

Hornsea 3 Cable installation progress update

August 2024

17/09/24

Welcome

This update offers insights into the ongoing onshore construction activities of the Hornsea 3 Offshore Wind Farm from 05 August to 01 September 2024.

As a valued stakeholder, we are committed to keeping you informed through these monthly updates.

Our goal is to maintain open and transparent communication throughout the construction period.

Descriptions of the activities presented in this update are provided in the glossary at the end.

About the Project

Hornsea 3 when operational, will form the Hornsea Trio with Hornsea 1 and 2 and will have a total capacity of in excess of 5GW.

Location

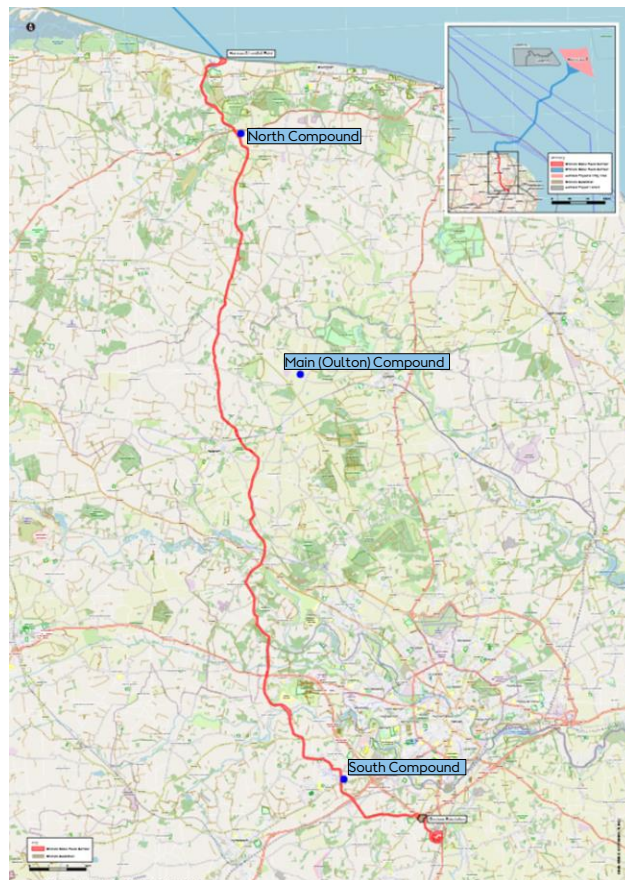
Hornsea 3 will be located in the North Sea, approximately 120km off the Norfolk coast and 160km off the Yorkshire coast.

Size

Approx. 200 offshore wind turbines will be located within a 696km² area. 53km cable route through Norfolk to connect to National Grid south of Norwich.

Power output

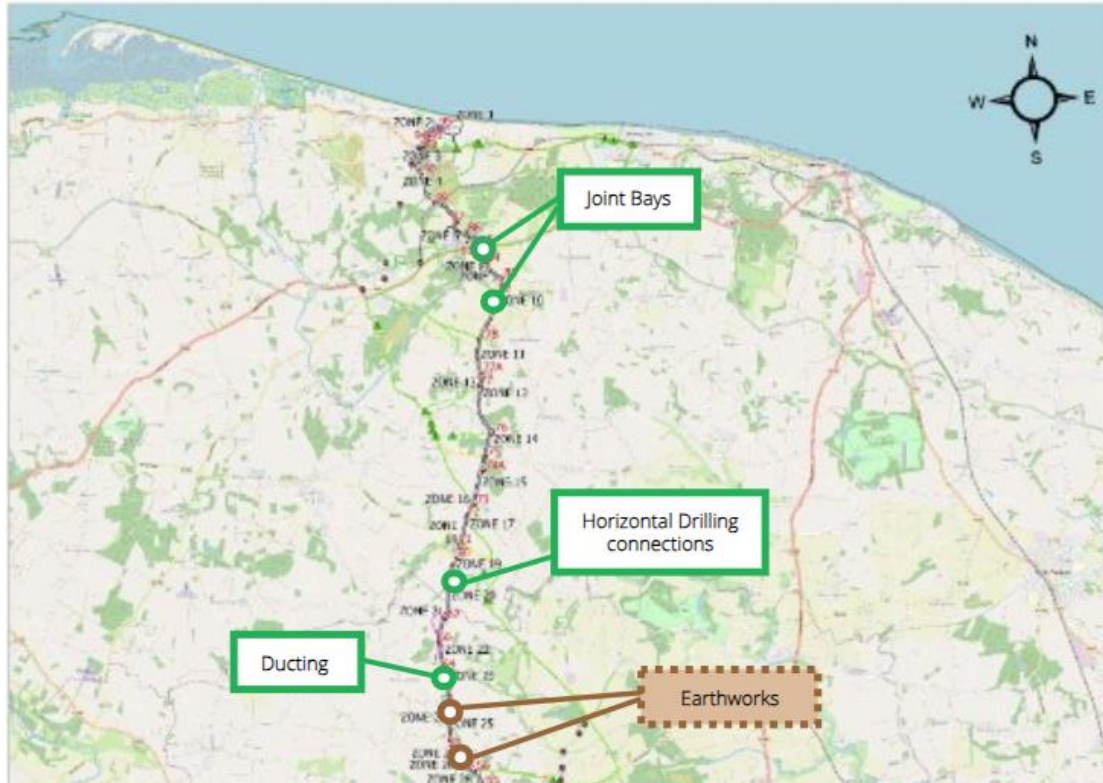
With capacity of 2.9GW, the wind farm will produce enough low-cost, renewable electricity to power more than 3.3M UK homes.



Hornsea 3 Cable Route from Landfall (Weybourne) to the Converter station (Swardeston)

North Norfolk construction activities w/c 05/08/24

The map provided below sets out the activities that were undertaken w/c 05/08/24 along the onshore cable route from Weybourne, North Norfolk through to Corpusty, North Norfolk.



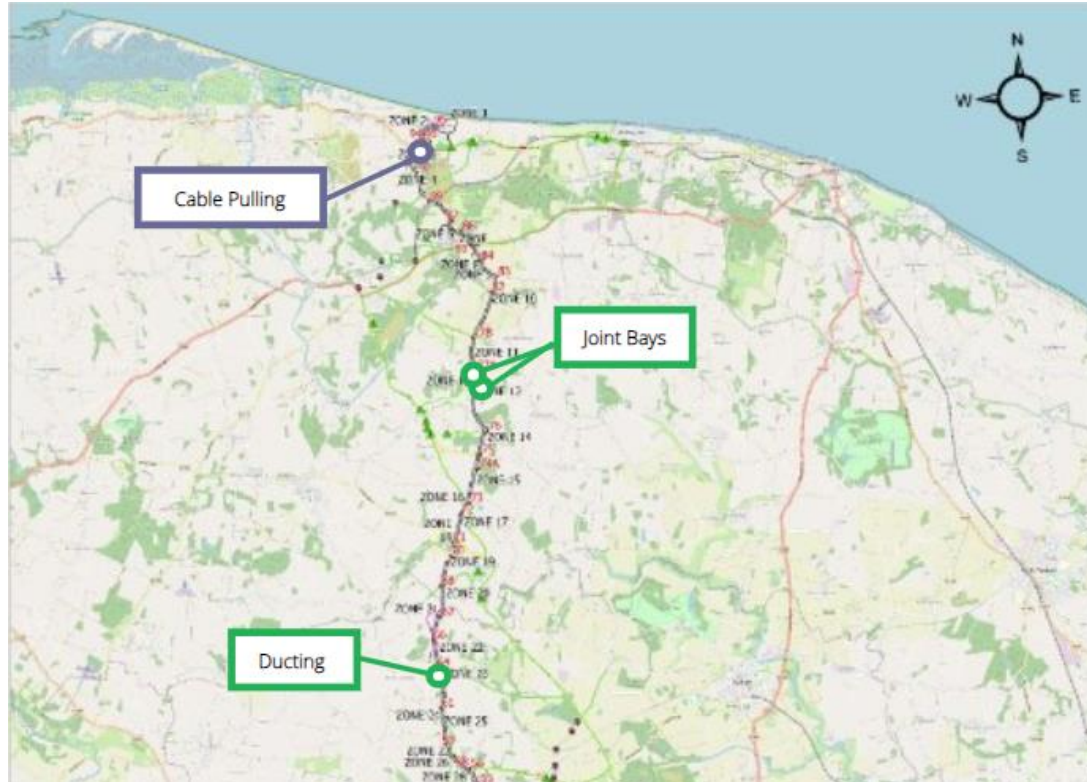
North Norfolk construction activities w/c 12/08/24

The map provided below sets out the activities that were undertaken w/c 12/08/24 along the onshore cable route from Weybourne, North Norfolk through to Corpusty, North Norfolk.



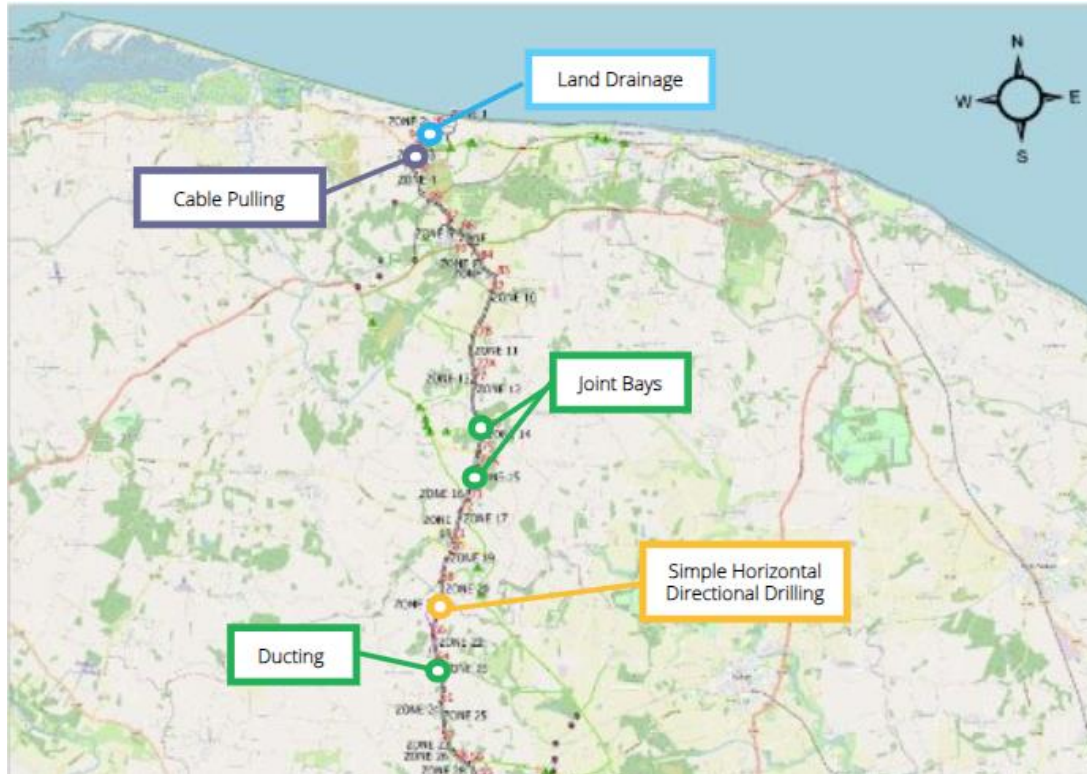
North Norfolk construction activities w/c 19/08/24

The map provided below sets out the activities that were undertaken w/c 19/08/24 along the onshore cable route from Weybourne, North Norfolk through to Corpusty, North Norfolk.



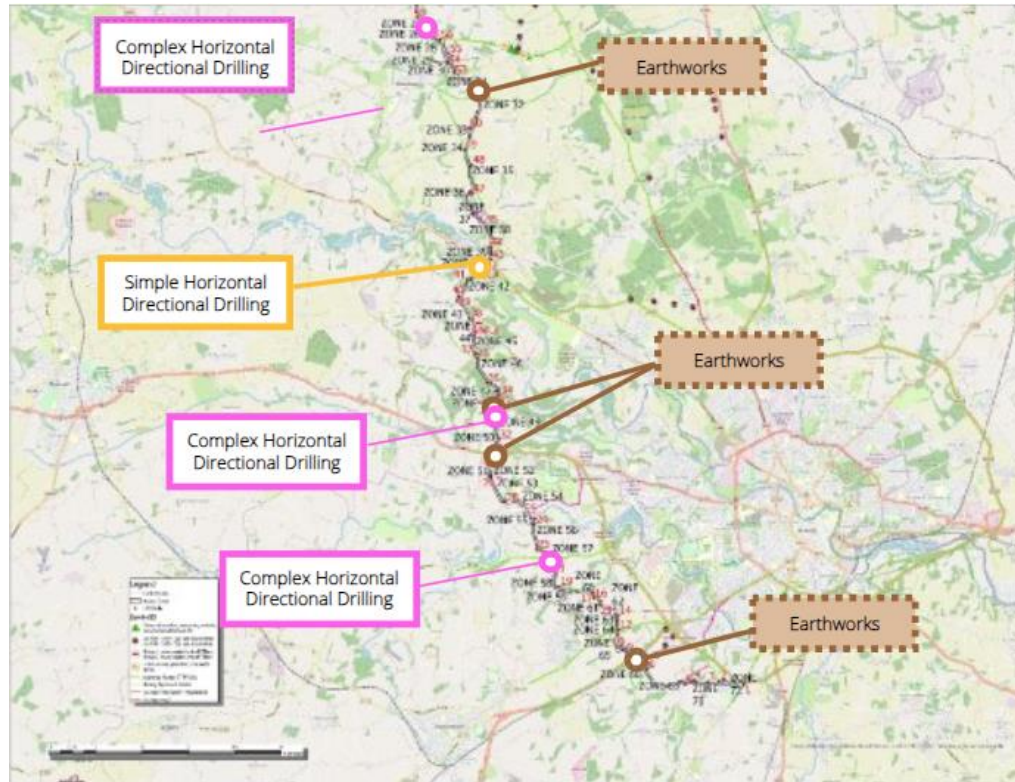
North Norfolk construction activities w/c 26/08/24

The map provided below sets out the activities that were undertaken w/c 26/08/24 along the onshore cable route from Weybourne, North Norfolk through to Corpusty, North Norfolk.



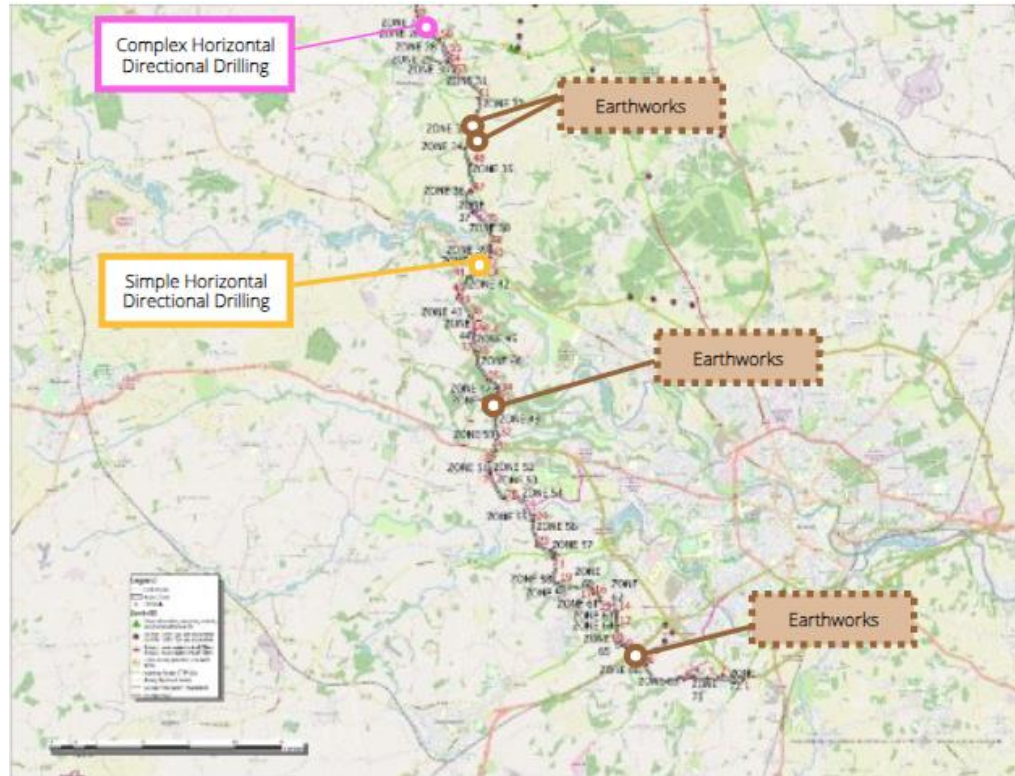
South Norfolk construction activities w/c 05/08/24

The map provided below sets out the activities that were undertaken w/c 05/08/24 along the onshore cable route from Corpusty, North Norfolk to Swardeston, South Norfolk.



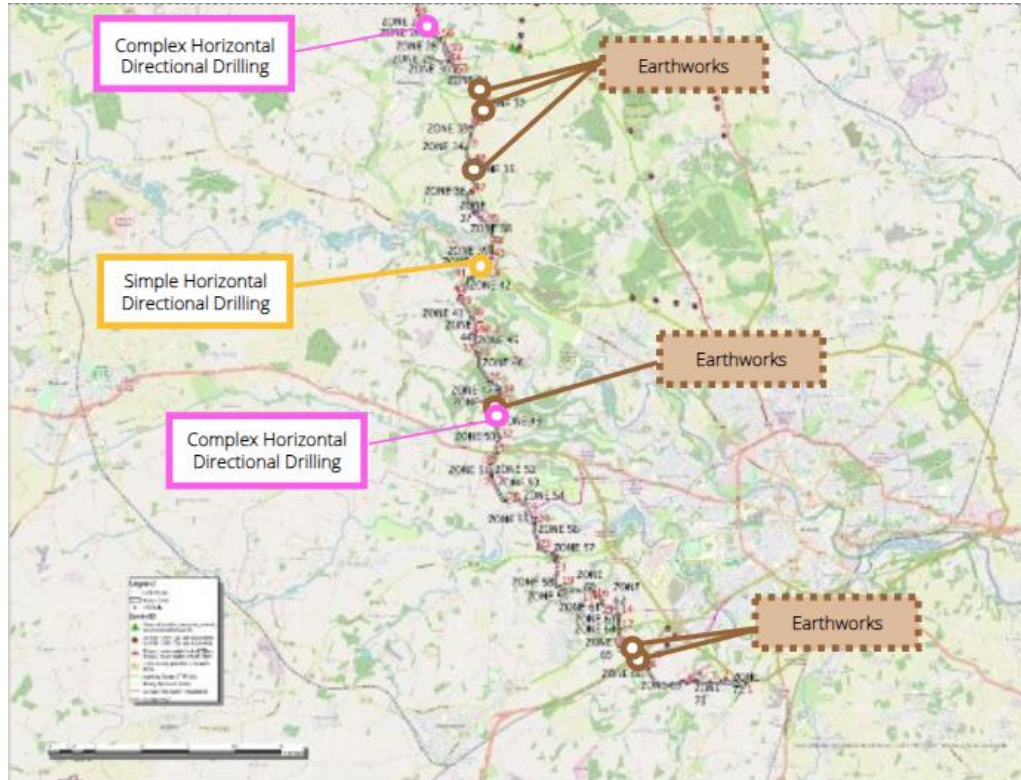
South Norfolk construction activities w/c 12/08/24

These are the activities that were undertaken w/c 12/08/24 along the onshore cable route from Corpusty, North Norfolk to Swardeston, South Norfolk.



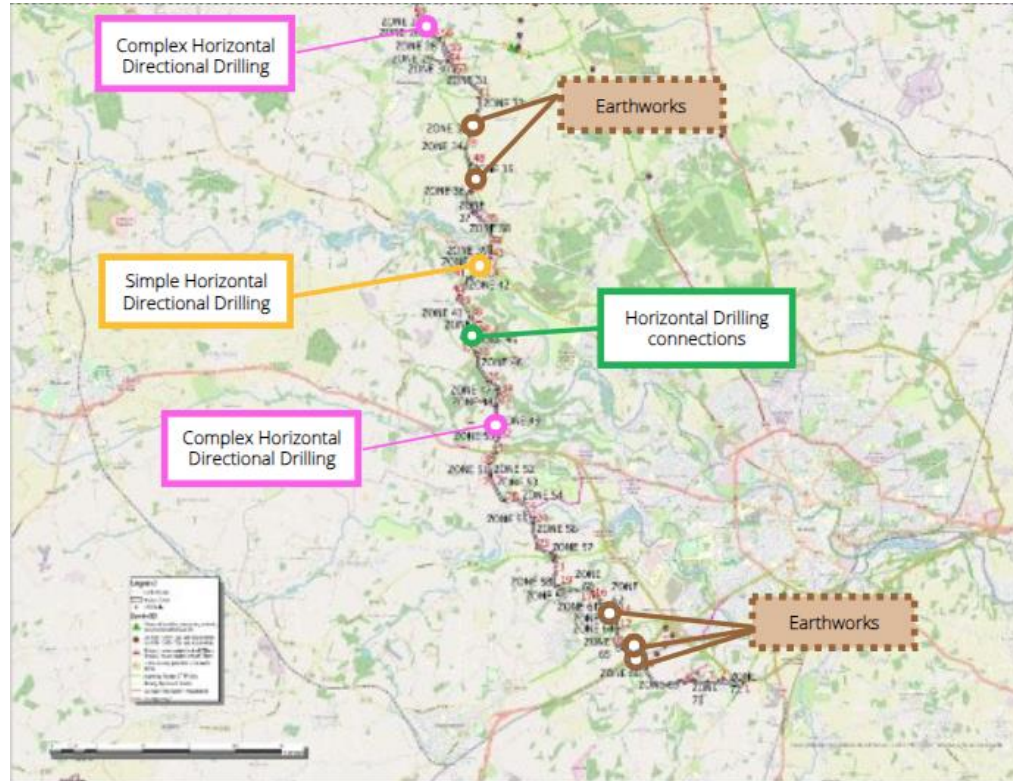
South Norfolk construction activities w/c 19/08/24

The map provided below sets out the activities that were undertaken w/c 19/08/24 along the onshore cable route from Corpusty, North Norfolk to Swardeston, South Norfolk.



South Norfolk construction activities w/c 26/08/24

The map provided below sets out the activities that were undertaken w/c 26/08/24 along the onshore cable route from Corpusty, North Norfolk to Swardeston, South Norfolk.



Overall Project Progress to Date - Part One

Since commencing construction on Hornsea 3 in May 2023, we have undertaken the following works:

Access Points

- Completed all required access points.

Pre-construction Drainage

- Completed 67 zones out of 72 zones.

Earthworks

- Stripped 61 zones.

Haul Roads

- Stoned up 57 zones, allowing the Haul Roads to become operational.



Access Points



Pre-construction
Drainage



Earthworks

Overall Project Progress to Date

- Part Two

Ducting

- Completed HDD connection works from zone 2 to 14, and 16 to 20. Zone 15 is currently on going. Completed zone 43 and 44.
- Completed trenching and ducting from zone 2 to 23, zone 29 to 31, 38, 39, 41 to 48, 51.

Horizontal Directional Drills (HDDs)

- Complex (large scale) HDDs: 12 completed along the route.
- Simple (smaller scale) HDDs: 22 completed along the route.

Joint Bays

- Completed eight joint bays.



Glossary

Access points (bell mouths)

To access each land plot for our works, new gated construction traffic access points (bell mouths) need to be installed at highway entrance / exit points. The bell mouths provide access to the work area for plant, machinery, materials and anything else required to ensure the project is delivered on time.

Timeframes for installation vary depending on their size and complexity, however we will inform communities of any proposed disruption through Advance Work Notices (AWNs). As with all work on the highway, some short-term disruption may occur where a road closure or lane-closure is required.

Since pre-construction works started in June 2022 we have sent out over 150 AWNs regarding any road or lane closure along the route.

Cable Pulling

Cable pulling is the process by which we pull the 400kv cables through the pre-installed ducts.

Drainage

Pre-construction drainage is installed where necessary to keep the soils draining effectively during our trenching works. Post-construction drainage will then be installed to help the land return to its former use.

Ducting

Duct installation works consist of trench excavations where ducting will be laid. The ducting acts as a protective casing through which the cabling will be pulled later in the project. Upon completion of installing the ducting, the trench will be reinstated with subsoil.

A specialist insulating material is used to surround the ducting, to help reduce the risk of the cables overheating.

A team of groundworkers use excavator machines to complete the digging and backfilling of the trenches.

Glossary

Earthworks / Topsoil Strip

Prior to topsoil stripping, demarcation fencing is installed to define the construction working corridor using post and rope or stockproof fencing where applicable.

Excavators will scrape back the topsoil, which will then be piled at the side of the working area, to form a topsoil bund. This prevents the topsoil becoming damaged by working equipment. Topsoil and subsoil will be stored separately on a field-by-field basis.

These topsoil bunds are then seeded with an approved seed mix to reduce the risk of surface water run-off and soil erosion.

Haul Roads

A temporary haul road is constructed along the cable route to protect the subsoil from damage and create a safe, designated route for our construction traffic.

It's also important that the aggregate that we lay for the haul road is kept separate from the area of land we have just excavated. A separation membrane helps ensure this. Heavy Goods Vehicle (HGV) tipper wagons will be required to deliver the stone to site.

Horizontal Directional Drills (HDDs)

Horizontal directional drills (HDDs), also known as directional boring, are a minimal impact trenchless method of installing underground utilities, in this case ducting for high voltage cables.

There will be approximately 95 HDDs on Hornsea 3, located under roads, woodland, rivers and rail links, reducing the effects that open-trench construction methods would create and therefore minimising disruption.

Glossary

Joint Bays

The construction of joint bays is required to enable the installation and jointing of the cable sections to form a complete circuit. The joint bays are typically every 1-1.2km, depending on the length of the cable, road access, topography, soil type, rivers, roads, and other physical land constraints.

Jointing

Jointing is the process by which we connect the individual sections of cables together to form a complete circuit. This process is completed within our joint bays, where specialist teams of welders connect the ends of the cables. Before jointing can commence, small compounds need to be erected at the joint bays.

Zones

The cable route is broken down into zones. There are a total of 72 zones along the onshore cable corridor route, all going through North Norfolk, Broadland and South Norfolk.

Engagement

Advance Work Notices (AWNs)

In line with our community engagement framework and commitment to inform communities about potentially disruptive works, the Hornsea 3 Community Relations Team has produced and distributed a total of **150 AWNs** since June 2022 to residents, businesses, and Parish Councils along the cable route.

Newsletters

Hornsea 3 publishes quarterly newsletters to provide stakeholders with an update on the progress of our Project. You can access all of our newsletters published so far by visiting [our website](#).

To sign up to receive our quarterly newsletters straight to your inbox email: community@hornsea3.co.uk.

Community Benefit Fund

Our Hornsea 3 Community Fund has officially launched in the North Norfolk and East Anglia region. This initiative commits **£7 million** over a period of at least 10 years, demonstrating our dedication and commitment to effecting positive change in this region.

The new Hornsea 3 Community Fund is being independently administered by GrantScape, an independent grant-making charity. You can find more details on the fund, the eligibility criteria, funding zone map, and more, on GrantScape's webpage [Hornsea 3 Community Fund – Grantscape](#).

Events and Meetings

In line with our community engagement framework to proactively engage with communities, the Hornsea 3 Community Relations Team has attended **73** community events and meetings with local stakeholders since our works commenced.

How to get in touch

Project enquiries

Community Liaison Officers

Telephone: 0800 158 2354

Email: community@hornsea3.co.uk

Community Relations Team

We aim to provide a full response to all enquiries within 10 working days.

**Let's create a world
that runs entirely on
green energy**

