

**The Great Grid Upgrade**

Grimsby to Walpole

# Grimsby to Walpole

Project Background Document

January 2024



nationalgrid

**The way we generate electricity in the UK is changing rapidly, and we are transitioning to cheaper, cleaner and more secure forms of renewable energy such as new offshore windfarms.**

We need to make changes to the network of overhead lines, pylons, cables and other infrastructure that transports electricity around the country, so that everyone has access to clean electricity from these new renewable sources. These changes include a need to increase the capability of the electricity transmission system between the North and the Midlands, and between the Midlands and the South. It is also needed to facilitate the connection of proposed new offshore wind, and subsea connections between England and Scotland, and between the UK and other countries across the North Sea. Our Grimsby to Walpole proposals are part of The Great Grid Upgrade – the largest overhaul of the grid in generations.

This first stage of our public consultation aims to introduce you to National Grid Electricity Transmission, explain why an upgraded grid requires work in this area and outline our early proposals for a new electricity transmission line between a new substation at Grimsby and Walpole, along with three further new substations along the route.

# Overview of proposals

National Grid Electricity Transmission is proposing to build a new high-voltage electricity transmission line and associated works between a new substation at Grimsby West in North East Lincolnshire and a new substation in the Walpole area, in Norfolk. We are also proposing two new connection substations near the Lincolnshire coast and a new substation at Weston Marsh in Lincolnshire.

This Project Background Document has been prepared to support the first stage of public consultation, which will run from 18 January 2024 to 13 March 2024. During this consultation, we are seeking views about:

- the emerging preferred corridor within which the overhead line may be routed
- potential locations for the proposed new substations
- our work to date to identify where the proposed reinforcement might be located.

We commit to listening to your views and will consider these alongside planning policy, technical assessments and environmental surveys as we develop more detailed proposals. Your views during this consultation will help inform our more detailed proposals, which we will be presenting and consulting on during a further consultation in 2025. Feedback from both stages of consultation will be carefully considered as we further shape our proposals and we will report on that when we make an application to the Secretary of State for permission to build, operate and maintain the new assets.

For further details on our approach to this consultation, please see our Consultation Strategy, which can be found on our website. All documents published as part of this consultation, including this Project Background Document, can be found at [nationalgrid.com/grimsby-walpole](https://nationalgrid.com/grimsby-walpole), or are available on request by contacting the project team at [contact@g-w.nationalgrid.com](mailto:contact@g-w.nationalgrid.com) or 0800 0129 153.

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# Executive summary

## The UK Government has set out a commitment to achieving net zero emissions by 2050.

This means achieving a balance between the greenhouse gases put into the atmosphere and those taken out. The energy industry plays a key part in this transition, from developing renewable energy generation technology, to upgrading the existing transmission network to allow communities across the country to benefit from this clean energy.

We are presenting some proposals in your local area to support that transition and make sure the grid is ready. These proposals are part of The Great Grid Upgrade, the largest overhaul of the grid in generations.

Decarbonising the energy system and delivering cheaper and more secure energy supplies is one of the biggest challenges facing our world. At National Grid Electricity Transmission (NGET) we have a critical role to play in the acceleration towards a cleaner future.

The UK is in the middle of a transformation, with the energy we use increasingly coming from cleaner, greener sources. In 2019, for the first time since the industrial revolution, most of our electricity came from low carbon sources. NGET is at the heart of that energy transformation – investing around £1.3 billion each year to adapt and develop our transmission network to connect new sources of low carbon and green energy to our homes and businesses.

While it is vital that more of the energy we use comes from low carbon and renewable sources, both NGET and the Government recognise it is also important to keep the impact as low as possible on bills, people, communities and our natural environment. National Grid is committed to finding the right balance between these factors to ensure our projects have a sustainable, positive impact.

The UK already has 14.7 gigawatts (GW) of offshore wind energy in operation.<sup>1</sup> The Government's recent [British Energy Security Strategy](#)<sup>2</sup> outlines the ambition to increase energy from offshore wind to 50 GW by 2030 – more than enough to power every home in the UK. In [Powering Up Britain](#),<sup>3</sup> the Government explains that the grid needs to be expanded at an unprecedented scale and pace to deliver more clean power and increase our energy security.

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<sup>1</sup> Wind Energy Statistics, Renewable UK [renewableuk.com/page/ukwedhome](https://renewableuk.com/page/ukwedhome)

<sup>2</sup> British Energy Security Strategy, Department for Business, Energy & Industrial Strategy and Prime Minister's Office, April 2022, [gov.uk/government/publications/british-energy-security-strategy](https://www.gov.uk/government/publications/british-energy-security-strategy)

<sup>3</sup> Powering Up Britain, Department for Energy Security and Net Zero, March 2023, [assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1147340/powering-up-britain-joint-overview.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147340/powering-up-britain-joint-overview.pdf)

Delivering the infrastructure needed to achieve this ambition will boost local economies, provide jobs and opportunities to learn new skills, and bring vital investment to communities right across the country.

Grimsby to Walpole would play an important part in allowing the UK to decarbonise its energy system in a meaningful way that will not only meet net zero targets but, perhaps more urgently, will deliver a more secure and resilient energy system, which improves affordability through connection of renewable energy. Delivering a clean energy transition is the surest way to deliver energy security for the UK and lower bills in the long term.

Grimsby to Walpole will support the UK's net zero target by reinforcing the electricity transmission network in Lincolnshire, Cambridgeshire and Norfolk, and facilitate the connection of planned offshore wind generation, battery storage/solar, interconnectors with other countries and subsea links to Scotland, allowing clean green energy to be carried on the network.

The reinforcement is needed because our existing power lines do not have sufficient capacity for all the new sources of electricity that we expect to connect to the network over the next 10 years and beyond. Building Grimsby to Walpole, together with other reinforcements, will help meet this future energy requirement.

This document is supported by a number of technical documents, including:

- **Strategic Options Report (SOR), Grimsby to Walpole and North Humber to High Marnham, May 2023**
- **Addendum to Strategic Options Report, January 2024 (SOR Addendum)**
- **New Walpole Substation Location Options Report, January 2024**
- **Corridor Preliminary Routeing and Siting Study (CPRSS), January 2024**, explaining the process and work undertaken to date to identify an emerging preferred corridor within which the proposed infrastructure may be located.

**We recommend that you read these reports in more detail as they will help inform your feedback.**

Our proposals include building a new 400,000 volt (400 kV) overhead electricity transmission line, new 400 kV substations at Grimsby West and Walpole, together with three new connection substations in Lincolnshire for planned new offshore wind generation, battery storage/solar, interconnectors with other countries and subsea links to Scotland. This document provides more detail on our early works carried out to date and our emerging preference for where the new overhead line and other infrastructure could be located.

# Our public consultation

## Our commitment to you

We want to ensure that all stakeholders and communities are engaged in the development of our proposals and have the opportunity to comment on the proposals at key decision-making points. From 18 January 2024 to 13 March 2024, we are holding our first stage of public consultation to:

- introduce National Grid Electricity Transmission and our proposals to you
- explain why we must build new electricity transmission infrastructure in this area and what technology is the best to use
- outline the work carried out to identify our emerging preferred route corridor and graduated swathe
- ensure all stakeholders have the opportunity to provide feedback on our work to date and hear your views about where within our emerging preferred corridor and graduated swathe the exact route could be located, and how we should approach building this vital infrastructure
- outline next steps to the programme and show how we will further develop our proposals.

This document includes information on our plans, what we are consulting upon and how you can get involved. It also signposts the more detailed technical information included in the other reports published as part of this consultation. As well as providing information in this document and on the project website, we are holding a range of both in-person and online public consultation events. We hope they will provide you with an opportunity to ask questions and comment on our proposals at this early stage of their development. Please see the 'Have your say' section towards the end of this document for all the details about our consultation, where you can find more information and how you can give us your views.

Your feedback is important in helping us to develop and refine our plans. This is the first stage of consultation on our proposals. We will carry out further consultation as our plans develop.

When we carry out further consultation, we will explain in an interim report how feedback from this first stage of consultation has shaped our plans and we will outline the key themes in the feedback from this first stage. We will report on the feedback from each stage of public consultation, and our responses to comments, in a Consultation Report which will be provided as part of our Development Consent Order (DCO) application, which we are planning to submit in 2027. To find out more about how we develop our proposals, please see our [video](#)<sup>4</sup> explaining how we work.

## Our approach to public consultation

Certain types of energy infrastructure, including overhead electricity transmission lines of the type we are considering for Grimsby to Walpole, are nationally significant infrastructure projects under the Planning Act 2008. This means that we will be preparing and submitting a DCO application to the Planning Inspectorate, who will consider our proposals and make a recommendation to the Secretary of State for Energy Security and Net Zero, who will decide on whether development consent should be granted. Local planning authorities, along with others, remain important consultees in the process. Before submitting a DCO application, a developer must carry out public consultation in accordance with the requirements of the Planning Act 2008. To find out more about the [DCO process](#),<sup>5</sup> please see the Planning Inspectorate website.

Consultation to support our DCO application is planned to take place over two stages. Stage 1 is the public consultation about our early proposals. It is an early non-statutory stage, not required by the Planning Act 2008, and will be held over an eight-week period from 18 January 2024 to 13 March 2024.

The next stage, Stage 2 of the public consultation, will be the statutory consultation under the Planning Act 2008. This will happen in 2025, before we finalise our proposals and submit a DCO application in 2027.

<sup>4</sup> National Grid Electricity Transmission, 'How we work' video, [players.brightcove.net/867903724001/default\\_default/index.html?videoId=6329276694112](https://players.brightcove.net/867903724001/default_default/index.html?videoId=6329276694112)

<sup>5</sup> National Infrastructure Planning – the process, Planning Inspectorate, [infrastructure.planninginspectorate.gov.uk/application-process/the-process/](https://infrastructure.planninginspectorate.gov.uk/application-process/the-process/)

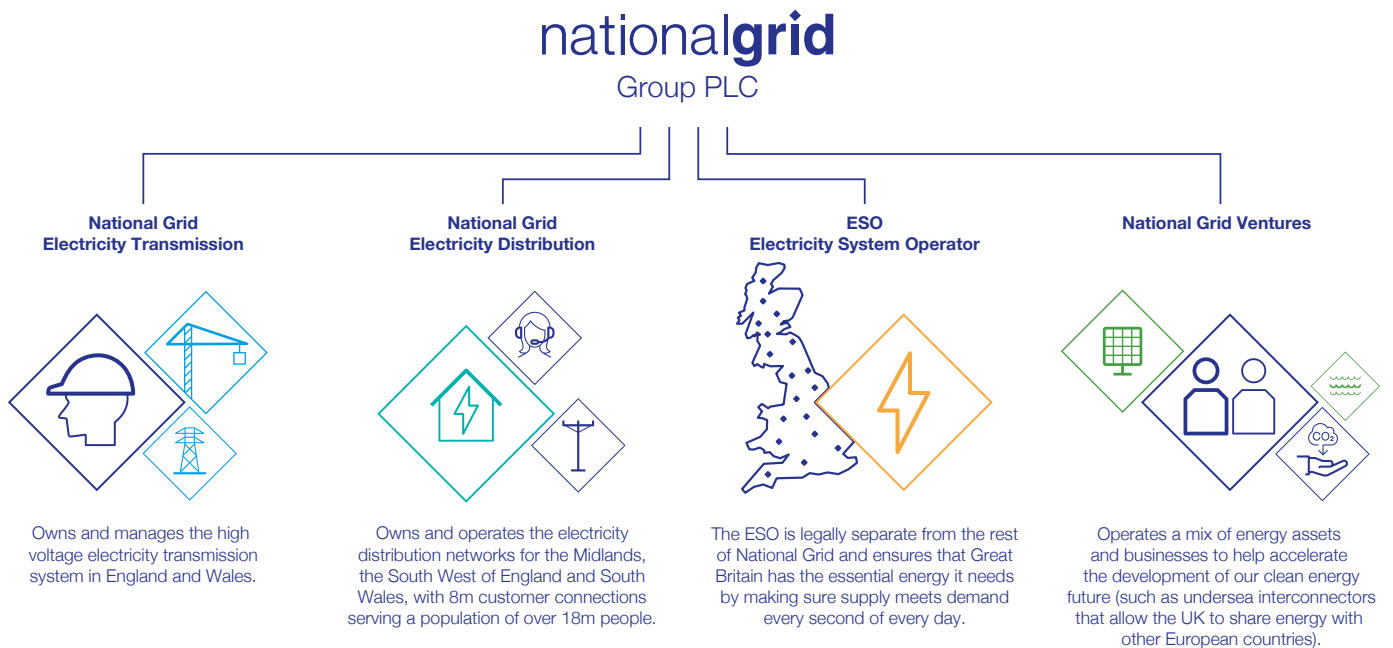


# About National Grid

**National Grid Electricity Transmission (NGET) owns, builds and maintains the network in England and Wales. It is NGET that is developing plans for Grimsby to Walpole.**

NGET sits at the heart of Britain’s energy system, connecting millions of people and businesses to the energy they use every day. We bring energy to life – in the heat, light and power we bring to our customer’s homes and businesses; in the way that we support our communities and help them to grow; and in the way we show up in the world. Our vision is to be at the heart of a clean, fair and affordable energy future.

Within the National Grid Group there are distinctly separate legal entities, each with their individual responsibilities and roles. The entities involved in the transmission of electricity at high voltage are shown in the diagram below.





In 2022, Western Power Distribution also became part of the National Grid Group of companies and is now National Grid Electricity Distribution. Each of the different entities within the National Grid Group are working to build a cleaner, fairer and more affordable energy system that serves everyone – powering the future of our homes, transport and industry.

When developing transmission network proposals, NGET must, under the Electricity Act 1989, do that in an efficient, coordinated and economical way, and in a way which considers people, places and the environment (the desirability of preserving amenity duty). Options to deliver additional network capability and the options we take forward are evaluated against these statutory duties.

How we will go about doing that, meeting our amenity responsibilities and involving stakeholders and communities, is outlined in our commitments when undertaking works in the UK.<sup>6</sup>

### 1. Establishing need

We only seek to build electricity lines along new routes or build new above-ground installations where existing infrastructure cannot be upgraded, where forecasted increases in demand cannot be met by other means, where customer connections are required or where existing infrastructure has been identified for replacement.

### 2. Involving stakeholders and communities

We promote genuine and meaningful engagement, meeting and, where appropriate, exceeding the requirements for consultation or engagement.

### 3. Routing networks and selecting sites

If we need to build new infrastructure, we seek to avoid areas which are nationally or internationally designated for their landscape, wildlife or cultural significance.

### 4. Minimising the effects of new infrastructure

When we are developing new infrastructure, we seek to reduce the effect of our work on communities by having regard to safety, noise and construction traffic.

### 5. Mitigating adverse effects of works

We carry out relevant environmental investigations and report on these when we apply for consent for new works and use best practice environmental impact assessment techniques to assess possible effects of our works and identify opportunities for mitigation measures.

### 6. Offsetting where mitigation is not practicable

When we cannot mitigate the impacts of our proposals, we offset these impacts in practical and sustainable ways that are developed through engagement with local stakeholders.

### 7. Enhancing the environment around our works

When undertaking works, we consider what practicable measures can be taken to enhance nearby and surrounding areas for the benefit of local communities and the natural and historic environment.

### 8. Monitoring and learning for the future

We monitor, evaluate and review our engagement processes to learn from previous experiences to improve our working practices.

### 9. Reviewing our commitments

We review these commitments at least every five years, and make additional revisions in response to new legislation, policy and guidance.

### 10. Working with others

We require other organisations working on our behalf to demonstrate these same commitments and continue to create an environment where we can share and deliver best practice.

<sup>6</sup> National Grid's commitments when undertaking works in the UK: Our stakeholder, community and amenity policy (National Grid, December 2019) – available at [nationalgrid.com/sites/default/files/documents/National%20Grid\\_s%20commitments%20when%20undertaking%20works%20in%20the%20UK.pdf](https://nationalgrid.com/sites/default/files/documents/National%20Grid_s%20commitments%20when%20undertaking%20works%20in%20the%20UK.pdf)

## Many other organisations also have a key role to play in delivering a cleaner energy future.



Department for  
Energy Security  
& Net Zero

The Department for Energy Security and Net Zero (DESNZ) is the ministerial department with primary responsibility for energy.

In November 2020, the Prime Minister set out a [Ten Point Plan for a Green Industrial Revolution](#).<sup>7</sup> This was followed by a White Paper, which sets out the Government's proposals for future law. The Energy White Paper, entitled [Powering Our Net Zero Future](#),<sup>8</sup> sets out how, as a country, we will transform the way we produce and use energy to tackle climate change, meet net zero emissions by 2050, and build back greener. The White Paper focuses on the Government's ambitions to increase energy generation from offshore wind and increase interconnector capacity, as well as hydrogen, carbon capture utilisation and storage (CCUS), heat and transport decarbonisation. Building on the White Paper, Government also published the [British Energy Security Strategy](#)<sup>9</sup> in April 2022, increasing the 2030 ambition for offshore wind from 40 GW to 50 GW. In [Powering Up Britain](#),<sup>10</sup> Government explains that the grid needs to be expanded at an unprecedented scale and pace to deliver more clean power and increase our energy security.

DESNZ, working with input from National Grid ESO, is conducting a review of how offshore wind is connected, with the aim of removing barriers to achieving Government ambitions for offshore wind.<sup>11</sup> In Summer 2023, DESNZ also consulted about a recommended approach to community benefits for electricity transmission network infrastructure.<sup>12</sup>

The Secretary of State for DESNZ is also the ultimate decision maker for new electricity transmission network proposals under the Planning Act 2008 (as amended).



Planning  
Inspectorate

The Planning Inspectorate is the Government agency responsible for examining proposals for Nationally Significant Infrastructure Projects (NSIPs). In energy terms, those include offshore windfarms, new nuclear power stations and new overhead lines greater than 2 km in length. The overhead line infrastructure that we are proposing to build for the Grimsby to Walpole reinforcement would meet the threshold to be an NSIP.

## ofgem

Ofgem (the Office of Gas and Electricity Markets) is the government regulator for gas and electricity markets in Great Britain. Ofgem is a non-ministerial government department and an independent National Regulatory Authority, whose role is to protect consumers as a greener, fairer, energy system is delivered. Ofgem works with Government, industry and consumer groups to help deliver net zero from an energy perspective at the lowest cost possible to consumers.

## ESO

ESO is the Electricity System Operator for the whole of Great Britain. ESO ensures electricity is always where it is needed and the network remains stable and secure in its operation.

Generators apply to ESO when they wish to connect to the network and ESO leads the work to consider how the network may need to evolve to deliver a cleaner, greener future.

<sup>7</sup> The Ten Point Plan for a Green Industrial Revolution, HM Government, November 2020, [gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution](https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution)

<sup>8</sup> Energy White Paper, Powering our Net Zero Future, HM Government, December 2020, [gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future](https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future)

<sup>9</sup> British Energy Security Strategy, Department for Business, Energy & Industrial Strategy and Prime Minister's Office, April 2022, [gov.uk/government/publications/british-energy-security-strategy](https://www.gov.uk/government/publications/british-energy-security-strategy)

<sup>10</sup> Powering up Britain, Department for Energy Security and Net Zero, March 2023, [assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1147340/powering-up-britain-joint-overview.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147340/powering-up-britain-joint-overview.pdf)

<sup>11</sup> Offshore Transmission Network Review, Department for Business, Energy & Industrial Strategy, updated 24 August 2020, [gov.uk/government/groups/offshore-transmission-network-review](https://www.gov.uk/government/groups/offshore-transmission-network-review)

<sup>12</sup> Community benefits for electricity transmission infrastructure, Department for Energy Security and Net Zero, May 2023, [gov.uk/government/consultations/community-benefits-for-electricity-transmission-network-infrastructure](https://www.gov.uk/government/consultations/community-benefits-for-electricity-transmission-network-infrastructure)



# Moving towards net zero

## The world we live in is changing and the UK is at a turning point as we embrace the enormous opportunities a cleaner, greener future brings.

The UK has set a world-leading target to tackle climate change, which is to achieve net zero by 2050. Put simply, this means that we will remove the same amount of greenhouse gases from the atmosphere as we produce.

As a country, we are already making progress. The UK has the largest offshore wind capacity in the world, with some 14.7 GW in operation, along with 15.2 GW of solar.

Recent years have been record-breaking for renewables on the GB transmission network. Summer 2020 saw the longest run without burning coal since the industrial revolution, stretching almost 68 days. Solar power has set new records too, with 10.1 GW of power produced in April 2023. In June 2023, UK windfarm capacity reached 27.9 GW, overtaking combined cycle gas power stations for the first time.<sup>13</sup>

The way we generate electricity in the UK is therefore changing rapidly. We are transitioning to cleaner technologies such as new offshore windfarms. That means we need to make changes to the grid so the whole country has access to the clean electricity from these new renewable sources.

Decarbonising the energy system means replacing – as far as it is possible to do so – fossil fuels with clean and low carbon energy technologies such as from wind turbines and nuclear power for electricity production.

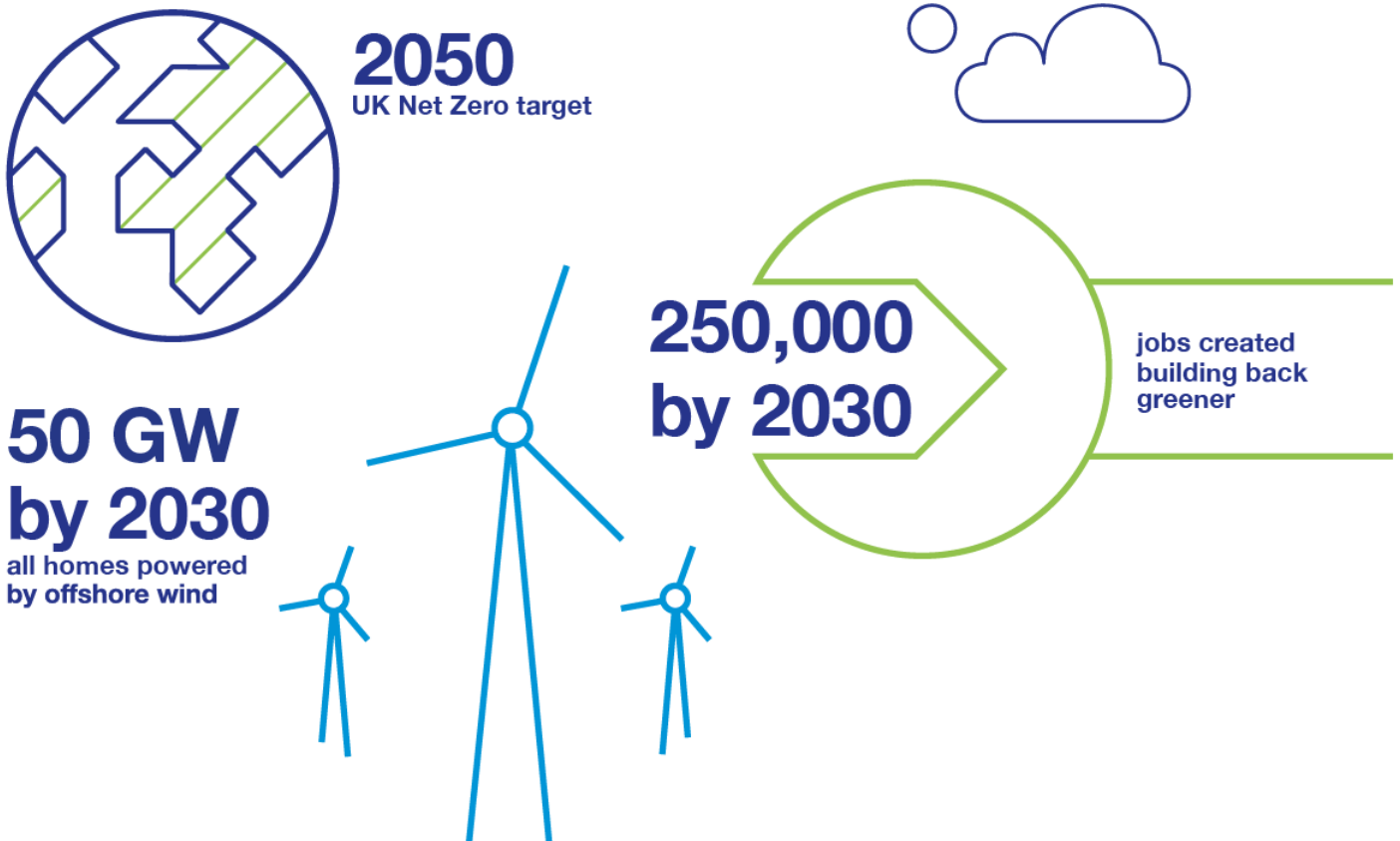
Growth in energy generated from offshore wind is a key part of achieving net zero. The Government's [British Energy Security Strategy](#)<sup>14</sup> outlines the ambition to increase energy from offshore wind to 50 GW by 2030 – more than enough to power every home in the UK. It also includes a target for 70 GW of solar by 2035.

While the way we generate electricity is changing, demand is set to significantly increase. The Climate Change Committee anticipates that electricity demand will at least double by 2050 as we shift to clean energy to drive electric vehicles, heat our homes and power our industry.

In [Powering Up Britain](#),<sup>15</sup> the Government explains that the grid needs to be expanded at an unprecedented scale and pace to deliver more clean power and increase our energy security.

The energy revolution brings with it huge opportunities to boost skills and jobs. It is expected that up to 60,000 jobs will be created in the offshore wind sector alone this decade. Up to 250,000 jobs in low carbon industries are also expected to be created by 2030 as set out in the Government's [Ten Point Plan for a Green Industrial Revolution](#).<sup>16</sup> The Climate Change Committee's [Sixth Carbon Budget](#),<sup>17</sup> published in December 2020, recommends deployment of renewables at scale, including sustaining a build rate to support deployment up to 140 GW of offshore wind by 2050, raising further opportunity for growth and job creation. By 2050, our own analysis indicates that the energy sector needs to fill around 400,000 jobs to build the net zero energy workforce.

Our mission at National Grid Electricity Transmission is to support these aims. We believe that by acting now, the UK can become the world's first major clean economy, with net zero carbon emissions by 2050, creating growth and jobs for communities across Britain. Grimsby to Walpole proposals will help the transition to clean energy, making sure the grid is ready.



<sup>13</sup> Electric Insights Quarterly, Drax/Imperial College London, April to June 2023, [reports. electricinsightsco.uk/wp-content/uploads/2023/09/Drax\\_23Q2.pdf](https://electricinsightsco.uk/wp-content/uploads/2023/09/Drax_23Q2.pdf)

<sup>14</sup> British Energy Security Strategy, Department for Business, Energy & Industrial Strategy and Prime Minister's Office, April 2022, [gov.uk/government/publications/british-energy-security-strategy](https://www.gov.uk/government/publications/british-energy-security-strategy)

<sup>15</sup> Powering Up Britain, HM Government, March 2023, [gov.uk/government/publications/powering-up-britain](https://www.gov.uk/government/publications/powering-up-britain)

<sup>16</sup> Ten Point Plan for a Green Industrial Revolution, HM Government, December 2020, [gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution](https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution)

<sup>17</sup> Sixth Carbon Budget 2033–2037, Climate Change Committee, December 2020, [theccc.org.uk/publication/sixth-carbon-budget/](https://www.theccc.org.uk/publication/sixth-carbon-budget/)

# The project

## **National Grid Electricity Transmission is proposing to upgrade the electricity transmission network between Grimsby West and Walpole, including five new substations.**

The Grimsby to Walpole upgrade will increase the capability of the network to carry clean green energy from the north of England to the Midlands and East Anglia. It is also required to connect and carry power from offshore windfarms, interconnectors, solar/battery storage proposals and high voltage direct current (HVDC) links that are planned to connect to the network.

This reinforcement is one of a number of network upgrades that need to be accelerated to help meet increased Government targets for offshore wind (see the latest Network Options Assessment (NOA) published in summer 2022 by the ESO). It needs to be operational as close as possible to 2030 to meet those Government targets. More details on the NOA can be found on page 17 of this document.

### **Proposed new overhead line**

The proposed upgrade would involve the construction and operation of approximately 140 km of new 400,000 volt (400 kV) overhead electricity transmission line.

New pylons and conductors (electrical wires) would be located along the overhead line route. At this early stage of the project, we have not decided on exactly what type of pylon we will use. This will be considered in more detail as we develop our proposals further. As a starting position, we are considering the use of traditional 400 kV lattice steel pylons. These are typically around 50 metres in height, with approximately three pylons per kilometre on a straight section of the route, slightly more in places.

In some locations, specific constraints such as navigable river crossings, can require considerably taller pylons to ensure safe electrical clearance from the electrical conductors (wires) to activities below.

You can find out more about pylon types in our Corridor Preliminary Routeing and Siting Study report.



### Proposed new substations

Five new 400 kV substations are needed as part of the Grimsby to Walpole upgrade, to connect new customers and ensure the network meets the relevant technical standards.

- One substation, to be located in the vicinity of the existing Grimsby West substation, is needed to replace the existing substation and to connect three solar/battery storage projects, plus two additional supergrid transformers for Northern Powergrid.
- Two connection substations south west of Mablethorpe in Lincolnshire are needed to facilitate the connection of planned offshore wind generation, interconnectors with other countries and a subsea link from Scotland.
- One substation near existing overhead lines at Weston Marsh, north east of Spalding, is needed to connect an offshore windfarm and two solar/battery storage projects.
- One substation in the vicinity of the existing Walpole substation, is needed to connect proposed subsea links from Scotland and a combined cycle gas turbine power station.

We have included emerging preferred siting zones for these substations as part of this consultation and we are seeking your feedback on these. We will include more detailed information about the proposed substations in our next stage of public consultation in 2025.

### Other requirements

Additional land will be required to build and reduce the potential impacts of the proposed upgrade. This includes, but is not limited to, the following:

- temporary land for construction activities including working areas for construction equipment and machinery, site offices, welfare, storage and access; and
- land required for mitigation, compensation and enhancement of the environment as a result of the environmental assessment process and delivering Biodiversity Net Gain.

# How the need for network reinforcement is identified

**Every year, ESO looks at how much energy needs to be carried on the network in the future and where network capability needs to be improved to accommodate that.**

1. That starts with ESO identifying a range of [Future Energy Scenarios](#)<sup>18</sup> which are discussed with stakeholders and published each summer. Future Energy Scenarios represent different credible scenarios for how quickly we might make the transition to a cleaner, greener energy future as we strive towards net zero by 2050.
2. The Future Energy Scenarios inform the analysis in the [Electricity Ten Year Statement](#),<sup>19</sup> which is published each autumn, setting out ESO's view of future transmission requirements and where the capability of the transmission network might need to be addressed over the next decade.

3. Transmission owners, which for England and Wales is NGET, then respond with solutions to address the requirements identified in the Electricity Ten Year Statement. We work with energy consumers in mind, making sure we focus on transmission system proposals that offer the best value and can be delivered in an efficient and coordinated way. ESO assesses and publishes its recommendations as to which proposals should proceed in a Network Options Assessment (NOA) report each year.

In summer 2022, a refreshed [NOA](#)<sup>20</sup> was published alongside ESO's Pathway to 2030 [Holistic Network Design \(HND\)](#),<sup>21</sup> setting out a blueprint for the connection of the offshore wind needed to meet the Government's 2030 targets.

In planning and operating the network, transmission licence holders – onshore and offshore – are required by their licence to comply with the [National Electricity Transmission System Security and Quality of Supply Standards \(NETS SQSS\)](#).<sup>22</sup> These set out criteria and methodologies for planning and operating the transmission network in the UK – in essence, minimum requirements designed to ensure secure and stable electricity supplies.

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<sup>18</sup> Future Energy Scenarios 2023, National Grid ESO, July 2023, [nationalgrideso.com/document/283101/download](https://nationalgrideso.com/document/283101/download)

<sup>19</sup> Electricity Ten Year Statement 2023, National Grid ESO, October 2023, [nationalgrideso.com/document/286591/download](https://nationalgrideso.com/document/286591/download)

<sup>20</sup> Network Options Assessment Refresh 2021/22, National Grid ESO, July 2022, [nationalgrideso.com/document/262981/download](https://nationalgrideso.com/document/262981/download)

<sup>21</sup> Pathway to 2030 Holistic Network Design, National Grid ESO, July 2022, [nationalgrideso.com/future-energy/the-pathway-2030-holistic-network-design](https://nationalgrideso.com/future-energy/the-pathway-2030-holistic-network-design)

<sup>22</sup> Security and Quality of Supply Standard, National Grid ESO, [nationalgrideso.com/industry-information/codes/security-and-quality-supply-standards/code-documents](https://nationalgrideso.com/industry-information/codes/security-and-quality-supply-standards/code-documents)



### What is the Network NOA and what does it mean for this project?

The NOA 2021/22 Refresh was published in July 2022; it updated an annual report from ESO which outlines its recommendations for which network reinforcement projects need to be taken forward and when. The report also recommends the most economically suitable investment strategy for these reinforcements and outlines the pathway to 2030 and beyond.

This project, along with others, is a priority because the Midlands, South and East of England – which covers areas spanning from the Humber in the North to East Anglia and the Thames Estuary in the south – have been identified as areas in need of network reinforcement to enable the connection of more offshore wind on the East Coast.

ESO has identified this and other reinforcements in the **NOA** as ‘HND essential’ to deliver the **Pathway to 2030 Holistic Network Design (HND)** – connecting offshore wind needed to meet the Government’s offshore target for 2030. ESO also advises in the NOA that the reinforcement needs to be accelerated to help meet the Government’s 2030 offshore wind target.

Grimsby to Walpole therefore forms an important part of our plans for this region – helping increase power flows from the North to the Midlands and facilitating the connection of solar and offshore wind and interconnectors.



# How we develop projects

Our approach to developing new electricity transmission proposals includes the following key stages:





The Strategic Proposal stage involves identifying potential options that will meet the need to reinforce the network that has been identified by ESO and provide physical connection points for customers in and around the local area. Thereafter, at the Options Identification and Selection stage, we look at potential corridors where the proposed new infrastructure might be most appropriately located. This is the stage that we are currently at.

We have identified a strategic option and an emerging preferred corridor that meets the network reinforcement requirement. We are sharing information about those early, so that we can consider everyone's feedback as we further develop our proposals. You can read more about how we develop our proposals at the project development and delivery stage in [Our Approach to Consenting](#).<sup>23</sup>

The sections that follow give an overview of the need for network reinforcement in the region; the work we have undertaken to identify a strategic option; our emerging preferred corridor; information about this first stage of consultation; how you can give us your feedback; and next steps.

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<sup>23</sup> Our Approach to Consenting, National Grid Electricity Transmission, April 2022, [nationalgrid.com/electricity-transmission/document/142336/download](https://nationalgrid.com/electricity-transmission/document/142336/download)

# The need for network reinforcement in the region

## The electricity transmission network today in the region

Like much of the high voltage electricity transmission network across the country, the electricity transmission network is limited to the north and south of this area, where it was largely built in the 1960s. In North East Lincolnshire, the network was initially developed to supply demand in and around Grimsby and the South Humber Bank, with the network extending into the area from Keadby in the Trent Valley to Grimsby West.

In the late 1990s, a further high voltage electricity transmission line was added between Grimsby and Keadby, when gas-fired power stations were built on the South Humber Bank and that area started to export electricity out of the region.

To the south of Grimsby and the South Humber Bank, the 400 kV network mostly lies outside Lincolnshire, in the Trent Valley. There, it was built to carry electricity on to the rest of the country from power stations in the Yorkshire and Nottinghamshire coal fields. Today, power still flows largely north to south on this part of the network.

In south Lincolnshire, a new substation was built at Bicker Fen in the 1990s to meet increased demand on the local distribution network. Bicker Fen is also a point on the network where renewable energy from onshore and offshore wind is connected. Viking Link, an interconnector with Denmark is also connected there.

Large parts of the region, including the main population centres at Scunthorpe, Lincoln, Boston and Skegness, the coastal towns and the more dispersed towns and villages, receive their electricity supplies from the lower voltage distribution networks. In North Lincolnshire, the local distribution network is owned and operated by Northern Powergrid and connects to the transmission network at Keadby, Grimsby West and West Burton. In south Lincolnshire, the distribution network is owned and operated by National Grid Electricity Distribution (NGED) and connects to the transmission network at Bicker Fen and Sutton Bridge. In Cambridgeshire and Norfolk, the distribution network operator is UK Power Networks and connects to the transmission network at Walpole. The extent of the existing electricity transmission network (the blue lines on the map) is therefore very limited. There is no transmission network across most of the eastern half of Lincolnshire.

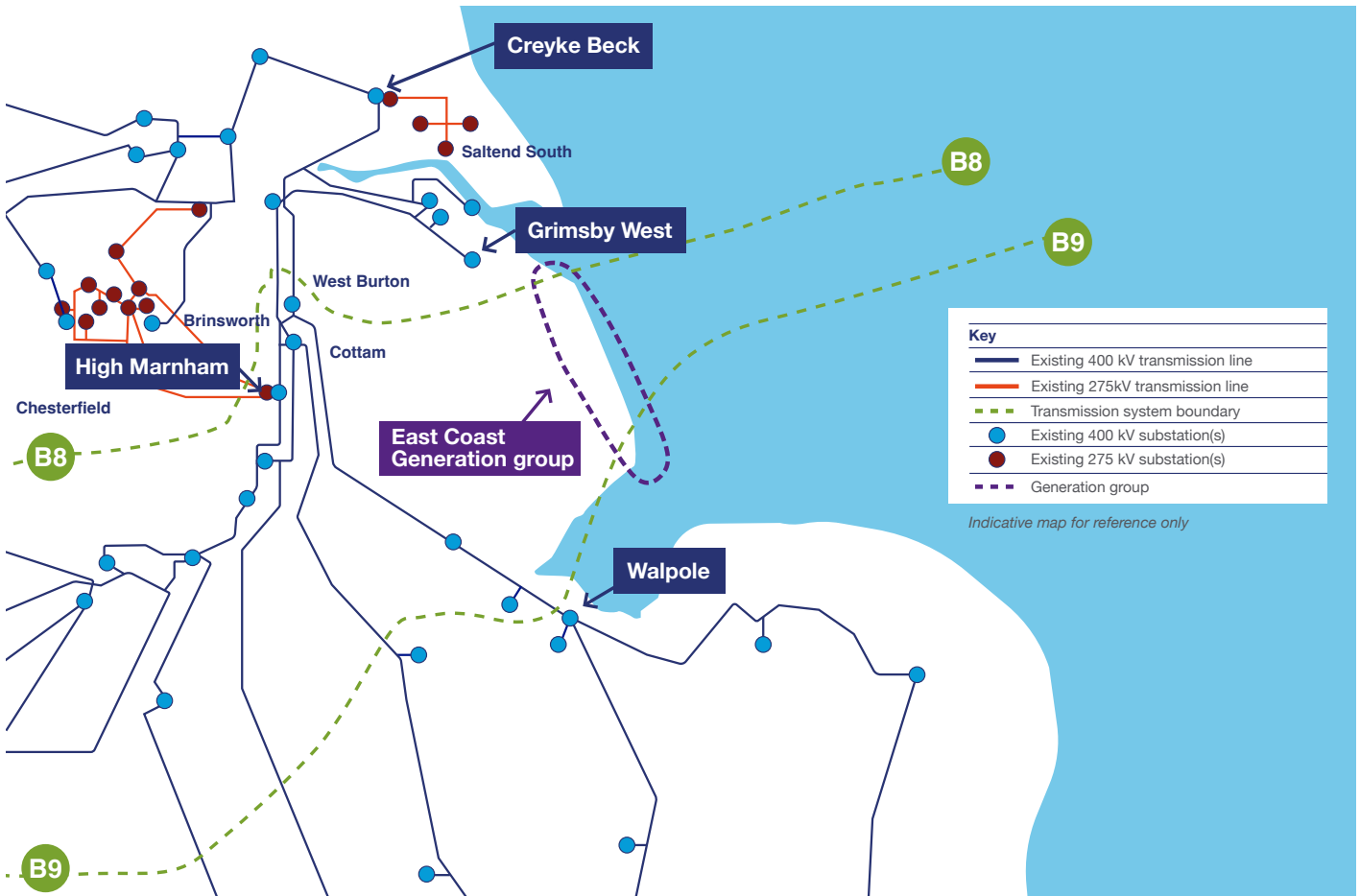


Figure 1 Map showing the B8 and B9 transmission boundaries

**How power is transported throughout the network**

The high voltage electricity transmission network in England and Wales operates largely at 400 kV and 275 kV. It connects separately owned generators, interconnectors, large demand users fed directly from the transmission system and the lower voltage distribution networks.

Most lines of pylons on the network carry two electrical circuits. The network is planned and operated under a set of standards designed to ensure there are no widespread electricity supply interruptions, even if two circuits are out of service.

For example, if one circuit is switched out for planned maintenance and another is impacted by a fault at the same time, the Security and Quality of Supply Standard is designed to ensure:

- electricity system frequency is maintained within statutory limits
- no part of the network is overloaded beyond its capability
- voltage performance stays within acceptable statutory limits
- the system remains electrically stable.

ESO oversees the standards that we maintain on the system; however, they are approved by a Security and Quality of Supply Standard panel and Ofgem.

### Why does the network in the region need reinforcing?

With growing offshore wind and interconnectors, an anticipated tripling of wind generation connected across the Scottish networks by 2030 and the Government's increased ambition to connect 50 GW of offshore wind by 2030, north-south power flows are set to increase. ESO, in the Electricity Ten Year Statement, anticipates that the network between the North and the Midlands needs to be capable of transferring around 25.9 GW of electricity by 2033, compared to 11.6 GW that it can transfer today while remaining compliant with the standards the network is operated to.

### Increasing network boundary capability

Where power flows from one part of the network to another exceed the capability of the network across what we call 'transmission boundaries', one of two things needs to happen.

Firstly, ESO might pay generators to reduce the energy they produce in one part of the country while paying others elsewhere to generate. These payments are called 'constraint payments'. Balancing the network in this way can temporarily manage power flows where network capability is insufficient, but increases operation costs, as more expensive generation is brought on. This can be an economic way to manage the network up to a point, if constraint costs are not disproportionate. Where constraint costs are substantial, the network becomes uneconomic to operate. It then becomes necessary to invest in increasing network capability.

Transmission boundaries B8 and B9 run east to west, separating the northern generation zones including Scotland, Northern England and North Wales from the Midlands and southern demand centres.

### Existing network capacity and demand in the Lincolnshire area

The existing network serving the South Humber Bank area is already exporting significant amounts of power, which contributes to the North to Midlands power flow challenge on the existing network. Elsewhere, across most of the eastern half of Lincolnshire, where new sources of electricity are planned to come ashore, there is no existing electricity transmission infrastructure.

Peak demand for electricity in the region in 2022 was 785 MW.<sup>24</sup> Towards the end of this decade, electricity demand in the region is forecast to be slightly lower than it is today, at around 764 MW in 2030, before starting to rise thereafter to 823 MW by 2032.

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<sup>24</sup> Forecast peak demand by National Grid ESO from the Future Energy Scenarios 2023, for the Leading the Way scenario for North East Lincolnshire, East Lindsey District, Boston Borough, South Holland District and Fenland District Council areas [nationalgrideso.com/document/283101/download](https://nationalgrideso.com/document/283101/download)



### New sources of electricity proposed to connect in the region

As shown in Tables 1 and 2, there are several new sources of clean green energy contracted to connect south of the Humber and north of the B9 boundary by the mid-2030s. Should all of these be built, this would amount to up to 18.6 GW of new electricity sources connecting in the region by the mid-2030s<sup>25</sup>

in addition to those already connected and contracted to connect to the existing network in the region at Killingholme, Grimsby West, Spalding, Bicker Fen, north of Bicker Fen, and at Walpole. Of that 18.6 GW, just over 9.7 GW would be at the Lincolnshire Connection substations, which are an integral part of Grimsby to Walpole, in a location that the electricity transmission network does not currently reach.

**Table 1 Proposed new connections in the region**

Project name	Type	Capacity (MW)	Connection year	New substation
Race Bank Extension	Offshore wind	565 MW	2030	Lincolnshire Connection Substation A/ B
Outer Dowsing Offshore Wind Project	Offshore wind	1,500 MW	2030	Weston Marsh
EcoGrimsbyWest	Energy Storage/ Solar	249 MW	2031	Grimsby West
Mablethorpe Storage	Energy Storage/ CCGT	1,500 MW	2031	Lincolnshire Connection Substation A/ B
Aminth Energy Ltd	Interconnector	1,400 MW	2031	Lincolnshire Connection Substation A/ B
SENECA (Nu-link)	Interconnector	1,200 MW	2031	Lincolnshire Connection Substation A/ B
Mablethorpe Green Energy Centre	Energy Storage/ Solar	1,025 MW	2033	Lincolnshire Connection Substation A/ B
Walpole Flexible Generation	Energy storage/ CCGT	2,000 MW	2033	Walpole
Spalding PV & BESS Station	Energy Storage/ Solar	480 MW	2033	Weston Marsh
Holbeach Marsh Energy Park	Energy Storage/ Solar	750 MW	2033	Weston Marsh
Carbon Free 2030	Energy Storage/ Solar	500 MW	2034	Grimsby West
Stallingborough PV & BESS	Energy Storage/ Solar	500 MW	2034	Grimsby West
EcoMablethorpe	Energy storage/ Solar	249 MW	2034	Lincolnshire Connection Substation A/ B
Stallingborough Carbon Capture CCGT	Storage/ CCGT	906 MW	2035	Grimsby West
<b>Total</b>		<b>12,824 MW</b>		

<sup>25</sup> Connection registers, National Grid ESO, [nationalgrideso.com/industry-information/connections/reports-and-registers](https://nationalgrideso.com/industry-information/connections/reports-and-registers)



In addition, Table 2 lists several high voltage direct current (HVDC) subsea links that are planned to come ashore and connect to substations in the region.

**Table 2 Proposed HVDC subsea links**

Project name	Type	Capacity (MW)	Connection year	New substation
Offshore HVDC Link (HND1) (from North Sea windfarms)	HVDC link	1,800 MW	2030	Lincolnshire Connection Substation A/B
Eastern Green Link (EGL) 3 (from Peterhead in Scotland)	HVDC link	2,000 MW	2033	EGL3 or EGL4 to include an option to form a three-ended circuit at Lincolnshire Connection Substation A or B and the new Walpole Substation
Eastern Green Link (EGL) 4 (from the Westfield area in Scotland)	HVDC link	2,000 MW	2033	EGL3 or EGL4 to include an option to form a three-ended circuit at Lincolnshire Connection Substation A or B and the new Walpole Substation
<b>Total</b>		<b>5,800 MW</b>		

With no reinforcements, the network would not have the capacity needed to export all that electricity out of the area across both the B8 and B9 boundaries. We therefore need to reinforce our network:

- to maintain system compliance and prevent circuit overloads from happening; and
- to connect proposed new sources of electricity in locations where the electricity transmission network does not extend today.



### Wider reinforcements on the B8 boundary

Before building new lines, we look first at whether we can carry out works to our existing network to deliver more power carrying capability. Work to derive more capability out of the existing network across transmission boundary B8 is planned in the next decade, including:

- reconductoring Keadby to Cottam<sup>26</sup>
- thermally uprating Keadby to West Burton<sup>27</sup>
- installing new power control devices along Keadby to West Burton<sup>28</sup>
- uprating the existing line from 275 kV to 400 kV from Brinsworth to Chesterfield to High Marnham<sup>29</sup>
- reconductoring West Burton to Ratcliffe-on-Soar.<sup>30</sup>

When replacing the wires (conductors) on overhead lines, it is sometimes possible to do that on existing pylons with new wires that can carry more power – and sometimes with wires that can be operated at a higher temperature allowing more power to be transported. That is what we are doing with the first two schemes. Power control devices are equipment that allow more power to be directed to flow along parts of the network that have some additional capacity.

While those works will increase the boundary transfer capability across boundary B8 to around 14 GW, they will not be sufficient to accommodate the north–south power flows that are expected on the network. Up to around 29 GW of boundary transfer capability is needed by 2033 across the B8 boundary to account for increasing offshore wind generation interconnectors.

### Wider reinforcements on the B9 boundary

Work to derive more capability out of the existing network across transmission boundary B9 is planned in the next decade, including:

- reconductoring Enderby to Patford Bridge to East Claydon
- thermally uprating the Cottam to Market Harborough to Grendon circuit.

While those works will increase the boundary transfer capability across boundary B9 to around 15.6 GW, they will not be sufficient to accommodate the north–south power flows that are expected on the network. Around 22.4 GW of boundary transfer capability is needed by 2033 across the B9 boundary with increasing offshore wind and interconnectors.

<sup>26</sup> Keadby to Cottam reconductoring is referred to as KCRE in NOA and received a ‘proceed’ recommendation in NOA 2021/22 and NOA 2021/22 Refresh.

<sup>27</sup> Keadby to West Burton thermal uprating is referred to as KWHW in NOA and received a ‘proceed’ recommendation in NOA 2021/22 and NOA 2021/22 Refresh.

<sup>28</sup> Installing power control devices along Keadby to West Burton is referred to as KWPC in NOA and received a ‘proceed’ recommendation in NOA 2021/22 and NOA 2021/22 Refresh.

<sup>29</sup> Uprating Brinsworth to Chesterfield to High Marnham from 275 kV to 400 kV is referred to as EDEU in NOA and received a ‘proceed’ recommendation in NOA 2021/22 Refresh.

<sup>30</sup> Reconductoring West Burton to Ratcliffe on Soar is referred to as WRRE in NOA and received a ‘proceed’ recommendation in NOA 2021/22 Refresh.



# Identifying the strategic proposal for Grimsby to Walpole

**Our Strategic Options Report explains in detail how we have considered a range of technical, environmental, socio-economic and cost factors in determining the most suitable strategic option to take forward.**

## **Network requirements and technology options considered**

We are bound by Government policy, legislation, regulation and industry rules, which inform the balance that we need to strike when developing proposals and ultimately will determine whether individual proposals should proceed. This applies to all grid upgrades across the country.

To meet our obligations, NGET is required to reinforce the transmission system across both the B8 and B9 boundaries, while ensuring that customers are also able to connect to our system in the Creyke Beck area and in Lincolnshire.

Currently, the B8 boundary, across the entire country, has the capability to transmit 11.6 GW of electricity between the North and the Midlands, and the B9 boundary has the capability to transmit 12.5 GW of electricity between the Midlands and the South. As explained in 'The need for network reinforcement in the region' section, work will be carried out in the next decade to derive more capability from the existing network. Those works only increase the B8 boundary transfer capability to around 14 GW, and the B9 boundary transfer capability to around 15.6 GW. With around 25.7 GW of transfer capability required by 2033 across the whole of the B8 boundary, and 22.4 GW of transfer capability by 2033 across the whole of the B9 boundary, new lines are needed.

In the Lincolnshire area, up to 18.6 GW of new sources of electricity is contracted to connect by the mid-2030s, with 9.7 GW contracted to connect to the transmission system in a location where the existing network does not extend today.

To remain compliant with the Security and Quality of Supply Standards (SQSS) that applies to operating the transmission system, the Strategic Options Report explains that we need to add 12 GW of power carrying capability across the B8 boundary between the North and the Midlands, and 6 GW of additional capability across the B9 boundary.

Building Grimsby to Walpole will provide 6 GW of additional capability across both the B8 and B9 boundaries and connect proposed new sources of electricity that are planned to come ashore on the east coast.

The remaining 6 GW of additional capability across the B8 boundary will be provided by the proposed North Humber to High Marnham reinforcement.

There are different ways to transmit electricity – by onshore overhead lines and pylons, by underground cables, or through offshore subsea cables under the seabed which connect to onshore overhead lines. In looking at how we might best meet the need to carry more power across the B8 and B9 boundaries, we have considered different types of technology. Each has different features that affect how, when and where it may or may not be appropriate to be used:

- **onshore** 400,000 volt (400 kV) alternating current (AC) overhead lines and 400 kV AC underground cables
- **offshore**, including high voltage direct current (HVDC) cables
- **onshore** HVDC cables.



### Identifying the preferred strategic option

As part of the strategic optioneering process, we have considered a range of factors, including:

- technology options available for each strategic option, including the feasibility of how it could be delivered
- environmental and socio-economic constraints relevant to each option
- initial capital costs of each strategic option, along with lifetime costs (calculated over a 40-year period)
- system benefits which each strategic option would provide.

### Geographic scope

The geographic scope of each strategic option is also a significant factor. Shorter proposals are generally more efficient options. Shorter reinforcements are also usually associated with lower levels of environmental effects, lower capital and lifetime costs, and are, in general terms, more likely to comply with relevant policy guidance. As explained earlier, we have duties under the Electricity Act 1989, to develop proposals that are efficient, coordinated and economical, and which have regard to people, places and the environment (the desirability of preserving amenity duty).

### Strategic options considered

To facilitate an additional 6 GW increase in power flows across the B8 boundary (in addition to 6 GW being added by our North Humber to High Marnham upgrade<sup>31</sup>), and a 6 GW increase across the B9 boundary, three strategic options have been considered for Grimsby to Walpole, including two onshore options and one subsea option.

<sup>31</sup> North Humber to High Marnham, National Grid, [nationalgrid.com/NH-HM](https://nationalgrid.com/NH-HM)

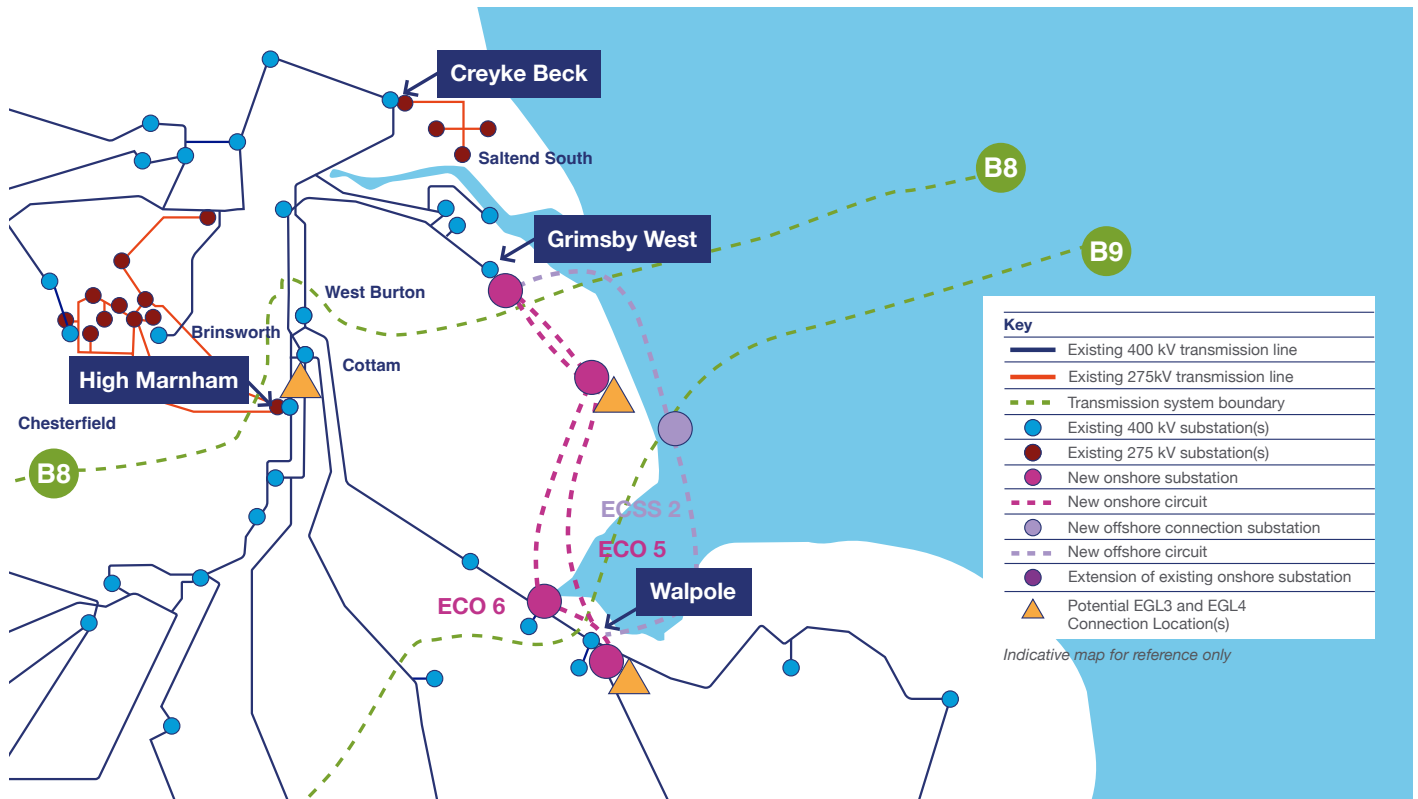


Figure 2 Map showing the strategic options considered

Due to the number of proposed new sources of electricity connecting at Grimsby West and at the proposed new Lincolnshire Connection substations, all options must start from Grimsby West. A new double circuit electricity transmission reinforcement is required to maintain compliance with the Security and Quality of Supply Standards (SQSS).

### Preferred strategic option

Of the three strategic options considered, a new 400 kV overhead electricity transmission line between a new substation at Grimsby West in North East Lincolnshire and a new substation at Walpole in Norfolk, via two new connection substations in Lincolnshire, approximately 140 km in length, was identified as our emerging preference in the Strategic Options Report. It is this option that was therefore taken forward for route corridor identification. This option was preferred because of:

- **Value to consumers**

We are required to strike a balance and make efficient, coordinated and economical investments that also have regard to environmental and amenity considerations. Investing cost effectively benefits consumers as we try to bring forward proposals that are as affordable as possible to bill payers. The capital cost estimate for the new transmission circuits, including the overhead line and required substations, is the lowest overall and the lifetime cost is substantially lower than the subsea option and lower than two of the three other onshore connection options.

The use of AC overhead line technology, as opposed to underground cables, gas insulated lines or a HVDC underground connection, would also be the most cost-effective solution.

- **Environment and socio-economic**

Overall, from an environmental and socio-economic point of view, each of the options appraised had their relative advantages and disadvantages, and potentially different impacts.

On the basis of the information at the time of assessment and assuming appropriate mitigation is undertaken, together with sensitive routing and siting, environmental and socio-economic factors were not considered to differentiate between the onshore and offshore options considered.

- **Cost**

In comparing between onshore and subsea strategic options, we have discounted the latter from an economic perspective. The subsea HVDC solution would be significantly more expensive to both build and maintain over a 40-year period. The onshore option that we are taking forward has a capital cost estimate (including substations) of £1,074 million, compared to £4,391.7 million for an equivalent subsea option (including substations).



For more information about the strategic options considered, please see our **Strategic Options Report (SOR)**, which is available on our website: [nationalgrid.com/g-w](https://nationalgrid.com/g-w).

### Further strategic optioneering

Since the SOR was published in June 2023, we have carried out further work, which is summarised in our Addendum to Strategic Options Report (SOR Addendum), published in January 2024. Further work was undertaken because, following the publication of the May 2023 SOR, increased demand for connections to the network made a new substation at Weston Marsh necessary. As a result, the preferred strategic option was amended to include a new 400 kV substation at Weston Marsh.

### New Walpole Substation Location Options Report

The Strategic Optioneering process recommended a connection in the Walpole area. We carried out some work to consider potential electrical configuration options in the Walpole area, including looking at options for use of the existing Walpole substation and potential areas where a new substation could be connected to the network to narrow down the area of search for our routeing and siting work. This is summarised in our New Walpole Substation Location Options Report.

### Additional wider network reinforcement across the B8 and B9 boundaries

While our Grimsby to Walpole proposals will provide an additional 6 GW of capacity across both the B8 and B9 boundaries, this alone is not sufficient to provide all the forecast capacity the country needs to move more clean energy from the between the North and the Midlands and the centres of demand in the South. Additional connection and B8 and B9 boundary requirements on the east coast are also explained in our SOR.

Network proposals to address those additional requirements include the proposed North Humber to High Marnham reinforcement<sup>32</sup> and Eastern Green Links 3 and 4.<sup>33</sup> Those reinforcements are being developed and consulted on separately and do not form part of the Grimsby to Walpole upgrade.

<sup>32</sup> North Humber to High Marnham, National Grid Electricity Transmission, [nationalgrid.com/nh-hm](https://nationalgrid.com/nh-hm)

<sup>33</sup> Eastern Green Links 3 and 4, National Grid Electricity Transmission, [nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/eastern-green-link-3-and-4](https://nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/eastern-green-link-3-and-4)

# Route corridor options identification and selection process

**As explained earlier in the ‘How we develop projects’ section, we have considered where the proposed new line could potentially be located between the Grimsby West area and Walpole area.**

## Define the study area

To start with, we define a study area based on the broad start and end points for the project. This is informed by factors including:

- the location of large towns and other built-up areas
- the location of physical features such as estuaries, or protected sites like Areas of Outstanding Natural Beauty (AONB), National Parks or nature conservation areas
- opportunities to utilise and connect to established electricity transmission corridors.

## Constraint mapping

We then map out key features in the study area that we want to avoid or minimise contact with, informed by planning policy and our professional judgement. These include the built-up areas where people live and other features that may be sensitive in terms of ecology, heritage or landscape, as well as features that may represent planning or technical constraints. The full list is in the CPRSS, which is available on our website at [nationalgrid.com/g-w](https://nationalgrid.com/g-w).

## Option identification, appraisal and selection

Considering the constraints and opportunities available, using a combination of computer modelling and expert professional judgement, we devise and refine various routes from one connection end to another and zones for each substation. These seek to represent different high-level options for making the connection while avoiding the identified constraints, for example, routing on one side of a town or the other. The outputs of this stage are a series of route corridors and substation siting zones and then further refinement to choose an emerging preferred corridor and emerging preferred substation siting areas.

## Developing a graduated swathe

Following the selection of an emerging preferred corridor and emerging preferred substation siting areas, we produce a graduated swathe which indicates where an overhead line alignment could be routed or a substation be sited. Where two existing overhead lines cross, a number of specific design considerations arise that will need to consider local constraints and construction. If an existing overhead line crosses a new overhead line, it may require a ‘line swap-over’ to create two new routes of the existing overhead lines and new overhead lines. This shaded area is darker where we feel at the moment it is more likely for physical infrastructure such as the overhead line or substations to be located, when considering environmental factors and identified constraints, and is lighter where it is less likely.

**This is the stage we have currently reached and is what we are presenting at this consultation.**



## Technology Options



Example of a 400 kV steel lattice pylon

### Overhead lines

In line with our statutory duties and existing and emerging Government policy, as set out in the National Policy Statements,<sup>34</sup> our starting assumption when we need to add a new route to the network, is to look for a corridor for a new overhead line.

Overhead electricity transmission lines typically involve building new steel lattice pylons to support the wires (conductors). The size, height and spacing of pylons are determined by safety, topographical, operational and environmental considerations. A typical 400 kV pylon is around 50 metres tall.

The main impact of overhead lines is generally considered to be visual, with effects on landscape and views.



Constructing underground cable

### Underground cables

In line with the National Policy Statements, we may propose using underground cables in sensitive areas, such as National Parks or AONB, to reduce visual impact.

For installing cables underground a large cable swathe is required. This is typically between 65 and 120 metres wide depending on the number and size of cables to be installed, with additional working areas beyond this. Once the cables have been installed, the construction swathe will be reinstated, and normal agricultural practices can be resumed. Trenchless crossing techniques, such as horizontal directional drilling, are sometimes used to install cables under constraints such as rivers or major roads. Should these techniques be required, larger working areas may be necessary.

Joint bays would also be needed at intervals of approximately 500 to 1,000 metres to allow for the individual sections of cable to be joined together. In these areas a wider corridor swathe may be needed. The work required to bury cables would likely affect archaeology, vegetation and wildlife along the construction corridor.



Cable sealing end compound

### Cable sealing end compounds

Cable sealing end compounds would be required where underground cables join an overhead line. These sealing end compounds are generally around 30 x 80 metres, dependant on design requirements.

<sup>34</sup> Department for Energy Security & Net Zero – GOV.uk, [EN-5 Electricity Networks National Policy Statement \(publishing.service.gov.uk\)](https://www.gov.uk/government/policies/national-policy-statements)



# Identifying our emerging proposals

**Our Corridor Preliminary Routeing and Siting Study (CPRSS) report outlines how we have carried out detailed environmental and technical assessments to identify areas that may be more or less sensitive to the introduction of new infrastructure, including a 400,000 volt (400 kV) overhead line and substations.**

We have identified an emerging preferred corridor which, in overview:

- broadly runs south east from Grimsby in North East Lincolnshire to Burgh le Marsh in East Lindsey, via the two connection substations near Alford, between the Lincolnshire Wolds AONB and the coast
- then continues south west from Burgh le Marsh, crossing the Poacher railway line, to a crossing of the River Witham, north west of Boston
- onward from there, the emerging preferred corridor heads south, crossing New Hammond Beck, then west of Wigtoft, before crossing into South Holland, and beginning to parallel the existing 400 kV overhead line that runs to the north east of Spalding, before connecting into the new Weston Marsh substation siting area
- then crossing the River Welland, heading south, to a crossing of B1165, then heading east, crossing South Holland Main Drain, then into Fenland south of Newton in the Isle, and continuing east onto to the new Walpole substation siting area near West Walton in King's Lynn and West Norfolk.

The emerging preferred corridor and emerging preferred substation siting areas have been identified because:

- they represent the best opportunity to limit environmental and socio-economic impacts and technical complexity
- they represent largely, the most Holford<sup>35</sup> and Horlock<sup>36</sup> Rule compliant options
- the emerging corridor avoids acquisition or oversailing of residential properties and largely avoids most environmentally sensitive sites and features within the study area, including the Lincolnshire Wolds AONB
- the emerging corridor takes the opportunity to follow established electricity transmission line corridors, except where it has been more appropriate not to, for technical, environmental and other reasons.

<sup>35</sup> The Holford Rules, National Grid, [nationalgrid.com/sites/default/files/documents/13795-The%20Holford%20Rules.pdf](https://nationalgrid.com/sites/default/files/documents/13795-The%20Holford%20Rules.pdf)

<sup>36</sup> The Horlock Rules, National Grid, [nationalgrid.com/sites/default/files/documents/13795-The%20Holford%20Rules.pdf](https://nationalgrid.com/sites/default/files/documents/13795-The%20Holford%20Rules.pdf)

Following the selection of the emerging preferred corridor and emerging preferred substation siting areas, we considered where it might be more, or less, appropriate to site the new overhead line and substations within the corridor. We took account of factors such as sensitive local sites and features, including residential properties, larger woodlands and existing infrastructure.

The outcome of this early-stage work is shown by a blue shaded 'graduated swathe', which indicates where, at this stage, we believe the proposed infrastructure might best be located. Darker blue areas of shading represent where it may be more likely to route the new line or site a substation.

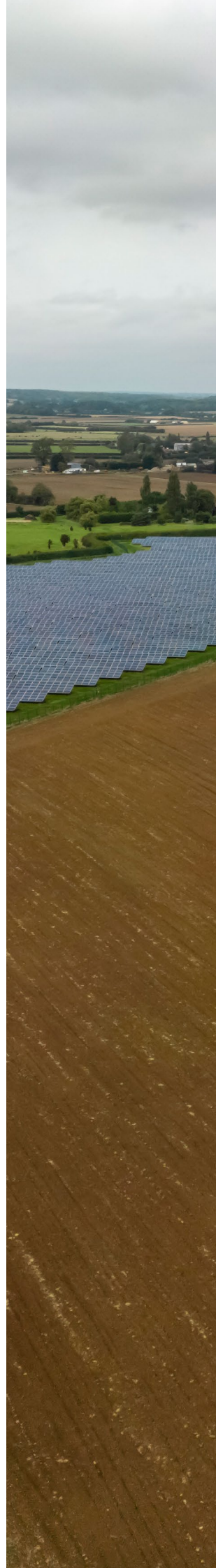
In some sections of the corridor, the swathe forms two or more distinct paths through the emerging preferred corridor, to take account of local sites and features. We welcome your views about options where there are alternative paths within the emerging preferred corridor.

The graduated swathe is only an early indication of where the new overhead line and substation infrastructure could potentially be located and represents our initial thinking. Your feedback, together with the ongoing design, survey and consenting work, will be important in helping to refine this.

Should consultation feedback indicate that other areas within – or outside – the emerging preferred corridor should be given further consideration, we will consider that, and other feedback, before bringing forward more detailed proposals at the next stage of public consultation.

We welcome your views about where the line might best be routed as part of our consultation.

**For more information about the emerging preferred corridor, the graduated swathe and alternative corridors considered, please see our CPRSS.**





# Our proposals for public consultation

**Our emerging preferred corridor has been split into 11 sections to make it easier for people to give feedback about any particular areas that they may wish to comment on. We are also presenting five substation zones,\* one at the northern end where a new substation would be located near to the existing Grimsby West substation, two where the new connection substations are proposed near Alford, one near Weston Marsh and one at the southern end near to the existing Walpole substation.**

- **Section 1** – Grimsby West to Barnoldby le Beck\*
- **Section 2** – Barnoldby le Beck to North Thoresby
- **Section 3** – North Thoresby to Alvingham and Keddington
- **Section 4** – Alvingham and Keddington to Tothill
- **Section 5** – Tothill to Cumberworth\*
- **Section 6** – Cumberworth to Burgh le Marsh
- **Section 7** – Burgh le Marsh to Midville
- **Section 8** – Midville to River Witham
- **Section 9** – River Witham to River Welland
- **Section 10** – River Welland to B1165\*
- **Section 11** – B1165 to Walpole\*

## Interpreting our graduated swathe

The graduated swathe indicates where the overhead line alignment could be routed. This shaded area is darker where an alignment is more likely, when considering environmental factors and identified constraints, and is lighter where it is less likely. This swathe remains indicative until more detailed assessment work is done.

\* Further information on the substations can be found in the relevant sections of the route.

Within our graduated swathe, as shown in our CPRSS report, we are showing existing overhead lines as dark blue lines. Our substation siting zones also have a graduated swathe presented which shows where within the zone we feel it is most likely that a new substation could be located at this stage. This overlaps with the graduated swathe for the overhead line in places to indicate how the new overhead line may approach the broad locations for the new substations.

## Providing feedback on our plans

Your feedback is important to us in helping to refine our plans. We welcome comments on all aspects of our proposals, including the areas important and relevant to you. We have provided below a summary of each section of the graduated swathe, including the key issues and constraints.

**For more information and a comparative analysis of the emerging preferred route against alternative options, there are detailed overviews for each section in the Corridor Preliminary Routeing and Siting Study report, which can be accessed on our project website ([nationalgrid.com/g-w](https://nationalgrid.com/g-w)).**

You can also use our online interactive map on our project website ([nationalgrid.com/g-w](https://nationalgrid.com/g-w)) to input your postcode to determine the nearest sections to you. A series of maps have been produced for each section, which provide more detail at a local level. These are also available on our project website.

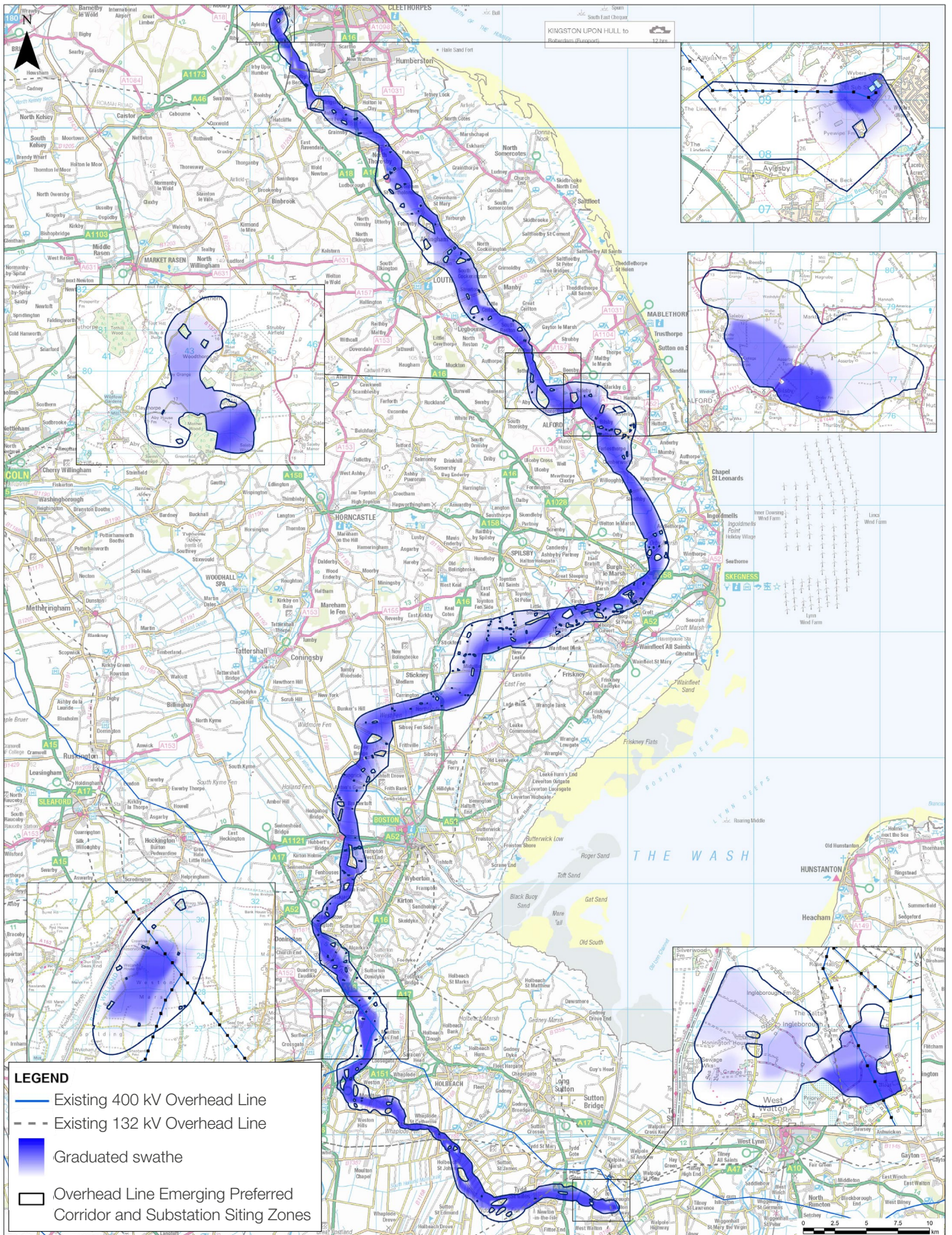


Figure 3 Map showing the emerging preferred corridor

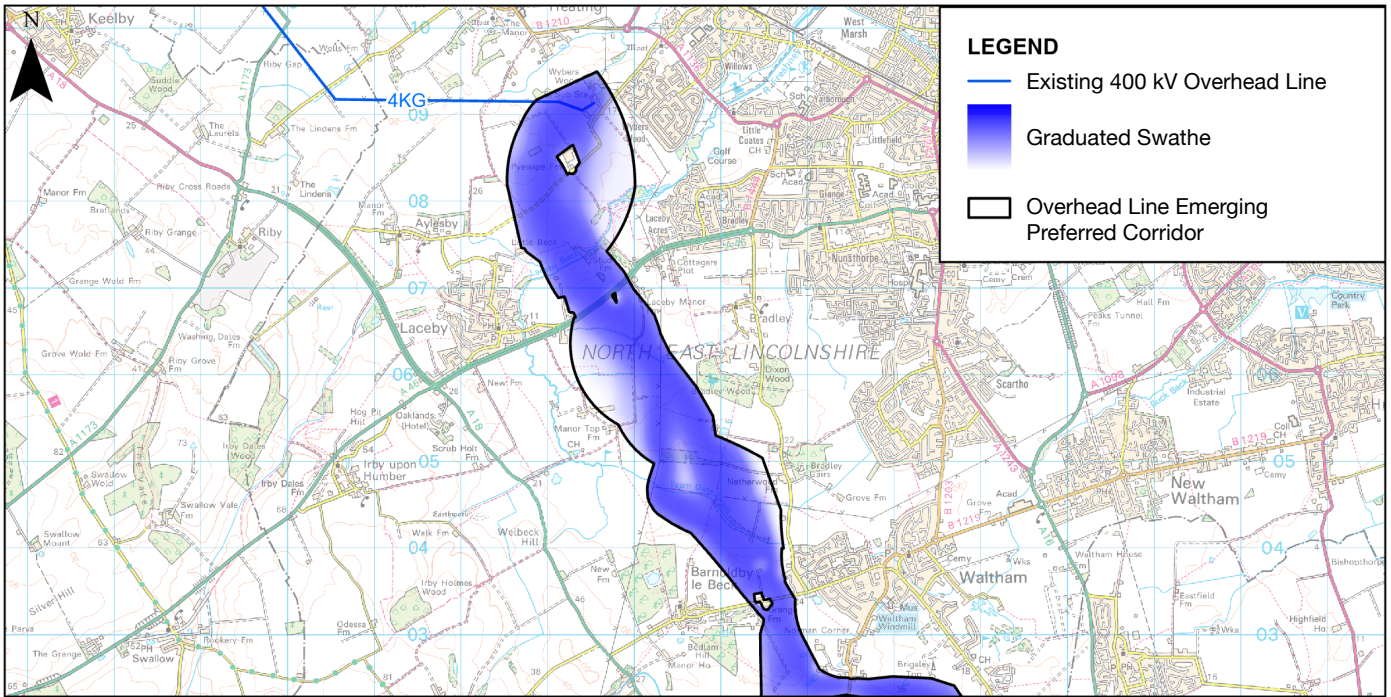


Figure 4 Map showing section 1 of the emerging preferred corridor

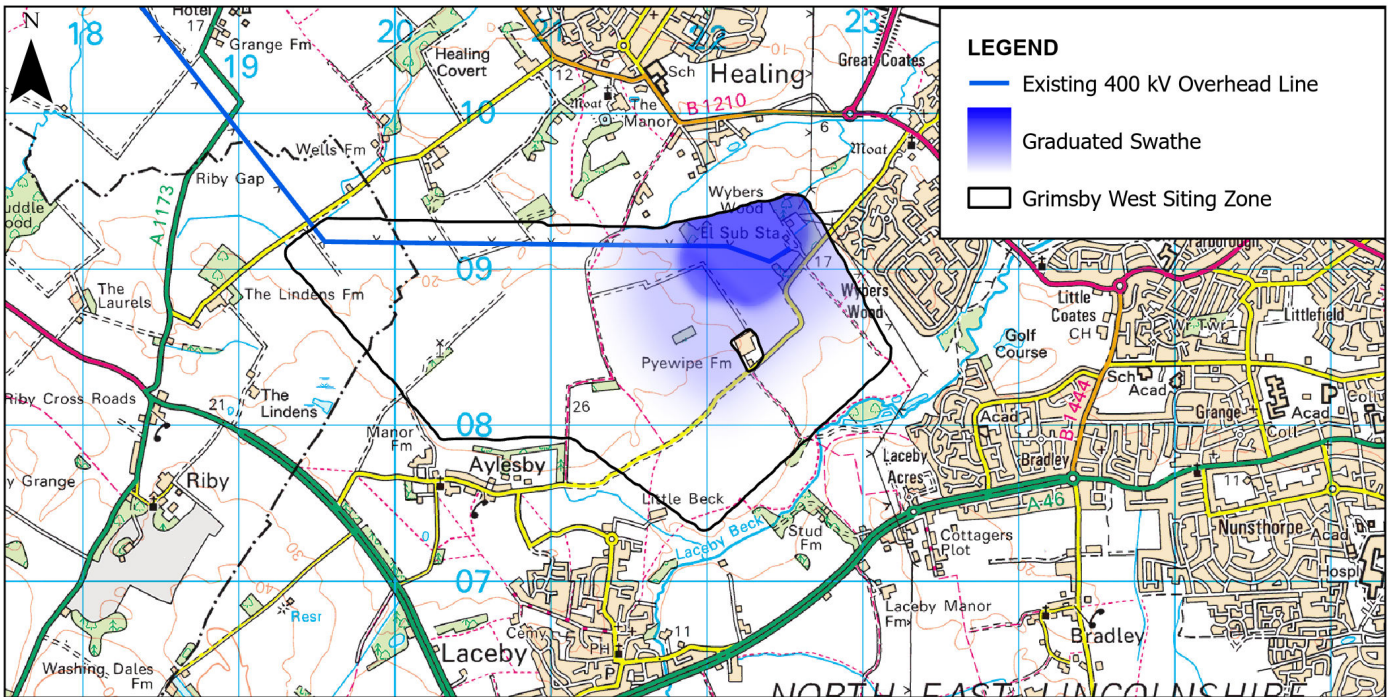



Figure 5 Map showing the emerging preferred location for the new Grimsby West substation

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website





# Section 1

## Grimsby West to Barnoldby Le Beck

This section of the emerging preferred corridor runs from the new Grimsby West substation (which the new overhead line would connect into) to a point immediately east of the village of Barnoldby le Beck (south of Waltham Road). The route taken avoids a large number of receptors and is routed such to retain distance away from the Lincolnshire Wolds AONB.

The substation siting area for the new Grimsby West substation is to the west of the existing substation. Our emerging preference within the substation siting area is to locate the substation within and/or adjacent to the NGET landholding to minimise impacts upon the surrounding environment and make the most use of land already in our ownership. We are expecting to route the new overhead line west of Grimsby towards Laceby, then south towards the A46. This route avoids Wybers Wood, the Grimsby West Urban Extension housing allocation, both to the east, and the Aura Power Solar Farm and existing wind turbines to the west.

From Laceby Beck, the corridor heads south east towards the existing 132 kV overhead lines before reaching Waltham Road at Barnoldby le Beck.

**We would like your feedback on this section of the route, including the location of the new Grimsby West substation. Please see questions 3b and 3c on our feedback form.**

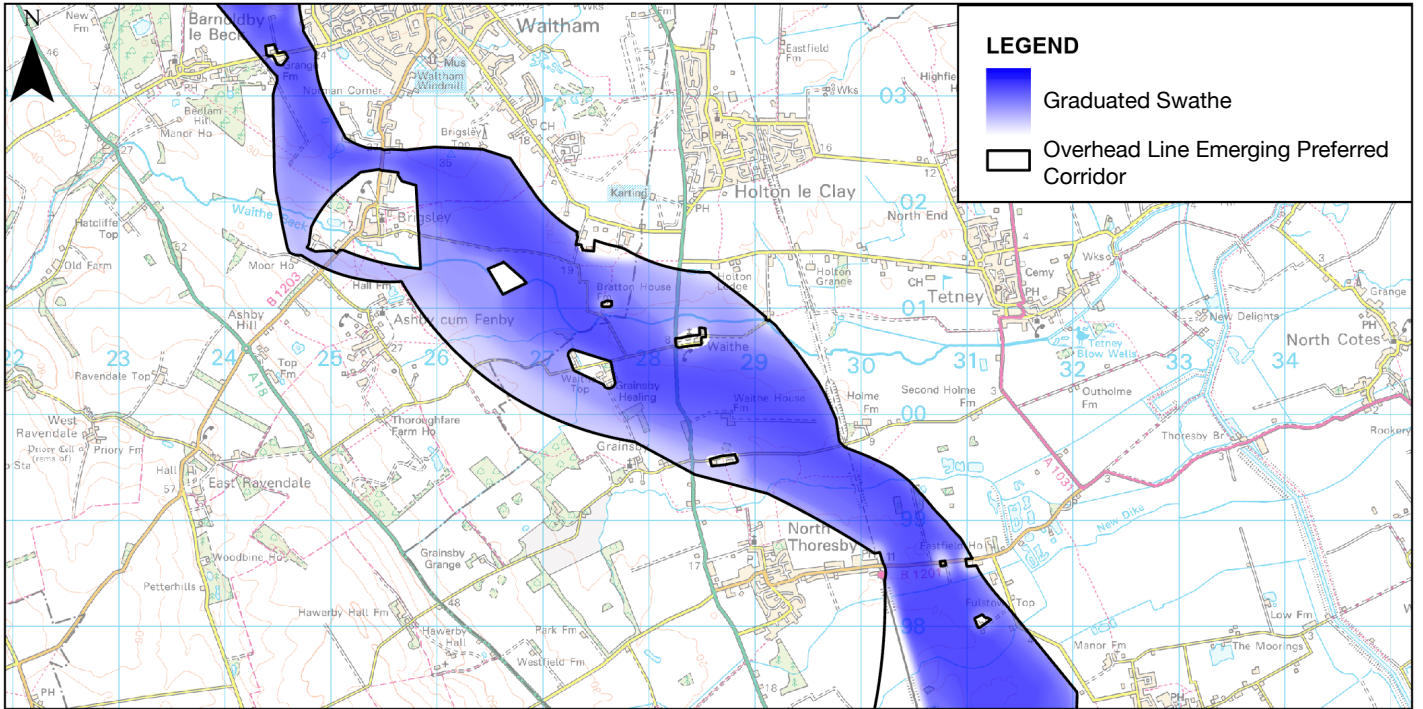



Figure 6 Map showing section 2 of the emerging preferred corridor

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website



## Section 2

# Barnoldby le Beck to North Thoresby

This section runs from immediately east of Barnoldby le Beck, south of Waltham Road, to immediately east of the village of North Thoresby, south of the B1201.

The emerging preferred corridor runs south towards Brigsley. Due to the narrow nature of the corridor in this area, we are presenting two options for crossing the B1203, both north and south of Brigsley. Our emerging preference is to route to the north of the village to limit the overall length of the line needed and avoid the need for additional angle pylons in this section.

Once through this narrower area, the preferred corridor continues south east to the east of North Thoresby. The swathe shows our preference to route to the east within the corridor south of Brigsley to limit effects on the setting of the AONB.

**We would like to know if you have any preference for the line to go north or south of Brigsley, in addition to any other feedback you may have on this section of the route. Please see questions 3d and 3e on our feedback form.**

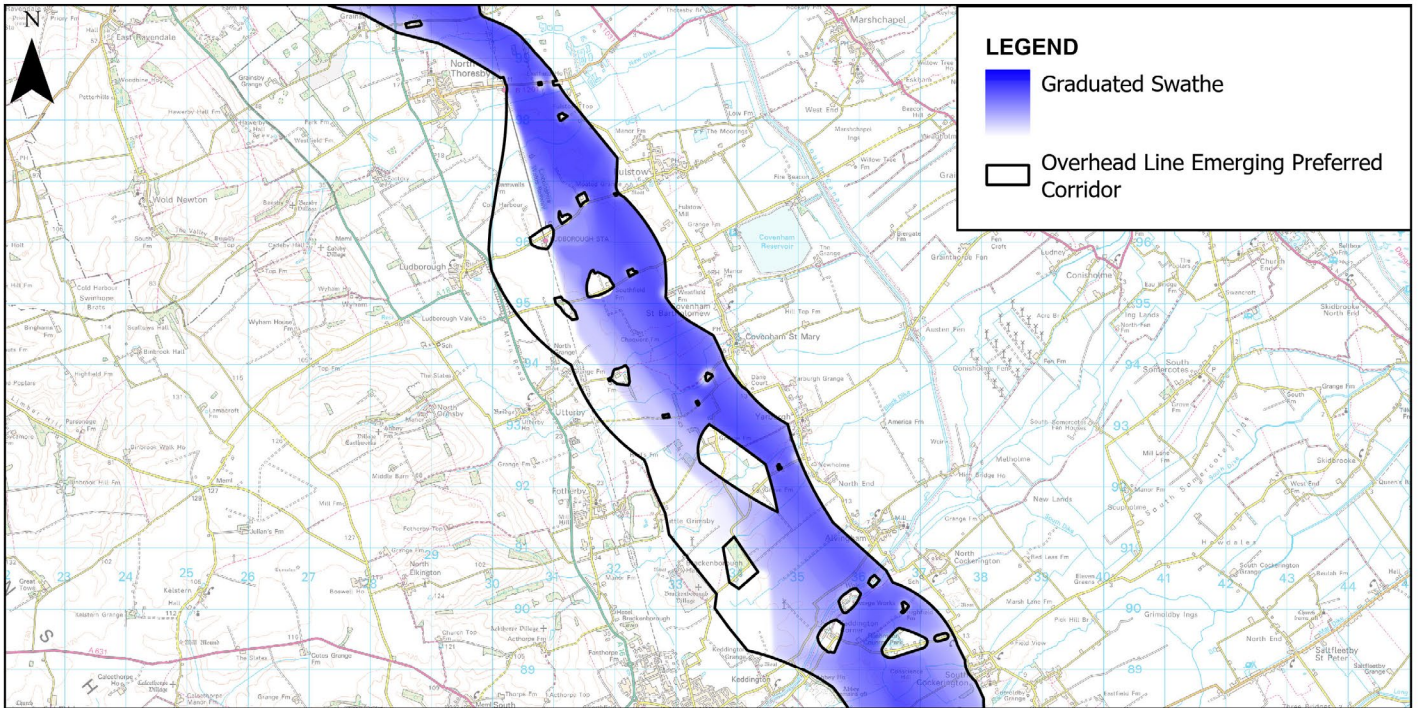



Figure 7 Map showing Section 3 of the emerging preferred corridor

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website



# Section 3

## North Thoresby to Alvingham and Keddington

This section of the emerging preferred corridor runs from east of North Thoresby, south of the B1201, to a point north east of Keddington and south west of Alvingham, south of Alvingham Road.

**We would like your feedback on this section of the route. Please see question 3f on our feedback form.**

Overall, our emerging preference in this section is to stay to the east of the corridor to increase the distance of the new overhead line from the AONB and to avoid crossing the Lincolnshire Wolds Railway.

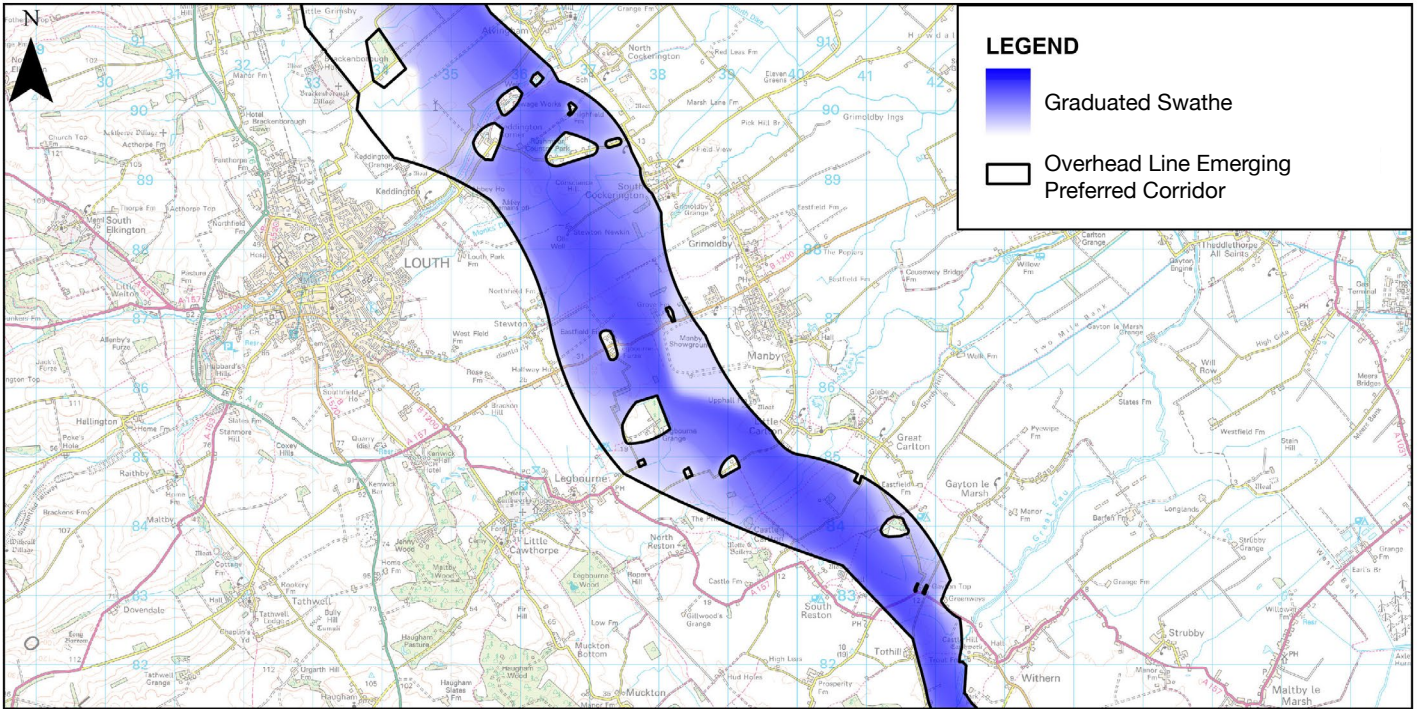



Figure 8 Map showing Section 4 of the emerging preferred corridor

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website



# Section 4

## Alvingham and Keddington to Tothill

This section runs from a point north east of Keddington and south west of Alvingham, south of Alvingham Road, to a point immediately east of Tothill.

**We would like your feedback on this section of the route. Please see question 3g on our feedback form.**

Our emerging preference in the north of this section is to stay to the west of the corridor to avoid properties along Louth Road and a narrow area associated with properties and farms. Once south of here, the swathe takes the shortest, straightest route across the B1200, west of Manby Showground to provide greater separation from the AONB and North Reston Farm Airfield.

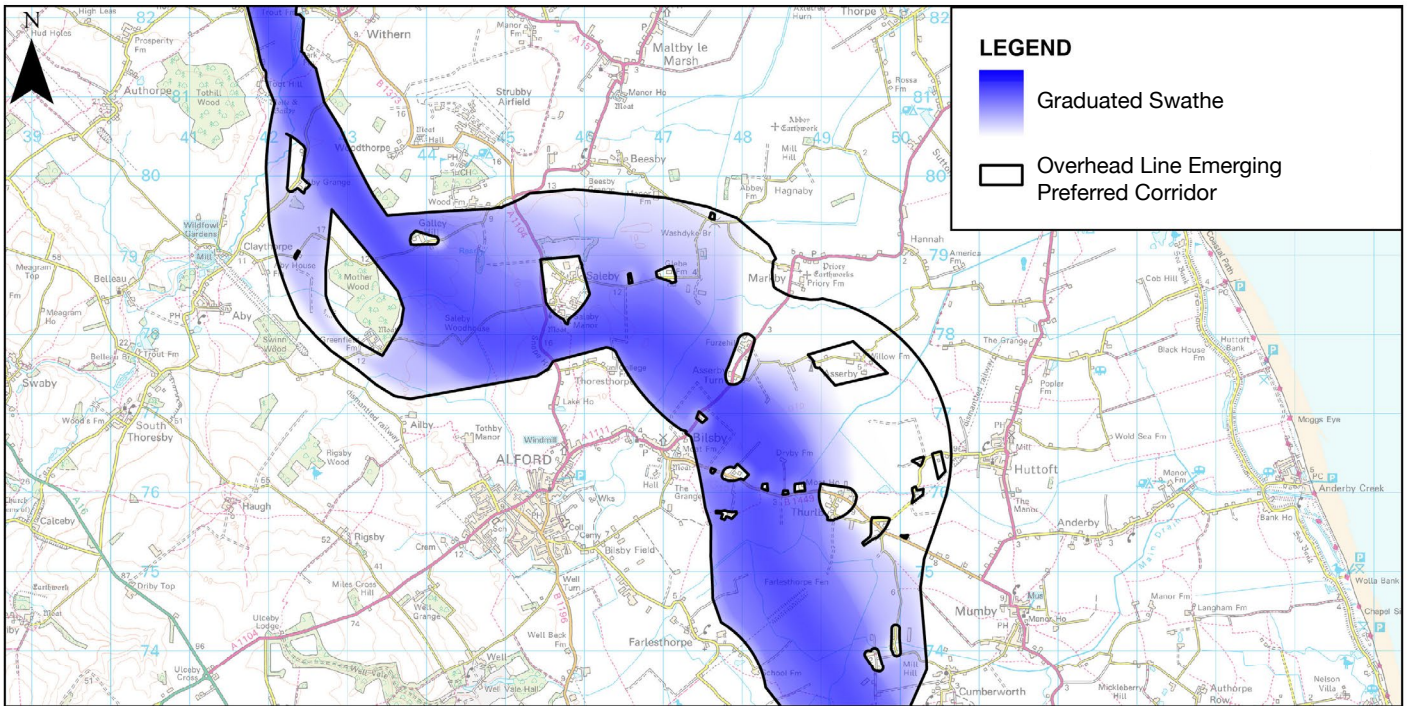
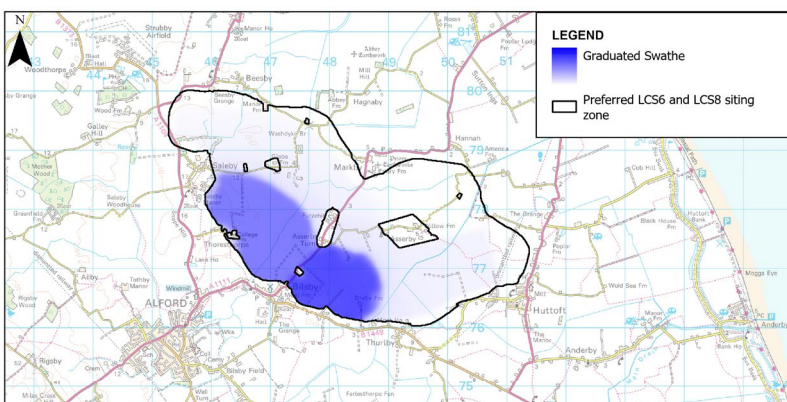
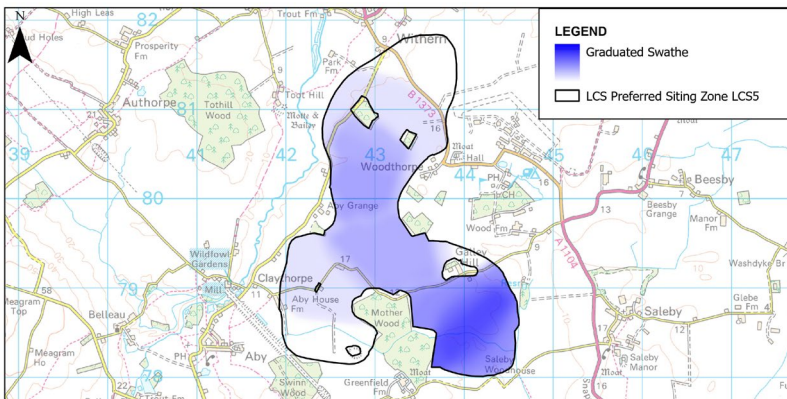


Figure 9 Map showing Section 5 of the emerging preferred corridor



Figures 10 and 11 Maps showing the emerging preferred locations for the new LCS A and B

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website





# Section 5

## Tothill to Cumberworth

This section runs immediately east of Tothill to west of Cumberworth and includes proposed areas for the location of the two Lincolnshire Connection Substations (LCS).

The SOR and SOR Addendum identified that two LCS will be required to ensure necessary system resilience, to manage security risk and to ensure the most efficient solution for both the system and the community to maintain compliance with NGET SQSS. The northernmost substation is referred to as LCS A and the southernmost is referred to as LCS B.

The siting area for LCS A covers an area north and west of Woodthorpe, east of Claythorpe and east of Greenfield Wood/Mother Wood. Our emerging preference within the substation siting area is to locate the LCS A to the south east, adjacent to Mother Wood.

The corridor for the overhead line splits in two in the northern part of this section, east and west of Greenfield Wood/Mother Wood. The swathe shows our current preference to route east of the woodland and south of Woodthorpe Hall Golf Course. Opting for a route south of Woodthorpe Hall Golf Course reduces the overall length of the new overhead line, avoids more angle pylons and maximises use of Mother Wood as a visual screen, given our emerging preference for the location of LCS A.

The overhead line would then route directly east, south of Saleby, before heading south east, passing Bilsby to the east.

The siting area for LCS B is located to the north of Bilsby, east of Saleby and west of Huttoft. The preferred location for LCS B substation is north of Bilsby, as shown by the swathe. Our emerging preference within the substation siting area is to locate LCS B to the east of the A1111, between Bilsby and Asserby.

From LCS B substation, the corridor continues south before routeing through a narrow area between residential and commercial properties west of Cumberworth.

**We would like your feedback on this section of the route, including the locations of the new Lincolnshire Connection substations. Please see questions 3h to 3j on our feedback form.**

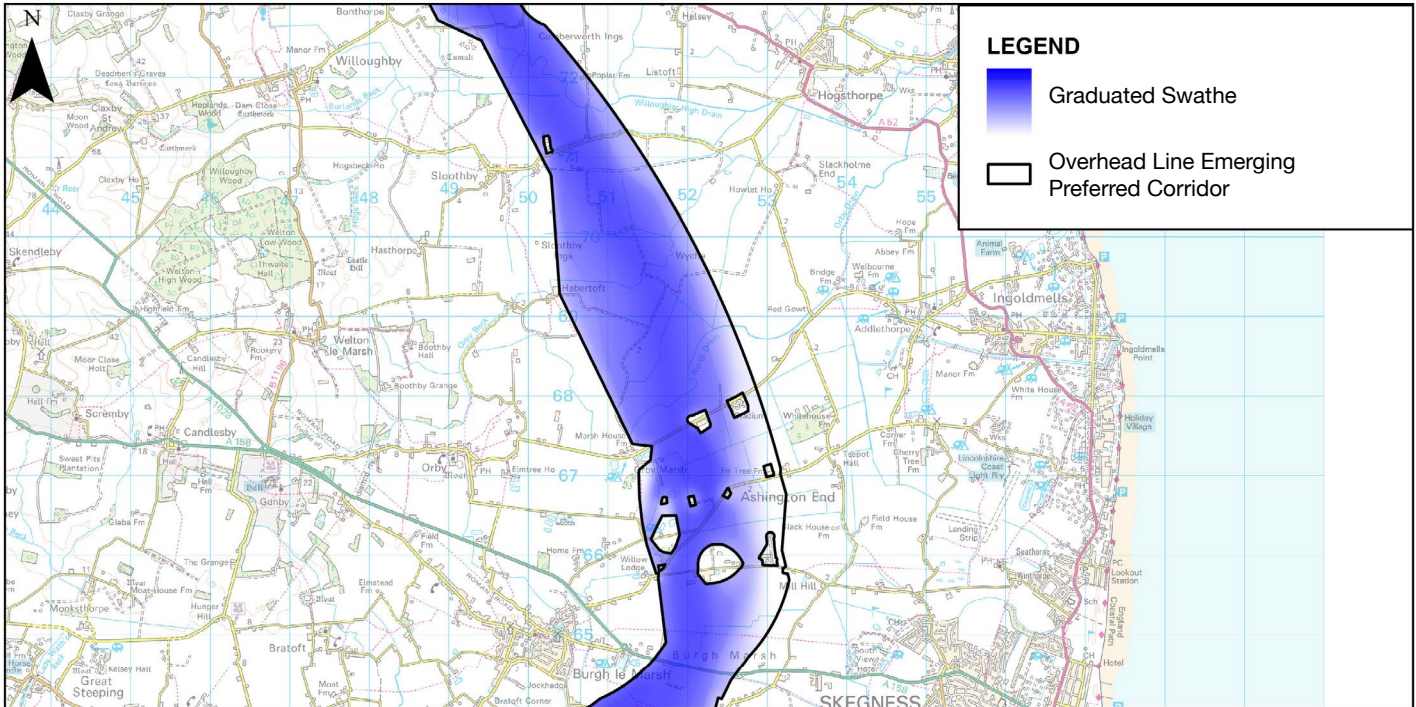



Figure 12 Map showing Section 6 of the emerging preferred corridor

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website



## Section 6

# Cumberworth to Burgh Le Marsh

This section runs from a point west of Cumberworth to a point east of Burgh le Marsh, south of the A158. The route here aims to avoid scattered properties, farms and businesses as much as possible, before crossing the A158, staying west within the corridor to avoid the underground cables for the existing Triton Knoll and proposed Outer Dowsing offshore wind farms.

There is some optionality retained to potentially cross the A158 further to the east within the corridor although this is less preferable.

**We would like your feedback on this section of the route. Please see question 3k on our feedback form.**

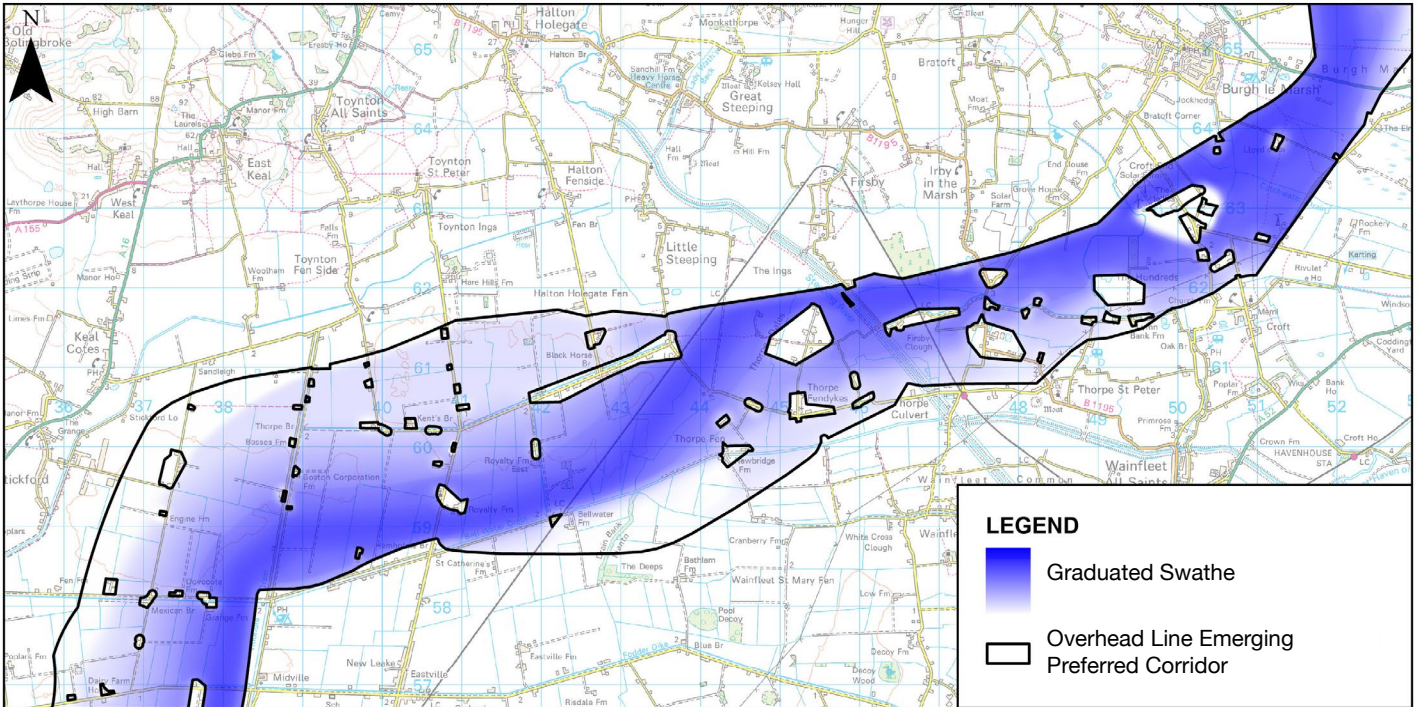



Figure 13 Map showing Section 7 of the emerging preferred corridor

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website



# Section 7

## Burgh Le Marsh to Midville

This section runs west from east of Burgh le Marsh, south of the A158, to the west of Midville, south of Fodder Dike.

Given complexity of routeing at High Lane and Croft Lane, south of Burgh le Marsh, our emerging preference is a route in the northern part of the corridor, through the Hollies Solar Park and Wind farm. This is to maintain distance from the existing 132 kV overhead line in this area to reduce impacts on residential properties.

The route then runs parallel to the Poacher railway line, crossing it north east of New Leake, before continuing south west and turning south at Midville. This is the shortest, straightest approach through the corridor in this area of the section.

**We would like your feedback on this section of the route. Please see question 3I on our feedback form.**

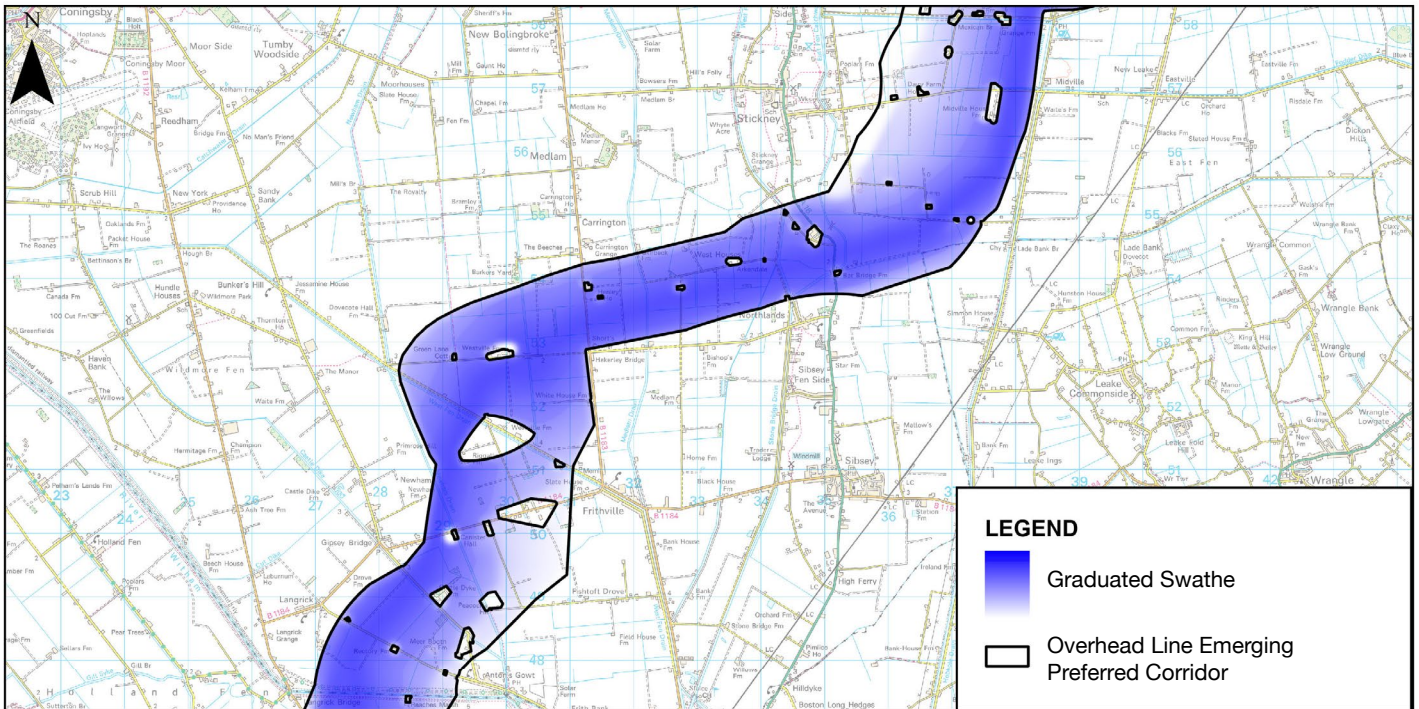



Figure 14 Map showing Section 8 of the emerging preferred corridor

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website



# Section 8

## Midville to River Witham

This section runs from west of Midville, south of Fodder Dike, to a crossing of the River Witham between Langrick Bridge and Anton's Gowt. In this part of the section, properties, farms and businesses are well spaced, allowing the shortest, straightest route to be taken.

From Midville, the overhead line would continue south, before turning west at Hobhole Bank to Sibsey Northlands, where the route aims to avoid scattered properties. Heading south from here, our preference is to stay west within the corridor to allow for a shorter, straighter route to minimise the number of angle pylons and avoid properties along West Fen Drain.

**We would like your feedback on this section of the route. Please see question 3m on our feedback form.**

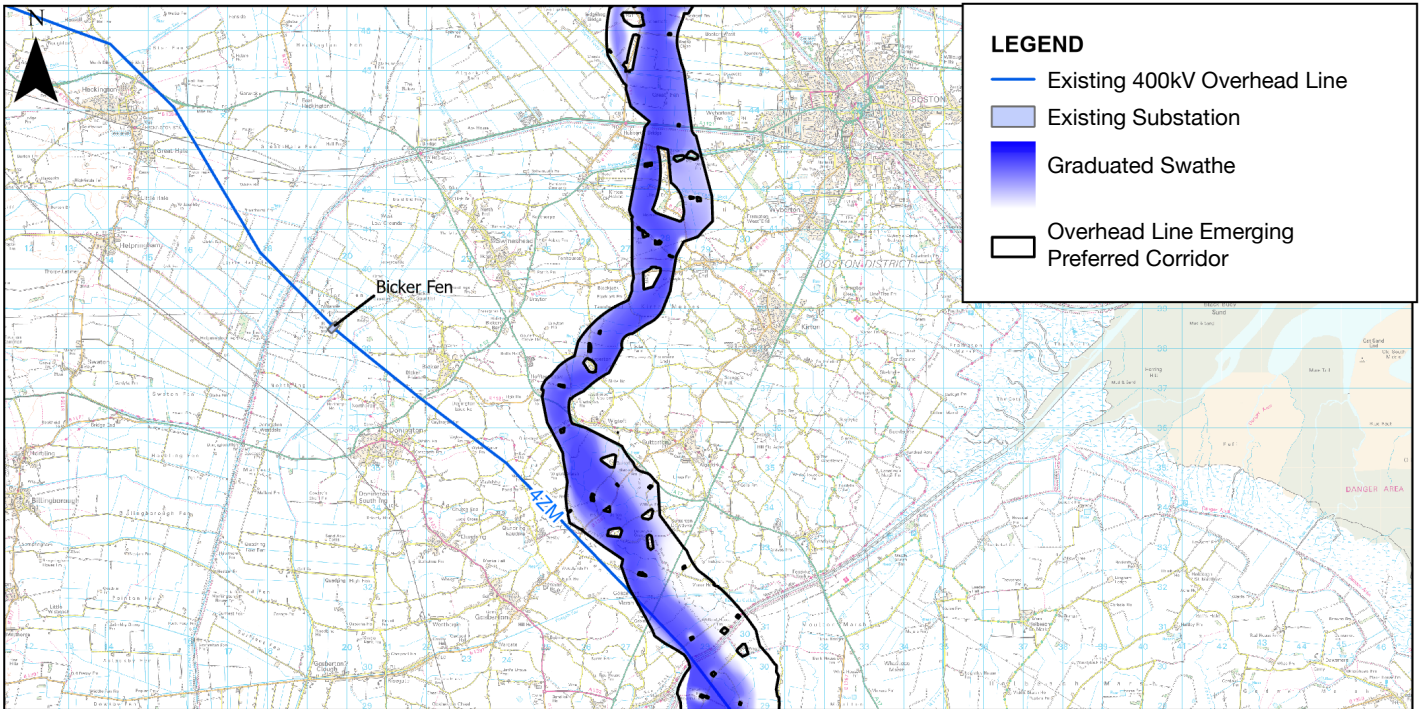



Figure 15 Map showing Section 9 of the emerging preferred corridor

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website





# Section 9

## River Witham to River Welland

This section runs from a crossing of the River Witham between Langrick Bridge and Anton's Gowt to a crossing of the River Welland between Spalding and The Wash.

**We would like your feedback on this section of the route. Please see question 3n on our feedback form.**

From the River Witham, the corridor heads directly south. At New Hammond Beck, the corridor splits in two, running to both the east and west. As shown by the swathe, our emerging preference is to route to the west of the corridor to avoid more properties in the east part of the corridor and reduce potential visual impacts.

From here, the remainder of this section is relatively unconstrained. The corridor continues south, taking a route west of Wigtoft to maximise the distance from environmentally designated sites around The Wash. From here, the route runs south east towards the River Welland, beginning to parallel the existing 400 kV overhead line near Risegate Eau to minimise visual impact.

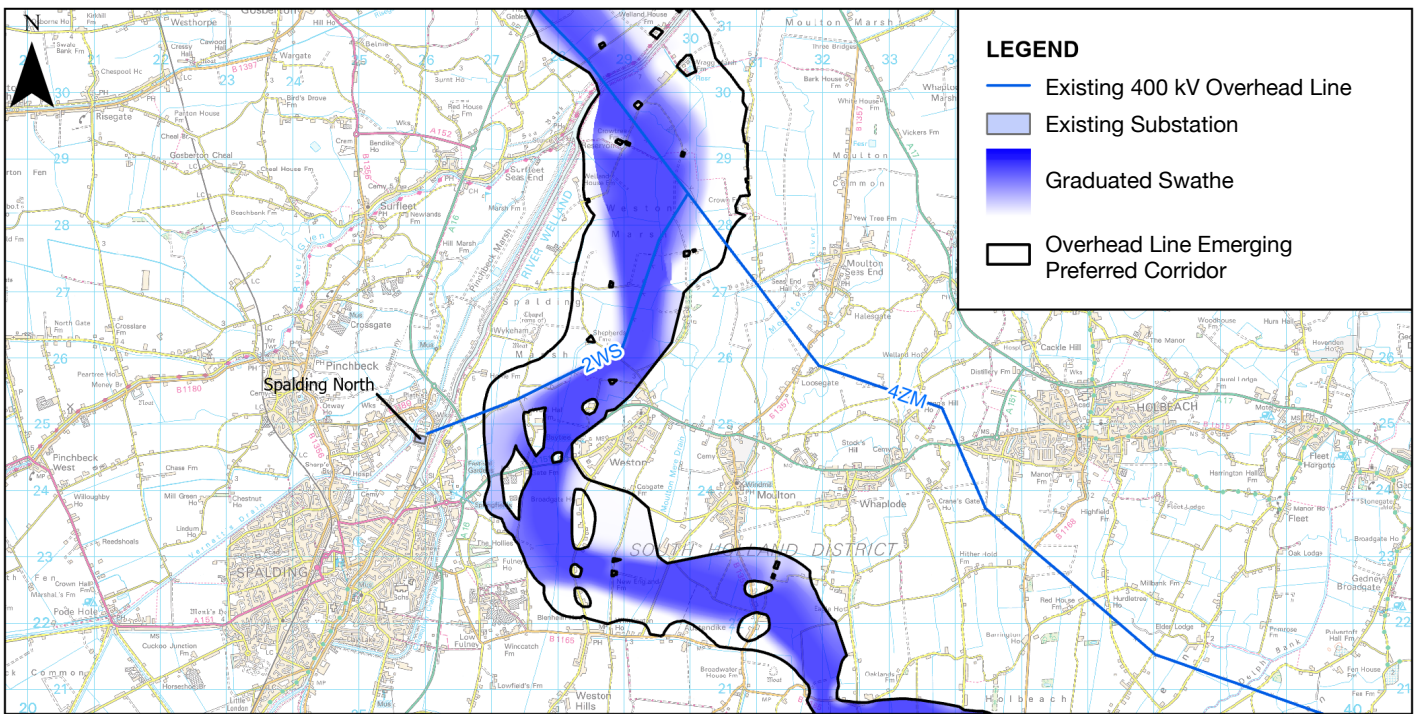


Figure 16 Map showing Section 10 of the emerging preferred corridor

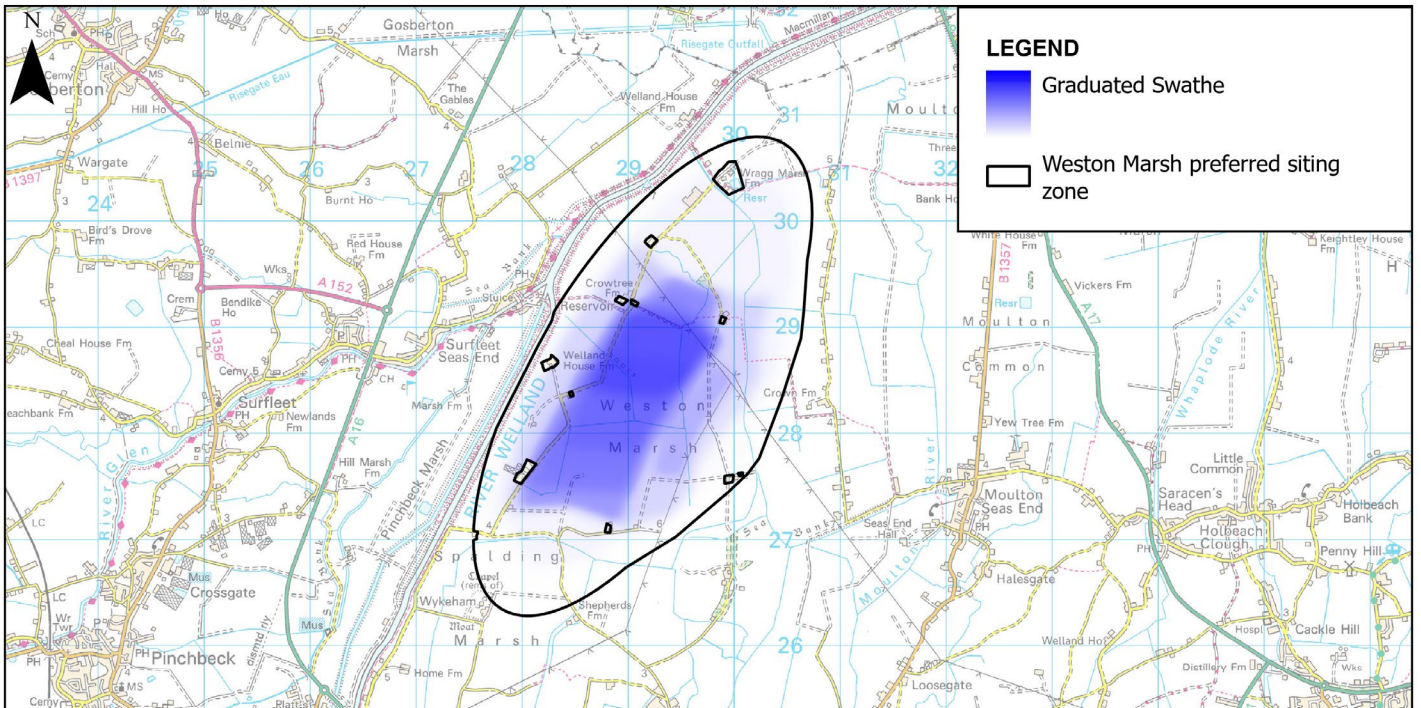



Figure 17 Map showing the emerging preferred locations for the new Weston Marsh substation

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website



# Section 10

## River Welland to B1165

This section runs from a crossing of the River Welland between Spalding and The Wash, to a crossing of the B1165 north west of Whaplode St Catherine. Our preference through most of this section, as shown by the graduated swathe, is to follow the shortest, straightest route to minimise the number of angle pylons.

From the River Welland, the corridor runs south to the proposed siting area for the Weston Marsh substation. The substation siting area is located to the east of Surfleet Seas End and the River Welland, at the 'tee' point of the existing overhead line and the overline line connecting to Spalding power station.

Our emerging preference within the substation siting area is to locate the substation in the centre of siting area to limit the spread of infrastructure, limit the amount of work required to the existing overhead lines and provide increased operational flexibility.

Following this, the route continues to head south, west of Weston and east of Spalding, crossing the A151. From here, the corridor continues east, crossing the B1165 where the corridor narrows to reduce the potential impact to the west and avoid properties to the east.

**We would like your feedback on this section of the route, including the location of the new Weston Marsh substation. Please see questions 3o and 3p on our feedback form.**

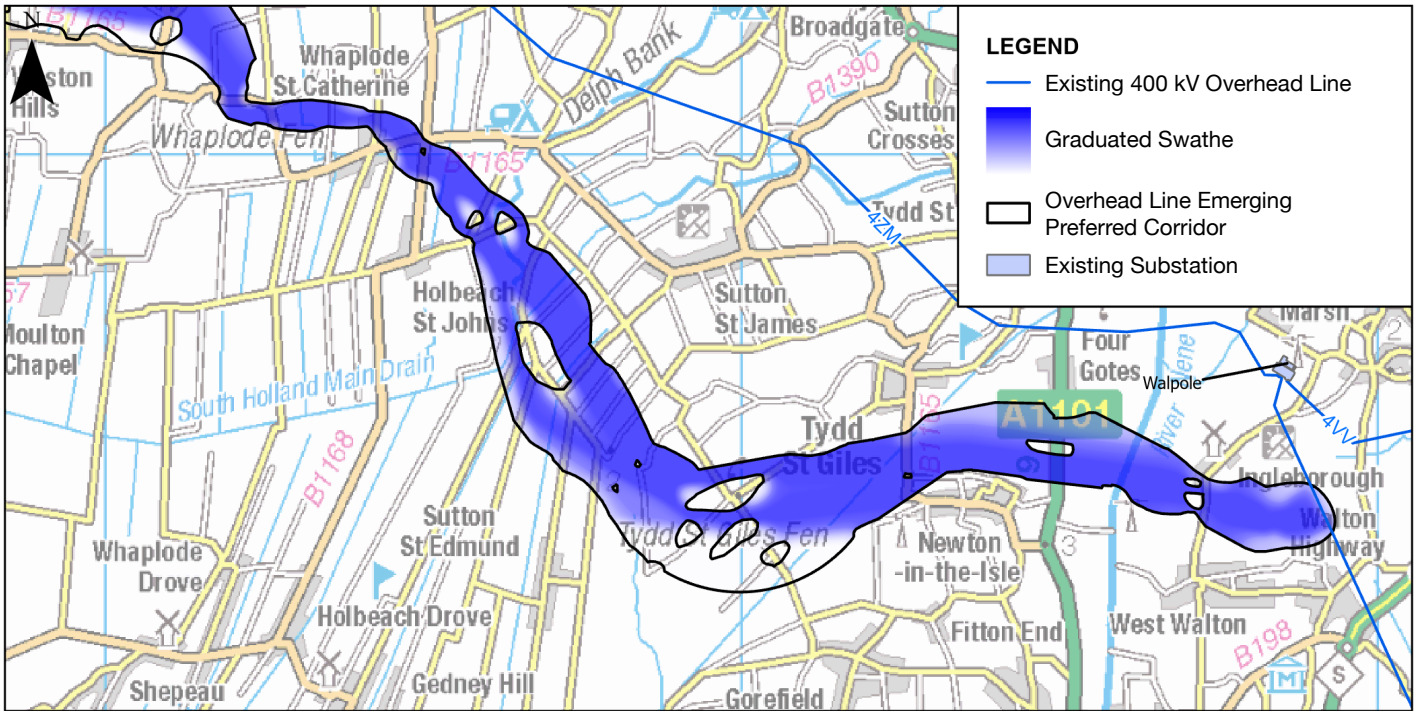


Figure 18 Map showing Section 11 of the emerging preferred corridor

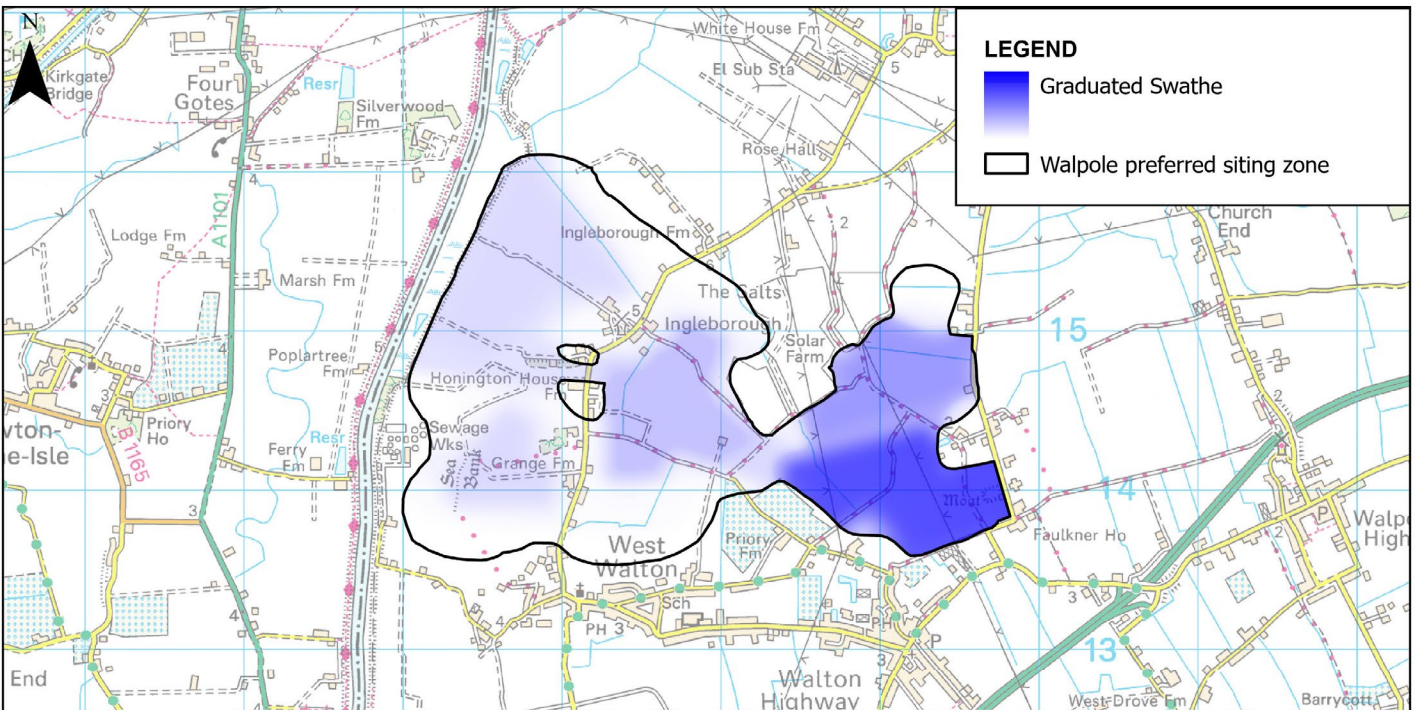


Figure 19 Map showing the emerging preferred locations for the new Walpole substation

Scan this QR code to view more detailed maps of our emerging preferred corridor and graduated swathe on our website



# Section 11

## B1165 to Walpole

This section runs from a crossing of the B1165 north west of Whaplode St Catherine to the new Walpole substation (which the overhead line would connect into). The new Walpole substation is proposed to be located near to the existing 400 kV overhead line, north of Walton Highway.

From the B1165 the route would continue east, taking the most direct route to limit the amount of infrastructure (and angle pylons) within the landscape. At South Holland Main Drain, the corridor splits in two. The swathe shows our preference for the eastern route to allow for the most direct route and to minimise the number of angle pylons.

Our preference within the corridor is then to continue east towards the River Nene using the northern of the three routes south west of Tydd St Giles.

At the River Nene, the corridor again splits in two. Our preference is to use the southern route to provide separation from the Wisbech Gas Compressor Station. The corridor then crosses the River Nene, continuing east towards the new Walpole substation (which the overhead line would connect into).

The Walpole substation siting area is located north of West Walton. Our emerging preference is to locate the substation to the south east of the siting area, adjacent to the existing 400 kV overhead line to reduce the required deviations of this overhead line and limit the spread of impacts into the surrounding environment.

**We would like your feedback on this section of the route, including the location of the new Walpole substation. Please see questions 3q and 3r on our feedback form.**

# Information for landowners

## When developing proposals for network upgrades, we need to understand who has a legal interest in the land in and around the areas being considered as part of the proposed reinforcement.

In the DCO planning process, which would apply to this project, anyone with a legal interest in land is known as a Person with an Interest in Land (PIL). If you are identified as a PIL, we will contact you directly.

While much of the information we need to confirm a legal interest on is available on public registers, we have appointed land referencing firm Dalcour Maclaren to contact individual landowners to verify the publicly available information and to ensure we have made diligent enquiry. This is to ensure that the information is up to date and to ascertain the current occupation of the land.

Dalcour Maclaren will also assist with contacting landowners and occupiers and arranging access for non-intrusive and intrusive surveys to be carried out in early 2024.

More detailed information for landowners, along with contact information, can be found on the Landowner page of our project website.

### Best practice guides

We have produced 'Best Practice' guides which show how NGET constructs overhead lines and underground cables. You can view these guides on the project website.

**If you are a landowner and want to talk to our lands team, please email [g-w@dalcourmaclaren.com](mailto:g-w@dalcourmaclaren.com), call on 0333 034 7961 or write to 1 Staplehurst Farm, Weston on the Green, Oxfordshire OX25 3QU.**



# How to find out more

The aim of our non-statutory consultation is to:

- introduce our emerging proposals for Grimsby to Walpole
- outline our work to date to consider strategic options and identify an emerging preferred corridor and substation siting areas
- hear your views on our emerging proposals and our work to date.

Our consultation is running until 13 March 2024. We want to hear the views of local communities near to the proposed upgrade, so please submit your feedback by this date.

You can take part in the consultation and provide feedback in a range of ways. Full details of all our consultation events and where to find more information will be published on the project website, [nationalgrid.com/g-w](https://nationalgrid.com/g-w). You can sign up on the project website to receive project updates directly to your inbox.

We have made the following documents available on our project website. If you would like a paper copy of any of our consultation documents or technical documents, then please do get in touch. Please note that technical documents may be subject to a printing charge.

Document	Description
<b>Project Background Document</b>	Providing a summary of our proposals and information on how to get involved.
<b>Strategic Options Report</b>	Explaining the strategic options considered to deliver the necessary network upgrade.
<b>Addendum to Strategic Options Report</b>	Explaining the work undertaken to consider the increased demand for connections to the network since the May 2023 Strategic Options Report.
<b>New Walpole Substation Location Options Report</b>	Explaining the options considered for where the new Walpole substation could be located.
<b>Corridor Preliminary Routeing and Siting Report</b>	Providing more technical information on the project and the need for the project, the options considered, the routeing and siting options assessed and our preferred options.
<b>Overview map and individual route section maps</b>	Showing the location of the preferred route and the graduated swathe.
<b>Consultation newsletter</b>	Summarising details of the Project and public consultation.
<b>Feedback form</b>	To gather comments and feedback from the public consultation.
<b>Project website</b>	Hosting all project information, including downloadable versions of all of the above documents.



## Public information events

Throughout the consultation we are holding a series of face-to-face events. Our public information events are being held across the local area. Information about our proposals will be on display and copies of maps and technical documents will be available to view. Members of the project team will be available to talk through our proposals and answer any questions.

<b>Date</b>	<b>Time</b>	<b>Location</b>
<b>Wednesday 31 January 2024</b>	2pm–7pm	<b>Tydd St Giles Community Centre</b> Broad Drove East, Wisbech PE13 5LN
<b>Friday 2 February 2024</b>	2pm–7pm	<b>Moulton Seas End Village Hall</b> 21 Seas End Road, Moulton Seas End, Spalding PE12 6LE
<b>Wednesday 7 February 2024</b>	2pm–7pm	<b>Burgh Le Marsh Village Hall</b> Jacksons Lane, Burgh le Marsh, Skegness PE24 5LA
<b>Saturday 10 February 2024</b>	11am–5pm	<b>Alford Corn Exchange</b> 9 Market Place, Alford LN13 9EB
<b>Tuesday 13 February 2024</b>	2pm–7pm	<b>North Thoresby Village Hall</b> The Square, North Thoresby, Grimsby DN36 5QL
<b>Friday 16 February 2024</b>	2pm–7pm	<b>Eastville, Midville and New Leake Village Hall</b> Station Road, Boston PE22 8LS
<b>Tuesday 20 February 2024</b>	2pm–7pm	<b>Walpole Community Centre</b> Summer Close, Wisbech PE14 7JW
<b>Thursday 22 February 2024</b>	2pm–7pm	<b>The Pavilion</b> London Road, Louth LN11 9QP
<b>Saturday 24 February 2024</b>	11am–5pm	<b>Oaklands Hall Hotel,</b> Barton Street, Laceby, Grimsby DN37 7LF
<b>Tuesday 27 February 2024</b>	2pm–7pm	<b>Hubberts Bridge Community Centre</b> Langrick Road, Boston PE20 3SG
<b>Thursday 29 February 2024</b>	2pm–7pm	<b>Alvingham Village Hall</b> 352 Yarburgh Road, Alvingham, Louth LN11 0QG

## Webinars

We welcome you to attend one of our online webinar sessions, where we will present details of our proposals followed by an open question and answer (Q&A) session. We are holding a series of general overview and location-themed webinars and invite you to attend the webinar most relevant to you.

A recording of a general overview presentation will also be available to view on our website. Details on how to sign up for a webinar are available on the website or by contacting the community relations team by phone on **0800 0129 153** or by email at [contact@g-w.nationalgrid.com](mailto:contact@g-w.nationalgrid.com).

Date	Time	Topic
<b>Tuesday 23 January 2024</b>	2pm	Introduction to Grimsby to Walpole project proposals – general overview
<b>Thursday 25 January 2024</b>	10am	Our proposals in Sections 1 (Grimsby West to Barnoldby le Beck) and 2 (Barnoldby le Beck to North Thoresby)
<b>Monday 29 January 2024</b>	7pm	Our proposals in Sections 3 (North Thoresby to Alvingham and Keddington) and 4 (Alvingham and Keddington to Tothill)
<b>Monday 5 February 2024</b>	2pm	Our proposals in Sections 5 (Tothill to Cumberworth) and 6 (Cumberworth to Burgh le Marsh)
<b>Thursday 15 February 2024</b>	10am	Our proposals at the Lincolnshire connection substations
<b>Saturday 2 March 2024</b>	10am	Our proposals in Sections 7 (Burgh le Marsh to Midville) and 8 (Midville to River Witham)
<b>Tuesday 5 March 2024</b>	7pm	Our proposals in Sections 9 (River Witham to River Welland), 10 (River Welland to B1165) and 11 (B1165 to Walpole)
<b>Thursday 7 March 2024</b>	2pm	Introduction to Grimsby to Walpole project proposals – general overview



### Local information points

Paper copies of the consultation newsletter and feedback form are available to collect from one of the following local information points. These are located within or in close proximity to the emerging preferred corridor and can be collected from the start of and throughout the consultation period.

Reference copies of the Strategic Options Report, the Addendum to the Strategic Options Report, Corridor Preliminary Routeing and Siting Study, and Project Background Document are also available in these locations.

Local information point opening hours can be subject to change. Please check with the relevant venue for the most up-to-date opening hours.

Public information point	Opening times
<b>Grimsby Central Library</b> Town Hall Square, Grimsby DN31 1HG	Monday – Closed Tuesday–Friday – 8:30am–5pm Saturday – 9am–1pm Sunday – Closed
<b>Waltham Library</b> High Street, Waltham, Grimsby DN37 0LL	Monday – Closed Tuesday–Friday – 8:30am–12:30pm and 1:30pm–5:30pm Saturday – 9am–1pm Sunday – Closed
<b>Louth Library</b> Northgate, Louth LN11 0LY	Monday, Wednesday and Friday – 9am–5pm Tuesday – 9am–6pm Thursday – 9am–2pm Saturday – 9am–4pm Sunday – Closed
<b>Alford Library and Focal Point</b> 6 Market Place, Alford LN13 9AF	Monday, Wednesday, Thursday – Closed Tuesday and Saturday – 10am–1pm Friday – 10am–1pm and 2pm–5pm Sunday – Closed
<b>Burgh le Marsh Library and Community Hub</b> Tinkers Green, Jacksons Lane, Burgh le Marsh, Skegness PE24 5LA	Monday, Wednesday and Friday – Closed Tuesday – 2pm–4:30pm Thursday and Saturday – 10am–1pm Sunday – Closed
<b>Skegness Library</b> 23 Roman Bank, Skegness PE25 2SA	Monday, Tuesday, Wednesday and Friday – 9am–5pm Thursday – 9am–6pm Saturday – 9am–1pm Sunday – Closed
<b>Boston Library</b> County Hall (Bank Street entrance), Boston PE21 6DY	Monday, Tuesday, Wednesday and Friday – 9am–5pm Thursday – 9am–6pm Saturday – 9am–4pm Sunday – Closed

**Spalding Library**

Victoria Street, Spalding PE11 1EA

Monday, Tuesday, Wednesday and Friday – 9am–5pm  
 Thursday – 9am–6pm  
 Saturday – 9am–1pm  
 Sunday – Closed

**Holbeach Community Library**

Co-Op Store, 5 Fleet Street, Holbeach, Spalding PE12 7AX

Monday–Friday – 9am–5pm  
 Saturday – 9am–noon  
 Sunday – Closed

**Long Sutton Library**

Trafalgar Square, Long Sutton, Spalding PE12 9HB

Monday and Thursday – 2pm–6pm  
 Tuesday and Friday – 10am–5pm  
 Wednesday – Closed  
 Saturday – 10am–1pm  
 Sunday – Closed

**Wisbech Library**

Ely Place, Wisbech PE13 1EU

Monday – 9:30am–1pm  
 Tuesday – 9:30am–7pm  
 Wednesday, Thursday and Friday – 9:30am–5pm  
 Saturday – 9:30am–4pm  
 Sunday – Closed

**King's Lynn Library**

London Road, King's Lynn PE30 5EZ

Monday–Saturday – 8am–10pm  
 Sunday – 10am–4pm

# Have your say

## Who are we consulting?

Our consultation is open to anyone who may have an interest in our proposals – residents, communities, landowners, local businesses and interest groups, as well as elected representatives and prescribed consultees such as the Environment Agency, Natural England and Historic England.

## How to give feedback

Our first stage of public consultation runs from 18 January to 13 March 2024. We want to hear the views of local people, so please submit your feedback by this date. All feedback we receive as part of this consultation will be carefully considered as we prepare more detailed proposals before a further stage of public consultation in 2025.



### Online

You can give your feedback by completing our online feedback form, available at [nationalgrid.com/g-w](https://nationalgrid.com/g-w)



### Email us

[contact@g-w.nationalgrid.com](mailto:contact@g-w.nationalgrid.com)



### Call us

0800 0129 153



### Paper feedback form

You can download and print a copy of our feedback form from our website and post it back to us at Freepost G TO W. You can also pick up a paper feedback form from any of the public information events or deposit points. Alternatively you can request a consultation pack (newsletter, feedback form and freepost envelope) to be sent to you in the post.

## What we are asking for feedback on

Throughout this document we have explained the need case for our Grimsby to Walpole proposals, the strategic options considered, our approach to routing and siting, and our emerging preferred corridor and substation siting areas. We have described our proposals for each section of the emerging preferred corridor and we would value your feedback on these areas, including the potential locations for new substations.

We want to know your views on our approach and our emerging preferred corridor and graduated swathe. We also value your comments on local features and impacts that are important to you, including any relevant mitigation you would like to see.

We are asking for your local knowledge on the most appropriate location within the swathe to route the pylons and associated infrastructure and if there is anything we should consider as we develop our proposals further.

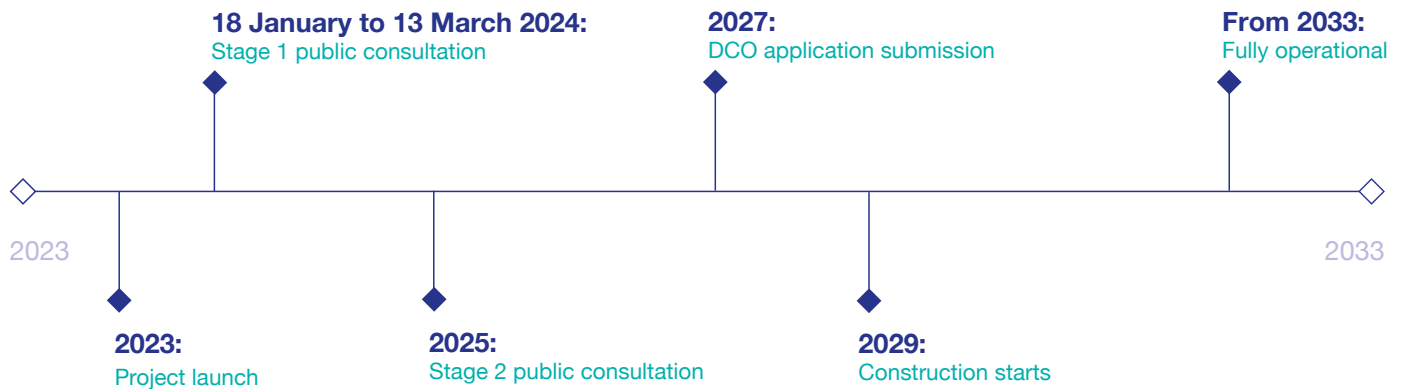
The feedback received through this first consultation stage will inform how we further develop our plans for the proposed reinforcement.



# Next steps

**The feedback received throughout the first stage of consultation will inform how our plans for Grimsby to Walpole are developed further and will influence the next stage in the design of the project.**

Following this consultation, we will commence the Defined Proposals and Statutory Consultation Stage where the next stage of public consultation will be undertaken, including on preliminary environmental information. Feedback from that stage will inform any further work on our proposals prior to submission of the DCO application.





To raise awareness of this consultation, we have:

- sent a copy of our consultation newsletter to all addresses within a 1 km radius of our preferred route corridor
- placed advertisements in the local media, including locally circulating newspapers, online and on social media
- contacted a number of local interest and environmental groups.

During this consultation and over the coming months we will be:

- continuing our discussions with landowners and people with an interest in land which interacts with the project
- briefing local elected representatives
- working with the local authorities and other stakeholders
- continuing to refine our proposals in response to your feedback

- carrying out environmental impact assessment work and undertaking surveys along the route
- providing updates to the local community and to those who have asked to be kept updated on our proposals via a community newsletter
- continuing to refine our proposals in response to your feedback and presenting our updated plans for the project during our next stage of consultation, planned for 2025.

Following further development and finalisation of detailed proposals, we will submit our DCO application to the Planning Inspectorate, who will examine our proposals and make a recommendation on the application to the Secretary of State for the Department of Energy Security and Net Zero, who will make the final decision on whether or not to grant consent. We will be preparing a Consultation Report alongside our application, which will show how we have taken your views into consideration.



# Contact us

**Please get in touch if you have any questions about our proposals for Grimsby to Walpole.**

**0800 0129 153**

(lines are open Monday to Friday, 9am–5:30pm).

[contact@g-w.nationalgrid.com](mailto:contact@g-w.nationalgrid.com)

**Freepost G TO W**

(no stamp or further address details are required).

If you feel your land may be affected by these proposals, please contact the Grimsby to Walpole Lands Team by calling **0333 034 7961** or by emailing [g-w@dalcourmaclaren.com](mailto:g-w@dalcourmaclaren.com).

Alternatively, you can write to **1 Staplehurst Farm, Weston on the Green, Oxfordshire OX25 3QU.**



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