

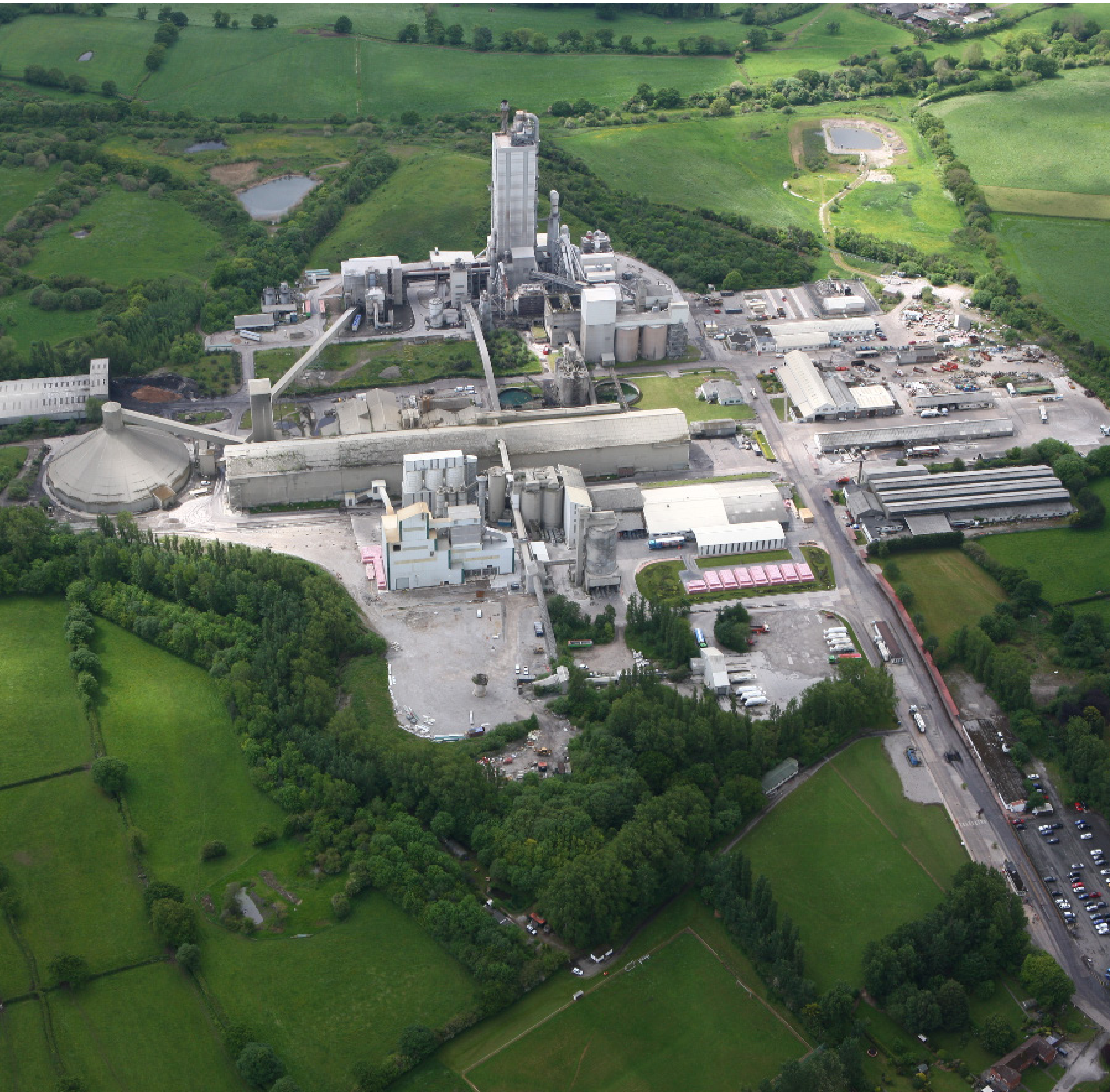
# Welcome

## Padeswood Carbon Dioxide Spur Pipeline Proposed Development

The Padeswood Spur Pipeline Proposed Development is part of an industrial decarbonisation project that aims to tackle carbon dioxide emissions and support economic growth in north Wales and the north west of England.

The Proposed Development would transport carbon dioxide from the new carbon capture plant at the Heidelberg Materials UK cement works in Padeswood, Flintshire to be safely stored underground in Liverpool Bay.

It would connect to the HyNet Carbon Dioxide Pipeline at Northop Hall, which was granted development consent by the Secretary of State for Energy Security and Net Zero in March 2024.



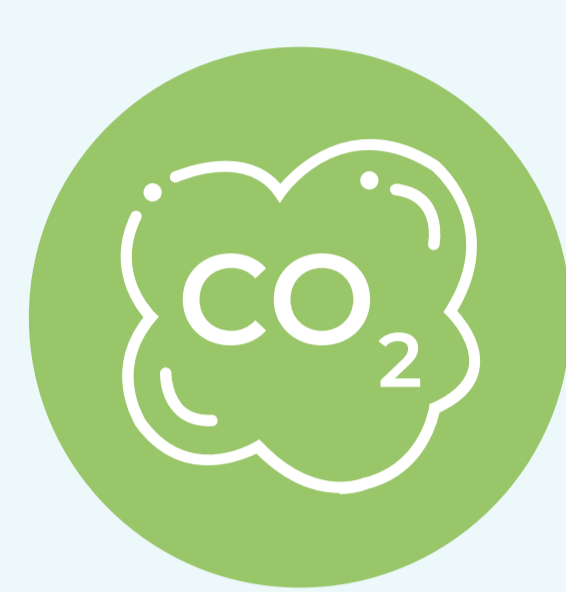
[Hynethub.co.uk](https://hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)



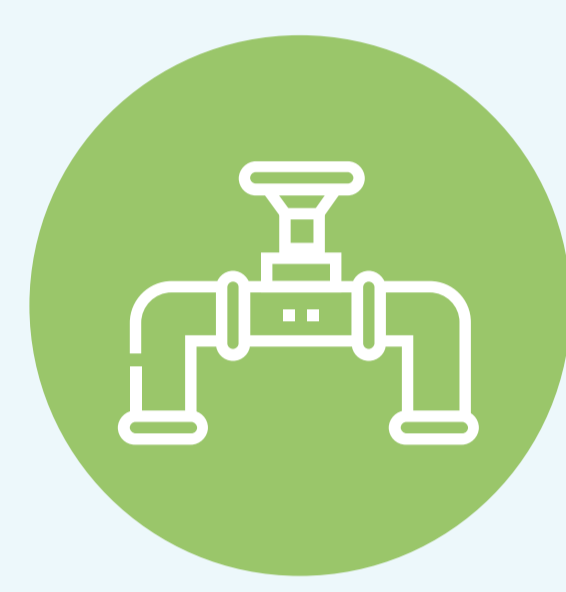
# What is carbon capture and storage?

Carbon Capture and Storage (CCS) is a safe and proven technology that can capture and store up to 95% of CO<sub>2</sub> emissions produced in industrial processes.

## How it will work for the Padeswood Carbon Dioxide Spur Pipeline Proposed Development:



**Step one:** Install technology that will capture the CO<sub>2</sub> emissions at the industrial plant, in this case the Heidelberg Materials UK cement works in Padeswood. This step is outside the Padeswood Spur Pipeline Proposed Development as Heidelberg Materials UK is responsible for the capture plant.



**Step two:** The CO<sub>2</sub> is then transported via a pipeline from the industrial plant to the Northop Hall AGI where it connects to the HyNet Carbon Dioxide Pipeline. **This is the step we are applying for.**



**Step three:** From the Northop Hall AGI, the CO<sub>2</sub> is transported via the HyNet Carbon Dioxide Pipeline to be stored deep beneath the seabed in carefully selected offshore sites. These storage sites are depleted natural gas fields beneath Liverpool Bay, which have previously held natural gas securely for millions of years.

View of the Point of Ayr Terminal

Hynethub.co.uk  
hello@hynethub.co.uk



# Identifying the Padeswood Spur Pipeline route

To determine the best route from the Heidelberg Materials UK cement works at Padeswood to the HyNet Carbon Dioxide Pipeline connection at the Northop Hall AGI, we have taken engineering, environmental, planning and landownership considerations into account.

**When planning the route, we focused on these key factors:**



Protecting the environment and local communities



Ensuring the carbon dioxide transportation is safe and secure



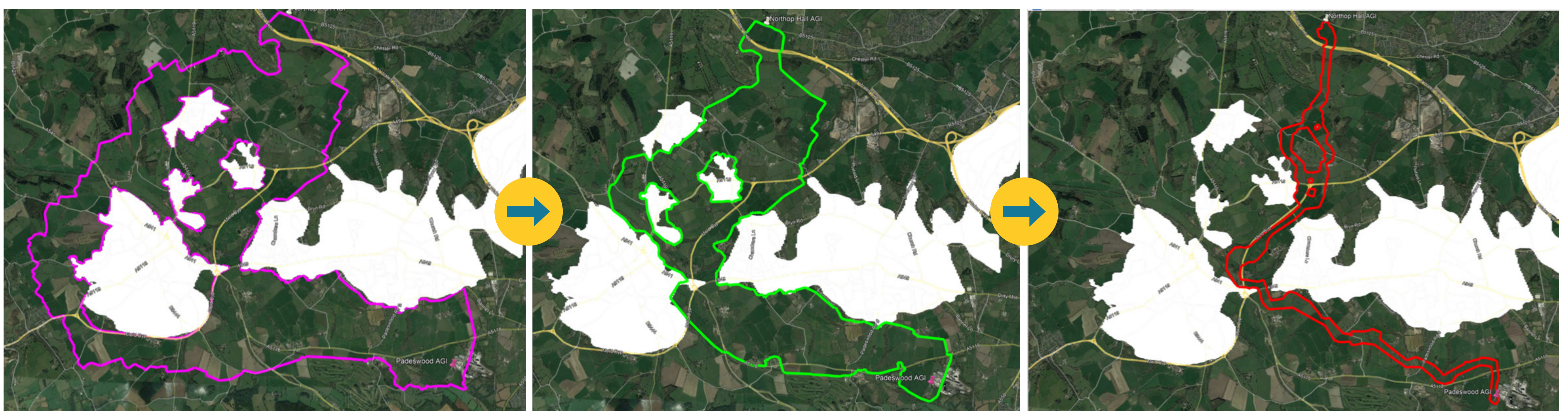
Making sure the route is technically sound and causes minimal disruption



Boosting local benefits by maximising the positive socio-economic effects in the area



Ensuring the Padeswood Spur Pipeline Proposed Development is cost-effective



Maps showing the stages of the route design process.

The area for the pipeline route was narrowed down based on engineering, planning and landowner considerations.

[Hynethub.co.uk](https://hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)



# What will be built as part of the Proposed Development?

- Padeswood Above Ground Installation (AGI)
- A spur pipeline transporting carbon dioxide, connecting the Padeswood AGI to the Northhop Hall AGI (which has already been granted development consent as part of the HyNet Carbon Dioxide Pipeline).
- Additional equipment at Northhop Hall AGI
- Temporary construction compounds



[Hynethub.co.uk](http://Hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)



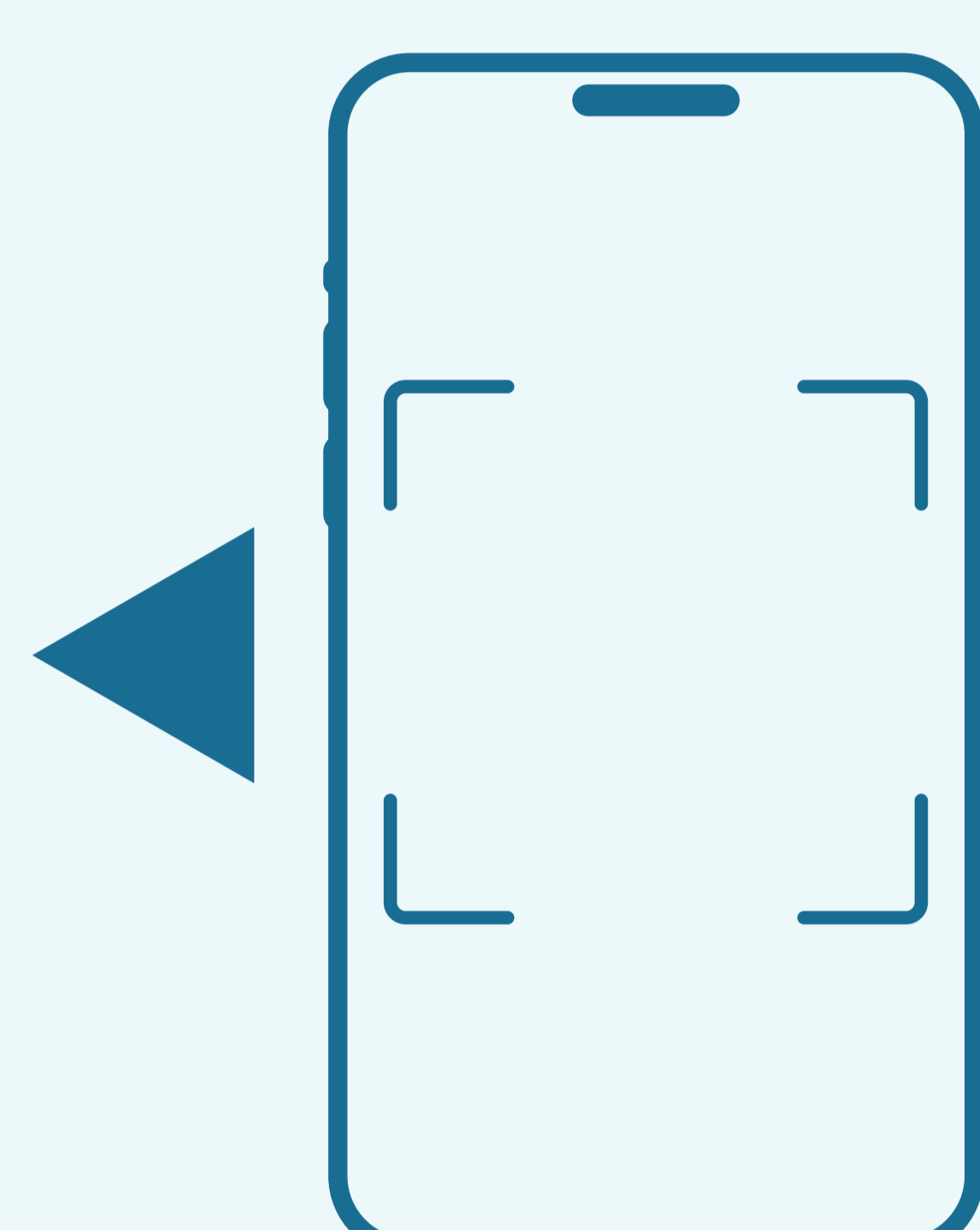
# Padeswood Above Ground Installation (AGI)

To ensure the safe and efficient operation of the pipeline, the AGI is comprised of a fenced compound housing equipment designed to receive carbon dioxide from the Heidelberg Materials UK Cement Works.

The AGI will be located inside of the proposed Heidelberg Materials UK carbon capture facility which will be located within the land boundaries of the cement works.

The carbon capture facility at the Padeswood cement works is subject to a separate planning application, which was submitted to Welsh Ministers by Heidelberg Materials UK in September 2024.

To view the application, visit [planningcasework.service.gov.wales](https://planningcasework.service.gov.wales) quoting the case reference '**DNS CAS-02009-W1R1Z7**'.



Scan the QR code to  
visit our website



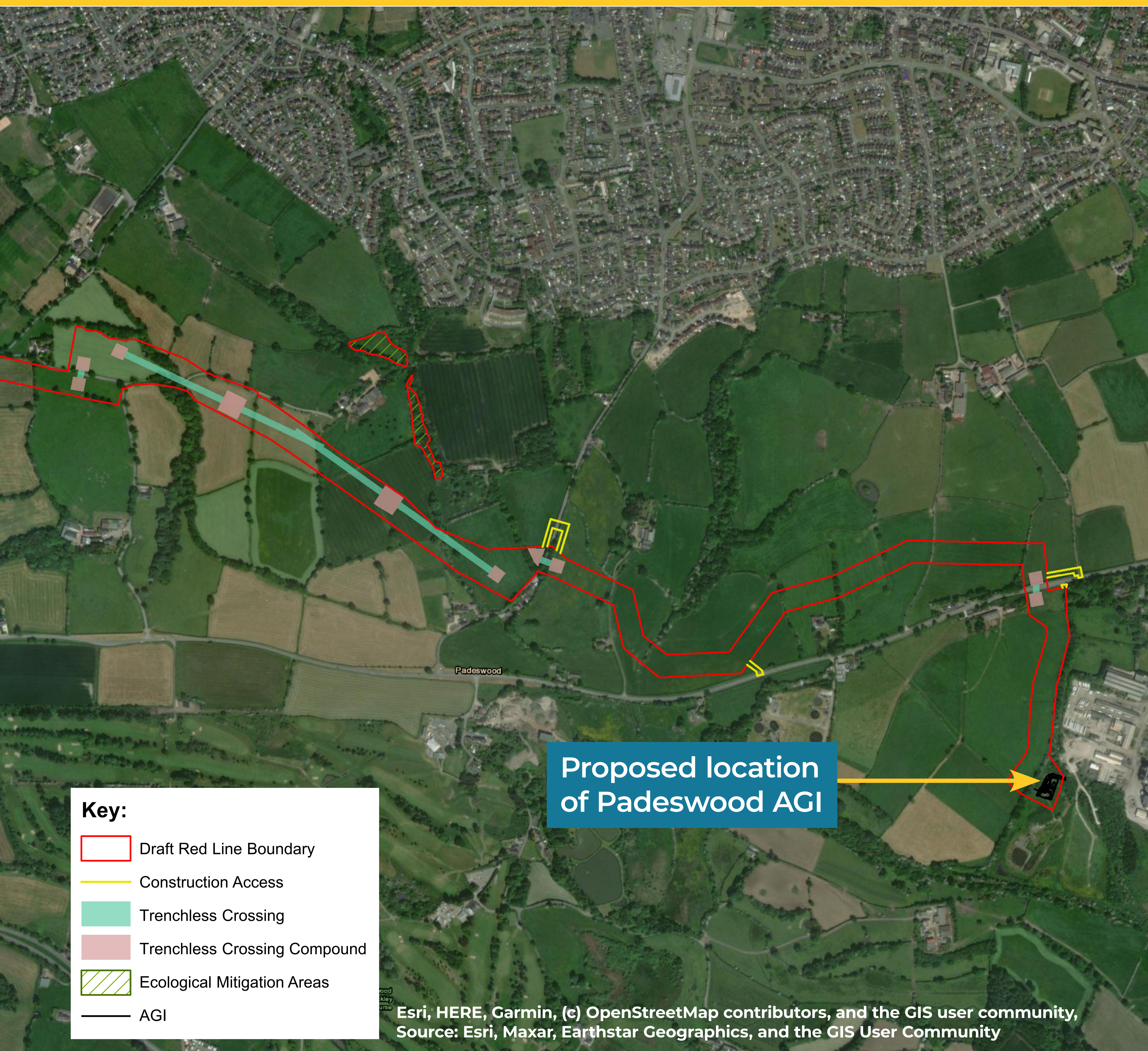
Example: A typical Above Ground Installation in a rural setting

[Hynethub.co.uk](https://hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)



# Padeswood Spur Pipeline Route Section 1

Padeswood cement works and Buckley



In this section, the proposed carbon capture facility on the site of the Padeswood cement works will connect to the Padeswood Carbon Dioxide Spur Pipeline via the Padeswood AGI. The Padeswood AGI will be in the north-west corner of the carbon capture facility.

The Padeswood Spur Pipeline will run north of the Padeswood AGI and cross under the A5118, then turn to the west and run to the south of Buckley, adjacent to the A5118. It then runs in a north-west direction crossing Padeswood Road South and the Foundary Drain watercourse.

We are proposing ecological mitigation areas to the south of Buckley, west of Padeswood Road South. Situated close to an Ancient Woodland and riverbank habitats, these areas could include planting to expand habitat and improve the environment in these areas.

[Hynethub.co.uk](http://Hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)



# Padeswood Spur Pipeline Route Section 2

Mynydd Isa and Mold



The Padeswood Carbon Dioxide Spur Pipeline route will pass between Mynydd Isa and Mold.

The route runs to the south of Buckley in a north-west direction towards Mynydd Isa, crossing the Wat's Dyke woodland and watercourse, and Rose Lane. The route will then pass between Mynydd Isa and Mold, crossing under the A549 Mold Road east of the Wylfa roundabout.

The pipeline will then cross under the Mold Bypass twice, to the north of the Wylfa roundabout and then run alongside the Mold Bypass in a north-east direction.

For Mold Bypass crossings, specialist trenchless crossing installation techniques will be used. This means the road will remain open during installation.

[Hynethub.co.uk](http://Hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)



# Padeswood Spur Pipeline Route Section 3

New Brighton and Sychdyn



At this section, the Padeswood Carbon Dioxide Spur Pipeline will run adjacent to the Mold Bypass before crossing under Bryn-y-Baal Road. It will then run further north and go under the A494, to the east of the New Brighton roundabout, continuing to the north and crossing Alltami Road.

For these roads, the pipeline will be installed using trenchless crossing techniques to avoid long-term closure during installation.

We are proposing a temporary Centralised Construction Compound in this area, off the A5119 near the Shell service station. This will serve as a central point for storing equipment, pipe and other materials to be distributed to storage areas within the other compounds.

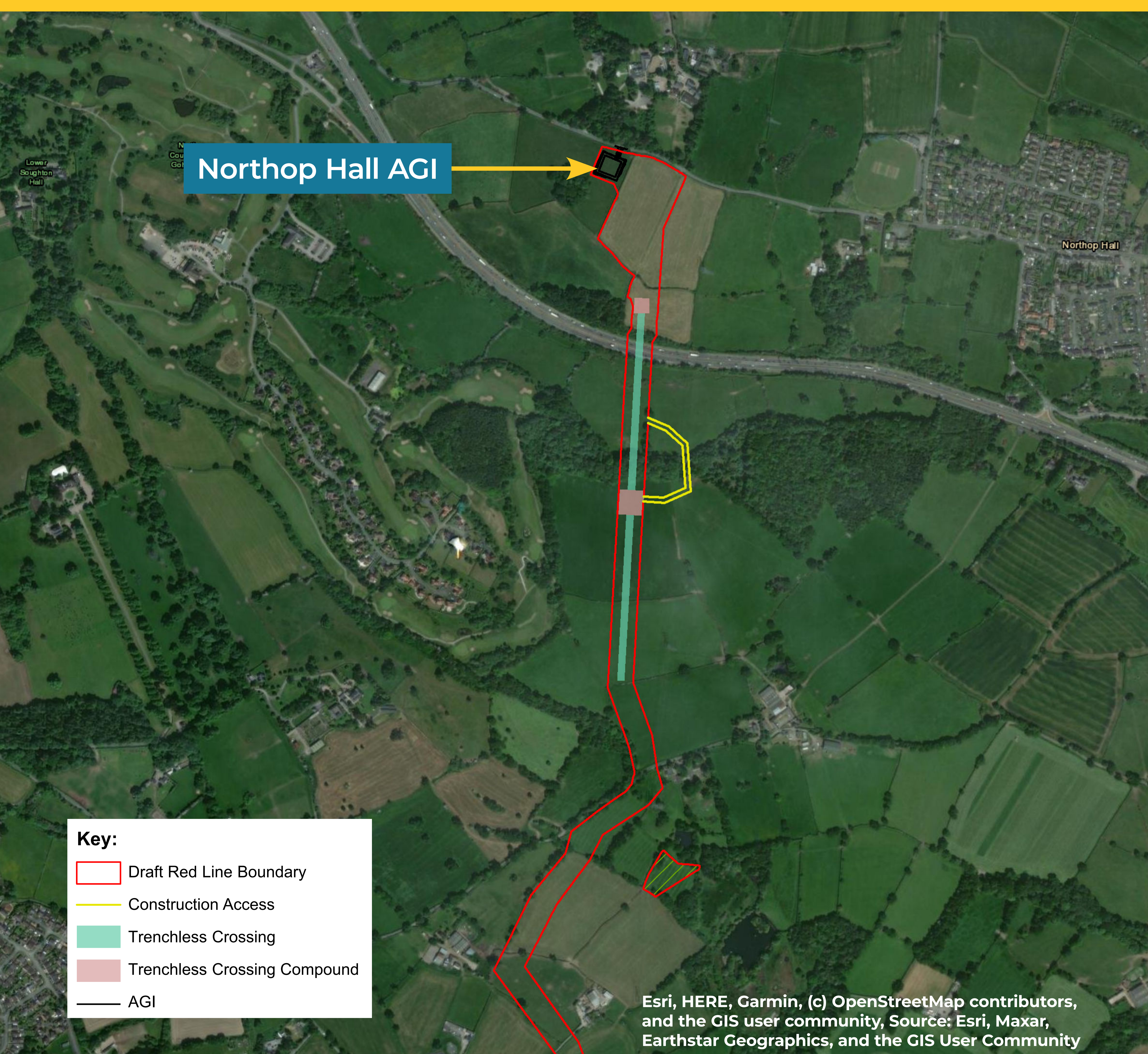
[Hynethub.co.uk](http://Hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)





# Padeswood Spur Pipeline Route Section 4

## Northop Hall



In this section, the Padeswood Carbon Dioxide Spur Pipeline will connect to the HyNet Carbon Dioxide Pipeline, which will transport the CO<sub>2</sub> onwards to undersea storage at Liverpool Bay.

The pipeline will route northwards towards the A55 and an area of Ancient Woodland. It will then run north of the A55 to connect to the Northop Hall AGI, which links to the HyNet Carbon Dioxide Pipeline.

At the road crossings and under this area of Ancient Woodland, the Padeswood Spur Pipeline will be installed using trenchless crossing techniques to minimise impacts and avoid the need to close and divert the A55.

Additional equipment will be installed at the Northop Hall AGI to facilitate the connection. None of this equipment will be more than 5 meters high.

[Hynethub.co.uk](http://Hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)

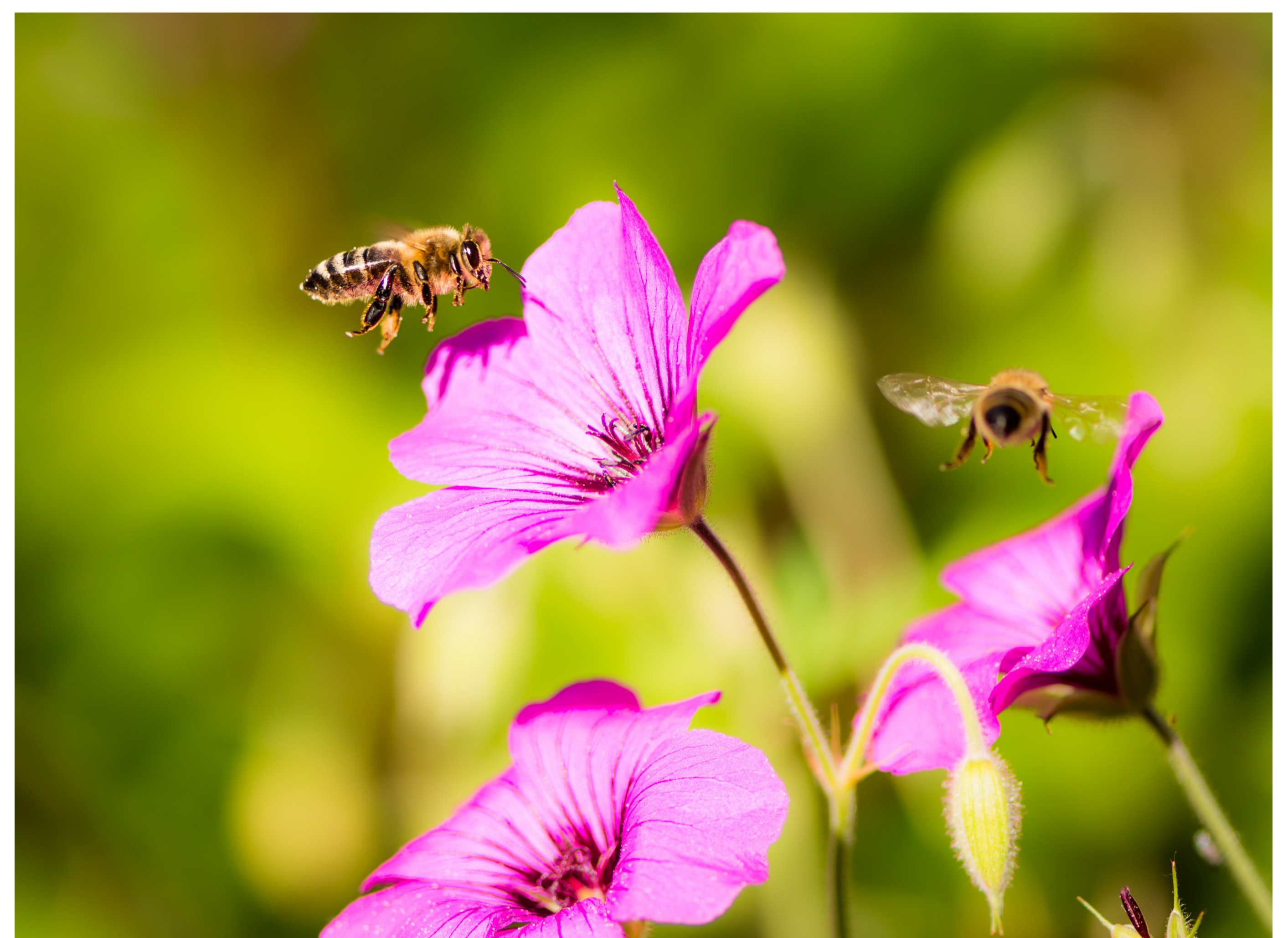


# Minimising our environmental impact

As part of the planning process, an Environmental Impact Assessment (EIA) is being carried out to understand the potential effects that the proposals would have on the environment. This considers the potential effects on the construction, and maintenance of the proposed development.

The Environmental Statement will outline topics as well as any mitigations necessary to ensure limited impact. This includes:

- Air quality
- Climate change
  - Climate resilience
  - Greenhouse gases
- Cultural heritage and archaeology
- Ecology and biodiversity
  - Designated Sites
  - Priority habitats including trees and hedgerows
  - Protected species
  - Biodiversity net gain
- Land and soils
- Landscape and views
- Major accidents and disasters
- Mitigation and safety measures
- Noise and vibration
- Population and human health
- Traffic and transport
- Water management and flooding



**The draft Environmental Statement is available for comment as part of this consultation.**

A Non-Technical Summary (NTS) of all the findings in the draft Environmental Statement is also available to view in Welsh and English. The documents can be viewed here today or online at [hynethub.co.uk/padeswood](https://hynethub.co.uk/padeswood)

**Hynethub.co.uk**  
**hello@hynethub.co.uk**




# Have your say

We want your feedback on our plans for the Padeswood Spur Pipeline and the draft planning application documents we have made available.

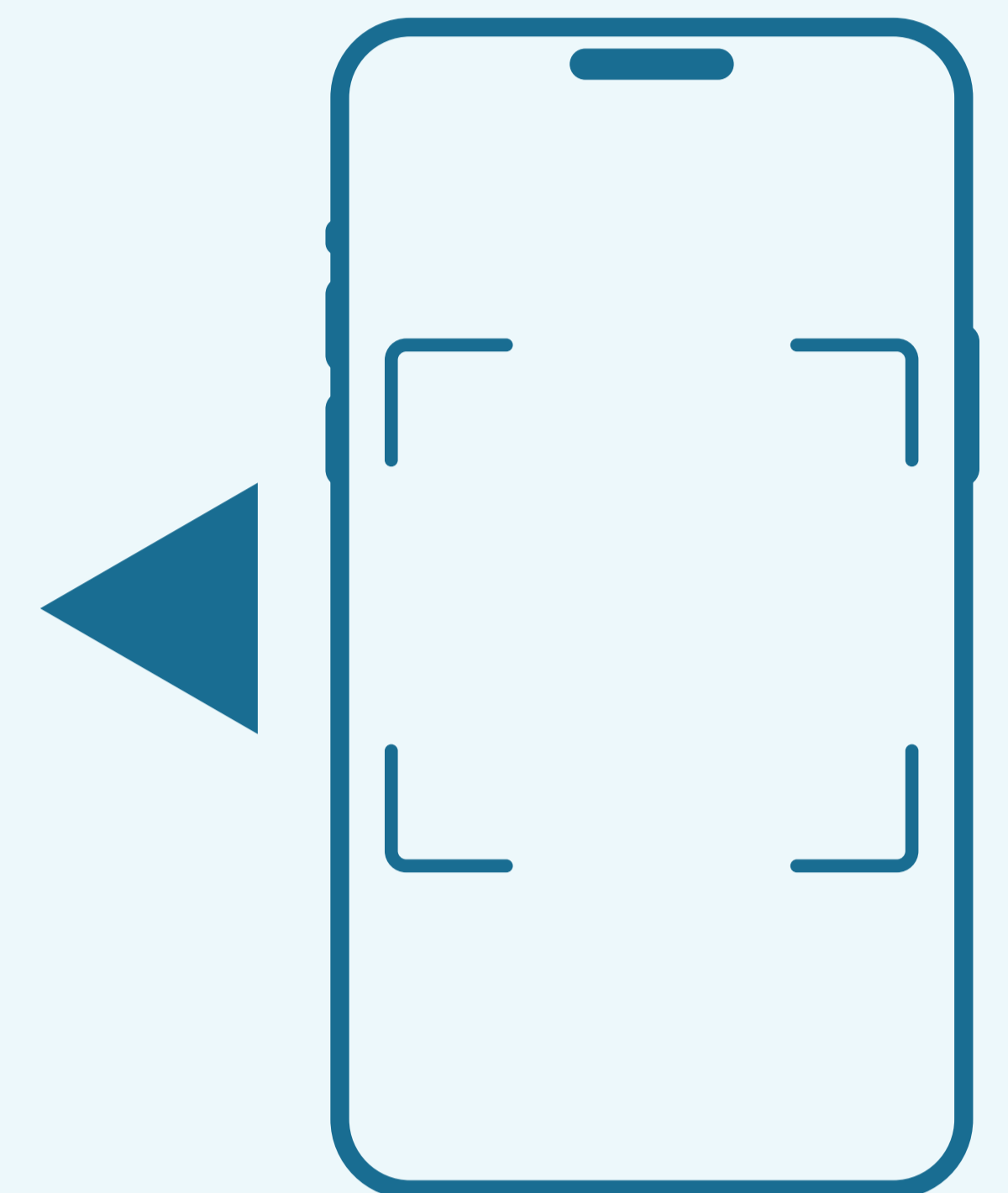
This consultation will run from **26 March to 29 April 2025**. Please submit your feedback by 11.59pm on 29 April 2025 to ensure it is considered.

You can provide your feedback by:

 Completing the feedback form on the project website: [hynethub.co.uk/padeswood](https://hynethub.co.uk/padeswood) or scan the QR code

 Sending an email to: [hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)

 Sending written feedback to our freepost address: **Freepost LBCCS**



Scan the QR code to visit our website

Hard copies of the feedback form are available, please ask a member of the team here today.



[Hynethub.co.uk](https://hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)



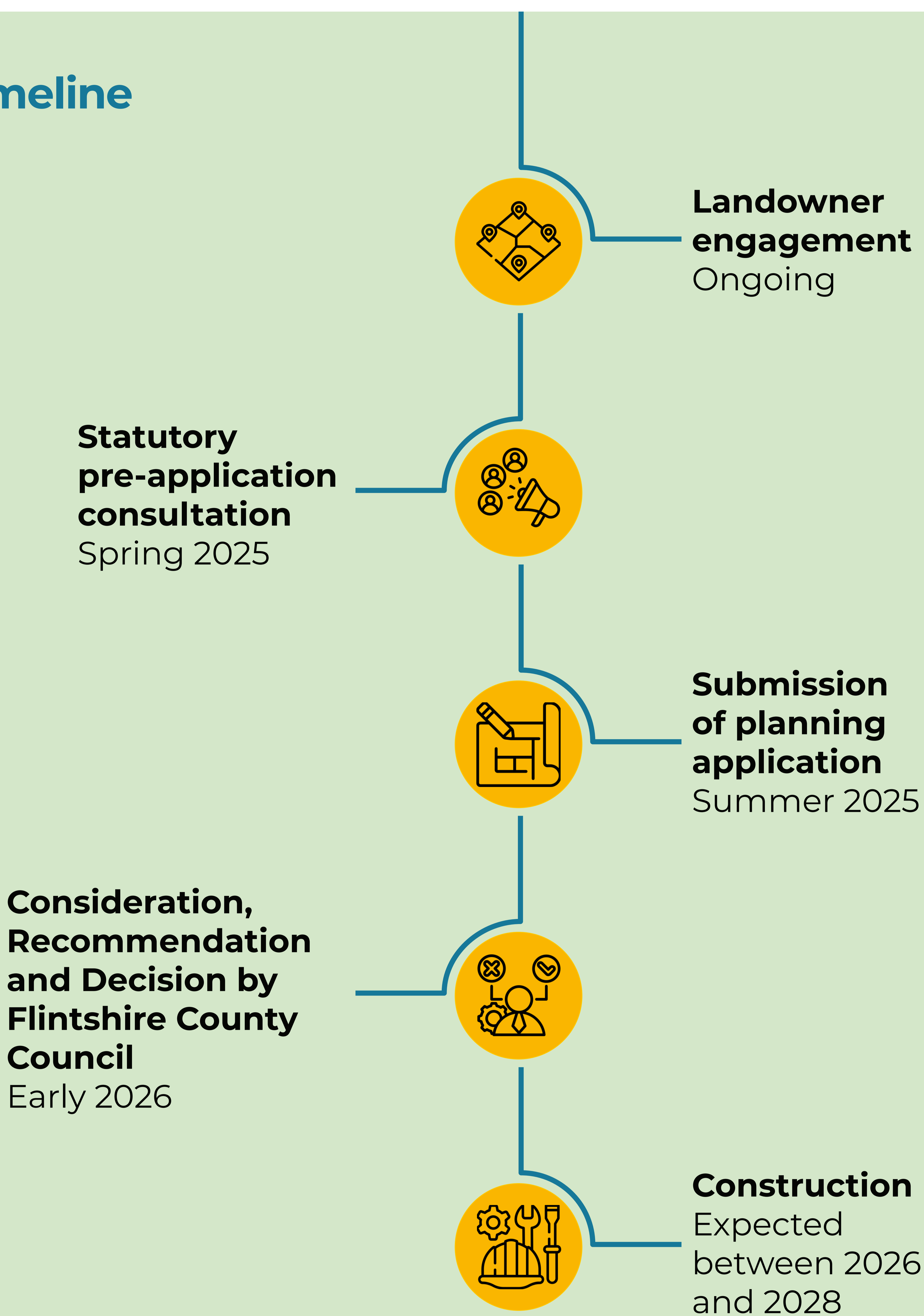
# Next steps

The Padeswood Spur Pipeline lies within the Local Authority boundary of Flintshire County Council. To gain consent to build the proposed development, Liverpool Bay CCS Limited (the Applicant), a member of the Eni SpA group, will prepare a planning application to be submitted under the Town and County Planning Act 1990 (as amended) to Flintshire County Council in summer 2025.

Once the application has been submitted you will have another opportunity to have your say by providing comments on the application, directly to the Council.

Draft planning application documents are available for comment as part of this consultation.

## Timeline



[Hynethub.co.uk](https://hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)



# Keeping safe during construction

Construction will be carefully managed to keep everyone safe through the following approaches:

- Temporary access tracks will be established from the existing road network to minimise disruption and local environmental impacts.
- Open trenching is used across minor roads and tracks, while trenchless crossings will be used under major roads. Temporary traffic marshalling shall be in place whenever construction equipment is required to cross major roads.
- Waste will be managed and disposed of in accordance with existing local regulations.
- Throughout construction, core working hours are likely to be from 8am to 6pm on weekdays (excluding bank holidays) and from 8am to 1pm on Saturdays.
- Some locations where trenchless crossings are being carried out will require working 24 hours a day, but this will be for short periods.
- Temporary construction compounds will be set up to facilitate construction activities, commissioning and landscaping works.



[Hynethub.co.uk](https://hynethub.co.uk)  
[hello@hynethub.co.uk](mailto:hello@hynethub.co.uk)

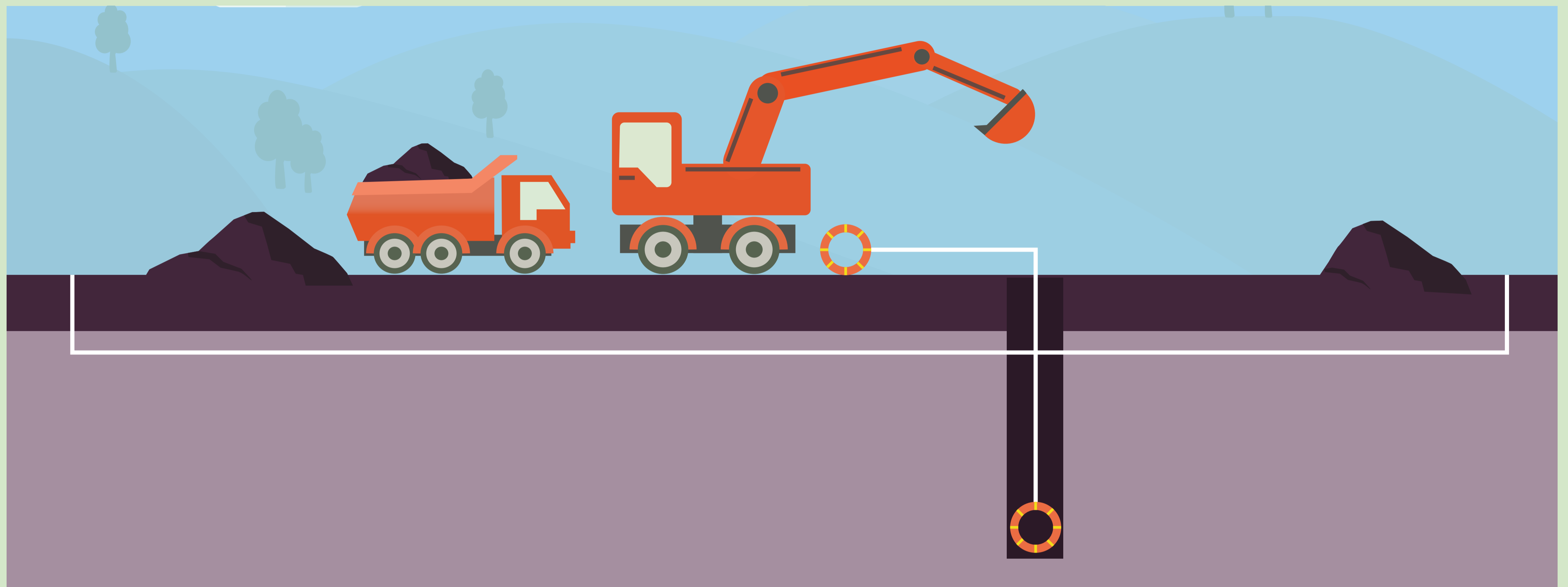


# The construction process

The method of installing the buried proposed spur pipelines will mostly be by the open-cut trench technique, with some areas requiring trenchless crossings.

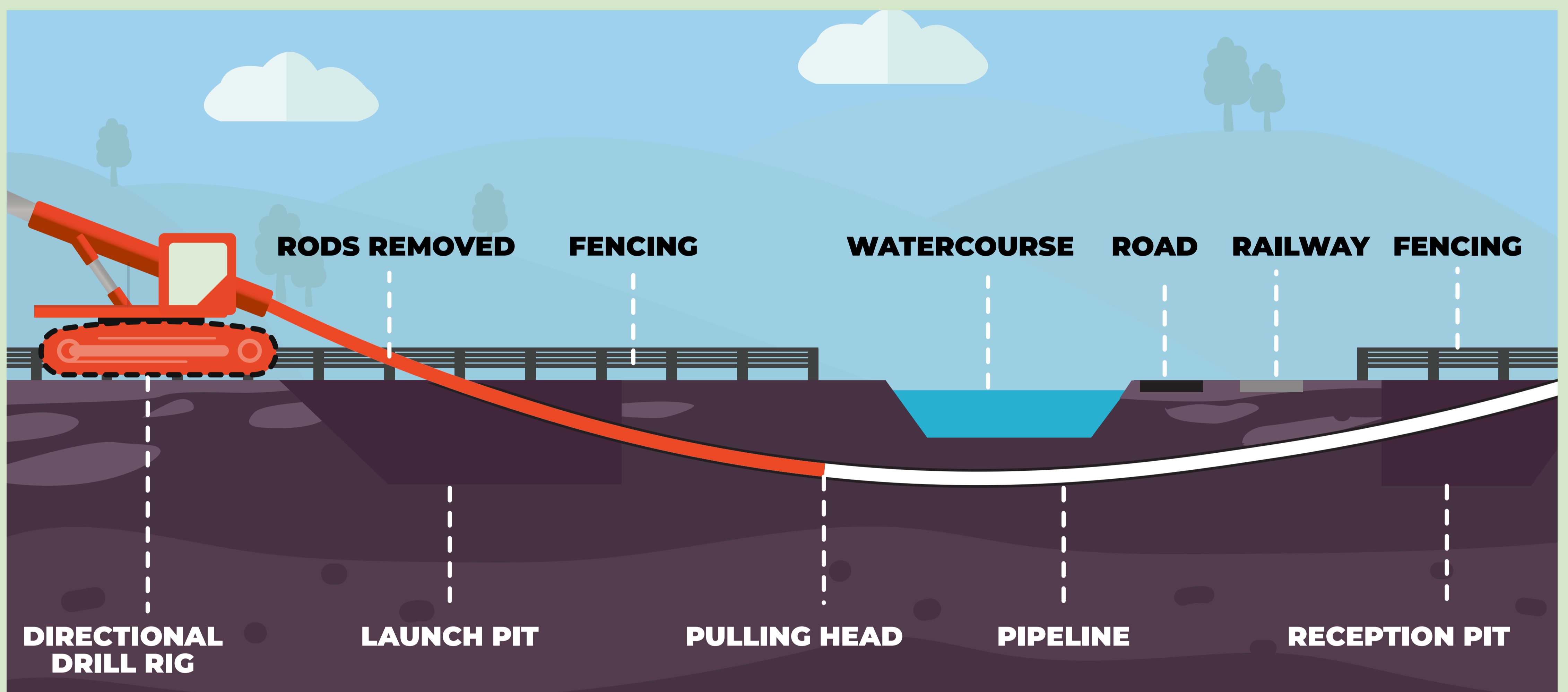
The open-cut trench technique will involve digging soil to form a trench, lowering the pipe into the trench, and backfilling it with the excavated soil.

## Open cut trenching

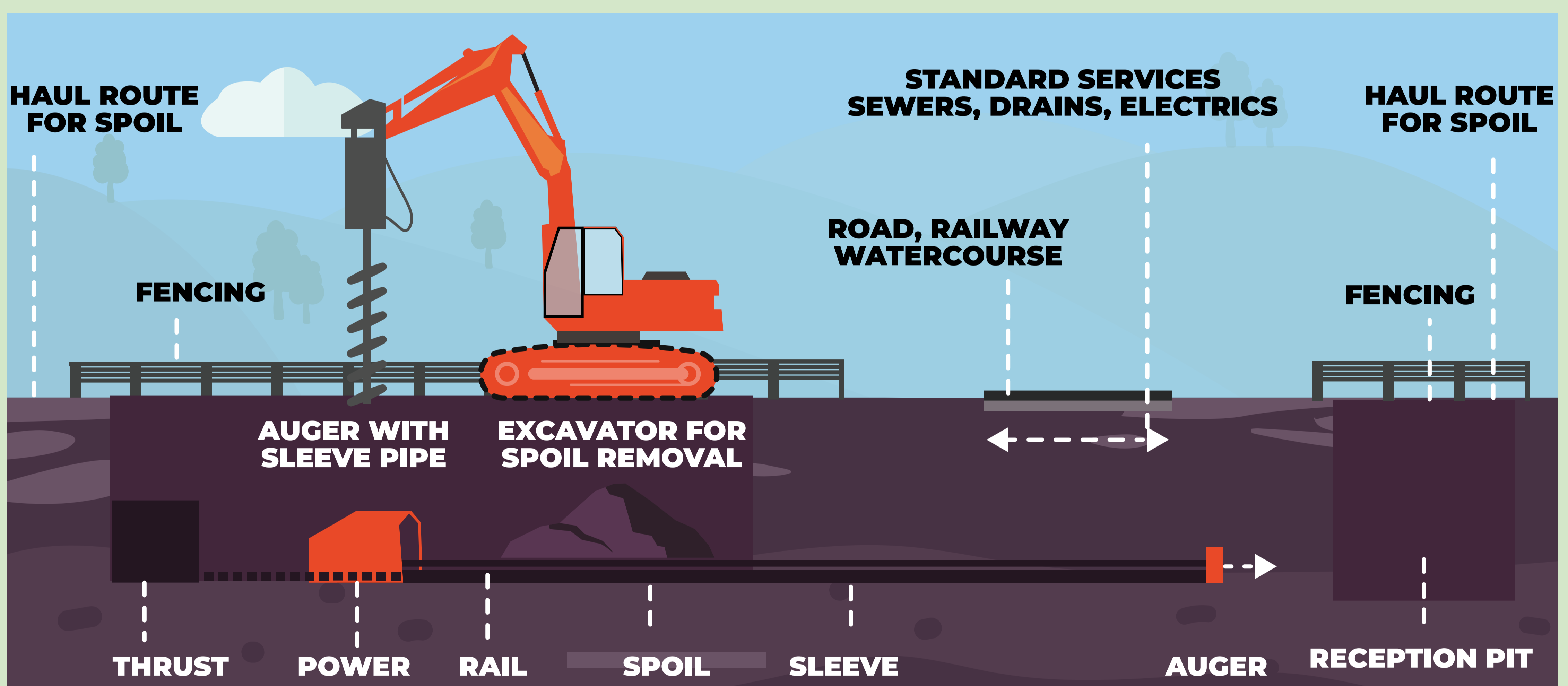


Trenchless techniques are used when installing pipelines under railway lines, major roads and riverbeds. In these cases, we will use methods such as:

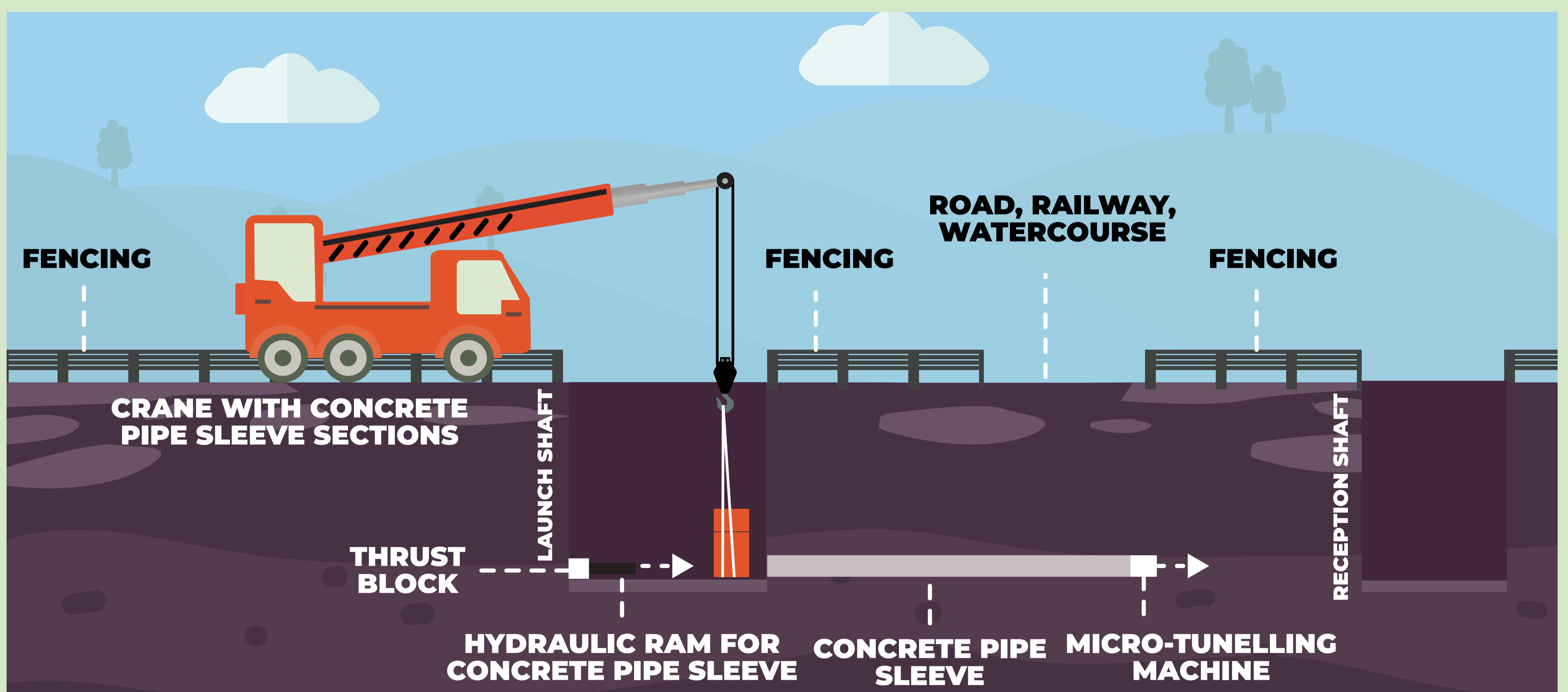
## Horizontal directional drilling



## Auger boring



## Micro-tunnelling



Hynethub.co.uk  
hello@hynethub.co.uk

