



**Morocco-UK
Power Project**
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Welcome

Welcome to this statutory public consultation event for the Morocco-UK Power Project (the 'Project'). We are consulting on all elements of the Project in the UK (the 'Proposed Development').

Our proposals have been shaped and refined by local views and expertise in two previous rounds of consultation. We're grateful to everyone who has taken the time to speak with us and shape our plans so far.

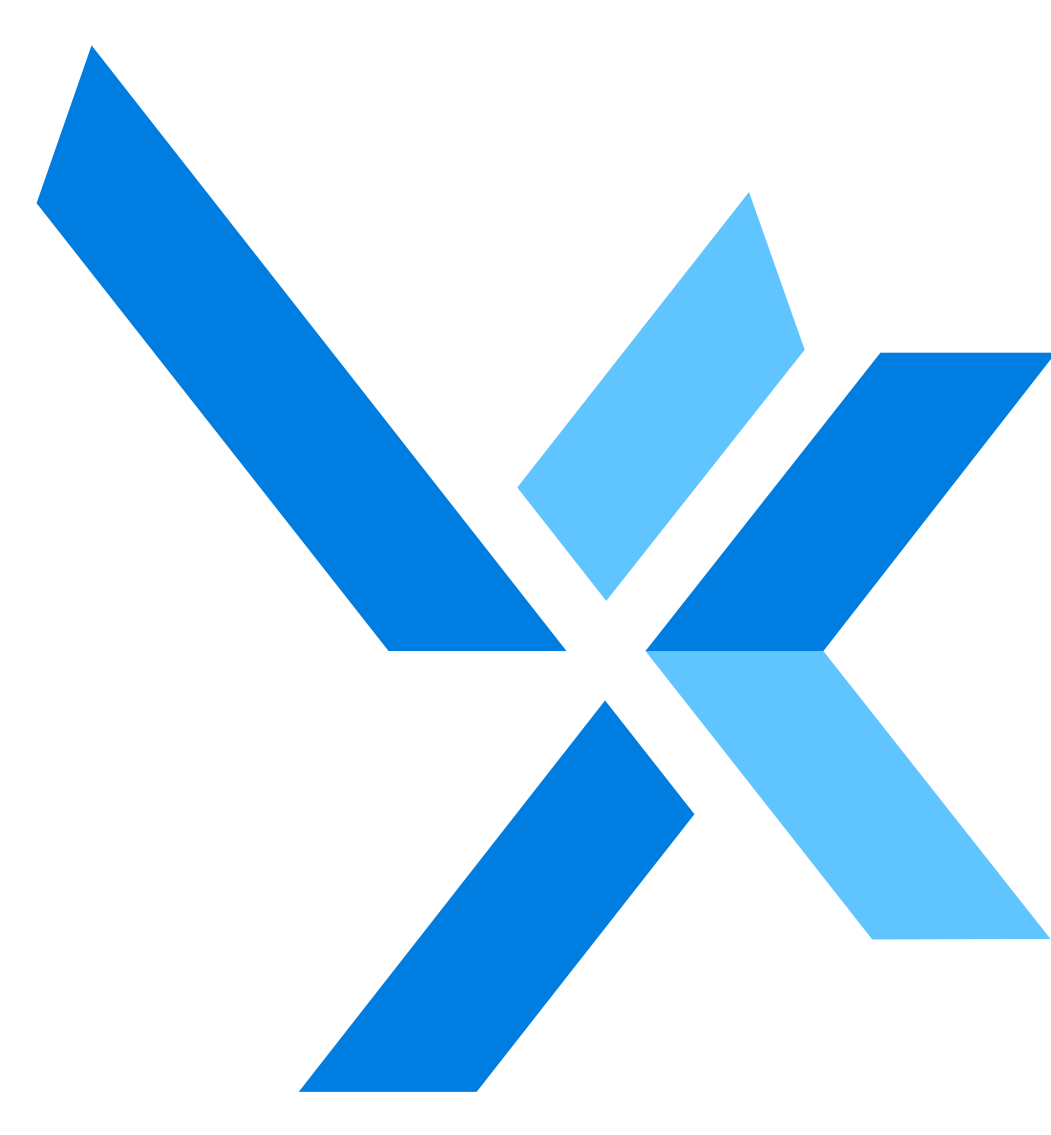
Before we submit our application for a Development Consent Order (DCO) to the Secretary of State for Energy Security and Net Zero (the 'Secretary of State'), we are holding a final round of consultation to get your views on our updated proposals.

In this room, you will find information about:

- **Our updated proposals**
- **The planning process**
- **How you can take part in the consultation and submit your views.**

Members of our team are on hand to answer any questions you may have. You can also pick up a copy of our consultation booklet and questionnaire here, as well as viewing our technical documents.

Your views are important and we strongly encourage you to respond to the consultation, either today or before the deadline of **27 June 2024**.



Our Mission

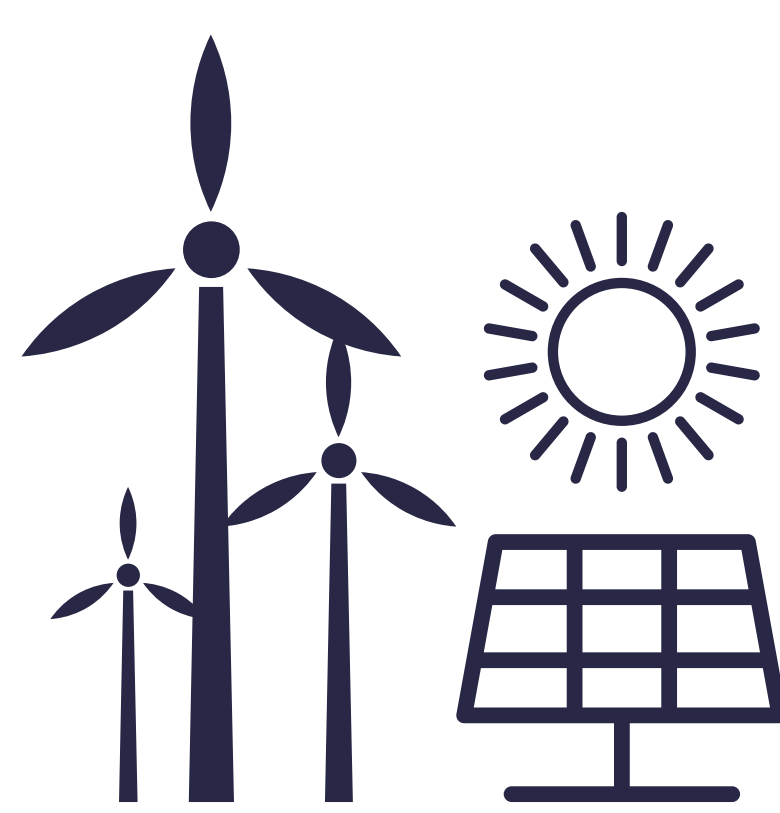
Over the coming decades, the UK will undergo a revolution in the way it powers homes, businesses and transport.

It needs to stop using carbon fuels in generating electricity by 2035 if it is to meet its commitments to combat climate change. Our project exists to help close this gap.

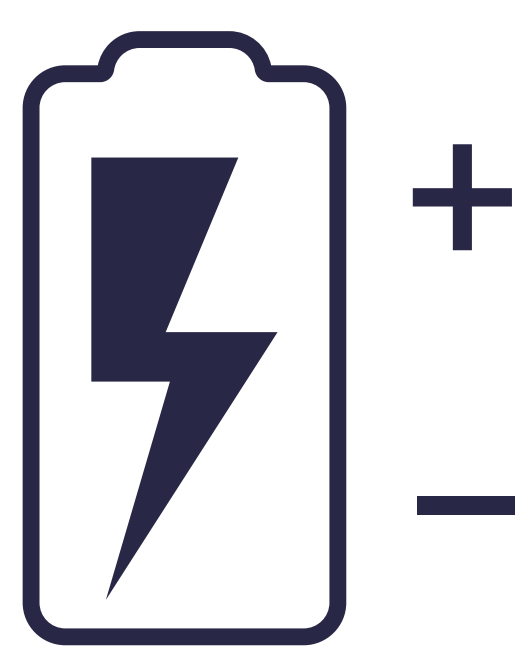
The Project proposes a new electricity generation facility entirely powered by solar and wind energy combined with a battery storage facility. It would connect Guelmim Oued Noun, an energy-rich region in Morocco, to the UK via 4,000km (2,485 miles) of subsea cables.

This Project would deliver 3.6 gigawatts (GW) of reliable wind and solar energy to Great Britain for 19+ hours a day on average. This is enough to provide affordable, clean power to the equivalent of over 7 million British homes and once complete, the Project would be capable of supplying 8% of Great Britain's electricity needs.

11.5GW
Solar and wind generation



22.5GWh
Battery storage



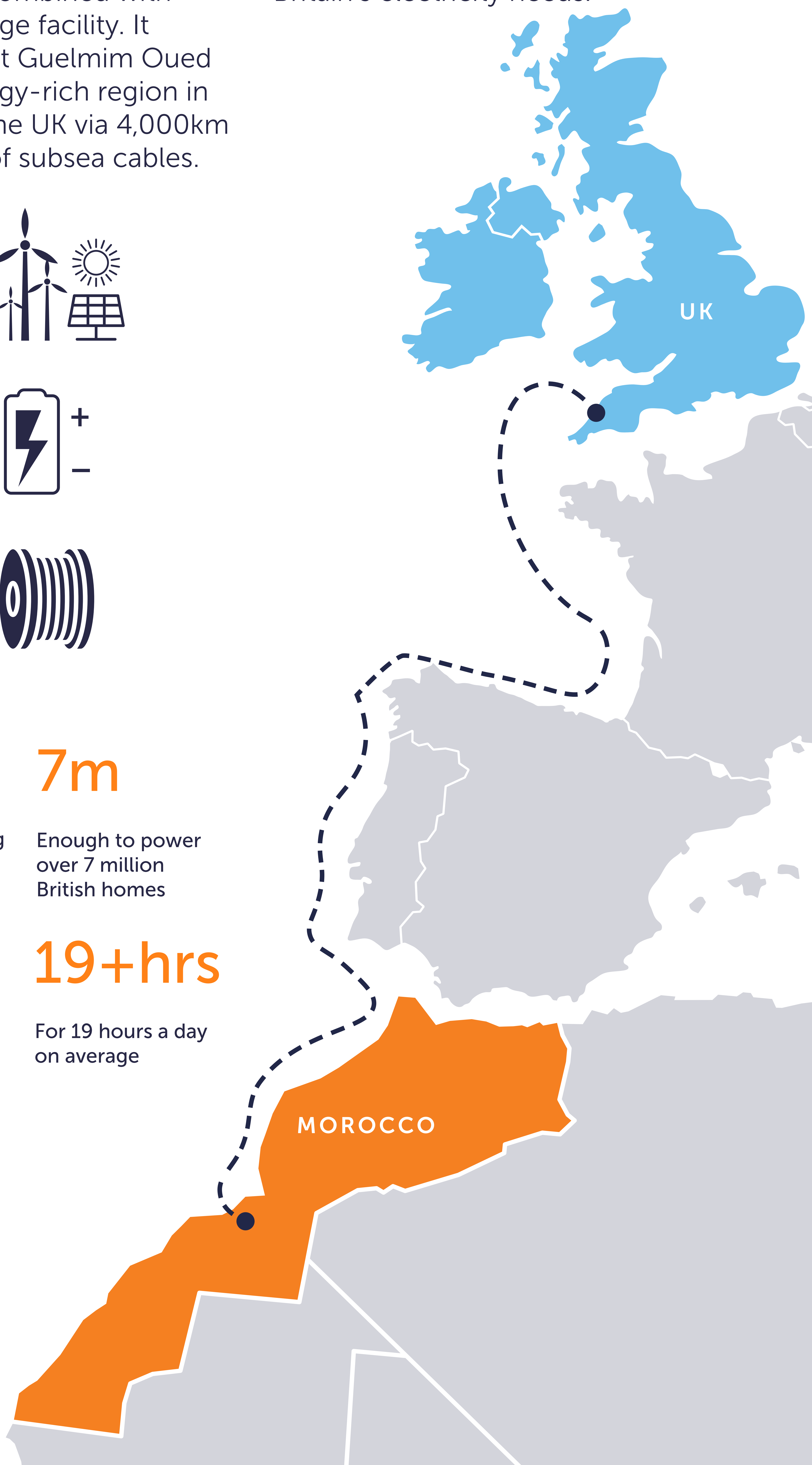
2 x 1.8GW
HVDC subsea cable systems



8%
Capable of meeting 8% of GB's annual electricity demand

7m
Enough to power over 7 million British homes

3.6GW **19+hrs**
Supply of reliable renewable power For 19 hours a day on average





The Proposed Development



1 Offshore cables

Electricity would move between Morocco and the UK along four cables buried under the seabed. This would use proven High Voltage Direct Current (HVDC) technology which is already used to transport electricity between the UK and other parts of Europe. The approximate length of the cable corridor in UK waters is 370km.

2 Landfall

The cables are proposed to come ashore at Cornborough Range, about 2.5km south of Westward Ho! and 4km west of Bideford. The offshore cables would join a set of onshore cables here. This would take place underground in a safe and secure casing called a 'joint bay'.

3 Onshore cables

Four cables are proposed to run between the landfall at Cornborough Range and the converter stations. These would all be buried underground in pairs. We have carefully considered feedback from previous consultations, as well as potential environmental impacts, in proposing the route for the cables. For example, the planned cable route now avoids Abbotsham Village.

4 Converter stations

We need to convert electricity from the HVDC used to transport it efficiently from Morocco to High Voltage Alternating Current (HVAC) before it can be used in this country's electricity system and our homes.

We propose to do this at two converter stations at the old Webbery Showground, close to the point that the Proposed Development would connect into the National Grid. Each converter station would be able to convert 1.8GW of electricity from HVDC to HVAC.

5 Connection point

The Project would connect into the National Grid via a new substation adjacent to the existing Alverdiscott Substation. This would allow for the onward transmission of 3.6GW of electricity to where it's needed in the country. 12 HVAC cables would link the converter stations to the substation.



What's changed?

Our proposals have been shaped and refined by local views and expertise in two previous rounds of consultation. We have developed our proposals over time, taking into account technical requirements, our ongoing environmental surveys and studies, and feedback from stakeholders and the community:

1 Identifying a grid connection

Our work alongside National Grid identified Alverdiscott National Grid Substation as the preferred option for connecting the Project into the grid. This is because it had sufficient space close to the point of connection for the converter stations and a lower risk of interactions with nearby infrastructure.

2 Identifying landfall options

This included assessing multiple potential landing sites, considering factors such as distance from the point of connection at Alverdiscott, the suitability of the land for installing cables, the need to avoid steep cliffs, environmental constraints, and accessibility. We selected the proposed landfall at Cornborough Range because it was considered preferable in a number of areas to install the cables there than at other potential locations.

3 Locating the converter station site and onshore cable route

We conducted a search for suitable sites for the converter stations. The factors we considered to identify our initial proposed site included:

- distance from Alverdiscott National Grid Substation
- the availability of enough space to build the converter stations
- accessibility from existing roads
- avoiding impacts on environmental and heritage features, homes, areas at higher risk of flooding, and Public Rights of Way.

4 Initial public consultation (November 2022)

We published our early proposals at this time to seek feedback on the proposed location of the converter stations and our options for cable routes.

The proposals we published at that stage included locating the converter stations south of their current proposed location, south of Gammaton Cross.

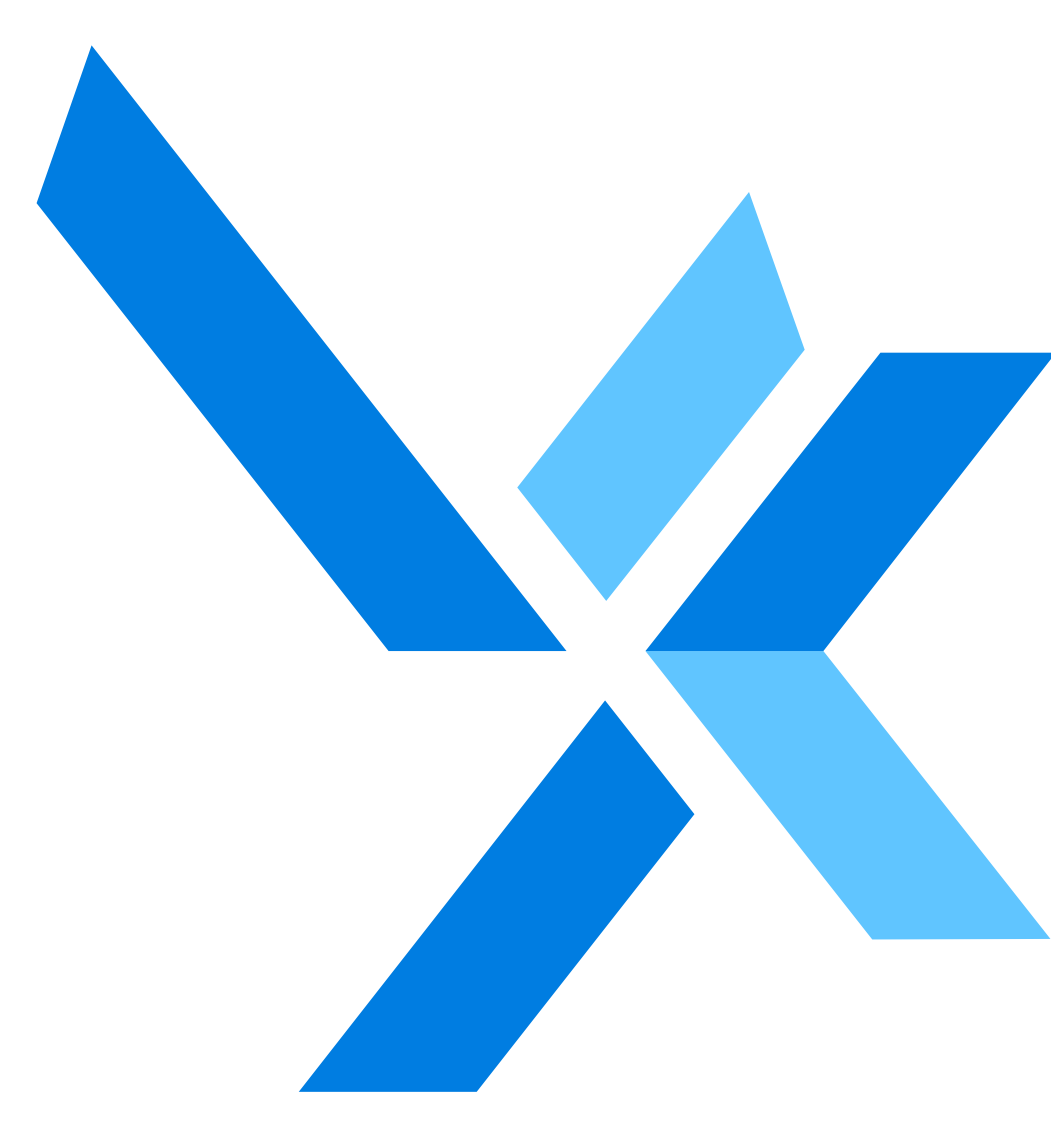
5 Second public consultation (April – May 2023)

We carefully considered feedback from our first round of consultation and responded with updated proposals. These included:

- moving the converter station site to the old Webbery Showground to reduce impacts on homes
- changing the route of our cable corridor to avoid impacting new homes and the primary school in Abbotsham
- presenting more detail about construction.

6 Statutory consultation (May-June 2024)

Since the last consultation, the Secretary of State recognised the Proposed Development as nationally significant. We have also continued our environmental and technical assessment to refine our proposals. Changes made since the last consultation include proposing to rotate the eastern converter station south and west to reduce its potential environmental impacts consultation.



The planning process

Last year, the Secretary of State recognised the Proposed Development as nationally significant and requiring development consent under section 35 of the Planning Act 2008.

This recognised the major contribution it could make to the country's need for clean, secure and reliable energy.

The change means we need to apply for a Development Consent Order (DCO) from the Secretary of State to construct and operate the Proposed Development, rather than seeking planning permission from Torridge District Council.

The DCO application process is managed by the Planning Inspectorate on behalf of the Secretary of State. The stages that a DCO application must pass through involve extensive consultation and local involvement. You can see an outline of the process and an indicative timeline on this board. We are currently at the statutory consultation stage.





The converter station site

Our proposals include two converter stations, located at the old Webbery showground west of the existing National Grid Alverdiscott 400kV substation.

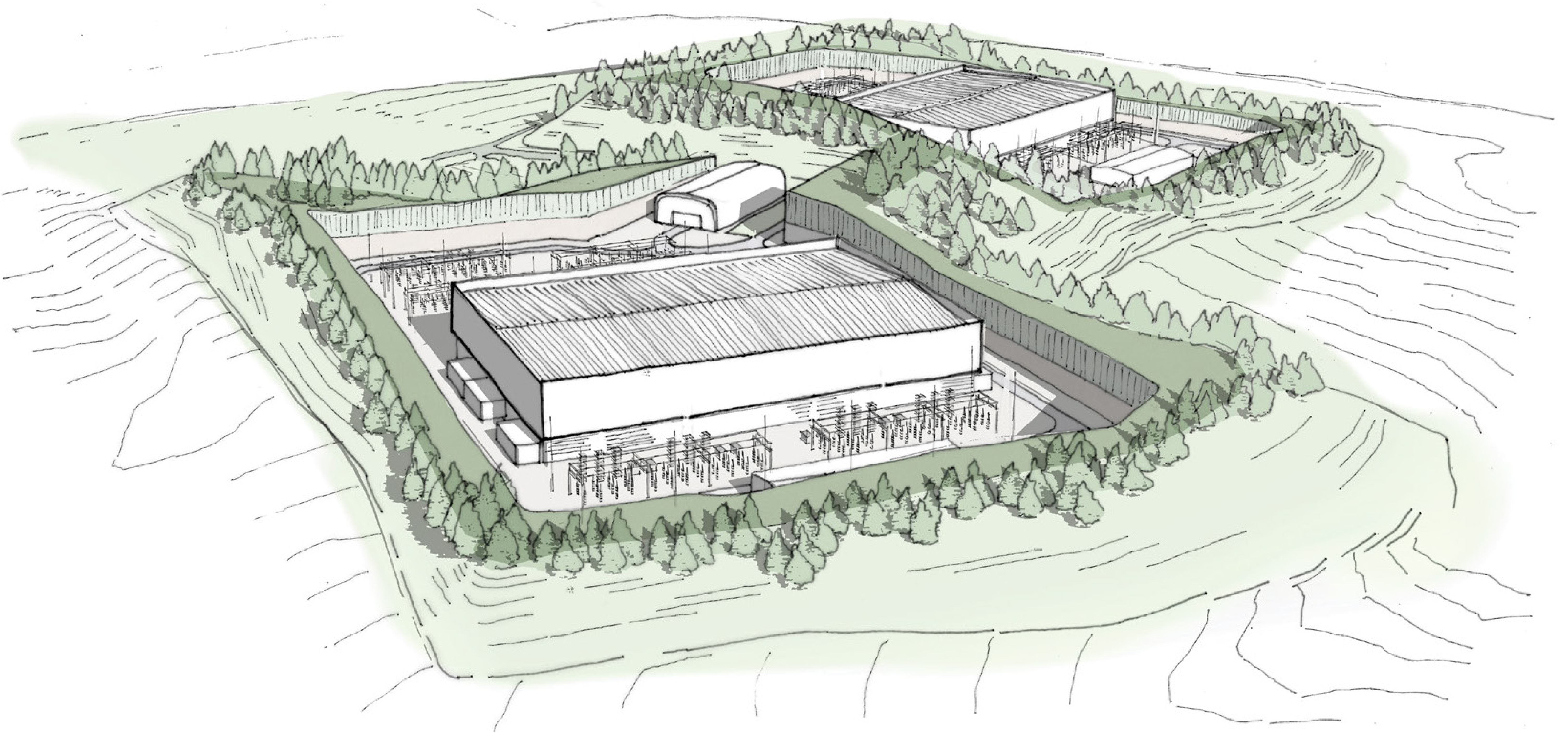
Called 'Bipole 1 (East)' and 'Bipole 2 (West)', these would convert electricity from the High Voltage Direct Current (HVDC) received from Morocco to the Alternating Current (AC) used in our homes.

The equipment which would convert the electricity – known as valves and reactors – would be housed in a weatherproof building called a converter hall. Outside of the converter hall, there would be a variety of Direct Current (DC) and AC electrical equipment, such as transformers. The equipment located outside can withstand weather. Two control buildings (one per Bipole) would be required to monitor the electrical control systems managing the flow of electricity through the conversion process from DC to AC.

DC electricity is vital for transmission over a long distance efficiently, but it can't be used in our laptops, kettles and televisions. The converter station's primary purpose would be to change the DC electricity back into AC so that the electricity can be sent onwards to the National Grid for use where it's needed in homes, schools, hospitals and businesses.

Around Bipole 1 (East) and Bipole 2 (West), the converter station site would include the supporting buildings where people would work and critical spares could be stored, along with the landscaping and infrastructure shown on the artist's impression below.

The total area of the proposed converter station site is around 32ha (79 acres). This includes around 13ha (32 acres) for the converter station buildings.



Artist's impression of the converter station site showing a potential appearance of the converter station for indicative purposes



Building the converter stations

Should the Proposed Development be granted development consent, we expect construction of the converter stations to take place over around 72 months – starting in 2026 and finishing in 2032.

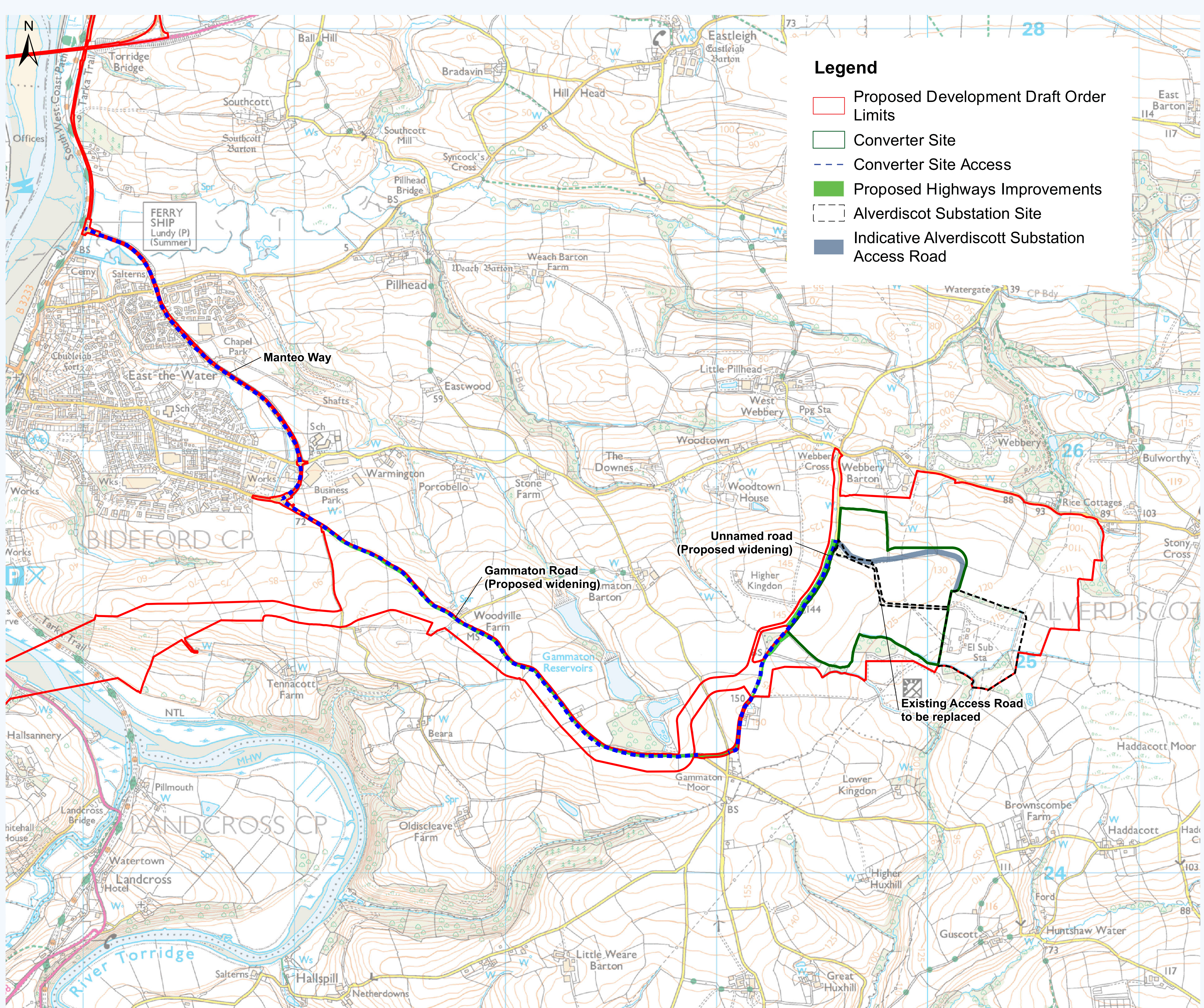
How and when we build the converter stations will be informed by their design, which will take into account feedback from this consultation, further environmental assessments and ongoing technical work.

We will set out more information about the likely phasing, activity and timings for this period in our DCO application - and would welcome your feedback on these. Our application will include an Onshore Outline Construction Environmental Management Plan (CEMP) and an Outline Construction Traffic Management Plan (CTMP).

Construction would result in maximum of 545 additional vehicle movements per day, including 105 Heavy Goods Vehicles (HGVs). The majority of these would be travelling to and from the converter station site.

Working hours would typically be between 7am to 7pm Monday to Friday and typically 7am to 1pm on Saturday, with no working on Sundays or Bank Holidays.

There may be times where we need to work outside these hours – for example, when we need to move a very large item like a transformer that cannot be broken up (called an 'Abnormal Indivisible Load'), we may do this at night or in the early hours of the morning. We would agree activities like this in advance with local authorities and communicate in advance with residents.



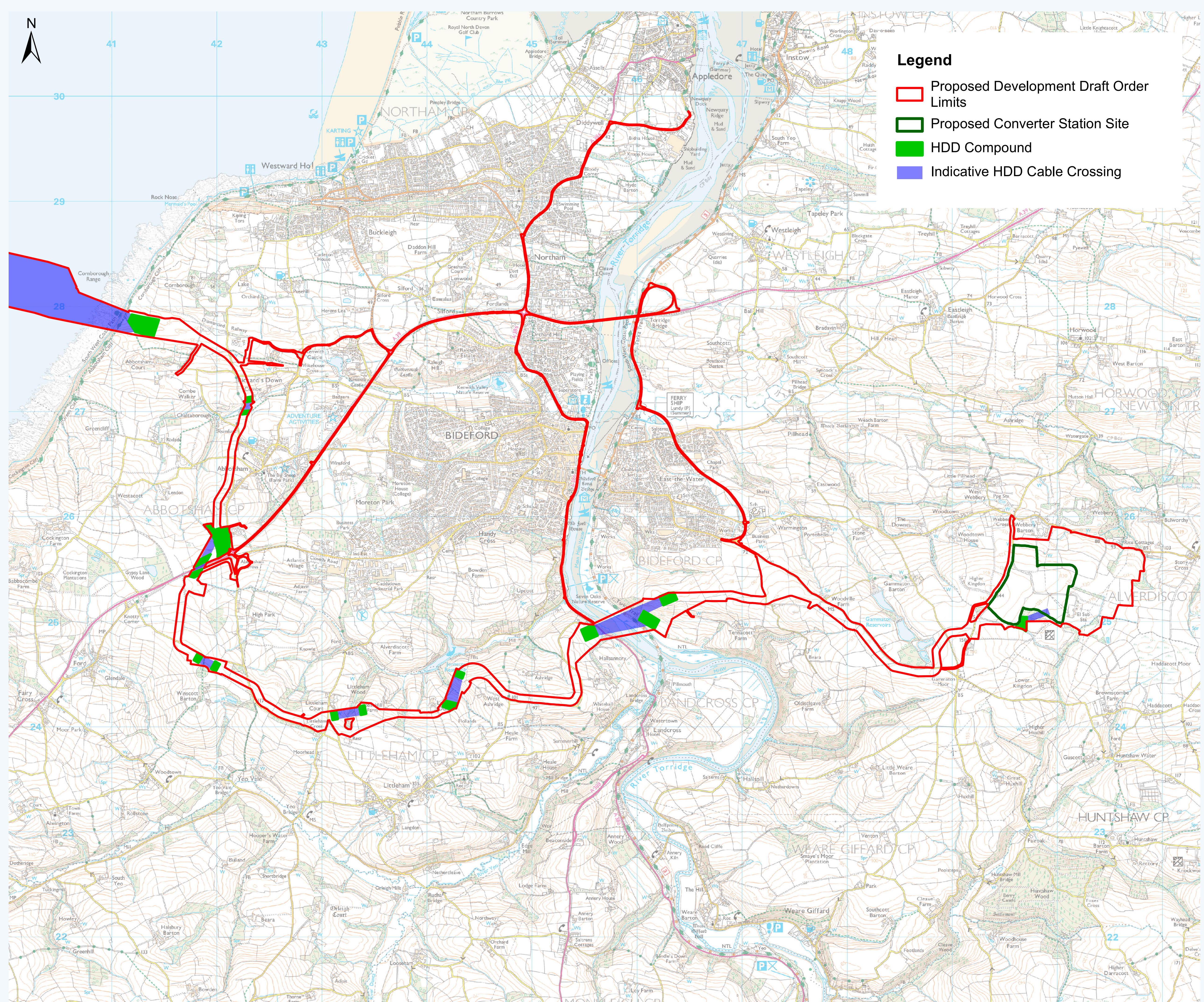
Construction access arrangement

The onshore cables

We would install four HVDC cables in pairs underground for around 14.5km along a single corridor from the proposed landfall at Cornborough Range to the converter station site.

The width of this corridor would vary depending on the technique required to install cables, but will typically be 65 metres during construction and 32 metres once the cables are installed. Once the installation of the underground High Voltage Direct Current (HVDC) cables is complete, the land would be reinstated to its previous use and condition. There would be no permanent infrastructure above ground along the HVDC cable route.

The converter station site would connect to the new substation proposed to be built at Alverdiscott National Grid Substation using 12 High Voltage Alternating Current (HVAC) cables. These would all be buried underground and located within the converter station site or National Grid substation.



Work areas for cable installation

Installing the onshore cables

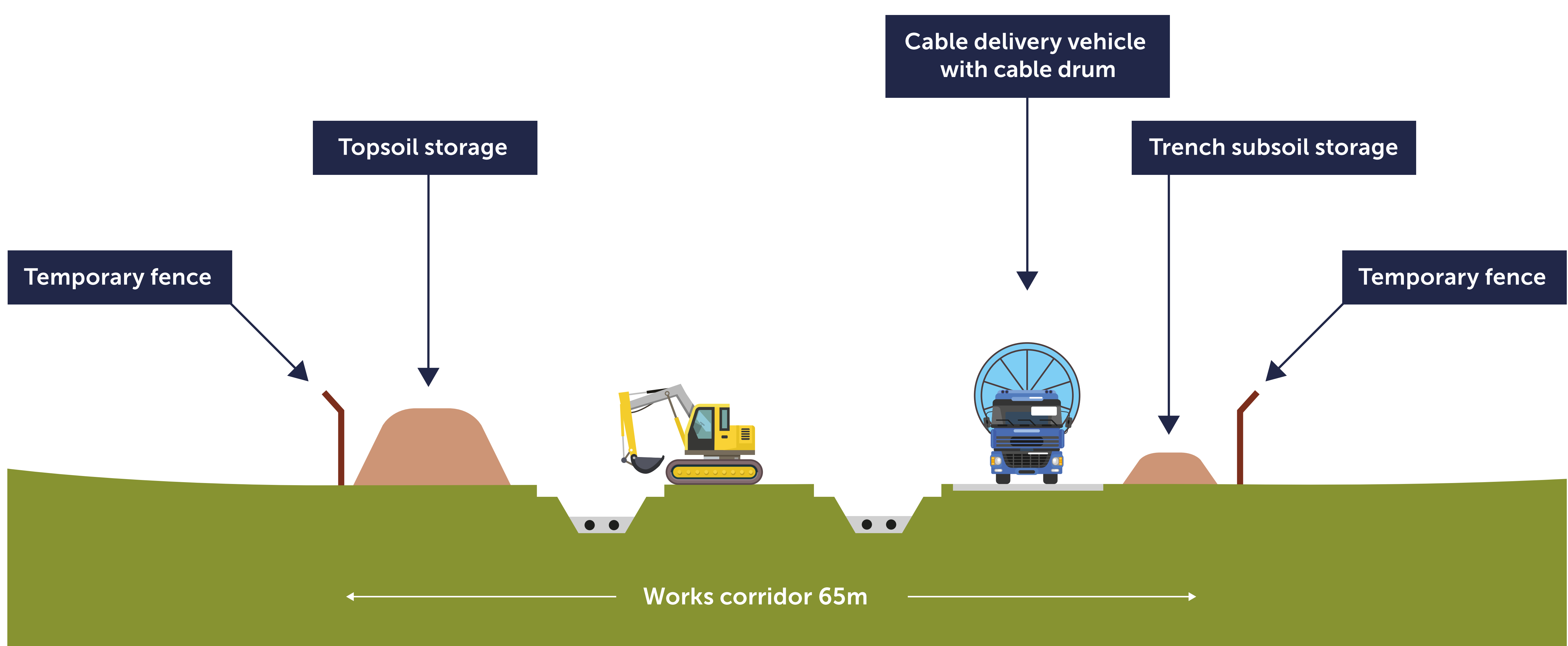
We would work in phases to install the cables. Overall, it would take around two years to install the cables – but each phase would only involve working in a part of the cable corridor at a time.

All of the measures set out in our Outline Construction Environmental Management Plan and Outline Construction Traffic Management Plan would apply to the areas where we would install the onshore cables.

The cables would be installed in ducts, each generally about 1km long. In most places, we would dig a trench, install a duct, restore the land over the duct, and then pull the cable through the duct. Where we need to cross obstacles such as the River Torridge or a major road, we would use trenchless installation techniques like Horizontal Directional Drilling (HDD). This involves digging down either side of the area to be crossed, drilling underneath them, and installing the duct. Each section of cable would be joined together in a safe and secure underground casing called a 'joint bay'.

We would need to carry out some works before we begin installing the cables:

- Construction compounds: We would establish a small number of temporary construction compounds (primarily at proposed HDD locations) in addition to the main construction compound off Gammaton Road.
- A386 improvements: We would improve an existing junction along the A386 to provide access to the area where we would install the cables under the River Torridge using HDD.



Indicative diagram of cable installation

The offshore cables

Electricity would move from Morocco to the UK along four cables either buried in or protected on top of the seabed. To ensure the most efficient method, electricity will be transmitted using proven HVDC technology, already used to transport electricity between the UK and Europe.

Within UK waters, the cables would be located in a corridor around 370km in length, from the edge of the UK's exclusive economic zone (EEZ) to the point they are proposed to reach shore at Cornborough Range. The cables would be placed in pairs with a fibre optic cable which would allow us to monitor the cables once installed up until the point they approach the land. The cables would then be separated out as they approach the shore.

Ultimately, the space that the cables would occupy once installed is one metre wide for each pair of cables. However, while we plan our route, we need to allow enough space within the corridor to take into account conditions we encounter during construction and feedback from stakeholders. We are therefore looking at routing options in a corridor 500m wide in most places, extending to 1500m in some places where the cables would cross existing power and telecommunications cables.

DEVELOPING OUR ROUTE:

We have completed multiple studies and surveys to inform our proposed route offshore. These include investigations of water depth, seabed features and geohazards, metocean influences, external stakeholders (e.g. seabed leaseholders, general fishing activities, shipping etc) and environmental constraints such as marine protected areas including Special Areas of Conservation (SAC), Special Protection Areas (SPA), and Marine Conservation Zones (MCZ). We will continue to work with relevant stakeholders in developing our proposals offshore in further detail.



Indicative image of a cable-laying vessel

Installing the offshore cables

If a DCO is granted, we expect to install the offshore cables between 2028 and 2029.

This would take place in a series of phases: we would lay sections of cable of around 160km each working from the landfall initially and then moving seawards.

The offshore cables would be installed using specialised cable-laying vessels. These carry a pair of drums with a length of cable, which is then bundled and laid off the ship onto the seabed. We would then bury the cables to protect them and avoid disrupting other maritime activities, such as fishing. In most places in UK waters, we would do this using a trenching machine on a remotely operated vehicle (ROV). In places, we may also put in place additional rock protection over the cables.

There would be some amount of work we need to do to prepare the cable route before this could take place. This includes surveys to check the condition of the

seabed before we begin work, debris clearance, removal of out-of-service cables along the route, boulder removal, and ploughing trenches in certain areas.

We are aware of the need to make sure that we coordinate cable laying carefully with people and businesses using the water along the route. We are engaging with relevant authorities such as the Marine Management Organisation and Maritime and Coastguard Agency, as well as other marine users, when planning and carrying out our cable installation works.

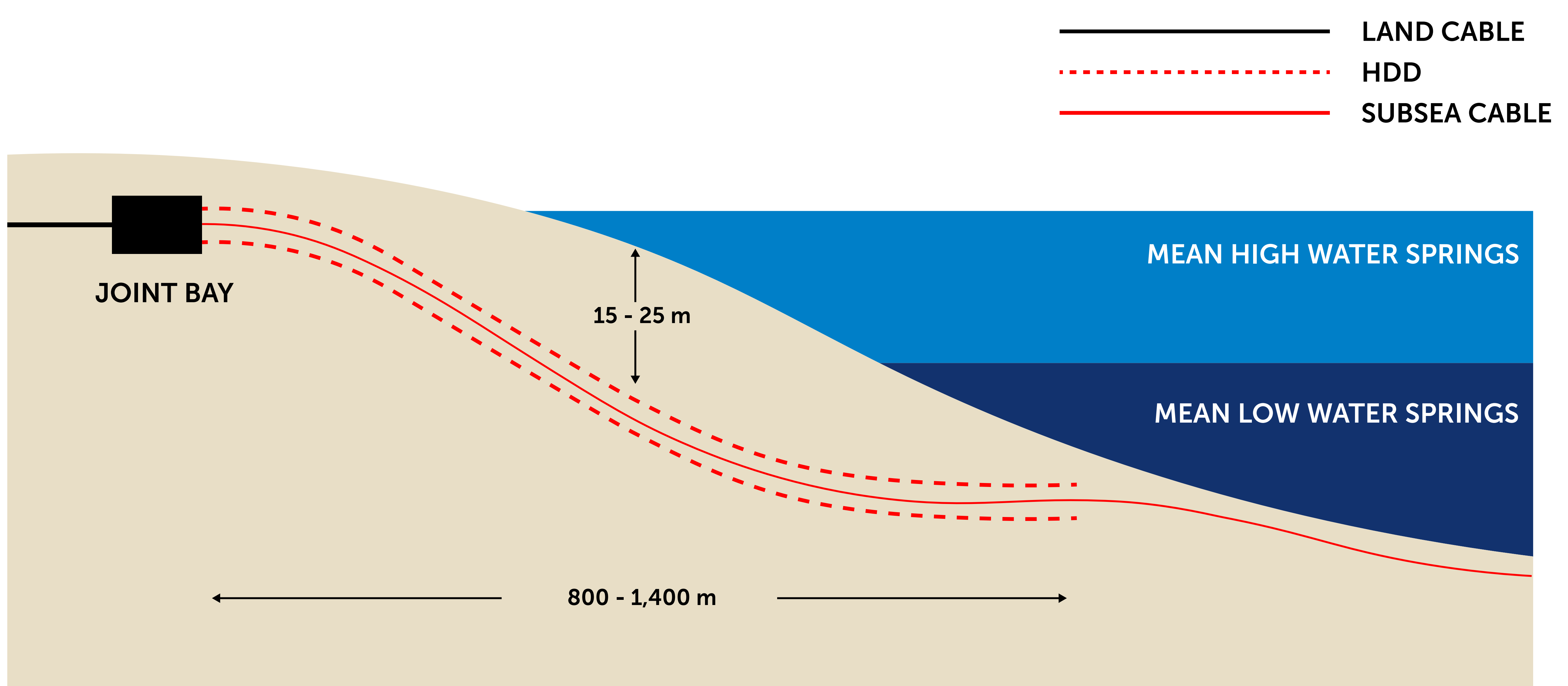
We would also submit a number of documents with our DCO application setting out how we will plan and manage offshore construction in more detail. These include an Outline CEMP.

COMING ASHORE:

The cables are proposed to come ashore at Cornborough Range, about 2.5km south of Westward Ho! and 4km west of Bideford. The offshore cables will join to a set of onshore cables here. This will take place underground in two safe and secure casings called 'joint bays'.

CONSTRUCTION:

The landfall at Cornborough Range would be constructed using HDD under the seabed and shoreline, pulling the offshore cables (most likely from the sea towards the land) through underground ducts and connecting to the onshore cables at the joint bay. This would require the use of a jack-up barge where we are working near the shore. We would need to widen the existing junction from the Cornborough Sewage Treatment Works access road should we bring the cables ashore at this location.



NOT TO SCALE

*Indicative dimensions

Diagram showing HDD in the intertidal area



Assessing our impact

Our EIA will look at the Proposed Development's potential environmental effects. These will include benefits as well as negative impacts. The purpose of the EIA process is to make sure that where we have identified potential impacts, we adopt measures in our design to avoid, address or mitigate them.

The Proposed Development is classed as development requiring assessment of likely significant effects on the environment under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations). This means we need to conduct a formal assessment of its likely significant effects and consult on that assessment.

Our EIA is broken down into many topics that we need to assess, across the construction, operation, maintenance and decommissioning of the Proposed Development. We have already done a lot of work to get to know the land required for the Proposed Development, through site visits and surveys. This has helped shape the design of the Proposed Development.

We are now ready to publish the initial findings of our EIA. These are included in a document called the Preliminary Environmental Information Report (PEIR), which includes a non-technical summary, that we have published as part of this consultation. You can find out how to access the PEIR in the final section of the consultation booklet.

Feedback from this consultation will inform our ongoing EIA. We will submit a document called an Environmental Statement (ES) setting out the final results of our assessments as part of our DCO application.





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Jobs, skills and investment

We aim to be an integral player in, and to fully contribute to, the social and economic development of the communities in which we operate.

Be it in Morocco's southern villages, Devon or the coastal communities of Spain, Portugal, and France, we are consulting with local authorities and communities to maximise the economic benefit of the projects.

Locally, we expect to create 110 jobs in construction and 30 permanent full-time equivalent jobs once the converter stations are operational. As part of our Development Consent Order application (DCO), we will identify how the Proposed Development can contribute to local and regional jobs, community projects and the local economy over its lifetime.

We will also look for opportunities to source materials from the UK and encourage the use of domestic suppliers wherever practicable. We are already planning ahead here: our sister company, XLCC, is establishing a world class cable manufacturing facility at Hunterston in Scotland that will provide High Voltage Direct Current (HVDC) subsea cables for the Project.





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Responding to the consultation

Your views are important and we welcome your feedback. Please respond by **11:59pm on Thursday 27 June 2024** through the methods below.

FIND OUT MORE

You can find out more about our updated proposals and take part in the consultation by:

- Getting in touch with us by phoning **0800 038 3486**, emailing **hello@xlinks.co** or writing to **Xlinks Morocco-UK Power Project consultation, FREEPOST SEC NEWGATE UK LOCAL**
- Visiting our website: **xlinks.co/devon**
- Getting in touch by post, email or phone to request a printed copy of our consultation booklet and questionnaire or a USB containing all the consultation materials. We will post these to your address free of charge. Requests for printed copies of the PEIR will be considered on a case-by-case basis and might be subject to a reasonable printing charge.
- Collecting a copy of our consultation booklet and questionnaire from Northam Library or Pollyfield Community Centre (please check opening hours with the venue before attending), where a printed copy of the PEIR including a Non Technical Summary will also be available to review.





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Next Steps

We will consider all the feedback that we receive at this stage of consultation, along with outputs from technical assessments, and environmental surveys to help us refine our proposals.

Following further development to finalise our proposals, we propose to submit our Development Consent Order (DCO) application, including a Consultation Report showing how we have taken account of feedback, to the Planning Inspectorate. We anticipate this happening in autumn 2024. The Planning Inspectorate will appoint an independent Examining Authority to examine our proposals and make a recommendation on the application to the Secretary of State, who will make the final decision on whether or not to grant development consent.

You can get in touch with us at any time throughout this process using the contact details on this page.

Contact us

Phone: **0800 038 3486**

Email: **hello@xlinks.co**

Website: **xlinks.co/devon**

Post: **Xlinks Morocco-UK Power Project consultation,
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