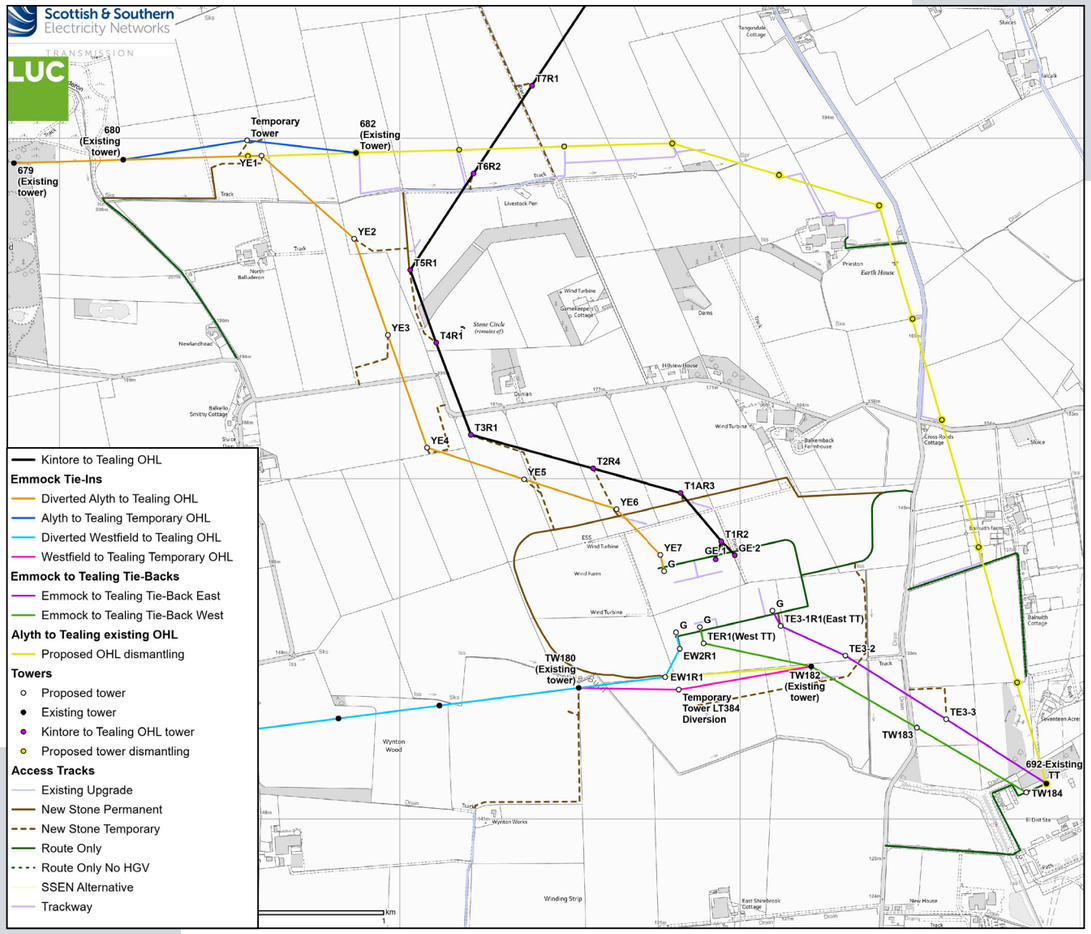
Emmock and Tealing Section 37 tie-ins

Feedback

There was limited specific feedback provided on the scope of the tie-in application. However, it is noted that comments on this section of the project was provided in the overarching feedback to the wider project, specifically in relation to section A. This feedback and our response to it is covered in detail in Table 3.5 in the **Alignment Selection Report on Consultation** published January 2025.



Feedback table (Emmock and Tealing Section 37 tie-ins)

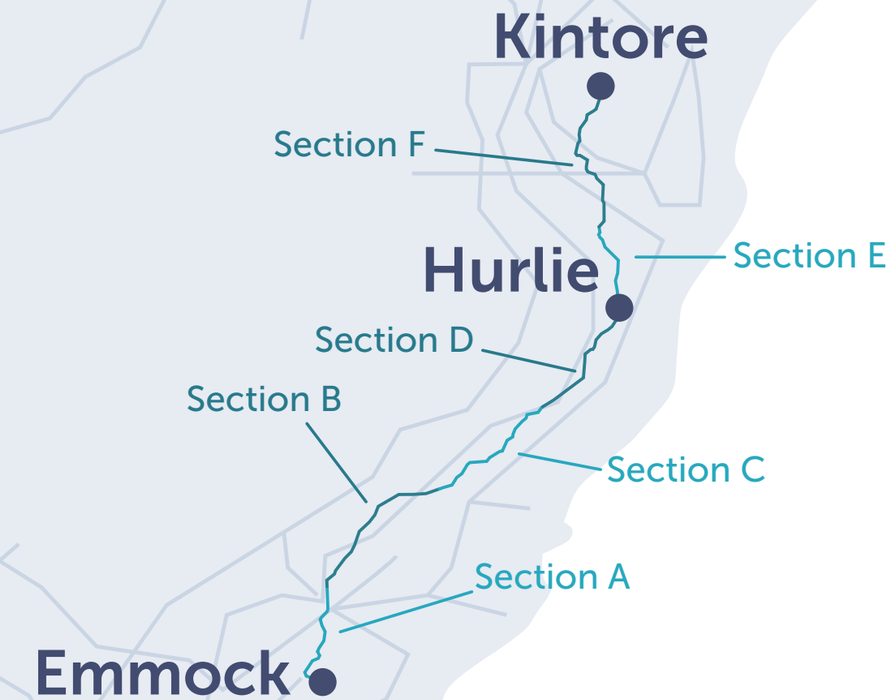
Feedback	Response
Impacts on Scheduled Monuments There are 9 scheduled monuments within 3km of the proposed development which the development could have an impact on.	Whilst there will be some impact on the setting for some of the referenced scheduled monuments in the immediate vicinity of the proposed development, there will be no direct impacts on these assets either through construction or operation of the OHL's.
Impacts on views Many attendees have highlighted concerns about the impact the proposed development will have on views around Tealing from their properties.	At this stage the alignment for the route is now fixed, however there is the opportunity for further refinement to limit impacts further within the Limit of Deviation which will be applied for. This LoD will allow for micro siting in specific circumstances to help alleviate impacts as far is practical and reasonable.
Impacts on Birds Potential impacts have been highlighted by consultees in relation to sites designated for various bird species.	Impacts on bird species will be limited and where there is the potential for impacts this has been addressed through mitigation by design through the development for the alignment and applied mitigation through things like screening, planting and specific mitigation through a Breeding Bird Protection Plan all of which will be agreed with the relevant consultees prior to construction.

Kintore to Tealing 400kV Overhead Line

Project location

Our overhead line project spans around 106km and throughout the development of the project, we have presented the project within six sections, to allow you to focus and comment on the areas of most interest to you.

Section	Location
A	Tealing (Emmock) to Forfar
B	Forfar to Brechin
C	Brechin to Laurencekirk
D	Laurencekirk to Hurlie
E	Hurlie to River Dee
F	River Dee to Kintore



Consult our maps

We have split our maps into sections so that you can refer to the areas of most interest to you in clearer detail. Copies will be available at the events to take away with you, or alternatively, you can download the copies you need from our project webpage.

The story so far

May – Jul 23

We first introduced this project in May 2023, consulting on corridors and route options.

The consultation closed on 20 July 2023, with **3,236** written responses received.

Dec 23

We published a Report on Consultation on the combined corridor and route section consultation and to document how the routes being taken forward to the next stage have been informed by this process.

Mar 24

After refining our proposals, we held public consultations where we presented new route options in Sections D, E and F following the change in location of Hurlie 400kV substation. We requested feedback on these potential route options and further updates to the refined routes.

Why we are here today

We are at the alignment stage of the development of our Kintore to Tealing 400kV Overhead Line project and have identified the Proposed Alignment we are taking forward to further develop and submit as part of an application for consent. The Proposed Alignment has been refined from the various options that we have investigated during the development of the project.

We are implementing the Scottish Government's Best Practice Guidance which can be found **here** for pre-application consultation with stakeholders who may be affected by our development proposals. The pre-application consultation comprises two consultation events that should be held in advance of applying for Section 37 consent.

Our first event was held in September 2024, where we presented the Potential (preferred) and Alternative Alignment options. Following that event we considered stakeholder feedback, completed further survey and review of our appraisals, and identified the Proposed Alignment, which is the alignment we intend to take forward to a Section 37 application.

This second event presents further detail on the Proposed Alignment and provides feedback to stakeholders in respect of comments they have provided on the proposals. The feedback is also provided in the Alignment Selection Report on Consultation.

Prior to the pre-application consultations, we have held consultations (during 2023 and 2024) on the corridor and routeing stages of our project development. These consultations were in addition to the pre-application consultation events and the feedback received has been fundamental in shaping the design of the Proposed Alignment that we are now presenting.

We will provide updated 3D visualisations and maps to show what the proposed overhead line will look like and where it will be located. These are available to view and download from our project website: **ssen-transmission.co.uk/TKUP**

We want to know if you have any further comments in relation to how we have responded to feedback and how you would like us to best engage with you in the future, prior to the submission of our Section 37 application.

It should be noted that our alignment proposals presented at this event are the result of extensive engagement and project design, as such, there is limited scope to make significant changes to the proposals at this stage.

Apr/Aug 24

The consultation closed on 30 April 2024, with **1,610** written responses received.

We published a Report on Consultation in August 2024 confirming the proposed route options being taken forward to alignment and detailing how consultation has informed this process.

Sept – Oct 24

We held a further series of public consultations where we presented our potential alignment options as well as alternative alignment options in some sections and sought feedback on these proposals.

The consultation closed on 21 November 2024, with **872** written responses received.

Jan – Mar 25

Following consideration of the feedback received during our 2024 engagement and further studies and survey work, we published our Alignment Selection Report on Consultation in January 2025. Within the Alignment Selection Report on Consultation, we confirmed the Proposed Alignment that we will look to take forward in our consent application.

Final pre-application consultation (PAC) events will be held in February/March 2025.

Working with you

The work we have planned is significant and has the potential to deliver wide ranging benefits in your community, Scotland, and beyond. We know that delivering our projects will require a lot of work that has the potential to impact on you. That's why we want to work with you at every step of the way throughout the planning and delivery stages of these essential works. We are committed to ensuring a meaningful engagement process that actively seeks the views of everyone affected by our plans. That means making our plans clear and easily accessible, so that you can give us input throughout each stage of the development process. We appreciate all feedback received to date which has been analysed by the project team. Feedback has been actioned where constraints allow.

A more detailed appraisal of feedback regarding our alignment, can be accessed via our Alignment Selection Report on Consultation, published January 2025.

Scan the QR code to access our Report on Consultation (ROC)

Kintore to Tealing 400kV Overhead Line

Selecting an alignment

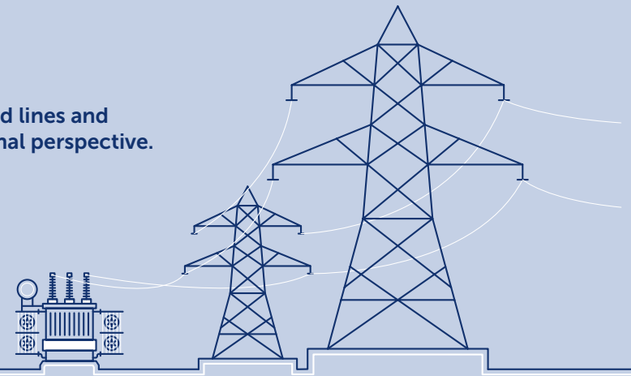
The consideration of alignment options and design solutions brings together work by four main disciplines:

Engineering Team

Who identify engineering constraints and where overhead lines and cables can be installed from a construction and operational perspective.

Key considerations include:

- Infrastructure crossings
- Environmental design
- Ground conditions
- Accessibility
- Proximity to existing infrastructure and properties



Communities Team

Who work with communities and make sure that their feedback during the consultation process is closely considered during project refinement.

Key considerations include:

- Community engagement
- Consultation responses review
- Recreational areas and areas of local interest

Land Team

Who engage with landowners to identify key land use constraints.

Key considerations include:

- Landowner engagement
- Mitigating effects of infrastructure on land and properties
- Reaching land agreements

Environmental Team

Who identify key environmental, community and social constraints along the routes which the new infrastructure could impact upon.

Key considerations include:

- Engagement with statutory consultees and planning authorities
- Results of specialist environmental surveys including archaeology, ornithology, ecology, geology and hydrology
- International environmental designations including Special Areas of Conservation (SACs - designated for habitats), Special Protected Areas (SPAs - designated for bird species), Sites of Special Scientific Interest (SSSI), Ramsar sites (wetlands of international importance identified under the terms of the Ramsar Convention) and World Heritage Sites
- National designations including Scheduled Monuments, Listed Buildings, National Scenic areas, National Nature Reserves, Gardens and Designed Landscapes
- Regional environmental sensitivities including Wild Land Areas and Special Landscape Areas
- Local environmental aspects including visual amenity, local and RSPB nature reserves, recreation uses

Striking a balance

When selecting an alignment, we need to carefully balance key considerations relating to engineering, environment, cost and social aspects, in each section of the overhead line route.

We then consider the likely effect and level of impact of each consideration, which will vary from section to section.

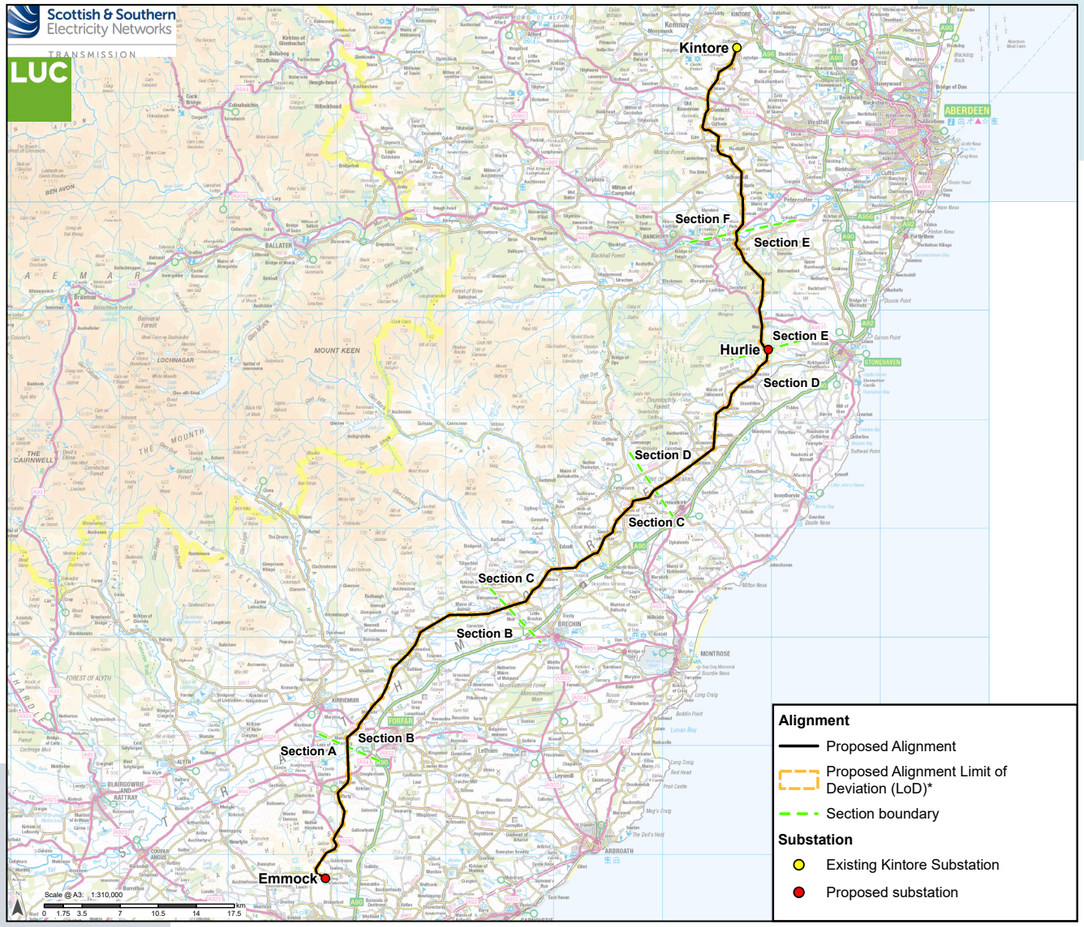
This can be based on how populated the area is, the outcomes of environmental and engineering surveys, the presence of peat, the local water environment, if there is existing infrastructure we need to avoid, if the effects on land and property can be mitigated and if a constructable alignment can be identified.

You can download our Alignment Maps, Alignment Consultation Document from our website: **ssen-transmission.co.uk/TKUP**

Ultimately, we need to balance a range of factors and present the solution we consider most viable for consultation. We consulted on our Potential Alignment in September 2024 and have now confirmed the alignment option we are taking forward as the Proposed Alignment within our Alignment Selection Report on Consultation published January 2025.

Our Alignment Selection Report on Consultation documents the consultation responses received as part of our alignment consultation process for the project and where appropriate, shows how the Proposed Alignment being taken forward to consent has been informed by this process. This can be downloaded from the project webpage or viewed during the events.

Proposed Alignment overview



Kintore to Tealing 400kV Overhead Line

The consenting process

The legislation governing the consenting of overhead line (OHL) projects in Scotland is the Electricity Act 1989. Applications for consent to construct and operate new overhead lines are made under Section 37 of this Act and are referred to as "Section 37 Consents".

The Section 37 application will be accompanied by an Environmental Impact Assessment (EIA) Report, as well as standalone reports such as a planning statement, and detailed design drawings. A Pre-Application Consultation (PAC) Report will also be provided, and this will provide details of the public and stakeholder consultation undertaken, a summary of the feedback received, and our response to that feedback.

We plan to submit our Section 37 application to the Scottish Government's Energy Consents Unit (ECU) in Spring 2025.

Once an application for consent has been submitted, all documents relating to the submission will be made publicly available on the ECU portal and our own website. Printed copies will also be available at publicly accessible locations. There will be an opportunity for the public to make formal representations to the ECU before a recommendation is made by them to the Scottish Ministers for a decision.

Please note that feedback provided as part of this final alignment consultation event are not formal representations to the Energy Consents Unit (ECU). Once an application for consent has been submitted, there will be an opportunity for the public to make formal representations to the ECU before it takes a decision.

We will update stakeholders once the application for consent has been submitted and we will also publish newspaper advertisements to inform local communities and the general public of the applications being made to Scottish Ministers.

Determining a Section 37 application and communicating outcomes

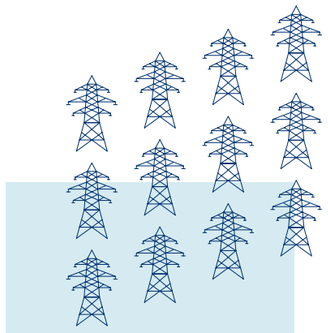
Section 37 applications are determined on a case-by-case basis by the Scottish Ministers.

We anticipate receiving a decision on the consent application within 12 months from the application date, however timescales may vary.

When a decision is made, the ECU will send us a decision notice, copying in the local planning authorities and other consultation bodies. The decision notice is a record of the reasons for the decision and, if consent is granted, it contains the conditions that must be satisfied in order to implement the consent.

The ECU and local planning authority will publish the decision notice via their own channels, and we must publicise the outcome on our website, in the Edinburgh Gazette, and in a local newspaper. We will also communicate the decision by mainstream media and other various means, including email updates to Elected Members and those signed up to project updates, social media, and press releases.

Read more here about the Section 37 process here



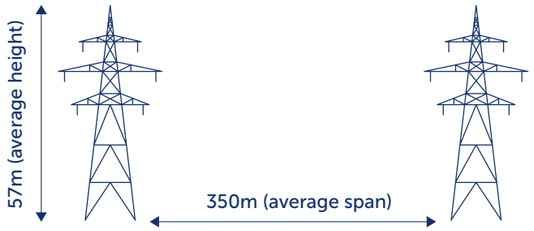
About the overhead line

400kV double circuit overhead line

The required technology for the new Kintore – Tealing 400kV OHL connection has been determined to be a new double circuit 400kV HVAC (High Voltage Alternating Current) overhead line.

The overhead line would consist of steel lattice towers with an average height of approximately 57m which would support six conductor bundles on six cross arms and an earth wire between the peaks for lightning protection. The average distance between towers is expected to be 350m. Tower height and the distance between them will vary dependent on several factors such as altitude, climatic conditions and topography.

On the proposed Kintore - Tealing 400kV OHL, 55% of the towers are below 57m. Towers range from 49.5m in height to 69.6m in height. One tower, situated within Hurlie substation, is 72m to overcome the change in elevation.

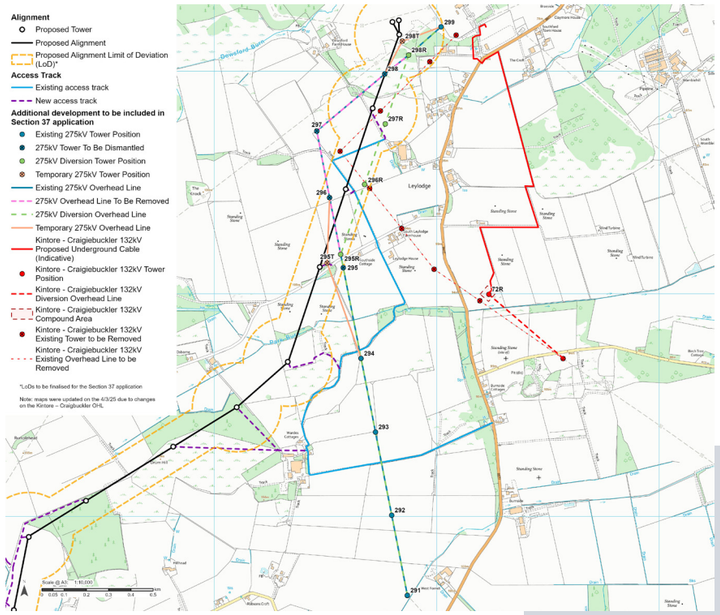


Ancillary development

Additional works that will also be required as part of the construction of the new overhead line include the following:

- Upgrade of existing and creation of new access tracks, described in more detail on page 22;
- Vegetation clearance and management;
- Temporary working areas around the proposed tower locations to facilitate construction;
- At some tower locations, the formation of temporary flat areas from which the conductors (wires) will be pulled through during construction. These areas will contain earthed metal working surfaces referred to as Equipotential Zones (EPZs);
- Other temporary measures required during construction, such as measures to protect road, railway and water crossings during construction (e.g. scaffolding);
- Temporary construction compounds will also be required at locations along the overhead line route; The final location and design of temporary site compounds will be confirmed by our Contractor and separate planning consents will be sought as required.

Works required around Kintore substation



The challenges with undergrounding at 400kV

The environmental, technical, and operational constraints associated with undergrounding at 400kV make it extremely challenging to deliver in many areas of Scotland. For underground cables at this capacity, longer than 1-2km, additional substation infrastructure would also be needed, enlarging the project's footprint.

Underground cables at 400kV are estimated to be between 5 and 10 times more expensive than overhead lines, and since these costs are reflected in consumer bills, it is a factor that needs to be considered. To deliver the necessary capacity, up to 30 parallel cables will be required. To achieve the required spacing, a trench of over 40m wide would need to be excavated, typically between 1m and 7m deep. During construction, a working corridor of over 70m wide is required for cable installation. This can result in significant land use constraints, typically more so than overhead line construction activities, particularly for farming operations.

BETWEEN 5–10x
More expensive than overhead lines

UP TO 30
Parallel cables required

Trench of **OVER 40M WIDE AND 1–7M DEEP**
would need to be excavated

OVER 70M WIDE
working corridor, which can result in **significant land use constraints**

Why the development cannot be placed offshore

In its assessment of what is required to meet 2030 targets, the National Energy System Operator (NESO) concluded there is a need for both onshore and offshore projects. Overhead lines can carry roughly three times more power than subsea cables, making them more efficient and cost effective for energy bill payers, whilst technical challenges and constraints limit the use of only offshore solutions.

Moreover, onshore energy infrastructure helps support local electricity needs and improves the network's reliability across northern Scotland. Visit our Frequently Asked Questions page to find out more about our engineering and technology considerations including more details regarding underground and offshore cables: **ssen-transmission.co.uk/2030faqs**

Managing construction impacts

We are committed to minimising the impact of construction through avoiding potential issues by designing them out, undertaking thorough environmental assessments and working closely with the local community. Our focus includes mitigating effects, for example to people, biodiversity, water, soil, and traffic disturbances. A Construction Environment Management Plan will be set up, to ensure mitigation is put in place and its effectiveness is monitored throughout the construction phase.

During construction, expected short-term impacts may include noise and traffic disruptions. Before starting, we will have a plan to manage these, including organising deliveries and travel to avoid busy times and sensitive areas. We will work closely with community groups and contractors to ensure adherence to mitigation measures. Typically, most project components will take around four years to complete, however these works will be phased across the length of the overhead line with bursts of activity and quiet periods.