



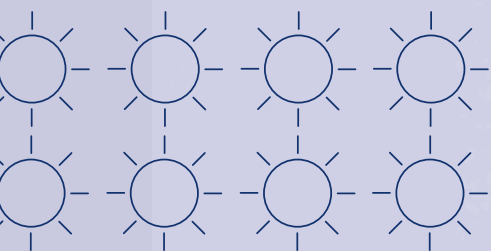
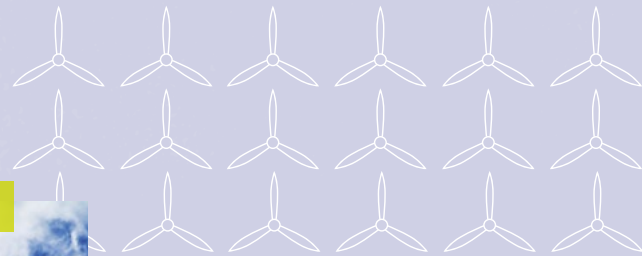
Scottish & Southern
Electricity Networks

TRANSMISSION

Tealing (Emmock) 400kV Substation

Pre-Application Consultation

March 2024



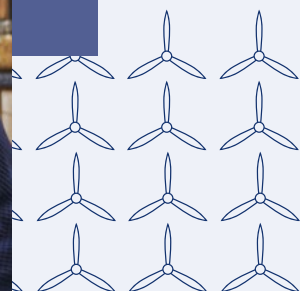
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The consultation events will be taking place on:

7 March 2024 - Tealing, Tealing Village Hall – 2pm-7pm

5 June 2024 - Tealing, Tealing Village Hall – 2pm-7pm



Powering change together



The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had.

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.

We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish Governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with National Grid Electricity System Operator to connect vast renewable energy resources – harnessed by solar, wind, hydro and marine generation – to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two thirds of power generated in our network.

But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future.

We're investing £20 billion into our region's energy infrastructure this decade, powering more than ten million UK homes and 20,000 jobs, 9,000 of which will be here in Scotland.



Find out more

Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

What we do

We manage the electricity transmission network across our region which covers a quarter of the UK's land mass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground subsea cables and overhead lines (OHL) to electricity substations, our network keeps your lights on all year round.

Working with you

We understand that the work we do can have an impact on our host communities. So we're committed to minimising our impacts and maximising all the benefits that our local developments can bring to your area.

We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at: ssen-transmission.co.uk/talk-to-us/contact-us

The Pathway to 2030

Building the energy system of the future will require a delivery of significant infrastructure over the next few years. In partnership with the UK and Scottish Governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

Achieving net zero

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

Securing our energy future

And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices. The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence.

The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

Meeting our 2030 targets

In July 2022, National Grid, the Electricity System Operator (ESO), published the Pathway to 2030 Holistic Network Design (HND).

This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity.

It's an ambitious plan that will help the UK achieve net zero.

What does this mean for you?

The East of Scotland will play a key role in meeting these goals. The extensive studies that informed the ESO's Pathway to 2030 HND confirmed the requirement to increase the power transfer capacity of the onshore corridor from Kintore to Tealing.

This requires a 400kV connection between these sites to enable the significant capability needed to take power from onshore and large scale offshore renewable generation, connecting on the East Coast of Scotland before transporting power to areas of demand.

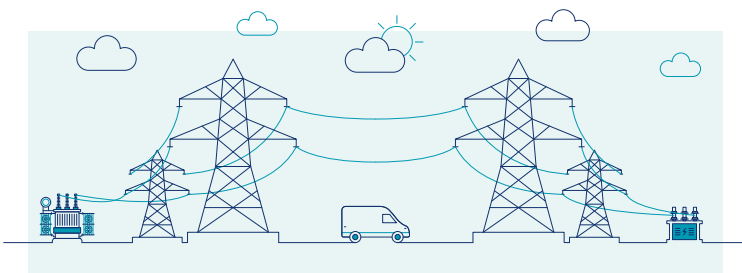
As part of these plans, we're proposing to build a new 400kV OHL between Kintore and Tealing. This also requires two new 400kV substations to be constructed in Fetteresso Forest and at Tealing to enable future connections and export routes to areas of demand.




In addition, two of the existing 275kV OHLs out of the existing Tealing substation to Alyth and Westfield require upgrades to 400kV operation and to be connected to the proposed new Tealing 400kV site.

These five projects, collectively called Kintore to Tealing 400kV projects, are seen as critical to enable the delivery of the UK and Scottish Government's targets.

These five projects:

- Kintore - Tealing 400kV OHL
- Hurlie 400kV substation
- Emmock 400kV substation
- Alyth - Tealing 400kV upgrade
- Tealing - Westfield 400kV upgrade



-  New infrastructure
-  Upgrade/replacement of existing infrastructure
-  Existing network



Project overview

We're leading some exciting projects to power change in the UK and Scotland. To support the delivery of 2030 offshore wind targets set by the UK and Scottish Governments, and to power local communities, we need to upgrade our existing network. In some key areas, we need to develop entirely new infrastructure, and quickly.

There are five key projects, with all the details on what we're doing for each below.

The new 400kV OHL between Kintore and Tealing

Based on the requirements outlined in National Grid ESO's Pathway to 2030 Holistic Network Design we have developed proposals to reinforce the transmission system. As part of this we are proposing to establish a new 400kV OHL between Kintore and Tealing.

This requires two new 400kV substations to be constructed to connect to this new OHL, one at Fetteresso Forest in Aberdeenshire and one near the village of Tealing in Angus to enable required future connections and export routes to areas of demand.

In addition, two existing OHLs out of Tealing substation to Alyth and Westfield in Fife will be upgraded to operate at 400kV and connected into the new Emmock 400kV substation.

While they have been presented in combined consultation events in May last year, they are separate projects and will be progressed through separate consultation and consenting processes.

New and upgraded OHL connections

The new Kintore to Tealing OHL will connect from the north of the proposed substation site. This will be a new 400kV line supported by new towers. Towers would be 57m in height on average, although tower heights may be increased where local topography dictates in order to achieve sufficient clearance distances.

- The existing 275kV OHL from Alyth to the existing substation will be upgraded and connect to the new proposed substation from the northwest. This will require the construction of approximately 1.5km of new OHL to connect the existing OHL to the new substation. These new towers will match the existing towers on that line and will be approximately 50m tall. This will also allow the removal of approximately 3.5km of existing OHL.
- The existing 275kV OHL to Westfield, which connects Scottish Power Transmission's (SPT) infrastructure to the existing Tealing substation, will be upgraded and connect to the new proposed substation. This will connect from the south west. This will require approximately 0.5km of new OHL to connect the existing OHL to the new substation. These new towers will match the existing towers on that line and will be approximately 50m tall. This will leave approximately 1.5km of redundant OHL.
- The new 400kV substation and the existing 275kV substation need to be connected to each other. The proposal is to use the 1.5km section of Tealing Westfield OHL which will become redundant when it is upgraded to 400kV. This will likely require a short section of additional OHL but significantly less than if a new build solution was implemented. There is also likely to be a requirement for an additional OHL circuit between the two sites and this will likely be approximately 1km of new OHL on towers approximately 50m tall.

Tealing (Emmock) 400kV substation

This consultation is focused on the proposal to build a new 400kV substation required near Tealing. The new substation will be located approximately 1km northwest of the existing 275kV substation at Tealing.

The new proposed substation will be an outdoor, Air Insulated Switchgear (AIS), 400kV substation.

The electrical equipment will sit on a development platform approximately 675m x 300m.

The overall size of the new substation is influenced by a range of factors, including:

- Plant and equipment required for current network plans.
- Space provision required future renewable energy generation projects.
- Areas for drainage, landscaping/screening and habitat enhancement.
- Permanent and temporary access roads.
- Temporary areas required during construction for laydown and welfare.

Help shape our plans

The work we have planned is significant and has the potential to deliver massive benefits in your community, Scotland, and beyond. Yet we know that achieving our goals will require a lot of work that will impact your lives. That's why we want to work with you every step of the way throughout the planning and delivery stages of these essential and ambitious works.

We're committed to delivering a meaningful consultation 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.

Throughout the consultation, we'll present our approach to developing the project, including changes made since we last consulted with you.

We will also provide some visualisations and maps to show you where everything will be located.

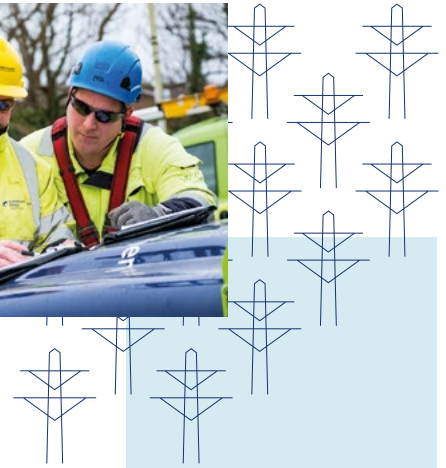
We want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of any changes and refinements we've made.

By telling us what you think, you will help shape our proposals. We want to harness your local knowledge so that we spot any unforeseen challenges early and maximise the potential benefits and opportunities for your communities.

Because, ultimately, we want you to work with us to ensure that the energy infrastructure we build will be the best it can possibly be.

Who we are consulting with

As well as communities, we are keen to hear feedback from a broad range of other stakeholders including but not limited to landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES) and Scottish Forestry (SF).



How we've selected the substation site

Our site selection process makes sure the design, consenting, construction and operation of our projects are undertaken in a manner, which on balance, causes the least disturbance to the environment and the local community, while ensuring the solution taken forward is economically and technically practical.

To do this we follow an internal process supported by third party environmental and technical experts.

This has many key stages, each increasing in detail and definition and bringing technical, environmental, people, and cost considerations together to find a balanced outcome.

Nine site options were identified within a 5km Area of search, which centred on the existing Tealing substation, and assessed for suitability based on factors including size, access, topography and the nature of technical and environmental constraints.

From this list, two potential sites (Sites 4 (land at Balkemback Farm and 7 (land at North of Mains of Boldovan)) were identified as suitable for further appraisal.

This second stage involved more detailed consideration of the environmental, engineering and likely cost constraints based on further desk assessment, site inspection by engineering and environmental specialists and initial enquires to landowners.

The appraisal concluded that there was little to distinguish between the shortlisted sites, the principal factors being the relative level of cultural heritage constraint, the works necessary to rationalise existing OHL connections and the associated costs.

While site 7 was preferred by being further from cultural heritage features, the fact that there are fewer properties, fewer technical challenges and lower development around site 4 makes it preferable.

Further detail on why Site 4 was selected can be found in our Consultation Document published 9 May 2023.

Our proposed site: Site 4 - Emmock

Following our last consultation on the proposed Tealing substation in May 2023, where we asked for your views regarding shortlisted sites, in December 2023 we confirmed that the site we were proposing to progress with was Site 4.

What has changed since we last consulted?

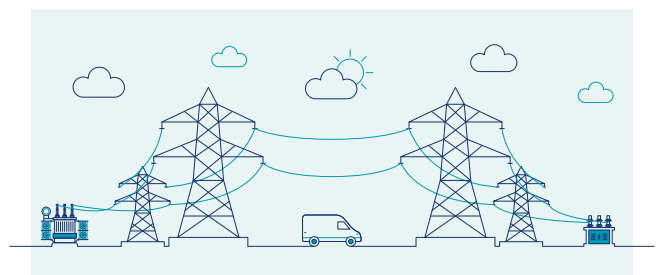
Since our last consultation, we have analysed and reported on the consultation findings, which have allowed us to confirm the proposed site which will now be taken forward into the planning process. We have continued to develop our environmental analysis and have appointed specialist substation designers to start to optimise the substation design, to reduce its size and visibility and maximise opportunities for biodiversity gain.

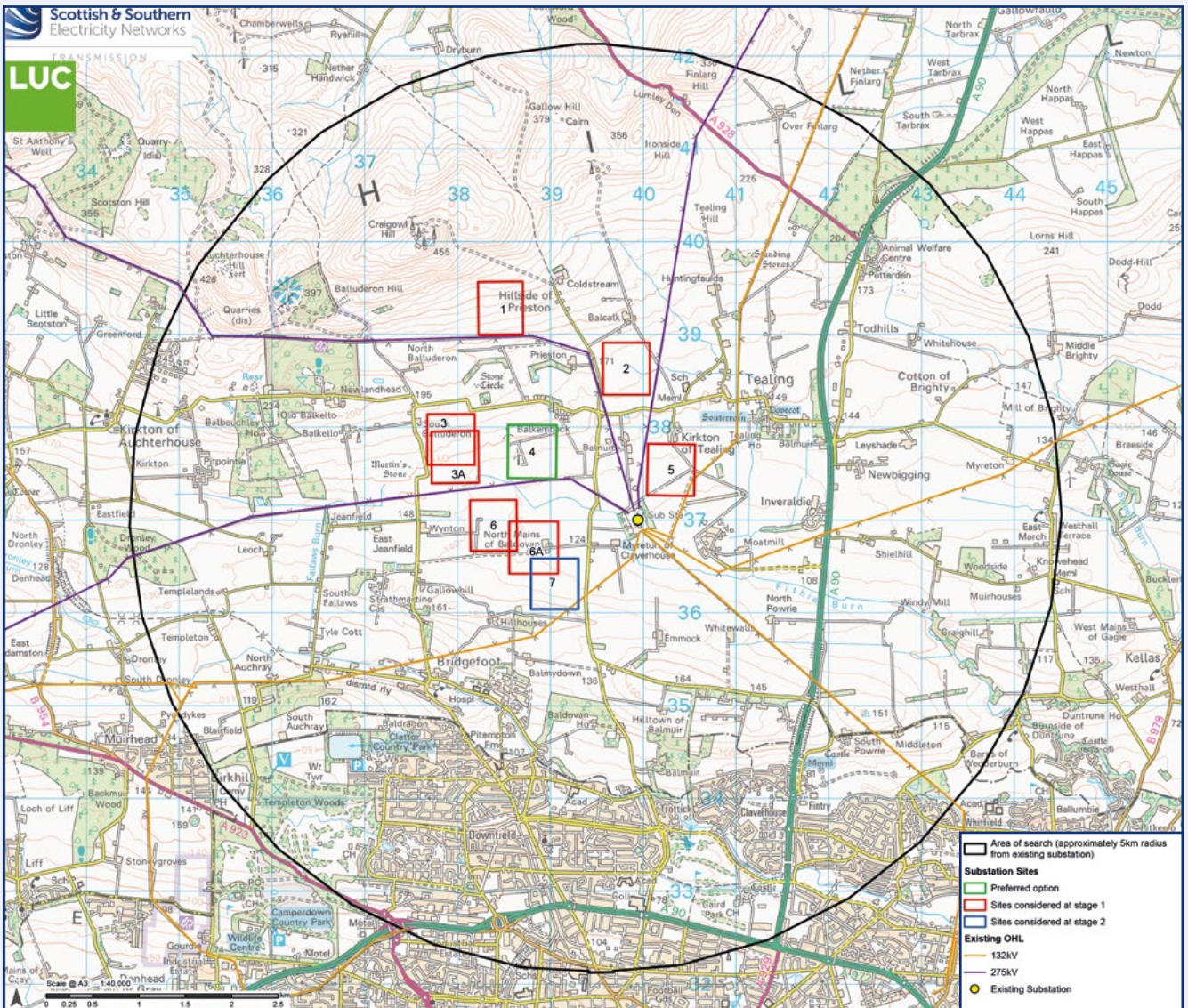
Naming our site

To avoid confusion with the nearby Tealing 275kV substation, Emmock 400kV substation was chosen which recognises the proximity to the nearby Emmock Road. Going forward, for the next consultation and submission of our planning application, the name will be formally changed to Emmock 400kV substation.

What next?

We are now at the formal 'pre-application stage of our consultation process. We will consult again in June 2024, to share feedback from this consultation and any subsequent changes to design, prior to submitting a planning application to Angus Council at the end of the summer.

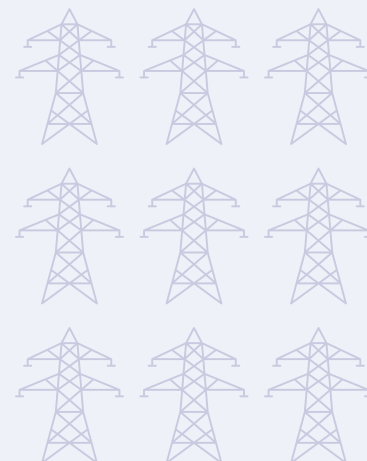




Why this site?

The consultation process, held last year, confirmed that the proposed site 4 for the Emmock 400kV substation is most appropriate to be progressed through the Environmental Impact Assessment and subsequent consenting stages:

- There are fewer residential properties in close proximity to the site.
- Nearby cultural heritage assets identified are unlikely to be adversely impacted by the development.
- The Site offers efficient connections to the existing Tealing substation, reusing redundant sections.
- The requirement of new infrastructure needed to connect upgraded existing circuits is minimised.
- The location allows over 3km of existing 275kV OHL to be removed.



The Town and Country Planning process

The legislation that enables the planning of projects like Emmock 400kV substation is the Town and Country Planning (Scotland) Act 1997.

Engaging the right people

Local Planning Authorities determine the outcome of any applications made under the Town and Country Planning Act and establish the planning pathway our substation projects must take, including which consents are required.

The Emmock 400kV substation project is classed as "National Development" under the Town and Country Planning process; therefore, pre-application consultation is required with the public and interested parties.

The Pre-Application Consultation process

A Proposal of Application Notice (PAN) was submitted to Angus Council on 31 January 2024. This is the first stage in the planning application process, and the beginning of a consultation period that must allow for at least 12 weeks between the start of the pre-application consultation and feedback, and submission of a planning application.

The plans we are consulting on at this event might change between now and the submission of a planning application. The red line boundary that has been submitted with the PAN represents the maximum extent of the land potentially included in the application site, but this area may be reduced or rationalised as the development proposal becomes finalised.

There is a requirement to hold at least two events to provide the opportunity for members of the public to comment on the proposals. This public event is the first event. A second event will be held on 5 June 2024, in Tealing Village Hall at which feedback will be given on the views obtained at the first event. There will also be a short opportunity for comment after this second event and comments will be included in a Pre-application Consultation (PAC) Report.

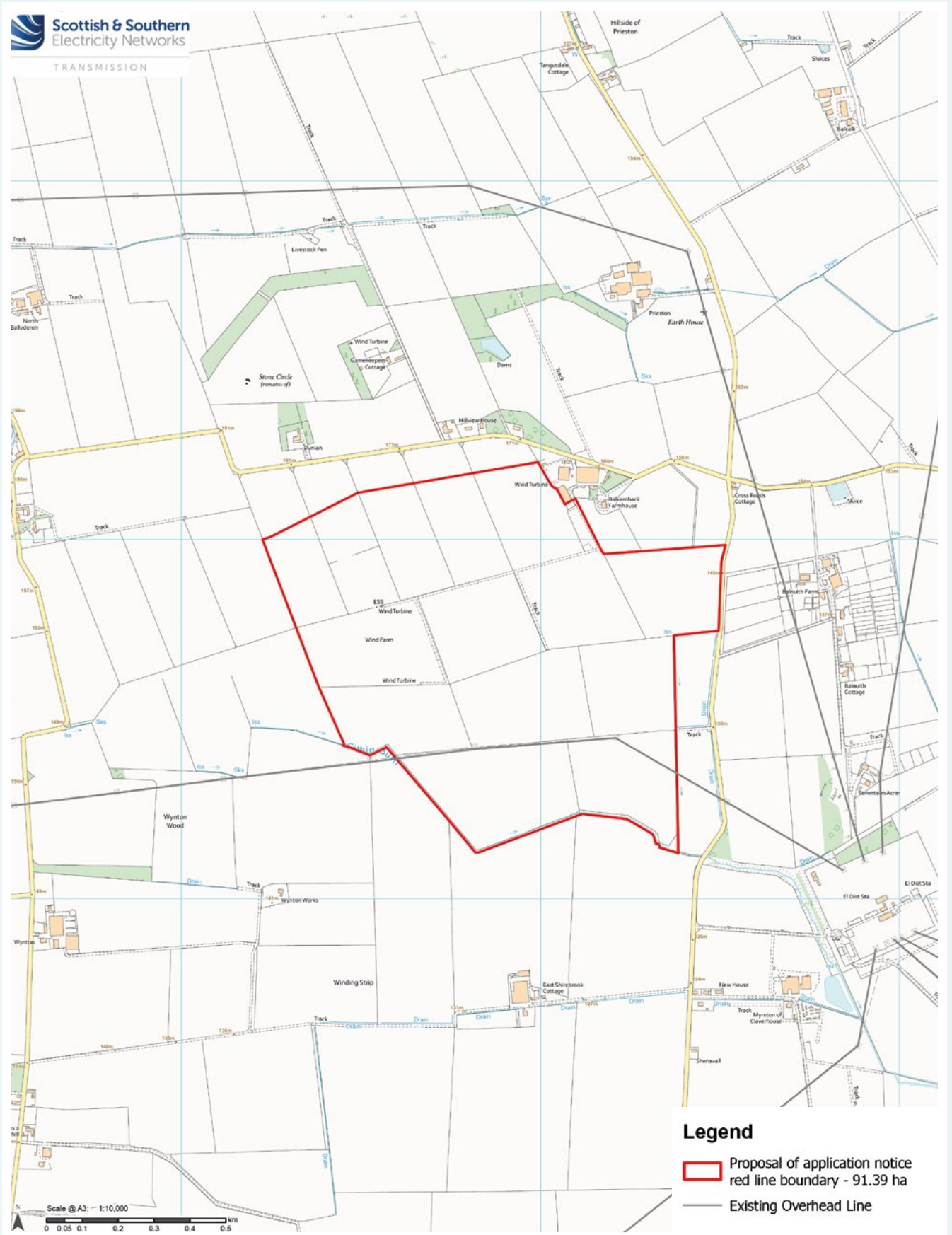
Submitting a planning application

The planning application is due to be submitted to Angus Council in late summer 2024.

A Pre-application Consultation Report will accompany the planning application providing details of the consultation undertaken and communicating how the consultation process has influenced the proposed development. Where comments are received that cannot be addressed in the final proposal, an explanation will also be given why this is the case.

Comments made through the pre-application consultation process are not formal representations to Angus Council. When the planning application is submitted there will be an opportunity to make formal representations to Angus Council.





Environmental considerations

The potential environmental impacts discussed below will be assessed as part of the Environmental Impact Assessment (EIA), which will accompany the planning application to Angus Council. The EIA Report will be available for members of the public to view and comment on as part of the planning process and the determination of the application by Angus Council

Cultural heritage

The proposed substation is likely to be visible from a number of Scheduled Monuments and listed buildings. This will be confirmed by full assessment as part of the Environmental Impact Assessment (EIA) process, which will consider both impacts associated with the substation and in combination with the new overhead transmission line and propose measures to avoid or reduce cultural heritage impacts if necessary.

Terrestrial ecology and ornithology

The nearest nature conservation designated site is Auchterhouse Hill Site of Special Scientific Interest (SSSI), over 2km north-west of the proposed site. An impact upon the SSSI is not anticipated.

While the Site is some 8km north of the Firth of Tay and Eden Special Protection Area (SPA) designated for non-breeding greylag and pink-footed geese and will not impact the SPA directly, it does lie within the foraging distance for geese and this will be recognised during the EIA process.

Also of relevance are the Outer Firth of Forth and St. Andrews Complex SPA, 8km south, Loch of Kinnordy SPA 16km and Loch of Lintrathen SPA 20km from the Site respectively.

The Outer Firth of Forth SPA is predominantly designated for its breeding and non-breeding seabird species (including herring gull which can forage up to 15 – 20 km). Although designated for its breeding seabird species, the herring gull can travel inland to feed.

Much of the Site has low conservation value, being predominantly arable land. There is some riparian habitat along the Fithie Burn which has potential for use by otters. It is also possible that badgers could use the fields within the Site for foraging.

While the Site is not particularly constrained in ecological or ornithological terms, the EIA process will include detailed assessments of ecological and ornithological impacts, both from the proposed substation and in combination with OHL. In turn, these assessments will inform the need for impact mitigation.

As described on page 18, we are committed to creating greater biodiversity than provided by the site currently. This will include new habitat creation and species-rich planting in the landscape and drainage designs.

Other mitigation may also be necessary, such as avoiding certain construction activities at sensitive periods. Habitat and Species Management Plans will be implemented during construction and operations.

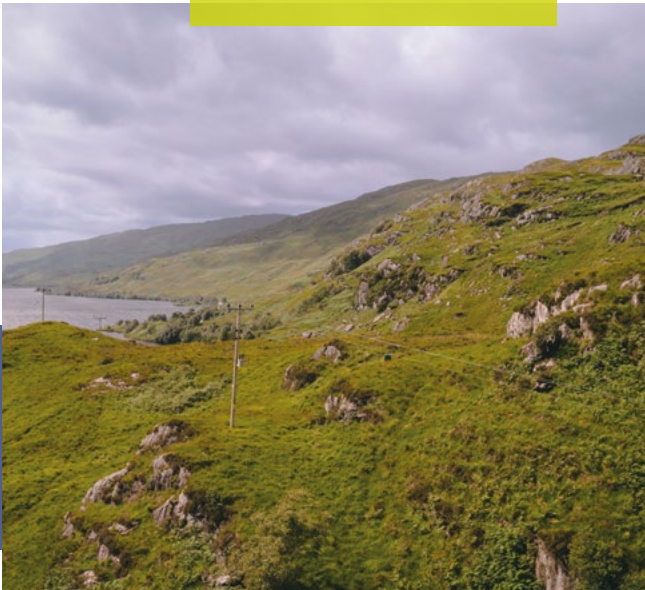
Noise and vibration

The Site is largely rural. The main noise sources experienced by those living in the vicinity of the Site and along the minor roads serving the area will be traffic, although it is likely there will be some local and occasional noise from farm vehicles and machinery.

During construction, noise and possibly vibration may be experienced by properties close to the Site from the movement of construction equipment, and certain activities (earthworks). The adoption of standard construction methods will ensure the level of off-site construction noise is kept to a minimum.

Baseline noise levels will be measured using techniques and at locations agreed with Angus Council.

A detailed noise and vibration impact assessment will be undertaken as part of the EIA, which will model possible levels of noise based on the equipment specified for the substation and define the measures necessary to attenuate (mitigate) noise so that significant impacts at nearby properties are not experienced.



Traffic

While the primary access routes will be from the A90, local access to the site will be via the minor roads from the A90, via Emmock Road to the south and via Tealing to the north.

A detailed construction traffic route assessment will be undertaken, as part of the EIA, to define route options with least impact, and will include determining how the amenity of properties close to the roads can be protected and what road improvements or modifications may be required.

A detailed Transport Impact Assessment, which will also include consideration of road safety, impacts to other road users and community impacts will be submitted as part of the planning application.

Water environment

The Fithie Burn flows in an easterly direction along the southern boundary of the Site.

A small drain, which drains agricultural land, is present in the eastern part of the site, approximately 165m east of the proposed substation platform. A larger tributary discharges flow from a culvert and then runs south along the edge of the unclassified road east of the Site before entering the land drain upstream of the Fithie Burn.

SEPA future flood maps show a risk of future flooding from the Fithie Burn and from the tributary in the next 200 years however, no part of our proposed site falls within the flood risk area.

Modelling of the Fithie Burn and the unnamed tributary in the eastern part of the Site is being carried out to inform the design. There are no Private Water Supplies within the Site.



Landscape and visual assessment

The Site is not located in or close to any national, regional or locally designated landscapes.

The landscape is characterised by lowland open, medium-scale farmland which is predominantly productive arable land use with. The local area already accommodates significant infrastructure, notably the existing Tealing substation and the Seagreen convertor station.

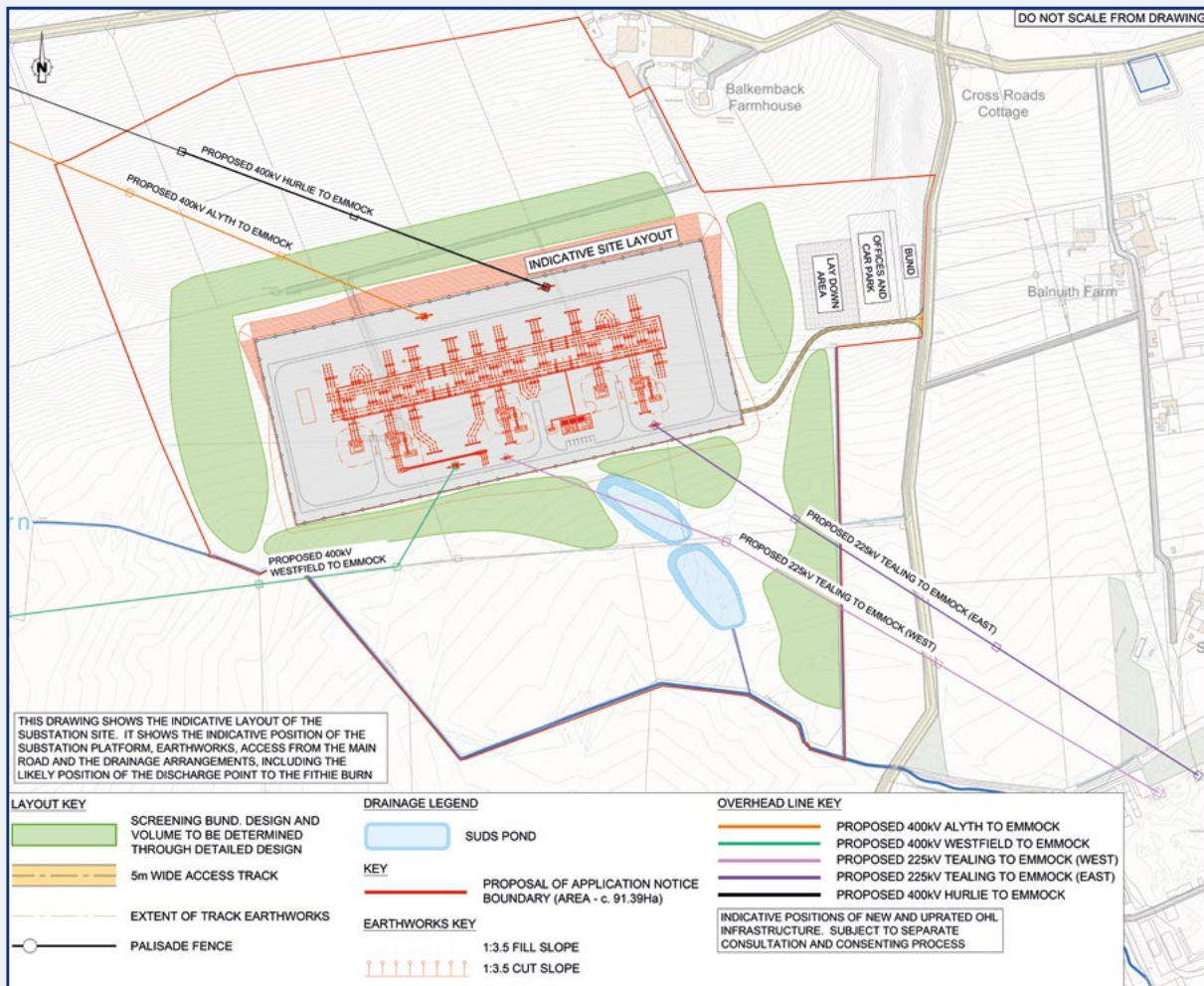
The site falls very gradually from north to south with an elevation change of approximately 25m. Fields units are large, under both arable and pasture with some fields separated by drystone dykes. The site is open to adjacent farmland in all directions. Tree cover is limited to occasional deciduous trees along one field boundary within the southern extent of the site. There are two small wind turbines on the site.

There are properties and associated farm buildings at Balkemback located to the north-east of the site with further properties in the wider vicinity.

The landscape plan on page 13 has been designed to reduce the visual impact of the substation on these receptors, as indicated by the indicative visualisations on page 15.

Plans will be developed further through the landscape and visual impact assessment, conducted as part of the EIA, which will also consider the possibility of cumulative impacts with the new overhead transmission line.

Proposed substation layout



The substation footprint has been positioned to optimise the amount of cut and fill needed to create a level development platform, the opportunity to screen the substation particularly from the north and east, the need to manage surface run off and to ensure the viability of the remaining fields.

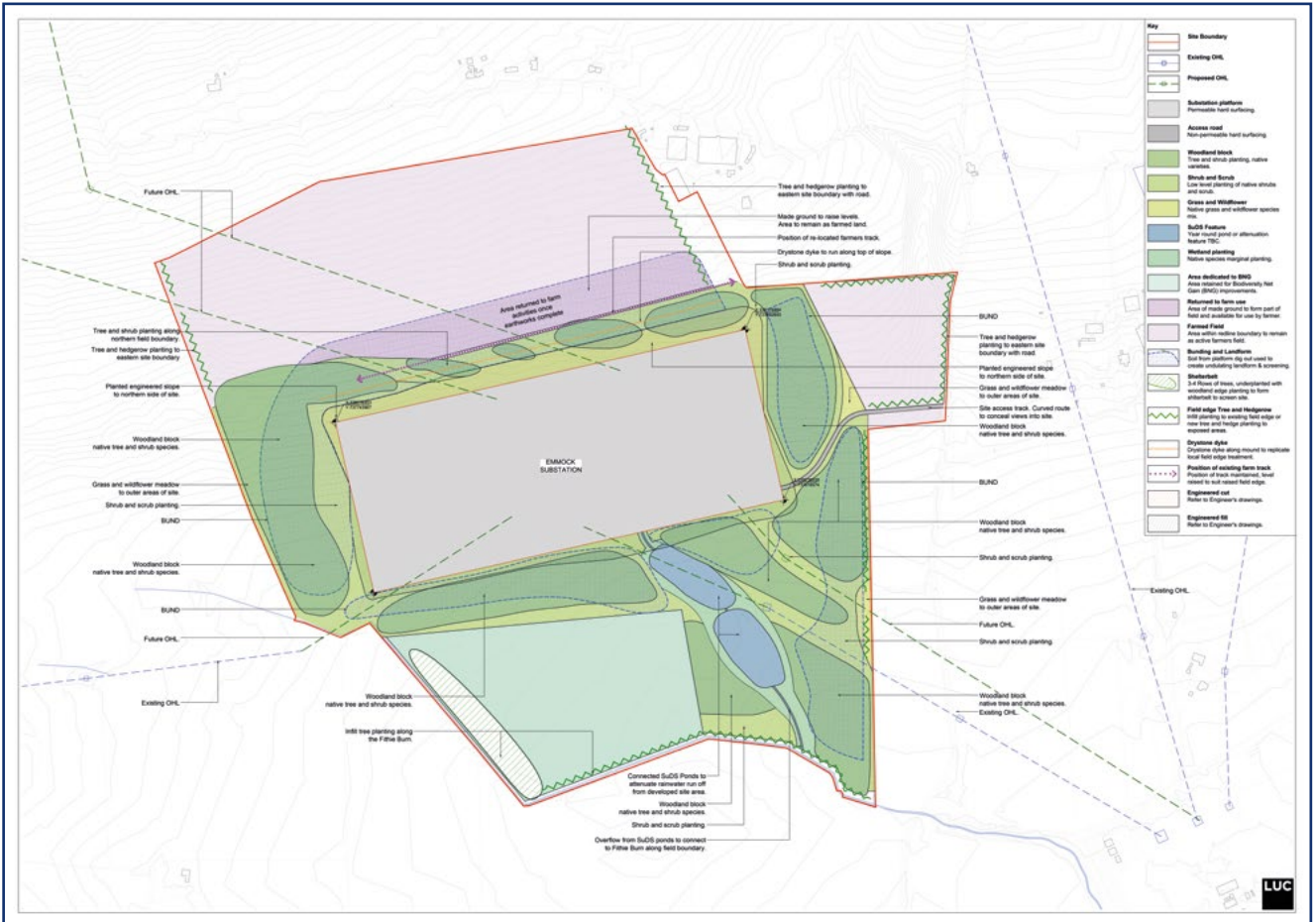
Landscaping bunds will be created around the substation platform, and planted with native shrubs, grasses and flora to reduce landscape and visual impact and to improve the biodiversity of the site compared to its previous agricultural use.

A new permanent access will be formed off Emmock road.

A security fence will be erected around the perimeter of the substation platform.

While the lighting strategy has not yet been defined, it will adopt the following broad principles; lighting will be kept to the minimum to ensure safe operations and security; individual light clusters will be low-level, narrow beam, and directed downwards to minimize glare and light spill; different lighting configurations and designs will be adopted for different parts of the site and will be appropriate for use; landscape bund design and positioning will support the reduction of glare and light spill experienced by the local community.

Proposed designs



Landscape design

The indicative Landscape Zonal Plan illustrates the principal components of the landscape design.

The main drivers are to screen and filter the visibility of the substation platform in a manner which is sympathetic to the wider landscape, taking advantage of the open low lying nature of the area and creating an undulating and varied landform.

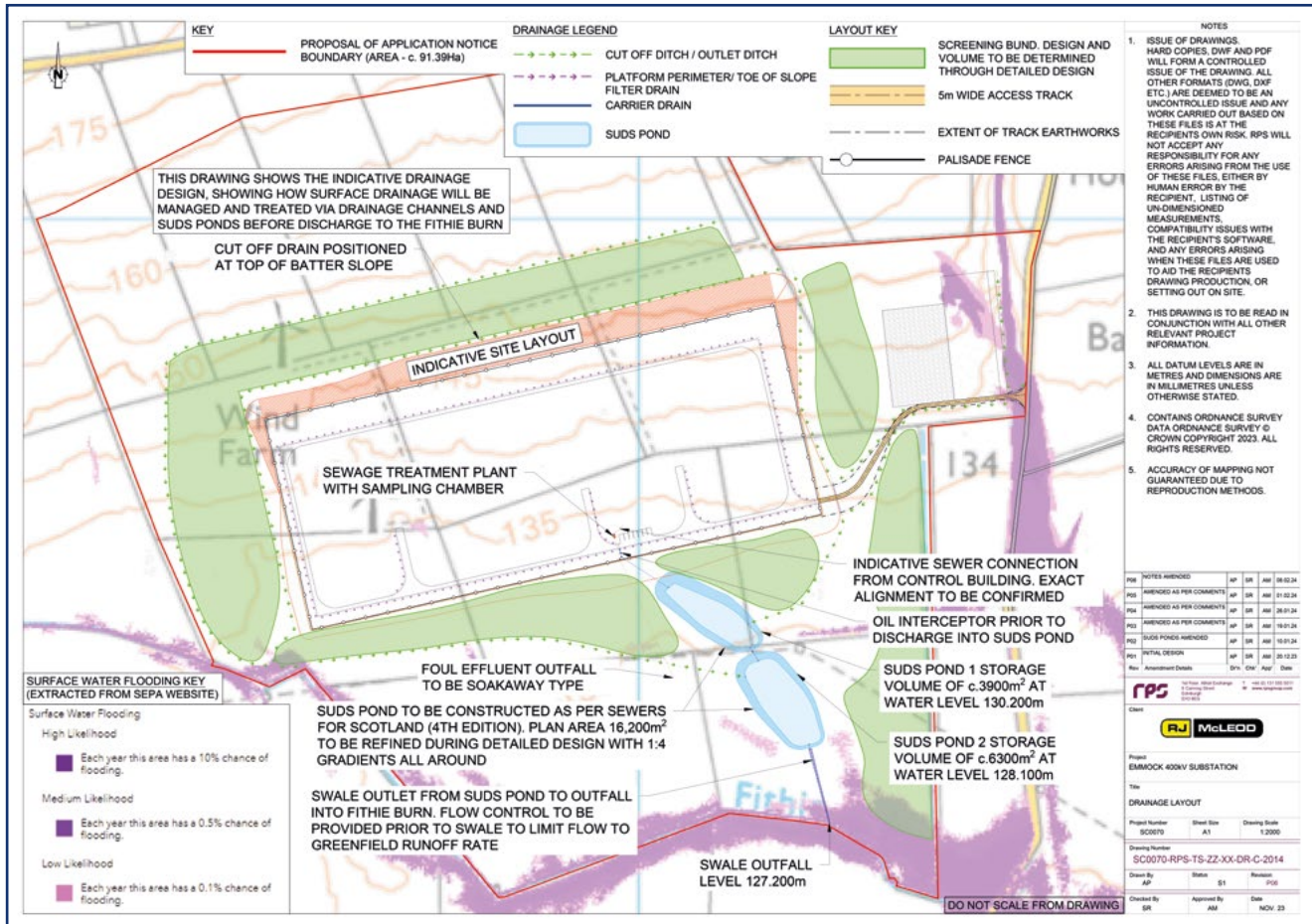
The design will introduce new elements formed from excavated material, new shelter belts and new field edge treatments.

Planting will include a mix of new woodland planting, the creation of shrub and scrub and new grass and willflower habitat, contributing to increasing the biodiversity of the Site compared to its current character.

The drainage features are integrated into the design as elements of the landscape creating visual diversity.

The Plan will be refined as the substation design evolves and following the landscape and visual impact assessment as part of the EIA process.

Proposed designs



Drainage design

Following the principles of sustainable urban drainage, the drainage network will comprise a network of grass lined swales (channels) which will collect drainage from the substation platform.

A cut off swale will intercept field run off from the higher parts of the site to the north of the platform. The existing field drainage network will be reinstated following the earthworks and convey drainage to the cut off drain.

Run off will drain to a network of ponds to slow, hold and treat (by settlement) drainage water before being released to the Fithie Burn ensuring that the volume, rate and quality of surface water discharge will be no greater than the level of run off currently.

A network of interceptors will capture grit and contaminants from internal roadways and hardstanding.

Materials storage areas within the substation will be self contained with drainage being conveyed to the SUDs ponds via an interceptor.

Office, canteen and hygiene facilities will be connected to the foul sewer which runs beneath the minor road to the east of the site.

The drainage design will be refined as the platform and wider site design evolves. This will be informed too by a more detailed Flood Risk Assessment and hydrology assessment which will form part of the EIA.

Development considerations

During our last consultation, we outlined many of the engineering, environmental and social considerations we take account of when establishing a practical site for the substation. Now that we have identified a proposed site, we are able to share further details regarding many of our development considerations.

Summary of engineering considerations

The fundamental engineering considerations when selecting a preferred site location for a new 400kV substation include access, connectivity, footprint requirements, ground and environmental conditions and avoiding hazards. The proposed new Kintore - Tealing 400kV OHL is currently in development and will need to connect into the new Emmock 400kV substation.

The substation is required to be located so that it can be readily connected to the new 400kV scheme, as well as future connections and the wider existing transmission network.

Site selection criteria site 4

- OHL access and connectivity
- Proximity to existing Tealing substation
- Substation footprint requirements
- Grounds and Environmental conditions
- Logistical access for equipment delivery
- Hazards

Site assessment

The site offers good OHL connectivity and flexibility with connecting to new and existing assets on the transmission network including future external developer connections. There is good existing access to the site off the A90, which will facilitate the delivery of large substation equipment and provide ease of access for future operational needs.

Access and civil considerations

The chosen site will allow connection of the proposed new Kintore -Tealing 400kV OHL and connection to the existing 275kV Tealing substation. The new substation will also facilitate the upgrade of the existing Aylth to Tealing and Tealing to Westfield 275kV OHL connection to 400kV connections.

The main access to site is proposed to be from the A90 via an existing slip road with survey and design works ongoing to determine any improvements required to facilitate this access.

There will also be the requirement to establish a new bell mouth and a new access track south of the new substation site to allow for delivery and vehicle access during and post construction.

Extensive ground and Site investigation works have taken place on the preferred site which will be used to inform the civil design of the site. The platform level is designed to optimise the overall cut fill balance of the site to minimise the amount of material import required.

Site layout

The layout of the substation has been developed as an Air Insulated Switchgear (AIS) after an optioneering exercise was carried out to determine the most suitable design for the preferred site. The AIS equipment will be outdoors and consists of busbars and switchgear which is used to marshal and control the electricity supply.

The substation platform size has been developed based on the number of bays to facilitate the initial connections at the site and allowance made for future connections and is approximately 675m x 300m and the tallest point of the site will be ~14.3m in height.

Building size

A control building will be required on site which contains ancillary equipment required to operate the substation including control panels and low voltage AC and DC systems.

The size of this building is determined by the number of ancillary system equipment required which is determined by the number of bays within the substation which for Emmock is 22. The building will be single story with an approximate overall height of 7m.

As well as the control building, Emmock substation will also have 2 x reactors which are required to keep the amount of electrical current flowing in the circuit to a safe and manageable level. Each reactor will be located within the substation site and will have an approximate height of 11m.

3D visualisations

We understand that local stakeholders need to be able to visualise what the development may look like in their local area.

We've commissioned 3D visualisations which model the substation into the local landscape to help understanding of the proposals in terms of the visual impact, distance and height.

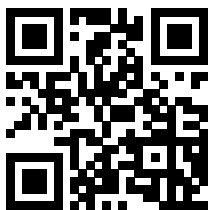
A flythrough video is also available to view from the project webpage or via the QR code at the bottom of this page.

Our proposals may change based on feedback and further refinement of the design. If that happens, we'll update our model and video and share this on our webpage and with you at the next event.

These images are for illustrative purposes. Further details on landscaping will be provided as the project develops.

Photomontages

Photomontage visualisations will also be produced as part of the Environmental Impact Assessment (EIA). Once the EIA is completed, we'll ensure these photomontages are easily available to view.



Find out more

Scan the QR code with your smartphone to view on the project website.



View from Balnuith



Emmock - Drone Shot



View from Balkemback

Other projects in the local area

As the transmission operator in the north of Scotland, we need to maintain and invest in the high voltage electricity transmission network in our area to provide a safe and reliable electricity supply to our communities.

We also need to offer terms for connections to the transmission network for new generation such as wind farms and pumped storage schemes and for new sources of electricity demand.

Therefore, as well as Emmock 400kV substation, we have a number of other projects within the local area we are currently developing, described below.

Our relevant Pathway to 2030 projects are also detailed on page 2 and includes information regarding our proposals for the Kintore to Tealing OHL.

Upgrade of existing OHL Alyth – Tealing and Tealing – Westfield

As part of the Kintore –Tealing 400kV scheme, the export routes to areas of demand must be upgraded to 400kV. This means the existing Alyth – Tealing and Tealing – Westfield OHLs, which currently operate at 275kV need to be upgraded to operate at 400kV.

This is termed 'reconductoring' and is achieved by replacing the existing conductors with larger capacity conductors. Once upgraded these lines will connect into the proposed new 400kV Emmock substation.

Future developments

We know that local stakeholders are keen to understand the full extent of renewable developments being proposed in their local area. Applications from renewable developers to connect to the transmission network are made to National Grid ESO and undergo a lengthy process before we begin to develop a network connection for developments applying in our license area.

We aim to be transparent about the renewable developments looking to connect to our network but are not permitted to disclose any details of these developments until they are in the public domain.

A list of projects that hold contracts for Transmission Entry Capacity (TEC) with National Grid, the Electricity System Owner is available from their website: nationalgrideso.com/data-portal/transmission-entry-capacity-tec-register

Future developments may also require additional work at Tealing substation including further extensions to the existing site.

Finding common ground with landowners

We recognise landowners and occupiers as key stakeholders in the development of our projects. At all levels, we will be transparent about our proposals and keep the conversation open and constructive when it comes to those affected and reaching effective compromise.

From the outset of the project, our land team have been identifying and contacting landowners and occupiers who may be affected by our proposals. If you are a landowner who is affected by the proposals and have not yet had contact from us, please get in touch via the contact details for the dedicated project land managers found on the relevant webpages: <https://bit.ly/48W3BX7>

We work with landowners and occupiers to mitigate the effects of our infrastructure on their properties and our team of dedicated Land Managers will be on hand to answer queries and address concerns throughout this process.

As part of this, we need to carry out various engineering and environmental surveys to inform what we design and how we build it. We will always seek consent from affected landowners and occupiers in advance for these surveys.

Once we have finalised the design, we will be required to secure the appropriate land rights from landowners and occupiers in order to secure planning consent.

Our land managers will endeavour to reach a voluntary agreement with landowners and occupiers, however, as a statutory undertaker, we might need to underpin voluntary discussions with an application to Scottish Ministers for a Necessary Wayleave or Compulsory Purchase Order.

Ultimately this is to ensure nationally significant infrastructure projects are delivered on time and in line with our licence obligations. We also have a duty to protect the interests of the UK bill payer.

Statutory powers are not used lightly as we aim to work with landowners and occupiers to secure the necessary land rights voluntarily.

All potentially affected landowners and occupiers have the opportunity to provide feedback at our in-person consultation events and by submitting a feedback form.

We would encourage all those with an interest to submit their views through this consultation.



Leaving things better than we found them

On every project we deliver, we always need to consider how we impact the environment in that area. As we enhance the transmission network in the East of Scotland, we have a responsibility to design and build our projects to protect and enhance the environment. We will always look to minimise the potential impacts from our activities and achieve Biodiversity Net Gain (BNG).

As the first developer to consult upon and implement an award-winning approach to deliver Biodiversity Net Gain (BNG) on all new sites, we're committed to delivering a "greener grid", focusing on habitat restoration and creating biodiversity growth as we invest in our network. We are committed to delivering 10% Biodiversity Net Gain on all sites gaining consent going forward. This ensures that we don't just restore our natural habitats but actively improve them for the benefit of local communities, wildlife, flora and fauna.

During the development, construction and operation of our projects, we will leave the environment in a measurably

better state than before development started, ensuring a positive environmental legacy at all our sites. As this project progresses through the development process, we will actively seek ways to avoid and minimise impacts on biodiversity, through careful routeing and site design to avoid impacting areas of highest biodiversity value.

Where avoidance is not possible, we will offset this by introducing new habitats along with restoration efforts. These can be achieved within the boundary of the development site, or by providing support to local groups involved with habitat restoration or creation projects, within the locale of the development site.

If there are biodiversity improvement projects in your local area that SSEN Transmission could get involved with, please get in touch. Contact details for the Community Liaison Manager can be found on page 16).

Example projects

Argyll Coast and Countryside Trust (ACT)

Argyll's rainforest is a unique and rare habitat of ancient and native woodland. This collaboration with ACT will help deliver our compensatory tree planting and BNG commitments in Argyll. It also aligns with ACT's woodland planting ambitions, supporting its charitable objectives including biodiversity gain, health and wellbeing, improvement for local people, outdoor learning opportunities and climate change workshops.



Argyll Coast and Countryside Trust (ACT)

Thurso South substation and The Bumblebee Conservation Trust

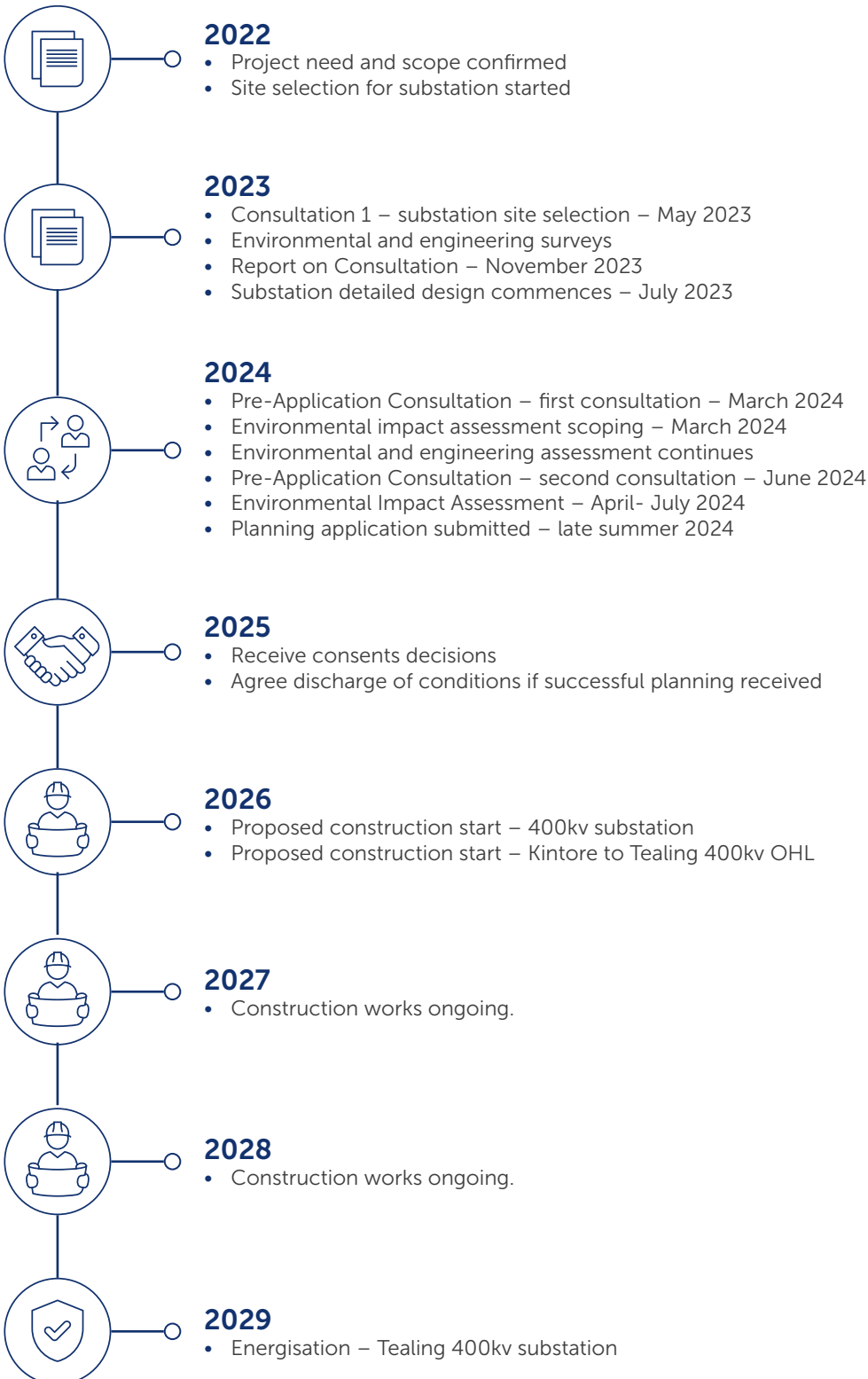
We created approximately 10 hectares of bee-friendly habitat to support the pollination of the rare endemic great yellow bumblebee.

This contributed to wider conservation efforts for this bee species. A collaboration with The Bumblebee Conservation Trust facilitated research on food availability for bumblebees, identifying the need for a diverse seed mix containing key flowering species to enhance early, main and late food supply to support the full lifecycle of bumblebees.



Thurso South substation and The Bumblebee Conservation Trust

Project timeline



Notes

Have your say

We value community and stakeholder feedback. Without this, we would be unable to progress projects and reach a balanced proposal.

The feedback period

Previous consultation highlighted the need for an extended feedback period. In response to this, we will extend our usual 28 days feedback period.

We will accept feedback from now until 15 April 2024.

How to provide feedback

Submit your feedback online by scanning the QR code on this page or via the form on our project webpage at: <https://bit.ly/48W3BX7>

Email the feedback form to the Community Liaison Manager. Or write to us enclosing the feedback form at the back of this booklet.

What we're seeking views on

During our last public consultation events in May and June 2023, we wanted to know your thoughts on the substation sites under consideration and if you agreed with the one we'd identified to take forward.

Now we want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of any changes and refinements we've made.

We'll be actively looking to mitigate the impacts of the project as much as possible over the coming months, but it would be helpful to understand what you believe we should be doing to help minimise these impacts and if there are any opportunities to deliver a local community benefit you would like us to consider.

We encourage all interested community members to fill in a feedback form when submitting feedback, however if you prefer, you can email us to provide your feedback or ask any questions.

Our Community Liaison Team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations and development trusts, and regularly engage with interested individuals.

Community Liaison Manager

Rhiannon Merritt
Community Liaison Manager

SSEN Transmission
10 Henderson Road,
Inverness, IV1 1SN

E: tkup@sse.com



Additional information

The best way to keep up to date is to sign up to project updates via the project webpage: <https://bit.ly/48W3BX7>

You can also follow us on social media

 [SSEN-Transmission](#)

 [SSETransmission](#)



To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar.

Your feedback

Thank you for taking the time to read this consultation booklet. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Please complete in BLOCK CAPITALS.

Q1. Now that we have shared updated design plans for this site, is there anything you'd like to bring to our attention that you believe we may not have already considered during project development?

Comments:

Q2. Are there any environmental features, that you consider important and should be brought to the attention of the project team?

Comments:

Q3. What suggestions for social or environmental community benefit opportunities do you have that you would like us to consider or are there any local initiatives you would like us to support?

Comments:

Q4. Is there anything regarding the Emmock 400kV substation proposal that you feel you require more information about? If so, please detail below.

Comments:

Q5. Do you have any other comments?

Comments:

Full name

Address

Telephone

Email

If you would like your comments to remain anonymous please tick this box.

We would like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on projects, services and future developments from the Scottish and Southern Electricity Networks group listed below. If you are happy to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting us at stakeholder.admin@sse.com or by clicking on the unsubscribe link that will be at the end of each of our emails.

For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at ssen-transmission.co.uk/privacy

If you would like to be kept informed of progress on the project please tick this box.

Thank you for taking the time to complete this feedback form. Please submit your completed form by one of the methods below:

Post: SSEN Transmission, 10 Henderson Road, Inverness, IV1 1SN **Email:** tkup@sse.com

Online: <https://bit.ly/48W3BX7>

Download: Comments forms and all the information from today's event will also be available to download from the project website.

The feedback form and all information provided in this booklet can also be downloaded from the dedicated website: <https://bit.ly/48W3BX7>

We intend to use Artificial Intelligence (AI) to assist our experienced teams in the analysis of your feedback, so we can categorise key points raised more quickly. You can learn more about how we're utilising AI at ssen-transmission.co.uk/AIFAQ

Any information given on the feedback form can be used and published anonymously as part of Scottish and Southern Electricity Networks consultation report. By completing this feedback form you consent to Scottish and Southern Electricity Networks using feedback for this purpose.

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