

Viking CCS pipeline

Statutory consultation brochure



We have changed our name.

The V Net Zero pipeline is now
called the Viking CCS pipeline

Enabled by





Contents

4	Get involved	
5	About this brochure	
5	Harbour Energy – who we are	
6	The Viking CCS project	
7	What the project would deliver	
	Opportunities for the Humber	
	Tackling climate change	
	Safeguarding industry	
	Boosting biodiversity	
8	The story so far	
9	This consultation	
10	Why we are seeking your views	
11	Overall route map	
12	Section 1: Rosper Road to A180	
14	Section 2: A180 to A46	
16	Section 3: A46 to Pear Tree Lane	
20	Section 4: Pear Tree Lane to Manby Middlegate	
24	Section 5: Manby Middlegate to Theddlethorpe	
26	How we will construct the pipeline	
	Open cut trenching	
	Trenchless techniques	
	Temporary construction compounds	
	Construction access routes	
	Temporary access tracks	
	Construction of above ground facilities	
30	Above ground infrastructure	
	Immingham facilities	
	Pipeline	
	Block valve stations	
	Theddlethorpe facilities	
	Offshore operation	
34	Environment	
	What is a Preliminary Environmental Information Report?	
	Summary of preliminary assessment of environmental effects	
40	How to get involved	
	Consultation documents	
	Online virtual consultation room and events	
	In-person consultation events	
	Document inspection venues	
43	Your feedback	
	Consultation feedback – your data, your rights	
44	Next steps	
45	The Development Consent Order (DCO) process	
46	Notes	

Get involved

There are lots of ways you can take part.



Visit our virtual consultation room:
consultation.vikingccs.co.uk



Visit our in-person and online events,
where you can chat to the project team



Read copies of our consultation materials,
which are available at document
inspection venues, at in-person events,
and on our website – or you can ask us to
send them by post



Email us at:
vikingccspipeline@aecom.com



Write to us at:
Freepost VIKING CCS PIPELINE
(no stamp needed)



**Have a question, but don't want to
submit a response to the consultation?**

Phone: **07917 986 094** or
email us at: vikingccspipeline@aecom.com

To find out more, please see the
'How to get involved' section of this
brochure



The V Net Zero pipeline has changed its name to the Viking CCS pipeline, to better reflect the strength of our project's carbon capture and storage capabilities. The aims of the project and our approach to developing it have not changed. All of the feedback we've received so far remains valid and has helped us refine our proposals.

About this brochure

Thank you for taking part in our statutory public consultation on the proposed Viking CCS pipeline. This is a new 55km carbon dioxide (CO₂) pipeline between Immingham and Theddlethorpe, which we refer to in this brochure as 'the project'.

This consultation is an important step in delivering the project, which will put the Humber and Lincolnshire region at the forefront of carbon capture and storage (CCS). This technology is recognised as one of the key ways the UK can achieve its target of net zero emissions by 2050.

In this brochure, we describe the proposals for the project, including the preferred route for the pipeline, the key benefits and likely effects. We also explain where you can find more details and submit your comments.

We'd like to hear what you think, so please tell us about any ideas, local knowledge or concerns you may have. We will consider all your feedback as we develop our proposals and the pipeline design.

This statutory consultation is taking place between Tuesday 22 November 2022 and Tuesday 24 January 2023. Please respond by 23:59 on Tuesday 24 January 2023. Your feedback will help us ensure the project considers local people and businesses, the environment, and the wider Lincolnshire and Humber region.

Please see the 'This consultation' section of this brochure, where we outline the purpose of the consultation. Also look at the 'How to get involved' and 'Your feedback' sections, which explain how to take part.

Harbour Energy – who we are

Harbour Energy is the largest London listed independent oil and gas company. We have a leading position in the UK, as well as interests in Indonesia, Vietnam, Mexico and Norway.

Our priority is to run safe and reliable operations, while protecting our people, assets and the environment. Across our operations, we are committed to achieving net zero greenhouse gas emissions by 2035.

We have a long history of operating in the Humber and Lincolnshire region, providing safe and environmentally sound operations. In particular, we have more than 40 years of operational experience relating to the Viking field area in the North Sea. We also operated the Theddlethorpe Gas Terminal site over the same time period.

We are working with industry and government to develop a CO₂ capture, transport and storage network in the UK, as the developer of the Viking CCS project.

The Viking CCS project

The Viking CCS pipeline is a 55km pipeline that will transport captured carbon dioxide (CO₂) from Immingham to the former Theddlethorpe Gas Terminal (TGT). It is an essential part of the Viking CCS project, which will put the Humber and Lincolnshire region at the forefront of carbon capture and storage technology in the UK.

Meeting the UK's target of achieving net zero emissions by 2050 will mean reducing emissions of CO₂ from existing industries within the Humber and Lincolnshire region. This transition to a low-carbon economy must be done in a way that retains and promotes jobs and prosperity.

Carbon capture, transport and storage offers a way to maintain these vital energy intensive industries for decades. The technology allows us to keep jobs in the Humber and Lincolnshire region, and provides the infrastructure needed to promote the development of new industries and investment.

What is carbon capture and storage?

Carbon capture and storage (CCS) is the capture of CO₂ emissions from industrial sources before the CO₂ can enter the atmosphere, followed by transportation of the CO₂ to deep underground sites where it is stored. In the UK, all prospective CO₂ storage sites are located offshore, with a large storage potential under the North Sea.

As countries around the world work to cut their CO₂ emissions, the capture and storage of CO₂ is set to play a crucial role. By capturing, transporting and injecting CO₂ into depleted gas reservoirs, we can help the transition to cleaner sources of energy while decarbonising existing industry and infrastructure. The UK government has set out plans, as part of the Sixth Carbon Budget, to capture and store between 20 and 30 million tonnes of CO₂ a year by 2030.

How will the Viking CCS pipeline help with CO₂ capture?

The Viking CCS project will take CO₂ that has been captured from industries in the Immingham area, and transfer it to deep offshore storage sites. The CO₂ will travel from Immingham through a new onshore pipeline to the former TGT at Theddlethorpe.

At TGT, the CO₂ will transfer into our existing offshore pipeline to be transported 140km off the coast of Lincolnshire. Finally, the CO₂ will be injected into depleted gas reservoirs 9,000 feet below the seabed.

This process will be one of several important ways for the UK to reach its target of achieving net zero emissions by 2050.



Opportunities for the Humber

The project will protect existing high quality jobs and skills training, while attracting new industries and promoting low-carbon, technology-led investment in the region for the long term.



Safeguarding industry

This investment will remove CO₂ emissions from existing industry in the Humber region, safeguarding existing jobs and enabling a longer term sustainable energy transition.



Boosting biodiversity

We're aiming to achieve a 10 per cent net increase in local biodiversity as part of the project.



Tackling climate change

By 2030, the Viking CCS project and our partners plan to capture, transport and store 10 million tonnes of CO₂ a year. This would be equivalent to removing almost 20 per cent of the emissions from the UK's cars each year.

The story so far

2021

2021

The project launched and we began to develop options for the route corridor.

2022

April – June 2022

We held our first non-statutory consultation on the proposed route corridor. The 'corridor' was the widest possible area within which we could lay the pipeline.

September – October 2022

Following feedback from our first consultation, and extra work by our project team to find the optimum route corridor, we made some changes to the corridor. We then held a second non-statutory consultation to seek views on the updated route corridor.

2022/23

November 2022 – January 2023

This statutory consultation seeks your views on the preferred route for the pipeline, as well as the potential environmental effects and details about construction and operations.

This consultation

The purpose of this statutory consultation is to understand your views on our proposals for the project, including the preferred route for the pipeline.

It is called 'statutory' because there are certain requirements we must meet under the Planning Act 2008, as part of the planning process.

The project is a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008. This means we will make an application to the Secretary of State for Business, Energy and Industrial Strategy for a Development Consent Order (DCO), which would grant permission to build and operate the pipeline. For more information on the next steps in the DCO process, please see the 'Next steps' section of this brochure (page 44).

The project is also an Environmental Impact Assessment (EIA) development, requiring us to submit an Environmental Statement with the DCO application. The EIA is currently underway and, as part of this consultation, we have prepared a *Preliminary Environmental Information Report (PEIR)* to describe the environmental setting of the project and our preliminary assessment of the potential environmental effects of the project. We have also presented this information in a much shorter *PEIR Non-Technical Summary (NTS)*, which uses non-technical language to describe these potential environmental effects. See 'How to get involved' for details of where you can view the PEIR and PEIR NTS.

This consultation is an important opportunity for you to give us your comments on the project before we submit our DCO application, which we expect to do in 2023.

Your feedback to this consultation is important and will continue to help shape the design of the project.

Why we are seeking your views

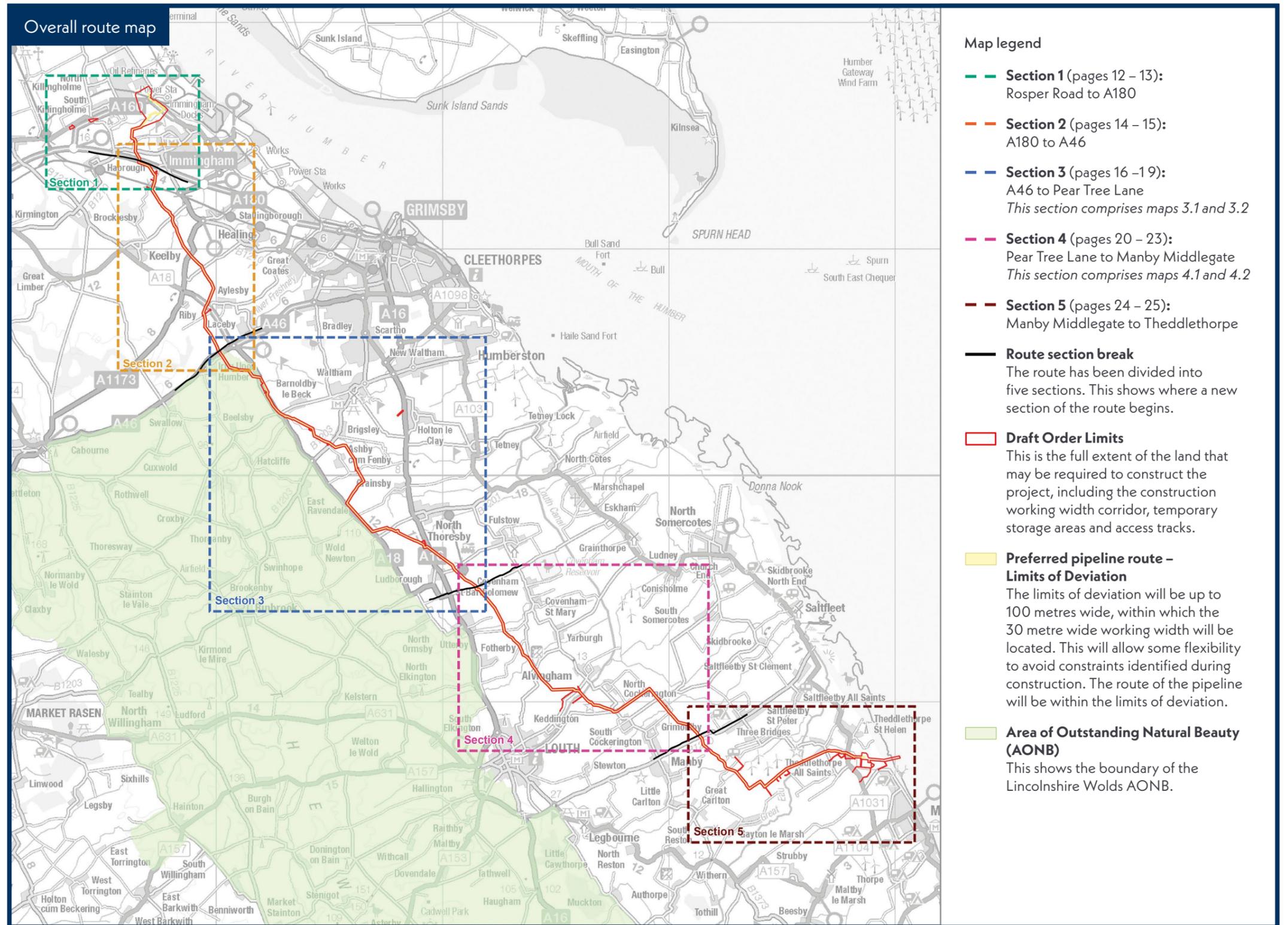
Since holding two non-statutory public consultations on the pipeline corridor, we have considered feedback and completed more technical work to refine the preferred route of the pipeline.

We now want to know what you think.

We've divided the route into five sections to help explain our proposals, enabling you to navigate the project easily and provide feedback on our design.

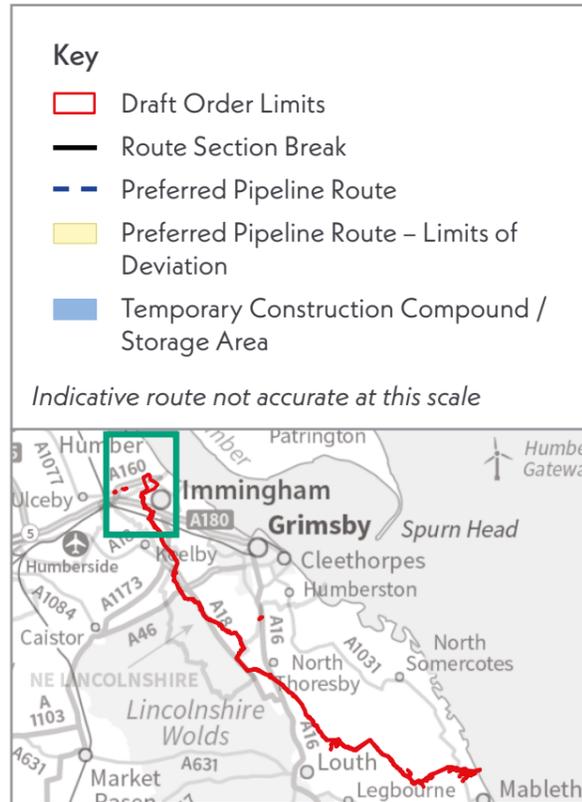
As shown on the overview map, each section of the route is a different colour and includes key project features, such as the preferred pipeline route and temporary construction compounds or storage areas. Details of these features are outlined in the legend on the right.

If you would like to view the maps in closer detail, please visit the **interactive mapping tool** in our virtual consultation room at: consultation.vikingccs.co.uk

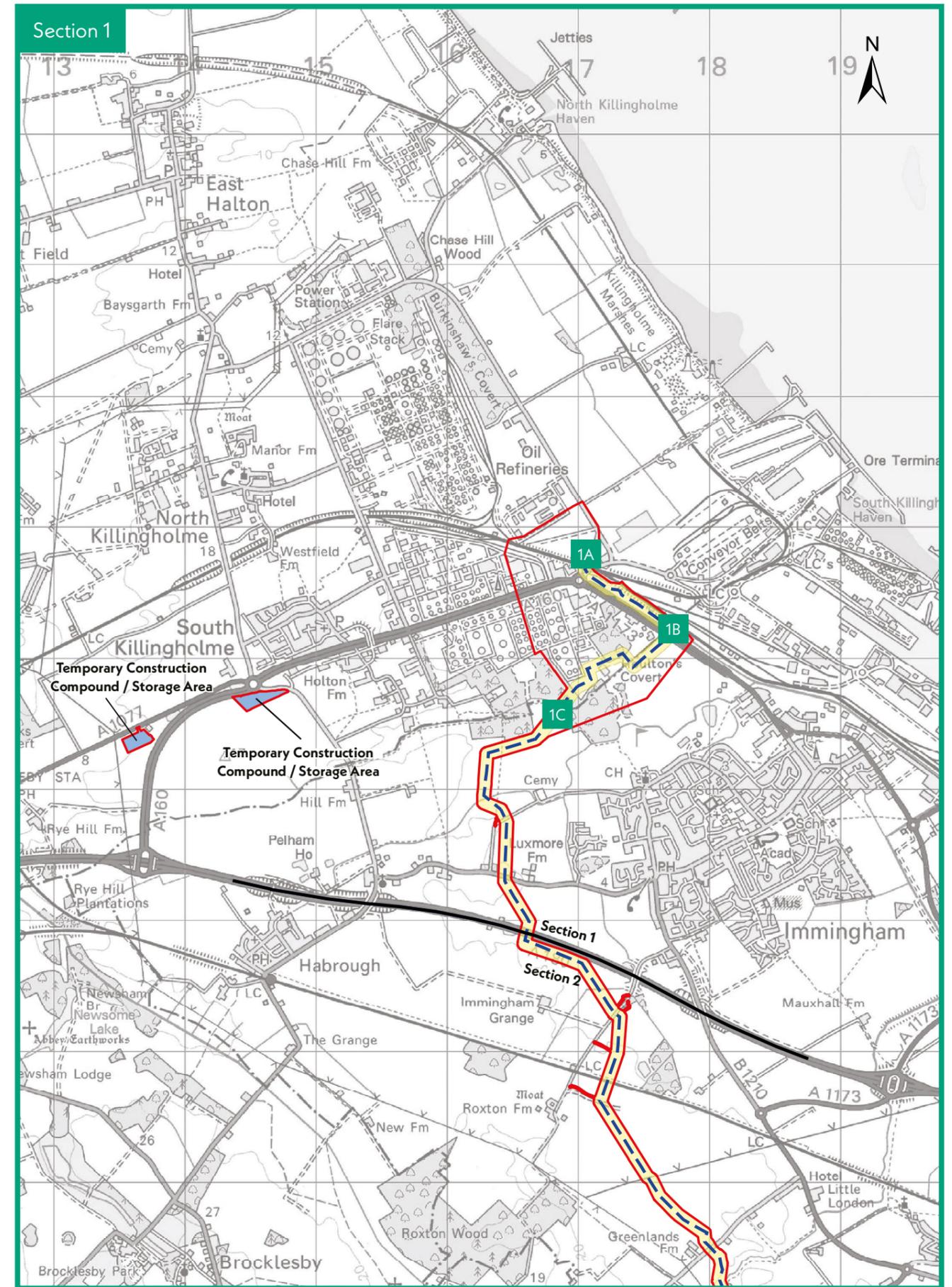


Section 1: Rosper Road to A180

- 1A** The proposed route begins on a parcel of land west of Rosper Road, Immingham. It leaves the site under two sections of Humber Road off Manby Roundabout and crosses the Port of Immingham railway line. The route then runs parallel to Manby Road (A1173), before crossing the road and turning to the south-west.
- 1B** The route crosses through Homestead Park and Houlton's Covert, before passing through an area of woodland.
- 1C** Leaving the wooded area, the route turns south-west, then south, to cross Mill Lane and Habrough Road (B1210). It continues south through an arable field to meet the A180, to the east of the Jet petrol station.

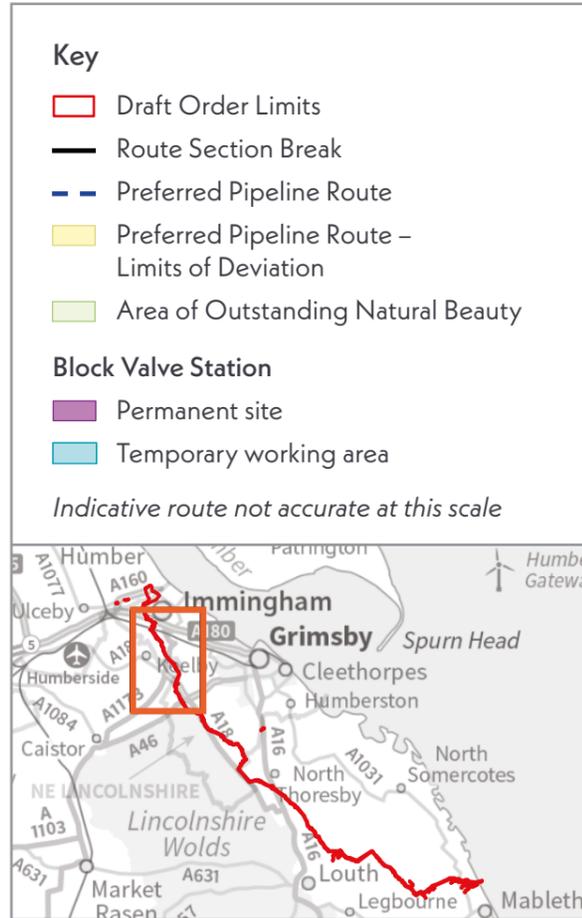


i Temporary construction compounds will be required for material and equipment storage and staff facilities during construction. In section 1, there are two options being considered for locating a temporary construction compound. Both options are located south of Ulceby Road (A1077).

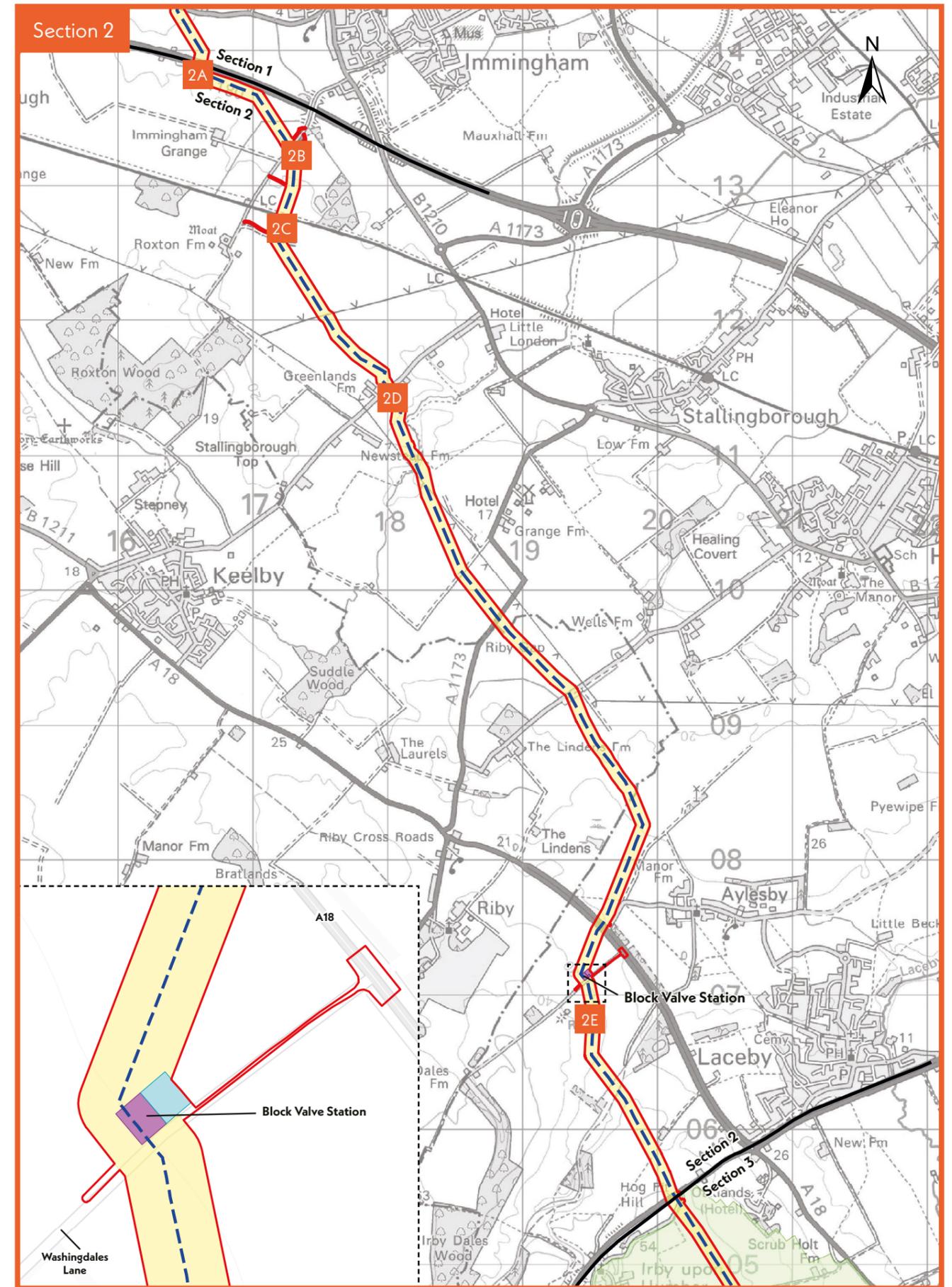


Section 2: A180 to A46

- 2A** The route crosses the A180 east of the Jet petrol station, then passes through arable fields alongside the A180. It then turns to the south-east and crosses Roxton Road.
- 2B** The route travels south, to cross Network Rail's line between Cleethorpes and Habrough, 200 metres east of the Roxton Road level crossing.
- 2C** The route continues south-east through arable fields, and crosses Keelby Road to the north of North Beck Drain. Continuing to the south-east over arable land, the pipeline crosses a spur of North Beck. It then passes beneath a Northern Powergrid overhead line and crosses North Beck once again.
- 2D** The route then travels south-east towards Riby Gap, crossing Riby Road and Wells Road, before turning south to the west of Aylesby. Here it crosses Barton Street, then an access road. There will be a block valve station immediately to the north of the access road.
- 2E** The route begins to rise up towards the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB), to 50 metres above sea level. It reaches the A46 at Hog Pit Hill.



i For details of what a block valve station is, and what it would look like, please see the 'Above ground infrastructure' section of this brochure.

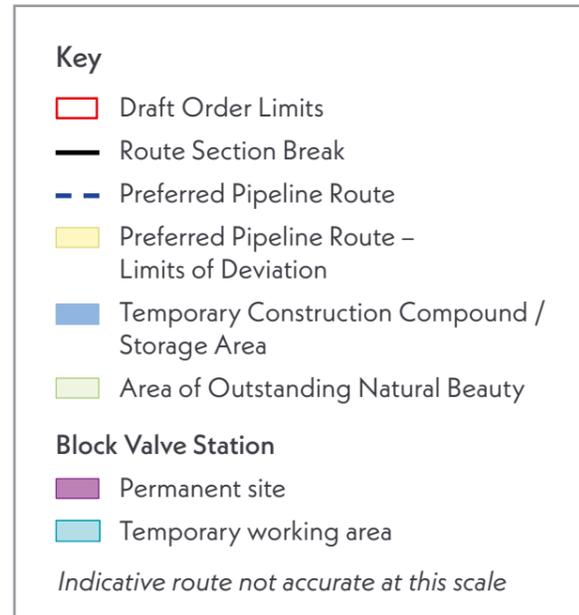


Section 3.1: A46 to Pear Tree Lane

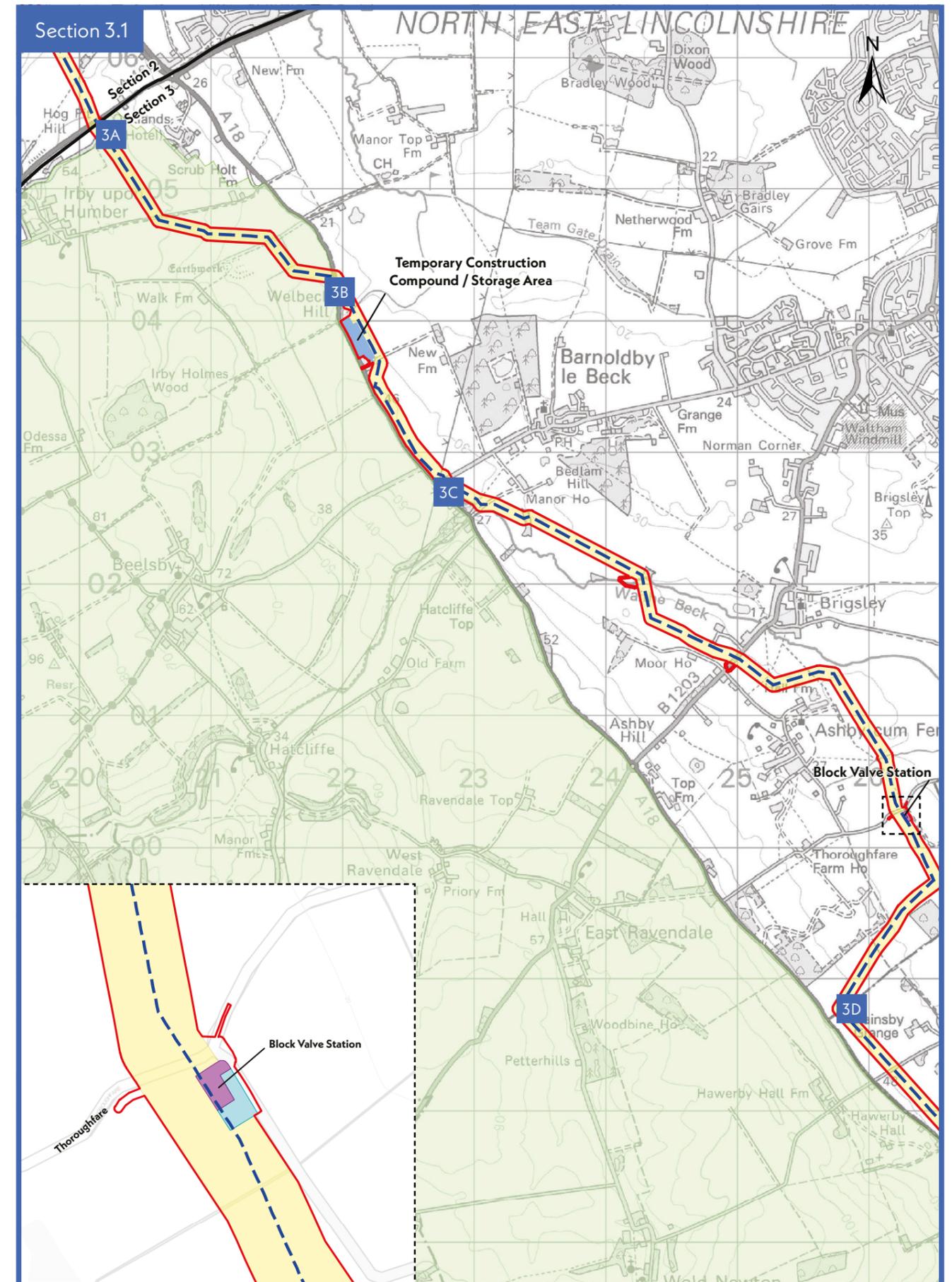
3A The route crosses the A46 and enters the Lincolnshire Wolds AONB for a short distance, starting at a point east of the Irby Upon Humber Conservation Area. After crossing Old Main Road, it runs south-east for a short distance, passing north of the Civil War fort scheduled monument. It leaves the AONB at Welbeck Hill.

3B Here the route crosses Barton Street (A18) and runs parallel to it before crossing Main Road west of Barnoldby le Beck. It crosses Waltham Road and a National Cycle Network route, and then crosses into arable land and travels south-east to the south of Barnoldby le Beck, before crossing Waithe Beck. The route continues south-east to cross Waltham Road (B1203) between the villages of Brigsley and Ashby cum Fenby.

3C Passing east of Ashby cum Fenby, the route crosses Thoroughfare. There will be a second block valve station south of here.



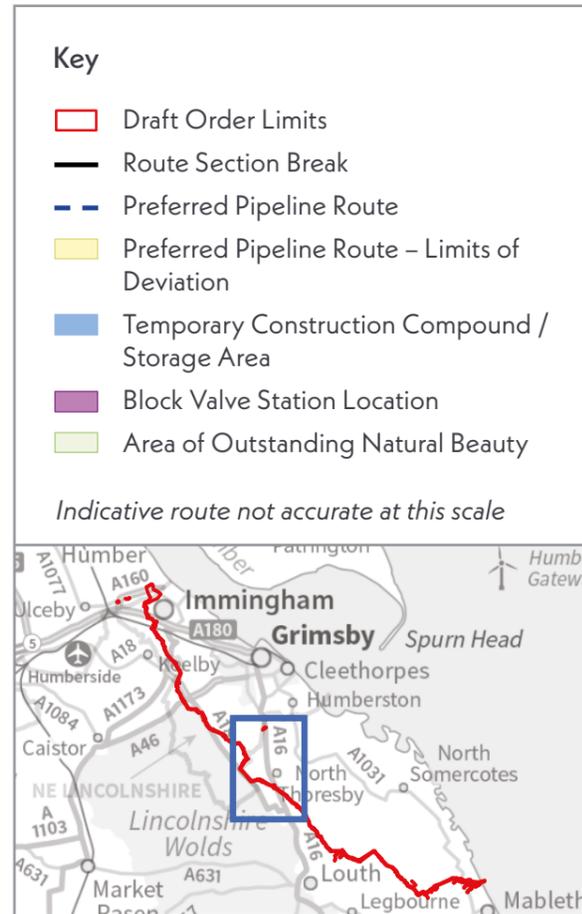
i For details of what a block valve station is, and what it would look like, please see the 'Above ground infrastructure' section of this brochure. Temporary construction compounds will be required for material and equipment storage and staff facilities during construction. In section 3, there are two options being considered for locating a temporary construction compound. One option (shown on this page) is situated west of Barnoldby le Beck adjacent to the A18. The other option (shown on the following page) is situated west of Holton le Clay, at the site of the former Grimsby Airfield.



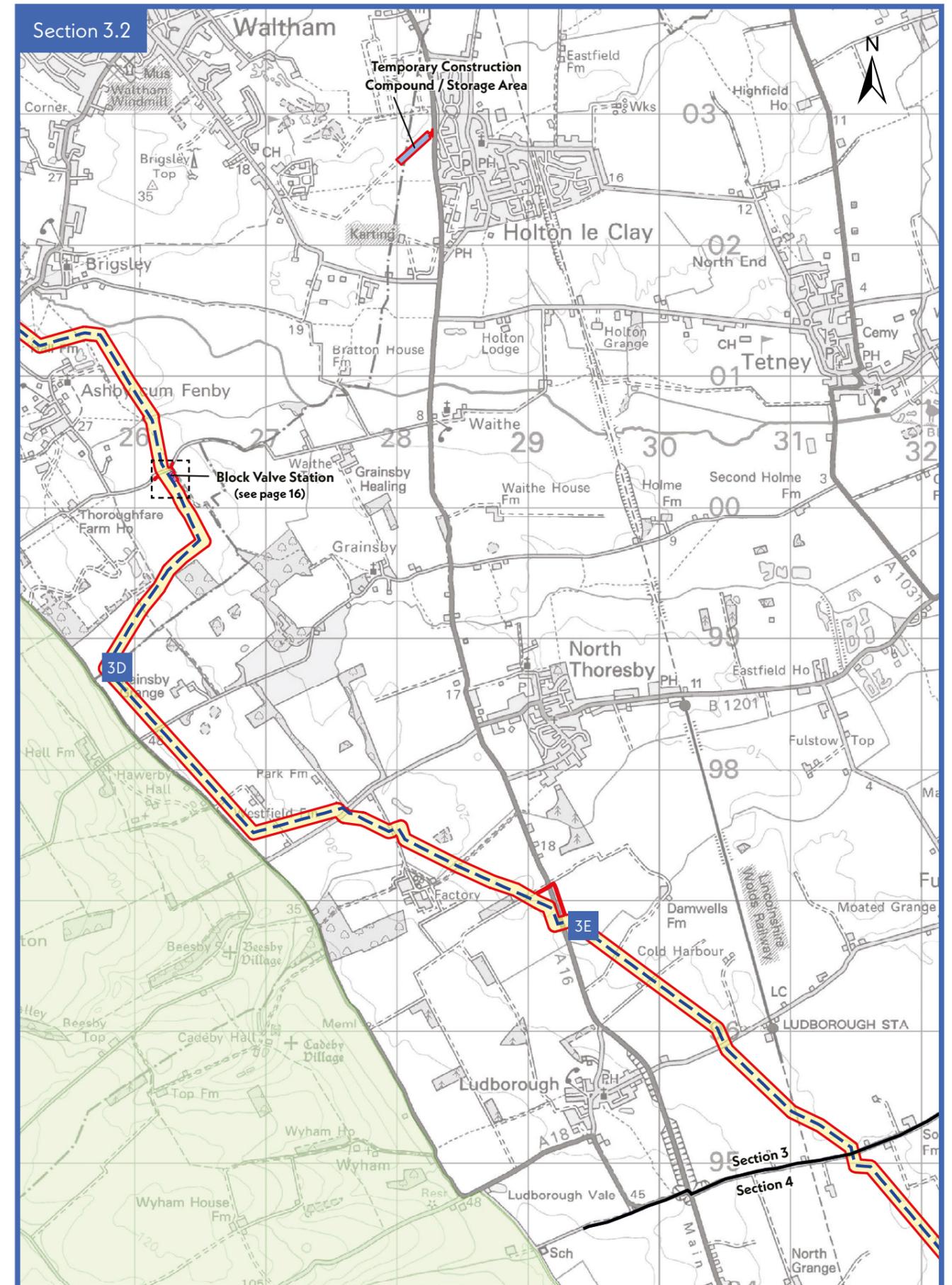
Section 3.2: A46 to Pear Tree Lane

3D The proposed route then runs parallel to Barton Street (A18), crossing Grainsby Lane and turning to the east to cross an unnamed lane. Turning south-east, it passes to the north-east of the household waste recycling centre and crosses Black Leg Drain. The route then crosses over the A16.

3E It continues over arable land to cross Station Road, passing south of Ludborough Station on the Lincolnshire Wolds Railway line to meet Pear Tree Lane.



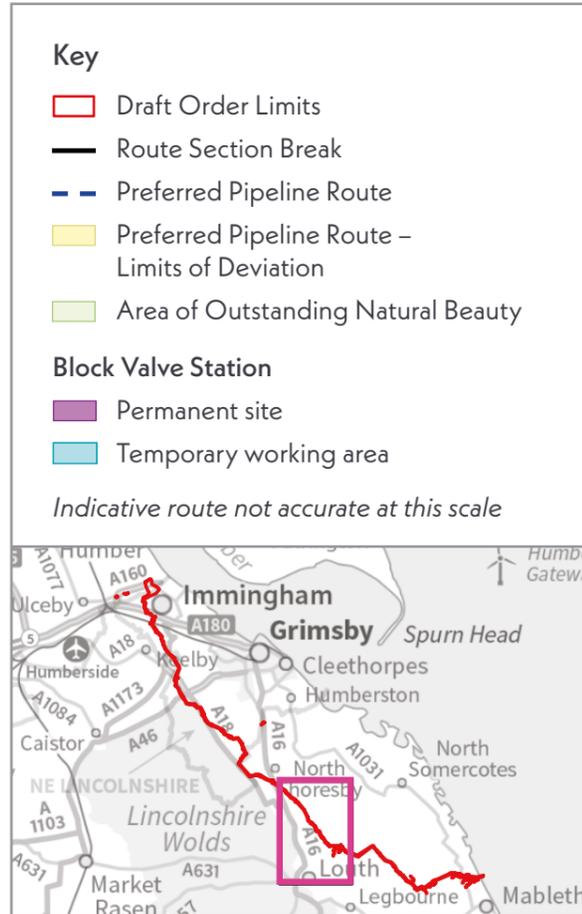
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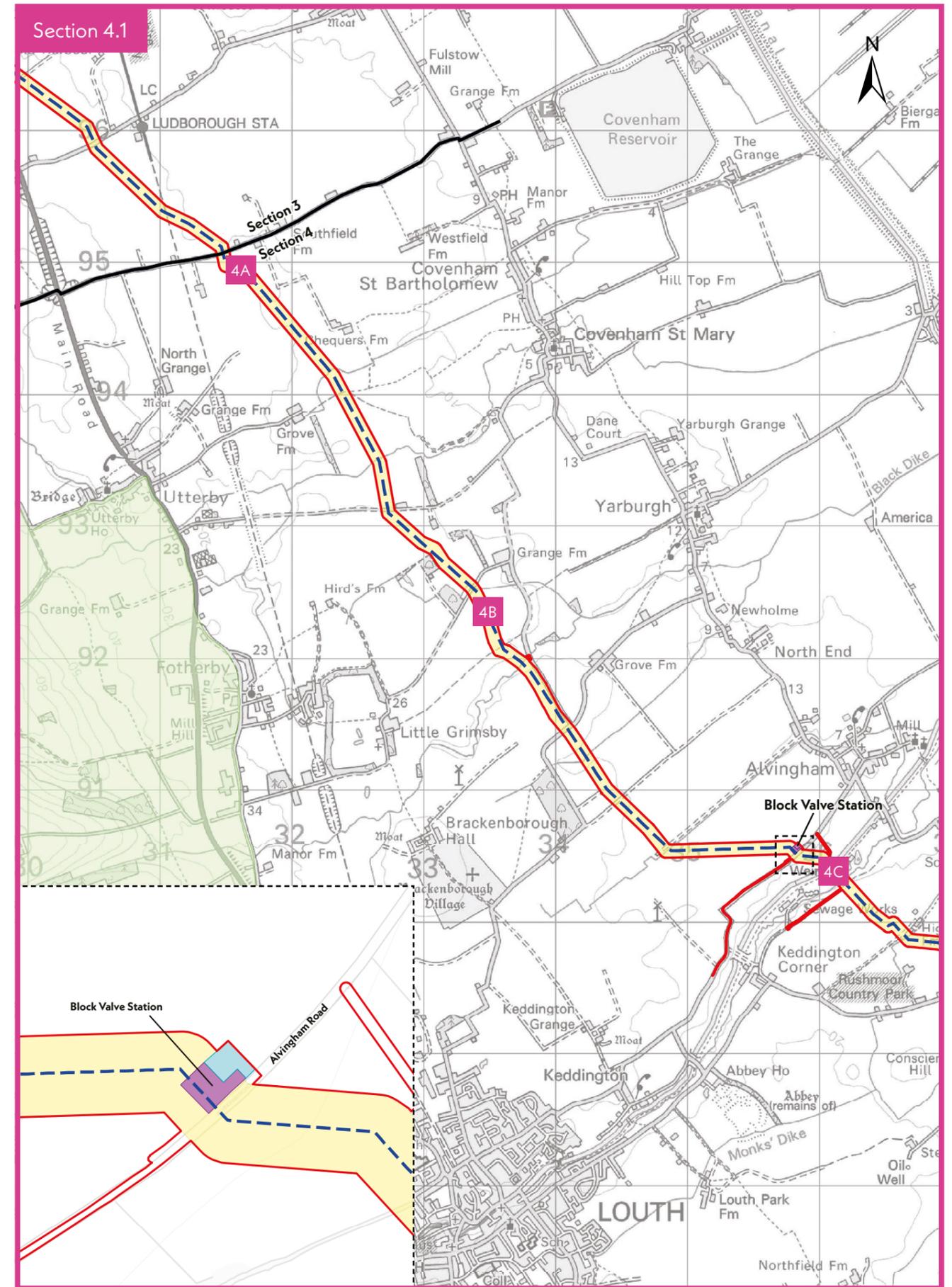
Section 4.1: Pear Tree Lane to Manby Middlegate

4A After crossing Pear Tree Lane, the route goes through arable land between Covenham St Bartholomew and Utterby, passing east of Holly Well Lane. Here it crosses two water courses before continuing south-east over arable land between Yarburgh and Little Grimsby, crossing Ings Lane and Little Grimsby Lane.

4B The route crosses Black Dyke and runs parallel to Brackenborough Road, to the west of the solar farm on Westfield Road. It then crosses Brackenborough Road, continues, and then heads east towards Alvingham Road. North of Alvingham Road, there will be a block valve station.



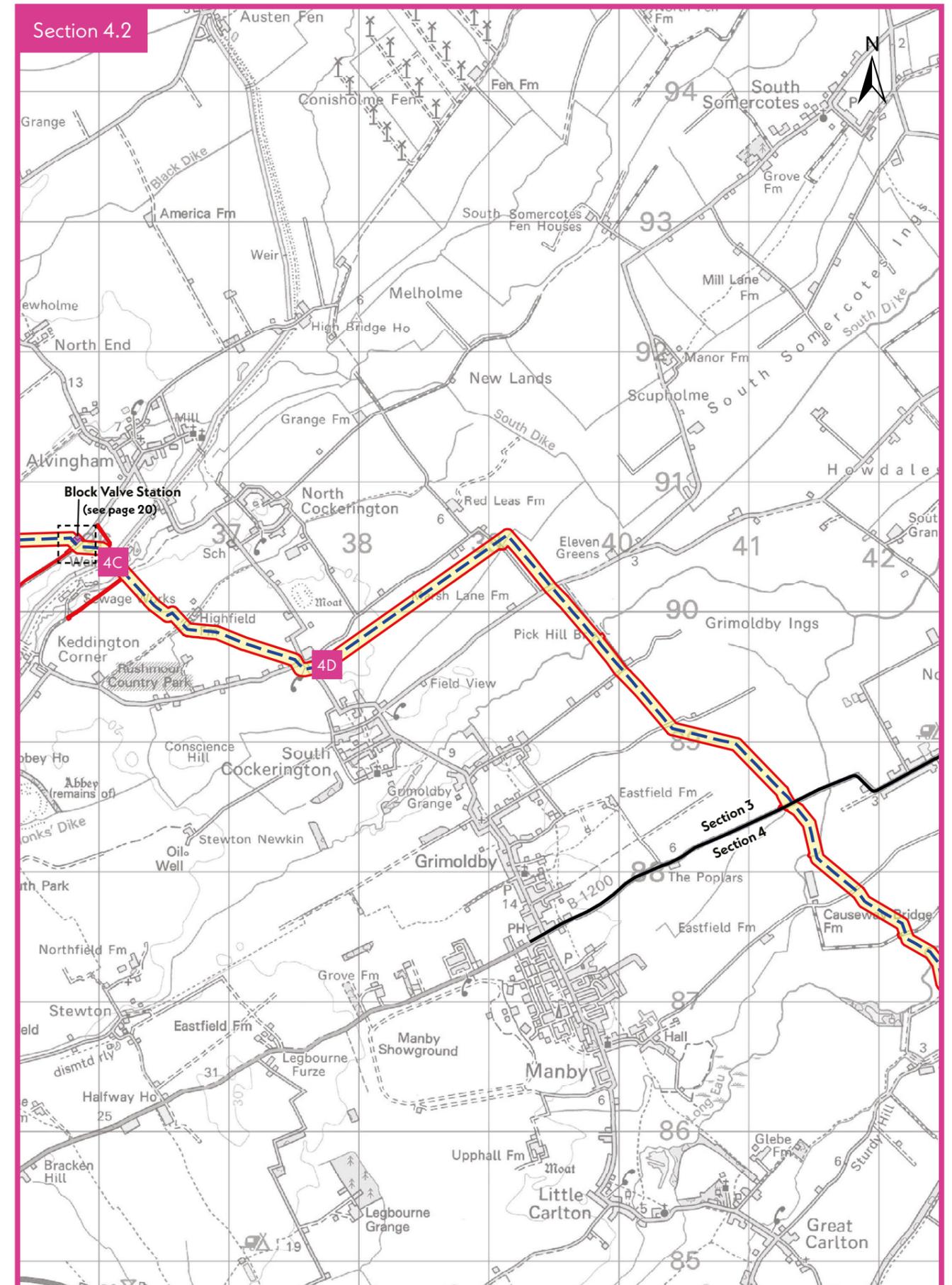
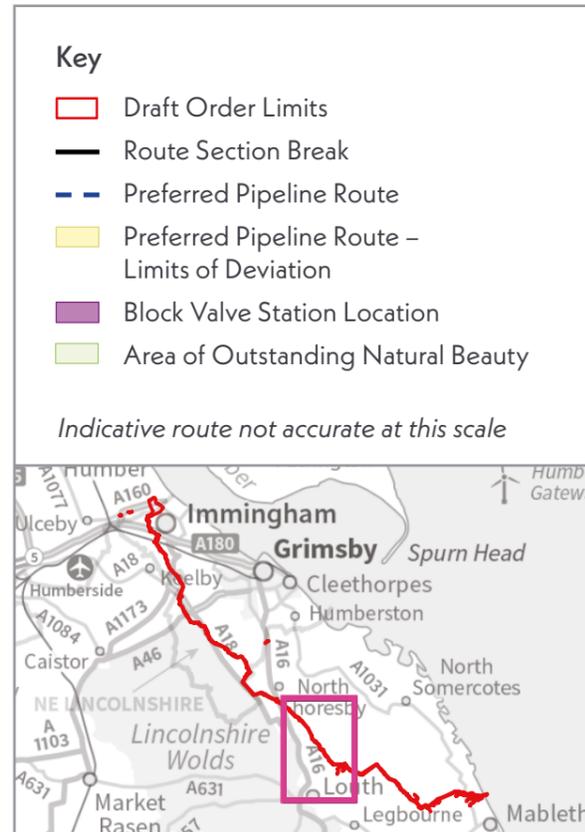
i For details of what a block valve station is, and what it would look like, please see the 'Above ground infrastructure' section of this brochure.



Section 4.2: Pear Tree Lane to Manby Middlegate

4C The proposed route then crosses Alvingham Road to the south of Alvingham, before crossing the Louth Canal and the River Lud to the north-east of Anglian Water's water treatment works. Continuing south-east, it passes north of Rushmoor Farm Park and crosses Louth Road, before immediately crossing Mill Hill Way.

4D The route then travels north-east, parallel to Red Leas Lane, before turning back towards the south-east, crossing Harrowsea Drain. It crosses Marsh Lane, then runs parallel to Pick Hill Lane. It then passes across Grayfleet water course and then Pick Hill Lane, travelling south-east to meet Manby Middlegate.



Section 5: Manby Middlegate to Theddlethorpe

5A The route crosses Manby Middlegate, crossing arable land between Saltfleetby St Peter and Manby. It crosses the Long Eau, shortly followed by Thacker Bank, before passing west of Gayton le Marsh wind farm and crossing Two Mile Bank Drain.

5B The route then travels north-east, crossing Great Eau, then to the south of Theddlethorpe All Saints, before crossing Mill Lane. Continuing east, it crosses Mablethorpe Road (A1031).

5C The route continues to the east and enters the site of the former Theddlethorpe Gas Terminal, where it will connect to the existing offshore pipeline.

5D Before the existing pipeline crosses beneath the dunes and beach, and before heading out to sea, there is a valve (the 'dune valve'), which we will need to replace.

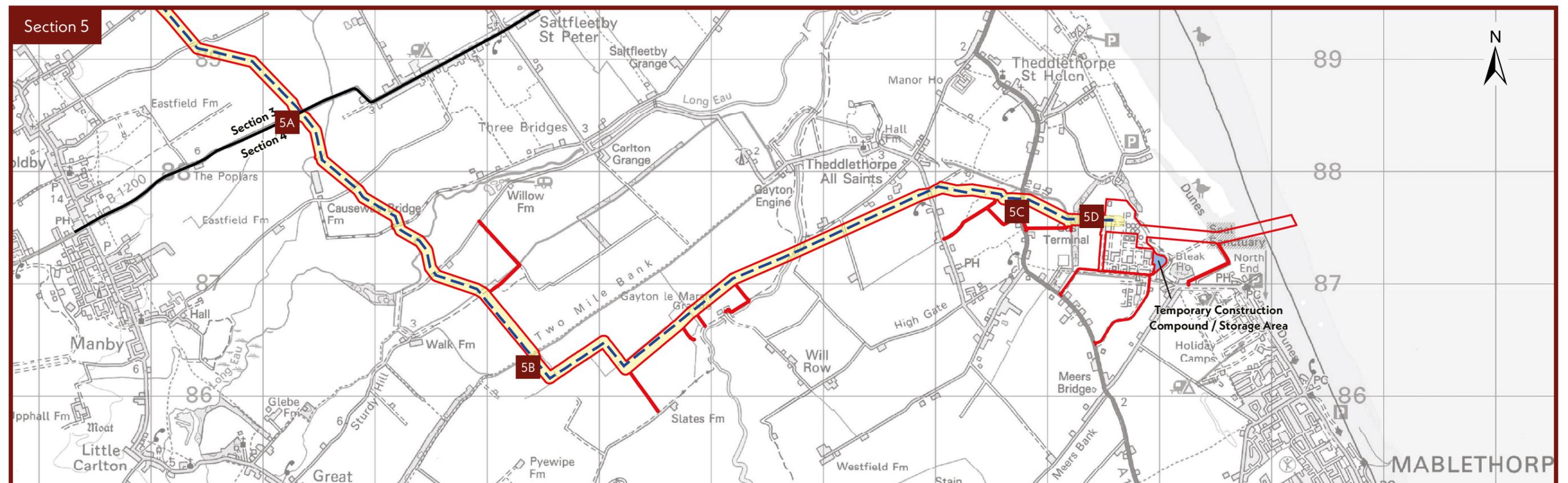


A temporary construction compound, which will be required for material and equipment storage and staff facilities during construction, will be situated within the site of the former Theddlethorpe Gas Terminal.

Key

- Draft Order Limits
- Route Section Break
- Preferred Pipeline Route
- Preferred Pipeline Route – Limits of Deviation
- Temporary Construction Compound / Storage Area

Indicative route not accurate at this scale



How we will construct the pipeline

We currently expect the construction phase to last for approximately one year. We will develop a detailed programme that will aim to limit the amount of time each specific location is affected by construction.

The main activities will include earthworks and moving materials by lorry, cutting the trench, laying and covering the pipeline, covering the trench, and landscaping.

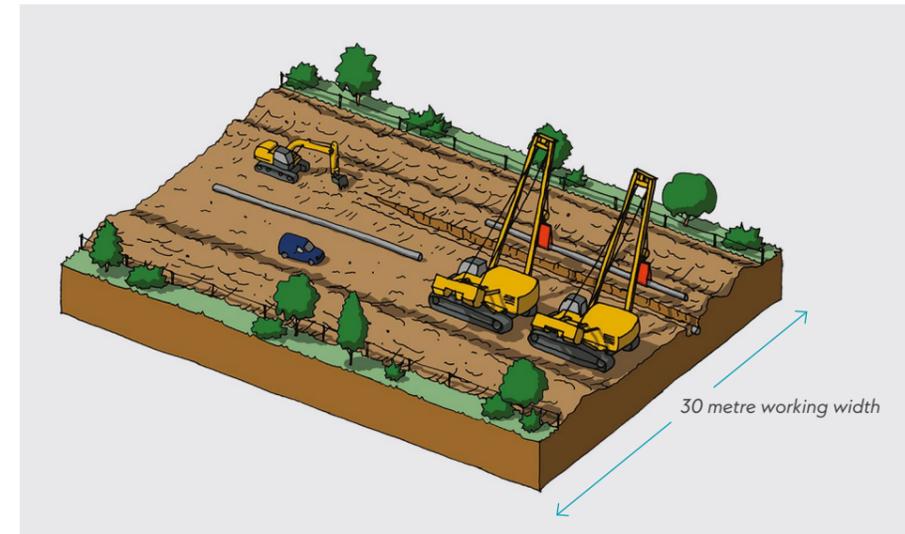
We will develop a Construction Environmental Management Plan (CEMP) to ensure that, throughout the construction period, we carefully control activities that may cause dust, noise and vibration, and manage any potential impacts. The CEMP will include a traffic management plan to help limit disruption to local roads during construction. A draft CEMP is available to read as part of this consultation.

We will let residents know well in advance any details of the construction works planned, to help manage disruption and to allow communities to plan for any disruption we cannot avoid.

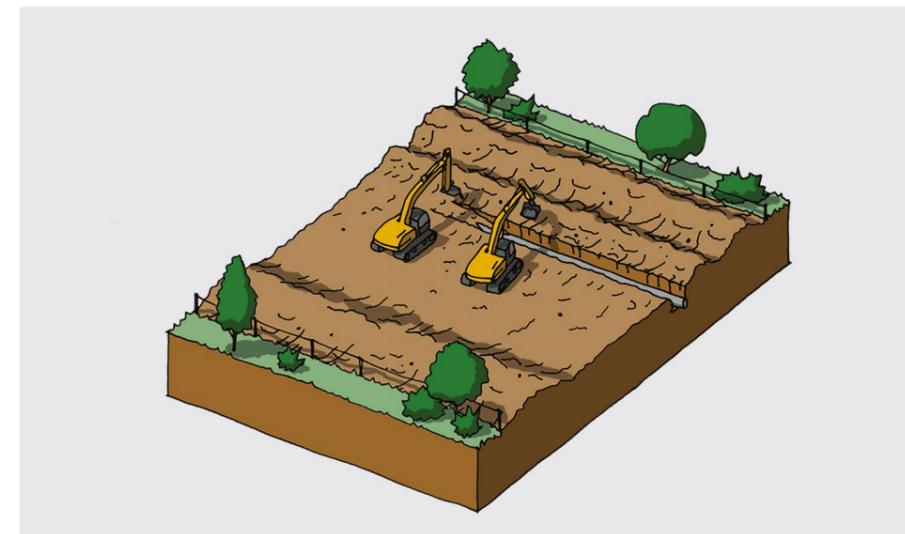
Open cut trenching

The most common method of constructing the pipeline will be open cut trenching.

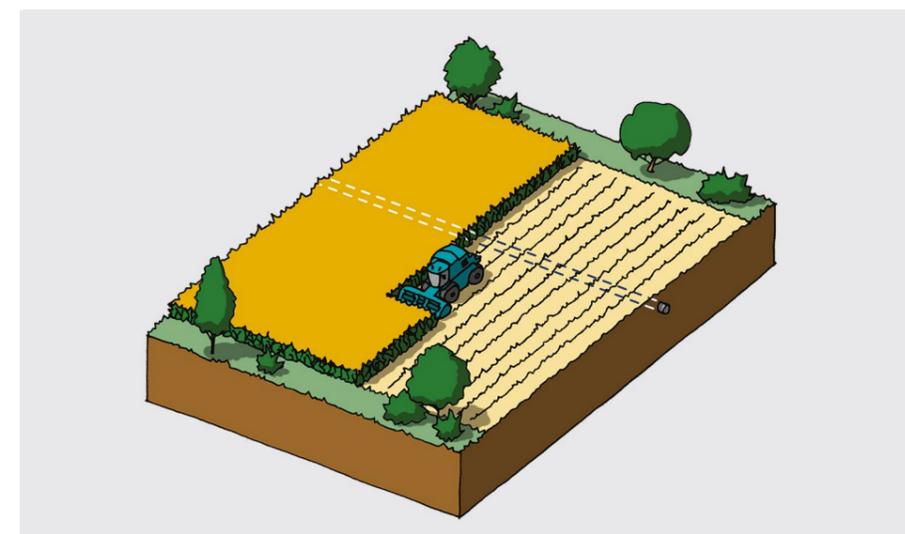
- First, we mark out and fence off the 30 metre working width – the total area within which construction work will take place
- We create access routes to the working area from the road network
- Next, we carefully strip back the topsoil and store it next to where we removed it, on the edge of the working width
- The pipeline sections are delivered to the site from pipe storage areas at temporary construction compounds. We place them on supports, and then weld them together into longer sections called 'strings'
- Next, we dig the pipeline trench, storing excavated material separately from the topsoil, on the opposite side of the trench
- We then lower the pipeline 'strings' into the trench using special vehicles called 'side booms'
- We weld the pipeline strings together in the trench
- We then fill the trench with the excavated material and carefully replace the topsoil
- We reinstate the drainage and return the land to its previous use



Cross section diagram of the laying of the pipeline



Cross section diagram of the 'backfill' of the pipeline

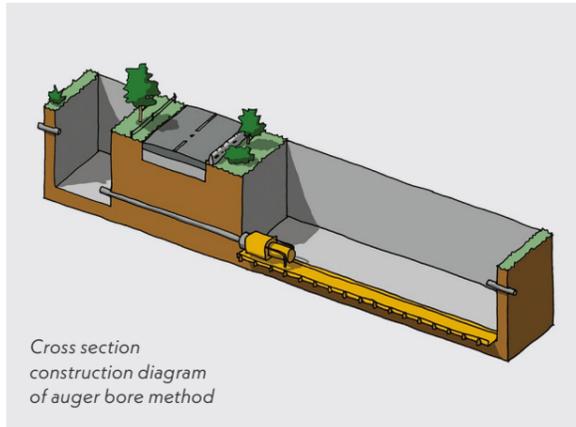


Cross section diagram of the pipeline beneath farmland following return to its previous use

How we will construct the pipeline (continued)

Trenchless techniques

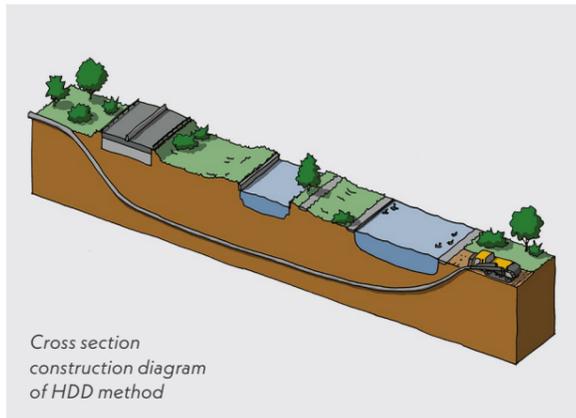
To help reduce disruption during construction, where we need to cross railways and major roads and waterways, we plan to use trenchless techniques instead of open cut trenching. There are two ways we propose to do this:



Cross section construction diagram of auger bore method

Auger bore

- A pit is dug on one side of the crossing and a smaller reception pit is dug on the other side
- A section of pipe is then fitted with an auger, similar to a drill bit or corkscrew
- The auger is then bored through to the other pit, taking the pipe with it
- Sections of pipe are welded together as the pipe is pushed through
- Spoil material is removed from the long pit
- The pits are then backfilled with the excavated material and the land is restored



Cross section construction diagram of HDD method

Horizontal directional drilling (HDD)

- A steerable drill is used to drill a hole beneath the crossing point
- The hole created is slightly larger than the diameter of the pipe
- A pipe 'string' is welded together on one side of the crossing
- A winch is then used to pull the pipe 'string' through the hole

Temporary construction compounds

During the construction phase, we will need temporary construction compounds. One of our compounds will include offices for the pipeline contractor, welfare facilities, and workshops. We will also use it to store materials (such as sections of pipe) and equipment before we need them in the pipeline working area. Other compounds will mostly be used for storing sections of pipe.

Construction access routes

Before construction begins, we will agree with the local highways authority which roads we can use to access the working area. Some roads will be available for all construction traffic, including heavy goods vehicles (HGVs), but other roads may be restricted to light goods vehicles and cars.

Temporary access tracks

In some locations, we may need side access routes off the working area. For these, we will strip topsoil and store it at the edge of the track. To allow safe access, the entrances off the roads will be created like permanent junctions, ensuring all access points have good visibility. Once we've completed construction, we will restore the access entrances and replace the topsoil over the tracks, ready to be returned to their original use.

Construction of above ground facilities

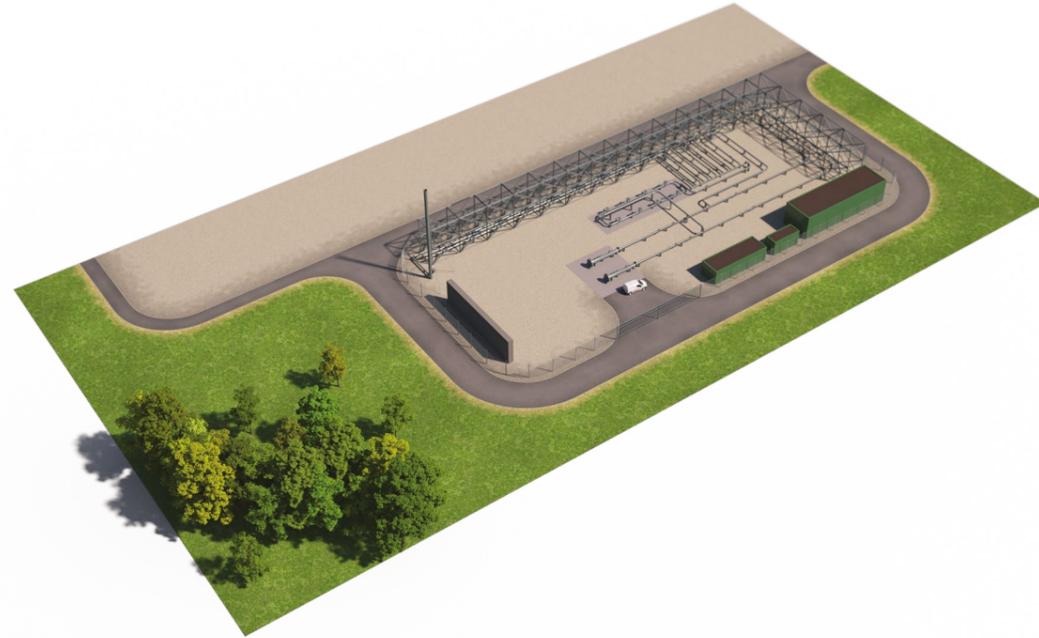
There will be above ground facilities where the pipeline begins at Immingham, and where the pipeline connects to the existing offshore pipeline at Theddlethorpe. There will also be three block valve stations along the pipeline route (see further details on page 31). Each of these will have an area next to them that will be used temporarily for construction. These working areas will have access directly off the road, and will include areas for parking vehicles, storing plant equipment, machinery and materials, and providing welfare facilities for construction workers.

Above ground infrastructure

Immingham facilities

The CO₂ captured from emitters will pass into an above ground facility, which forms the beginning of the Viking CCS pipeline. The facility will be located on a parcel of land west of Rosper Road in Immingham.

- The site will have above ground pipework and include a vent stack approximately 25 metres high
- The facilities will require an electrical connection
- It will be surrounded by security fencing and have a gated access off Rosper Road and room to park a car or van



Block Valve Stations

Block valve stations are installations of approximately 35 x 35 metres, that allow sections of the pipeline to be shut off either at the site or remotely.

This could be to allow for maintenance or in the highly unlikely event of an emergency. We are proposing to have three block valve stations along the route.

- There will be permanent access from the road into each site, and the site will be gated and securely fenced
- The facilities will require an electrical connection
- We will plant vegetation in an area around the site to help provide screening to minimise the visual impact



Pipeline

Once the land has been fully reinstated, the only visible aspect of the pipeline would be pipeline marker posts located at certain points, such as where the pipeline crosses under a road.

We will monitor the pipeline 24 hours a day, seven days a week. It will also be inspected during regular site visits.

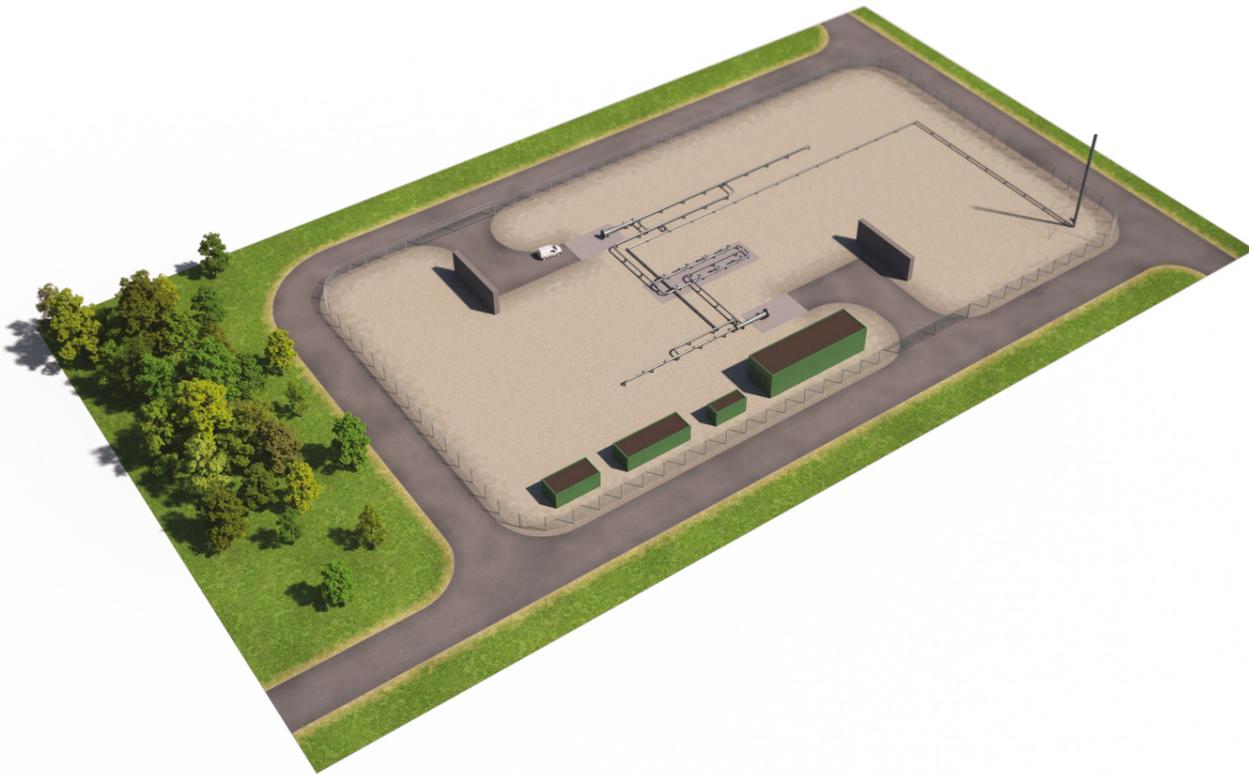


Above ground infrastructure (continued)

Theddlethorpe facilities

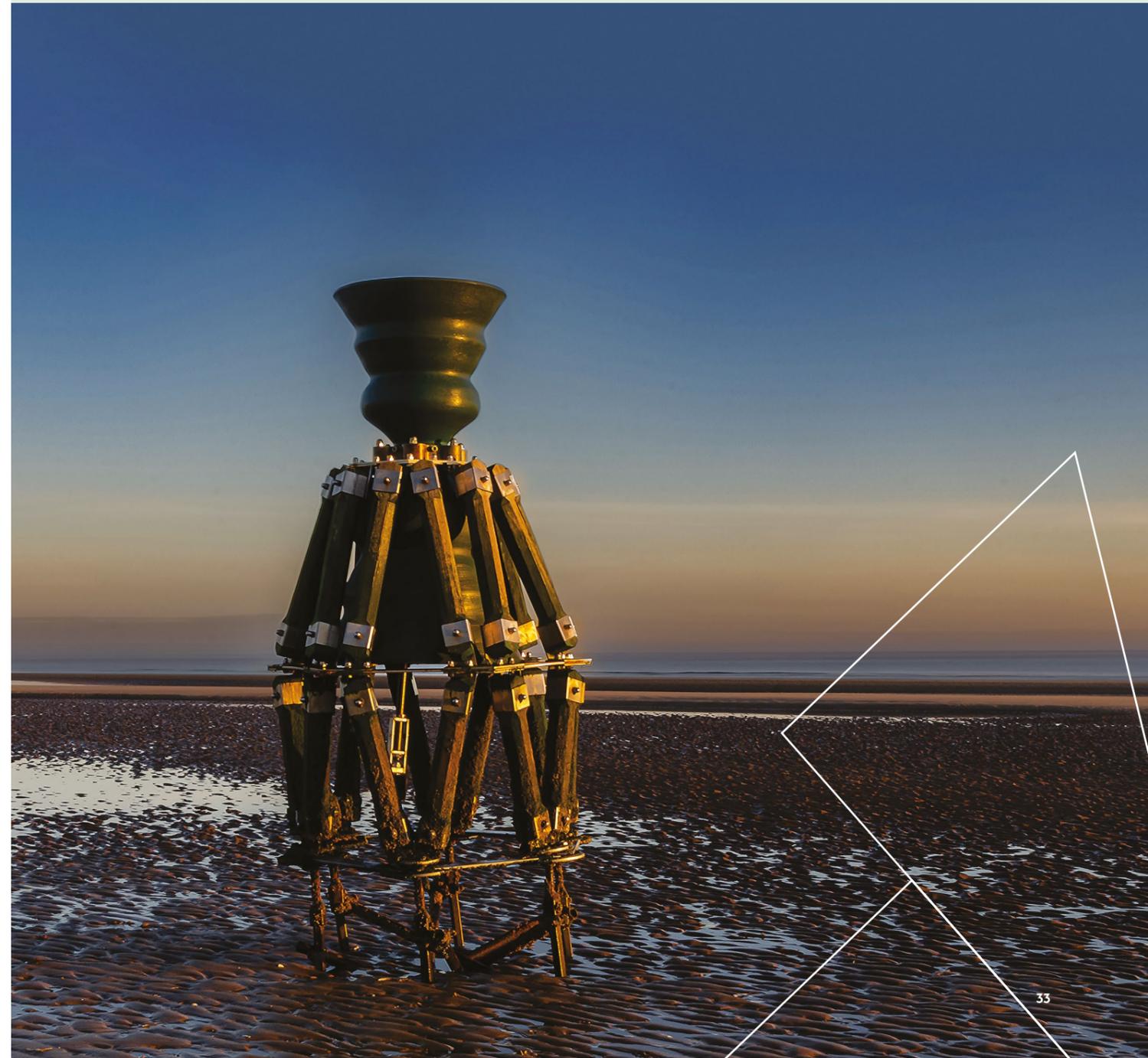
There will be an above ground facility at the site of the former Theddlethorpe Gas Terminal. This will be where the onshore pipeline connects to the existing offshore pipeline.

- This will also include above ground pipework and a vent stack approximately 25 metres high
- The site will have an access point from the road, an access track, and a gated access point
- The facilities will require an electrical connection
- The facility will be surrounded by security fencing and, if necessary, landscape planting will be used to further screen it



Offshore operation

Although not part of our DCO application, we will use an existing offshore pipeline to transport the CO₂ offshore for 120km. We will need an additional 20km of new pipeline to connect the existing pipeline to the point of injection into the depleted gas reservoir. At the point of injection, there will be an unmanned platform.



Environment

Our project will bring many benefits but, as with all infrastructure projects, there may be some impacts. That’s why the development process requires us to carry out detailed environmental assessments before we submit our application.

Understanding the area we’re working in, its environmental sensitivities and the impacts our project might have, allows us to identify how we could mitigate those impacts.

We have a commitment to protect the environment at all times. The aim of the project is to provide a net environmental benefit by reducing the emissions of CO₂ to the atmosphere from critical UK industries.

Managing our environmental impact starts during the pipeline routing assessment phase and is systematically reviewed and assessed throughout the rest of the project. This will ensure we can identify and control, where possible, any potential impacts associated with project activities.

What is a Preliminary Environmental Information Report?

We have already started initial assessment work and site surveys, which have been summarised in our *Preliminary Environmental Information Report (PEIR)*, which is part of this consultation. This report sets out the potential environmental impacts of the project across a number of different topics, based on the preliminary assessment work we’ve done to date.

Following this consultation, we will continue to develop our Environmental Impact Assessment and present the findings within an *Environmental Statement (ES)*. The ES will reflect the evolution of the project design and the feedback received during this consultation. We will submit the ES as part of our DCO application.

Our assessments so far suggest there will be some short term impacts while we install the pipeline. Some of these may require additional mitigation measures, which we will identify through ongoing assessment work. Once the project is operational, we don’t expect any significant impacts on the environment.

The table on the right sets out the topic areas covered by the PEIR. It summarises the possible ‘significant effects’ our proposals could have. ‘Significant effects’ is a technical term, which is used on major infrastructure projects to identify environmental factors that require further assessment. Identifying a ‘significant effect’ in the PEIR does not mean it will definitely happen. By identifying them at this stage, we can explore opportunities to manage the potentially significant effects.

For a short, non-technical summary of the assessment, please refer to the *PEIR Volume I: Non-Technical Summary*, and for full details, refer to the *PEIR Volumes II, III and IV*. All of these documents are available to view online, at our in-person events, and at our document inspection venues.



A note on wording

Identifying a ‘significant effect’ in the PEIR does not mean it will definitely happen. By identifying them at this stage, we can explore opportunities to manage the potentially significant effects.

Topic	Summary of preliminary assessment of environmental effects	
	Significant effects during the construction phase	Significant effects during the operational phase
Ecology and biodiversity	<ul style="list-style-type: none"> Direct loss of woodland habitat within the draft order limits may result in potential significant effect 	<ul style="list-style-type: none"> The project aims to achieve 10% biodiversity net gain, and we will include plans on how we will achieve this in the ES. This has the potential to lead to a significant effect (beneficial)
Landscape and visual	<ul style="list-style-type: none"> Short term significant effects on Regional Character Areas and Local Character Areas associated with the construction phase, and long term effects resulting from vegetation removal during the construction phase Short term significant visual effects on residents, recreational users of public rights of way, users of local and trunk roads, and places of business within a maximum of 1km of the draft order limits, as a result of the construction of the project. However, this would vary for each individual location Potential significant effects on the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) due to the loss of landscape elements such as hedgerows, trees and vegetation, which contribute to the natural beauty of the designation 	<ul style="list-style-type: none"> Short term significant effects on the Lincolnshire Wolds AONB due to the loss of landscape elements such as hedgerows, trees and vegetation, which contribute to the natural beauty of the designation. However, these would be replanted at the end of the construction phase, to restore the landscape characteristics in the medium to long term. As planting establishes, the effects would no longer be significant

Topic	Summary of preliminary assessment of environmental effects	
	Significant effects during the construction phase	Significant effects during the operational phase
Historic environment	<ul style="list-style-type: none"> Potentially significant effects upon the buried remains in Sections 1, 2, 3 and 5, relating to: <ul style="list-style-type: none"> Late Iron Age ditches, west of Rosper Road Iron Age and Romano British settlement, west of Rosper Road Roman enclosures south-east of Greenlands Farm, Stallingborough Romano British field system and possible vineyard, North Thoresby Possible Late Saxon / medieval occupation site, west of Mablethorpe Road (A1031), Theddlethorpe All Saints and associated remains Field system and settlement near Walk Farm, Great Carlton Toft earthworks and cropmarks, Theddlethorpe All Saints 	<ul style="list-style-type: none"> No significant effects are anticipated
Geology and hydrogeology	<ul style="list-style-type: none"> No significant effects are anticipated 	<ul style="list-style-type: none"> No significant effects are anticipated
Agriculture and soils	<ul style="list-style-type: none"> No significant effects are anticipated 	<ul style="list-style-type: none"> No significant effects are anticipated
Water environment	<ul style="list-style-type: none"> No significant effects are anticipated 	<ul style="list-style-type: none"> No significant effects are anticipated
Traffic and transport	<ul style="list-style-type: none"> Short term significant effect due to the number of heavy goods vehicle movements required during the construction phase (e.g. on Thoroughfare in Section 3 of the draft order limits) 	<ul style="list-style-type: none"> No significant effects are anticipated



A note on wording

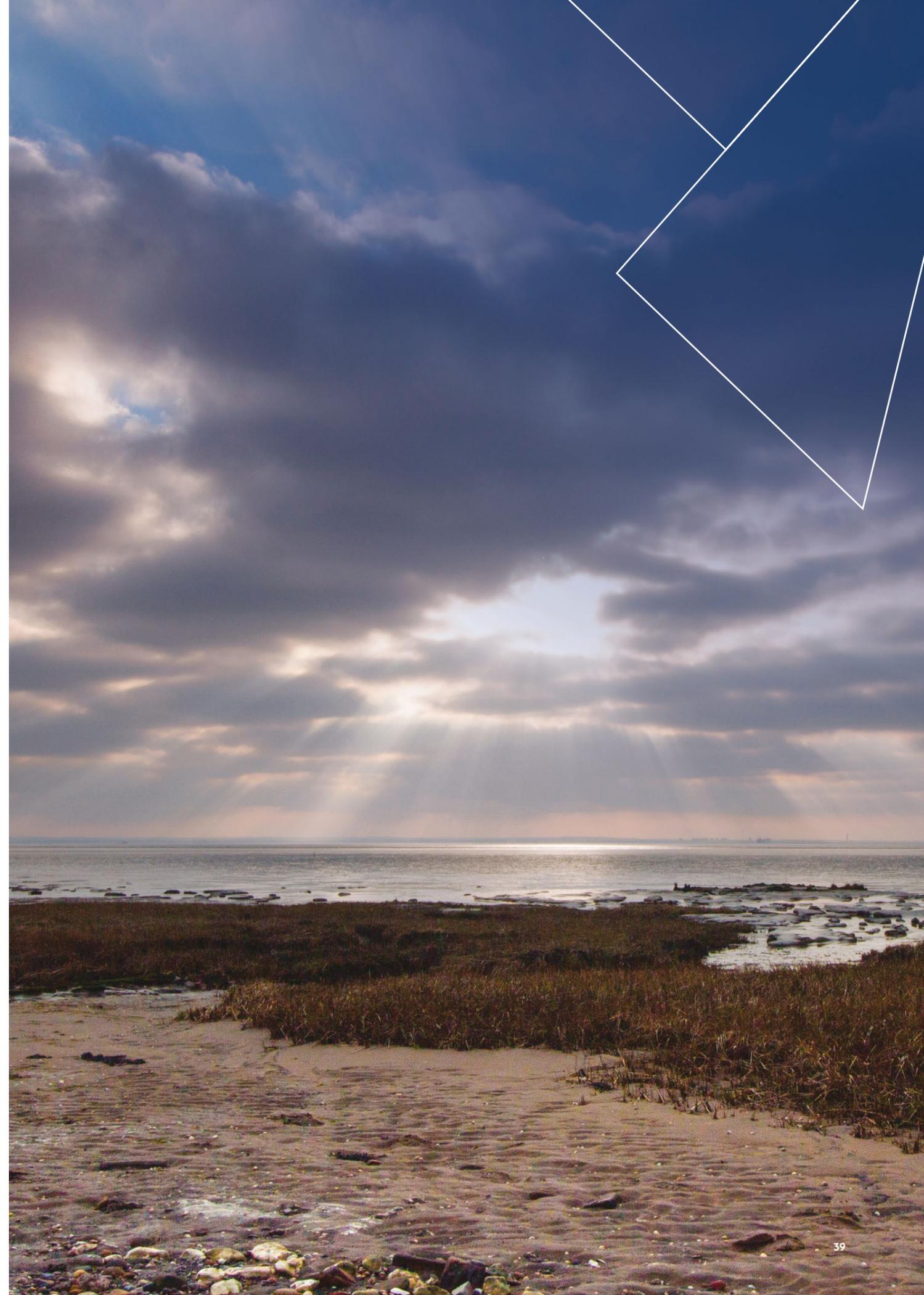
Identifying a 'significant effect' in the PEIR does not mean it will definitely happen. By identifying them at this stage, we can explore opportunities to manage the potentially significant effects.

Topic	Summary of preliminary assessment of environmental effects	
	Significant effects during the construction phase	Significant effects during the operational phase
Noise and vibration	<ul style="list-style-type: none"> Short term significant noise effects are expected at particular residential locations, in Habrough, Ashby cum Fenby, Fotherby, Cockerington, Theddlethorpe and Holton le Clay. This will depend on the location, duration of works, and equipment being used 	<ul style="list-style-type: none"> No significant effects are anticipated
Air quality	<ul style="list-style-type: none"> No significant effects are anticipated 	<ul style="list-style-type: none"> No significant effects are anticipated
Climate change	<ul style="list-style-type: none"> No significant effects are anticipated 	<ul style="list-style-type: none"> Significant effect (beneficial) related to the transportation (and storage) of CO₂ emissions, which otherwise would be emitted to the atmosphere
Socio economics	<ul style="list-style-type: none"> Short term significant effects due to: <ul style="list-style-type: none"> The temporary loss of open space Temporary land take during installation of underground pipeline and block valve stations, and the erection and use of temporary construction compounds Potential for noise and vibration, air quality and visual effects arising from construction activities to have an impact on residential properties, business premises, community facilities and visitor attractions (e.g. Lincolnshire Wolds AONB) Potential temporary disruption of access to residences during construction; and potential temporary disruption of access to visitor attractions or open space, leading to impact on residents' physical activity and health 	<ul style="list-style-type: none"> No significant effects are anticipated

Topic	Summary of preliminary assessment of environmental effects	
	Significant effects during the construction phase	Significant effects during the operational phase
Health and wellbeing	<ul style="list-style-type: none"> We expect a temporary positive effect, which may be significant, due to an increase in local employment and training, leading to improved mental and physical health outcomes We expect local residents and workers in communities close to the construction may experience a temporarily negative change in air quality, noise and traffic, as well as visual intrusions and temporary diversions of public rights of way during the construction phase, which may be significant 	<ul style="list-style-type: none"> No significant effects are anticipated
Materials and waste	<ul style="list-style-type: none"> No significant effects are anticipated 	<ul style="list-style-type: none"> No significant effects are anticipated
Cumulative effects	The cumulative effects assessment of inter project effects remains at the Stage 1 phase. We have provided a list of other developments in PEIR Volume II: Chapter 19 for feedback during this statutory consultation. We will include a full assessment of cumulative and combined effects in the ES.	
Major accidents and disasters	The preliminary assessment has identified the potential major accidents and disasters that could relate to the project, and the consequences of these events happening. They have an extremely low probability of happening, and the engineering design of the project will incorporate appropriate standards, regulations, proven design methods and control measures to reduce the risks of such accidents to an acceptable level which is the standard expected by the regulatory authorities (Health and Safety Executive and Environment Agency). With the implementation of these measures, no significant effects are anticipated.	

i A note on wording

Identifying a 'significant effect' in the PEIR does not mean it will definitely happen. By identifying them at this stage, we can explore opportunities to manage the potentially significant effects.



How to get involved

The consultation will run from **Tuesday 22 November 2022 to Tuesday 24 January 2023**, and there are many ways to get involved. To make sure materials are as accessible as possible, we are making the information about the project available in several ways.

Consultation documents

We have produced a range of consultation documents to help you find out more and have your say. We will make these available during the consultation period on our website, in our virtual consultation room, at in-person events, and at the document inspection venues. The consultation documents are:

- *Statutory consultation brochure (this document)*
- *Frequently asked questions (FAQ) document*
- *Response form*
- *Maps of the pipeline route*
- *Non-Statutory Consultation Report*
- *Statement of Community Consultation*
- *Preliminary Environmental Information Report*
- *Preliminary Environmental Information Report Non-Technical Summary*

For paper copies of the consultation documents, please contact us using the contact details on page 4.



Online virtual consultation room and webinar

We are using a virtual consultation room, which replicates a face to face consultation event. You can find it at consultation.vikingccs.co.uk and visit it to view the proposals, request further information, and ask questions of the project team.

We are also holding an online webinar on Tuesday 10 January 2023 at 7pm, where you can learn more about the proposals and ask questions. You'll find details of how to sign up for the webinar in our virtual consultation room and on our project website.



In-person consultation events

We are holding events at indoor community venues along the route of the pipeline. Here you'll be able to view all our consultation materials and speak to the team.

Date and time	Venue address
Tuesday 22 November 3pm – 7pm	Theddlethorpe Theddlethorpe Village Hall, Silver Street, Theddlethorpe, Mablethorpe, LN12 1PA
Wednesday 23 November 3pm – 7pm	Louth Louth Town Hall, Eastgate, Louth, LN11 9NH
Friday 25 November 3pm – 7pm	Immingham Immingham Civic Centre Hub, Pelham Road, Immingham, DN40 1QF
Saturday 26 November 2pm – 5pm	Healing Healing Village Hall, Poplar Road Park, Poplar Road, Healing, DN41 7SR
Monday 28 November 3pm – 6.30pm	Mablethorpe Trusthorpe Village Hall, Sutton Road, Trusthorpe, Mablethorpe, LN12 2PH
Wednesday 30 November 3pm – 6.30pm	North Thoresby North Thoresby Village Hall, The Square, North Thoresby, Grimsby, DN36 5QL
Thursday 1 December 3pm – 7pm	Grimoldby and Manby Grimoldby and Manby Village Hall, 6 Tinkle Street, Grimoldby, LN11 8SW



Document inspection venues

All our consultation documents will be available to view, free of charge, at the document inspection venues below, throughout the consultation period. Please note, some may be closed for the Christmas period, so please contact the venue to check opening times before travelling.

Document inspection venue	Address	Opening hours	Contact details
Immingham Library	Pelham Road, Immingham, DN40 1QF	Monday 9am – 5pm Tuesday 9am – 5pm Wednesday 9am – 5pm Thursday 9am – 5pm Friday 9am – 5pm Saturday 9am – 1pm Sunday Closed	01472 323 631
Keelby Community Library	Victoria Road, Keelby, Grimsby, DN41 8EH	Monday 10am – 12pm Tuesday Closed Wednesday 3pm – 5pm Thursday Closed Friday Closed Saturday 10am – 12 noon Sunday Closed	01522 782 010
Waltham Library	High Street, Waltham, Grimsby, DN37 0LL	Monday Closed Tuesday 8:30am – 12:30pm, 1:30pm – 5:30pm Wednesday 8:30am – 12:30pm, 1:30pm – 5:30pm Thursday 8:30am – 12:30pm, 1:30pm – 5:30pm Friday 8:30am – 12:30pm, 1:30pm – 5:30pm Saturday 9am – 1pm Sunday Closed	01472 323 656
Louth Library	Northgate, Louth, LN11 0LY	Monday 9am – 5pm Tuesday 9am – 6pm Wednesday 9am – 5pm Thursday 9am – 2pm Friday 9am – 5pm Saturday 9am – 4pm Sunday Closed	01522 782 010
Mablethorpe Library	Stanley Avenue, Mablethorpe, LN12 1DP	Monday 9am – 5pm Tuesday 9am – 5pm Wednesday 9am – 5pm Thursday 9am – 6pm Friday 9am – 1pm Saturday 9am – 1pm Sunday Closed	01522 782 010

Your feedback

Your feedback is important to us and will help us determine our final proposals, which we will submit in our DCO application. You can tell us your response, in writing, in one of the following ways:



Completing the online response form located on the project website at: consultation.vikingccs.co.uk



Attending an **in-person consultation event**, where you can meet the project team and complete a paper copy of the response form



Requesting the response form by post or picking up a paper copy at one of our document inspection venues – you can post this to us at: **Freepost VIKING CCS PIPELINE** (no stamp needed)



Email the response form to: vikingccspipeline@aecom.com



Email or post us a written response to the consultation

We must receive all responses by 23:59 on Tuesday 24 January 2023.

Consultation feedback – Your data, your rights

To view our privacy notice visit consultation.vikingccs.co.uk/privacy-policy

Next steps

Once the consultation closes on Tuesday 24 January 2023, we will review all the suggestions and comments we have received during the consultation period.

We will analyse your feedback as we make further refinements to our proposed design and develop any mitigation measures.

We will set out a summary of the responses you have given during consultation, with details of how your feedback has helped shape our proposals. This *Consultation Report* will form part of our DCO application and will be available to the public after we submit the application, which we expect to be later in 2023.

If our application for a DCO is accepted by the Planning Inspectorate, on behalf of the Secretary of State for Business, Energy and Industrial Strategy, an Examining Authority will consider the application and any representations, which will take up to six months. During the examination stage, anyone with an interest in the project can take part and make representations in writing, or verbally at hearings.

The Examining Authority will be given three months to report its recommendation to the Secretary of State, who has a further three months to make a final decision on whether or not to grant a DCO for the project.

The Development Consent Order (DCO) process

There are six stages to the DCO process:



If you would like any further information on the DCO application process, please visit the Planning Inspectorate's website:
<https://infrastructure.planninginspectorate.gov.uk/application-process/the-process/>



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