



H2
Teesside



H2Teesside consultation December update

As one of the UK's largest low carbon hydrogen production facilities, H2Teesside aims to bring jobs, customers and investment to Teesside.

H2Teesside aims to be one of the biggest blue hydrogen production facilities in the UK, delivering economic growth for Teesside and the domestically-produced low carbon hydrogen that the UK needs.

It will produce approximately 160,000 tonnes of low carbon hydrogen per annum, which will displace existing natural gas consumption by industrial emitters in Teesside, and capture and send for secure long-term storage approximately two million tonnes of CO₂ per year.

Along with its sister project HyGreen Teesside and a number of other proposed projects in the area, H2Teesside can strengthen Teesside's development into the UK's leading hydrogen hub, creating new high quality jobs, supporting local education and skills development and

kick-starting a highly-skilled UK-based hydrogen supply chain.

bp will also invest in green skills by launching a dedicated education skills programme for H2Teesside. The programme will aim to reach more than 5,000 people to help inspire the next generation of talent, ensuring local people benefit from near-term job opportunities and advancing social mobility.

Our vision

At bp, we are taking action through transformative projects that will help us achieve our net zero ambition.

As operator of the Northern Endurance Partnership, we are helping build the infrastructure needed to safely capture, transport and store CO₂ from a range of

power, hydrogen and industrial businesses in Teesside and the Humber who together make up the East Coast Cluster (ECC). The ECC aims to remove up to 27 million tonnes of CO₂ emissions a year by 2030.

We're also operators of Net Zero Teesside Power which will be the world's first commercial scale, gas-fired power station with carbon capture technology, capable of capturing approximately two million tonnes of CO₂ a year.

In addition to H2Teesside, Teesside is also the planned location of bp's green hydrogen project – HyGreen Teesside. Together, H2Teesside and HyGreen Teesside, could deliver over 15% of the UK Government's target of developing 10GW of hydrogen production by 2030.

Next steps

Thank you to everyone who took part in our statutory consultation for the H2Teesside proposed development between 14 September and 26 October 2023.

The feedback from that consultation has been considered and we have carried out further technical work. This has allowed us to review our project design. We have identified several revisions on which we are now consulting.

This second round of consultation is open between 13 December 2023 and 23 January 2024.

In advance of our first consultation round, we published a Preliminary Environmental Information (PEI) Report, when the Proposed Development for H2Teesside was in an early stage of design development. The PEI Report presented an assessment based on a worst-case scenario for the Proposed Development and the Order Limits presented in the PEI Report gave flexibility for further design development to take place. As a result of our further technical works, the design of the Proposed Development has now developed, demonstrated by the amount of area removed from the Order Limits, shown in black hatching on Figure 1 (overleaf). These changes are minor and have no worsening effect than that previously identified in the PEI Report.

There are seven proposed additions (shown in yellow hatching on Figure 1) to the Order Limits for which greater details are provided below, these changes have come about as a result of further technical and design work, assessment and in response to feedback received during the first round of statutory consultation.

In addition, there have been a number of small changes made to the Order Limits that are not covered in detail below. These minor changes predominantly relate to enabling the use of existing access roads required to deliver the Proposed Development. These changes are minor in nature and have no worsening effect than that previously identified in the PEI Report.

These small changes can be seen in greater detail [here](#).



Introduction to design changes

The following sections outline the seven proposed additions to the new Order Limits, including a description of the works taking place and a comparison of effects to that reported in the PEI Report.

Some of the changes comprise the inclusion of Above Ground Installations (AGIs). AGIs are made up of a range of structures and pieces of equipment that are designed to be kept at a low level – usually around two metres tall. AGIs comprise:

- Pressure reduction units that control the flow or pressure of hydrogen into the network.
- Instrument and control kiosks that house the equipment that monitors parameters like flow, pressure and temperature of the hydrogen.
- Facilities that enable inspection and cleaning of the pipeline.

Where a topic is not mentioned in the tables below, there are no differences of effect against what has been assessed and presented within the PEI Report and previously consulted on.

This document is intended as an update to what has been assessed and presented within the PEI Report. Please read this document alongside the PEI Report, located [here](#) to get a full picture of the Proposed Development and its potential environmental effects.

Figure 1: Map displaying the proposed additions and removals to the Order Limits since the publishing of the PEIR.

Key:  **Red line boundary**

 **Area added:** Total 70.55 acres

 **Area removed:** Total 2166.42 acres





change

1

Area at Venator

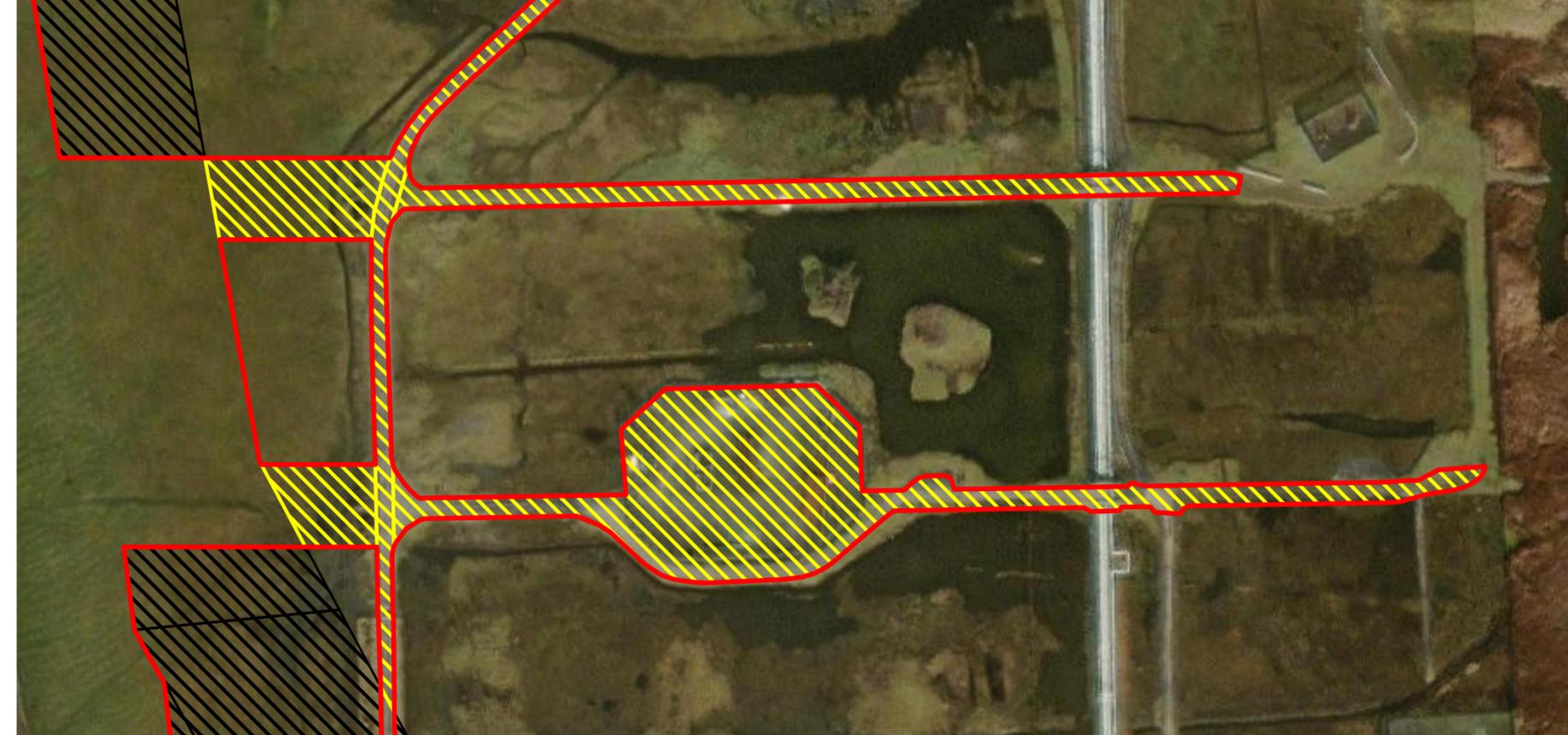
Description of works

Installation of Above Ground Installation (AGI) within the Venator site on the area of land highlighted in yellow.

Potential environmental effects

Ecology and nature conservation

Although this land has not been subject to detailed baseline survey, there are unlikely to be any new or different significant effects from that reported in the PEI Report from this change. This area is predominantly hardstanding and directly adjacent to areas of land in similar use and similar works are already considered in the PEI Report. Potential significant effects to the nearby Special Protection Area (SPA) and adjacent habitats have already been reported. Site-specific mitigation will be developed in consultation with Natural England and other stakeholders. The results of all surveys and mitigation measures will be provided within the Environmental Statement (ES).



change

2

North of Seal Sands roundabout

Description of works

Areas in yellow required for natural gas distribution network connection. These areas would be required for pipe works to support installation of the trenchless crossing to the existing NGN AGI located approx. 350m to the east.

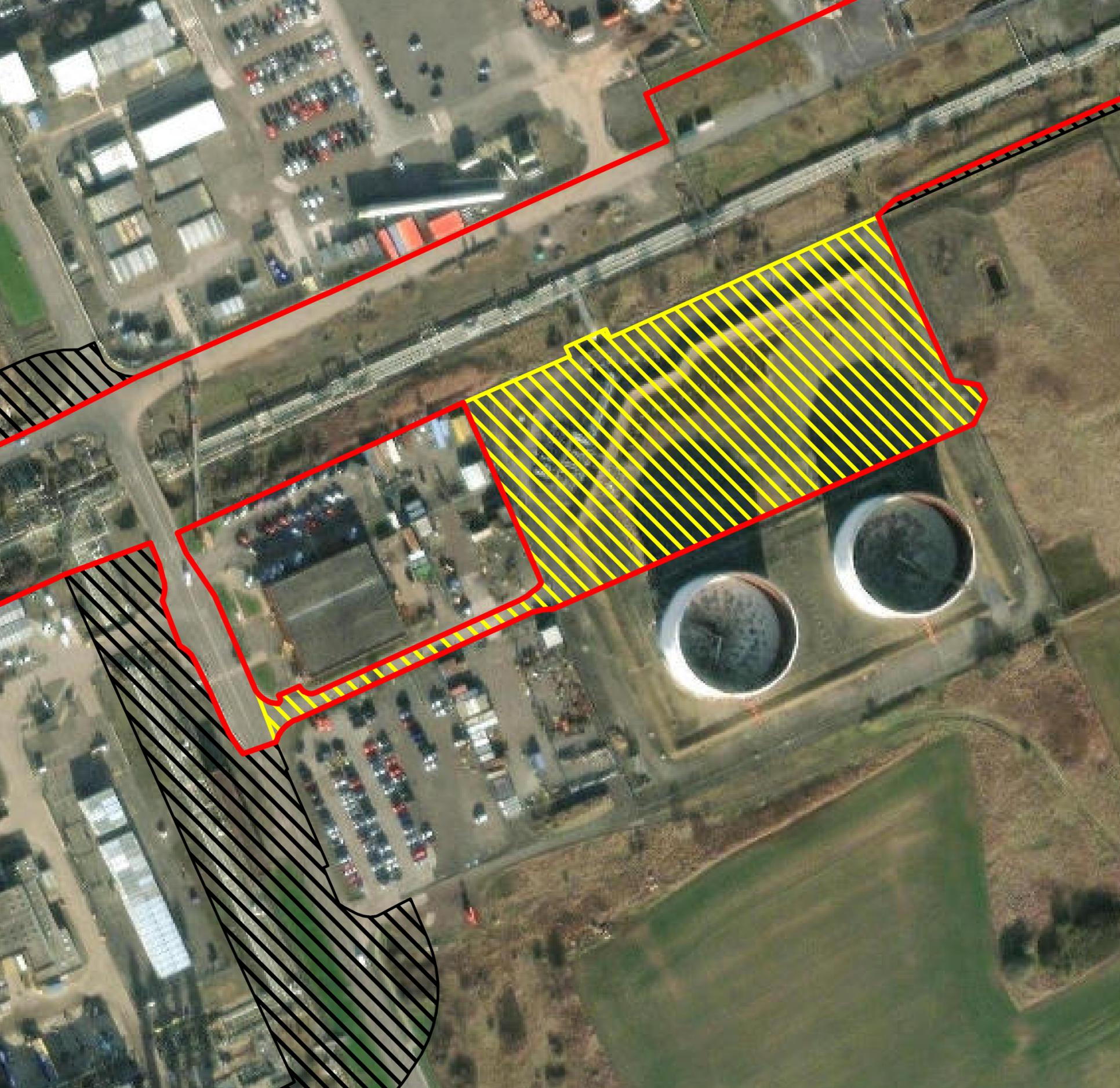
Potential environmental effects

Ecology and nature conservation

This area comprises hardstanding but is immediately adjacent to a waterbody that is likely to be used by birds. This area (including the waterbody) will be surveyed to ascertain how it is used.

There are unlikely to be any new or different significant effects from that reported in the PEI Report as works have been designed to utilise

existing hardstanding and minimise potential impacts. Potential significant effects to the nearby SPA and adjacent habitats have already been reported in the PEI Report and impacts to potential habitat such as the adjacent waterbody will be mitigated using the same measures as are referenced in the PEI Report. Site-specific mitigation will be developed in consultation with Natural England and other stakeholders. The results of all surveys and mitigation measures will be provided within the ES.



change

3

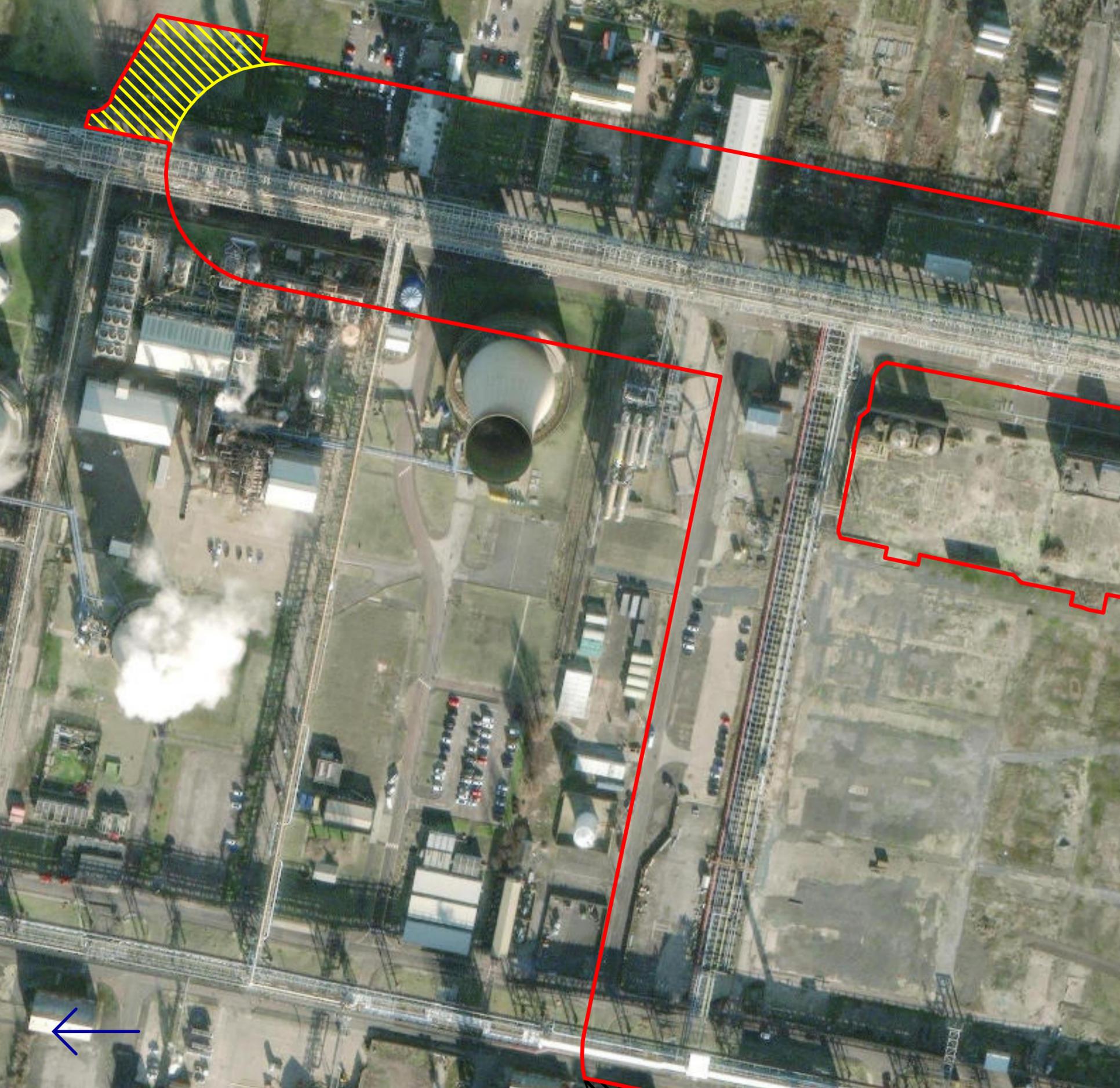
North-west of A174/A102 roundabout

Description of works

Installation of AGI in the area highlighted in yellow.

Potential environmental effects

This area is predominantly hardstanding and directly adjacent to areas of land in similar use and similar impacts are already considered in the PEI Report. There are unlikely to be any new or different significant effects from that reported in the PEI Report arising from this change.



change **4**

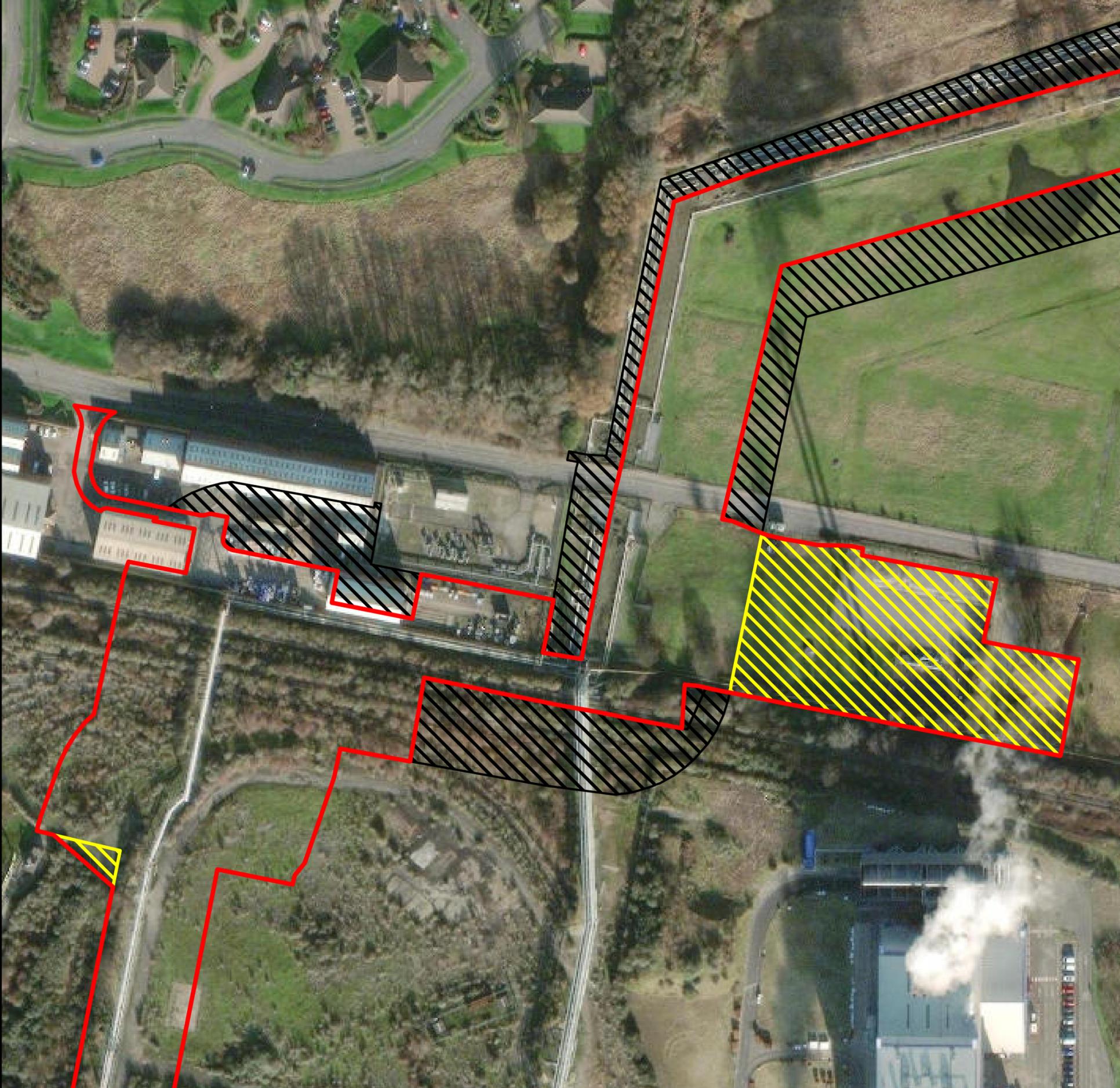
Area at SNF Oil and Gas Ltd

Description of works

Installation of AGI in the area highlighted in yellow.

Potential environmental effects

This area is predominantly hardstanding and directly adjacent to areas of land in similar use and similar impacts are already considered in the PEI Report. No changes to the conclusions of the PEI Report arise from this change.



change **5**

Area at Furatom (UK) Ltd. on the B1275

Description of works

Installation of AGI on the land highlighted in yellow.

Potential environmental effects

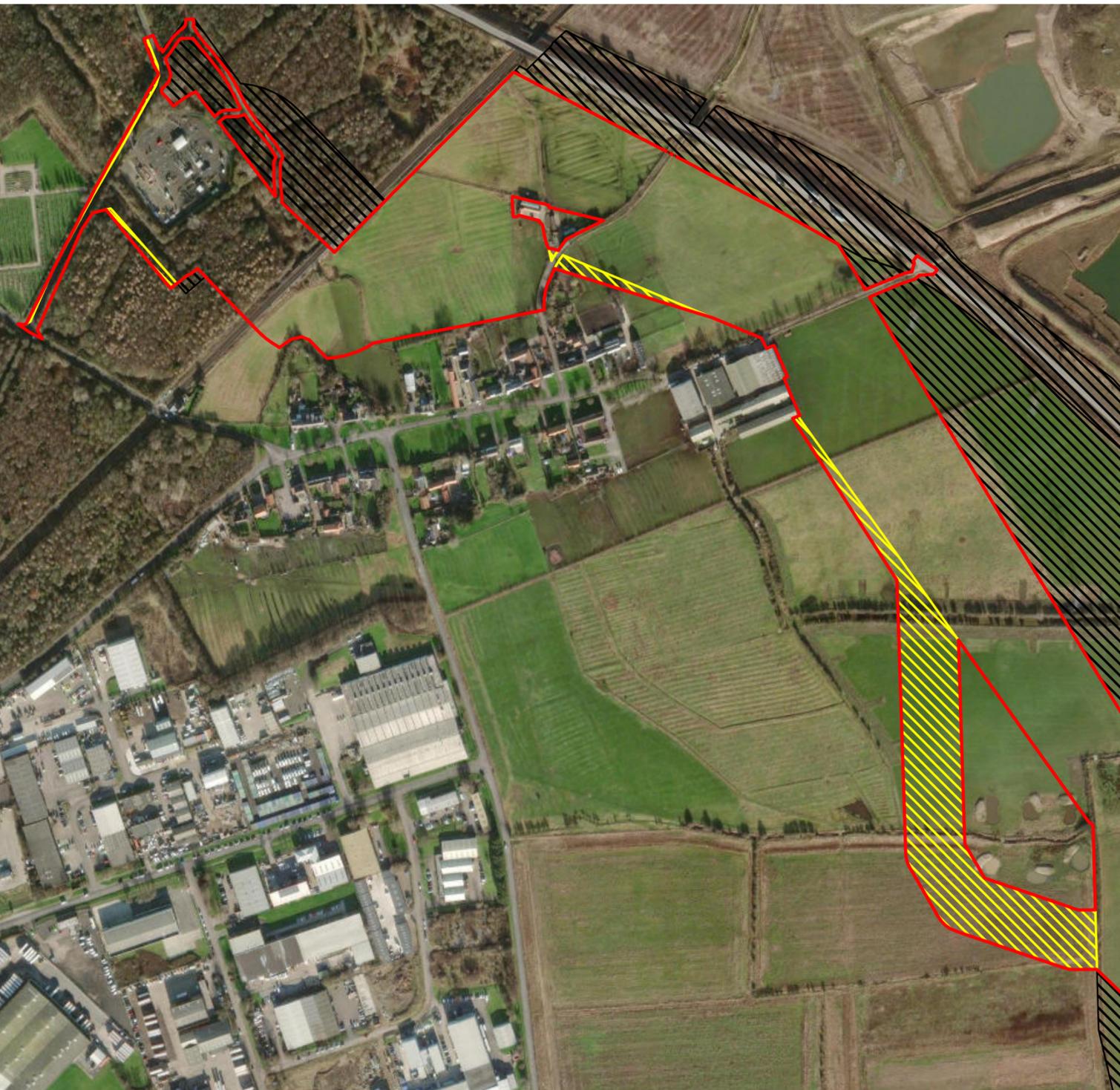
Ecology and nature conservation

Although this land has not been subject to either detailed baseline survey or bat roost assessment, there is unlikely to be any new or different significant effects from that reported in the PEI Report. The area is directly adjacent to areas of land in similar use. Potential significant effects to habitats have already been reported in the PEI Report. This initial precautionary conclusion is reached before taking into consideration site specific mitigation and habitat management measures. Site specific mitigation will be developed in consultation with Natural England and other stakeholders, as required. Mitigation measures will be provided in the ES.

change

6

Area west of A1185/ East of Cowpen Bewley



Description of works

Amendment to pipeline routing to avoid ponds and other areas of habitat creation within RSPB reserve land shown in image on the area highlighted yellow.

Potential environmental effects

Ecology and nature conservation

The proposed change has the potential to reduce effects upon habitats and birds due to the removal of land to the east from the RLB. Although the proposed additional land has not yet been surveyed to confirm habitat condition and to check for ecological constraints, there are unlikely to be any new or different significant effects from that reported in the PEI Report. The area is directly adjacent to similar works already assessed. Potential significant effects to habitats have already been reported in the PEI Report. This initial precautionary conclusion is reached before taking into consideration site-specific mitigation and habitat management measures. Site-specific mitigation will be developed in consultation with Natural England and other stakeholders, as required. Mitigation measures will be identified in the ES.

Cultural heritage

The proposed change has the potential to cross an area of known non-designated medieval field systems of Cowpen Bewley included in the Historic Environmental Record. The area has not been subject to geophysical survey and is in relative proximity to a Roman settlement. This route option has the potential to result in additional effects to those considered in the PEIR. However, these will be able to be managed through mitigation secured by a requirement in the Development Consent Order. A significant residual effect cannot be ruled out at this stage and will be confirmed by a geophysical survey. However, this will be undertaken before submission of the application to confirm the design in this area.



change

7

Area north of Redcar British Steel train station

Description of works

Yellow area at the top (north) of the image on the left added to cover rerouting of water connection taking into account feedback received from Teesworks.

Yellow area at the bottom (south) of the image required to pipeline connections (shown in greater detail on the right).

Potential environmental effects

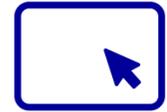
Surface water, flood risk and water resources:

This area has potential for interactions or crossings with Ash Gill. Further information is required to assess the full extent of any impact, which will be reported within the Environmental Statement. However, the watercourse is of low morphological importance due to the industrial nature of the surrounding area, and it is anticipated that any crossings or interactions with Ash Gill as a result of this additional area would be managed in accordance with best practice guidance, secured through the Framework CEMP being submitted as part of the DCO Application. Taking this into account, there is unlikely to be any new or different potential residual significant effects over and above what was reported in the PEI Report.



Have your say

Do you have any comments on H2Teesside and our proposed changes? If so, we want to hear your views. You can respond to our consultation in the following ways:



Online fill in the response form here or at our website www.h2teesside.co.uk



Post: Write to us or send a completed copy of the response form to **FREEPOST H2Teesside**



Email: Write to us or send a completed copy of the response form to info@h2teesside.net

Please submit your feedback by 23:59 on 23 January 2024

Next steps

Your feedback will inform the progression of the Proposed Development. Each proposed revision detailed above, will be assessed and reported in full (including accounting for within baseline surveys) in the Environmental Statement that accompanies the application for development consent. Once we have taken your feedback into consideration, we plan to submit our application in Q1 2024.



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