VikingCCS

Viking CCS Pipeline

Environmental Statement Volume II - Chapter 7: Landscape and Visual

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a Harbour Energy Company
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7.1 Introduction

7.1.1 This chapter of the Environment Statement (ES) presents the assessment of the likely significant effects of the Viking CCS Pipeline (hereafter referred to as the Proposed Development) on landscape and visual receptors during construction, operation and decommissioning. The assessment includes consideration of impacts on landscape character, landscape elements, and the visual amenity/ views experienced by people. Although effects on the landscape and visual environment are interrelated, they are assessed and reported separately in this chapter.

7.1.2 The assessment of impacts and effects on landscape and visual amenity have relationships with other assessments undertaken as part of the Environmental Impact Assessment (EIA) process, in relation to interrelated environmental effects and this chapter should be read in conjunction with:

- *Chapter 6: Ecology and Biodiversity;*
- *Chapter 8: Historic Environment*; and
- *Chapter 16: Socio-economics*.

7.1.3 This chapter is supported **Figures 7-1** to **7-10** *(*with higher resolution version of these figures included within *ES Volume III (Application Document 6.3).* Additional supporting information to this assessment is contained in the following appendices *(ES Volume IV: (Application Document 6.4)*:

- Appendix 7.1: Representative Viewpoints; and
- Appendix 7.2: Visualisations.

7.2 Legislation, Policy and Guidance

Introduction

7.2.1 The Legislation, Policy and Guidance section of this chapter provides an overview of the relevant legislation, planning policy and technical guidance relevant to the landscape and visual assessment.

Legislation

7.2.2 The European Landscape Convention (ELC) (Ref 7-1) was signed by the UK Government in 2006 and came into effect in March 2007. The ELC recognises landscape in law. It focuses specifically on landscape issues and highlights the importance of integration of landscape into areas of policy, to promote protection, management and planning of all landscapes including the assessment of landscape and analysis of landscape change.

7.2.3 The ELC defines landscape as ‘an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors’. The ELC considers landscape as a whole (land or marine), from urban to rural areas, and whether special or degraded.

National Planning Policy

7.2.4 National Planning Policy relevant to landscape and visual is detailed in **Table 7-1**.

7.2.5 The National Policy Statements (NPS) set out the Government's policy for the delivery of energy infrastructure and provide the legal framework for planning decisions. The statements applicable to the Proposed Development are the Overarching National Policy Statement for Energy (EN-1) (Ref 7-3) and Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (Ref 7-4). Draft versions of NPS EN-1 and EN-4 were published for consultation by the Department for Energy Security and Net Zero (DESNZ) in March 2023. Planning Practice Guidance (PPG) for 'Natural Environment' (Ref 7-5) provides guidance on landscape value. An overview of how relevant national planning policy has been complied with is provided within the *Planning Statement (Application Document 7.1)*.

7.2.6 The revised National Planning Policy Framework (NPPF) (Ref 7-2) was published in July 2021 and sets out national planning policies that reflect priorities of the Government for operation of the planning system and the economic, social, and environmental aspects of the development and use of land. The NPPF has a strong emphasis on sustainable development, with a presumption in favour of such development.

Table 7-1: National Planning Policy Relevant to Landscape and Visual

Policy Reference	Policy Context
National Policy Statements (NPS)	
*Overarching National Policy Statement for Energy (EN-1) (*Ref 7-3*)*	
Section 5.9 Paragraph 5.9.5 to 5.9.7	*"The applicant should carry out a landscape and visual assessment and report it in the ES."* *"The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project."* *The applicant's assessment should include the effects during construction of* *the project and the effects of the completed development and its operation* *on landscape components and landscape character.* *The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity."*
Section 5.9 Paragraph 5.9.9 – 5.9.11	*"National Parks, the Broads and Areas of Outstanding Natural Beauty (AONBs) have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the IPC should have regard to in its decisions. The conservation of the natural beauty of the landscape and countryside should be given substantial weight by the IPC in deciding on applications for development consent in these areas".* *"Nevertheless, the IPC may grant development consent in these areas in exceptional circumstances. The development should be demonstrated to be in the public interest and consideration of such applications should include an assessment of:* • *the need for the development, including in terms of national considerations, and the impact of consenting or not consenting it upon the local economy;*

Policy Reference	Policy Context
	• *the cost of, and scope for, developing elsewhere outside the designated area or meeting the need for it in some other way, taking account of the policy on alternatives set out in Section 4.4; and* • *any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated."*
Section 5.9 Paragraph 5.9.8	*"Virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate."*
Section 5.9 Paragraph 5.9.22 and 5.9.23	*"Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration."* *"Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant vista."*
*Draft Overarching National Policy Statement for Energy (EN-1) (*Ref 7-6*)*	
Section 5.10 Paragraph 5.10.18	*The applicant should consider landscape and visual matters in the early stages of siting and design, where site choices and design principles are being established. This will allow the applicant to demonstrate in the ES how both negative effects have been minimised and opportunities for creating positive benefits or enhancement have been recognised.*
Section 5.10 Paragraph 5.10.19	*"The assessment should include the effects on landscape components and character during construction and operation. For projects which may affect a National Park, The Broads or an Areas of Outstanding Natural Beauty the assessment should include effects on the natural beauty and special qualities of these areas."*
Section 5.10 Paragraph 5.10.26	*Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration.*
*Overarching National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (*Ref 7-4*)*	
Section 2.21 Paragraph 2.21.1	*"Additional considerations apply during the construction of a pipeline (which, without mitigation, can affect both landscape and ecology). These comprise the effect upon specific landscape elements within and adjacent to the pipeline route, such as grasslands, field boundaries (hedgerows, hedgebanks, drystone walls, fences), trees, woodlands, and watercourses."*

Policy Reference	Policy Context
	"There will also be temporary visual impacts caused by the need to access the working corridor and to remove flora and soil." *"The working width of the pipeline will vary depending on the surrounding terrain. Temporary impacts could include large excavations where deep pits are needed for boring beneath rivers, roads and sensitive features."*
Section 2.21 Paragraph 2.21.2	*"Long term impacts upon the landscape for pipelines are likely to be limited, as once operational the main infrastructure is usually buried. They are likely to include:* • *limitations on the ability to replant landscape features such as hedgerows or deep-rooted trees over or adjacent to the pipeline; and* • *structures and indication points necessary to identify the pipeline route and provide it with service access."*
Section 2.21 Paragraph 2.21.3	*"The application should also include proposals for reinstatement of the pipeline route as close to its original state as possible and take into account any requirements for agreements with the landowner to access areas for aftercare and management work. Where it is unlikely to be possible to restore landscape to its original state, the applicant should set out measures to avoid, mitigate, or employ other landscape measures to compensate for, any adverse effect on the landscape."*
*Draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (*Ref 7-6*)*	
Section 2.21 Paragraph 2.21.1	*"There will also be temporary visual and landscape impacts caused by the need to access the working corridor and to remove flora and soil."*
Section 2.21 Paragraph 2.21.2	*"Long term impacts upon the landscape for pipelines are likely to be limited, as once operational the main infrastructure is usually buried. They are likely to include:* *• limitations on the ability to replant landscape features such as hedgerows or* *deep-rooted trees over or adjacent to the pipeline; and* *• structures and indication points necessary to identify the pipeline route and provide it with service access."*

Policy Reference	Policy Context
Section 2.21 Paragraph 2.21.3	*The application should also include proposals for reinstatement of the pipeline.* *route as close to its original state as possible and take into account any requirements for agreements with the landowner to access areas for aftercare and* *management work.* *Where it is unlikely to be possible to restore landscape to its original state, the applicant should set out measures to avoid, mitigate, or employ other landscape measures to compensate for, any adverse effect on the landscape."*
National Planning Policy Framework (NPPF)	
Paragraph 174	*"Planning policies and decisions should contribute to and enhance the natural and local environment by [inter alia] … protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); … [and] recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services; … [and] minimising impacts on and providing net gains for biodiversity".*
Paragraph 176	*"Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues".*
Planning Practice Guidance (PPG) for 'Natural Environment' (Ref 7-5)	
(Paragraph: 036 Reference ID: 8-036-20190721)	*"…plans should recognise the intrinsic character and beauty of the countryside, and that strategic policies should provide for the conservation and enhancement of landscapes. This can include nationally and locally-designated landscapes but also the wider countryside."*
(Paragraph: 036 Reference ID: 8-036-20190721)	*"Where landscapes have a particular local value, it is important for policies to identify their special characteristics and be supported by proportionate evidence. Policies may set out criteria against which proposals for development affecting these areas will be assessed. Plans can also include policies to avoid adverse impacts on landscapes and to set out necessary mitigation measures, such as appropriate design principles and visual screening, where necessary. The cumulative impacts of development on the landscape need to be considered carefully."*

Local Planning Policies

7.2.7 Local Planning Policies relevant to Landscape and Visual are detailed in **Table 7-2**. An overview of how relevant local planning policy has been complied with is provided within the *Planning Statement (Application Document 7.1).*

Table 7-2: Local Planning Policies Relevant to Landscape and Visual

Policy Reference	Policy Context
North Lincolnshire Council	
*The North Lincolnshire Core Strategy (2006 – 2026) (*Ref 7-9*)*	
Policy CS5 - Delivering Quality Design in North Lincolnshire	Notes that all new design in North Lincolnshire should be well designed and appropriate for its context. It notes that developments should incorporate appropriate landscaping and planting that enhances biodiversity and contributes to green infrastructure.
Policy CS12 - South Humber Bank Strategic Employment Site – A Broad Location	Notes that the biodiversity and landscape character of the Humber Estuary should be protected and enhanced by harmonising the landscape with port related development activities. The policy states that the South Humber Gateway Conservation Mitigation Strategy Delivery Plan will develop new green infrastructure directly linked to the Green Infrastructure Strategy for North Lincolnshire.
CS16: North Lincolnshire's Landscape, Greenspace and Waterscape	*"The council will protect, enhance and support a diverse and multi-functional network of landscape, greenspace and waterscape through:* *1. Identifying in supporting documents within or evidencing the Local Development Framework, a network of strategically and locally important landscape, greenspace and waterscape areas. Development on or adjacent to these areas will not be permitted where it will result in unacceptable conflict with the function(s) or characteristic of that area.* *2. Requiring development proposals to improve the quality and quantity of accessible landscape, greenspace and waterscape, where appropriate.* *3. Requiring development proposals to address local deficiencies in accessible landscape, waterscape and greenspace where appropriate.* *4. Requiring the protection of trees, hedgerows and historic landscape to be specified where appropriate.* *The creation and maintenance of the network of landscape, green space and waterscapes will be secured by a range of measures, including protecting open space, creating new open spaces as part of new development, and by using developer contributions to create, improve and maintain green infrastructure assets where appropriate."*
*North Lincolnshire Local Plan Publication Draft Addendum Plan (2022) (*Ref 7-10*)*	
Policy DQE1 – Protection of Landscape, Townscape and Views.	Requires that development proposals do not cause unacceptable harm and protect the distinctive character and quality of the landscape. Development proposals should also take account of views in to and out of development areas and preserve local views and vistas.
Policy DQE11 – Green	Sets out measures to maintain and improve the green infrastructure network and recognises the value and multifunctional benefits of the network. It states that proposals which assist in the delivery of the identified principles will be supported. Where loss or harm is

Policy Reference	Policy Context
Infrastructure Network	unavoidable, suitable mitigation is provided for project where the need for and benefits outweigh adverse impacts.
Policy DQE12 – Protection of Trees, Woodland and Hedgerows	States that trees, woodland and hedgerows will be retained and protected, and planting schemes will be required to accompany applications for development.
North East Lincolnshire Council	
*North East Lincolnshire Council Local Plan (2013 to 2032) (*Ref 7-11*)*	
Policy 22 - Good design in new developments	Requires a high standard of sustainable design informed by a thorough consideration of the particular site's context, protection and enhancement of natural assets and protection and enhancement of heritage assets including character and local distinctiveness.
Policy 31 - Renewable and low carbon infrastructure.	Requires proposals to consider the scale and nature of impacts on landscapes having particular regard to the Landscape Character Assessment and the impact on the setting and scenic beauty of the Lincolnshire Wolds AONB and visual impact. Proposals should include the provision for decommissioning with the sites restored with minimal adverse impact on amenity and landscape and to consider opportunities for enhancement.
Policy 40 - Developing a green infrastructure network	Requires development to maintain and improve the network of green infrastructure where there are appropriate opportunities.
Policy 42- Landscape	Requires due consideration to be given to the nature, location, design and implementation of development proposals. Developers should have regard to the landscape context (as identified in the Landscape Character Assessment) and consider the relevant landscape guidelines and management strategies. Priority will be given to the protection and enhancement of landscape character, natural beauty and the setting of the AONB.
SO6 Built, historic and natural environment	*"Ensure that the development needs of the Borough are met in a way that safeguards and enhances the quality of the built, historic and natural environment and ensures that the development needs are met in a way that minimises harm to them. Direct development to locations of least environmental value and proactively manage development to deliver net gains in biodiversity overall. Encourage the use of brownfield land.* *Critical success factors:* *1. safeguarded designated, landscape, and heritage assets, and protected important species and habitats."*

Policy Reference	Policy Context
Lincolnshire County Council **West Lindsey District Council**	
Central Lincolnshire Local Plan (adopted April 2023) (Ref 7-12)	
Policy S62: Area of Outstanding Natural Beauty and Areas of Great Landscape Value	*"The Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) is a nationally designated landscape and has the highest level of protection. Great weight should be given to conserving and enhancing the landscape and scenic beauty in this area. All development proposals within, or affecting the setting of, the AONB shall:* *a) be compatible with the special character of the area and have had regard to conserving and enhancing the special quality and scenic beauty of the landscape; and* *b) respect the landscape character, topography, and context in relation to the siting, design, scale and extent of development; and* *c) protect and enhance important views into, out of and within the AONB; and* *d) retain and enhance existing natural, historic and cultural features that contribute to the special quality of the landscape.* *Proposals which will result in an adverse impact on the AONB or which fail to demonstrate that they will not have an adverse impact taking into account any mitigation proposed will not be supported.* *Areas of Great Landscape Value (AGLV) are locally designated landscape areas recognised for their intrinsic character and beauty and their natural, historic and cultural importance. A high level of protection will be afforded to AGLV reflecting their locally important high scenic quality, special landscape features and sensitivity.* *Development proposals within, or within the setting of, AGLV shall:* *e) conserve and enhance the qualities, character and distinctiveness of locally important landscapes; and* *f) protect, and where possible enhance, specific landscape, wildlife and historic features which contribute to local character and landscape quality; and* *g) maintain landscape quality and minimise adverse visual impacts through high quality building and landscape design; and* *h) demonstrate how proposals have responded positively to the landscape character in relation to siting, design, scale and massing and where appropriate have retained or enhanced important views, and natural, historic and cultural features of the landscape; and* *i) where appropriate, restore positive landscape character and quality.* *Where a proposal may result in adverse impacts, it may exceptionally be supported if the overriding benefits of the development demonstrably outweigh the harm – in such circumstances the harm should be minimised and mitigated through design and landscaping."*

Policy Reference	Policy Context
Policy S66: Trees, Woodland and Hedgerows	*Development proposals should be prepared based on the overriding principle that:* • *the existing tree and woodland cover is maintained, improved and expanded; and* • *opportunities for expanding woodland are actively considered and implemented where practical and appropriate to do so.*
East Lindsey District Council	
East Lindsey Local Plan Core Strategy 2018 (Ref 7-13)	
SP10 – Design	Requires sustainable development which maintains and enhances the character of the District's towns, villages and countryside by reflecting the character of the surrounding area, minimises glare and light spillage and does not unacceptably harm the nearby residential amenity or landscape.
SP23 – Landscape	Requires landscapes to be protected and enhanced and guided by the District's Landscape Character Assessment with landscapes defined as highly sensitive afforded the greatest protection. The distinctive landscape character will not be compromised and the highest level of protection will be afforded to the AONB. Development will be supported where it conserves and enhances designated and historic landscapes (Lincolnshire Wolds, Coastal Country Park, Conservation Areas, Historic Park and Gardens and setting of listed buildings in the landscape).
SP 25 – Green Infrastructure	Will seek to connect existing green infrastructure to improve the network of spaces for amenity and wildlife.
SP 27 – Renewable and Low Carbon Energy	Will be supported where the adverse impact is weighed against the benefits and considered acceptable in relation to a number of matters including residential amenity, landscape character, significance (including the setting) of a historic garden, park or conservation area.

Guidance

7.2.9 The landscape and visual assessment has been informed by, and is based on the following published guidance:

- Guidelines for Landscape and Visual Impact Assessment, Third Edition, known as GLVIA3 (Ref 7-14);
- Visual Representation of Development Proposals. Technical Guidance Note 06/19 (Ref 7-15);
- Assessing landscape value outside national designations. Technical Guidance Note 02/21 (Ref 7-16);
- Infrastructure. Technical Guidance Note 04/2020 (Ref 7-17); and
- An Approach to Landscape Character Assessment (Ref 7 19).

7.2.10 GLVIA3 (Ref 7-14) places a strong emphasis on the importance of professional judgement in identifying and defining the significance of landscape and visual effects. The LVIA has been undertaken by Chartered Landscape Architects who are experienced in undertaking and reporting assessments for similar types of projects.

7.2.11 Professional judgement has been used in combination with structured methods and criteria to determine the sensitivity of landscape and visual receptors (informed by their value and susceptibility to change), the magnitude of effects on those receptors (i.e., the nature of the effect), and the significance of effects.

7.3 Scope of Assessment and Consultation

Introduction

7.3.1 A scoping exercise was undertaken in early 2022 to establish the content of the LVIA and the approach and methods to be followed.

7.3.2 The Scoping Report records the findings of the scoping exercise and details the technical guidance, standards, best practice and criteria to be applied in the assessment to identify and evaluate the likely significant effects of the Proposed Development on landscape and visual amenity.

7.3.3 Following receipt of the Scoping Opinion (*ES Volume IV: Appendix 5.2 (Application Document 6.4.5.2)*), the following requirements shown in **Table 7-3** have been identified by the Planning Inspectorate.

Consultation Responses

Scoping Report and Scoping Opinion

7.3.4 A summary of stakeholder engagement specific to LVIA has been provided in **Table 7-3.**

Table 7-3: Landscape and Visual Scoping Opinion

Section Reference to Scoping Opinion	Applicant's proposed matter	Planning Inspectorate / Prescribed Consultee comments	Response
Planning Inspectorate Table 7-7	Effects on landscape character during operation as a result of the introduction of the pipeline (operation)	The Applicant proposes to scope out long term operational effects on landscape character as a result of the introduction of the pipeline. The Applicant states that the pipeline would be buried and would not affect landscape character. Therefore, operational phase effects associated with the pipeline would be scoped out of the LVIA. The Inspectorate considers that whilst in general the introduction of the pipeline is unlikely to give rise to significant long-term effects on landscape character during operation of the Proposed Development, it is unclear whether any easement required would result in permanent landscape changes and the potential for such effects should be considered. The ES should also assess the potential for significant short-term effects during the beginning of the operational phase, as proposed reinstatement measures mature along the pipeline route.	Short-term effects during the beginning of the operational phase and the easement required and its impacts on the reinstatement of landscape features has been considered within *Section 7.8 Potential Impact and Assessment of Effects* in this Chapter. **Table 7-16** provides a summary of the operational phase residual landscape effects for Year 1 and Year 15.
Planning Inspectorate Table 7-7	Effects on landscape character and visual amenity during decommissioning of the Pipeline Offtake Facility,	The Applicant proposes to scope out effects on landscape character and visual amenity during decommissioning of the Pipeline Offtake Facility, shutdown valves and offshore pipeline tie-in and outlet. The Scoping Report states that the temporary and limited nature of the decommissioning of these features of the Proposed Development is not anticipated to give rise to any significant effects.	Decommissioning has been assessed within *Section 7.8 Potential Impacts and Assessment of Effects* in this Chapter of the ES.

Section Reference to Scoping Opinion	Applicant's proposed matter	Planning Inspectorate / Prescribed Consultee comments	Response
	shutdown valves and offshore pipeline tie-in and outlet	It is noted that the specific decommissioning methodology is not known at this stage, however, the Scoping Report states that there are a number of ways the redundant pipeline could be dealt with, including being lifted and removed where appropriate. In the absence of more detailed information relating to the decommissioning phase of the Proposed Development, the Inspectorate does not agree to scope these matters from the assessment. Therefore, the ES should include an assessment of this matter or provide information to demonstrate the absence of a likely significant effect.	
Planning Inspectorate Paragraph 7.2.17	Viewpoint locations	States that the Applicant should make effort to agree the number and location of the viewpoints with relevant consultation bodies.	The number and location of viewpoints has been agreed with the relevant stakeholders including the host local planning authorities and statutory consultees. A summary of stakeholder engagement is provided in **Table 7-4** and **Table 7-5** and representative viewpoints are described within **Table 7-12**.
East Lindsey District Council	Compounds	States that the EIA should assess the visual and residential impacts of compounds and any other structures /development/ plant/ machinery etc.	The temporary visual impacts of the construction compounds have been assessed within *Section 7.8 Potential Impacts and Assessment of Effects* in this Chapter.

Section Reference to Scoping Opinion	Applicant's proposed matter	Planning Inspectorate / Prescribed Consultee comments	Response
Lincolnshire County Council	Viewpoints	States that all viewpoints should be based on winter months though summer months can also be included.	Winter viewpoint photography has been undertaken and presented in the ES. Refer to *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2).*
	Montages	It should also be considered if any viewpoint montages should be included with all landscape features removed to demonstrate the very worst potential impact on the visual character of the area.	Photomontages have been provided for the Block Valve Stations. They demonstrate Year 1 with vegetation removed during the construction phase, newly planted mitigation (without any growth) and at Year 15 of the Proposed Development, when mitigation planting will have established. Refer to *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2)*.
National Grid Electricity Transmission (NGET)	Landscaping Scheme	States that if a landscaping scheme is proposed as part of the proposal, it is requested that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.	Statutory safety clearances will be taken into account for all reinstatement planting including the planting schemes for the block valves and is included in the OLEMP (*Application Document 6.8*).
North Lincolnshire Council	Viewpoints	Requests that the representative views proposed will properly consider key receptors, including residents of Marsh Lane and users of the England Coast Path.	Viewpoint 1 and Viewpoint 2 assess the impact on receptors at representative views along Marsh Lane and the England Coast Path. Refer to Figure 1 and Figure 2 in *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2)*.
West Lindsey District Council	Locations of the shutdown valves	State that it is agreed that the locations of the shutdown valves take account of the landscape sensitivities identified within the ES.	The need for the Block Valve Stations was determined through an initial engineering assessment. This was to enhance the safety of the Proposed Development and ensure sections of the pipeline could be isolated if required. This

Section Reference to Scoping Opinion	Applicant's proposed matter	Planning Inspectorate / Prescribed Consultee comments	Response
			work identified block valve locations at approximately 13 km, 24 km and 39 km along the pipeline route. The locations of the Block Valve Stations lie outside of the Lincolnshire Wolds AONB. Planting associated with the Block Valve Stations has been sensitively designed and included within the Outline Landscape and Ecological Management Plan (*Application Document 6.8*), which is secured through a Requirement in the draft Development Consent Order.
Natural England	Impact on Protected and Local Landscapes	The proposed scheme includes a small section within the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) and a reasonably significant section potentially or in its setting. The input of the Lincolnshire Wolds AONB Partnership would provide a valuable input into the report's assessment and recommendations for mitigation.	The Applicant has previously engaged and will continue to engage with the Lincolnshire Wolds AONB Partnership and Lincolnshire Wolds Countryside Management Service.
		The ES should include an assessment of local landscape character through the consideration of the relevant National Character Areas (NCAs) and any local landscape character assessments. We would expect the following forms of guidance to be used, as indicated in the scoping report: • 'Guidelines for Landscape and Visual Impact Assessment' (3rd Edition) (GLVIA3), Landscape Institute and Institute of Environmental Management and Assessment, 2013;	This chapter presents an assessment of local landscape character through the consideration of the relevant National Character Area and local landscape character assessment. See *Section 7.8 Potential Impacts and Assessment of Effects* of this chapter. The guidance that has been used in the ES is detailed in *Section 7.2 Legislation, Policy and Guidance* of this chapter and includes all the guidance indicated in the scoping report.

Section Reference to Scoping Opinion	Applicant's proposed matter	Planning Inspectorate / Prescribed Consultee comments	Response
		• 'An Approach to Landscape Character Assessment', Natural England, 2014: and • 'Visual Representation of Development Proposals Technical Guidance Note' 06/19, Landscape Institute, 2019.	

Feedback on the Preliminary Environmental Information Report

7.3.5 A summary of stakeholder engagement specific to LVIA has been provided in **Table 7-4.**

Table 7-4: Landscape and Visual Feedback on PEIR

Stakeholder	Feedback on PEIR	Response
East Lindsey District Council	Suggested that LVIA viewpoints would benefit from a detailed site visits being undertaken by the agent and the provision of photographs. Additional consideration was recommended as to the proposed locations.	Refer to *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2*). The recommendations were taken into account in undertaking the viewpoint site visits. Refer to **Table 7-5** for further details on the consultation with East Lindsey District Council on the viewpoint locations.
Lincolnshire Wolds Advisory Committee	Consideration of legislation, including the NPPF, is included in Section 7.2 Legislation, Policy and Guidance. The need for the Proposed Development is set out in Section 2.2 within *ES Volume II* Chapter 2: Alternatives and Design Evolution *(Application Document 6.2)* of the ES. An assessment of the landscape and visual effects of the Proposed Development, including assessments on the AONB and are included in Section 7.8 Potential Impacts and Assessment of Effects in this Chapter. The feedback makes reference to the Lincolnshire Wolds AONB Management Plan (2018-23) and the objectives outlined in section 7.1 of the document which state that development plans and planning guidance recognise and uphold the primary purpose of the Lincolnshire Wolds AONB designation. It also advises that the Proposed Development should be reviewed and assessed based on Policy PP9 and that impacts are minimised upon the area's natural beauty.	Table 7-2 Impacts on the AONB have been assessed within *Section 7.8* Potential Impacts and Assessment of Effects in this Chapter of the ES. within *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2)*.

Stakeholder	Feedback on PEIR	Response
	The feedback requested to ensure that there is the minimum length of route required by the Proposed Development that traverses directly through the AONB designation. Assurance is required in relation to impacts on the AONB minimised through consultation with relevant parties. Outlines the requirement for more detailed route analysis with appropriate mitigation and moderation the subject of ongoing dialogue with key stakeholders. There was acknowledgment that some of the most notable impacts upon the AONB, including the area's distinctive landscape character and high scenic quality would most likely result from the construction phase of the Project and that these need further assessment. It was noted that the Preliminary findings recognise the potential for significant impacts to the AONB, both in the immediate and longer term – this includes the potential loss of prominent landscape trees and hedgerows and other surrounding habitats that contribute to the cohesive landscape character of the Wolds.	The identification of the preferred Pipeline Corridor has been appraised and refined following the guiding principles set out in Section 2.4 of *ES Volume II Chapter 2: Alternatives and Design Evolution (Application Document 6.2.2)*. The AONB was a key factor considered for the pipeline routing work. A high-level summary outlining the preferred corridor and justification is provided in *Table 2-2 ES Volume II Chapter 2: Alternatives and Design Evolution (Application Document 6.2.2)*. **Table 7-2** Impacts on the AONB have been assessed within Section *7.8* Potential Impacts and Assessment of Effects within *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2)*.
	In relation to the Block Valve Stations, the feedback stated that the visual assessments should be utilised to help to inform and modify the site landscaping plans, to minimise impacts upon the setting of the AONB, including easterly views overlooking Ashby cum Fenby. Stated that Option 2a is the preferred option for the construction compound as this is the option furthest from the AONB boundary and a site used previously for storage and would avoid a location close to the potentially vulnerable Welbeck spring and the neighbouring public right of way.	An assessment of the landscape and visual effects of the Proposed Development, including assessments from the AONB, are included in *Section 7.8 Potential Impacts and Assessment of Effects* in this Chapter. Justification of the preferred locations for the Above Ground Infrastructure and Construction Compounds is provided within Section 2.9 of *ES Volume II Chapter 2: Alternatives and Design Evolution the ES (Application Document 6.2.3)*.
	Requested consideration of the construction phase within the Landscape and Visual Impact Assessment (LVIA) including impacts on landscape features.	An assessment of the landscape and visual effects of the Proposed Development, including assessments from the AONB, are included in

Stakeholder	Feedback on PEIR	Response
		Section 7.8 Potential Impacts and Assessment of Effects in this Chapter.
	States that further consultation in the Project proposals as the consultation and assessment phases proceed, including any careful mitigation and moderation to prevent harm to the nationally protected natural beauty and the recognised special qualities of the Lincolnshire Wolds AONB.	Statutory consultation was undertaken for the Proposed Development. Further information is included in *ES Volume II Chapter 4: Consultation* (*Application Document 6.2.4*).
Natural England	Natural England welcomes confirmation that the applicant is continuing to engage with the Lincolnshire Wolds AONB Partnership and Lincolnshire Wolds Countryside Management Service. Advise that their view and advice about this scheme is given proper consideration given their detailed knowledge of the area, its sensitivity to development pressures of this sort, and the scope for appropriate mitigation measures. States that they are well-placed to advise on the number and location of viewpoints for the LVIA.	The Applicant previously engaged and will continue to engage with the Lincolnshire Wolds AONB Partnership and Lincolnshire Wolds Countryside Management Service.
	States that National Planning Guidance is clear that development schemes with the setting of a designated landscape can impact on the delivery of the statutory purpose. Natural England notes that some sections of the pipeline route are well within the setting of the AONB and Block Valve Stations 1 and 2 may be within the setting of the AONB and are unclear how these would feature as visible surface infrastructure in any views from the AONB and ask that the ES fully considers this.	Views from within the AONB have been assessed from locations representing views towards the Block Valve Station. These are illustrated in *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2*).
	Refers to the NPPF and NPSs in relation to designated landscapes and states that national planning policy sets a default of no major development within a nationally designated landscape unless exceptional circumstances can be demonstrated. This 'major development test' uses criteria to show that there is no viable alternative to locating the scheme elsewhere or delivering it in some other way. The PEIR	An assessment of the landscape and visual effects of the Proposed Development, including impacts from the AONB, is included in *Section 7.8 Potential Impacts and Assessment of Effects* in this Chapter. It is assumed that all hedgerow and grassland will be reinstated to its original condition post

Stakeholder	Feedback on PEIR	Response
	acknowledges this policy requirement and we would ask that how the policy has been applied and why alternative routes (avoiding the AONB altogether) have been discounted is clearly set out in the Environmental Statement.	construction and mature trees within the AONB will be avoided via trenchless construction methods as set out in the Outline Landscape and Ecological Management Plan (*Application Document 6.8)*. The identification of the preferred Pipeline Corridor has been appraised and refined following the guiding principles set out in Section 2.4 *ES Volume II Chapter 2: Alternatives and Design Evolution (Application Document 6.2.2)*. The AONB was a key factor considered for the pipeline routing work. A high-level summary outlining the preferred corridor and justification is provided in **Table 2-2** within *ES Volume II Chapter 2: Alternatives and Design Evolution (Application Document 6.2.2)*.
	Requests clarity on whether and how landscape features, especially individual trees, woodlands and hedgerows can be replanted over the pipeline. Highlights that the permanent removal of these will produce a permanent landscape character and visual changes. Recommendations with regard to scope of the operation phase effects are that: • the ES includes a clear assessment, obviously based on a full survey of the route, of the potential for and risks to full reinstatement of the route within the AONB and its setting; and • considers 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.	An assessment of the landscape and visual effects of the Proposed Development, including impacts from the AONB, is included in *Section 7.8* of this Chapter. It is assumed that all hedgerow and grassland will be reinstated to its original condition post construction and that mature trees within the AONB will be avoided via trenchless construction methods as set out in the Outline Landscape and Ecological Management Plan (*Application Document 6.8)*.
	Outlined the AONB's special qualities and highlighted that the highest level of planning policy protection applies. Those features and qualities are referred to as 'special qualities' and will be	National policy relevant to the AONB designation, such as NPPF and National Policy

Stakeholder	Feedback on PEIR	Response
	profiled in the AONB's statutory management plan. Stated that a development scheme which impacts significantly on one or more special quality is likely to equate to a significant effect on the area's statutory purpose. Recommend that the ES provides an assessment of how this scheme would impact on the special qualities of the Lincolnshire Wolds AONB. Stated that this can be an addition to the LVIA, although some impacted special qualities may relate to cultural, historic or other qualities and associations which only partially link to the scope of an LVIA. Highlights particular sensitivities of the AONB including the Lincolnshire Chalk Streams (such as Laceby Beck and the Waithe Beck), the various archaeological heritage features likely to be present, the network of hedgerows and their accompanying wider field verges, and various landmark trees and copses.	Statements (NPS EN-1 and EN-4) have been considered in **Table 7-2** of this Chapter. Views from the AONB have been assessed. These are illustrated in *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2)*. Refer to assessments made in *ES Volume II Chapter 11: Water Environment and Chapter: 8: Historic Environment (Application Document 6.2.11 and 6.2.8)*.
	Stated that the PEIR did not appear to provide a full description of the proposed approach to LVIA. Requires confirmation that the highest level of value and sensitivity will be given to the AONB in assessing landscape and visual effects. Notes that the PEIR anticipates effects on National Character Areas and Landscape Character Areas as not significant given their size and scale compared to the scale of the pipeline scheme and this may or may not be relevant and helpful in relation to a Landscape Character Area within or adjacent to the AONB. Advises that a relatively modestly sized scheme can quickly change landscape character over a wide area if it introduces a highly visible incongruous element into that landscape. Advises that NCAs, including the Lincolnshire Wolds NCA, are high level and large-scale descriptions of an area. In relation to land use planning, they have a useful role to play in strategic planning decisions but they are not particularly helpful for understanding the effects of individual development schemes except to provide a broader descriptive context for a development proposal. States that a scheme like this is small in	Refer to Section *7.2 Legislation, Policy and Guidance* in this Chapter. Comments are noted with regard to the assessment of NCAs.

Stakeholder	Feedback on PEIR	Response
	scale compared to the extent of a NCA is stating the obvious and really offers nothing of relevance or value to the decision maker.	
	Advises that an important mitigation measure for the AONB will be a short duration construction phase with reinstatement beginning as soon as possible and requests that the landscape and visual chapter sets out a realistic timetable for construction where this affects the AONB. States that mitigation measures should factor in the increasing impact of ash die-back and the vulnerability of hedgerow standards. Requests a well-planned planting scheme delivered in this context to deliver some positive net gains in terms of maintaining landscape character and improving habitat connectivity.	This is noted. Refer to *Section 7.9 Mitigation and Enhancement Measures* in this Chapter. A timetable of construction activity has been included within *ES Volume II Chapter 3: Description of the Proposed Development (Application Document 6.2.3).*
North Lincolnshire Council (NLC)	Notes the approach and advice set out within the Guidelines for Landscape and Visual Impact. Assessment 3rd Edition (GLVIA3, 2013 and the relevant local policies contained within the North Lincolnshire Local plan and Core Strategy.	Relevant planning policy, has been considered in Table 7-2 of this Chapter.
	Requests careful consideration of the effects on the South Humber Bank Landscape Initiative area, saved policy LC20.	Measures identified in Policy EC4p: South Humber Bank - Landscape Initiative to mitigate increased industrialisation are included in the landscape masterplan for the Immingham Facility. This has been considered as part of the design development *of Chapter 3: Description of the Proposed Development (Application Document 6.2.3)*.
West Lindsey District Council (WLDC)	WLDC are content that significant impacts on landscape character and visual amenity are not likely to arise from operation and maintenance of the buried pipelines and Block Valve Station 1. Requests detailed consideration is given to the nearby Area of Great Landscape Value designation.	An assessment of the landscape and visual effects of the Proposed Development, including assessments from the Area of Great Landscape Value (AGLV), is included in *Section 7.8 Potential Impacts and Assessments Effects* in this Chapter.

Additional Consultation

7.3.6 The relevant Local Planning Authorities (LPAs) were consulted on the on the viewpoints to inform the landscape and visual assessment. The relevant LPAs comprise of:

- North Lincolnshire Council;
- North East Lincolnshire Council;
- West Lindsey District Council; and
- East Lindsey District Council.

7.3.7 The following feedback was received which is presented in **Table 7-5** with a project response.

Table 7-5: Landscape and Visual Additional Consultation

LPA	Date of communication	Comments	Response
East Lindsey District Council	23 January 2023 – Email	The viewpoints provided by the applicant represent a full range of receptor types and sensitivity. Geographically they are reasonable well-spaced along the pipeline corridor. The majority of viewpoints are located along road corridors. Whilst road users are potential visual receptors, they are typically less sensitive to change compared to footpath users or residents. A number of recommendations were made mostly relate to the 'refinement' of the viewpoint locations; either moving the viewpoint to a more representative location, or to represent more sensitive receptors that should be included in the assessment.	A response was provided to East Lindsey District Council on the 9 June 2023, explaining how East Lindsey District Council comments were taken into account.
	23 June 2023 - Email	East Lindsey were happy with the modified locations of viewpoints 12 to 19. It was considered that four suggested additional viewpoints by East Lindsey have not been considered.	Suggested viewpoint 1 – A16 Holton le Clay – location of construction compound discounted from Proposed Development. Suggested viewpoint 2 – This is covered by Viewpoint 15. Suggested viewpoint 3 – The identified

LPA	Date of communication	Comments	Response
			impacts would be no greater than those at Viewpoint 19 which are assessed to be neutral during the construction stage. Suggested viewpoint 4 – This is covered by Viewpoint 22.
North East Lincolnshire Council	6 December 2022 - Email	North East Lincolnshire Council's Trees and Woodland Officer responded with suggestions of potential alternatives and additional potential viewpoints.	A meeting was held with North East Lincolnshire Council's Trees and Woodland Officer on 22 May 2023 after the site visit on the 22 March 2023 allowed for greater understanding of the views on site. At the meeting, the locations of the viewpoints were further discussed, refined and agreed.
West Lindsey District Council	No viewpoint locations were identified as being required to inform the LVIA within West Lindsey District Council.		
North Lincolnshire Council	6 December 2022	Confirmed agreements with viewpoints and had no further comments.	N/A

Scope of Assessment

7.3.8 The scope of this assessment has been established through the scoping process. This section sets out the scope of the assessment.

Aspects scoped into the assessment

7.3.9 Short-term impacts on landscape character and visual amenity during the construction stage have been considered in this assessment.

7.3.10 Short-term effects on landscape character and visual amenity during year 1 of the operational phase have been considered in this assessment including the easement required and its impacts on the reinstatement of landscape features. The potential for significant long term effects during year 15 operational phase as proposed hedgerow and other vegetation mitigation establishes and matures along the pipeline route has also been covered as part of the assessment.

7.3.11 Decommissioning on landscape character and visual amenity has been assessed.

Aspects scoped out of the assessment

7.3.12 No elements have been scoped out of the assessment.

7.4 Assessment Methodology

7.4.1 The following section summarises the methodology for the LVIA which builds on the general assessment methodology presented in *in ES Volume II Chapter 5: EIA Methodology (Application Document 6.2.5)*. For clarity and in accordance with good practice, the assessment of potential effects on landscape character and visual amenity, although closely related, are undertaken separately.

7.4.2 The assessment of the National Character Areas (NCA) has been undertaken on a project wide basis. For all other landscape receptors and the identified visual receptors, the assessment has been split into sections, as defined in *ES Volume II Chapter 3: Description of the Proposed Development (Application Document 6.2.3)*. to assist when describing baseline conditions present across the length of the pipeline route and to describe the context and resulting impacts and effects of the Proposed Development.

7.4.3 The method for the production of visualisations which support the completion of the assessment is set out in *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2)*.

Sensitivity of Landscape Receptors

7.4.4 Landscape receptors are components of the landscape that are likely to be affected by the Proposed Development. These can include overall character and key characteristics, individual elements or features and specific aesthetic or perceptual aspects. It is the interaction between the different components of the Proposed Development and these landscape receptors which has potential to result in landscape impacts and effects (both adverse and beneficial).

7.4.5 The sensitivity of the landscape receptor has been derived by combining the value of the landscape (undertaken as part of the baseline study) and the susceptibility to change of the receptor to the specific type of development being assessed.

7.4.6 Landscape value is frequently addressed by reference to international, national, regional, and local designations. Absence of such a designation does not necessarily imply a lack of quality or value. Factors such as accessibility and local scarcity can render areas of nationally unremarkable quality, highly valuable as a local resource. The evaluation of landscape value has been informed by Technical Guidance Note 02/21 (Ref 7-17) and undertaken considering the following factors and classified as high, medium, or low with evidence provided as to the basis of the evaluation:

- *natural heritage* - landscape with clear evidence of ecological, geological, geomorphological, or physiographic interest which contribute positively to the landscape;
- *cultural heritage* - landscape with clear evidence of archaeological, historical or cultural interest which contribute positively to the landscape;
- *landscape quality/condition* - the measure of the physical state of the landscape including the intactness of the landscape and the condition of individual elements;
- *scenic quality* - the level of visual and sensory appeal of the landscape;
- *perceptual aspects* - the extent that the landscape receptor is recognised for its perceptual qualities (e.g., scenic, wildness or tranquillity);
- *functional* - landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape;

- *rarity* - the presence of unusual elements or features;
- *representativeness/distinctiveness* - the presence of particularly characteristic features;
- *recreation* - the extent that recreational activities contribute to the landscape receptor; and
- *association* - extent that cultural or historical associations contribute to the landscape receptor.

7.4.7 Landscape susceptibility relates to the ability of a particular landscape to accommodate a scheme. It is assessed through consideration of the baseline characteristics of the landscape, and in particular, the scale or complexity of a given landscape. The evaluation of landscape susceptibility is defined as high, medium, low or very low and is supported by a clear explanation based upon the analysis of the landscape receptor and the extent to which it is able to accommodate the changes that will result from the Proposed Development.

7.4.8 The overall sensitivity assessment of the landscape receptor has been made by applying professional judgement to combine and analyse the identified value and susceptibility ratings. Overall sensitivity has been rated as high, medium, low or very low. **Table 7-6** below outlines indicators that inform landscape value, susceptibility and sensitivity. The basis of the assessment is made clear in the evaluation of each landscape receptor.

Table 7-6: Sensitivity of Landscape Receptors

	Higher Sensitivity	⟷	Lower Sensitivity
Value	A designated landscape (National Park, Area of Outstanding Natural Beauty, National Scenic Area, World Heritage Site) or a landscape in very good condition, exceptional scenic quality and high recreational opportunities or a high degree of rarity.	⟷	Landscapes containing few if any notable elements / features, of poor condition or containing several detracting features and limited aesthetic qualities. Landscapes which are not formally designated.
Susceptibility	Attributes that make up the character of the landscape which offer very limited opportunities to accommodate change of the type proposed without fundamentally altering key characteristics.	⟷	Attributes that make up the character of the landscape which are tolerant of a large degree of the type of change proposed without fundamentally altering the key characteristics.

Landscape Magnitude of Effect

7.4.9 Landscape magnitude of effect refers to the extent to which the Proposed Development will alter (impact) the existing characteristics of the landscape. It is an expression of the size or scale of change to the landscape, the geographical extent of the area influenced, and its duration and reversibility. The variables involved are:

- the extent of existing landscape elements that will be lost, the proportion of the total extent that this represents and the contribution of that element to the character of the landscape;
- the extent to which aesthetic or perceptual aspects of the landscape are altered either by removal of existing components of the landscape or by the addition of new components;
- whether the change alters the key characteristics of the landscape that are integral to its distinctive character;
- the geographic area over which the change will be experienced (for example within the application boundary, the immediate setting around that boundary, at the local landscape character area scale, or on a larger scale influencing broader areas of landscape character); and
- the duration of the change (i.e., short term, medium term, or long term), as defined *in ES Volume II Chapter 5: EIA Methodology (Application Document 6.2.5)*, and its reversibility (i.e., whether it is permanent, temporary, or partially reversible).

7.4.10 Landscape change can be both direct, through alteration of physical components, or indirect, resulting from changes to perceptual aspects of character and how it is experienced.

7.4.11 An overall assessment of the magnitude of landscape change resulting from the Proposed Development on landscape receptors has been made by combining the above judgements using evidence and professional judgement. The levels of landscape magnitude of change are described as being high, medium, low, very low and none as defined in **Table 7-7** below.

Table 7-7: Magnitude of Effect – Landscape Receptors

Magnitude	Criteria
High	Large alteration to the landscape receptor or may impact an extensive area or unique characteristics at a local level. May be longer term, permanent or reversible.
Medium	Partial alteration to the landscape receptor or may impact a wide area or characteristics at a local level. May be medium term, permanent or reversible.
Low	Slight alteration to the landscape receptor or may impact a restricted area and few key characteristics. May be short to medium term, permanent or reversible.
Very Low	Very slight alteration to the landscape receptor or may impact a limited area or no key characteristics. May be short term, permanent or reversible.
None	No change to the landscape receptor.

Sensitivity of Visual Receptors

7.4.12 Sensitivity of visual receptors has been defined through an appraisal of the viewing expectation of the viewer and value placed on the view as identified in the baseline study, and its susceptibility to change as a result of the specific development.

7.4.13 Value of the view is an appraisal of the value attached to views and is often informed by the appearance on Ordnance Survey or tourist maps and in guidebooks, literature and art, or identified in policy. Value can also be indicated by the provision of parking or services and signage and interpretation. The nature and composition of the view and its scenic quality is also an indicator. The value of the view has been classified as high, medium, low or very low or very low and is supported by evidenced, professional judgements.

7.4.14 The susceptibility of visual receptors to change has been established as a function of the occupation or activity of people experiencing the view, and the extent to which their attention or interest is focussed on the view and the visual amenity they experience. For example, walkers whose interest may tend to be focused on the landscape or a particular view, or visitors at an attraction where views are an important part of the experience, indicate a higher level of susceptibility. Conversely receptors engaged in outdoor sport where views are not important, or receptors at their place of work, are considered less susceptible to change.

7.4.15 Judgements about the susceptibility of visual receptors have been ascribed using high, medium, low or very low ratings using consistent and reasoned judgements. Judgements about the susceptibility of visual receptors have been ascribed using high, medium, low or very low ratings using consistent and reasoned judgements.

7.4.16 The overall sensitivity assessment of the visual receptor has been determined by applying professional judgement to combine and analyse the identified value and susceptibility ratings. Overall visual sensitivity has been rated as high, medium, low or very low. The table below outlines indicators that inform value of the view, susceptibility and sensitivity of visual receptors. The basis of the assessment is made clear in the evaluation of each visual receptor.

Table 7-8: Sensitivity of Visual Receptors

	Higher Sensitivity	⟷	Lower Sensitivity
Value	Views protected by designation, or nationally recognised, or recorded on maps / guidebooks or with cultural associations. Views that have high scenic qualities relating to the content and composition of the view.	⟷	Views which are not documented or protected with minimal or no cultural associations. Views that exhibit low scenic qualities relating to the content and composition of the view.
Susceptibility	Viewers whose attention or interest is focused on their surroundings.	⟷	People whose attention or interest is not focused on their surroundings and where the view is incidental to their enjoyment.

Visual Magnitude of Change

7.4.17 Visual magnitude of effect relates to the extent to which the Proposed Development will alter the existing view and is an expression of the size or scale of change in the view, the geographical extent of the area influenced and its duration and reversibility. The variables involved are described below:

- the scale of the change (impact) in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the Proposed Development;
- the degree of contrast or integration of any new features or changes in the form, scale, composition and focal points of the view;
- the nature of the view of the Proposed Development in relation to the amount of time over which it will be experienced, and whether views of this will be visible fully, partially or glimpsed;
- the angle of view in relation to the main activity of the receptor, distance of the viewpoint from the Proposed Development and the extent of the area over which the changes will be visible; and
- the duration of the change (i.e., short term, medium term, or long term), as defined in *ES Volume II Chapter 5: EIA Methodology (Application Document 6.2.5)*, and its reversibility (i.e., whether it is permanent, temporary, or partially reversible).

7.4.18 An overall assessment of the magnitude of visual change resulting from the Proposed Development on the visual receptor has been made combining the above judgements using evidence and professional judgement. The levels of visual magnitude of change are described as being high, medium, low, very low and none as defined in **Table 7-9**.

Table 7-9: Magnitude of Effect – Visual Receptors

Magnitude	Criteria
High	A pronounced change to the composition of the view or change that may be viewed in the foreground or directly. May be longer term, permanent or reversible.
Medium	A noticeable change to the composition of the view or change that may be viewed in the middle ground or indirectly. May be medium term, permanent or reversible.
Low	An unobtrusive change in the composition of the view or change that may be viewed in the background or obliquely. May be short to medium term, permanent or reversible.
Very Low	A barely perceptible change in the composition of the view or change that may be viewed in the background and/or very obliquely. May be short term, permanent or reversible.
None	No change to the view.

Significance of Effect

7.4.19 Determination of the significance of landscape and visual effects has been undertaken by employing professional judgement and experience to combine and analyse the magnitude of change against the identified sensitivity of landscape and visual receptors.

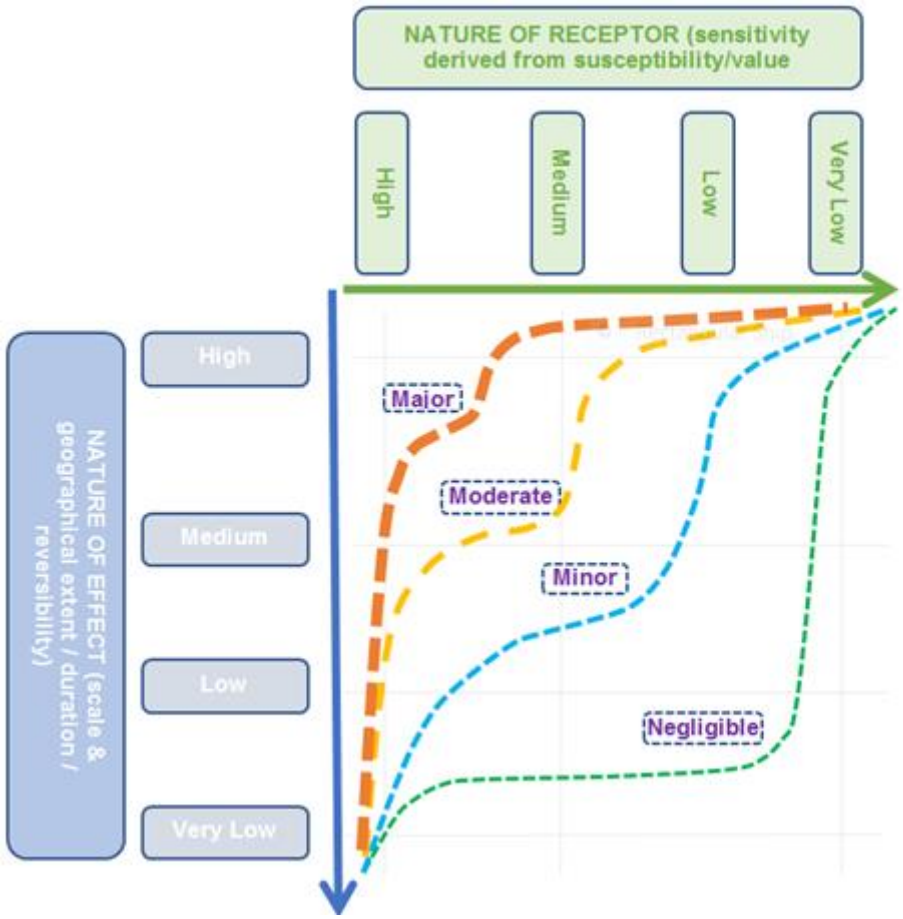
7.4.20 The landscape assessment has taken account of direct and indirect changes to existing landscape elements, features, key characteristics and evaluates the extent to which these will be lost or modified, in the context of their importance in determining the existing baseline character.

7.4.21 The visual assessment has taken account of the likely changes to the visual composition, including the extent to which new features will distract or screen existing elements in the view or disrupt the scale, structure, or focus of the existing view.

7.4.22 An indication of how Nature of Receptor (Sensitivity) and Nature of Effect (Magnitude) have been combined is presented in **Figure 7-1.**

7.4.23 This diagram is intended as a guide on possible outcomes and as set out in GLVIA3, is not a prescriptive process leading to a pre-determined conclusion on significance.

Figure 7-1: Combining Sensitivity/Magnitude



7.4.24 The significance of landscape and visual effects are described with reference to the criteria presented in **Table 7-10** below. For the purposes of this assessment, effects rated as being of Moderate or Major significance are considered to represent a significant effect.

Table 7-10: Significance of Effect

Significance of Effect	Landscape	Visual
Major Beneficial	Alterations that result in a considerable improvement of the existing landscape resource. Valued characteristic features will be restored or reintroduced.	Alterations that typically result in a pronounced improvement in the existing view.
Moderate Beneficial	Alterations that result in a partial improvement of the existing landscape resource. Valued characteristic features will be largely restored or reintroduced.	Alterations that typically result in a noticeable improvement in the existing view.

Significance of Effect	Landscape	Visual
Minor Beneficial	Alterations that result in a slight improvement of the existing landscape resource. Characteristic features will be partially restored.	Alterations that typically result in a limited improvement in the existing view.
Negligible Beneficial	Alterations that result in a very slight improvement to the existing landscape resource, not uncharacteristic within the receiving landscape.	Alterations that typically result in a barely perceptible improvement in the existing view.
Neutral	No alteration to any of the components that contribute to the existing landscape resource.	No change to the existing view.
Negligible Adverse	Alterations that result in a very slight deterioration to the existing landscape resource, not uncharacteristic within the receiving landscape.	Alterations that typically result in a barely perceptible deterioration in the existing view.
Minor Adverse	Alterations that result in a slight deterioration of the existing landscape resource. Characteristic features will be partially lost.	Alterations that typically result in a limited deterioration in the existing view.
Moderate Adverse	Alterations that result in a partial deterioration of the existing landscape resource. Valued characteristic features will be largely lost.	Alterations that typically result in a noticeable deterioration in the existing view.
Major Adverse	Alterations that result in a considerable deterioration of the existing landscape resource. Valued characteristic features will be wholly lost.	Alterations that typically result in a pronounced deterioration in the existing view.

Temporal Scope of Assessment

7.4.25 Landscape and visual effects can differ from one stage of the development to the next and change over time as mitigation planting establishes and matures. The assessment therefore considers potential effects of the Proposed Development at each of the following stages:

- *Construction*: including consideration of all temporary structures and works areas relating to construction, such as temporary construction compounds, movement of plant and machinery etc.
- *Operational Year 1*: including consideration of potential medium to longer term effects associated with the Block Valve Stations following completion of the construction phase

and associated reinstatement. This stage is intended to represent the potential worst-case operational effects prior to establishment of mitigation planting.

- *Operation Year 15*: including consideration of potential longer-term effects of the Proposed Development 15 years after becoming operational. This stage is intended to help demonstrate how proposed mitigation planting will influence effects once established.
- *Decommissioning*: including consideration of the removal of all above ground structures and works areas relating to the operational stage, which will be very similar in nature for the construction phase, including the use of temporary decommissioning compounds. As set out in *ES Volume II Chapter 3: Description of the Proposed Development (Application Document 6.2.3)*, it is assumed that all pipework will be left in situ.

Cumulative Landscape and Visual Effects

7.4.26 The assessment of cumulative effects follows a similar process to that described above, first identifying and describing the cumulative baseline, followed by an assessment of the magnitude of change and significance of effect.

7.4.27 The cumulative baseline involves a theoretical scenario in which other consented and application stage schemes are present in addition to existing schemes. The assessment of cumulative magnitude of change and significance of effects involves consideration of the additional change resulting from the Proposed Developments to the defined cumulative baseline scenario.

7.4.28 It is important to note that cumulative effects may vary from the effects of the Proposed Developments considered in isolation. For example, it is possible for a scheme to have effects that are judged of relatively high significance on a particular receptor when taken on its own, but when considered together with the effects of other developments the additional cumulative effect of the scheme may be lower.

Study Area

7.4.29 The extent of the Study Area has been informed by a review of the maximum parameters of the Proposed Development, desk-based research, the appraisal work undertaken to date to inform the routeing and siting work, knowledge of the area and professional judgement.

7.4.30 A Study Area of 1 km from the DCO Site Boundary has been identified for the landscape and visual assessment. Beyond 1 km either side of the pipeline route it is unlikely that construction or operational elements, taking their scale/ height into account will result in significant landscape or visual effects. However, in proximity to the Immingham Facility and the Theddlethorpe Facility, in response to taller and potentially more visible and intrusive elements, the Study Area has been extended to 2 km from the DCO Site Boundary. It is judged that significant landscape or visual effects will be unlikely beyond this Study Area. The LVIA Study Area is shown on **Figure 7-2**.

Revision: 2 Drawn: LC Checked: RC Approved: MW Date: 2023-09-14

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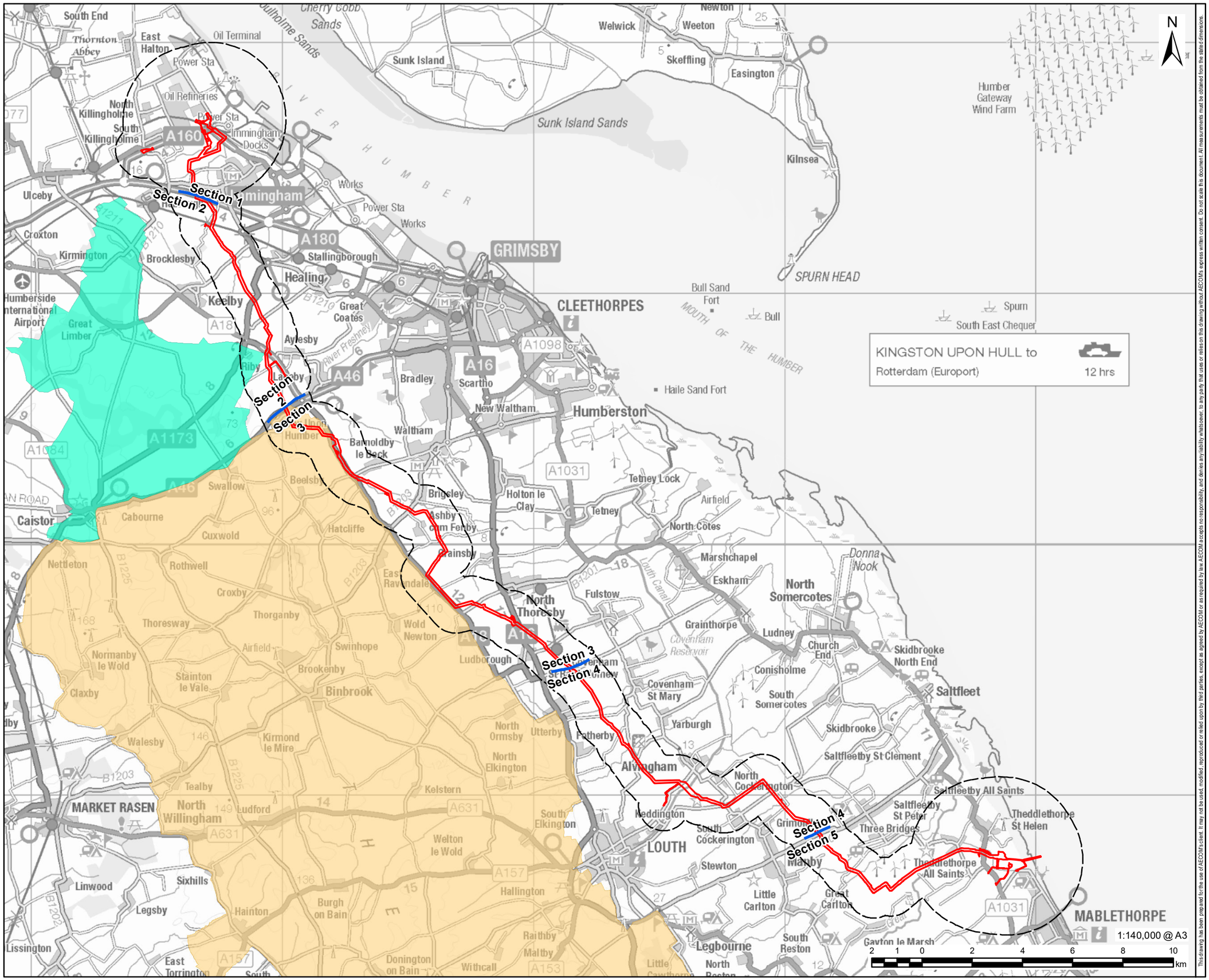

VikingCCS

AECOM

PROJECT

Viking CCS Pipeline

LEGEND

- DCO Site Boundary
- Study Area
- Route Section Break
- Area of Great Landscape Value
- Lincolnshire Wolds Area of Outstanding Natural Beauty

NOTES:
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FIGURE TITLE

Figure 7-2
Landscape Designations

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_230914_ES_7-2

Assumptions and Limitations

7.4.31 Site visits were undertaken by Chartered Landscape Architects on the 22 March 2023, 22 June 2023 and the 29 June 2023. The visits served to assess the existing character of the landscape and visit representative viewpoints and to capture viewpoint photography.

7.4.32 No technical difficulties or practical problems were encountered in carrying out the LVIA. The March site visit was conducted when broadleaf vegetation was not in leaf and represents the most open views. The June visit was conducted in the summer, allowing a comparison of visibility or visual effects over two seasons and a wide range of light and weather conditions. Potentially significant differences between seasonal views have been outlined where relevant within the assessment and taken into consideration in assessing the impacts and reaching conclusions. The site visits were undertaken in clear weather with good to very good visibility of at least 3 km.

7.4.33 Views of the Proposed Development other than those assessed are acknowledged to exist. The viewpoints are not intended to provide an exhaustive or fully comprehensive catalogue of views of the Proposed Development; rather they provide a representative sample for the purpose of the landscape and visual amenity assessment, using viewpoints agreed with key consultees.

7.4.34 In addition to the site visits, the existing landscape character has been assessed through a review of desk-based sources including mapping, aerial photography, planning and policy documents, landscape character assessments and other sources of information.

7.5 Landscape Baseline Conditions

National Character Areas (NCAs) and Designated Landscapes

7.5.1 The Lincolnshire Wolds AONB and an area identified as an AGLV lies within the western part of the pipeline route (Section 3) Study Area. The AGLV is a non-statutory, local-level designation identified by Policy S62 in the Central Lincolnshire Local Plan (Ref 7-12). Refer to **Figure 7-2**.

7.5.2 The national landscape character context of the Study Area is shown on **Figure 7-3**. At the national level, the Study Area falls within parts of the following Natural England (NCA):

- NCA 41: Humber Estuary (Ref 7-19);
- NCA 42: Lincolnshire Coast and Marshes (Ref 7-20); and
- NCA 43: Lincolnshire Wolds (Ref 7-21).

Regional Landscape Character Areas (RCAs)

7.5.3 At the regional level, landscape character is identified by the Lincolnshire County Council (2011) The Historic Character of The County of Lincolnshire (Ref 7-22) and the East Midlands Region Landscape Character Assessment (Ref 7-23) and shown on **Figure 7-3**.

7.5.4 The Study Area encompasses regional-level RCA including those identified in The Historic Character of The County of Lincolnshire (2011) (RCA3/4/8) and The East Midlands Region Landscape Character Assessment (EMRLCA 2010) (RCA1/2/7):

- RCA 1a: Coastal Saltmarsh;
- RCA 1b: Coastal Dunes;
- RCA 1c: Shallow Coastal Waters;
- RCA 2a: Settled Fens and Marshes;
- RCA 2c: Fen and Marsh Margin Farmlands; and

- RCA 7a: Chalk Wolds.

Local Landscape Character Areas (LCAs)

7.5.5 At the local level, landscape character is identified by:

- North Lincoln Council (1999) North Lincolnshire Landscape Character Assessment and Guidelines (Ref 7-24);
- North East Lincolnshire Council (2015) North East Lincolnshire Landscape Character Assessment, Sensitivity and Capacity Study (Ref 7-25);
- The Historic Character of The County of Lincolnshire (Ref 7-22);
- East Lindsey Council (2009) East Lindsey District Landscape Character Assessment (Ref 7-26); and
- West Lindsey Council (1999) West Lindsey District Landscape Character Assessment (Ref 7-27).

7.5.6 The Study Area encompasses local-level LCA which are subdivided into the Landscape Character Types (LCTs) as shown on **Figure 7-4** and set out below by reference to published landscape character assessments.

North Lincolnshire Landscape Character Assessment and Guidelines

7.5.7 A review of the current North Lincolnshire Landscape Character Assessment (Ref 7-24) was commissioned by JBA Consulting and forms part of the evidence base for the emerging North Lincolnshire Local Plan. The assessment subdivided the LCA into LCTs.

7.5.8 The LCT within the Humber Estuary LCA are:

- Open Undulating Farmland LCT; and
- Industrial Landscape LCT.

7.5.9 The LCT within the Lincolnshire Drift LCA is:

- Open Undulating Farmland LCT.

North East Lincolnshire Landscape Character Assessment, Sensitivity and Capacity Study

- Humber Estuary LCA;
- Lincolnshire Coast and Marshes LCA; and
- Lincolnshire Wolds LCA.

East Lindsey District Council Landscape Character Assessment

- LCA G1: Binbrook to Tetford Wolds Farmland;
- LCA I1: Holton le Clay to Great Steeping Middle Marsh;
- LCA J1: Tetney Lock to Skegness Coastal Outmarsh; and
- LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast.

West Lindsey Council Landscape Character Assessment

- LCA Wolds' Estates.

Landscape Value

7.5.10 The baseline value of the landscape character areas and types within the Study Area has been assessed by reference to evidence in relation to designated landscapes (Lincolnshire Wolds AONB and West Area of Great Landscape Value as defined within the Central

Lincolnshire Local Plan) and relevant criteria set out in Landscape Institute Technical Guidance Note 02/21 “Assessing landscape value outside national designations” (Ref 7-16).

7.5.11 The assessment of value is provided in **Table 7-11.**

Revision: 2 Drawn: LC Checked: RC Approved: MW Date: 2023-09-14

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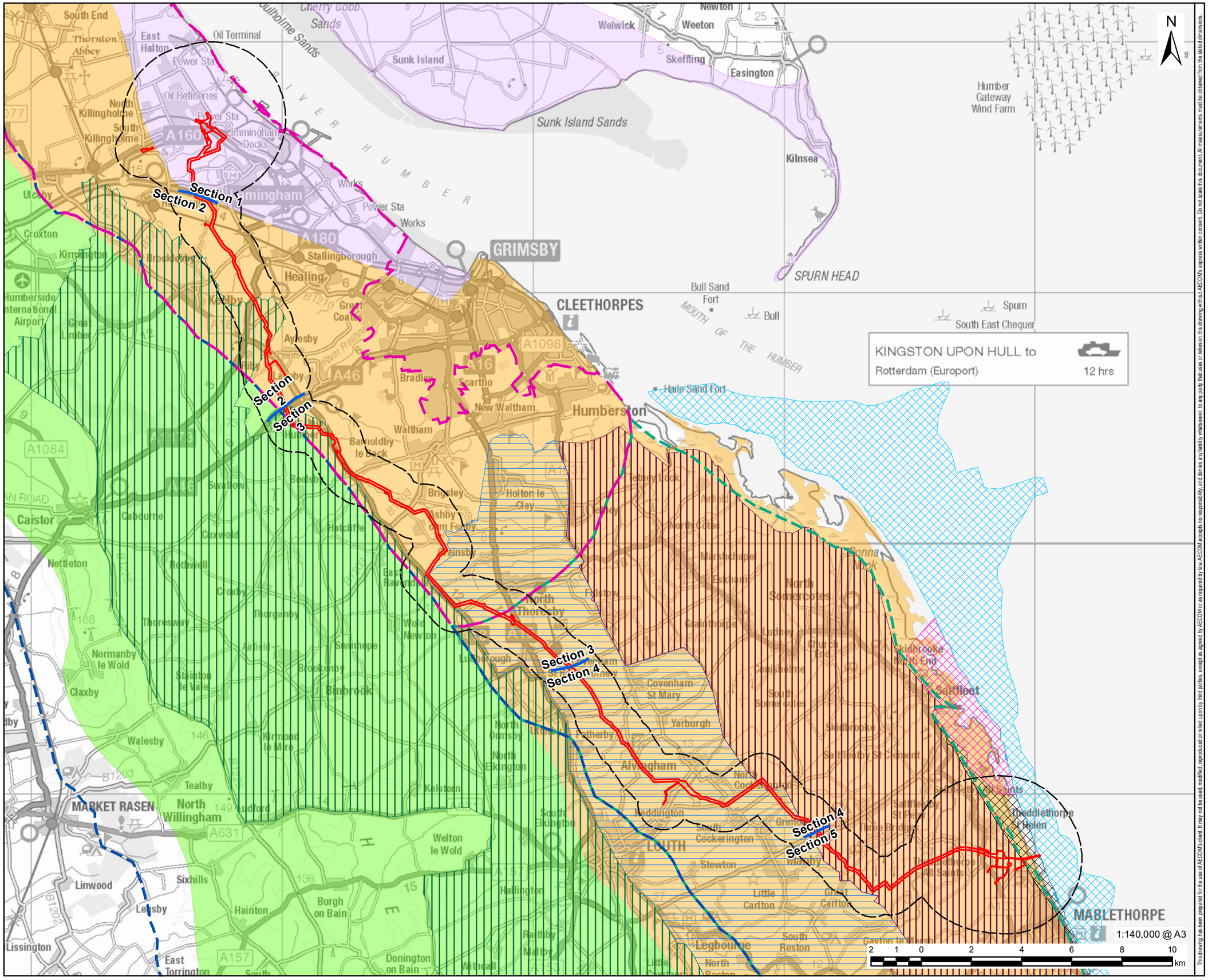

VikingCCS

AECOM

PROJECT

Viking CCS Pipeline

LEGEND

- DCO Site Boundary
- Study Area
- Route Section Break

National Character Area:

- NCA 41: Humber Estuary
- NCA 42: Lincolnshire Coast and Marshes
- NCA 43: Lincolnshire Wolds

East Midlands Region Landscape Character Area:

- 1A: Coastal Saltmarshes and Mudflats
- 1B: Coastal Dunes, Beach and Intertidal Sand Flats
- 1C: Shallow Coastal Waters
- 2A: Settled Fens and Marshes
- 2C: Fen and Marsh Margin Farmlands
- 7A: Chalk Wolds

Historic Landscape Character Area:

- The Northern Marshes
- The Wolds
- The Grazing Marshes

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FIGURE TITLE

Figure 7-3
National and Regional Landscape Character Areas

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_230914_ES_7-3

Revision: 3 Drawn: LC Checked: RC Approved: MW Date: 2023-09-14

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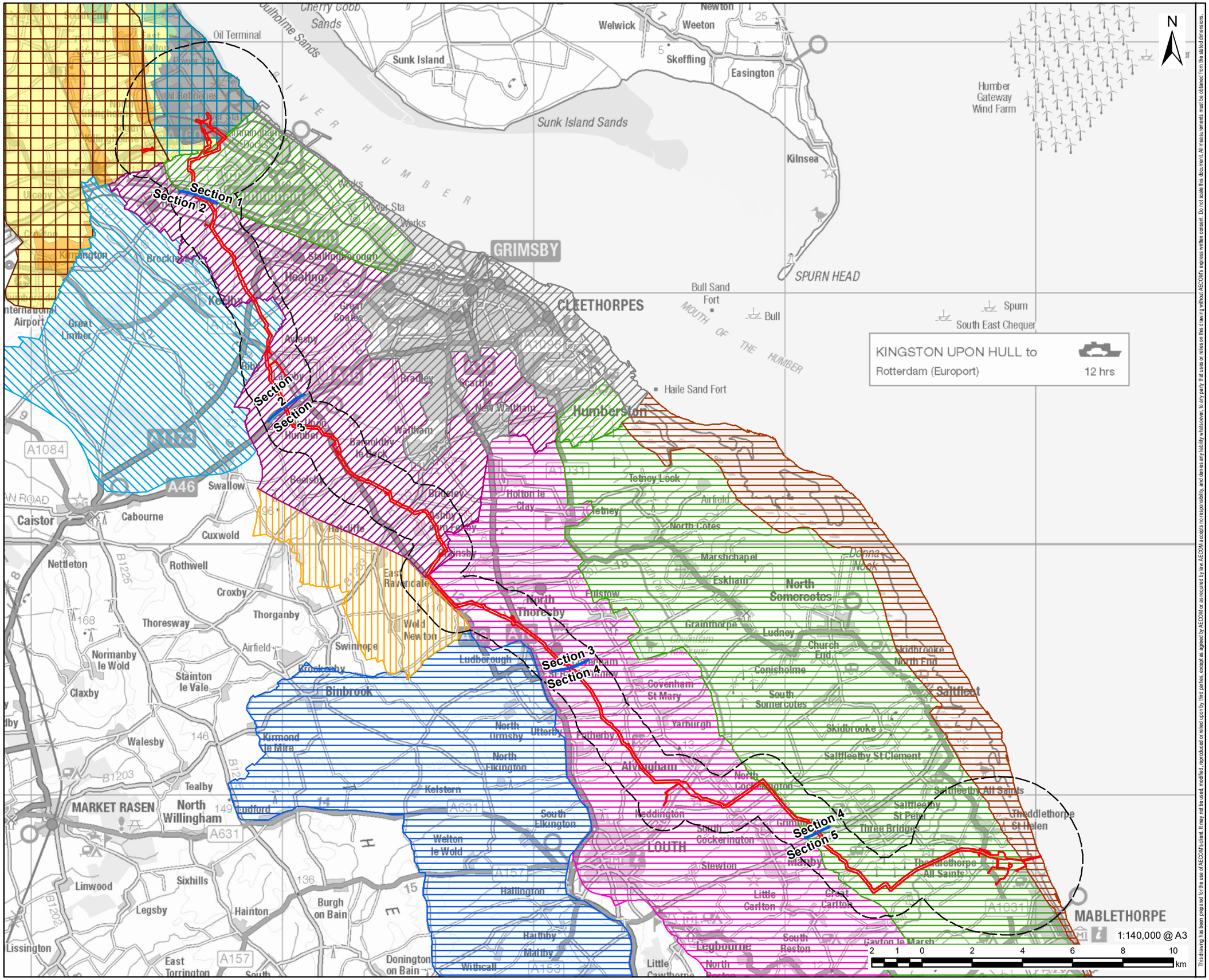

VikingCCS

AECOM

PROJECT

Viking CCS Pipeline

LEGEND

- DCO Site Boundary
- Study Area
- Route Section Break

North East Lincolnshire Landscape Character Area:

- Humber Estuary
- Lincolnshire Wolds
- Lincolnshire Coast and Marshes
- Undefined

West Lindsey District Council Landscape Character Area:

- 14: Wolds' Estates

East Lindsey District Council Landscape Character Area:

- G1: Binbrook to Tetford Wolds Farmland
- I1: Holten le Clay to Great Steeping Middle Marsh
- J1: Tetney Lock to Skegness Coastal Outmarsh
- K1: Donna Nook to Gibraltar Point Naturalistic Coast

North Lincolnshire Landscape Character Area:

- LCA Humber Estuary
- LCA Lincolnshire Drift
- LCT Flat Open Farmland
- LCT Industrial Landscape
- LCT Open Undulating Farmland
- LCT Wooded Farmland

FIGURE TITLE

Figure 7-4
Local Landscape Character Areas

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_230914_ES_7-4

Table 7-11: Landscape Value

Landscape	Key Characteristics	Value
NCA 41: Humber Estuary	• expansive, flat, low-lying estuarine landscape dominated by the open water of the Humber; • underlying bedrock of Cretaceous Chalk exposed as cliffs; • predominantly reclaimed, formerly inter-tidal landscape of high-quality soils and arable farming within large rectilinear fields with boundaries formed by dykes, drains and embankments, and with very little tree cover; • large, dispersed farmsteads and small villages on higher land within a quiet rural landscape; • internationally important estuarine, intertidal and coastal habitats of mudflats, salt marsh, saline lagoons, sand flats and sand dunes supporting large numbers of breeding and overwintering birds and grey seals; • Big skies and open views over the estuary, mudflats and salt marshes, with views of extensive industrial installations especially on the south bank; • Quiet rural areas/estuary contrast distinctly with urban and industrial influences around Hull and around the major ports, especially on the south bank; • the south bank, in particular, there are extensive industrial complexes of oil and chemical tanks, towers, chimneys, warehouses and storage areas which are a key man-made characteristic.	• evident natural heritage value demonstrated by internationally important habitats; • limited cultural heritage value with few listed buildings/conservation areas and cultural associations on land dominated by industrial and urban uses; • poor or degraded landscape elements common within the industrialised areas and indicative of a degraded landscape condition; • a high level of distinctiveness associated with the estuary but few recreational opportunities; • strong perceptual and scenic character of the estuary contrasting with the industrialised/port uses on land; • some perceptual wildness and tranquillity around the estuary and functional value as a maritime habitat; • Overall: taking these factors into account, NCA 41: Humber Estuary is assessed as **medium landscape value.**

Landscape	Key Characteristics	Value
NCA 42: Lincolnshire Coast and Marshes	• flat coastal plain to the east, with dramatic skylines across great distances, rising the adjacent Lincolnshire Wolds in the west; • chalk bedrock overlain by post-glacial sand, gravel and clay deposits creating slowly permeable, seasonally waterlogged fine and fertile loamy soils; • strong coastline and marine influences with extensive wide, shallow beaches, mudflats, major dune systems and sandy beaches; • important coastal habitats managed for nature conservation support a wide range of overwintering and migratory seabirds; • a clear distinction between the higher ground of the Middle Marsh, where settlement is nucleated, and dispersed settlement relating to drainage in the Outmarsh; • a predominantly open, medium-scale agricultural landscape of mixed arable farmland in the Middle Marsh to the west and smaller farms with traditional pastures / occasional vegetable crops on the Outmarsh - nearer to the coast; • woodland and hedge cover is sparse but increases westwards towards the Lincolnshire Wolds with significant ancient woodland on the Middle Marsh and Sites of Special Scientific Interest (SSSI) and nature reserves; • less tree and hedgerow cover on the lower-lying, open Outmarsh drained eastwards	• NCA predominantly hosts the Proposed Development with the majority within the Middle Marsh, moving into the Outmarsh and Coast in the southernmost areas; • evident natural heritage value present in nationally important habitats, including ancient woodland and nature reserves and internationally important coastal Ramsar, Special Area of Conservation (SAC) and Special Protection Area (SPA) sites; • some cultural heritage value associated with medieval sites but few listed buildings/conservation areas or cultural associations; • poor or degraded landscape elements common within the industrialised areas and indicative of a degraded landscape condition; • recreational opportunities predominantly linked to the coast and diminish inland; • strong perceptual and scenic character of the coast contrasting with the relatively featureless inland agricultural land; • some perceptual wildness and tranquillity around the coast and functional value as a maritime habitat; • Overall: taking these factors into account, NCA 42: Lincolnshire Coast and Marshes is assessed as **low landscape value.**

Landscape	Key Characteristics	Value
	towards the sea by natural watercourses and many manmade drainage ditches; • the Middle Marsh, is a softly undulating arable landscape with fields defined by woodlands and hedgerows; • the Outmarsh, an open landscape of arable land/ pasture divided by narrow dykes; • the coast itself, characterised by erosion and deposition and intertidal habitats including salt marsh, coastal dunes and wetlands; • deserted medieval villages, traces of ridge and furrow and medieval and later industry; • A dispersed settlement pattern with a concentration of larger settlement along the coast including resort towns and Grimsby, an important international freight link; • Industrial areas, holiday resorts of bungalows and extensive caravan parks locally dominant; • developed seaside resorts attract tourists to the coast including to enjoy the wild coast long views, high levels of tranquillity and numerous nature reserves providing recreation and green tourism.	
NCA 43 Lincolnshire Wolds	• Rolling chalk hills but also a diverse geology enabling a variety of building materials in traditional buildings; • A largely agricultural landscape with a pronounced scarp edge to the north and west affording panoramic views; • Predominantly arable with limited woodland and isolated chalk and neutral grasslands on	• Much of the NCA is within the Lincolnshire Wolds AONB and those areas outside of it share similar elements of high quality and condition; • Outside of the AONB the key characteristics are typically less pronounced and / or influenced by less distinctive landform or urbanising or other detracting elements; • Overall: taking these factors into account, NCA 43: Lincolnshire Wolds is assessed as **high landscape value.**

Landscape	Key Characteristics	Value
	the steepest uncultivated slopes and semi-natural acidic mires in the valley marshes; • Broad grass verges of valuable species-rich habitats and chalk springs and flushes of chalk stream habitats; • A historically and archaeologically rich landscape with a sparse settlement pattern of small market towns and small nucleated villages and scattered farmsteads; • Wartime airfields.	
Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB)	• The special qualities of the AONB are summarised in Table 1 in the Lincolnshire Wolds Management Plan 2018 – 2023 under six headings and a listing of elements that comprise the special qualities. These are listed as: Landscape Character; Earth Heritage; Biodiversity; Archaeology; Cultural Associations (community value); and Historic Landscapes and Buildings; • Elements that comprise the special qualities relating to landscape character are listed as: scenic beauty and rural charm; expansive, sweeping views; peace and tranquillity; and farmed land (scenic quality, biodiversity, socio-economic).	• The Study Area includes land within the Lincolnshire Wolds AONB which by virtue of the designation is regarded as being of high quality and condition; • The AONB designation is indicative of high scenic quality and value; • There are multiple designated heritage assets and sites of designated conservation value within the Study Area; • PRoW are reasonably well represented within the AONB and it is visited extensively for recreational purposes; • The area is perceived as attractively rural and as described in the AONB key characteristics it is both a scenic, working landscape and a valued cultural landscape; • Alfred, Lord Tennyson featured the AONB in many of his works including ‘The Brook’. The landscape has offered inspiration to many artists and writers over the years including the mid-19th century landscape painter Peter de Wint, and more recently the author A. S. Byatt in the Booker Prize-winning novel ‘Possession’; • Overall: taking these factors and the designated status of value into account, the Lincolnshire Wolds AONB is assessed as **high landscape value.**

Landscape	Key Characteristics	Value
Area of Great Landscape Value (AGLV) – North of Caistor.	• Policy S62 of the Central Lincolnshire Local Plan states that "Areas of Great Landscape Value (AGLV) are locally designated landscape areas recognised for their intrinsic character and beauty and their natural, historic and cultural importance. A high level of protection will be afforded to AGLV reflecting their locally important high scenic quality, special landscape features and sensitivity; • The AGLV area within the Study Area is north of Caistor and West of the B1211.	• The AGLV contains no statutory designations of ecological/biodiversity value, although 2 areas of replanted ancient woodland are present at Irby Dales Wood and north of Keelby on the B1211. The natural heritage value is therefore low; • There is cultural heritage value evidenced by Great Limber Conservation Area and Brocklesby Park Historic Park and Garden, which is extensive within the AGLV; • The landscape is in fair to good condition with hedgerows maintained low and both hedgerows and woodland intact and contributing to a well-defined landscape pattern of intensive agriculture in medium to large fields; • There are no identifiable associations of note and the landscape, whilst exhibiting few detractors, is low in distinctiveness and perhaps due to the historic parkland has few PRoW and low recreational value; • There is a perception of landscape value from the remnant/extant areas of Brocklesby Park Historic Park and Garden, which is extensive within the AGLV and a degree of tranquillity rather than wildness, in what is a functional agricultural landscape; • Overall, taking these factors and the local designated status of value into account the AGLV which is partially within the Study Area is assessed as **medium landscape value.**
Lincolnshire Drift LCA (North Lincolnshire)		
Open Undulating Farmland LCT	• Gently undulating terrain of around 40m AOD in the west, dipping towards the lower lying ground of the Humber in the north and east; • The undulating nature of the terrain has resulted in both arable and pastoral land use due to the mix of areas with good draining soils and ones with impeded drainage;	• Kirmington Pits is a SSSI but there are few natural heritage designations or land-based elements of value. The Humber Estuary is both a RAMSAR Site and a SSSI but lies beyond the LCA; • In relation to cultural heritage there are numerous scheduled monuments associated with historic farmsteads as well as the

Landscape	Key Characteristics	Value
	• Settlement is dispersed with larger settlements such as Barrow upon Humber and Goxhill to the north of the LCAR with smaller scattered settlements, such as Wootton and Ulceby, to the south; • Settlements retain important open spaces, such as small meadows, orchards and ponds. Ponds are a particular feature of the villages, given the poor drainage. Blow wells also occur at Barrow upon Humber; • Strong presence of historic farmsteads throughout the LCAR with many surviving in their extant condition or only partially altered; • Additional Cultural Heritage provided by the Scheduled Monuments south of Goxhill and around Kirmington as well as the Conservation Area at Barrow upon Humber; • Despite the existence of traditional farm buildings, large -scale portal framed sheds are common; • Large, intensive arable fields bounded by clipped hawthorn hedges although some degraded and with gaps; • Simple, peaceful landscape is interrupted by pylons that are often dominant elements when in close proximity, transport corridors and industry forming a distant backdrop in some views; • Urban clutter such as the proliferation of signs or fencing along field boundaries are common features;	Conservation Area at Barrow upon Humber as noted in the LCA description; • Landscape Condition is fair within the context of intensive agricultural use, noting that gappy hedgerows are a feature; • No associations have been identified and the LCA lacks distinctiveness and has limited recreational value; • Perceptual (Scenic)/Perceptual (Wildness and tranquillity) is present at a local level only and not a key characteristic; • There are widespread detracting elements including urban clutter, large agricultural buildings and pylons; • Overall, taking these factors into account the Lincolnshire Drift LCA Open Undulating Farmland LCT is assessed as **low landscape value.**

Landscape	Key Characteristics	Value
	• The Public Rights of Way (PRoW) network is more prevalent in the north east around Goxhill and Barrow upon Humber and in the south west between Ulceby and Kirmington. No PRoW network within the western half of the LCT.	
Humber Estuary LCA (North Lincolnshire)		
Open Undulating Farmland LCT	• LCT largely as described for the Lincolnshire Drift LCA, differences noted below; • Settlement is limited to scattered farmsteads and located in the northern area. Within the southern area South Killingholme is nucleated east to west cross the 160 corridor and also north to south along Town Street; • In the northern area, the landscape is open and sometimes exposed due to the scarcity of woodland blocks. Trees are commonly grouped with farm buildings or nearby as shelterbelts, or occasionally present in hedgerows; • In the southern area, blocks of mixed woodland help to screen the hard industrial edge. This includes Houlton's Covert, which has been present for over 100 years retaining its original footprint, and the more recent community woodland of Mayflower Wood; • In the northern area, the PRoW network, originating from East Halton, links up with the route along the coastline. In the southern area, the routes are curtailed by the Industrial Landscape to the east.	• There are few natural heritage designations or land-based elements of value. The Humber Estuary is both a RAMSAR Site and a SSSI but lies beyond the LCA; • In relation to cultural heritage there are numerous scheduled monuments associated with historic farmsteads as well as the Conservation Area at Barrow upon Humber as noted in the LCA description; • Landscape Condition is fair within the context of intensive agricultural use, noting that gappy hedgerows are a feature; • No associations have been identified and the LCA lacks distinctiveness and has limited recreational value; • Perceptual (Scenic)/Perceptual (Wildness and tranquillity) is present at a local level only and not a key characteristic; • There are widespread detracting elements including urban clutter, large agricultural buildings and pylons; • Overall, taking these factors into account the Humber Estuary LCA Open Undulating Farmland LCT which is partially within the Study Area is assessed as **low landscape value.**

Landscape	Key Characteristics	Value
Industrial Landscape LCT	• Landscapes visually dominated by large or massive structures serving as docks, storage, factories or petrochemical installations. These structures are often separated by extensive open arable land with hedges and groups of trees playing little compositional role in the landscape.	• There are no land based natural heritage designations of value; • Cultural Heritage value is limited to scheduled monuments on the periphery of the LCT; • Landscape Condition is poor and/or industrialised throughout and although a distinctive landscape it has low recreational/Perceptual (Scenic)/Perceptual (Wildness and tranquillity) value and its functional value is industrial in nature; • Overall, taking these factors into account the Humber Estuary LCA Industrial Landscape LCT is assessed as **very low landscape value.**
North East Lincolnshire		
Humber Estuary LCA	• The Humber Estuary is expansive, flat and low-lying comprising largely of industrial complexes and farmland; • The simple landscape is characterised by large unbounded arable fields with industrial/urban and semi-natural habitat land uses providing local variety; • Hedgerow and tree cover is limited, with occasional woodland blocks visually prominent and interrupting views. In many areas flood alleviation berms block views of the River Humber.	• A virtually flat, visually intrusive area dominated by on-shore oil and gas refineries and other large scale industrial units and extends inland to the A180. Medium to large scale open arable farmland bounded by established, low cut hedgerows with hedgerow trees. Network of busy roads, including the main A180 which is bounded by tall native hedgerows and trees. The value of the Humber Estuary LCA is **very low value**.
Lincolnshire Coast and Marshes LCA	• The scenery of the Lincolnshire Coast and Marshes is characterised by undulating farmland often including a number of large woodland blocks. The landscape is unexceptional, with views across to the urban/ industrialised coast and estuary detracting from the overall scene; • The Lincolnshire Drift is relatively less fertile than the majority of Humber region and, as a	• The LCA is shown as including part of the Lincolnshire Wolds AONB but this is not referenced in the written description and for assessment purposes the LCA is assumed to exclude the AONB, which is assessed separately; • The LCA includes the Bradley & Dixon Woods LNR and a scheduled monument/moated site at Healing but is otherwise of limited natural/cultural heritage value; • As noted by the written description it has low recreational/Perceptual (Scenic)/Perceptual (Wildness and

Landscape	Key Characteristics	Value
	consequence, there is a higher proportion of hedges, unchanneled streams, permanent pasture and woodland than elsewhere in the former county. This provides a number of local wildlife refuges; • The Lincolnshire Coast and Marshes LCA is a transition zone lying as it does between the higher Wolds and the coast. It is an unexceptional agricultural landscape without a strong sense of place or setting; • Areas close to the A180 are often affected by traffic noise. This can have a detracting influence on the quality of the Landscape Character.	tranquillity) value and its functional value is agricultural in nature; • Overall, this is a transitional landscape with no strong sense of place, although it borders the AONB it is equally influenced by the urban areas of Grimsby. Taking these factors into account the Lincolnshire Coast and Marshes LCA is assessed as **low landscape value.**
LCA G1: Binbrook to Tetford Wolds Farmland	• Dealt with as part of the Lincolnshire Wolds AONB.	• Dealt with as part of the Lincolnshire Wolds AONB **high landscape value.**
LCA I1: Holton le Clay to Great Steeping Middle Marsh	• Gently undulating foothills to the Wolds rising from Tetney Lock to Skegness Coastal Outmarsh with views to Binbrook to Tetford Wolds Farmland and Little Cawthorpe to Skendleby Wolds Farmland; • Predominantly arable farmland with medium to large scale fields, some pasture with grazing sheep and cattle, bounded by ditches and dykes; • Meandering rivers and streams, and the Louth Canal contained by flood embankments, which flow from the Wolds eastwards to the coast;	• The LCA includes no identifiable sites of designated natural heritage value in the LCA within the Study Area and only a small number of small sites beyond it, perhaps reflecting the agricultural land use; • There are multiple scattered scheduled monuments throughout the LCA reflecting cultural heritage value; • There is a relatively dense network of PRoW connecting settlements and transport corridors; • As noted by the written description the LCA has Perceptual (Scenic) value as a result of the relationship to the Wolds, a rural landscape in good condition and absence of detractors and a Perceptual (Wildness and tranquillity) tranquillity value;

Landscape	Key Characteristics	Value
	• Scattered blocks of mixed deciduous woodland throughout but more frequent around the south western boundary; • Frequent scattered villages, hamlets, farmsteads and dwellings include a line of merging villages at the foot of the Wolds; • Traditional and distinctive historic market towns of Louth, Alford and Burgh le Marsh; • Scattered scheduled monuments and heritage features such as windmills and water mills, ridge and furrow fields, deserted medieval villages and disused railway tracks; • A distinctive and tranquil rural landscape with very few minor detractors.	• Overall, this LCA borders the AONB, includes a section of the AGLV and has some of the qualities associated with them, with a less varied landform. Taking these factors into account LCA I1: Holton le Clay to Great Steeping Middle Marsh is assessed as **medium landscape value.**
LCA J1: Tetney Lock to Skegness Coastal Outmarsh	• A low lying, drained coastal plain contained to the east by sea embankments, sand dunes and sea defences; • Mostly flat with some areas of gentle undulations including some saltern mounds; • Some wide-open views and big skies. Some views enclosed by landform, embankments, sand dunes or trees; • Extensive network of drains, ditches and dykes with a strong geometric pattern in the northern and central parts of the area; • Rivers and the historic Louth Canal cross from the Lincolnshire Wolds in the west towards the coast; • Predominantly mixed agricultural land use with both arable and pasture, and some remnants of ridge and furrow;	• The landscape within the Study Area has a condition consistent with managed agricultural use. Landscape elements such as ditches are in good condition, but the condition of hedgerows varies from poor to fair. Woodland is managed and generally in good condition; • Perceptual scenic quality is influenced by the presence of flat arable farmland enclosed with hedgerows, shelter belts and sand dunes / saltmarshes adjacent to the coast. Scenic detractors include the existing National Gas Transmission, Theddlethorpe Terminal, very low-density settlement in villages, wind turbines and the presence of the urban edge of Mablethorpe; • The LCA contains a small number of listed buildings/scattered scheduled monuments; • Natural heritage value includes a number of ecological designations which straddle the LCA and LCA K1, such as Saltfleetby - Theddlethorpe Dunes National Nature Reserve/SSSI and the Humber Estuary RAMSAR site;

Landscape	Key Characteristics	Value
	• Several important coastal nature reserves with a high level of nature conservation designation with associated wildlife; • Sparsely scattered settlements set within mature ornamental trees and hedgerows; • A stretch of coastal resorts from Mablethorpe to Skegness with caravan parks, and new residential and commercial developments on their outskirts; • An extensive network of raised minor roads with a few larger A roads serving the coastal resorts; • A predominantly intact and distinctive rural landscape with some man-made influences including a gas terminal, an oil storage facility and several wind farms.	• There is a network of local PRoW, which link villages and roads within the Study Area. There are several car parks facilitating access to the Saltfleetby - Theddlethorpe Sand Dunes and beach. The LCA also contains several holiday parks and tourist attractions on the northern edge of Mablethorpe; • The LCA is perceived as a mix of villages and large-scale arable farmland. There is a sense of remoteness to the far west of the LCA, but this is reduced elsewhere. Overall perceptual tranquillity/wildness aspects for the LCA as a whole are considered to be low; • Mablethorpe features in the D. H. Lawrence novel, Sons and Lovers as the destination for the Morel family's holiday. The town is also associated with the East Coast floods in 1953; • The LCA has a number of factors which contribute to landscape value including conservation interest and recreation value. The presence of several designated ecological sites, tourist facilities, and cultural and literary associations combine with urban and industrial development in the Study Area to give overall **medium landscape value.**
LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast.	• Flat tidal strip with some stretches of long sandy beaches and mud flats with areas of saltmarsh; • Wide open views with big skies which extend out to sea; • Views influenced by and contained to the landward side in some areas by concrete promenades defending coastal sea resorts, and in other areas by vegetated sea banks or coastal sand dunes; • Large areas used by the Ministry of Defence (MOD);	• The LCA contains no listed buildings/scattered scheduled monuments or other indicators of cultural heritage value; • Natural heritage value includes a number of international/national ecological designations Saltfleetby - Theddlethorpe Dunes National Nature Reserve/SSSI and the Humber Estuary RAMSAR site and a SAC and SPAs, all indicative of high conservation value; • There is public access to the Saltfleetby-Theddlethorpe Sand Dunes and several car parks facilitating access to beach; • Perceptual scenic quality is influenced by the sand dunes / saltmarshes and coast which define an unspoilt natural landscape with very few detractors;

Landscape	Key Characteristics	Value
	• Drains flowing onto the tidal marshes create intricate dendritic patterns emphasised by the saltmarsh vegetation; • Mosaic of coastal, dune, mudflat and saltmarsh vegetation; • No settlements but occasional small-scale built structures in MOD designated Danger Areas; • Protected by international, national and local nature conservation designations; • Remote and tranquil for the most part, but less tranquil adjacent to coastal resorts and designated MOD Danger Areas; • A very distinctive and mostly unspoilt natural landscape with very few detractors.	• Perceptual tranquillity/wildness aspects for the LCA as a whole are considered to be high given the undeveloped nature; • The LCA has a number of factors which contribute to landscape value including conservation interest and recreation value to give overall **medium landscape value.**
LCA Wolds' Estates.	• Arable landscape with a regular pattern of medium sized fields; • Extensive belt of mixed deciduous and coniferous woodland gives some sense of enclosure and a backdrop to views; • Settlements have attractive wooded settings and the majority of buildings are constructed in a characteristic estate style; • Parkland landscape with distinctive individual mature trees and groups of trees near Brocklesby; • Widespread influence of Brockelsby Estate with large stone gateposts, post and rail fencing and a castellated gates house	• Largely as described for the AGLV; • Overall, taking these factors and the local designated status of value into account the LCA is assessed as **medium landscape value.**

Landscape	Key Characteristics	Value
	• Larger and more open fields east of the B1211 and A18 allowing distant views across be flat landscape towards Immingham docks.	

7.6 Visual Baseline Conditions

Zone of Theoretical Visibility (ZTV)

7.6.1 In order to identify locations with potential to have views of the Proposed Developments, a number of ZTV have been produced in accordance with principles set out in GLVIA3. These ZTVs identify those areas which have potential for views of the Proposed Developments and to what extent it is likely to be visible. The ZTVs are illustrated on **Figure 7-5**, **Figure 7-6**, **Figure 7-7**, **Figure 7-8** and **Figure 7-9**.

7.6.2 The ZTVs have been generated by analysis of an OS Terrain 5 digital terrain model (DTM) of the surrounding terrain and the Proposed Developments themselves. Buildings have been incorporated into the DTM from OS Open Map Local with an assumed height of 7 m. Woodland from the National Forest Inventory has also been incorporated into the DTM with an assumed height of 10 m, with an observer eye height of 1.6 m.

7.6.3 The ZTVs illustrate that theoretical visibility of the Proposed Developments is intermittent across the Study Area primarily due to terrain and intervening vegetation.

7.6.4 The ZTV for the Immingham Facility and both options for the Theddlethorpe Facility (option 1 and option 2) has been prepared based upon the tallest structures, i.e., the single permanent vent at both sites, at up to 25 m above ground level (AGL). The ZTV for the Block Valve Stations have been produced using the height of the largest anticipated structures at 4 m AGL. A ZTV for the pipeline route has been produced using the height of the anticipated construction vehicles at 3.5 m AGL. These present a worst-case scenario, in order to identify the likely maximum extent of theoretical visibility of the Proposed Developments.

Visual receptors

7.6.5 The ZTVs were used to inform likely visibility from receptors/ people with a view of the Proposed Development within the Study Area. In addition, professional judgment based on a number of site visits, was used to inform the selection of viewpoints included within the assessment. Key visual receptors that have the potential to be affected by the Proposed Development are shown on **Figure 7-10** and include:

Settlement receptors:

7.6.6 Larger settlements within the vicinity of the Proposed Development, from which it may be visible, include from north to south: Immingham/South Killingholme, Keelby, Stallingborough, Aylesby/ Laceby, North Thoresby, Covenham St Bartholomew/ Covenham St Mary, Alvingham, North Cockerington, South Cockerington, Grimoldby, Saltfleetby St Peter, Theddlethorpe and Mablethorpe.

7.6.7 Other village/hamlets in the vicinity of the Proposed Development include: Habrough, Riby; Irby upon Humber, Barnoldby le Beck, Brigsley, Ashby cum Fenby, Ludborough and isolated properties and farmsteads in close proximity to the proposed pipeline route, block valve houses and Immingham Facility and Theddlethorpe Facility.

Recreational receptors:

- Users of the PRoW network;
- Users of the Proposed England Coast Path (PRoW 530);
- Recreational aspects of the coast, including beaches, parking facilities for visitors to the coastal strip, caravan parks, and holiday parks; and
- National Cycle Network (NCN) Routes 1 and 110.

Transport routes:

- Major ‘A’ roads, the A160, A180, A18, A46 and A16;
- Secondary ‘A’ roads, A1077, A1173, and A1031;
- ‘B’ roads and the local (unclassified) road network; and
- Passengers on the Lincolnshire Wolds Railway (LWR heritage line).

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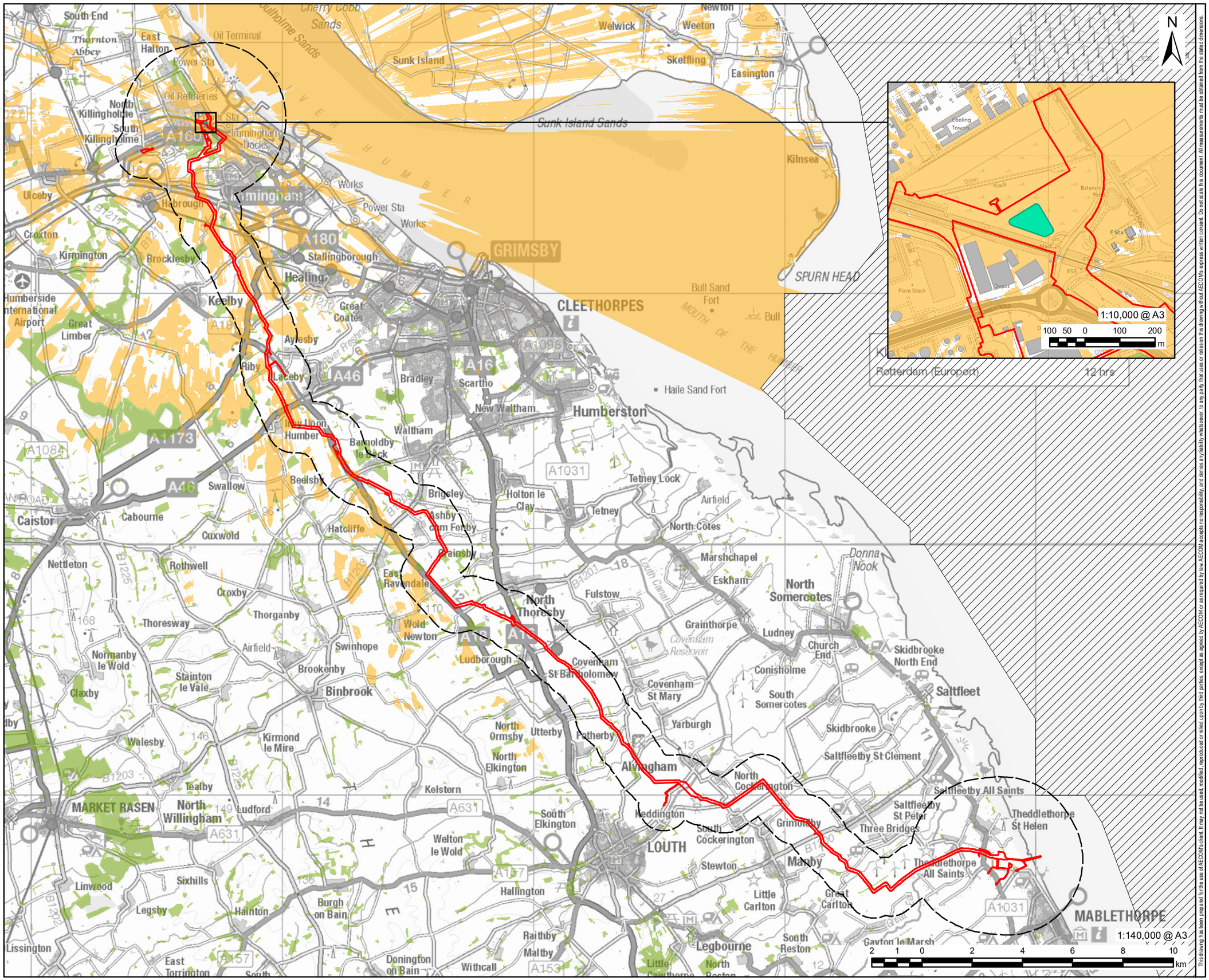

VikingCCS

AECOM

PROJECT

Viking CCS Pipeline

LEGEND

- Study Area
- DCO Site Boundary
- Immingham Facility - 25m Height
- Existing Building - 7m Height
- National Forest Inventory - Woodland - 10m Height
- No DTM Coverage
- Zone of Theoretical Visibility

ZTV NOTES:
Zone of Theoretical Visibility (ZTV) has been generated using OS Terrain 5 digital terrain model which does not take into account the screening effects of vegetation, buildings or other structures.
Existing Buildings have been incorporated into the DTM from OS Open Map Local with an assumed height of 7m.
Woodland from National Forest Inventory has also been incorporated into the DTM with an assumed height of 10m.
ZTV is based upon a grid of points at 20m apart within the Immingham Facility Area at a height of 25m with an observer eye height of 1.6m.
All heights mentioned above are above ground level (AGL) unless otherwise specified.

FIGURE TITLE

Figure 7-5
Zone of Theoretical Visibility
Immingham Facility at 25m Height

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_231004_ES_7-5

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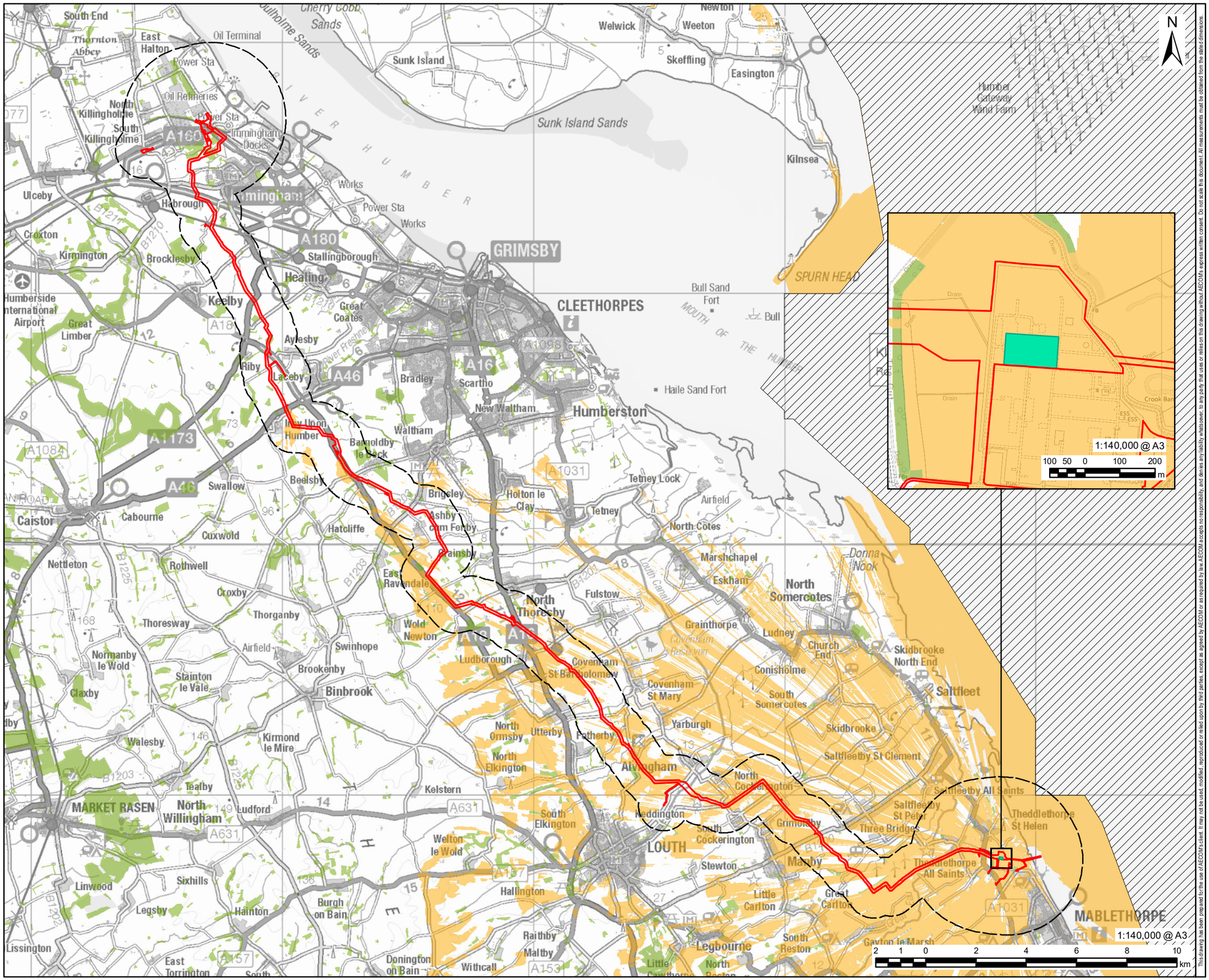

VikingCCS

AECOM

PROJECT

Viking CCS Pipeline

LEGEND

- Study Area
- DCO Site Boundary
- Theddlethorpe Facility - 25m Height
- Existing Building - 7m Height
- National Forest Inventory - Woodland - 10m Height
- No DTM Coverage
- Zone of Theoretical Visibility

ZTV NOTES:
Zone of Theoretical Visibility (ZTV) has been generated using OS Terrain 5 digital terrain model which does not take into account the screening effects of vegetation, buildings or other structures.
Existing Buildings have been incorporated into the DTM from OS Open Map Local with an assumed height of 7m.
Woodland from National Forest Inventory has also been incorporated into the DTM with an assumed height of 10m.
ZTV is based upon a grid of points at 20m apart within the Theddlethorpe Facility Area at a height of 25m with an observer eye height of 1.6m.
All heights mentioned above are above ground level (AGL) unless otherwise specified.

FIGURE TITLE

Figure 7-6
Zone of Theoretical Visibility
Theddlethorpe Facility - Option 1 at 25m Height

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_231010_ES_7-6

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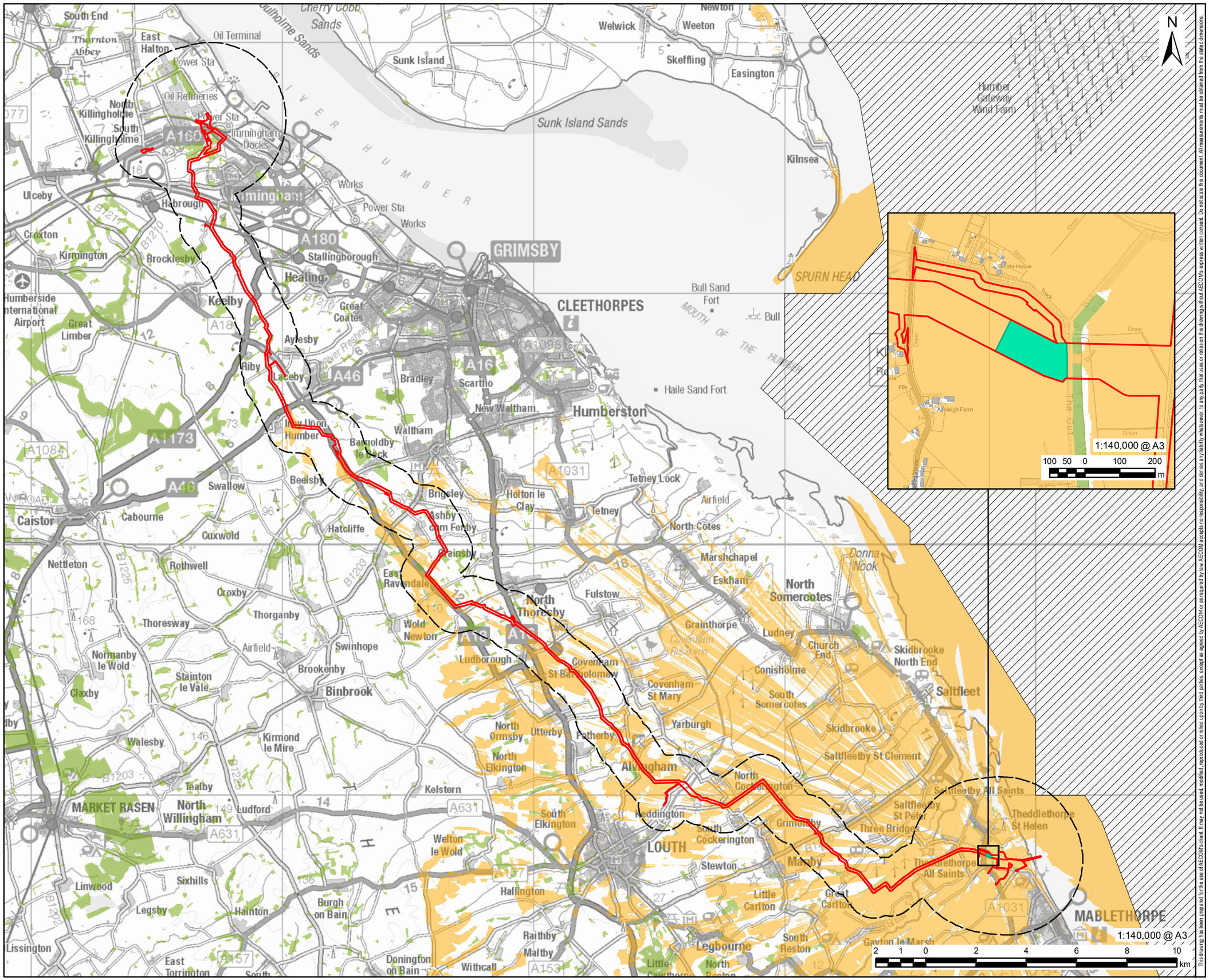

ZTV NOTES:
Zone of Theoretical Visibility (ZTV) has been generated using OS Terrain 5 digital terrain model which does not take into account the screening effects of vegetation, buildings or other structures.
Existing Buildings have been incorporated into the DTM from OS Open Map Local with an assumed height of 7m.
Woodland from National Forest Inventory has also been incorporated into the DTM with an assumed height of 10m.
ZTV is based upon a grid of points at 20m apart within the Theddlethorpe Facility Area at a height of 25m with an observer eye height of 1.6m.
All heights mentioned above are above ground level (AGL) unless otherwise specified.

VikingCCS

AECOM

PROJECT

Viking CCS Pipeline

LEGEND

- Study Area
- DCO Site Boundary
- Theddlethorpe Facility - 25m Height
- Existing Building - 7m Height
- National Forest Inventory - Woodland - 10m Height
- No DTM Coverage
- Zone of Theoretical Visibility

FIGURE TITLE

Figure 7-7
Zone of Theoretical Visibility Theddlethorpe Facility - Option 2 at 25m Height

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_231010_ES_7-7

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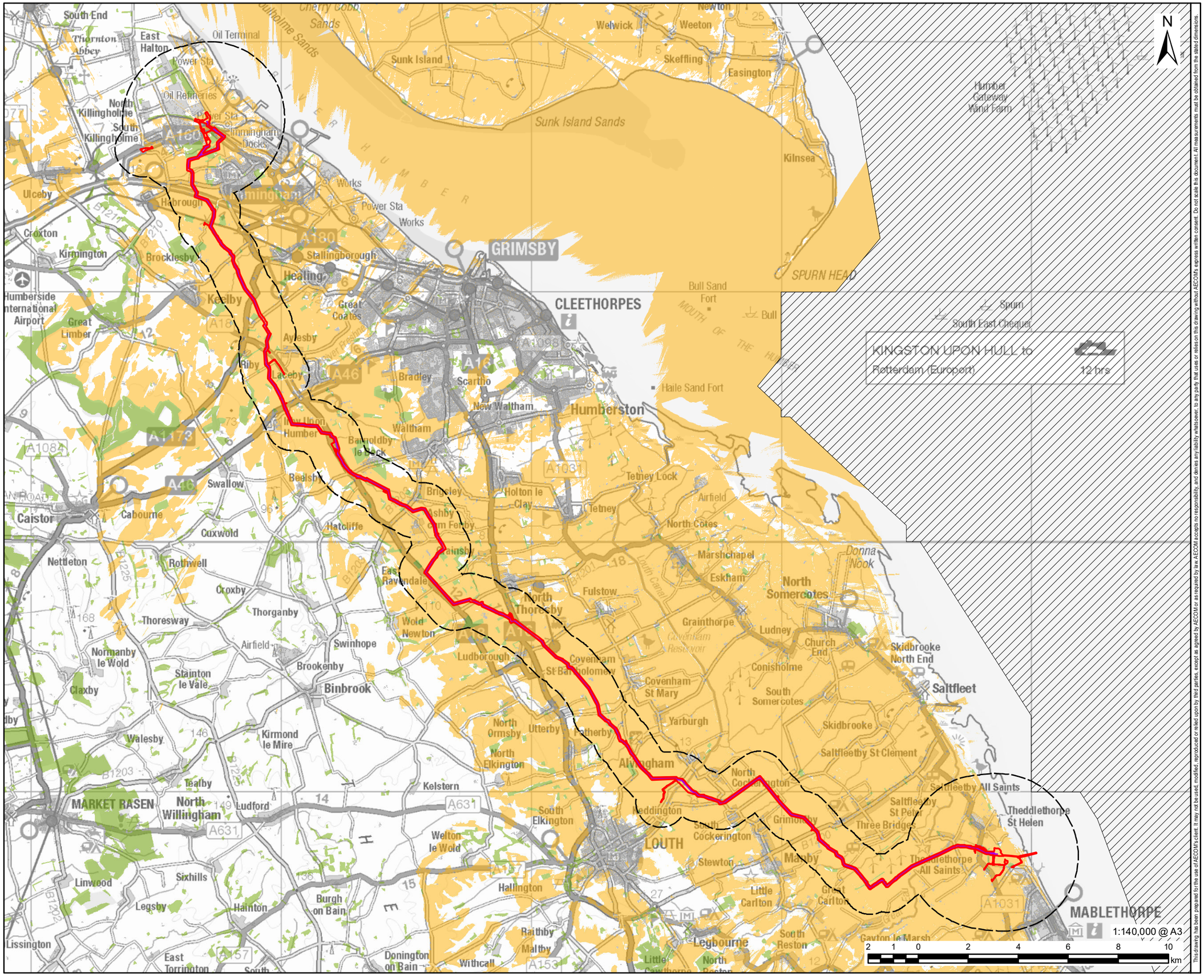

VikingCCS

AECOM

PROJECT

Viking CCS Pipeline

LEGEND

- Study Area
- DCO Site Boundary
- Preferred Pipeline Route - 3.5m Height
- Existing Building - 7m Height
- National Forest Inventory - Woodland - 10m Height
- No DTM Coverage
- Zone of Theoretical Visibility

ZTV NOTES:
Zone of Theoretical Visibility (ZTV) has been generated using OS Terrain 5 digital terrain model which does not take into account the screening effects of vegetation, buildings or other structures.
Existing Buildings have been incorporated into the DTM from OS Open Map Local with an assumed height of 7m.
Woodland from National Forest Inventory has also been incorporated into the DTM with an assumed height of 10m.
ZTV is based upon a series of points every 100m along the Preferred Pipeline Route at a height of 3.5m with an observer eye height of 1.6m.
All heights mentioned above are above ground level (AGL) unless otherwise specified.

FIGURE TITLE

Figure 7-8
Zone of Theoretical Visibility Preferred Pipeline Route at 3.5m Height

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_231010_ES_7-8

Revision: 2 Drawn: LC Checked: KM Approved: RC Date: 2023-10-10

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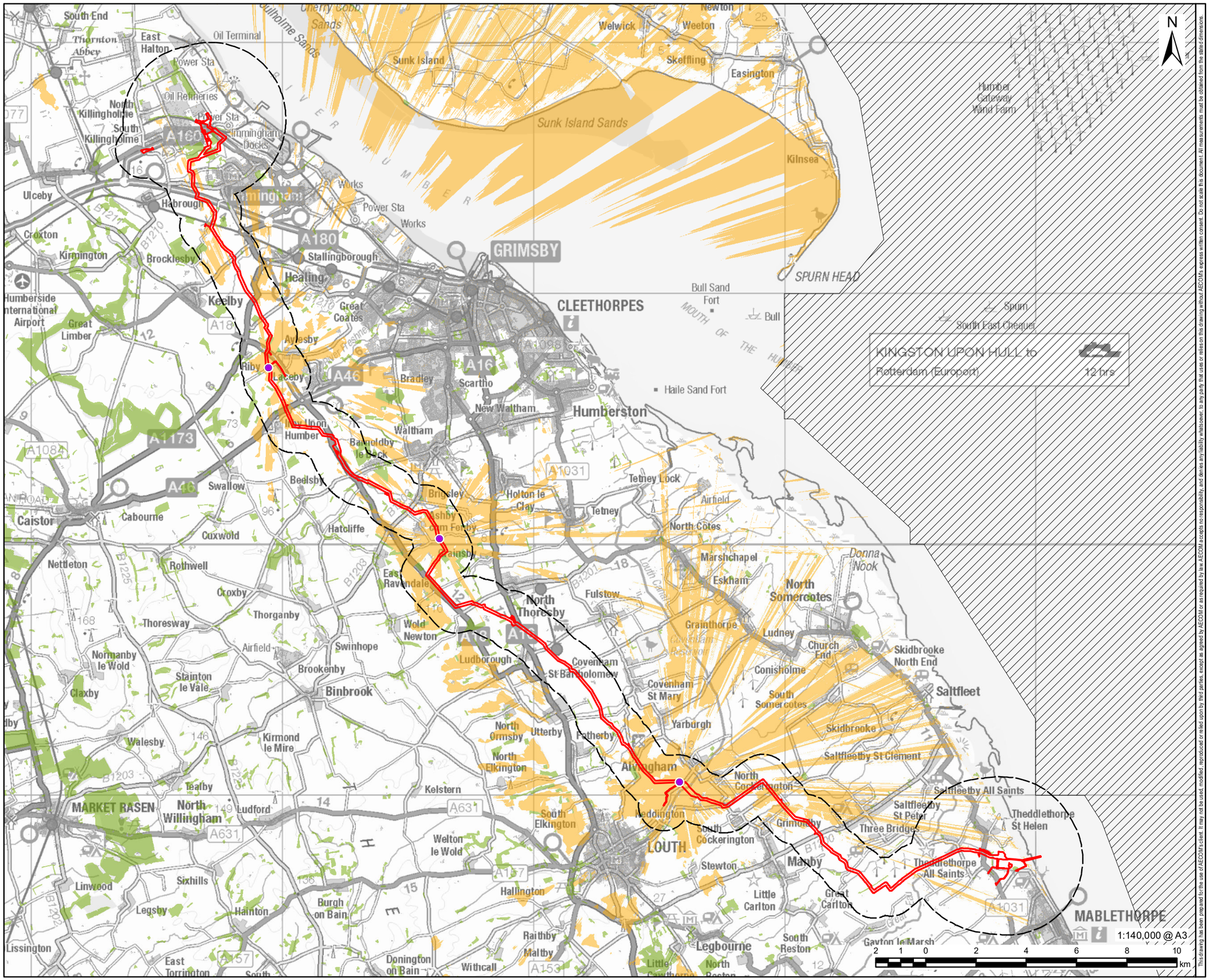

VikingCCS

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PROJECT

Viking CCS Pipeline

LEGEND

- Study Area
- DCO Site Boundary
- Block Valve Station - 4m Height
- Existing Building - 7m Height
- National Forest Inventory - Woodland - 10m Height
- No DTM Coverage
- Zone of Theoretical Visibility

ZTV NOTES:
Zone of Theoretical Visibility (ZTV) has been generated using OS Terrain 5 digital terrain model which does not take into account the screening effects of vegetation, buildings or other structures.
Existing Buildings have been incorporated into the DTM from OS Open Map Local with an assumed height of 7m.
Woodland from National Forest Inventory has also been incorporated into the DTM with an assumed height of 10m.
ZTV is based upon a grid of points at 10m apart within the Block Valve Station Area at a height of 4m with an observer eye height of 1.6m.
All heights mentioned above are above ground level (AGL) unless otherwise specified.

FIGURE TITLE

Figure 7-9
Zone of Theoretical Visibility
Block Valve Stations at 4m Height

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_231010_ES_7-9

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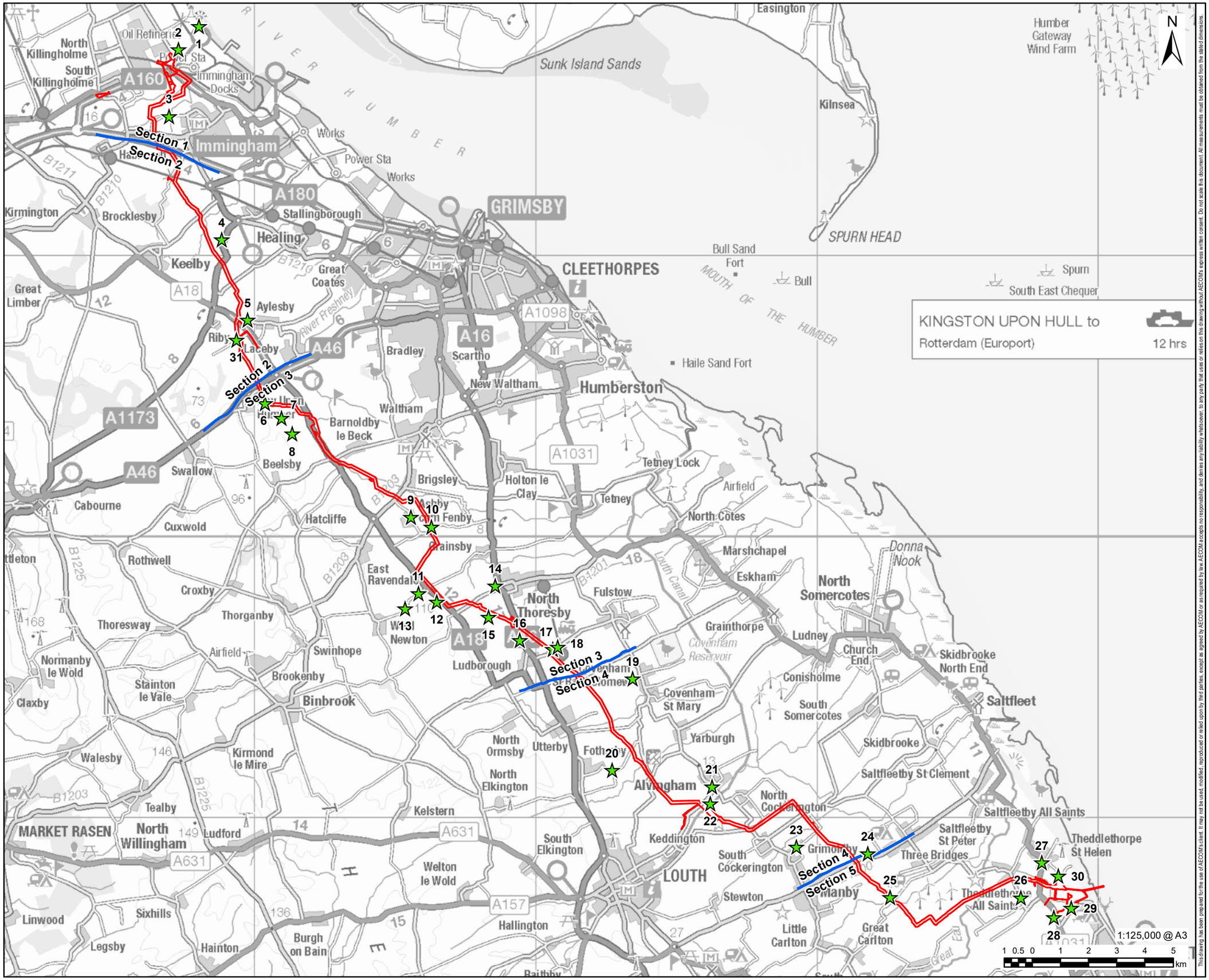

VikingCCS

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PROJECT

Viking CCS Pipeline

LEGEND

- DCO Site Boundary
- Route Section Break
- Viewpoint Location

FIGURE TITLE

Figure 7-10
Representative Viewpoints

ISSUE PURPOSE

ENVIRONMENTAL STATEMENT

PROJECT NUMBER / REFERENCE

60668955 / VCCS_231010_ES_7-10

Baseline Conditions

7.6.8 Representative Viewpoints (VP) 1 to 30 are shown on **Figure 7-10** and accompanying baseline photography is contained in *ES Volume IV: Appendix 7.2 (Application Document 6.4.7.2)*. Descriptions of the baseline view and value are provided in **Table 7-12**.

7.6.9 The selection of viewpoints has been chosen to represent a range of receptor groups across the Study Area, focussing on those where a view is theoretically possible. The visual assessment is then used to assess the type of receptor and nature of effects on them arising from the Proposed Development. In line with principles in GLVIA3, not all receptors will be assessed but based on the representative groups and locations, coupled with the ZTV analysis, the range of likely effects will be considered.

Table 7-12: Representative Viewpoints

Viewpoint	Key Characteristics/Receptor Type	Value of View
Pipeline (Section 1)		
Viewpoint 1: PRoW NKIL 50, Killingholme Marshes Proposed England Coast Path (518033, 418152)	Representative of recreational receptors including PRoW and long-distance recreational trail with potential views towards the Immingham Facility including 25m high venting stack.	View from PRoW over low level structures within the Killingholme gas fields. Localised mounding in the middle ground screens views further south. Large scale industrial development at Humber Refinery, Lindsey Oil Refinery and the VPI Immingham CHP Plant are clearly visible within the middle distance and extending across a large proportion of the skyline. Intermittent hedgerow and trees along nearby roads partially obscure lower parts of the industrial structures. Alternative views across the Humber Estuary are the focus for receptors at this location. A partially industrialised, **very low value** view.
Viewpoint 2: Marsh Lane Proposed England Coast Path PRoW NKIL 100 (517300, 417324)	Representative of recreational receptors users of the long-distance recreational trail and users of the local road network with potential views towards the Immingham Facility including 25m high venting stack.	View from a single residential property on Marsh Lane with native hedgerows lining the highway boundaries. The structures located within the VPI Immingham CHP Plant site and other tall structures are visible in the background of the view. Upper storey windows from the nearby residential property are likely to gain clearer views above garden vegetation and tall hedgerows lining the highway. A partially industrialised, **very low value** view.
Viewpoint 3: Brocklesby Avenue, Immingham (516970, 414952)	Representative of settlement and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary.	An open view from new housing, across open fields with localised copses and tree cover and well managed, low hedgerows. The petro-chemical stacks and infrastructure forms a noticeable detractor within the wider view. Overall, the view is relatively ordinary and unlikely to be visited for enjoyment of the view.

Viewpoint	Key Characteristics/Receptor Type	Value of View
		An ordinary, predominantly rural, **low value** view.
Pipeline (Section 2)		
Viewpoint 4: Riby Road, Stallingborough (518840, 410562)	Representative of settlement and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary.	An open view from housing, across large scale arable fields. Small copses and hedgerows are visible in the middle ground. Woodland is present across the background of the view. Pylons and visible across the full expanse of the view. Overall, the view is relatively ordinary and unlikely to be visited for enjoyment of the view. An ordinary, predominantly rural, **low value** view.
Viewpoint 5: PRoW 106 St Lawrence Trail, Aylesby (519753, 407710)	Representative of settlement and recreational receptors including PRoW with potential views towards the pipeline construction works located within the DCO Site Boundary and Washingdales Lane Block Valve Station.	A view from the PRoW at the edge of village across arable farmland within the AGLV. Woodland and hedgerow trees form the background of the view with residential properties at The Lindens just visible. Attractive view with limited detractors. A view likely to be visited and appreciated by residents or others at a local level. Overall, a **medium value** view.
Pipeline (Section 3)		
Viewpoint 6: PRoW NELC 16 Walk Lane, Irby Upon Humber (Lincolnshire Wolds AONB) (520375, 404753)	Representative of settlement, recreational receptors including PRoW and visitors to the AONB and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary.	A rural view from within the Lincolnshire Wolds AONB over arable fields in the fore and middle ground. Elements characteristic of the AONB are seem in a wide panorama and form a pleasing composition. An open view likely to be visited in the AONB. A **high value** view.

Viewpoint	Key Characteristics/Receptor Type	Value of View
Viewpoint 7: PRoW NELC 17 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB) (520957, 404221)	Representative of recreational receptors including PRoW and visitors to the AONB with potential views towards the pipeline construction works located within the DCO Site Boundary.	A rural view from within the Lincolnshire Wolds AONB over open arable fields in the fore and middle ground. Elements characteristic of the AONB are seem in a wide panorama and form a pleasing composition. Overhead lines are visible across the view with wind turbines visible on the horizon. An open view likely to be visited in the AONB. A **high value** view.
Viewpoint 8: PRoW NELC 122 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB) (521349, 403660)	Representative of recreational receptors including PRoW and visitors to the AONB with potential views towards the pipeline construction works located within the DCO Site Boundary.	A rural view from within the Lincolnshire Wolds AONB over open arable fields in the fore and middle ground. Elements characteristic of the AONB are seem in a wide panorama and form a pleasing composition. Overhead lines are visible across the view with wind turbines visible on the horizon. An open view likely to be visited in the AONB. A **high value** view.
Viewpoint 9: Ashby cum Fenby PRoW NELC 150 (525570, 400692)	Representative of settlement and recreational receptors including PRoW with potential views towards the pipeline construction works located within the DCO Site Boundary and Thoroughfare Block Valve Station.	An expansive view from the edge of Ashby cum Fenby, across open fields with localised copses and tree cover and well managed, low hedgerows. The view is highly rural with few detractors but is relatively ordinary and unlikely to be visited solely for enjoyment of the view. An ordinary, rural, **medium value** view.
Viewpoint 10: Thoroughfare, Ashby cum Fenby (526294, 400357)	Representative of recreational receptors including PRoW and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary and Thoroughfare Block Valve Station.	A relatively open, rural view from the edge of Ashby cum Fenby, across open fields with localised copses and tree cover and well managed, low hedgerows. The view is highly rural with few detractors but is relatively ordinary and unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.

Viewpoint	Key Characteristics/Receptor Type	Value of View
Viewpoint 11: Hawerby Road, East Ravensdale PRoW NELC 35 (Lincolnshire Wolds AONB) (525841, 397991)	Representative of users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary and Thoroughfare Block Valve Station.	A rural view from within the Lincolnshire Wolds AONB but including detracting elements and a truncated view in which landform is uncharacteristic of the AONB and traffic on the A18 is intrusive. Overall, a **medium value** view.
Viewpoint 12: Lane near Hawerby NELC 35 (Lincolnshire Wolds AONB) (526480, 397691)	Representative of settlement and recreational receptors including PRoW with potential views towards the pipeline construction works located within the DCO Site Boundary.	A rural view from within the Lincolnshire Wolds AONB over open arable fields in the fore and middle ground. Elements characteristic of the AONB are seem in a wide panorama and form a pleasing composition with distant views to the sea. An open view likely to be visited in the AONB. A **high value** view.
Viewpoint 13: PRoW Near Wold Newton (Lincolnshire Wolds AONB) (525368, 397453)	Representative of recreational receptors including PRoW with potential views towards the pipeline construction works located within the DCO Site Boundary.	A rural view from within the Lincolnshire Wolds AONB over open arable fields in the fore and middle ground. Elements characteristic of the AONB are seem in a wide panorama and form a pleasing composition with distant views to the sea. An open view likely to be visited in the AONB. A **high value** view.
Viewpoint 14: A16/ High Street North Thoresby (528573, 398252)	Representative of settlement/residential views from North Thoresby and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary.	This is a wide view looking westwards from North Thoresby. It is dominated by the A16 in the foreground and intact hedgerows which obstruct views of the fields and land beyond, except for the elevated skyline of the Lincolnshire Wolds AONB, comprised of woodland and glimpsed views of fields. Overall, the view is dominated by the traffic and A16 highway, and foreshortening by dense hedgerows, such that the agricultural landscape to the west of North Thoresby is not visible. As a

Viewpoint	Key Characteristics/Receptor Type	Value of View
		result of the hedgerows the AONB does not add perceptible value and there are no other elements of value within the view. Although absent from the image, traffic is frequent and intrusive at this location and is a detractor. A location unlikely to be visited for enjoyment of the view. Overall, a highway/traffic dominated, foreshortened, **low value** view.
Viewpoint 15: North Thoresby Factory/ Properties (528323, 397139)	Representative of views from isolated properties, recreational receptors including PRoW with potential views towards the pipeline construction works located within the DCO Site Boundary.	An attractive view in which the trees and rural nature of the access lane/PRoW receding into the distance, combine with landform, field colour and vegetation to create a pleasing panorama. There is a clear focal point provided by the avenue of trees and woodland blocks in the middle ground. A view likely to be appreciated by residents or others at a local level. Overall, a **medium value** view.
Viewpoint 16: A16 Layby (529431, 396317)	Representative of views of users of the A16/road network with potential views towards the pipeline construction works located within the DCO Site Boundary.	A wide, open, view across arable fields in stretching from the foreground to the background to a wooded horizon. It is dominated by the open, featureless, fields and has no clear focal point. It is unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.
Viewpoint 17: Station Road, Ludborough (530610, 396010)	Representative of views from isolated properties on the edge of Ludborough, and users of the local road network with potential views along the pipeline construction works located within the DCO Site Boundary	A wide, open, view across arable fields stretching from the foreground to the background to a wooded horizon with areas of upland in the AONB. It is dominated by the open, featureless, fields and has no clear focal point, although the background contributes to the panorama. Although indicative of rural nature of this landscape and hence reinforcing a sense of

Viewpoint	Key Characteristics/Receptor Type	Value of View
		place, it is unlikely to be visited solely for enjoyment of the view. An ordinary, rural, **low value** view.
Viewpoint 18: Station Road, Ludborough (530787, 396089)	Representative of views from isolated properties on the edge of Ludborough, recreational users of Luborough Station and the Lincolnshire Wolds Railway and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary.	An expansive view to the left-hand side and a framed view along Station Road west of Ludborough Station. The highway and wide grassed verge dominate the foreground, with a property forming the focal point. Low hedgerows recede into the distance either side of the road, limiting long views in the flat landscape. The open field access in the near left hand side reveals a distant view over large fields to a wooded horizon which forms the background. The view is rural with few detractors but is relatively ordinary with features of value or aesthetically pleasing composition. Although indicative of rural nature of this landscape and hence reinforcing a sense of place, it is unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.
Pipeline (Section 4)		
Viewpoint 19: PRoW off Main Road, Covenham St Bartholomew (533459, 394950)	Representative of settlement/residential views from Covenham St Bartholomew and users of the local PRoW network with potential views towards the pipeline construction works located within the DCO Site Boundary.	A rural view over open arable fields in the fore and middle ground with the elevated landform and landscape of the Lincolnshire Wolds AONB forming the distant skyline in the background. The scale of the open fields is the primary focus and creates a featureless view with no clear focus or aesthetically pleasing composition. An open arable view dominated by the fields unlikely to be visited for the view. A **low value** view.

Viewpoint	Key Characteristics/Receptor Type	Value of View
Viewpoint 20: Little Grimsby unnamed C-Class Road (532731, 391695)	Representative of views from isolated properties at Little Grimsby and recreational receptors including PRoW users with potential views towards the pipeline construction works located within the DCO Site Boundary.	An attractive view in which the trees and rural nature of the lane receding into the distance, combine with landform, field colour and vegetation to create a pleasing panorama. There are few detracting elements (distant turbines) in a view with a clear focal point provided by the avenue of trees and woodland blocks in the middle ground add to the composition and quality of the panorama. A view likely to be appreciated at a local level. Overall, a **medium value** view.
Viewpoint 21: Yarburgh Road, Alvingham (532731, 391695)	Representative of settlement/residential views from Alvingham and views for users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary and Louth Road Block Valve Station.	An expansive view from the edge of Alvingham, across open fields with localised copses and tree cover and well managed, low hedgerows. The view is highly rural with few detractors but is relatively ordinary and unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.
Viewpoint 22: Cherry Tree Lane/PRoW, Alvingham (536221, 390517)	Representative of users of the local PRoW network with potential views towards the pipeline construction works located within the DCO Site Boundary and Thoroughfare Block Valve Station.	An open view across the Louth Canal in the foreground, leading to fields and hedgerows in the mid and background, with landform and individual trees forming the horizon. The view is a pleasing composition with elements which add to the sense of place. A view likely to be appreciated at a local level. Overall, a **medium value** view.
Viewpoint 23: Pick Hill Lane, Grimoldby (539264, 388847)	Representative of settlement/residential, recreational receptors including PRoW and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary.	An attractive edge of village view in which the trees and rural nature of the lane receding into the distance, combine with attractive farm buildings to create a pleasing panorama and a strong sense of place. There is a clear focal point provided by the avenue of trees.

Viewpoint	Key Characteristics/Receptor Type	Value of View
		A view likely to be visited and appreciated by residents or others at a local level. Overall, a **medium value** view.
Viewpoint 24: Main Road, Saltfleetby (541820, 388734)	Representative of settlement, recreational receptors including PRoW and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary.	An expansive view from the edge of Saltfleetby, across flat, open, large-scale fields. The view is highly rural with few detractors but is relatively ordinary with no clear focus or aesthetically pleasing composition. Although indicative of the open nature of this landscape and hence reinforcing a sense of place, it is unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.
Pipeline (Section 5)		
Viewpoint 25: Thacker Bank (542602, 387176)	Representative of views from isolated properties and of users of the local road network with potential views along the pipeline construction works located within the DCO Site Boundary.	An open panorama in which the flat landform and drainage ditches, adjacent hedgerow, combine to evoke a sense of place and enjoyment of the view. A view likely to be appreciated at a local level. Overall, a **medium value** view.
Viewpoint 26: Sea Lane, Theddlethorpe (547254, 387169)	Representative of settlement/residential viewers, recreational receptors including PRoW and users of the local road network with potential views towards the pipeline construction works located within the DCO Site Boundary and Theddlethorpe Facility Option 1 and 2 including 25m high venting stack.	A view from the PRoW adjacent to Sea Lane. Wide panorama across open fields with localised copses and tree cover but no clear focal point. The view is highly rural with few detractors but is relatively ordinary and unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.
Viewpoint 27: PRoW 252 off Mablethorpe Road A1031 (548000, 388414)	Representative of settlement and users of the PRoW network with potential views towards the pipeline construction works located within the DCO Site Boundary and Theddlethorpe Facility Option 1 and 2 including 25m high venting stack.	A view from the PRoW adjacent to the Kings Head pub, Theddlethorpe. An expansive view from the PRoW connecting Mill Lane with the A1031. Wide panorama across open fields with localised copses and tree cover but no clear focal point. The view is highly rural with few detractors

Viewpoint	Key Characteristics/Receptor Type	Value of View
		but is relatively ordinary and unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.
Viewpoint 28: A1031 Mablethorpe Road, entrance to the Theddlethorpe Terminal (548432, 386462)	Representative of views from isolated properties on the A1031and of users of the local road network with views towards the Theddlethorpe Facility Option 1 and 2 including 25m high venting stack.	An ordinary, partially industrialised view in which the disused Theddlethorpe Terminal, highway and signage are detracting elements. The intervening vegetation in the middle ground provides a degree of enclosure but overall, a **low value** view unlikely to be visited for enjoyment of the view.
Viewpoint 29: Kent Avenue, Mablethorpe (549047, 386800)	Representative of settlement/residential viewers in Mablethorpe and users of the local road network with potential views towards the Theddlethorpe Facility Option 1 including 25m high venting stack.	An edge of settlement view including infrastructure, glimpsed views of Theddlethorpe Terminal, some housing and a band of trees across the middle ground. The view is rural but has no focal point and multiple detractors. It is relatively ordinary and unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.
Viewpoint 30: England Coast Path, Theddlethorpe (548596, 387942)	Representative of recreational viewers on the England Coast Path with potential views towards the Theddlethorpe Facility Option 1 and 2 including 25m high venting stack.	A view including the disused Theddlethorpe Terminal, and a band of trees across the middle ground forming the horizon. The view is rural but has no focal point and multiple detractors. It is relatively ordinary and unlikely to be visited for enjoyment of the view. An ordinary, rural, **low value** view.
Viewpoint 31: Washingdales Lane (519368, 407004)	Representative of users of the local road with potential views towards the Washingdales Lane Block Valve Station.	A rural, narrow view from a local road. Overall, the view is relatively ordinary and unlikely to be visited for enjoyment of the view. An ordinary, predominantly rural, **low value** view.

Future Baseline

7.6.10 As part of the future baseline scenario in the absence of the Proposed Development, it is predicted that small amounts of infill development within existing settlement boundaries would have been constructed, but the general landscape character and features would remain in a similar condition as they are now. Overall, there is no evidence within policy documents to suggest that key characteristics of the landscape or views will change within the operational life of the Proposed Development.

7.6.11 An assessment of the effects resulting from the Proposed Development and other developments identified as having the potential for significant effects is provided in *ES Volume II Chapter 20: Cumulative Effects Assessment (Application Document 6.2.20).*

7.7 Development Design and Embedded Mitigation

7.7.1 Where feasible, mitigation measures have been incorporated into the design of the Proposed Development such that they inform its detailed design and/or the approach to its construction.

7.7.2 Embedded measures have been defined through an iterative process of assessment and design-development, the aim being to mitigate impacts and effects as much as possible through good design and avoidance of any sensitive areas where practicable. This approach has accordingly provided opportunities to prevent or reduce adverse effects on landscape character and visual amenity by designing-in measures from the outset and defining the actions and control that will be applied during construction. Embedded mitigation includes working methods to use soil storage as screening, segregation of soil types (topsoil and subsoil) for reuse, sequential phasing to limit the extent of works at any one time and planting to reinstate sections of hedgerow or trees removed during the construction stage of the Proposed Development. Embedded mitigation also includes for the integration of permanent structures, specifically the block valve stations, into the landscape to minimise visual impacts, refer to *ES Volume II Chapter 3: Description of the Proposed Development (Application Document 6.2.3).*

7.7.3 The effectiveness of these embedded mitigation measures has been taken into account when assessing the potential impacts of the Proposed Development and the significance of its effects on the landscape and visual environment.

7.7.4 Elements of embedded mitigation of specific relevance to landscape character and visual amenity comprise the following (note: where a measure has been given a specific reference, this relates to the mitigation register, as presented *within ES Volume IV Appendix 3.1 (Application Document 6.4.3.1)*:

Siting and Routeing

- Sensitive siting and routeing has sought to:
    - avoid more sensitive landscape features such as woodland, including protected trees (e.g., Ancient Woodland) and mature tree specimens;
    - limit the proximity of construction compounds, pipe dumps, access points and laydown areas in less visually conspicuous locations along the route, as far as practicable, without compromising efficient working, for example away from the AONB and settlements;
    - limit the proximity of the pipeline route to settlement and residential properties; and
    - avoid the areas of highest quality landscape in the Lincolnshire Wolds AONB and AGLVs

Construction Control and Management Measures

- **C1**: Adoption of a maximum working width for the open-cut pipeline construction corridor of 30 m except for trenchless crossings where the maximum working width will be 50 m, sufficient to excavate the trench, store topsoil and subsoil separately and facilitate machinery and vehicle access (but avoiding additional land take);
- **C2**: Adoption of cut and cover along the pipeline route and subsequent reinstatement to original ground profiles. As per *ES Volume II Chapter 3: Description of the Proposed Development (Application Document 6.2.3)*, the approximately 2.4 km of pipeline within the Lincolnshire Wolds AONB will be installed with the original land profiles reinstated within 9 months, subject to installation methods and complexity;
- **C3**: Placement of topsoil to one side of the trench and subsoil to the other, with the additional height of the subsoil storage used on whichever side requires greater screening benefit;
- **C4**: Positioning temporary construction compounds in less visually conspicuous locations along the route, as far as practicable, without compromising efficient working, for example away from the AONB or village locations or settlements;
- **C5**: Employing standard good practice construction techniques, such as minimising vegetation clearance, installing tree protection measures around retained trees and hedgerows, separation and storage of subsoil and topsoil to ensure no degradation in quality, and reinstatement undertaken as soon as possible after completion of construction of each section/ area of works. A high standard of soil management and reinstatement will achieve better integration of the pipeline post reinstatement, reducing contrast with adjacent agricultural land and mitigating visual scarring through the landscape and along the pipeline route;
- **C6**: Reinstatement of hedgerows/ field boundaries crossed by the route, with native (and species-rich where appropriate) species planted to reduce or mitigate effects on landscape character and the visual awareness of the pipeline route within and across the landscape in the short to medium term;
- **C7**: Landscape maintenance will be put in place to maintain any new planting; and
- **C8**: Reinstatement of agricultural land such that there is no long-term change in land use along the pipeline route.

Engineering Design Principles

- *ES Volume II Chapter 3: Description of the Proposed Development (Application Document 6.2.3)* provides details of the design intent and design principles that have been adopted and embedded into the design. These include:
    - Locating the Immingham Facility within an existing industrial context of Immingham, to improve landscape fit and minimise visual impact; and
    - Designing the Block Valve Stations to have simple monolithic forms, avoiding unnecessary complexity in order to ensure a clean and unbroken silhouette and use of appropriate material and colours designed to respond to the colour palette of the context, to help integrate the buildings into the landscape and views.

Landscape Design Principles

7.7.5 Landscape design principles for the Proposed Development, as set out in the OLEMP (*Application Document 6.8*) and in *ES Volume II Chapter 3: Description of the Proposed Development (Application Document 6.2.3*) include:

- Protect existing vegetation wherever possible with the erection of tree protection measures in accordance with British Standard (BS) 5837:2012 (Ref 7-29) prior to commencement of ground works. Where this isn't possible, the aim is to limit the corridor of vegetation removal as far as reasonably practicable and locate the corridor of vegetation removal to the area of least established and lowest value trees (refer to *ES Volume IV ES: Appendix 6.10:(Application Document 6.4.6.10)*);
- Introduce screen/ structure planting of native trees/ shrubs around the permanent above ground structures to provide screening and landscape integration;
- Reinstate field boundary vegetation adjacent/ over the pipeline to reduce fragmentation of field boundaries; and
- Monitoring and maintenance of new planting and seeding to ensure successful establishment.

7.7.6 The outline landscape planting plans for the Block Valve Stations and the Theddlethorpe Facility (Option 2) are shown within the Outline Landscape and Ecological Management Plan (*Application Document 6.8*) and contains the following key elements.

- *Tree/ shrub planting:* native planting using species typical of the local area and existing landscape will be planted along the boundaries of the permanent above ground structure sites to provide visual mitigation around the periphery of the site and habitat connectivity; and
- *Replacement planting*: native shallow-rooting hedgerow species typical of the local area and existing landscape will be planted within the pipeline easement. To prevent future root damage to the pipeline, no trees will be planted within the pipeline easement.

7.8 Potential Impacts and Assessment of Effects

Potential Landscape and Visual Amenity Impacts: Construction Phase

7.8.1 During construction of the Proposed Development, there are several elements and activities that have the potential to temporarily impact landscape character and visual amenity within the Study Area. These impacts relate to the removal of existing landscape features such as hedgerows and arable land, and the visibility of new temporary features such as construction machinery, including effects on perceptual qualities of landscape and visual amenity.

7.8.2 The potential for temporary impacts on the landscape and visual resource of the Study Area (and beyond) may arise from the following construction activities:

Wider Proposed Development

- Construction of temporary access routes;
- Construction of the three main construction compounds including welfare facilities, site offices, parking and storage facilities; and
- Construction of the laydown and welfare areas and site access locations.

Underground Pipeline Route

- Site clearance, particularly the clearance of trees, hedgerows and other vegetation along the pipeline route;
- Ground excavation, particularly along the pipeline route which will result in the exposure of subsoil and the temporary change in land use from agricultural cropping/ grazing to an open excavation;

- Operations in relation to trenchless crossings;
- New, linear soil storage mounds adjacent to the pipeline route excavation, particularly where these occupy rolling landform or varied topography;
- Construction compounds, materials storage, temporary offices, vehicle parking and associated activity;
- Localised lighting in discrete working locations to facilitate safe working, during the months with shorter daylight hours;
- The stockpiling or temporary storage of materials, in particular those required along the pipeline route;
- Installation of temporary signage, construction equipment, traffic control measures at road crossings and localised use of perimeter fencing, and hoardings; and
- The temporary closure or diversion of Public Rights of Way (PRoW) where they cross the pipeline route.

7.8.3 The anticipated timescale for temporary impacts on the landscape and visual amenity from the construction activities is set out in *ES Volume II Chapter 3: Table 3-4: Typical Construction Activities and Duration of Works at Any One Location*. The typical duration for a 1 km of open cut pipeline works is not anticipated to exceed seven months, although where specialist crossings are required then this timescale would be greater.

Immingham/ Theddlethorpe Facilities and Block Valve Stations

- Site clearance, including vegetation removal;
- construction compound, welfare facilities and site offices, plant, equipment laydown, materials storage along with security fencing and hoarding with external lighting for security;
- Earthworks including land re-profiling and establishment of a level platform using imported materials followed by civil engineering and building works; and
- Localised lighting in discrete working locations to facilitate safe working, during the months with shorter daylight hours.

7.8.4 There would be the potential for these impacts to occur in combination adding to the impact experienced at individual receptors.

Potential Landscape and Visual Amenity Impacts: Operation Phase

7.8.5 During operation of the Proposed Development, this would relate to:

- The presence and operation of a number of permanent structures including vents of up to 25 m height at the Immingham Facility and the Theddlethorpe Facility;
- Gaps in hedgerows and other boundary vegetation as a result of vegetation removal during the construction stage including the presence of newly planted reinstatement planting and planting around the Immingham/ Theddlethorpe Facilities and Block Valve Stations during Operation Year 1; and
- Established planting around the Immingham/ Theddlethorpe Facilities and Block Valve Stations during Operation Year 15.

Potential Landscape and Visual Amenity Impacts: Decommissioning Phase

7.8.6 During Decommissioning this would relate to:

- The removal of infrastructure at the Immingham Facility, Theddlethorpe Facility and the Block Valve Stations and the pipeline is left in situ.

Assessment of Landscape Impacts: General Overview at the NCA Scale

7.8.7 The NCAs form the largest scale landscape character unit used for assessment. As they encompass multiple sections and in proportion to the unlikely potential for significant effects from the Proposed Development they have been assessed against the Proposed Development in its entirety.

7.8.8 Section 1 of the Proposed Development falls entirely within NCA 41: Humber Estuary. The natural characteristics of the estuary constitute its primary element of value, landward areas being largely industrialised. Consequently, the susceptibility of this NCA to further industrial development on land is therefore very low. Taking overall high value (estuarine elements) and very low susceptibility NCA 41 is assessed as low sensitivity to the Proposed Development. The Immingham Facility and pipeline works would be constructed/ operational within the industrialised section of NCA 41 with little or no influence on the natural characteristics of the estuary which constitutes its primary element of value. The scale and extent of change in NCA in construction and operation will be extremely localised and reinforce an existing industrialised baseline, and hence of very low magnitude. Combining **low sensitivity** with **very low magnitude** results in an effect on landscape character of **negligible significance**.

7.8.9 The majority of the Proposed Development falls within NCA 42 Lincolnshire Coast and Marshes. Susceptibility of this predominantly rural landscape to construction/operation of the CCS pipeline is assessed as medium, given the agricultural nature and established field pattern which contributes to its character. Combining medium value and medium susceptibility NCA 42 has a medium sensitivity to the large-scale linear infrastructure and buildings of the Proposed Development in construction/operation. Effects in construction would be sequential by section and within sections and fully reversible such that combined with the relatively small scale of the post construction elements/buildings, reinstatement of agricultural land, limited loss of vegetation and limited scale of built form added to the landscape. Taking these factors into account there would be **a very low magnitude** of change in landscape character. Overall, effects on the **medium sensitivity** NCA 42 would be **negligible significance**.

7.8.10 NCA 43: Lincolnshire Wolds is largely defined by the high value Lincolnshire Wolds AONB. It is assessed as being of high susceptibility to large scale linear infrastructure impacting its key rural characteristics and landform, resulting in overall high sensitivity to the Proposed Development. The majority of the Proposed Development is located in the adjacent NCA and as such there would be very limited direct impacts on the landscape characteristics of NCA 43, over a very localised area. Any indirect impacts from construction, including phased working in NCA 43, would be of short duration and limited in geographical extent. In operation any loss of key landscape elements and/ or introduction of infrastructure (mostly below ground) within NCA 43 would be very limited such that the key characteristics of the NCA would not be materially altered. It is assessed that given these factors, construction and operational effect on the **high sensitivity** NCA 43 would be **very low magnitude** and result in an effect on landscape character of **negligible significance**.

7.8.11 An assessment of the likely effects on landscape designations and landscape character during construction is provided below, using the designated landscapes, published LCAs and LCTs to illustrate and describe the range of typical effects.

Assessment of Landscape Impacts: Construction Phase

Construction Phase Pipeline (Section 1) including Immingham Facility and North Construction Compound

7.8.12 The AGLV north of Caistor is assessed as being of high susceptibility to large scale linear infrastructure construction impacting its key rural characteristics and landform, combining

with medium value to resulting in overall medium sensitivity to the Proposed Development. The Proposed Development avoids the AGLV, passing close to it in the southern section of Section 2. There will be little or no intervisibility between Section 1 and the AGLV, such that effects on landscape character in construction will be very localised and **very low magnitude**. Overall, there would be an effect of **negligible significance** on landscape character of the AGLV in construction.

7.8.13 The Lincolnshire Wolds AONB lies beyond the AGLV in relation to Section 1. It is assessed as high susceptibility to large scale linear infrastructure construction impacting its key rural characteristics and landform, combining with high value to resulting in overall **high sensitivity** to the Proposed Development. There will be little or no intervisibility between Section 1 and the AONB, such that effects on landscape character in construction will be **neutral**. Overall, there would be **no effect** on landscape character of the AONB from construction of Section 1.

Immingham Facility

7.8.14 The Immingham Facility construction would occur on land located within the Humber Estuary LCA Industrial Landscape LCT, which is dominated by large scale industrial uses and structures serving as docks, storage, factories or petrochemical installations. The landscape condition is poor and/ or industrialised throughout and although it is a distinctive landscape it has a weak structure and industrial use is the key characteristic, such that landscape value is very low.

7.8.15 The Immingham Facility will be located in a context which is influenced by the extant infrastructure of the adjacent power station and petrochemical site. The location is a within a degraded part of a highly industrial landscape. Susceptibility to construction activity is therefore assessed as very low. Taking the overall very low value of the Humber Estuary LCA into account the sensitivity of the LCA to the construction of the Proposed Development in this location is assessed as very low.

7.8.16 There will be no loss of landscape elements of value. There will be increased construction activity, akin to intensification of industrial use. There will be a small-scale temporary land use within a localised geographical extent of a small part of the Humber Estuary LCA anticipated to be for a duration of eight months.

7.8.17 Overall, considering the context of the Site within the LCA and existing urbanised/ industrial land use, coupled with duration and reversibility of the construction impacts, effects on landscape character will be **very low** magnitude on the Humber Estuary LCA Industrial Landscape LCT and overall effects will be **negligible adverse** and **not significant**.

North Construction Compound

7.8.18 The North Construction Compound would be located to the south of Habrough Roundabout and the A160. This is arable land currently and would be used as a main construction compound and pipe storage area. Access would be via Habrough Road.

7.8.19 The compound falls within the Lincolnshire Drift LCA/ Open Undulating Farmland LCT defined in The North Lincolnshire Landscape Character Assessment and Guidelines (1999). The landscape context is characterised by intensive agricultural land use with some limited influence from the urban edge of South Killingholme/ Immingham and a strong influence from the A160. The highway and presence of industrialised/ urban land uses in the vicinity of the Site lowers susceptibility, in spite of the rural nature of the land. Overall, there is a low susceptibility of the Lincolnshire Drift LCA/ Open Undulating Farmland LCT to the use for a construction compound. Taking the low value of the LCA and low susceptibility to the compound into account, overall sensitivity to this aspect of the Proposed Development is assessed as low.

7.8.20 Within this context the construction and presence of the compound would result in both direct and indirect effects on the Lincolnshire Drift LCA/ Open Undulating Farmland LCT and the AGLV to the south but due to distance/intervening landform/vegetation any effects on other LCAs/ LCTs would be neutral and not significant. For the Lincolnshire Drift LCA/ Open Undulating Farmland LCT which would be directly affected by the construction activity there would be temporary loss of arable land, introduction of soil storage/semi-industrialised construction use/vehicles/machinery and pipe laydown areas, within the southern section of the LCA. There would be a small-scale temporary change in land use within a localised geographical extent of a small part of the Lincolnshire Drift LCA anticipated to be for a duration of 20 months. Landscape elements, such as individual trees/shrubs/ditches on the southern boundary would be retained. Post construction the compound would be restored to arable agricultural use.

7.8.21 Overall, considering the context, small scale of the site within the LCA and location on its periphery, coupled with duration and reversibility of the impacts effects on landscape character would be **very low** magnitude on the Lincolnshire Drift LCA/ Open Undulating Farmland LCT and overall effects would be **negligible adverse** and not significant.

Pipeline (Section 1)

7.8.22 Section 1 of the pipeline route encompasses areas within the Humber Estuary LCA and the Industrial Landscape LCT.

7.8.23 The Humber Estuary LCA overall and the Industrial Landscape LCT, has a weak structure and industrial use is the key characteristic, such that landscape value is very low. Construction in the pipeline route would be located in a context which is influenced by the extant infrastructure of the adjacent power station and petrochemical site. The location is within a degraded part of a highly industrial landscape. Susceptibility to construction activity is therefore assessed as very low. Taking the overall very low value of the Humber Estuary LCA into account the sensitivity of the LCA to the construction of the Proposed Development in this location is assessed as very low.

7.8.24 There would be no loss of landscape elements of value. There would be increased construction activity, akin to intensification of industrial use. There would be a small-scale localised temporary land use change within a localised geographical extent of a small part of the Humber Estuary LCA/ Industrial Landscape LCT anticipated to be for a duration of up to seven months.

7.8.25 Overall, considering the context of the route and existing urbanised/ industrial land use, coupled with duration and reversibility of the construction impacts, effects on landscape character would be **very low** magnitude on the Humber Estuary LCA and the Industrial Landscape LCT and overall effects would be **negligible adverse** and **not significant**.

7.8.26 The Humber Estuary LCA Open Undulating Farmland LCT which is partially within Section 1 of the pipeline route is assessed as low landscape value. However, there is woodland cover and an intact field pattern in agricultural use within Pipeline Section 1 which increase susceptibility to construction activity, as an incongruous land use to medium. The maximum pipeline route width of 30 m would localise effects on the wider LCA but there will be some removal of woodland and loss of sections of hedgerow, as well as the introduction of temporary fencing, soil stores, haul routes and construction machinery. Overall, sensitivity is assessed as medium.

7.8.27 Overall, considering the small scale and localised geographical extent coupled with short duration and reversibility of the construction impacts, effects on landscape character will be **low** magnitude on the Humber Estuary LCA Open Undulating Farmland LCT and overall effects will be **minor adverse** and not significant.

Overall Summary on effects in Section 1

7.8.28 The combined effects of construction of the Northern Compound and Pipeline Section 1 would not exceed the level of **minor adverse** identified for the Humber Estuary LCA Open Undulating Farmland LCT as a result of pipeline construction. Similarly, the combined effects of construction of the Immingham Facility and Pipeline Section 1 would not exceed the level of **negligible adverse** identified for the Humber Estuary LCA Industrial Landscape LCT as a result of pipeline construction. Effects on the character and special qualities of the Lincolnshire Wolds AONB are assessed as **neutral** due to no direct effects and no likely indirect effects. Effects on the AGLV from all construction elements in Section 1 are assessed as **negligible significance**.

Construction Phase Pipeline (Section 2) including Washingdales Lane Block Valve Station

Washingdales Lane Block Valve Station

7.8.29 The Washingdales Lane Block Valve Station would be located within the Lincolnshire Coasts and Marshes LCA adjacent to the A18, west of Laceby and adjacent to the AGLV. Value, susceptibility and sensitivity to construction works, is assessed as medium. Construction of Washingdales Lane Block Valve Station is likely to have only a localised effect on the character of the Lincolnshire Coasts and Marshes LCA on its western edge. Intervisibility and effects on the AGLV would be very localised as a result of landform and construction would occur in the immediate context of the A18, reducing susceptibility as a result of baseline traffic movements and effects on tranquillity. Overall, taking the short timescale of the Block Valve Station construction (anticipated to not exceed five months), small scale change and limited loss of agricultural land coupled with localised geographical influence and reversibility of construction specific effects into account, the magnitude of effect on the AGLV and the Lincolnshire Coasts and Marshes LCA would be **very low**. Effects on the AGLV and those on the Lincolnshire Coasts and Marshes LCA would be **negligible adverse** and **not significant**.

Pipeline (Section 2)

7.8.30 The AGLV north of Caistor lies west of Pipeline Section 2, but the route does not pass through it and any effects on it will be indirect and not involve direct loss of key elements. The AGLV is assessed as being of high susceptibility to large scale linear infrastructure construction impacting its key rural characteristics and landform, combining with medium value to resulting in overall medium sensitivity to the Proposed Development. There will be intervisibility between Section 2 pipeline construction and the AGLV but taking intervening vegetation (not all included in the ZTV model) and phased working/duration into account effects on landscape character in construction will be very localised and **low magnitude**. Overall, effects on the **medium sensitivity** AGLV would be of **minor significance** on landscape character in construction.

7.8.31 The Lincolnshire Wolds AONB borders the southern boundary of Section 2. In Section 2 the majority of the pipeline route passes through The Lincolnshire Coast and Marshes LCA, with a small part of the central section cutting through The Wolds' Estate LCA. The AONB is assessed as high susceptibility to large scale linear infrastructure construction impacting its key rural characteristics and landform, combining with high value to resulting in overall **high sensitivity** to the Proposed Development. There is very localised intervisibility between Section 2 and the AONB but no direct effects from Section 2. Any effect on the special qualities of the AONB (scenic beauty and rural charm; expansive, sweeping views; peace and tranquillity; and farmed land (scenic quality, biodiversity, socio-economic) from the Proposed Development in Section 2 would be indirect and of short duration and distant. Consequently, the conclusion in relation to the AGLV would apply equally to the northern section of the Lincolnshire Wolds AONB which borders the edge of Section 2, such that the

magnitude of effects on the AONB, including from visibility of works in the adjacent Wolds' Estate LCA would be **very low** and overall significance of effects on landscape character would be **negligible adverse** and **not significant**.

7.8.32 As noted in the written description of The Lincolnshire Coast and Marshes LCA, this is a transitional landscape with no strong sense of place. However, the western section borders the AGLV in Section 2, and influence of the urban areas and outer villages of Grimsby is reduced compared to the wider LCA. There is an intact pattern of irregular medium scale fields and positive landscape contribution from blocks of woodland in a predominantly rural context. Susceptibility to construction activity within the pipeline route is therefore medium. Combining the overall low value of the LCA with medium susceptibility, the sensitivity of the Lincolnshire Coast and Marshes LCA to the Proposed Development in this location is assessed as medium. Given the small section of the Wolds' Estate LCA impacted to the east of the A18 and effectively within an enclave of the Lincolnshire Coast and Marshes LCA, the Wolds' Estate LCA is also assessed as medium sensitivity.

7.8.33 Within this context construction would result in temporary loss of arable land, introduction of soil storage, semi-industrialised construction use including vehicles and machinery within the more sensitive, western, section of the Lincolnshire Coast and Marshes LCA. However, there would be a small-scale temporary change in land use within a localised geographical extent of a small part of the Lincolnshire Coast and Marshes LCA for a duration of up to nine months in this section. There would be only limited removal of landscape elements, such as individual trees and hedgerows and the pipeline route avoids woodland, however the pipeline would cut across the landscape pattern albeit the extent of open trench. Post construction, the pipeline route would be restored to agricultural use.

7.8.34 Overall, considering the context, small scale of the site within the LCA and taking short duration and reversibility of the impacts on landscape character into account, effects will be **low** magnitude on the Lincolnshire Coast and Marshes LCA and the Wolds' Estates LCA, such that overall effects from the pipeline route construction works on landscape character would be **minor adverse** and **not significant**.

Overall Summary on effects in Section 2

7.8.35 Taken together the combined impacts of construction of Washingdales Lane Block Valve Station and Pipeline Section 2 would not lead to an overall change to the low magnitude of effects or change the significance. Only the Lincolnshire Coast and Marshes LCA would have both the block valve and pipeline construction and therefore the combined effects are assessed in relation to that receptor only. The combined effects would therefore not exceed the level of **minor adverse** identified for the Lincolnshire Coast and Marshes LCA as a result of pipeline construction.

Pipeline (Section 3) including Thoroughfare Block Valve Station and Central Compound

Thoroughfare Block Valve Station

7.8.36 The Thoroughfare Block Valve Station would be located within the Lincolnshire Coasts and Marshes LCA to the south-east of Ashby cum Fenby. Value, susceptibility and sensitivity is as assessed for the pipeline construction works. Construction of Thoroughfare Block Valve Station is likely to have only a very localised effect on the character of the Lincolnshire Coast and Marshes LCA. Overall, taking the short timescale of the Block Valve Station construction (not anticipated to exceed six months), small scale change and limited loss of agricultural land coupled with localised geographical influence and reversibility of construction specific effects into account, the magnitude of effect on the Lincolnshire Coast and Marshes LCA would be **very low**. The significance of effects on the Lincolnshire Coast and Marshes LCA would be **negligible adverse** and **not significant**.

Central Construction Compound

7.8.37 Central construction compound would be located near Welbeck Hill to the east of Barton Street (A18). This would be used as a construction compound and would act as the main pipe/ material storage area.

7.8.38 This compound would be located within the Lincolnshire Coast and Marshes LCA adjacent to the boundary of the Lincolnshire Wolds AONB.

7.8.39 The location is a highly rural landscape, on the edge of the Lincolnshire Coast and Marshes LCA, in good condition and sharing many of the qualities of the adjacent Lincolnshire Wolds AONB. Susceptibility to use as a construction compound, introducing an incongruous land use and associated activity is therefore high. In spite of the overall low value of the LCA, the sensitivity of the Lincolnshire Coast and Marshes LCA to the Proposed Development in this location is assessed as high.

7.8.40 The construction and presence of the compound would result in direct effects on the LCA. For the Lincolnshire Coast and Marshes LCA which would be directly affected by the construction activity there would be temporary loss of arable land, introduction of soil storage/semi-industrialised construction use/vehicles/machinery and pipe laydown areas, within the western section of the LCA but adjacent to and influencing the Lincolnshire Wolds AONB. There will be a small-scale temporary change in land use within a localised geographical extent of a small part of the Lincolnshire Coast and Marshes LCA for a duration anticipated to be of approximately 12 months. Landscape elements, such as individual trees/shrubs/ditches on the southern boundary would be retained. Post construction the compound would be restored to arable agricultural use.

7.8.41 Overall, considering the landscape context, the small scale of the Proposed Development directly impacted within the Lincolnshire Coast and Marshes LCA and location of the Proposed Development on the periphery of the LCA but in a high value landscape adjacent to the Lincolnshire Wolds AONB, short duration and reversibility of the impacts on landscape character, effects would be **low** magnitude. The overall effects from the compound on landscape character would be **minor adverse** and **not significant** for the LCA.

7.8.42 The Lincolnshire Wolds AONB is assessed as high susceptibility to construction impacting its key rural characteristics and landform, combining with high value to resulting in overall **high sensitivity** to the Proposed Development. The construction and presence of the compound would result in indirect effects on the Lincolnshire Wolds AONB, which includes areas of elevated land from which the compound would be visible, adjacent to and influencing the Lincolnshire Wolds AONB. There will be a small-scale temporary change in the setting of the Lincolnshire Wolds AONB within a localised geographical extent for a duration anticipated to be of approximately 12 months. Effects on the special qualities of the Lincolnshire Wolds AONB from the compound would be reversible and short term.

7.8.43 Overall, considering the context, small scale of the directly impacted areas within the AONB and location on its periphery but in a high value landscape adjacent to the Lincolnshire Wolds AONB, and short duration and reversibility of the impacts on landscape character, effects would be **very low** magnitude on the Lincolnshire Wolds AONB, such that overall effects from the compound on landscape character will be **minor adverse** and **not significant**.

Pipeline (Section 3)

7.8.44 Pipeline Section 3 passes through the Lincolnshire Wolds AONB. In this section, the north of the pipeline route passes through The Lincolnshire Coast and Marshes LCA between Irby Upon Humber to Grainsby, with the southern section from Grainsby passing through LCA I1: Holton le Clay to Great Steeping Middle Marsh.

7.8.45 Landscape value within LCA I1: Holton le Clay to Great Steeping Middle Marsh is assessed as medium landscape value, sharing many key elements and sense of place of the AONB. There is an intact pattern of irregular medium scale fields and positive landscape contribution from blocks of woodland in a predominantly rural context. Susceptibility to construction activity within the Lincolnshire Wolds AONB section of the pipeline route is therefore high and for LCA I1: Holton le Clay to Great Steeping Middle Marsh, accepting that much of the intervention is along or adjacent to the A18 corridor which reduces susceptibility, susceptibility is assessed as medium. Combining the overall high value of the Lincolnshire Wolds AONB with high susceptibility the Lincolnshire Wolds AONB has a high sensitivity to the construction works, and LCA L1: Holton le Clay to Great Steeping Middle Marsh has medium susceptibility, such that the sensitivity of LCA I1 to the Proposed Development in this location is assessed as medium.

7.8.46 Construction would result in temporary loss of arable land, introduction of soil storage and semi-industrialised construction use including vehicles and machinery. The north of Section 3 includes the more sensitive, western section of the Lincolnshire Coast and Marshes LCA and the route of approximately 2.4 km long within the Lincolnshire Wolds AONB, as well as on the boundary of it along the A18 for approximately 3 km. In the southern section of Section 3 the route passes across LCA I1: Holton le Clay to Great Steeping Middle Marsh diagonally.

7.8.47 Based on a worst-case proportionality of likely timescale by length related to Section 3, there would be construction activity within a sequentially localised geographical extent of a small part of both the Lincolnshire Coast and Marshes LCA and LCA I1: Holton le Clay to Great Steeping Middle Marsh and the Lincolnshire Wolds AONB for a duration anticipated to be up to nine months in this section. There would be only limited removal of landscape elements, principally short sections of hedgerow, however the pipeline route would cut across the field pattern. Post construction the pipeline route would be restored to agricultural use.

7.8.48 Overall, considering the context, small scale of the Proposed Development within the LCA and taking short duration and reversibility of the impacts on landscape character into account, effects would be **low** magnitude on the Lincolnshire Coast and Marshes LCA and LCA I1: Holton le Clay to Great Steeping Middle Marsh, such that overall effects from the pipeline route construction works on landscape character would be **minor adverse** and **not significant**.

7.8.49 The Lincolnshire Wolds AONB is assessed as high susceptibility to large scale linear infrastructure construction impacting its key rural characteristics and landform, combining with high value to resulting in overall **high sensitivity** to the Proposed Development. Effects on the special qualities of the Lincolnshire Wolds AONB from the Proposed Development, considering the nature of effects (soil stripping and placement in an agricultural context where soil disturbance/ ploughing is seasonal), small extent, short duration, retention of key landscape elements and reversibility, magnitude of effects would be **very low**. Overall effects from the pipeline route construction works on landscape character and the special qualities of the AONB would therefore be **minor adverse** and **not significant**.

Overall Summary on effects in Section 3

7.8.50 The combined effects of construction of Thoroughfare Lane Block Valve Station and Pipeline Section 2 would not exceed the level of **minor adverse** identified for the Lincolnshire Coast and Marshes LCA or Lincolnshire Wolds AONB as a result of pipeline construction.

Construction Pipeline (Section 4) including Louth Road Block Valve Station

Louth Road Block Valve Station

7.8.51 Louth Road Block Valve Station would be located within LCA I1: Holton le Clay to Great Steeping Middle Marsh, south-west of Alvingham and adjacent to the Louth Canal. Value, susceptibility and sensitivity is as assessed for the pipeline construction works. Construction of Louth Road Block Valve Station is likely to have only a very localised effect on the character of the LCA and no effects on the AGLV or Lincolnshire Wolds AONB. Overall, taking the short timescale of the Block Valve Station construction (anticipated to not exceed 7 months), small scale change and limited loss of agricultural land coupled with localised geographical influence and reversibility of construction specific effects into account, the magnitude of effect on LCA I1: Holton le Clay to Great Steeping Middle Marsh will be **very low** and of **negligible adverse** effect and **not significant**.

Pipeline (Section 4)

7.8.52 There would be no effects on the AGLV due to distance. Based on a worst-case proportionality of likely timescale by length related to Section 4, there would be construction activity visible from a localised geographical extent of a small part of the Lincolnshire Wolds AONB. There would be no removal of landscape elements in the Lincolnshire Wolds AONB in this section, however the pipeline route would be partially visible cutting across the field pattern of LCA I1: Holton le Clay to Great Steeping Middle Marsh.

7.8.53 Overall, considering the context, small scale of the Proposed Development within the LCA and taking short duration and reversibility of the impacts on landscape character into account, effects would be **low** magnitude on the Lincolnshire Coast and Marshes LCA and LCA I1: Holton le Clay to Great Steeping Middle Marsh, such that overall effects from the pipeline route construction works on landscape character would be **minor adverse** and **not significant**.

7.8.54 Effects on the special qualities of the Lincolnshire Wolds AONB from the Proposed Development, considering the indirect nature of effects (soil stripping and placement in an agricultural context where soil disturbance/ ploughing is seasonal), small extent, short duration, retention of key landscape elements and reversibility, magnitude of effects would be very **low**. Overall effects from the pipeline route construction works on landscape character and the special qualities of the Lincolnshire Wolds AONB would therefore be **negligible adverse** and **not significant**.

7.8.55 Pipeline Section 4 cuts diagonally across LCA I1: Holton le Clay to Great Steeping Middle Marsh, before bordering LCA J1: Tetney Lock to Skegness Coastal Outmarsh in the southern section.

7.8.56 LCA I1: Holton le Clay to Great Steeping Middle Marsh and LCA J1: Tetney Lock to Skegness Coastal Outmarsh are assessed as medium landscape value. There is a pattern of large-scale fields with variable and sometimes gappy hedgerows, which are intensively farmed. Susceptibility to construction activity within this Section of the pipeline route is reduced by the simplicity of the landform (largely flat) and fewer small scale landscape elements with which the linear Pipeline route contrasts, this is increasingly the case in the southern section of LCA I1 Holton le Clay to Great Steeping Middle Marsh. Overall, susceptibility is assessed as medium for both LCA I1: Holton le Clay to Great Steeping Middle Marsh and LCA J1: Tetney Lock to Skegness Coastal Outmarsh, accepting that this is primarily a rural landscape in which linear construction activity would be incongruous. Combining the overall medium value of the LCA I1: Holton le Clay to Great Steeping Middle Marsh and LCA J1: Tetney Lock to Skegness Coastal Outmarsh with medium susceptibility they have a medium sensitivity to the construction works.

7.8.57 Based on a worst-case proportionality of likely timescale by length related to the Section, there would be construction activity for a duration anticipated to be up to 12 months in Section 4. Considering construction will occur within a sequentially localised geographical extent of a small part of both LCA I1: Holton le Clay to Great Steeping Middle Marsh and LCA J1: Tetney Lock to Skegness Coastal Outmarsh at any one time, and involve very limited loss of landscape elements, the magnitude of effect on landscape character is assessed as low.

7.8.58 Overall, considering the context, small scale of the pipeline within the LCA I1: Holton le Clay to Great Steeping Middle Marsh and LCA J1: Tetney Lock to Skegness Coastal Outmarsh at any point, and taking short duration and reversibility of the construction impacts on landscape character into account, effects would be **low** magnitude, **minor adverse** and **not significant**.

Overall Summary

7.8.59 The combined effects of construction of Louth Road Block Valve Station and Pipeline Section 4 would not exceed the level of **minor adverse** identified for LCA I1: Holton le Clay to Great Steeping Middle Marsh and LCA J1: Tetney Lock to Skegness Coastal Outmarsh as a result of pipeline construction.

Pipeline (Section 5) including Theddlethorpe Facility Option 1 and 2 and Southern Construction Compound and Replacement of the Dune Isolation Valve

Theddlethorpe Facility Option 1

7.8.60 The Theddlethorpe Facility construction would occur in LCA J1: Tetney Lock to Skegness Coastal Outmarsh, which is assessed as having medium landscape value. LCA J1: Tetney Lock to Skegness Coastal Outmarsh contains the existing Theddlethorpe Gas Terminal fencing/hardstanding and the Theddlethorpe Facility would be constructed within that large scale former industrial use, reducing landscape susceptibility to the specific development to very low. Taking overall medium landscape value but the specific construction context and very low susceptibility into account sensitivity is assessed as very low.

7.8.61 Construction would occur in a context which is influenced by the extant infrastructure of the former gas terminal site. The location is a within a degraded part of remnant industrial landscape and there will be no loss of landscape elements of value. The increased construction activity will be akin to intensification of industrial use, and a small-scale temporary land use within a localised geographical extent of a small part of the LCA J1: Tetney Lock to Skegness Coastal Outmarsh for a duration of nine months.

7.8.62 Overall, considering the context of the site within the LCA and existing urbanised/industrial land use, coupled with duration and reversibility of the construction impacts, effects on landscape character of LCA J1: Tetney Lock to Skegness Coastal Outmarsh will be **very low** magnitude on the LCA and overall effects will be **negligible adverse** and **not significant**.

Theddlethorpe Facility Option 2

7.8.63 Theddlethorpe Option 2 construction would occur in LCA J1: Tetney Lock to Skegness Coastal Outmarsh, which is assessed as having medium landscape value. LCA J1: Tetney Lock to Skegness Coastal Outmarsh contains the existing TGT fencing/hardstanding but the influence on the wider landscape including the context of Option 2 is limited. The Option 2 site comprises an arable field in a largely rural context, increasing landscape susceptibility to construction of the facility, which is assessed as medium. Taking overall medium landscape value and the specific construction context and medium susceptibility into account sensitivity is assessed as medium.

7.8.64 Construction would occur in a predominantly rural context and there would be loss of arable land, a key element of landscape value in the LCA J1: Tetney Lock to Skegness Coastal Outmarsh. The increased construction activity will be a quasi-industrial use, albeit a small-scale temporary land use within a localised geographical extent of a small part of the LCA J1: Tetney Lock to Skegness Coastal Outmarsh for a duration anticipated to be of up to nine months.

7.8.65 Overall, considering the context of the site within the LCA and existing land use, coupled with duration and reversibility of the construction impacts of Option 2, effects on landscape character of LCA J1: Tetney Lock to Skegness Coastal Outmarsh will be **low** magnitude on the and overall effects will be **minor adverse** and **not significant**.

South Construction Compound

7.8.66 South Construction Compound will be located at the car park on the former TGT site, extending to approximately 13,000 m^2. This will be used predominantly as a pipe storage area. The compound lies within J1: Tetney Lock to Skegness Coastal Outmarsh LCA.

7.8.67 The compound would be located in an area which is influenced by the infrastructure of the National Gas Transmission, Theddlethorpe Terminal. The location is a within a degraded part of semi-industrial landscape influenced both by the former TGT but also adjacent urban areas of Mablethorpe and ribbon development from it. Susceptibility to use as a construction compound, and associated activity is therefore assessed as very low. Taking the overall low value of the LCA J1: Tetney Lock to Skegness Coastal Outmarsh into account the sensitivity of the LCA to the Proposed Development in this location is assessed as very low.

7.8.68 Assuming the compound occupies the terminal surfacing, there will be no temporary loss of arable land or other key landscape elements. There will be introduction of construction use/vehicles/machinery and pipe laydown areas. There will be a small-scale temporary change in land use within a localised geographical extent of a small part of the LCA for a duration anticipated to be of up to 8 months. There will be no loss of landscape elements of value. Post construction the compound will be restored to the former use as disused hardstanding.

7.8.69 Overall, considering the context of the site within the LCA and existing urbanised/industrial land use, coupled with duration and reversibility of the impacts, effects on landscape character will be **very low** magnitude on the J1: Tetney Lock to Skegness Coastal Outmarsh LCA and overall effects will be **negligible adverse** and **not significant**.

Pipeline (Section 5)

7.8.70 Pipeline Section 5 predominantly passes through LCA J1: Tetney Lock to Skegness Coastal Outmarsh with a short section passing through LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast.

7.8.71 Effects on the AGLV and AONB would be neutral, due to distance and lack of intervisibility with Section 5.

7.8.72 Both LCA J1: Tetney Lock to Skegness Coastal Outmarsh and LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast are assessed as having medium landscape value. There is a pattern of large-scale fields with a weak landscape structure, scale and openness which reduces susceptibility to construction activity within Section 5 of the pipeline route. In addition to the simplicity of the landform and few small scale landscape elements with which the linear Pipeline route contrasts, LCA J1: Tetney Lock to Skegness Coastal Outmarsh is influenced by wind farms and urbanising elements such as the National Gas Transmission, Theddlethorpe Terminal and built development on the edge of Mablethorpe. Overall, susceptibility is assessed as low for LCA J1: Tetney Lock to Skegness Coastal Outmarsh and high for LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast, accepting that LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast is primarily a natural landscape of

varied landform and elements of value which are not easily replicated such that it is susceptible to linear construction activity. Combining the overall medium value of LCA J1: Tetney Lock to Skegness Coastal Outmarsh with low susceptibility results in medium sensitivity to the construction works. Medium value of LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast combined with high susceptibility results in a high sensitivity of its landscape character to construction.

7.8.73 Based on a worst-case assessment of likely timescale related to the Section, there would be pipeline construction activity for a duration anticipated to be of up to six months in LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast. The scale and extent of the works would be very localised and primarily relate to the Dune Isolation Valve with inspection of the pipeline by machine the main activity, resulting in an overall very low magnitude of change in the impact on LCA K1.

7.8.74 The Theddlethorpe Facility Option 1 and 2 construction would occur in LCA J1: Tetney Lock to Skegness Coastal Outmarsh. Value, susceptibility and sensitivity is as assessed for the pipeline construction works.

7.8.75 Construction would occur in a context which is influenced by the disused/remnant infrastructure of the adjacent National Gas Transmission, Theddlethorpe Terminal. The location is within a degraded part of highly industrial landscape and there will be no loss of landscape elements of value. The increased construction activity will be akin to intensification of industrial use, and a small-scale temporary land use within a localised geographical extent of a small part of the LCA for a duration anticipated to be of up to 8 months.

7.8.76 Overall effects on landscape character of LCA J1: Tetney Lock to Skegness Coastal Outmarsh would therefore be **low** magnitude, **minor adverse** and **not significant**. Effects on landscape character of LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast would therefore be **very low** magnitude, **negligible adverse** and **not significant**.

Replacement of the Dune Isolation Valve

7.8.77 The Dune Isolation Valve is located in LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast. Medium value of LCA K1 combined with high susceptibility results in a high sensitivity of its landscape character to construction.

7.8.78 In LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast, construction would be limited to the replacement of the Dune Isolation Valve, as no construction work is required to the existing LOGGS Pipeline that will form the pipeline at this point. Considering the replacement would occur within a localised geographical extent of a small part of the LCA and involve no loss of landscape elements and use of an existing access track to the existing dune valve. There will be some temporary use of machinery but the magnitude of effect on landscape character is assessed as very low for LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast given the small-scale nature and very limited geographical extent, combined with the very short duration of the works.

7.8.79 Effects on landscape character of LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast will therefore be **very low** magnitude, **negligible adverse** and **not significant**.

Overall Summary and Conclusion on potential impacts on Lincolnshire Wolds AONB

7.8.80 The combined effects of construction of the Theddlethorpe Facility Option 1 or 2 would not exceed the level of minor adverse identified for LCA J1: Tetney Lock to Skegness Coastal Outmarsh as a result of the construction of Pipeline Section 5. The combined effects of construction of the Dune Isolation Valve would not exceed the level of minor adverse identified for LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast as a result of the construction of Pipeline Section 5.

7.8.81 As set out above, the relevant landscape special qualities of the AONB that could be impacted by the Proposed Development are scenic beauty and rural charm; expansive, sweeping views; peace and tranquillity; and farmed land (scenic quality, biodiversity, socio-economic). The Lincolnshire Wolds AONB Management Plan (2018-23) identifies each of these qualities as being in good condition, with the exception of farmland, which is in a varied condition.

7.8.82 The special qualities of the AONB could be adversely impacted in the construction phase of the Proposed Development, in particular by construction of the pipeline both inside the AONB and within its setting, and through the visibility of the Central Construction Compound during the construction period. The potential impacts from construction of the pipeline would be limited, primarily being soil stripping and placement in an agricultural context where soil disturbance/ploughing is already seasonal. The affected section of the AONB would be small in extent and any impacts would be of short duration and reversible. In respect of the Central Construction Compound, this would result in a small-scale temporary change in the setting of the Lincolnshire Wolds AONB within a localised geographical extent for a duration anticipated to be of approximately 12 months. This effect is fully reversible following completion of construction.

7.8.83 It is assessed that the AONB's recorded special qualities will all remain. Their condition will not be adversely affected by the Proposed Development. The AONB's integrity will be retained and there are no effects from the Proposed Development that would undermine the purposes of its designation. The Proposed Development is therefore in accordance with policy in the NPS and relevant local plans which afford protection of the AONB.

Assessment of Potential Landscape Impacts: Operational Phase

Immingham Facility

7.8.84 The Immingham Facility would be located in The Humber Estuary LCA Industrial Landscape LCT, which is dominated by large scale industrial uses and structures serving as docks, storage, factories or petrochemical installations. The location is within a degraded part of highly industrial landscape and susceptibility to further industrial use is assessed as very low. Taking the overall very low value of the LCA into account, the sensitivity of the LCA to the operation of the Immingham Facility is assessed as very low.

7.8.85 There would be increased intensification of industrial use as a result of additional infrastructure, which would permanently impact a small-scale section of the wider LCA. Elements of infrastructure will predominantly comprise of pipework but also include a 25 m high venting stack, 3.2 m palisade security fencing and various small scale control rooms. These elements will be perceived in the context of much larger scale industrial and chemical facilities which are already present.

7.8.86 Overall, considering the context of the site within the Humber Estuary LCA and existing urbanised/industrial land use, impacts on landscape character would be **very low** magnitude on the Humber Estuary LCA Industrial Landscape LCT and overall effects would be **negligible adverse** significance of effects and **not significant**.

Pipeline

7.8.87 The Lincolnshire Wolds AONB, the AGLV and the identified LCAs within the Study Area are assessed as being less susceptible to the operational pipeline than construction activity. This reflects the ability to reinstate the former land use over the majority of the route, without undue perceptible effects from the buried structure but also underlying susceptibility to the above ground elements including the Block Valve Stations. The Lincolnshire Wolds AONB are assessed as high value and low susceptibility and hence low sensitivity. The AGLV north of Caistor is assessed as medium value and low susceptibility and hence low sensitivity along with LCA I1: Holton le Clay to Great Steeping Middle Marsh/LCA J1: Tetney Lock to

Skegness Coastal Outmarsh/LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast and LCA Wolds' Estates. The remaining LCAs are assessed as being very low sensitivity to the Proposed Development in operation.

7.8.88 Post construction the pipeline route would be restored to agricultural use, reinstating the main land use before construction. Assuming the careful retention, replacement and handling of soil resources and appropriate landscape reinstatement measures of stone picking, cultivation and timely seeding for grassland and/or return to farming, there would be no obvious impact from the buried pipeline within open agricultural land. The majority of the pipeline route passes through arable land, successive seasonal cultivations and cropping would further integrate the reinstated land, such that it is fully integrated into the landscape.

7.8.89 The loss of hedgerows along the route, would result in very localised fragmentation of the landscape pattern, and for some locations the line of the route will be perceptible due to breaks in the vegetation. In many locations the distance between the hedgerow gaps and/or intervening landform coupled with the changes in pipeline alignment will mitigate this potential effect.

7.8.90 In addition, sections of removed hedgerow would not exceed the maximum pipeline route width of 30 m and where possible would be less and subsequently replanted. Although new hedgerow planting would be ineffective in re-establishing a continuous hedgerow at year 1, by year 15 it is reasonable to assume that the perception of a continuous hedgerow would be re-established, accepting that further maturity would be required to blend fully with the adjacent hedgerows.

7.8.91 On that basis the pipeline would result in low magnitude of impacts, discernible by some fragmentation of hedgerows which when viewed along the route would potentially be apparent.

7.8.92 Post reinstatement of soils and hedgerows the magnitude of change to landscape character would be **very low** for the **low** sensitivity Lincolnshire Wolds AONB and consequently effects would be of **negligible adverse** and **not significant**.

7.8.93 For low sensitivity LCAs and the AGLV, effects would also be of **very low** magnitude, given the scale and extent of change/loss of landscape elements and limited introduction of visible elements such that effects would be of **negligible adverse** and **not significant**. For very low sensitivity LCAs impacts of **very low** magnitude would be **negligible adverse** and **not significant**.

Block Valve Stations

7.8.94 In operation the Block Valve Stations would be bounded on a minimum of three sides by a strip of native tree and shrub planting. In year 1 this would be ineffective as a screen and residual effects on landscape character will therefore arise in relation to each Block Valve Station as set out below. The Lincolnshire Wolds AONB are assessed as high value and low susceptibility to the block valve stations, which are external to it, and hence low sensitivity. The AGLV north of Caistor is assessed as medium value and low susceptibility and hence low sensitivity along with LCA I1: Holton le Clay to Great Steeping Middle Marsh/LCA J1: Tetney Lock to Skegness Coastal Outmarsh/LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast and LCA Wolds' Estates. The remaining LCAs are assessed as being very low sensitivity to the Proposed Development in operation.

7.8.95 Washingdales Lane Block Valve Station would introduce a small scale, industrial style building and associated land use, fencing and access. Washingdales Lane Block Valve Station is likely to have only a localised effect on the character of the Lincolnshire Coasts and Marshes LCA on its western edge. Intervisibility and effects on the AGLV will be very localised as a result of landform. Overall, taking the permanence of the Washingdales Lane

Block Valve Station within the Lincolnshire Coasts and Marshes LCA/ AGLV, the small-scale change and limited loss of agricultural land coupled with localised geographical influence and reversibility of construction specific effects into account, the magnitude of impact on the low sensitivity AGLV and very low sensitivity Lincolnshire Coasts and Marshes LCA will be **very low**. Effects on the AGLV will be **negligible adverse**, and not **significant** and those on the Lincolnshire Coasts and Marshes LCA will also be **negligible adverse** and **not significant**.

7.8.96 Thoroughfare Block Valve Station would be located within the Lincolnshire Coasts and Marshes LCA to the south-east of Ashby cum Fenby. It would be sufficiently distant from Washingdales Lane Block Valve Station such that cumulative effects from the two buildings/ facilities in the same LCA would be negligible to neutral. As with Washingdales Lane Block Valve Station there would be a degree of increased industrialisation as a result of the new building and associated land use. However, this would represent a small-scale change and limited loss of agricultural land coupled with localised geographical influence such that the magnitude of impact on the very low sensitivity Lincolnshire Coasts and Marshes LCA would be **very low** and the effect would be **negligible adverse** and **not significant**.

7.8.97 In operation Louth Road Block Valve Station would be located within the low sensitivity LCA I1: Holton le Clay to Great Steeping Middle Marsh. As described for the other Block Valve Stations, impact on landscape character would be very localised, **very low** magnitude and of **negligible adverse** effect that is **not significant**.

7.8.98 For all Block Valve Stations, the scale of change to the landscape is very small and the proposed mitigation will integrate them into the landscape by Year 15 such that effects on landscape character of the wider LCAs will be of such very low magnitude as to be regarded as **neutral.**

Theddlethorpe Facility Option 1 and 2

7.8.99 Theddlethorpe Facility Option 1 lies within LCA J1: Tetney Lock to Skegness Coastal Outmarsh which contains the former TGT remaining infrastructure of fencing/hardstanding as a derelict/disused site and susceptibility of the medium value LCA to additional similar development/reinstatement of former industrialised land use is assessed as very low, resulting in an overall very low sensitivity of LCAJ1: Tetney Lock to Skegness Coastal Outmarsh to Option 1. The increased/intensification of industrial use, would be permanent but impact a very localised geographical extent of a small part of the LCA already influenced by the former / disused TGT.

7.8.100 Overall, considering the context of the site within the LCA and existing urbanised/industrial land use, impacts on landscape character of the low sensitivity LCA J1: Tetney Lock to Skegness Coastal Outmarsh would be **very low** magnitude and overall effects would be **negligible adverse** and **not significant**.

7.8.101 Theddlethorpe Facility Option 2 also lies within LCA J1: Tetney Lock to Skegness Coastal Outmarsh but would occupy a more rural/ green field context, less influenced by the infrastructure within the National Gas Transmission, Theddlethorpe Terminal and urban edge of Mablethorpe. In the more rural context of the LCA J1: Tetney Lock to Skegness Coastal Outmarsh susceptibility to additional industrialised land use is assessed as medium within the medium value LCA, resulting in medium sensitivity. The increased/ intensification of industrial use would be permanent but impact a very localised geographical extent of a small part of the LCA J1: Tetney Lock to Skegness Coastal Outmarsh, resulting in a low magnitude of impact on the LCA as a whole.

7.8.102 Overall, considering the context of the site within the LCA, impacts on landscape character of LCA J1: Tetney Lock to Skegness Coastal Outmarsh from Option 2 would be **low** magnitude and overall effects would be **minor adverse** and **not significant**.

Assessment of Potential Landscape Impacts: Decommissioning Phase

7.8.103 Any decommissioning of the Proposed Development is assumed to involve leaving the pipeline in-situ and removal of the above ground elements, giving rise to effects identified for the Construction Phase. Post decommissioning it is assumed that the sites of the above ground infrastructure are, in accordance with best practice, returned to the former and/or some compatible land use for the local context.

Immingham Facility

7.8.104 Removal of the Immingham Facility infrastructure would represent a localised, temporary change in landscape character broadly as described in detail for construction but in reverse and typically likely to be in a reduced timescale. As for construction, there would be a small-scale temporary land use within a localised geographical extent of a small part of the Humber Estuary LCA for a duration of up to eight months.

7.8.105 Overall, considering the context of the site within the LCA and existing urbanised/industrial land use, coupled with duration and reversibility of the decommissioning operation, impacts on landscape character would be **very low** magnitude on the Humber Estuary LCA Industrial Landscape LCT and overall effects would be **negligible adverse** and **not significant**.

Pipeline

7.8.106 No likely impacts are assessed to arise from decommissioning of the pipeline as it would be left in situ, resulting in a **neutral** effect on all designated and undesignated landscape character areas/types that is **not significant**.

Block Valve Stations

7.8.107 Decommissioning and demolition of the Block Valve Stations will generate effects no greater than those described and assessed for construction. On that basis none would exceed **very low** magnitude on the host LCAs and there would be no greater than **negligible adverse** effect that is **not significant** on landscape character.

Theddlethorpe Facility Option 1 and 2

7.8.108 As described for the decommissioning of the Immingham Facility above, there would be a small-scale temporary land use within a localised geographical extent of a small part of LCA J1: Tetney Lock to Skegness Coastal Outmarsh.

7.8.109 Overall, considering the context of the site within the LCA and existing urbanised/industrial land use, coupled with duration and reversibility of the decommissioning impacts, impacts on the landscape character of LCA J1: Tetney Lock to Skegness Coastal Outmarsh would be **very low** magnitude and overall effects would be **negligible adverse** and **not significant**.

Assessment of Potential Visual Impacts

General Overview

7.8.110 Susceptibility and sensitivity of the receptor groups (people with views of the Proposed Development) to construction, operation and decommissioning is set out in **Table 7-13**. Susceptibility is defined in GLVIA3 as *"The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences"*. As the assessment is undertaken at varying stages of the Proposed Development, it follows that susceptibility to the operation stage, particularly of the buried pipeline, may differ to, for example, the construction stage.

7.8.111 For the purposes of susceptibility, construction and decommissioning are assessed as essentially being similar processes involving machinery, vehicles and activity, likely to

generate similar impacts within views. Susceptibility to operation of the pipeline is regarded as being lower than that for construction (it is largely underground and hence susceptibility of the landscape and viewers is reduced). Susceptibility to above ground elements primarily relates to additional buildings for the Immingham Facility, Block Valve Stations and Theddlethorpe Facility. For each representative viewpoint location, the highest level of sensitivity receptor has been assessed to illustrate the "worst case" change in visual amenity, other receptors of lower sensitivity will experience less significant changes in views.

Table 7-13: Susceptibility to Construction/Operation/Decommissioning of User Groups at Representative Viewpoints

Viewpoint	Receptor Type/Value of View	Susceptibility	Sensitivity
Pipeline (Section 1)			
Viewpoint 1: PRoW NKIL 50, Killingholme Marshes Proposed England Coast Path	Recreational/ PRoW receptors /very low value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium
Viewpoint 2: Marsh Lane Proposed England Coast Path PRoW NKIL 100.	Recreational receptors /very low value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium
	Highway receptors/ very low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility	Very Low
Viewpoint 3: Brocklesby Avenue, Immingham.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility	Low
Pipeline (Section 2)			
Viewpoint 4: Riby Road, Stallingborough.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium

Viewpoint	Receptor Type/Value of View	Susceptibility	Sensitivity
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility	Low
Viewpoint 5: PRoW 106 St Lawrence Trail, Aylesby.	Residential receptors /medium value view.	Residential receptors susceptible to changes in their view: high susceptibility.	High
	Recreational/ PRoW receptors /medium value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	High
Pipeline (Section 3)			
Viewpoint 6: PRoW NELC 16 Walk Lane, Irby Upon Humber (Lincolnshire Wolds AONB)	Recreational/PRoW receptors /high value view.	Receptors likely to be involved in appreciation of the view from a PRoW in the AONB: high susceptibility.	High
Viewpoint 7: PRoW NELC 17 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB)	Recreational/PRoW receptors /high value view.	Receptors likely to be involved in appreciation of the view from a PRoW in the AONB: high susceptibility.	High
But susceptibility Viewpoint 8: PRoW NELC 122 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB)	Recreational/ PRoW receptors /high value view.	Receptors likely to be involved in appreciation of the view from a PRoW in the AONB: high susceptibility.	High
Viewpoint 9: Ashby cum Fenby PRoW NELC 150.	Residential receptors /medium value view.	Residential receptors susceptible to changes in their view: high susceptibility.	High
	Recreational/ PRoW receptors	Receptors likely to be involved in appreciation of the	High

Viewpoint	Receptor Type/Value of View	Susceptibility	Sensitivity
	/medium value view.	view from a PRoW: high susceptibility.	
Viewpoint 10: Thoroughfare, Ashby cum Fenby.	Recreational/PRoW receptors /medium value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium
Viewpoint 11: Hawerby Road, East Ravensdale PRoW NELC 35 (Lincolnshire Wolds AONB)	Recreational/PRoW receptors /high value view.	Receptors likely to be involved in appreciation of the view from a PRoW in the AONB: high susceptibility.	High
Viewpoint 12: Lane near Hawerby PRoW NELC 35 (Lincolnshire Wolds AONB)	Residential receptors /high value view.	Residential receptors susceptible to changes in their view: high susceptibility.	High
	Recreational/ PRoW receptors /high value view.	Receptors likely to be involved in appreciation of the view from a PRoW in the AONB: high susceptibility.	High
Viewpoint 13: PRoW Near Wold Newton (Lincolnshire Wolds AONB)	Recreational/ PRoW receptors /high value view.	Receptors likely to be involved in appreciation of the view from a PRoW in the AONB: high susceptibility.	High
Viewpoint 14: A16/ High Street North Thoresby.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility.	Low
Viewpoint 15: North Thoresby Factory/ Properties.	Residential receptors /medium value view.	Residential receptors susceptible to changes in their	High

Viewpoint	Receptor Type/Value of View	Susceptibility	Sensitivity
		view: high susceptibility.	
	Recreational/ PRoW receptors /medium value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	High
Viewpoint 16: A16 Layby.	Highway receptors/ low value view.	Vehicle users on an A road likely to be used for access primarily: low susceptibility.	Low
Viewpoint 17: Station Road, Ludborough.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility.	Low
Viewpoint 18: Station Road, Ludborough.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium
	Recreational/ PRoW receptors /low value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility.	Low
Pipeline (Section 4)			
Viewpoint 19: Main Road, Covenham St Bartholomew.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium

Viewpoint	Receptor Type/Value of View	Susceptibility	Sensitivity
	Recreational/ PRoW receptors /low value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium
Viewpoint 20: Little Grimsby unnamed C-Class Road.	Residential receptors /medium value view.	Residential receptors susceptible to changes in their view: high susceptibility.	High
	Recreational/ PRoW receptors /medium value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	High
Viewpoint 21: Yarburgh Road, Alvingham.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility.	Low
Viewpoint 22: Cherry Tree Lane/PRoW, Alvingham.	Recreational/PRo W receptors /medium value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	High
Viewpoint 23: Pick Hill Lane, Grimoldby.	Residential receptors /medium value view.	Residential receptors susceptible to changes in their view: high susceptibility.	High
	Recreational/ PRoW receptors /medium value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	High
Viewpoint 24: Main Road, Saltfleetby.	Residential receptors /low value view.	Residential receptors susceptible to	Medium

Viewpoint	Receptor Type/Value of View	Susceptibility	Sensitivity
		changes in their view: high susceptibility.	
	Recreational/ PRoW receptors /low value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility.	Low
Pipeline (Section 5)			
Viewpoint 25: Thacker Bank.	Residential receptors /medium value view.	Residential receptors susceptible to changes in their view: high susceptibility.	High
	Highway receptors/medium value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility.	Low
Viewpoint 26: Sea Lane, Theddlethorpe.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium
	Recreational/ PRoW receptors /low value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility	Low
Viewpoint 27: PRoW 252 off Mablethorpe Road A1031.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium

Viewpoint	Receptor Type/Value of View	Susceptibility	Sensitivity
	Recreational/ PRoW receptors /low value view.	Receptors likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium
Viewpoint 28: A1031 Mablethorpe Road, entrance to the Theddlethorpe Terminal.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility.	Low
Viewpoint 29: Kent Avenue, Mablethorpe.	Residential receptors /low value view.	Residential receptors susceptible to changes in their view: high susceptibility.	Medium
	Highway receptors/ low value view.	Vehicle users on a local road likely to be used for access primarily: low susceptibility.	Low
Viewpoint 30: England Coast Path, Theddlethorpe	Recreational/ PRoW receptors /low value view.	Receptors on the Long-Distance Trail likely to be involved in appreciation of the view from a PRoW: high susceptibility.	Medium

7.8.112 Susceptibility to the pipeline itself in operation is reduced to low for all receptors where it is the only element of the Proposed Development visible but remains as assessed for construction at locations where buildings/infrastructure above ground is present in operation (VP5/ VP10/ VP27/ VP29/VP30).

7.8.113 Susceptibility to decommissioning remains as assessed for construction at locations where buildings/infrastructure above ground is present in operation and requires removal (VP5/ VP10/ VP27/ VP29/VP30).

Construction Phase

Pipeline (Section 1) including Immingham Facility and Northern Construction Compound

7.8.114 Viewpoints 1 to 3 are located within Section 1 and are representative of the key visual receptors that have the potential to be affected by that section of the Proposed Development. They reflect views from the edge of settlement at Immingham (VP3)

recreational receptors including users of the PRoW network along the Humber coast (VP1) and from local roads (VP2).

7.8.115 Construction activity for the Immingham Facility would form a distant part of the inland view from VP1 on the Humber Estuary. The construction would occur in the context of the industrialised backdrop of the power station and petrochemical works and a foreground of other commercial/ industrial use and intervening hedgerows and scrubby vegetation around Rosper Road Pits and on the boundary of intervening land.

7.8.116 The main construction and associated plant, equipment, welfare facilities and storage of materials would be a barely noticeable aspect in views, the main element being taller equipment and cranes. Visibility of such tall elements would be temporary and reversible during the duration of works of up to a maximum of 12 months. Overall, this would limit the effects for visual amenity at VP1, resulting in **very low** magnitude and **negligible adverse** effects that is **not significant**.

7.8.117 At VP2 the views from Rosper Road, typically vehicle users, would be open and in the fore and middle ground, against a panorama and backdrop which is heavily industrialised. Given the context, elements in the view at VP2 would be similar to the baseline context, but would be prominent, albeit short term (less than 12 months) and reversible (construction specific impacts). At VP2 the change in the view would therefore result in a **medium** magnitude and a **minor adverse** effect that is **not significant**, as a result of the context and low sensitivity.

7.8.118 At VP3 Brocklesby Avenue, Immingham the pipeline route works would be openly visible across the rear of the panorama, from right to left. Initially this would comprise fencing, soil stripping and the formation of soil storage mounds either side of the route. The background is formed by the tall hedge running along Mill Lane which obstructs views from that direction and from the viewpoint to open land beyond. The likely duration of works within this view is up to a maximum of nine months. Initial works to strip and place soils would be prominent, featuring hydraulic excavators, albeit in the background. The fore ground and middle ground would remain in agricultural use and views would largely comprise the periodic presence of vehicles and machinery required to deliver and place the pipeline sections. Overall, taking the scale/extent, reversibility and limited geographical extent of the view into account, the effects on visual amenity would be **low** magnitude given the temporary nature and very short duration, resulting in a **minor adverse** effect that is **not significant**.

7.8.119 In construction, the use of the North Compound would primarily change visual amenity for users of the adjacent highways, the A160 and A1077. Views of the North Construction Compound from residential properties at South Killingholme would be substantially mitigated by distance and intervening vegetation along the A160, and to the extent that any activity is visible it would be in the context of vehicle movements along the A160. Effects on the visual amenity of low sensitivity vehicle users, arising from the North Construction Compound, very localised and limited geographical extent as well as transitory, resulting in a **low** magnitude and a **negligible adverse** effect that is **not significant**.

7.8.120 Overall, in Section 1, views of the works to construct the Immingham Facility would be localised and from locations heavily influenced by existing industrial infrastructure (VP1/ VP2) such that there is no significant effect on visual amenity. Views of the pipeline works, in the south of this Section from isolated properties such as VP3 Brocklesby Avenue will form a localised temporary, prominent but not significant change in visual amenity.

Pipeline (Section 2) including Washingdales Lane Block Valve Station

7.8.121 VP4, VP5 and VP31 are located within Section 2 and are representative of the key visual receptors that have the potential to be affected by construction operations within Section 2. They reflect views from the edge of settlement at Stallingborough and Aylesby (VP4, VP5) and recreational receptors including users of the PRoW network (VP5), which is also broadly similar to views from the A18.

7.8.122 VP4 is representative of views from properties on Riby Road A1173 Stallingborough, including new houses, and users of the road. Hedgerows on the A1173 and on the B1210, coupled with distance obstruct/ limited views from the main settlement of Stallingborough. The pipeline works would lie beyond intervening hedgerows and landform such that they are unlikely to register within the view, including in winter and there would be a neutral effect on visual amenity.

7.8.123 VP5 from the St Lawrence Trail, Aylesby is representative of recreational users of the PRoW. The pipeline works would lie beyond the A18 in the middle ground, the foreground arable field remaining intact. There would be some visibility of soil stripping machinery and soil mounding along the pipeline route on rising land in the left-hand side of the view. The works are likely to be of short duration in the view, the majority of the construction being screened on the right-hand side of the view, including in winter, by intervening roadside hedgerows. Construction of Washingdales Lane Block Valve Station would potentially be visible in the far left of the view, although it is likely to be substantially screened by vegetation along Beach Holt Lane. If visible from the PRoW (for example further north-west along it) it would form a distant and small-scale change from a localised section of the PRoW. Overall, the construction specific views would be similar to those described for VP3 in Section 1. However, it would occupy less of the largely unchanged panorama. Effects would be of **low** magnitude and **negligible adverse** effect which is **not significant**.

7.8.124 Overall, in Section 2, views of the pipeline works would be limited as there are relatively few publicly accessible viewpoint locations. For those locations where views are obtained, the pipeline route works would form a localised temporary, prominent but not significant change in visual amenity. Elsewhere, the construction of the pipeline route would be visible typically in mid-ground views as it crosses the agricultural landscape characteristic of views within Section 2 or substantially or fully screened by intervening landform and vegetation on field boundaries.

7.8.125 Views of construction of Washingdales Lane Block Valve Station would be predominantly from the A18 but it would be visible from wider locations including VP31, although the distribution of PRoW in the vicinity limits views to the vicinity of VP5. Views of the construction of the Washingdales Lane Block Vale Station would be visible in the foreground of the view, although partially screened by existing vegetation. Effects would be of **low** magnitude and **minor adverse** effect which is **not significant**.

Pipeline (Section 3) including Thoroughfare Block Valve Station and Central Construction Compound

7.8.126 Viewpoints 6 to 18 are located within Section 3 and are representative of the key visual receptors that have the potential to be affected by that section of the Proposed Development. They reflect views from within the Lincolnshire Wolds AONB (VP6, VP7, VP8, VP11, VP12, VP13), the edge of settlement at Ashby cum Fenby (VP9, VP10) and North Thoresby (VP14) and from recreational locations receptors including users of Ludborough Station (VP18) on the Lincolnshire Wolds Line heritage railway as well as from PRoW (VP9) and local roads (VP15, VP17) and the A16 (VP16).

7.8.127 VP6, VP7 and VP8 are representative of views from Walk Lane and Welbeck Hill, PRoW within the AONB. The pipeline works would be visible on rising open, arable land in the fore to middle ground, in both summer and winter. The construction activity would form a prominent element in the predominantly rural views. Pipeline route works would be openly visible across the panorama. Initially this would comprise fencing, soil stripping and the formation of soil storage mounds either side of the route. The likely duration of works within this view is up to a maximum of 12 months. Initial works to strip and place soils would be prominent, featuring hydraulic excavators. The fore ground and partial middle ground would remain in agricultural use. The soil storage would be prominent but not incongruous in the

context of an arable field which is regularly ploughed to expose soils. Post construction of the soil stores views would largely comprise the periodic presence of upper sections of vehicles and machinery required to deliver and place the pipeline sections. VP7 and VP8 would also gain views of the Central Construction Compound including vehicles, temporary accommodation, materials and machinery storage for a duration of up to 17 months, although views would be partially screened by tree planting and hedgerow along the A18 and would screen construction operations associated with the pipeline for a short section.

7.8.128 Overall, taking the scale/ extent, reversibility and geographical extent of the open views at VP6, VP7 and VP8 into account, the effect on visual amenity would be up to a “worst case” **medium** magnitude and of short duration, resulting in a **moderate adverse** effect that is **significant,** albeit on the borderline of that threshold.

7.8.129 VP9 and VP10, represent views in the vicinity of Ashby cum Fenby, including from residential and recreational locations. The pipeline works would lie east of the viewpoints and the flat landform and successive belts of intervening vegetation and hedgerows serves to limit long views. Consequently, there is likely to be only visibility of soil stripping machinery and soil mounding along the pipeline route from both locations and from the village edge. If visible, the pipeline works are likely to be of short duration in the view, the majority of the construction operations being screened, including in winter, by intervening roadside hedgerows. The construction of Thoroughfare Block Valve Station would potentially be visible from VP9. If visible from the PRoW it would form a distant/ small scale change from a localised section of the PRoW. Overall, effects would be of **low** magnitude and **minor adverse** effects that are **not significant**.

7.8.130 VP11, VP12VP13 represent views from local roads/ PRoW within the Lincolnshire Wolds AONB. VP11 and VP13 are more elevated but all three locations overlook the pipeline route and effects would be broadly similar. In summer there is little or no visibility of the A18 within the middle ground due to intervening hedgerows and trees, including avenue and estate tree planting. The pipeline route lies beyond the A18, which has additional hedgerows to its eastern edge. It is therefore likely that any views in summer would be limited to glimpsed sections of the initial earthworks, across the panorama between vegetation and discernible due to contrast with the adjacent greens of crops and grassland. For all locations there would be increased visibility in winter. For VP11, VP12 and VP13 effects will be a **very low** magnitude of in summer and effects of a **low** magnitude in the winter, when there would be greater visibility of the works parallel to the A18. The duration of views within the panorama would be short and construction related elements will be reversible (replacement of soils/removal of machinery). Views would consist of the soil mounds and periodic but temporary visibility of machinery such that there would be a maximum effect of **minor adverse** that is **not significant**.

7.8.131 VP14, on the western edge of North Thoresby represents residential views from the village edge and highway views from the A16. Intervening hedgerows and a landform which falls away from the viewpoint would provide effective screening, coupled with distance such that there would be **no impacts** on visual amenity resulting in a **neutral** effect that is **not significant**.

7.8.132 West of North Thoresby there will be open views from PRoW and from the vicinity of a commercial premises and isolated dwellings (VP15: North Thoresby Factory/ Properties). At VP15, these would largely be from the PRoW leading westwards from the A16, and views from the adjacent properties being more oblique. Views would be as described for VP16, open on rising arable land but relatively short duration (not exceeding seven months). Overall, given the distance but extent across the panorama, coupled with the nature of the change, short duration, effects will be **low** magnitude and **negligible adverse** effect that is **not significant**.

7.8.133 There would be views of the pipeline route from local roads and from the vicinity of Ludborough Station (VP17: Station Road, Ludborough and VP18: Station Road, Ludborough). At VP18, the pipeline route soil stripping and soil storage would be partially visible through the field access, crossing the field in the middle ground. It is an oblique view from the direction of travel but is akin to views likely from the adjacent railway. The majority of the view would remain unchanged, and the crossing of Station Road would be distant and not noticeable. Taking the scale and extent of change in the view into account, short duration and reversibility, effects at VP18 will be of **low** magnitude, and result in a **minor adverse** effect that is **not significant**. At VP17 there would be some temporary visibility of the open trench, framed by soil stores receding into the distance. The geographical extent of that view would however be very limited and for most sections of Station Road, without hedgerows, the view would comprise the soil stores and occasional machinery, as described for VP18. Views from VP17 would be in close proximity and effects at VP17 would be of **medium** magnitude, and **moderate adverse** effect, that is **significant** given the context and nature of the receptor.

7.8.134 From A16 north of Ludborough the pipeline route would form a line across the panorama in the middle distance, merging with the linear vegetation which forms the horizon/background. The soil stores would be of a scale and linearity in the view which is noticeable rather than prominent but would be openly visible across the arable field forming the foreground (VP16: A16 Layby). Overall, given the distance but extent across the panorama, coupled with the nature of the change, short duration, effects would be **low** magnitude and **negligible adverse** effect that is **not significant**.

7.8.135 Overall, in Section 3, views of the pipeline works would be open, from local roads often as a distant but noticeable element across large scale arable fields. There would be very localised/ limited geographical extent of views in proximity to the works and where they exist for most highway users the duration of visual impact would be transitory. For those locations the pipeline route works would form a localised temporary, prominent but not significant change in visual amenity. Elsewhere, the construction of the pipeline route would be substantially or fully screened by intervening landform and vegetation on field boundaries.

Pipeline (Section 4) including Louth Road Block Valve Station

7.8.136 From VP20, a local road on the edge of Little Grimsby, also at a PRoW junction, the pipeline route would form a barely discernible line of soil storage and/ or periodic views of hydraulic excavators, similar to farm activity. There would be a very low magnitude of visual impact and an effect of negligible significance. Overall, given the distance but extent across the panorama, coupled with the nature of the change, short duration, effects would be **very low** magnitude and result in a **negligible adverse** effect that is **not significant**.

7.8.137 There are unlikely to be any views of the pipeline route from properties in Covenham St Bartholomew and Covenham St Mary, due to distance and intervening landform/ vegetation. There would be distant/middle ground views from PRoW running west from these villages (VP19: PRoW off Main Road, Covenham St Bartholomew). The pipeline route would form a barely discernible line of soil storage and/or periodic views of hydraulic excavators, similar to farm activity. There would be a **very low** magnitude of visual impact and an effect of **negligible significance**. Similarly, from residential locations in Alvingham and Grimoldby, construction would be heavily screened by vegetation and landform and distant such that it is unlikely to register within views, including in winter and there would be a neutral effect on visual amenity. (VP21: Yarburgh Road, Alvingham and VP23: Pick Hill Lane, Grimoldby.).

7.8.138 VP24, on the edge of Saltfleetby broadly represents residential views from the village edge and highway views from a local road. Intervening hedgerows would provide some screening, coupled with distance such that effects on visual amenity would be **very low** magnitude and **negligible adverse** effects that are **not significant**.

7.8.139 There would be open views of the construction of Louth Road Block Valve Station from the PRoW adjacent to the Louth Canal (VP22: Cherry Tree Lane/ PRoW, Alvingham). The construction activity, and access to it, would occupy the foreground beyond the canal. Although the majority of the view would remain unchanged and the duration of construction would not exceed nine months in total the machinery and activity would be prominent and effects on visual amenity would be **low** magnitude for users of the PRoW, particularly given the timescale they would experience it, but reduced for the properties at the farm and for users of the fishery, due to intervening vegetation. Given the localised scale/ extent of change in the view and duration, effects would be **minor adverse** and **not significant**.

Pipeline (Section 5) including Theddlethorpe Facility Option 1 and 2 and Southern Construction Compound

7.8.140 Views of the pipeline construction from residential areas of Theddlethorpe All Saints/ isolated properties along local roads would occur across open arable fields but form a distant element such that effects would be the same as those described elsewhere in the rural, more open landscape around other settlements. (VP27: PRoW 252 off Mablethorpe Road A1031). At VP27 there would be distant/middle ground views from PRoW running west from these villages. The pipeline route would form a barely discernible line of soil storage and/ or periodic views of hydraulic excavators, similar to farm activity. Overall, given the distance but extent across the panorama, coupled with the nature of the change, short duration, effects would be **very low** magnitude and **negligible adverse** effects that are **not significant**. This would also be the case for properties on the edge of Theddlethorpe St Helen (VP26: Sea Lane, Theddlethorpe St Helen).

7.8.141 There would be views of the pipeline route and construction in proximity to local roads including from Green Lane, Willow Row Bank, and Thacker Bank (VP25), Mill Road and the A1031 Mablethorpe Road adjacent to The Cut. At VP25: Thacker Bank, representative of views from the local c-class roads characteristic of the area, there would be a fore and middle ground view of the soil stripping and soil storage along the pipeline route to the north and south, receding away from the viewer. Overall, given the very localised geographical extent that the view would be experienced in that way, typical views would be more distant, but extend across the panorama. The scale and extent, coupled with the nature of the change in the view and short duration is such that effects would be **low** magnitude and **negligible adverse** effects that are **not significant**.

7.8.142 At VP26: Sea Lane, Theddlethorpe St Helen, construction of the Theddlethorpe Facility Option 1 would generally not be visible, similar to the existing disused Terminal infrastructure, which is not discernible. However, there is the potential for tall construction elements such as cranes to be temporarily visible on the skyline, particularly in winter. From VP29: representative of views from properties and Kent Avenue and VP28 A1031 Mablethorpe Road (entrance to the former TGT site), the elements of Theddlethorpe Facility Option 1 would lie behind existing infrastructure in the Terminal (VP29) and at VP28 behind the lighting masts within the National Gas Transmission and former TGT site and construction is unlikely to be distinguishable as a change in the view, with the exception of tall cranes over short timescales. Overall, taking the duration, extent and reversibility of likely visibility of construction elements into account, effects on VP26, VP27, VP28 and VP29, and similar locations which they represent, would be very low magnitude and negligible significance. At VP30 England Coast Path, Theddlethorpe views of construction would either be distant and in the context of the existing fencing around the site or as users of the PRoW/Long distance Trail pass the Site, would be relatively open but constitute an industrialised use on a former industrial site which impacts a short section of the route over a very localised geographical extent such that effects are **low** magnitude and **minor adverse effects** that are **not significant**.

7.8.143 Theddlethorpe Facility Option 2 would lie beyond the current perceived extent of the National Gas Transmission, former TGT Site, as experienced from viewpoints in the locality including VP24, VP25, VP26. There would be middle ground visibility from locations along the A1031, including several properties from which the Theddlethorpe Facility Option 2 would be partially screened by boundary vegetation, but potential exists for construction to be noticeable or prominent in the middle ground, particularly from upper floors (albeit several of the properties are single storey). Taking duration and reversibility into account, effects on visual amenity at these locations, would be **low** magnitude and **minor adverse effects** that are **not significant**.

7.8.144 Effects from construction activity/ use of the South Compound would be similar to those described for Theddlethorpe Facility Option 1. The South Compound will generally not be visible and is highly screened from open land to the east by intervening vegetation. From other locations, any usage will lie behind existing infrastructure in the National Gas Transmission, Theddlethorpe Terminal and construction activity is unlikely to be distinguishable as a change in the view. Overall, taking the duration, extent and reversibility of likely visibility of construction elements into account, there will be **no effect** on visual amenity from use of the South Compound resulting in a **neutral** effect that is **not significant**.

Assessment of Potential Visual Impacts: Operational Phase

Immingham Facility

7.8.145 The Immingham Facility, including a 25m vent stack. Pipework and control room buildings would be locally visible from Humber Road and Rosper Road primarily appearing against the backdrop of large-scale industrial uses associated with the petrochemical installations. The geographical extent of such views is limited by intervening vegetation, in particular and the scale and extent of change in views. Overall, this would limit the magnitude of effect to **very low** magnitude resulting in **negligible adverse** effects that are **not significant** (VP1). At VP2 from Rosper Road PRoW users would view the Immingham Facility as a small-scale addition to a broader industrialised panorama. Given the context, elements in the view at VP2 would be similar to the baseline context and represent a **low** magnitude, permanent, change in the view resulting in a **negligible adverse** effect that is **not significant** at VP2 and similar viewpoints in proximity.

7.8.146 There would be no change in visual amenity from the North Compound in operation following reinstatement of the land to the original land use.

Pipeline Route

7.8.147 Post construction the pipeline route would be predominantly restored to agricultural use, reinstating the primary land use before construction. Assuming the careful retention, replacement and handling of soil resources and appropriate landscape reinstatement measures of stone picking, cultivation and timely seeding for grassland and/ or return to farming, there would be no obvious visual impact from the buried pipeline within open agricultural land. As the majority of the pipeline route passes through arable land, successive seasonal cultivations and cropping would further integrate the reinstated land, such that it is fully integrated into the landscape.

7.8.148 The loss of hedgerows along the route, would result in a very localised change in views, and for some locations where the alignment does not deviate within the view, the line of the route would be perceptible due to breaks in the vegetation. In many locations the distance between the hedgerow gaps and/ or intervening landform coupled with the changes in pipeline alignment would mitigate this potential effect.

7.8.149 In addition, sections of removed hedgerow would not exceed the maximum pipeline route width of 30 m and where possible would be less. and subsequently replanted. Although new

hedgerow planting would be ineffective in re-establishing a continuous hedgerow at year 1, by year 15 it is reasonable to assume that the perception of a continuous hedgerow would be re-established, accepting that further maturity would be required to blend fully with the adjacent hedgerows.

7.8.150 The pipeline would result in a **very low** magnitude on visual amenity in operation, partly as a result of the scale of the fields limiting the perception of cumulative loss of sections of field boundary. Overall, effects on visual amenity from the presence of the pipeline in operation, at all viewpoints and for all viewer groups would not exceed **negligible adverse** effects that are **not significant** (and will be neutral for many) in Year 1 and beyond to Year 15 for all locations.

Block Valve Stations

7.8.151 In operation the Block Valve Stations would be bounded on a minimum of three sides by a strip of native tree and shrub planting. In Year 1 this would be ineffective as a screen and residual effects on visual amenity will therefore arise in relation to each Block Valve Station as set out below.

7.8.152 The Washingdales Lane Block Valve Station would introduce a small scale, industrial style building and associated land use/ fencing/ access into localised views, represented by VP5 from the St Lawrence Trail, Aylesby. Intervisibility and effects on people's views from within the AGLV would be very localised, as a result of landform. Overall, the influence of the operational Washingdales Lane Block Valve Station within views around Aylesby would be localised to its immediate vicinity, including from VP31 and the A18. If visible from the PRoW (for example further north-west along it) it would form a distant/ small scale change from a localised section of the PRoW, potentially partially on the skyline from lower lying locations Overall, the operational views of Washingdales Lane Block Valve Station in Year 1 would be **low** magnitude resulting in a **minor adverse** effect that is **not significant**. By Year 15 mitigation planting would provide an effective screen such that although the nature of the view would be marginally more treed, any adverse effect on visual amenity in the context (including views within the AGLV and AONB) would be **very low** magnitude and **negligible adverse** effects that are **not significant**.

7.8.153 The Thoroughfare Block Valve Station would introduce new built form and a degree of increased industrialisation into local views, including potential visibility from VP10. If visible from the PRoW it would form a distant/ small scale change from a localised section of the PRoW. Overall, effects would be of **low** magnitude and **minor adverse** effects that are **not significant** in Year 1 and **very low** magnitude and **negligible adverse** effects and **not significant** by Year 15 taking mitigation planting into consideration.

7.8.154 In operation the Louth Road Block Valve Station would be visible from the PRoW along the Louth Canal, represented by VP22: Cherry Tree Lane/ PRoW, Alvingham. The building, and access to it, would occupy the foreground beyond the canal. Although the majority of the view would remain unchanged the building would be noticeable in Year 1 and effects on visual amenity would be **low** magnitude for users of the PRoW but reduced for the properties at the farm and for users of the fishery, due to intervening vegetation. Given the localised scale/ extent of change in the view and duration effects will be of **minor adverse** and **not significant** in Year 1 and reducing to **very low** magnitude and **negligible adverse** effects and **not significant** by Year 15 taking mitigation planting into account.

Theddlethorpe Facility

7.8.155 The Theddlethorpe Facility Option 1 would have a barely perceptible increased intensification of industrial infrastructure, including the 25m vent stack, very locally within a wider view from a very limited geographical extent resulting in a very low magnitude and neutral effect that is not significant. This will be the case both in Year 1 and beyond Year 15 at VP29 with **no change** at VP18 due to no or imperceptible inter-visibility resulting in a

neutral effect that is not significant. At VP30 England Coast Path, Theddlethorpe views of the Facility would either be distant (from the photo viewpoint location) and/or in the context of the existing fencing/hardstanding as users of the PRoW/Long Distance Trail pass the Site. Views would remain open at Year 1 but constitute an industrialised use on a former industrial site which impacts a short section of the route over a very localised geographical extent such that effects are low magnitude and **minor adverse** effects that are **not significant.** By Year 15, assuming mitigation planting effects at VP30 would be **very low magnitude** and **negligib**le significance.

7.8.156 The Theddlethorpe Facility Option 2 will impact on visual amenity through a slight intensification of infrastructure, including the 25m vent stack, within local views from VP28 A1031 Mablethorpe Road, and properties adjacent to it. This will be the case in Year 1, partially mitigated beyond Year 15 by planting around the Theddlethorpe Facility Option 2. Overall, considering the change in views/ localised geographical extent but permanent nature of the change, effects on visual amenity would be **low** magnitude and **minor adverse** effects that are **not significant** in Year 1 reducing to **very low** magnitude and **negligible adverse** effects that are **not significant** by Year 15.

Assessment of Potential Visual Impacts: Decommissioning Phase

7.8.157 Any decommissioning of the Proposed Development is assumed to involve leaving the pipeline in-situ and removal of the above ground elements giving rise to effects identified for the operational phase, primarily the Immingham Facility, Block Valve Stations and Theddlethorpe Facility Option 1 or Option 2. Post decommissioning it is assumed that the sites of the above ground infrastructure are returned to the former and/ or some compatible land use for the context.

Immingham Facility

7.8.158 Removal of the Immingham Facility infrastructure would represent a localised, temporary change in views broadly as described in detail for construction, but in reverse, and typically likely to be in a reduced timescale. As for construction, there will be a small-scale temporary change in views within a localised geographical extent for a duration of up to 6 months.

7.8.159 Overall, considering the context of the site and existing urbanised/ industrial nature of views, coupled with duration and reversibility of the decommissioning impacts, effects on visual amenity will be low magnitude resulting in minor adverse effects that are not significant.

Pipeline Route

7.8.160 No likely effects on visual amenity from decommissioning of the pipeline are anticipated, assuming it is left in-situ. Effects will therefore be neutral for all visual receptors.

Block Valve Stations

7.8.161 Decommissioning and demolition of the Block Valve Stations would generate similar effects to those described and assessed for construction. On that basis none would exceed **low** magnitude and there would be a maximum **negligible adverse** effect that is **not significant**.

Theddlethorpe Facility

7.8.162 As described for the removal of either of the options for the Immingham Facility, there will be a localised, temporary change in views broadly as described in detail for construction, but in reverse, and typically likely to be in a reduced timescale.

7.8.163 Overall, considering the context of the site and existing urbanised/ industrial nature of views as a result of the infrastructure associated with the National Gas Transmission, Theddlethorpe Terminal, coupled with duration and reversibility of the decommissioning impacts, effects on visual amenity will be low magnitude resulting in **minor adverse** effects that are **not significant**.

7.9 Additional Mitigation and Enhancement Measures

Additional Mitigation and Enhancement

7.9.1 The Draft Construction Environmental Management Plan (CEMP) *(ES Volume IV Appendix 3.1, Application Document 6.4.3.1)* sets out the additional mitigation measures identified in this assessment of likely significant effects within the Mitigation Register. This section summarises the types of mitigation measures that will be considered to mitigate against the effects on landscape and visual amenity where required. Each entry in the Mitigation Register has an alpha-numerical reference e.g., "C1" to provide a cross reference to the secured commitment. These measures will be adopted during the construction phase.

7.9.2 Opportunities to reduce impacts of nearby highly sensitive visual receptors should be sought through sensitive design of construction compounds e.g., organising compound features and using earthworks / fencing to screen internal activities during the construction phase. This forms mitigation measure **C9** in the Draft CEMP.

7.9.3 This measure will potentially reduce the magnitude of effects but changes in the view would remain and the measures are not considered likely to result in amended significance outcomes for landscape or visual receptors.

7.9.4 Additional planting around the Theddlethorpe Facility Option 2 could be considered to assist with screening views from sensitive receptors in proximity to VP28 A1031 Mablethorpe Road, although the assessment concluded that there would be no significant effects for these receptors.

7.9.5 Enhancements are measures that are considered to be over and above any measures to avoid, reduce or remediate adverse impacts of the Proposed Development. No additional enhancement measures have been identified to reduce the assessed impacts on landscape and visual amenity.

7.10 Residual Effects

Assessment of Residual Effects

7.10.1 The assessment has determined that there would be temporary to short term significant effects on the Lincolnshire Wolds AONB during construction. Effects would reduce to not significant during operation and decommissioning. The remaining landscape receptors will experience not significant effects during all stages of the Proposed Development.

7.10.2 The visual amenity assessment has determined that recreational users at VP6 (PRoW NELC 16 Walk Lane, Irby Upon Humber), VP7 (PRoW NELC 17 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB)), VP8 (PRoW NELC 122 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB)) and users of the heritage railway at VP17 (Station Road, Ludborough) are likely to experience significant short-term adverse effects during the construction phase of the Proposed Development as a result of the high sensitivity of the receptor and proximity to the construction operations associated with the pipeline route and limited intervening vegetation. No additional measures have been identified that would assist in reducing the impacts at the identified locations, and therefore the assessed effects remain.

7.10.3 Effects are assessed to reduce to not significant post the construction period, during operation and decommissioning for all visual receptors.

Table 7-14: Summary of Construction Phase Residual Landscape Effects

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
NCA 41: Humber Estuary	Low	Character change through vehicles/ machinery/soil stripping/construction compounds etc.	Very Low	Negligible	N/A	Very Low	**Negligible Adverse (Not Significant)**
NCA 42: Lincolnshire Coasts and marshes	Medium	As described above.	Very Low	Negligible	N/A	Very Low	**Negligible Adverse (Not Significant)**
NCA 43: Lincolnshire Wolds	High	As described above.	Very Low	Minor	CEMP C9	Very Low	**Negligible Adverse (Not Significant)**
Lincolnshire Wolds AONB	High	As described above.	Very Low	Minor	CEMP C9	Low	**Minor Adverse (Not Significant)**
AGLV – North of Caistor	Medium	As described above.	Very Low	Negligible	N/A	Very Low	**Minor Adverse (Not Significant)**
Lincolnshire Drift LCA							
Open Undulating Farmland LCT	Medium	Character change through vehicles/ machinery/soil stripping/construction compounds etc.	Very Low	Negligible	N/A	Very Low	**Negligible Adverse (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Humber Estuary LCA							
Open Undulating Farmland LCT	Medium	Character change through vehicles/ machinery/soil stripping/construction compounds etc.	Low	Minor	N/A	Low	**Minor Adverse (Not Significant)**
Industrial Landscape LCT	Very Low	As described above.	Very Low	Negligible	N/A	Very Low	**Negligible Adverse (Not Significant)**
Humber Estuary LCA	Very low	As described above.	Very Low	Negligible	N/A	Very Low	**Negligible Adverse (Not Significant)**
Lincolnshire Coast and Marshes LCA	Medium	As described above.	Low	Minor	N/A	Low	**Minor Adverse (Not Significant)**
LCA G1: Binbrook to Tetford Wolds Farmland	High	As described above.	Low	Minor	CEMP C9	Low	**Minor Adverse (Not Significant)**
LCA I1: Holton le Clay to Great Steeping Middle Marsh	Medium	As described above.	Low	Minor	CEMP C9	Low	**Minor Adverse (Not Significant)**
LCA J1: Tetney Lock to Skegness Coastal Outmarsh	Medium	As described above.	Low	Minor	CEMP C9	Low	**Negligible Adverse (Option 1) Minor Adverse (Option 2) (Not Significant)**
LCA K1: Donna Nook to	Medium	As described above.	Very Low	Negligible	CEMP C9	Very Low	**Negligible Adverse (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Gibraltar Point Naturalistic Coast.							
Wolds' Estates LCA	Medium	As described above.	Low	Minor	CEMP C9	Low	**Minor Adverse (Not Significant)**

Table 7-15: Summary of Construction Phase Residual Visual Effects

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 1: PRoW NKIL 50, Killingholme Marshes Proposed England Coast Path	Medium	Construction of the Immingham Facility.	Very Low	Negligible Adverse	N/A	Very Low	**Negligible Adverse (Not Significant)**
Viewpoint 2: Marsh Lane Proposed England Coast Path PRoW NKIL 100	Medium	Construction of the Immingham Facility.	Medium	Minor Adverse	N/A	Medium	**Minor Adverse (Not Significant)**
Viewpoint 3: Brocklesby Avenue, Immingham	Medium	Pipeline excavation/ works.	Low	Minor Adverse	N/A	Low	**Minor Adverse (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 4: Riby Road, Stallingborough	Medium	Pipeline excavation/ works.	None	Neutral	N/A	None	**Neutral (Not Significant)**
Viewpoint 5: PRoW 106 St Lawrence Trail, Aylesby	High	Block Valve Station 1/ Pipeline excavation/ works.	Low	Negligible Adverse	N/A	Low	**Minor Adverse (Not Significant)**
Viewpoint 6: PRoW NELC 16 Walk Lane, Irby Upon Humber (Lincolnshire Wolds AONB)	High	Pipeline excavation/ works.	Medium	Moderate Adverse	CEMP C9	Medium	**Moderate Adverse (Significant)**
Viewpoint 7: PRoW NELC 17 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB)	High	Pipeline excavation/ works.	Medium	Moderate Adverse	CEMP C9	Medium	**Moderate Adverse (Significant)**
Viewpoint 8: PRoW NELC 122 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB)	High	Pipeline excavation/ works.	Medium	Moderate Adverse	CEMP C9	Medium	**Moderate Adverse (Significant)**
Viewpoint 9: Ashby cum Fenby PRoW 150	High	Pipeline excavation/ works.	Low	Negligible Adverse	N/A	Low	**Minor Adverse (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 10: Thoroughfare, Ashby cum Fenby	Medium	Block Valve Station 2/ Pipeline excavation/ works.	Low	Negligible Adverse	N/A	Low	**Negligible Adverse (Not Significant)**
Viewpoint 11: Hawerby Road, East Ravensdale.	High	Pipeline excavation/ works.	Low	Minor Adverse	N/A	Low	**Minor Adverse (Not Significant)**
Viewpoint 12: Lane near Hawerby.	High	Pipeline excavation/ works.	Low	Minor Adverse	N/A	Low	**Minor Adverse (Not Significant)**
Viewpoint 13: PRoW near Wold Newton (Lincolnshire Wolds AONB)	High	Pipeline excavation/ works.	Low	Minor Adverse	N/A	Low	**Minor Adverse (Not Significant)**
Viewpoint 14: A16/ High Street North Thoresby.	Medium	Pipeline excavation/ works.	None	Neutral	N/A	None	**Neutral (Not Significant)**
Viewpoint 15: North Thoresby Factory/ Properties.	High	Pipeline excavation/ works.	Low	Negligible Adverse	N/A	Low	**Negligible Adverse (Not Significant)**
Viewpoint 16: A16 Layby.	Low	Pipeline excavation/ works.	Low	Negligible Adverse	N/A	Low	**Negligible Adverse (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 17: Station Road, Ludborough.	Medium	Pipeline excavation/ works.	Medium	Moderate Adverse	CEMP C9	Medium	**Moderate Adverse (Significant)**
Viewpoint 18: Station Road, Ludborough.	Medium	Pipeline excavation/ works.	Low	Minor Adverse	N/A	Low	**Minor Adverse (Not Significant)**
Viewpoint 19: Main Road, Covenham St Bartholomew.	Medium	Pipeline excavation/ works.	Very Low	Negligible Adverse	N/A	Very Low	**Negligible Adverse (Not Significant)**
Viewpoint 20: Little Grimsby unnamed C-Class Road.	High	Pipeline excavation/ works.	Low	Negligible Adverse	N/A	Low	**Negligible Adverse (Not Significant)**
Viewpoint 21: Yarburgh Road, Alvingham.	Medium	Pipeline excavation/ works.	None	Neutral	N/A	None	**Neutral (Not Significant)**
Viewpoint 22: Cherry Tree Lane/PRoW, Alvingham.	High	Block Valve Station 3/ Pipeline excavation/ works.	Low	Minor Adverse	N/A	Low	**Minor Adverse (Not Significant)**
Viewpoint 23: Pick Hill Lane, Grimoldby	Medium	Pipeline excavation/ works.	None	Neutral	N/A	None	**Neutral (Not Significant)**
Viewpoint 24: Main Road, Saltfleetby	Medium	Pipeline excavation/ works.	Very Low	Negligible Adverse	N/A	Very Low	**Negligible Adverse**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
							(Not Significant)
Viewpoint 25: Thacker Bank	High	Pipeline excavation/ works.	Low	Negligible Adverse	N/A	Low	**Negligible Adverse (Not Significant)**
Viewpoint 26: Sea Lane, Theddlethorpe	Medium	Theddlethorpe Facility	Very Low	Negligible Adverse	N/A	Very Low	**Negligible Adverse (Not Significant)**
Viewpoint 27: PRoW 252 off Mablethorpe Road A1031.	Medium	Pipeline excavation/ works.	Very Low	Negligible Adverse	N/A	Very Low	**Negligible Adverse (Not Significant)**
Viewpoint 28: A1031 Mablethorpe Road, entrance to the Theddlethorpe Terminal	Medium	Theddlethorpe Facility	Very Low	Negligible Adverse	N/A	Very Low	**Negligible Adverse (Not Significant)**
Viewpoint 29: Kent Avenue, Mablethorpe.	Medium	Theddlethorpe Facility	Very Low	Negligible Adverse	N/A	Very Low	**Negligible Adverse (Not Significant)**
Viewpoint 30: England Coast Path, Theddlethorpe	Medium	Theddlethorpe Facility	Low	Minor Adverse	N/A	Low	**Minor Adverse**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 31: Washingdales Lane	Low	Washingdales Lane Block Valve Station	Low	Negligible Adverse	N/A	Very Low	**Negligible Adverse (Not Significant)**

Table 7-16: Summary of Operation Phase Residual Landscape Effects Year1/ Year15

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
NCA 41: Humber Estuary	Medium	Landscape change through loss of hedgerows/ presence of Immingham Facility/Block stations/Theddlethorpe Facility influencing perceived character.	Very Low	Negligible	N/A	Very Low	**Negligible Adverse (Not Significant)**
NCA 42: Lincolnshire Coasts and marshes	Low	As described above.	Very Low	Negligible	N/A	Very Low	**Negligible Adverse (Not Significant)**
NCA 43: Lincolnshire Wolds	High	As described above.	Very Low	Minor	CEMP C9	Very Low	**Negligible Adverse (Not Significant)**
Lincolnshire Wolds AONB	Low	Landscape change through loss of hedgerows/ presence of Block Stations (external to the AONB) influencing perceived rural character.	Very Low	Negligible	Reinstatement of hedgerows/boundaries. Perimeter planting Block Valve Station 1 and 2.	Very Low	**Negligible Adverse (Not Significant)**
AGLV – North of Caistor	Low	As above.	Very Low	Negligible	As above.	Very Low	**Negligible Adverse (Not Significant)**
Lincolnshire Drift LCA							

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Open Undulating Farmland LCT	Very Low	Landscape change through loss of hedgerows/ degraded pattern.	Very Low	Negligible	Reinstatement of hedgerows/boundaries.	Very Low	**Negligible Adverse (Not Significant)**
Humber Estuary LCA							
Open Undulating Farmland LCT	Very Low	As above.	Very Low	Negligible	Reinstatement of hedgerows/boundaries.	Very Low	**Negligible Adverse (Not Significant)**
Industrial Landscape LCT	Very Low	Increased industrialisation	Very Low	Negligible	Reinstatement of hedgerows/boundaries.	Very Low	**Negligible Adverse (Not Significant)**
Humber Estuary LCA	Very Low	Increased industrialisation	Very Low	Negligible	Reinstatement of hedgerows/boundaries.	Very Low	**Negligible Adverse (Not Significant)**
Lincolnshire Coast and Marshes LCA	Very Low	Landscape change through loss of hedgerows/ degraded pattern.	Low	Negligible	Reinstatement of hedgerows/boundaries.	Low	**Negligible Adverse (Not Significant)**
LCA G1: Binbrook to Tetford Wolds Farmland	Very Low	As above.	Very Low	Negligible	N/A	Very Low	**Negligible Adverse (Not Significant)**
LCA I1: Holton le	Low	As above.	Low	Negligible	Reinstatement of hedgerows/boundaries.	Low	**Negligible Adverse**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Clay to Great Steeping Middle Marsh							**(Not Significant)**
LCA J1: Tetney Lock to Skegness Coastal Outmarsh	Low	Increased industrialisation/ Landscape change through loss of hedgerows/ degraded pattern.	Very Low	Negligible	Reinstatement of hedgerows/boundaries.	Very Low	**Negligible Adverse (Option 1) Minor Adverse (Option 2) (Not Significant)**
LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast.	Low	Increased industrialisation	Very Low	Negligible	Reinstatement of hedgerows/boundaries.	Very Low	**Negligible Adverse (Not Significant)**
Wolds' Estates LCA	Low	Landscape change through loss of hedgerows/ degraded pattern.	Very Low	Negligible	Reinstatement of hedgerows/boundaries.	Very Low	**Negligible Adverse (Not Significant)**

Table 7-17: Summary of Operational Phase Residual Visual Effects Year 1/Year 15

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 1: PRoW NKIL 50, Killingholme Marshes Proposed England Coast Path	Medium	Construction of the Immingham Facility.	Very Low (Yr1/Yr15)	Negligible Adverse	N/A	Very Low (Yr1/Yr15)	**Negligible Adverse (Not Significant)**
Viewpoint 2: Marsh Lane Proposed England Coast Path PRoW NKIL 100	Medium	Construction of the Immingham Facility.	Low (Yr1) Very Low (Yr15)	Negligible Adverse	N/A	Low (Yr1) Very Low (Yr15)	**Negligible Adverse (Not Significant)**
Viewpoint 3: Brocklesby Avenue, Immingham.	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 4: Riby Road, Stallingborough.	Medium	Pipeline excavation/ works.	Low (Yr1) Very Low (Yr15)	Minor (Yr1) Negligible (Yr15) Adverse	Perimeter planting	Low (Yr1) Very Low (Yr15)	**Minor Adverse (Year1) Negligible Adverse (Year 15) (Not Significant)**
Viewpoint 5: PRoW 106 St Lawrence Trail, Aylesby.	High	Block Valve Station 1/ Pipeline excavation/ works.	Low (Yr1) Very Low (Yr15)	Negligible Adverse	Perimeter planting	Low (Yr1) Very Low (Yr15)	**Negligible Adverse (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 6: PRoW NELC 16 Walk Lane, Irby Upon Humber (Lincolnshire Wolds AONB)	High	Pipeline excavation/ works.	Very Low (Yr1/Yr15)	Negligible Adverse	Perimeter planting	Very Low (Yr1/Yr15)	**Negligible Adverse (Not Significant)**
Viewpoint 7: PRoW NELC 17 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB)	High	Pipeline excavation/ works.	Very Low (Yr1/Yr15)	Negligible Adverse	Perimeter planting	Very Low (Yr1/Yr15)	**Negligible Adverse (Not Significant)**
Viewpoint 8: PRoW NELC 122 Welbeck Hill, Irby Upon Humber (Lincolnshire Wolds AONB)	High	Pipeline excavation/ works.	Very Low (Yr1/Yr15)	Negligible Adverse	Perimeter planting	Very Low (Yr1/Yr15)	**Negligible Adverse (Not Significant)**
Viewpoint 9: Ashby cum Fenby PRoW 150	High	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 10: Thoroughfare, Ashby cum Fenby	Medium	Block Valve Station 2/ Pipeline excavation/ works.	Low (Yr1) Very Low (Yr15)	Negligible Adverse	Perimeter planting	Low (Yr1) Very Low (Yr15)	**Negligible Adverse (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 11: Hawerby Road, East Ravensdale.	High	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 12: Lane near Hawerby.	High	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 13: PRoW Near Wold Newton (Lincolnshire Wolds AONB)	High	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 14: A16/ High Street North Thoresby	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 15: North Thoresby Factory/ Properties.	High	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 16: A16 Layby.	Low	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 17: Station Road, Ludborough.	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 18: Station Road, Ludborough.	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 19: Main Road, Covenham St Bartholomew.	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 20: Little Grimsby unnamed C-Class Road.	High	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 21: Yarburgh Road, Alvingham.	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 22: Cherry Tree Lane/PRoW, Alvingham.	High	Block Valve Station 3/ Pipeline excavation/ works.	Medium (Yr1) Very Low (Yr15)	Minor Negligible	Perimeter planting	Medium (Yr1) Very Low (Yr15)	**Minor Adverse (Year 1) Negligible (Year 15) (Not Significant)**
Viewpoint 23: Pick Hill Lane, Grimoldby	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 24: Main Road, Saltfleetby	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 25: Thacker Bank.	High	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 26: Sea Lane, Theddlethorpe	Medium	Theddlethorpe Facility (*Assumes Option 1)	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**

Receptor	Sensitivity	Description of Potential Impact	Potential Effect		Mitigation Measure(s)	Residual Effect	
			Magnitude	Significance		Magnitude	Significance
Viewpoint 27: PRoW 252 off Mablethorpe Road A1031.	Medium	Pipeline excavation/ works.	None (Yr1/Yr15)	Neutral	N/A	None (Yr1/Yr15)	**Neutral (Not Significant)**
Viewpoint 28: A1031 Mablethorpe Road, entrance to the Theddlethorpe Terminal	Medium	Theddlethorpe Facility	Very Low (Yr1/Yr15)	Negligible	N/A	Very Low (Yr1/Yr15)	**Negligible Adverse (Not Significant)**
Viewpoint 29: Kent Avenue, Mablethorpe.	Medium	Theddlethorpe Facility (*Assumes Option 1)	Very Low (Yr1/Yr15)	Negligible Adverse	N/A	Very Low (Yr1/Yr15)	**Negligible Adverse (Not Significant)**
Viewpoint 30: England Coast Path, Theddlethorpe	Medium	Theddlethorpe Facility	Very Low (Yr1/Yr15)	Negligible	N/A	Very Low (Yr1/Yr15)	**Negligible Adverse (Not Significant)**
Viewpoint 31: Washingdales Lane	Low	Washingdales Lane Block Valve Station	Low (Yr1) Very Low (Yr15)	Negligible Adverse	N/A	Low (Yr1) Very Low (Yr15)	**Negligible Adverse (Not Significant)**

7.11 Cumulative Effects

7.11.1 The assessment considers the potential for cumulative impacts to static views within the landscape which may be either simultaneous (where developments would be observable at the same time) or successive (where an observer would be required to turn to experience multiple developments).

7.11.2 Cumulative landscape effects may result where effects resulting from a number of developments combine, increasing the prevalence of such development within a landscape to an extent where they may become a defining characteristic. The likely significance of these effects relates to the number of developments affecting the landscape, their scale, their inter-relationship and the sensitivity and ability of the particular landscape to accommodate this type of development.

7.11.3 Cumulative visual effects may result where effects resulting from a number of developments combine to increase the appearance and dominance within a particular view. The likely significance of these effects relates to the number of developments visible and their scale, location and inter-relationship to each other within the view.

7.11.4 The short list of identified cumulative schemes as set out in *ES Volume II Chapter 20: Cumulative Effects Assessment (Application Document 6.2.20)* and illustrated on *Figure 20-2 Location of Shortlist of Other Developments (Application Document 6.3)* which have been scoped in or scoped out of the assessment are provided in **Table 7-18** below.

Table 7-18: Relevant Landscape and Visual Cumulative Schemes

ID	Application Reference	Development Name and Details	Approx. Distance from the DCO Site Boundary	Included in Assessment	Reason for Exclusion
#DCO-5	TR030007	Immingham Eastern Ro-Ro Terminal	13.5 km east of the DCO Site Boundary.	No	Discounted due to lack inter-visibility with the representative viewpoints and distance from the Proposed Development.
#DCO-7	EN070006	Humber Low Carbon Pipelines	2.6 km west of the DCO Site Boundary.	No	Discounted due to lack inter-visibility with the representative viewpoints and distance from the Proposed Development.
#DCO-8	TR030008	Immingham Green Energy Terminal	2.2 km south east of the DCO Site Boundary.	No	Discounted due to lack inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NELC CULM-1	DM/0211/20/REM	Residential development for 118 dwellings	Approximately 1.3 km east of the DCO Site Boundary.	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NELC CULM-2	DM/1175/17/FUL	Residential development for 145 dwellings	Approximately 380 m east of the DCO Site Boundary.	Included in baseline as majority of development is now currently constructed	
#NELC CULM-3	DM/0696/19/FUL	Residential development of 225 dwellings	Approximately 4 km north-east of the DCO Site Boundary.	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.

ID	Application Reference	Development Name and Details	Approx. Distance from the DCO Site Boundary	Included in Assessment	Reason for Exclusion
#NELC CULM-5	DM/1240/21/FUL	Residential development of 227 dwellings	Approximately 3.21 km north of the DCO Site Boundary.	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NELC CULM-6	DM/0026/18/FUL	North Beck Energy Centre	Approximately 3km east of the DCO Site Boundary.	No	Discounted due to lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NELC CULM-7	DM/1145/19/FUL	NEL Energy Solar Park	Approximately 534m east of the DCO Site Boundary.	No	Discounted due to scale and lack of inter-visibility with the representative viewpoints.
#NELC CULM-8	DM/0105/18/FUL	Stallingborough Interchange	Approximately 1.9km east of the DCO Site Boundary	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NELC CULM-9	DM/0198/20/REM	Residential development of 250 dwellings	Approximately 2km east of the DCO Site Boundary	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NELC CULM-12	DM/0899/21/FUL	Grimsby Solar Farm – Aura Power	Approximately 190 m north east of Section 2 of the, north of Aylesby.	Yes	
#NELC CULM-20	DM/0728/18/OUT	Residential development of 525 dwellings	Approximately 450m east of the DCO Site Boundary.	No	Discounted due to scale and lack of inter-visibility with the representative viewpoints.

ID	Application Reference	Development Name and Details	Approx. Distance from the DCO Site Boundary	Included in Assessment	Reason for Exclusion
#NELC CULM-24	DM/0118/15/OUT	Residential development of 400 dwellings	Approximately 3km of the DCO Site Boundary	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NELC CULM-28	DM/0769/22/FUL	Construction of new foul sewer	Approximately 209m east of the DCO Site Boundary.	No	Discounted due to scale and lack of inter-visibility with the representative viewpoints.
#NELC CULM-31	DM/1133/17/OUT	Residential development for 152 dwellings	Approximately 580m east of the DCO Site Boundary (m)	No	Discounted due to scale and lack of inter-visibility with the representative viewpoints.
#NELC CULM-33	DM/1167/16/FUL / AP/001/19	Residential development of 194 dwellings	Approximately 1.3km east of the DCO Site Boundary.	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NELC CULM-38	DM/0118/23/FUL	Residential Development of 60 dwellings	Approximately 566m east of the DCO Site Boundary.	No	Discounted due to scale and lack of inter-visibility with the representative viewpoints.
#NELC CULM-39	DM/0261/23/OUT	Residential development of 42 dwellings	Approximately 1.4km east of the DCO Site Boundary.	No	Discounted due to scale and lack of inter-visibility with the representative viewpoints. Future receptors would be included within the assessment of impacts for residential receptors at Viewpoint 14.
#NLC CULM-2	PA/2022/1223	Land Adjacent to the Westgate Entrance, Port of Immingham - port related employment uses	Approximately 160 m north of the DCO Site Boundary.	Yes	

ID	Application Reference	Development Name and Details	Approx. Distance from the DCO Site Boundary	Included in Assessment	Reason for Exclusion
#NLC CULM-3	PA/2022/1548	VPI Immingham	Approximately 40 m north west of the DCO Site Boundary.	Yes	
#NLC CULM-4	PA/2022/628	Residential development of 32 and 85 dwellings	Approximately 1.9 km west of the DCO Site Boundary.	No	Discounted due to scale and lack of inter-visibility with the representative viewpoints.
#NLC CULM-5	PA/2022/443	Solar farm 70 hectares (ha) in size	Approximately 2.5 km north west of the DCO Site Boundary.	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NLC CULM-9	PA/SCO/2022/13	Gigastack, Hornsea	Intersects Section 1 of the DCO Site Boundary.	Yes	
#NLC CULM-12	PA/2023/422	Humber Zero	Intersects Section 1 of the DCO Site Boundary.	Yes	
#NLC CULM-13	PA/2023/421	VPI Immingham Carbon Capture Plant	Intersects Section 1 of the DCO Site Boundary.	Yes	
#NLC CULM-14	PA/SCO/2023/1	Immingham Onshore Wind	Approximately 245m east of the DCO Site Boundary.	Yes	

ID	Application Reference	Development Name and Details	Approx. Distance from the DCO Site Boundary	Included in Assessment	Reason for Exclusion
#NLC CULM-15	PA/SCO/2023/2	Immingham Onshore Wind	Approximately 85m east of the DCO Site Boundary.	Yes	
#NLC CULM-16	PA/2023/612	VPI Immingham	Approximately 248m north of the DCO Site Boundary.	Yes	
#NLC CULM-17	PA/2018/918	Gas-fired power station	Approximately 153m north of the DCO Site Boundary.	Yes	
#NLC CULM-18	PA/SCO/2022/12	Humber Hub Blue Project	Approximately 2.1km north of the DCO Site Boundary.	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
#NLC CULM-19	PA/2023/502	Able UK Limited – Site Enabling Works	Approximately 1km north east of the DCO Site Boundary.	Yes	
#NLC CULM-27	PA/2021/1525	Monopole Manufacturing Facility	Approximately 541m north of the DCO Site Boundary.	Yes	
#ELDC CULM-1	N/085/00883/15	Residential development of 300 dwellings	Approximately 3km north east of the DCO Site Boundary.	No	Discounted due to scale, lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.

Landscape and Visual Cumulative Effects

7.11.5 Landscape receptors that have been assessed as having negligible adverse effects from the Proposed Development alone have not been included in the assessment of cumulative effects, as it is considered unlikely that the addition of a negligible adverse effect to the cumulative effects of other developments within the ZoI would lead to a significant cumulative impact. Therefore, the operational and decommissioning stages have not been assessed for cumulative landscape and visual impacts.

7.11.6 The landscape receptors Lincolnshire Wolds AONB, LCA G1 Binbrook to Tetford Wolds Farmland and Wolds' Estates LCA have not been assessed as no scoped in cumulative developments are located within these areas.

7.11.7 Cumulative schemes have only been included in the cumulative landscape assessment where the Proposed Development and a cumulative scheme occupy the same landscape character area. Where they occupy different LCAs it is considered that the potential for significant cumulative landscape effects is unlikely. **Table 7-19** provides an assessment of cumulative effects on landscape character.

7.11.8 For the purposes of this assessment, the unlikely worst-case scenario of all the shortlisted developments being constructed and therefore present in the landscape simultaneously has been assumed and if construction were not to occur simultaneously then the reported cumulative effect would be reduced.

7.11.9 **Table 7-20** provides an assessment of cumulative effects on Viewpoint 2 resulting from the addition of the Proposed Development to the cumulative baseline scenario.

7.11.10 Viewpoints 3, 6, 7, 8, 11, 12, 13, 17, 18, 22 and 30 that have been assessed to experience effects of minor or above as a result of the Proposed Development in isolation have been scoped out of the cumulative assessment as none of the identified cumulative schemes will be visible within the view from these viewpoint locations.

Table 7-19: Assessment of Cumulative Landscape Effects

Landscape Receptor	Receptor Sensitivity	Developments included in assessment	Description of impact	Residual cumulative effect
Lincolnshire Coast and Marshes LCA	Medium	#NLC CULM-9 - Gigastack Project, Hornsea #NELC CULM-12 – Grimsby Solar Farm	Construction of the cumulative developments will appear in different parts of the LCA and will not be concentrated in one area. As a result of the short-term impact of the Gigastack project and the localised impacts of the Grimsby Solar Farm, it is considered that the cumulative impact would remain at low, the same for the Proposed Development assessed in isolation resulting in a minor adverse, not significant effect.	**Minor Adverse** (not significant)
LCA I1 Holton le Clay to Great Steeping Middle Marsh	Medium	#NLC CULM-9 - Gigastack Project, Hornsea	The construction of the Gigastack cumulative development will appear in relatively close proximity to the Proposed Development, although as a result of the nature and short-term impact of both developments, it is considered that the cumulative impact would remain at low, the same for the Proposed Development assessed in isolation.	**Minor Adverse** (not significant)
LCA I1 Tetney Lock to Skegness Coastal Outmarsh	Medium	#NLC CULM-9 - Gigastack Project, Hornsea	Construction of the Gigastack cumulative development will appear in separate part of the LCA and not concentrated in one section. As such it is considered that the cumulative impact would remain at low, the same for the Proposed Development assessed in isolation.	**Minor Adverse**

Table 7-20: Visual cumulative effects assessment

Viewpoint	Receptor Sensitivity	Developments included in assessment	Description of impact	Residual cumulative effect
Viewpoint 2	Medium	#NLC CULM-2 - Land Adjacent to the Westgate Entrance #NLC CULM-3 - VPI Immingham #NLC CULM-9 – Gigastack, Hornsea #NLC CULM-12 - Humber Zero #NLC CULM-13 - VPI Immingham Carbon Capture Plant #NLC CULM-14/ #NLC CULM-15 - Immingham Onshore Wind #NLC CULM-16 - VPI Immingham #NLC CULM-17 - Gas-fired power station #NLC CULM-19 - Able UK Limited – Site Enabling Works #NLC CULM-27 - Monopole Manufacturing Facility	The construction activity associated with the identified cumulative developments, (with the exception of the Gigastack development), will be visible, spread across the horizon to the east, viewed in front of the Proposed Development. The construction of the Gigastack development will be clearly visible in the foreground to the left of the view, partially screening construction operations associated with the Proposed Development. The presence of the other characteristic, cumulative developments, will intensify the built structures visible from this location. The addition of the construction operations associated with the Proposed Development will result in a cumulative impact, slightly higher than that assessed for the Proposed Development in isolation as a result of the addition of the cumulative developments. The impact will be short term and reversible, resulting in a minor adverse (not significant) effect.	**Minor adverse**

7.12 Summary

7.12.1 The landscape effects have been assessed at a national, regional and local level and range from minor adverse to negligible adverse and are anticipated to result in no significant effects during construction, operation and decommissioning phases of the Proposed Development. Effects on the Lincolnshire Wolds AONB and The AGLV are assessed to result in minor adverse effects during construction reducing to negligible adverse during operation.

7.12.2 The visual effects were assessed at 30 viewpoints and represent the likely views experienced by a range of visual receptors, including residential, recreational and road users.

7.12.3 During construction of the Proposed Development there would be changes to views through the addition of detracting visual features associated with the construction process. This would result in short-term significant adverse effects at four representative viewpoints. Short term significant visual effects for the construction phase would be limited to highly sensitive viewpoints located in close proximity to the pipeline route.

7.12.4 During the operational phase, the visual influence of the Proposed Development would be limited as a result of the scale of the overall field boundaries that would reduce the perception of hedgerow loss along sections of the pipeline route. Impacts for the majority of viewpoints impacts would reduce to negligible adverse or neutral at operation year 1 reducing further to neutral at operation year 15. One viewpoint will experience minor adverse impacts at operation Year 1 reducing to negligible adverse at Year 15.

7.13 References

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