

Humber Low Carbon Pipelines project

Supporting jobs and the
decarbonisation of the Humber region

Project brochure | October 2022

nationalgrid

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Introduction

The Humber has a rich and diverse industrial and power generation heritage that is vitally important in the country's ambition to achieving net zero by 2050. By decarbonising its industry, the Humber has the potential to re-establish itself as a globally competitive, climate-friendly hub for industry and innovation but more importantly, protect and create tens of thousands of jobs for decades to come.

Thank you to everyone who took part in our previous consultations. Your contributions have been heard and have helped to inform our proposal for the Humber Low Carbon Pipelines Project. In this next stage of the consultation, we will be presenting our updated plans for new onshore

pipeline infrastructure to support the decarbonisation and economic growth of the Humber region.

The infrastructure consists of two underground pipelines: one to transport captured carbon dioxide emissions from major industrial emitters; the other to transport low carbon hydrogen for use as a more environmentally friendly alternative to fossil fuels.

Who is National Grid Ventures?

National Grid Ventures is a division of National Grid plc, one of the largest investor-owned energy companies in the world. It develops, operates and invests in energy projects in the UK and abroad, and in technologies and partnerships to accelerate the development of our clean energy future.

What are we consulting on?

On 31 October 2022, we launched our second phase of consultation. As part of this statutory consultation, we have published plans, visualisations, technical documents and other materials on the proposals, including a Preliminary Environmental Information Report (PEIR) detailing the potential environment impacts.

We are inviting people to comment on the proposed route alignment as well as:

- Above Ground Installations (AGIs);
- The potential impacts of the project during construction, operation and decommissioning;
- The Preliminary Environmental Information Report (PEIR); and,
- Our proposals for the project as a whole.

We want to hear your views

This brochure has been published as part of this stage of statutory consultation, which takes place between 31 October and 8.59am on 29 November 2022. In this brochure, you'll find out more information about the project, the proposed route, and how you can give your feedback. All comments will be considered before the plans are finalised.

In addition to this, as part of this consultation we have published additional documents on our proposals, including a Non-Technical Summary (NTS) and a Preliminary Environmental Information Report (PEIR), detailing the potential environment impacts.

All of these documents will be available throughout the consultation period on the project website or on request. Hard copies will also be available at our consultation events. Please visit our website for the full list of venues and dates of events.

Working together for net zero

East Coast Cluster

The Humber Low Carbon Pipelines project forms the backbone of Zero Carbon Humber, which is part of the East Coast Cluster. The East Coast Cluster unites Zero Carbon Humber and Net Zero Teesside with shared offshore infrastructure that will be developed by the Northern Endurance Partnership.

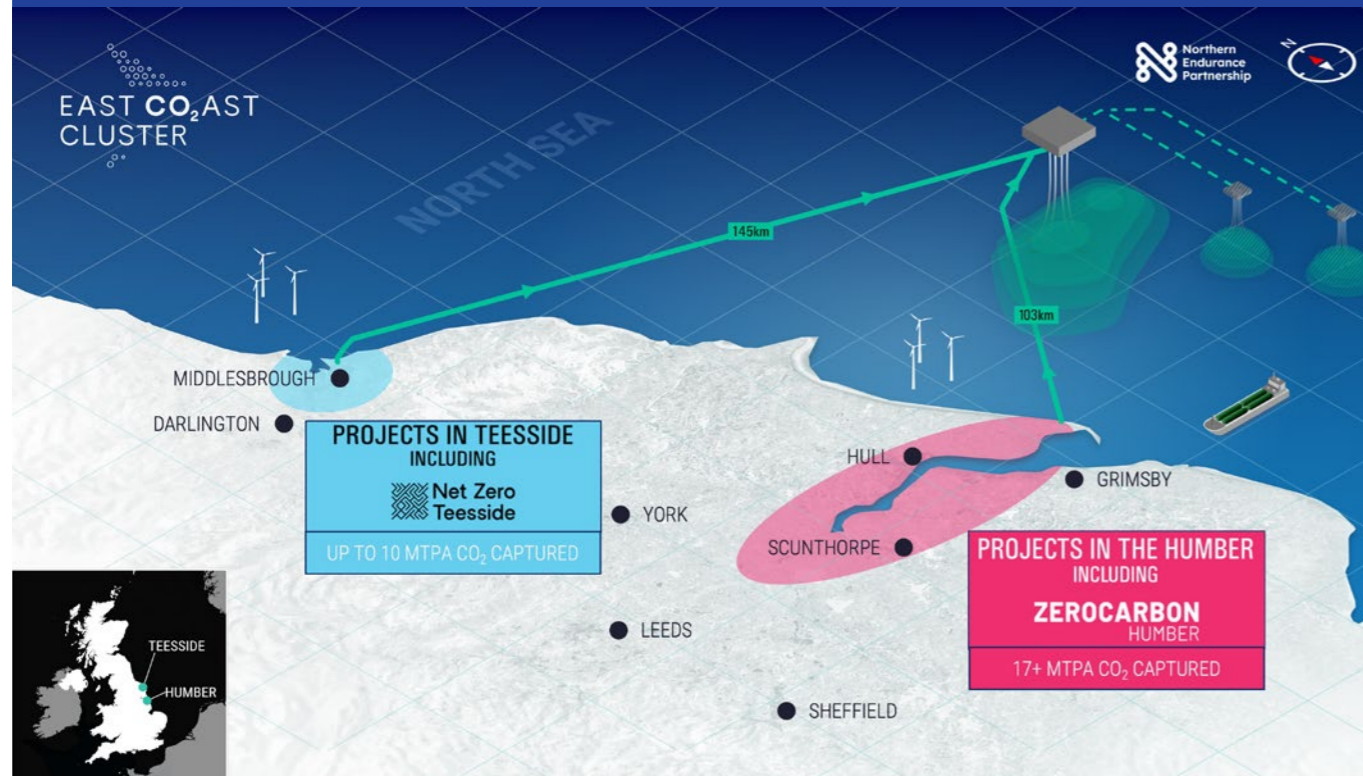
The East Coast Cluster is a wider regional ambition to decarbonise industries not just across the Humber region but also Teesside.

The proximity of these two regions provides them with the opportunity to share common transport and storage infrastructure, thus capitalising on the regions' knowledge and capabilities.

The East Coast Cluster brings together communities, businesses, industry and academia to deliver the carbon capture, usage and storage (CCUS) infrastructure needed to decarbonise the Humber and Teesside regions. By its strength in diversity of technologies, the East Coast Cluster stands ready to remove 50% of the UK's industrial cluster carbon dioxide emissions. It can also play a major role in levelling up across the country, with potential to support an average of more than 25,000 jobs a year between 2023 and 2050.

In October 2021, the Government confirmed the East Coast Cluster as one of the two clusters chosen for deployment by the mid-2020s.

Below: The proposed East Coast Cluster



For more information about the Project Context, please see the PEIR, Sections 2.2 and 2.3 of Chapter 2: Project Description (Volume II).

The technology

What is carbon capture, usage and storage (CCUS)?

Carbon dioxide (CO₂) is a natural gas produced by most living organisms. It is produced when we breathe out and is needed for plants to grow and develop.

Carbon dioxide is also used in everyday products including fizzy drinks, fire extinguishers and decaffeinated coffee. The gas is an integral part of everyday life. It is also, however, a by-product of burning fossil fuels. This is one of the major contributors to global climate change.

CCUS refers to technology which captures, permanently stores, and utilises harmful carbon dioxide emissions. These emissions will be stored beneath the seabed in natural porous rock formations or depleted oil and gas fields.

What is hydrogen?

Hydrogen (H₂) is a colourless and odourless gas, and when partnered with CCUS, is also low carbon.

It can be used to power industry and heat our homes and businesses as an alternative to using fossil fuels.

When burnt, fossil fuels emit the greenhouse gas carbon dioxide while hydrogen only produces water vapour.

For this reason, its use by industry in place of fossil fuels could assist in lowering the country's carbon dioxide emissions and will be critical to the UK achieving net zero by 2050.

Government support

Both CCUS and hydrogen have strong support from the UK Government. The British Energy Security Strategy (2022) set the following targets:

5GW to 10GW by 2030

Double low carbon hydrogen production capacity from 5GW to 10GW by 2030.

20-30Mt of CO₂

Capture 20-30Mt of carbon dioxide a year by 2030, building on the initial aim to deploy CCUS in two industrial clusters by the mid-2020s.

In October 2021, the Government confirmed the East Coast Cluster as one of two chosen for deployment by the mid-2020s.

Route evolution

Our proposed pipeline route – consisting of two underground pipelines – would connect to major industrial emitters and power stations.

The onshore pipelines would run between Drax Power Station and Easington on the Holderness Coast. They would connect with SSE Thermal and Equinor’s proposed Keadby 3 Carbon Capture Power Station, British Steel in Scunthorpe, the Humber Hub Blue Project at Uniper’s Killingholme site and Equinor’s Hydrogen to Humber (H2H) Saltend. Further connections could be made in the future.

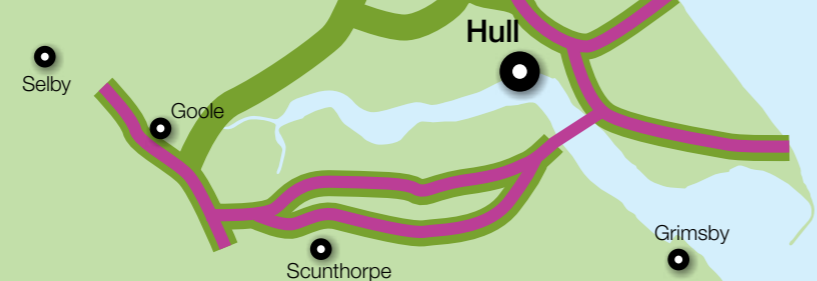
How has the route been selected?

Initial evaluations began in 2019 to consider possible route corridor options both north and south of the Humber. By assessing possible technical constraints as well as physical, environmental and social features, we were able to identify two possible pipeline configurations.

Configuration A was identified as the preferred choice on the balance of environmental, social, technical and cost factors.

Initial optioneering – 2019-2021

Key:
█ Configuration A 2019
█ Configuration B 2019



Illustrative example – not to scale

Route corridor options

We then developed a number of broad possible routes, or route corridor options. In autumn 2021, we published these route corridor options as part of the non-statutory consultation. The feedback received from local residents and stakeholders, alongside further technical studies allowed us to identify a preferred route corridor.

Route refinement

The preferred route corridor was published in spring 2022. Since then, we have further refined and narrowed the potential route to form the route we are consulting on in this consultation.

Initial optioneering – 2021

Key:
█ Indicative route corridor
█ Major emitters



Illustrative example – not to scale

For more information about our consideration of alternatives, please see the PEIR, Chapter 3: Consideration of alternatives (Volume II).

Working with landowners, occupiers and affected parties

National Grid Ventures will continue to work closely with landowners and occupiers to plan and deliver the project. We will ensure all parties are kept as up to date as possible while the project progresses and we encourage them (or their representatives) to liaise with us as they feel necessary.

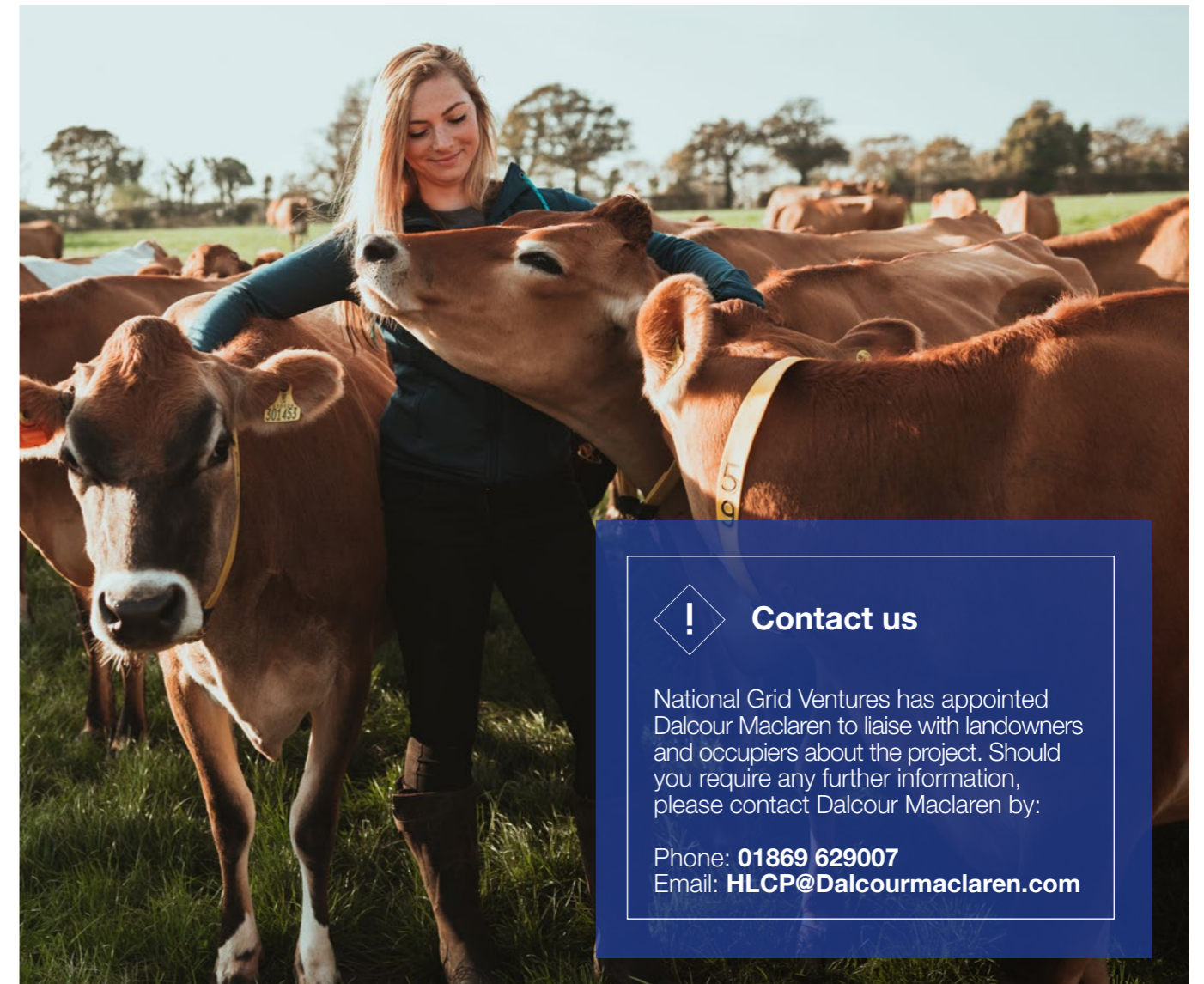
We have identified all parties who we believe may be affected by the project based on Land Registry Data and we are seeking to identify parties whose land interests are unregistered.

The pipelines will primarily run through agricultural land and will not be routed through private gardens.

Some surveys may be required in areas beyond the pipeline corridor for the purpose of gaining a greater understanding of local habitats and how they might be impacted by the project.

There is no intention to carry out surveys in private houses or gardens; these surveys are primarily in agricultural land and we will always work with landowners to seek access for surveys.

As part of our wider project commitments, we will also be working to deliver initiatives to enhance biodiversity. We welcome feedback from landowners and occupiers on any potential proposals that National Grid Ventures can support.



! Contact us

National Grid Ventures has appointed Dalcour Maclaren to liaise with landowners and occupiers about the project. Should you require any further information, please contact Dalcour Maclaren by:

Phone: **01869 629007**
 Email: **HLCP@Dalcourmaclaren.com**

The project – an overview

The proposals are to construct and operate two onshore pipelines.

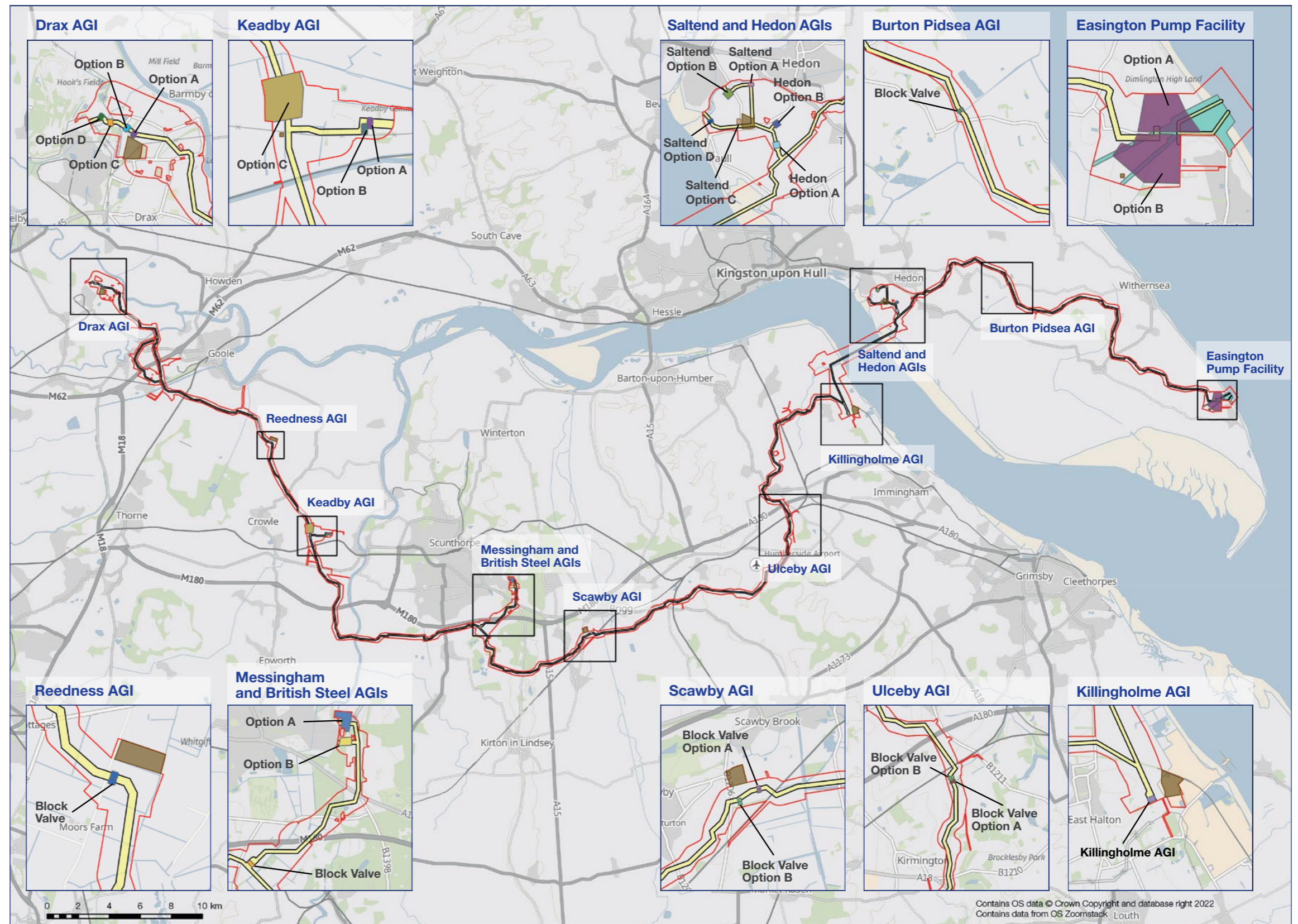
The Project has also been designed to facilitate other developments to connect to it at a later date.

This large-scale map shows the proposed route. For a more detailed project overview, please see chapter 2.3 of the PEIR.

A corrosion protection system will be installed along the length of the route, with a number of approximately 1m high, 0.5m wide by 0.5m deep protection cabinets. For more information please see the NTS and chapter 2.6 of the PEIR.

The proposed diameter for the pipeline transporting carbon dioxide is up to 600mm (24 inches) in diameter wide on sections of the route developed by National Grid Ventures, but could increase up to 900 mm (36 inches) in diameter. This is subject to ongoing technical assessments and project requirements. The pipeline transporting hydrogen would be up to 900mm (36 inches) in diameter. Both pipelines will be buried at a depth of 1.2 metres (4 feet).

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the PEIR, Chapter 3: Consideration of alternatives (Volume II).



i Detailed maps of each section of the proposed route are available overleaf and on the project website.

i **Above Ground Installations (AGIs)**
A number of AGIs will be required along the pipeline route for the maintenance and safe management of the pipelines. These are marked on the map. Please see the section maps and AGI panel for more details.

Legend

- Proposed Order Limits
- Indicative Construction Width
- Temporary Construction Compounds
- Temporary Office / Materials Laydown Area

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For illustrative purposes only

Section 1: Drax to Keadby

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the PEIR, Chapter 3: Consideration of alternatives (Volume II).

This section of the map shows the proposed route between Drax and Keadby. It includes:

Drax AGI (PIG Trap)

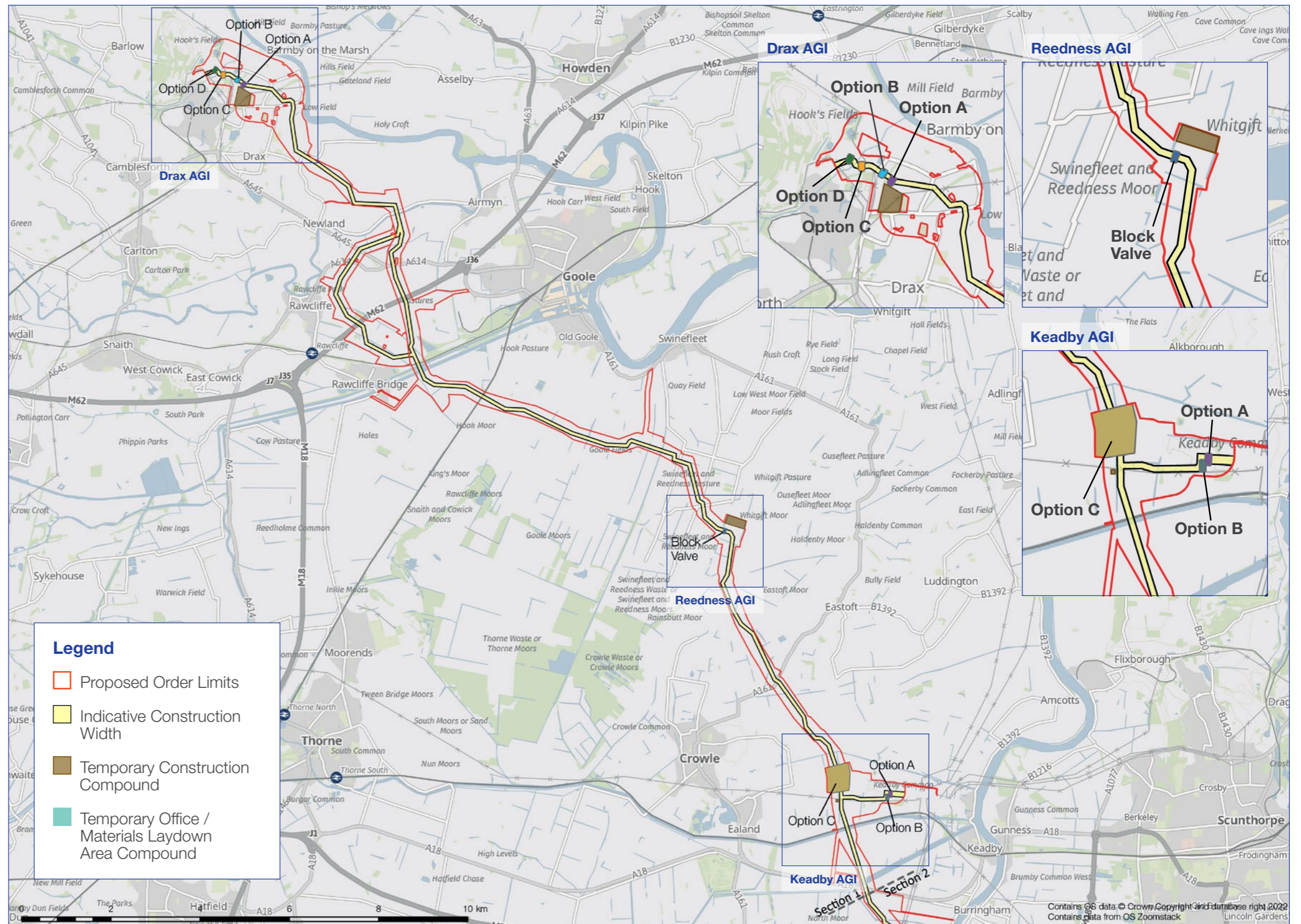
This Above Ground Installation (AGI) will be a Pipeline Inspection Gauge (PIG) trap of approximately 120m x 165m in size surrounded by a 25m wide area for landscaping. We are considering four different site options: A, B, C and D. Our current preference is option D.

Reedness AGI (Block valve KP 19.3)

This AGI will include two block valves – one for hydrogen and one for carbon dioxide. Each block valve will be approximately 90m x 90m with the potential for a 25m wide area surrounding the installation for landscaping. We have selected a single preferred site for this AGI. Please note this is identified as block valve KP 19.3 in the PEIR.

Keadby AGI

This AGI is a development of a block valve installation approximately 175m x 100m in size plus potentially a 25m wide area surrounding the installation of landscaping. We are considering three different site options A, B and C. Our current preference is option B.



Do you require a more detailed map? Please refer to the set of detailed maps, also published as part of this consultation. This document is available on the website, at consultation events and on request.

For all AGIs in this section, the maximum building height would be approximately 8m with a temporary vent stack of up to approximately 5m.

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the non-technical summary, Section 2.4; or the PEIR, Chapter 2 Project Description, Section 2.8.



Please use your feedback form to give us your views.

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Lincoln Gardens

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Section 2: Keadby to Scunthorpe

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the PEIR, Chapter 3: Consideration of alternatives (Volume II).

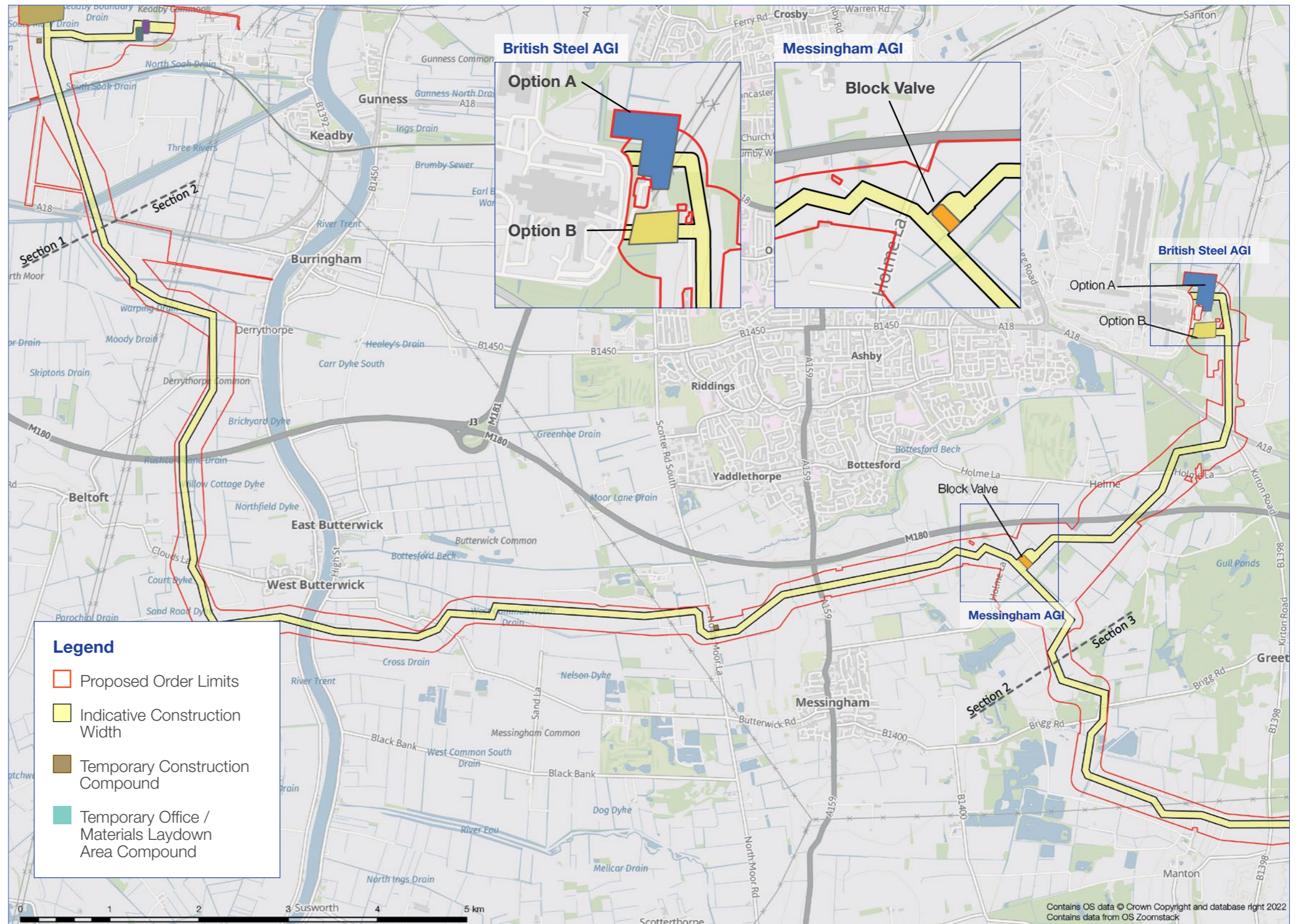
This section of the map shows the proposed route between Keadby and Scunthorpe. It includes:

Messingham AGI (Block valve KP 46.3)

This Above Ground Installation (AGI) will include two block valves – one for hydrogen and one for carbon dioxide. Each block valve will be approximately 90m x 90m plus a natural planting strip to reduce visual effects. We have selected a single preferred site for this AGI. Please note this is identified as block valve KP 46.3 in the PEIR.

British Steel AGI (PIG Trap)

This AGI will be a PIG Trap of approximately 120m x 165m in size plus a natural planting strip to reduce visual effects. We are considering two different site options: A and B. Our current preference is option A.



Do you require a more detailed map? Please refer to the set of detailed maps, also published as part of this consultation. This document is available on the website, at consultation events and on request.

For all AGIs in this section, the maximum building height would be approximately 8m with a temporary vent stack of up to approximately 5m.

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the non-technical summary, Section 2.4; or the PEIR, Chapter 2 Project Description, Section 2.8.



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Section 3: Scunthorpe to Killingholme

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the PEIR, Chapter 3: Consideration of alternatives (Volume II).

This section of the map shows the proposed route between Scunthorpe and Killingholme. It includes:

Scawby AGI (Block valve KP 57.4 / KP 57)

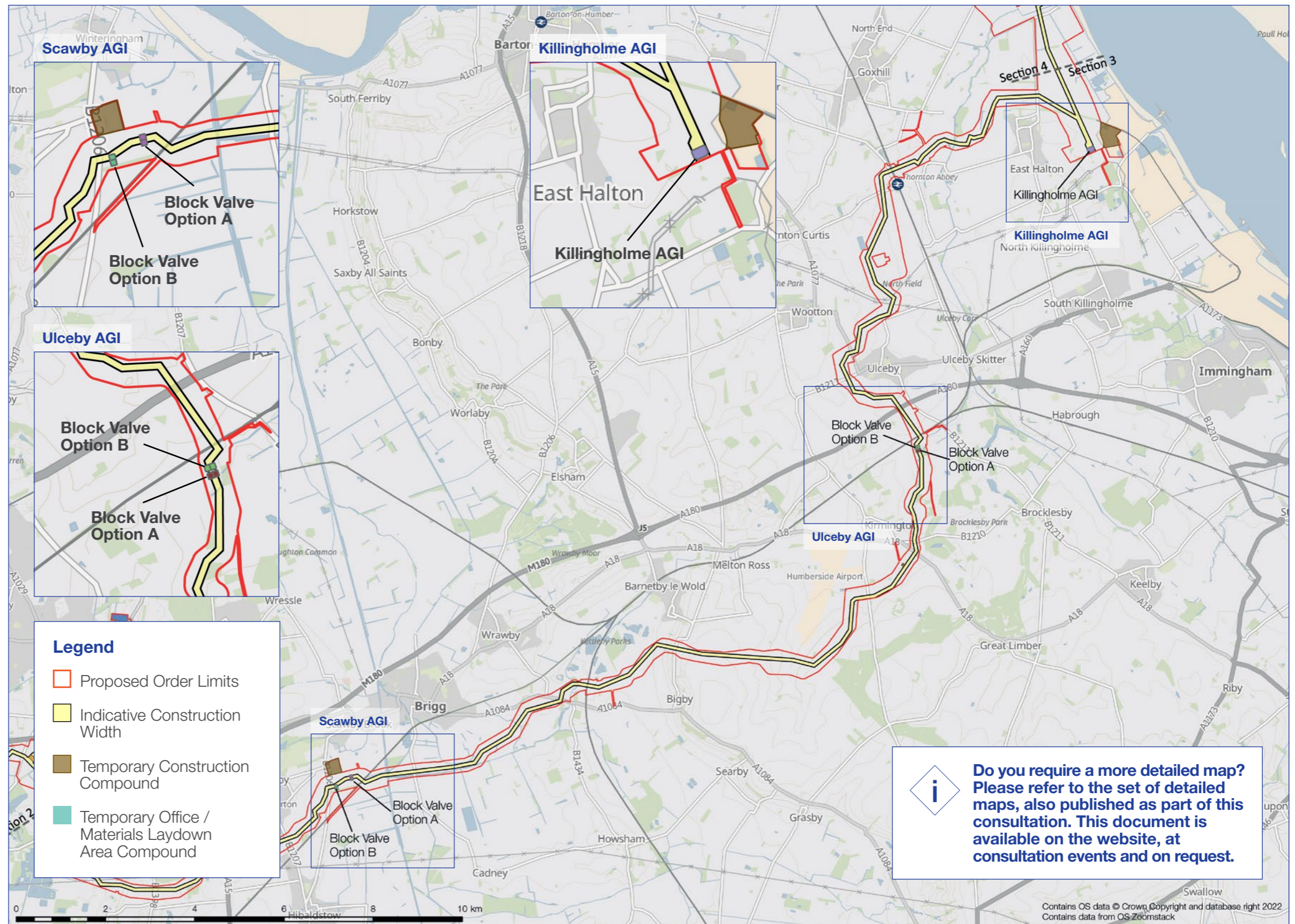
This Above Ground Installation (AGI) will include two block valves – one for hydrogen and one for carbon dioxide. Each block valve will be approximately 90m x 90m plus a natural planting strip to reduce visual effects. We are considering two different site options, A and B. Please note these site options are identified as block valves KP 57.4 (option A) and KP 57 (option B) in the PEIR.

Ulceby AGI (Block valve KP 75.1 / KP 75.2)

This AGI will include two block valves – one for hydrogen and one for carbon dioxide. Each block valve will be approximately 90m x 90m plus a natural planting strip to reduce visual effects. We are considering two different site options, A and B. Please note these site options are identified as block valves KP 75.1 (option A) and KP 75.2 (option B) in the PEIR.

Killingholme AGI (multi-junction)

This AGI will be a multi-junction installation of approximately 125m x 185m in size plus a natural planting strip to reduce visual effects. We have selected a single preferred site for this AGI.



For all AGIs in this section, the maximum building height would be approximately 8m with a temporary vent stack of up to approximately 5m.

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the non-technical summary, Section 2.4; or the PEIR, Chapter 2 Project Description, Section 2.8.

Do you require a more detailed map? Please refer to the set of detailed maps, also published as part of this consultation. This document is available on the website, at consultation events and on request.

Please use your feedback form to give us your views.

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Section 4: Killingholme to Hedon

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the PEIR, Chapter 3: Consideration of alternatives (Volume II).

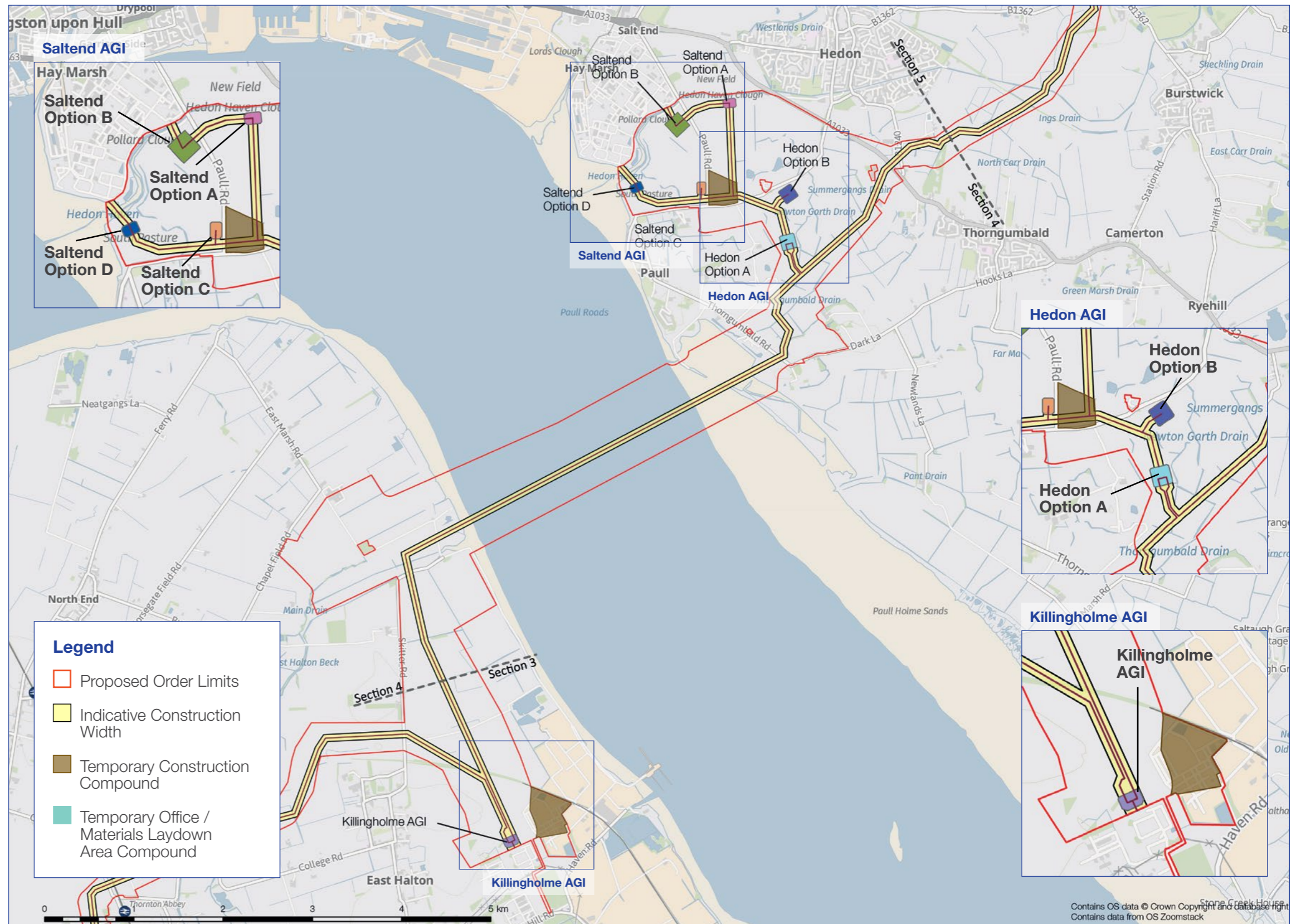
This section of the map shows the proposed route between Killingholme and Hedon. It includes:

Saltend AGI (PIG Trap)

This Above Ground Installation (AGI) will be a PIG Trap of approximately 120m x 165m in size plus a natural planting strip to reduce visual effects. We are considering four different site options: A, B, C and D. Our current preference is option D.

Hedon AGI (multi-junction)

This AGI will be a multi-junction installation of approximately 180m x 180m in size plus a natural planting strip to reduce visual effects. The interconnecting pipeline from Saltend AGI connects into this installation. We are considering two different site options, A and B. Our current preference is Option A.



Do you require a more detailed map? Please refer to the set of detailed maps, also published as part of this consultation. This document is available on the website, at consultation events and on request.

For all AGIs in this section, the maximum building height would be approximately 8m with a temporary vent stack of up to approximately 5m.

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the non-technical summary, Section 2.4; or the PEIR, Chapter 2 Project Description, Section 2.8.



Please use your feedback form to give us your views.

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Section 5: Hedon to Easington

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the PEIR, Chapter 3: Consideration of alternatives (Volume II).

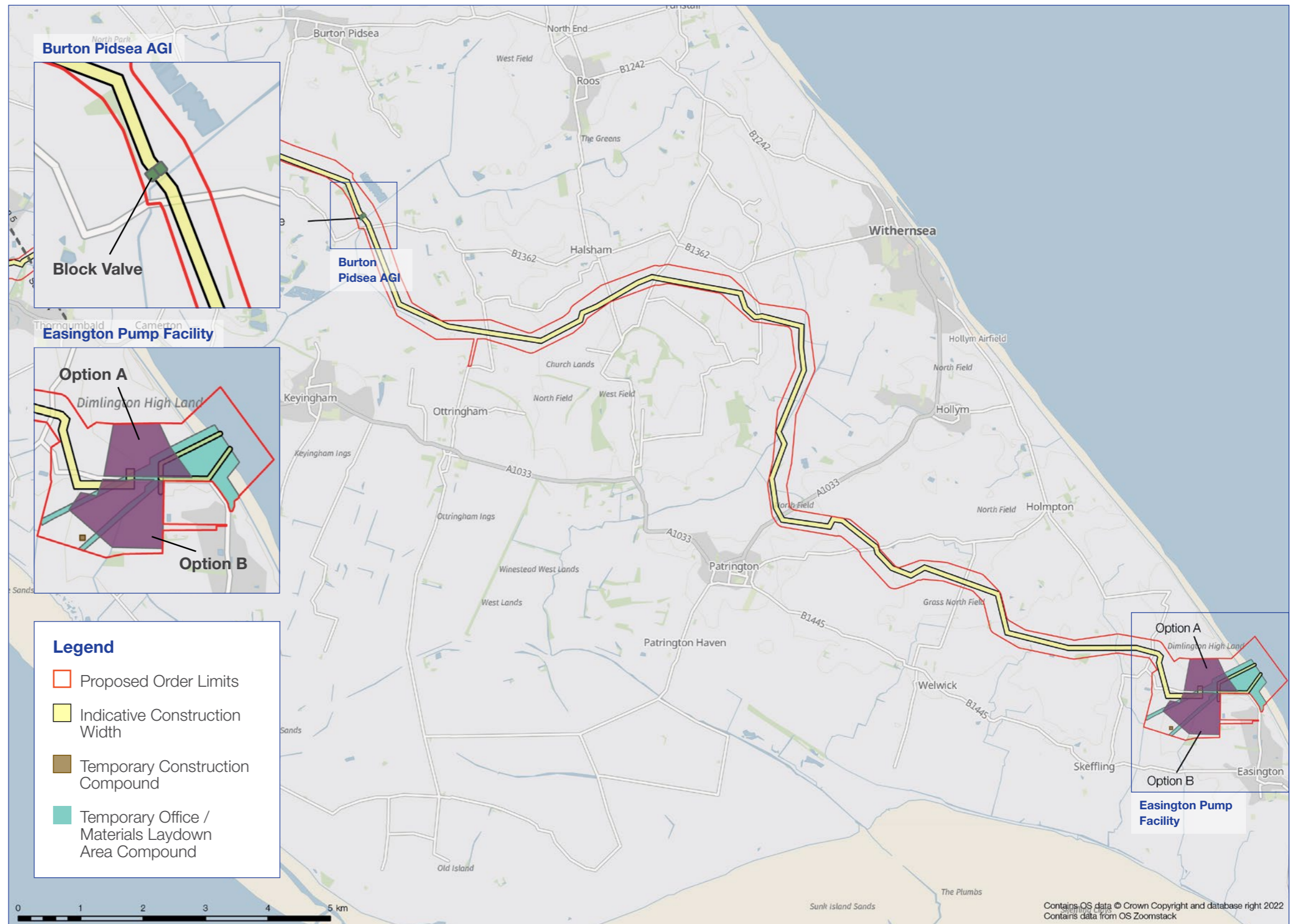
This section of the map shows the proposed route between Hedon and Easington. It includes:

Burton Pidsea AGI (Block valve KP 109.6)

This Above Ground Installation (AGI) will include two block valves – one for hydrogen and one for carbon dioxide. Each block valve will be approximately 90m x 90m plus a natural planting strip to reduce visual effects. The maximum building height would be approximately 8m with a temporary vent stack of up to approximately 5m. We have selected a single preferred site for this AGI. Please note this is identified as block valve KP 109.6 in the PEIR.

Easington Pump Facility

This Above Ground Installation (AGI) will be a Pump Facility of approximately 500m x 350m in size plus a natural planting strip to reduce visual effects. The installation will also include several vent stacks to facilitate operational and maintenance activities, with the highest being up to 50m (164 feet) tall. We are considering two different site options: A and B. Our current preference is option B.



Do you require a more detailed map? Please refer to the set of detailed maps, also published as part of this consultation. This document is available on the website, at consultation events and on request.

For further information on the temporary construction compounds, including trenchless crossing compounds, please see the non-technical summary, Section 2.4; or the PEIR, Chapter 2 Project Description, Section 2.8.



Please use your feedback form to give us your views.

Above Ground Installations (AGI)

We would need to construct a number of AGIs at intervals along the proposed route including at the start and end of a section of pipeline. These will allow us to safely and efficiently operate the pipelines as well as conduct routine inspections and maintenance.

There are four different types of AGI that are included within our proposal. Each AGI will comprise equipment and pipework, at least one small instrument building and a vehicle access point. Each site will be surrounded by security fencing of up to three metres (nearly 10 feet) high and if required, surrounded by a natural planting strip to reduce visual effects. Existing woodland will also be used wherever possible to provide natural screening.



As part of this consultation, we are asking for feedback on the proposed locations for the Above Ground Installations and the landscaping around their external boundaries.



AGI maintenance

AGIs will not normally be occupied. AGI inspections would be carried out at regular intervals, with valves checked once a year and a visual check of an AGI being carried out on a monthly basis. The AGIs will include appropriate security measures.

Temporary vent stacks will be used at all AGI locations, with the exception of the Pump Facility, which will have a permanent structure. The carbon dioxide and hydrogen vented will be small in volume, short term and infrequent, taking place roughly every ten years.



A **pipeline inspection gauge** (PIG trap) enables internal monitoring and inspection of the pipeline. They will be required at points on the route, such as Drax Power Station, and also form part of other types of AGI. PIG traps will be approximately 120m by 165m. The maximum building height would be approximately 8m with a temporary vent stack height of up to approximately 5m. They will include a pig trap arrangement, pipework and valves which will be predominantly buried. This image shows a single pipeline system.



A **multi-junction** is a 'hub' allowing several pipelines to cross-connect. This is required near Killingholme and Hedon. A multi-junction could be approximately up to 180m (591 feet) by 180m (591 feet) and include several PIG trap arrangements, pipework and valves which will be predominantly buried. The maximum building height would be approximately 8m with a temporary vent stack height of up to approximately 5m. This image shows two pipeline systems, hydrogen and carbon dioxide.



A **block valve** is required at regular intervals to enable sections of pipeline to be isolated for operational and maintenance purposes. They are required near Reedness, Keadby, Messingham, Scawby, Ulceby and Burton Pidsea. Block valve installations will be approximately 90m by 90m for the hydrogen and carbon dioxide pipelines separately. The maximum building height would be approximately 8m with a temporary vent stack height of up to approximately 5m. They will include pipework and valves which will be predominantly buried. This image shows a single pipeline system.



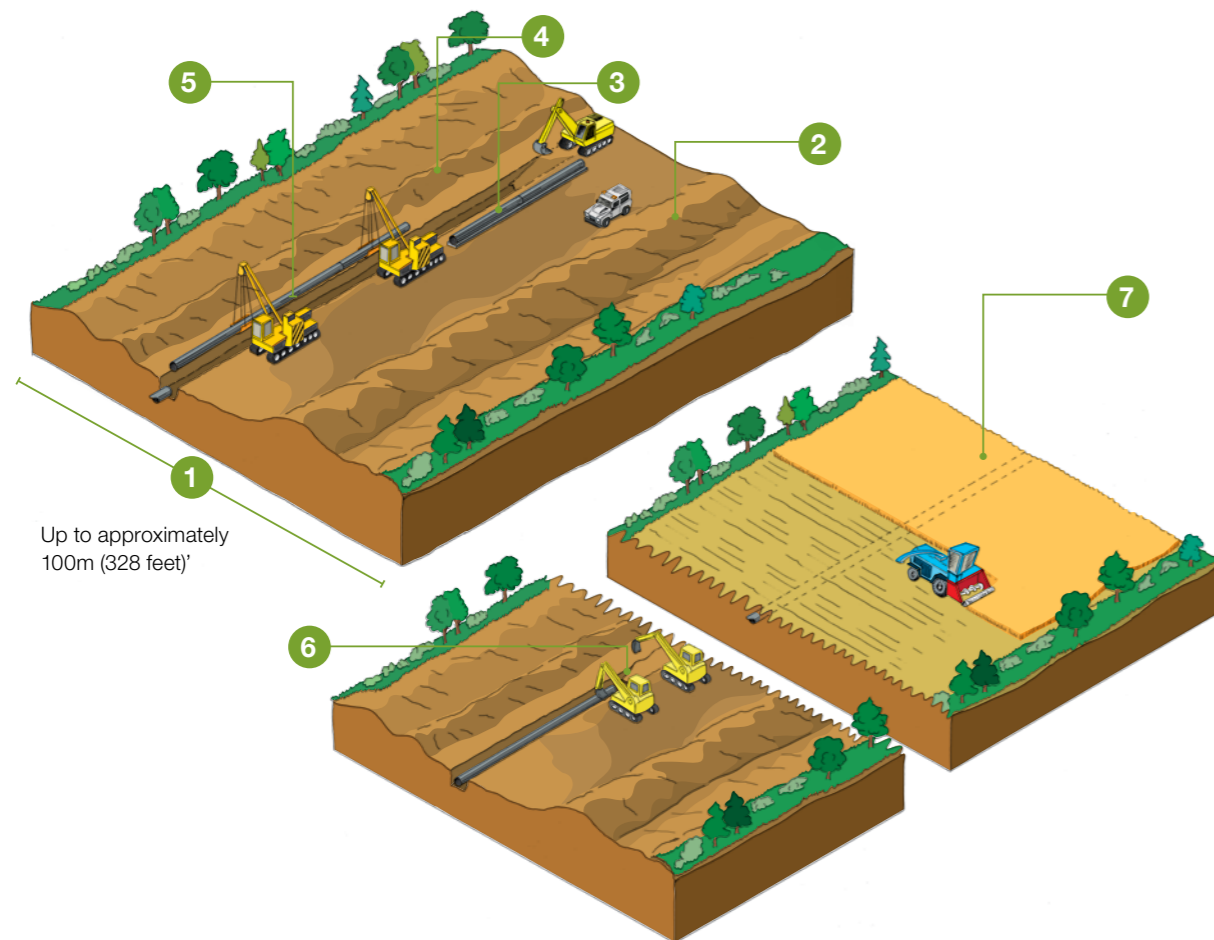
A **pump facility** will be required near the coast at Easington to connect the onshore carbon dioxide pipeline to the offshore carbon dioxide pipeline and to increase the pressure of the carbon dioxide to facilitate transportation offshore to the storage site. It will be approximately 500m by 350m and include several buildings. The installation will also include several vent stacks to facilitate operational and maintenance activities, with the highest being up to 50m (164 feet) tall.

For information on the proposed AGI sites, please see the maps pack or chapter 2.5 of the PEIR. All images shown above are illustrative and indicative.

Construction

Constructing an onshore underground pipeline

We are committed to working closely with local communities throughout the construction process to minimise disruption and manage the environmental impacts.



Up to approximately
100m (328 feet)

1 First, the working width – the total area within which construction work will take place – is marked.

2 Next, the topsoil is carefully stripped and stored next to the pipeline route.

3 The pipe which makes up the pipeline is delivered in short lengths and placed on supports. These short lengths of pipe are welded together into longer sections called 'strings'.

4 The pipeline trench is dug, with the excavated material being stored separately from the topsoil on the opposite side of the trench.

5 The pipeline 'strings' are lowered into the trench using special vehicles called 'side booms' and welded to the pipeline already installed.

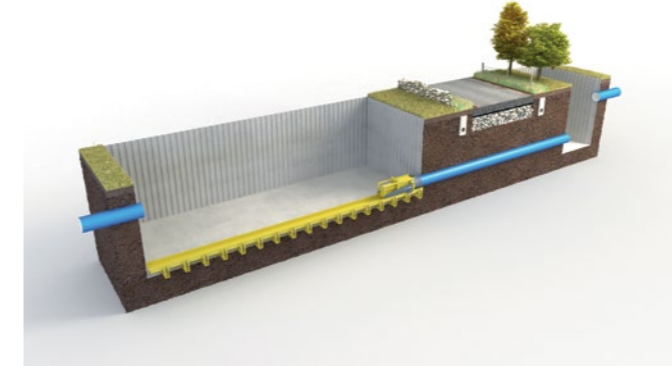
6 The trench is filled in using the previously excavated material and the topsoil is replaced.

7 Once the land above the pipeline has been fully reinstated, it can be returned to its previous use, for example farming.

This is an illustrative diagram showing the construction process of an onshore pipeline. Please note, these images are based on a single pipeline. The Humber Low Carbon Pipelines project will involve two pipelines and will take a similar approach. **For more information about our approach to construction**, please see the PEIR, Sections 2.8 of Chapter 2: Project Description (Volume II).

Crossing roads, railway, rivers and canals

To build the pipelines, roads, railways and waterways will need to be crossed. We will use a range of techniques to cross these features to avoid disruption.



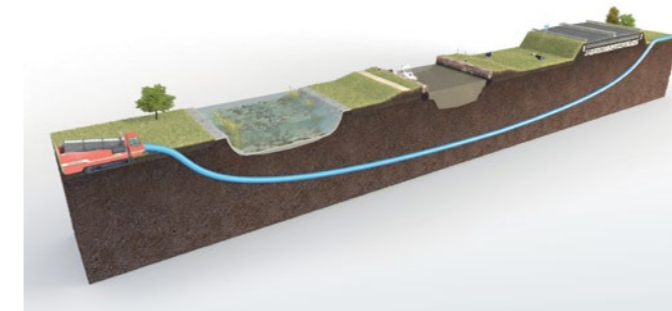
Auger bore

A long pit is dug on one side of the crossing with a shaft at the other side. A section of pipe is inserted with an auger – similar to the screw blade on a drill – inside it. This is pushed through to the other shaft, taking the pipe with it. Sections of pipe are welded together as they are pushed through.



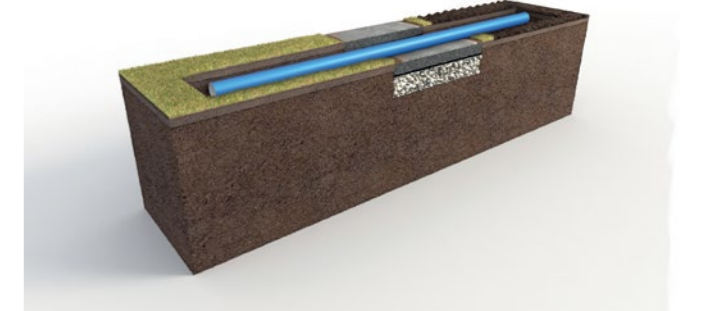
Micro tunnel

Shafts are dug at either side of the crossing. A cutting head digs a tunnel beneath it which is lined with concrete segments as it is dug. The pipe is then inserted in sections that are welded together as they are pushed through the tunnel.



Horizontal directional drilling

A special steerable drill is used to create an arced hole beneath the crossing, slightly bigger than the pipe. A winch then pulls the pipe through in a 'string' – a long, welded section of pipe assembled on site.



Open cut

For narrow roads or tracks with a low volume of traffic, a trench is dug across the road, closing it for a few days. The pipe is lowered into the trench, welded together in a string and the land is quickly reinstated.

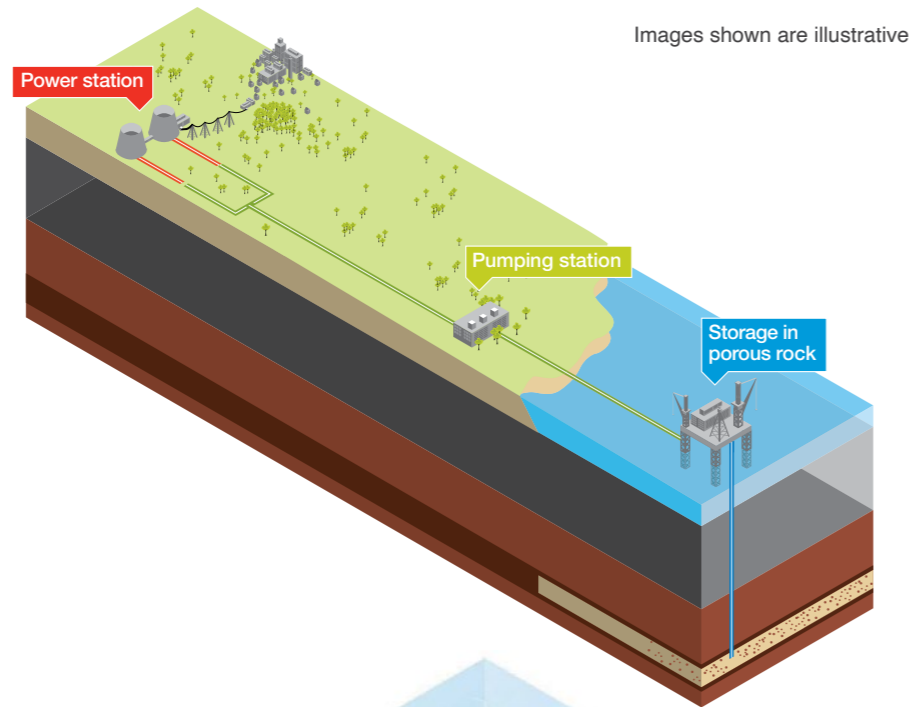
This is an illustrative diagram showing the construction process of an onshore pipeline. Please note, these images are based on a single pipeline. The Humber Low Carbon Pipelines project will involve two pipelines and will take a similar approach. **For more information about our approach to construction**, please see the PEIR, Sections 2.8 of Chapter 2: Project Description (Volume II).

Coast and offshore

The pipeline transporting captured carbon dioxide emissions would connect to a pump facility located near the coast. Here, the pressure of the carbon dioxide would be increased allowing for efficient transportation via a 103 km offshore sub-sea pipeline to the Endurance storage site beneath the North Sea for safe storage.

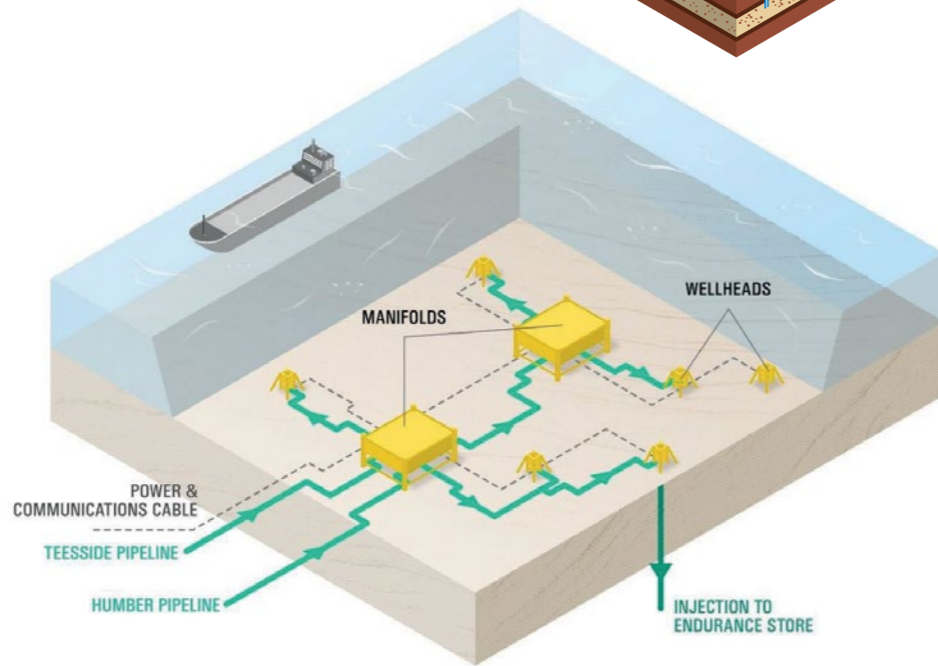
1,020m

The storage site is known as the Endurance Store and is located approximately 63km from the nearest coastline, at a depth of approximately 1,020 metres below the seabed surface. The Store contains highly saline water.



250 to 200 million years ago

The carbon dioxide will be injected into a Triassic-age geological feature, known as the Bunter Sandstone Formation. This means it was formed approximately 250 to 200 million years ago.



2025

Drilling of the wells into the Endurance Store is expected to commence in 2025 and will be developed in one stage. Five CO₂ injector wells and a monitoring well are planned. The CO₂ injector wells will be connected via two manifolds.

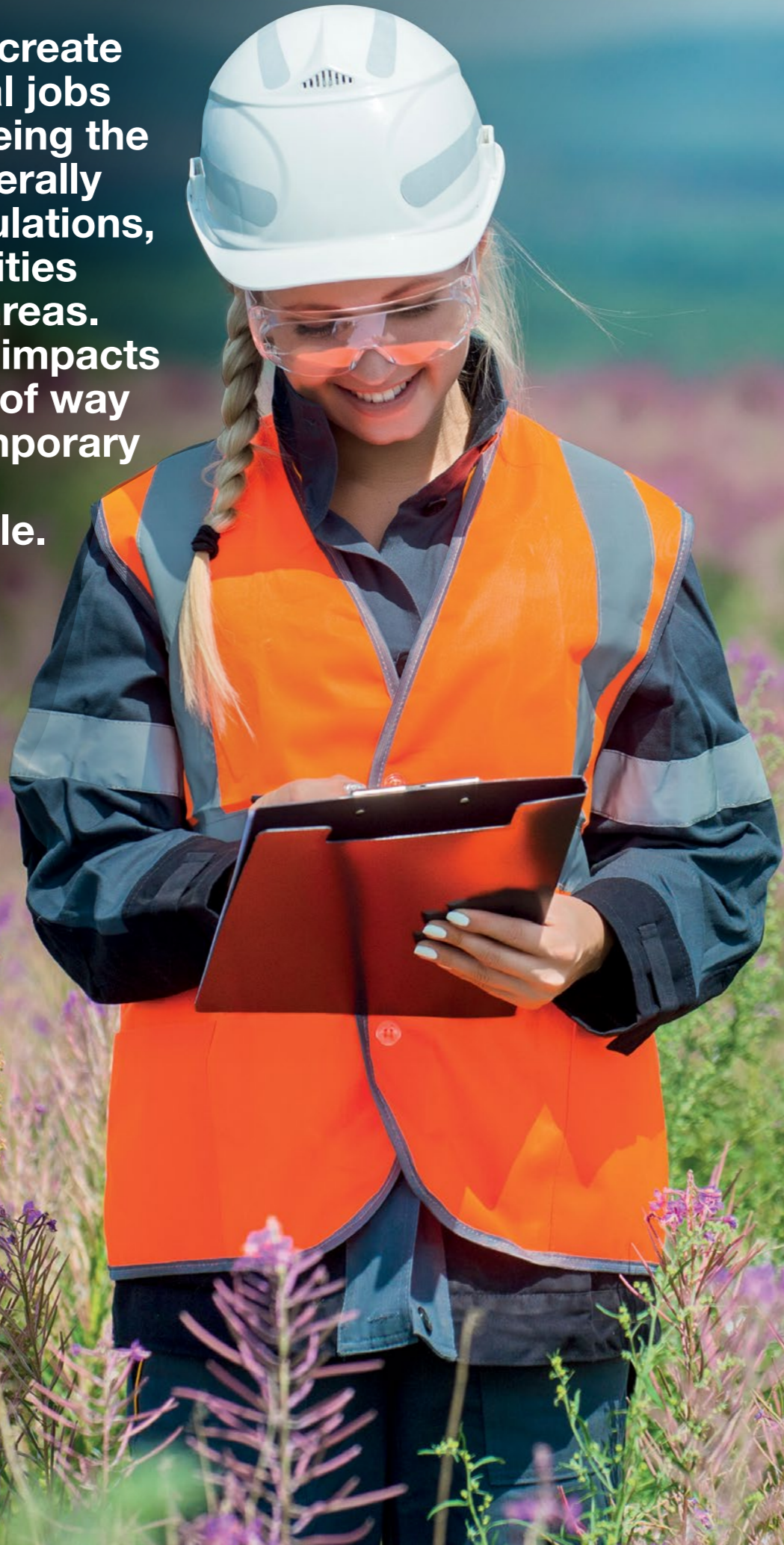


Offshore planning process

The plans for the sub-sea Transport and Storage facility and Northern Endurance Partnership (NEP) are being brought forward by BP as a separate project.

For more information on this, please contact BP at: netzeroteesside.co.uk/northern-endurance-partnership/

The Project will create and protect local jobs and we are routing the pipelines to generally avoid large populations, community facilities and recreation areas. We will manage impacts on public rights of way by providing temporary diversion routes where practicable.



Environmental considerations

National Grid Ventures has conducted extensive assessments of the potential environmental impacts of the project.

This has informed the route selection and helped us to identify where we can eliminate or reduce a particular effect.

For this consultation, we have published a detailed Preliminary Environmental Information Report (PEIR), and a non technical summary. Please read these documents for more information on potential environmental impacts and mitigation, including through construction, operation and decommissioning of the pipelines.



Biodiversity Net Gain – please give us your ideas

Biodiversity Net Gain (BNG) aims to leave the natural environment in a better state than it was beforehand. Please use your feedback form to share any suggestions of how the project could help to improve the local environment or play a role in enhancing local biodiversity.

Impact area	Overview of potential impacts
Agriculture and soils	There would be a temporary loss of agricultural land which would be reinstated, except for the permanent loss of small areas of agricultural land at above ground installations (AGIs).
Air quality	There is potential for short term impacts due to dust during construction, therefore we will provide mitigation to reduce dust from excavation and prevent it tracking onto local highways. We are consulting with local authorities to ensure we use the most appropriate construction routes to reduce impacts where practicable. The daily operation of the pipelines is not expected to have any impact on local air quality.
Ecology and biodiversity	We will minimise construction impact by seeking to avoid habitats and protected species such as badgers, water vole and bats; and timing works to avoid migrating and nesting birds. We do not expect significant impacts on habitats and species during operation.
Noise and vibration	Most construction is away from residential areas, however there is potential for short term impacts. We will mitigate these impacts where practicable, for example using temporary noise barriers. We are undertaking further assessments to understand and manage long-term impacts during operation, such as near the Pump Facility.
Traffic and transport	Construction vehicles will use pre-agreed routes, typically avoiding villages, high streets and single lane roads. We are working with the local authorities to agree appropriate routes to minimise local impacts. During operation there will be very little traffic associated with the pipelines.
Heritage	The route of the pipelines avoids listed buildings and other known historical features. We will be doing surveys to check for unknown historical features below ground. We are working closely with the local authorities and Historic England on this.
Hydrology and drainage	The impact of the Project on watercourses and flooding is being assessed. The pipelines will need to cross a number of rivers and drains and we are working with stakeholders to inform the design.

The development process

The proposed route for the Humber Low Carbon Pipelines project will be greater than 16km. Its length means that it is classified as a Nationally Significant Infrastructure Project (NSIP).

Planning

An NSIP is a major infrastructure project which, due to its size or nature, follows a separate consultation, application and determination process to an ordinary planning application.

NSIPs are governed by the Planning Act 2008, which requires us to apply for a Development Consent Order (DCO). This will be submitted to the Planning Inspectorate rather than a local planning authority.

The regulations for a DCO application mean there are a series of documents we must prepare at each stage. We have pulled out the main ones below.

In the case of energy-related development, the Planning Inspectorate acts on behalf of the Secretary of State at the Department for Business, Energy and Industrial Strategy (BEIS). It is the body responsible for carrying out the examination of our proposals. It will then make a recommendation to the Secretary of State for BEIS on whether or not to grant consent for the development.

The Secretary of State will then make the final decision on whether to grant consent for our project.

What is an Environmental Impact Assessment (EIA)?

The purpose of an EIA is to assess, measure and mitigate the likely significant effect of a proposed development on the environment. This will be used to inform the final Environmental Statement (ES) for the Humber Low Carbon Pipelines project which will be submitted to the Planning Inspectorate when we apply for development consent.

What is a Preliminary Environmental Information Report (PEIR)?

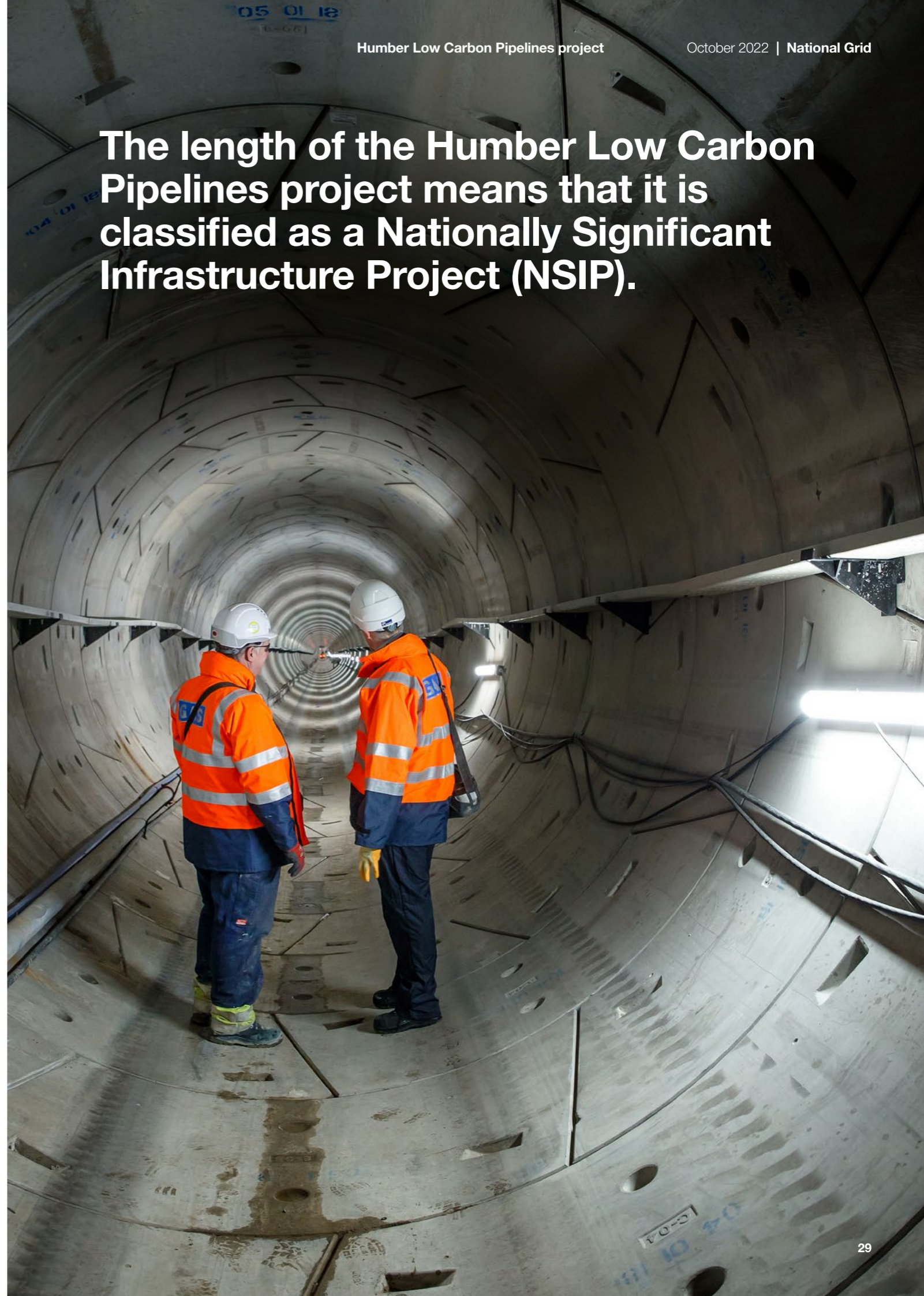
The PEIR is a technical document that sets out the findings from the extensive environmental studies and assessments carried out to develop our proposals. A non-technical summary of the PEIR (PEIR NTS) is available as an alternative source of this information.

Statement of Community Consultation (SoCC)

The SoCC sets out our programme of engagement with the local community and other important stakeholders as part of our statutory consultation and how we will obtain feedback from them.



The length of the Humber Low Carbon Pipelines project means that it is classified as a Nationally Significant Infrastructure Project (NSIP).



Have your say

Thank you for taking part in this consultation

How to submit your feedback

You can provide your comments in a number of ways:

In person: complete a printed feedback form and hand it to a member of the team at this event, or send it to the FREEPOST address listed below

Post: write to us at FREEPOST HLCP NATIONAL GRID

Email: send us an email at HumberLowCarbon@nationalgrid.com

Online: visit our website nationalgrid.com/humberpipelines and complete a digital feedback form. You can also find all copies of our consultation materials on our website

Consultation feedback must be submitted by 8.59am on 29 November 2022.

What happens next?

All the feedback we receive during this consultation will be recorded and considered. We will make changes to the proposals where appropriate. This process will be recorded in the Consultation Report which will be submitted as part of the planning application.

Once the plans have been finalised, we will submit the planning application for a Development Consent Order to the Planning Inspectorate.



Project timeline



Different formats

Please let us know if you or anyone you know require consultation documents in different formats, such as alternative languages, Braille or large print.

Contact us

Email us at: **HumberLowCarbon@nationalgrid.com**

Call us on: **0800 860 6255**

Write to us using: **FREEPOST HLCP NATIONAL GRID**

Website: **nationalgrid.com/humberpipelines**