

Coire Mashie Substation Project

Post – Consultation Event Update

9th July 2025



Agenda:

- **Who we are**
- **About the project**
- **Site selection / Consultation process**
- **Summary of feedback**
- **What happens next**
- **Questions**

SSEN Transmission Staff:

- **Darrell Muldoon – Project Manager**
- **Marta Ibáñez Garcia – Environmental Project Manager**
- **Kelly Scott – Lead Community Liaison Manager**
- **Ian Brown – Engineering Manager**
- **Thomas Silkstone – Land Manager**

Who We Are: SSEN TRANSMISSION

- **We are responsible for maintaining and investing in the electricity transmission network in the north of Scotland.**
Our network extends over a quarter of the UK's land mass, crossing some of its most challenging terrain.
- **Our first priority is to provide a safe and reliable supply of electricity to our communities.** We do this by taking the electricity from generators and transporting it at high voltages over long distances through our transmission network for onwards distribution to homes and businesses in villages, towns and cities.
- **Our operating area is home to vast renewable energy resources, and this is being harnessed by wind, hydro and marine generation.**
Working closely with National Grid ESO, we enable electricity generators to connect to the transmission system, allowing the electricity generated by them to be transported to areas of demand across the country.
- **As a natural monopoly, we are 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 in the north of Scotland. These costs are shared between all those using the transmission system, including generation developers and electricity consumers.



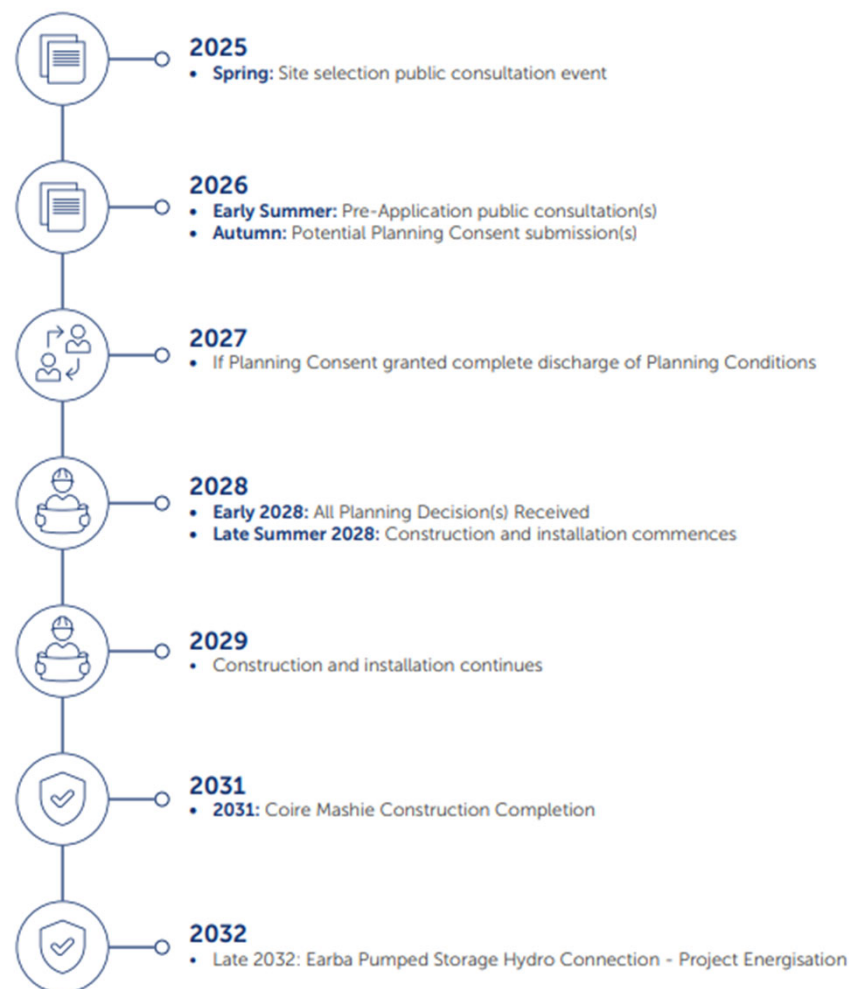
About the project

We are required to provide a connection for Gilkes Energy Limited's proposed Pumped Storage Hydro (PSH) scheme at Loch Earba to the transmission network.

To facilitate this, we are proposing the following project elements:

- A new 400kV Coire Mashie substation;
- A new 400kV underground cable connecting the Earba PSH to the proposed new Coire Mashie substation.

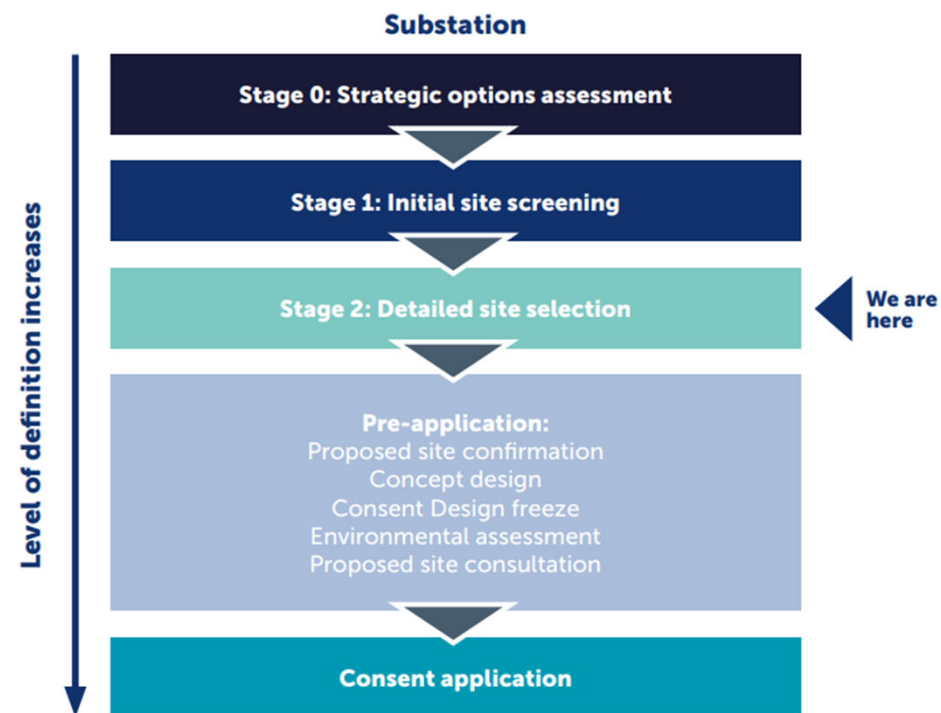
We are at the early development and engagement stage of the project – concentrating on selecting the most appropriate site for the new substation.

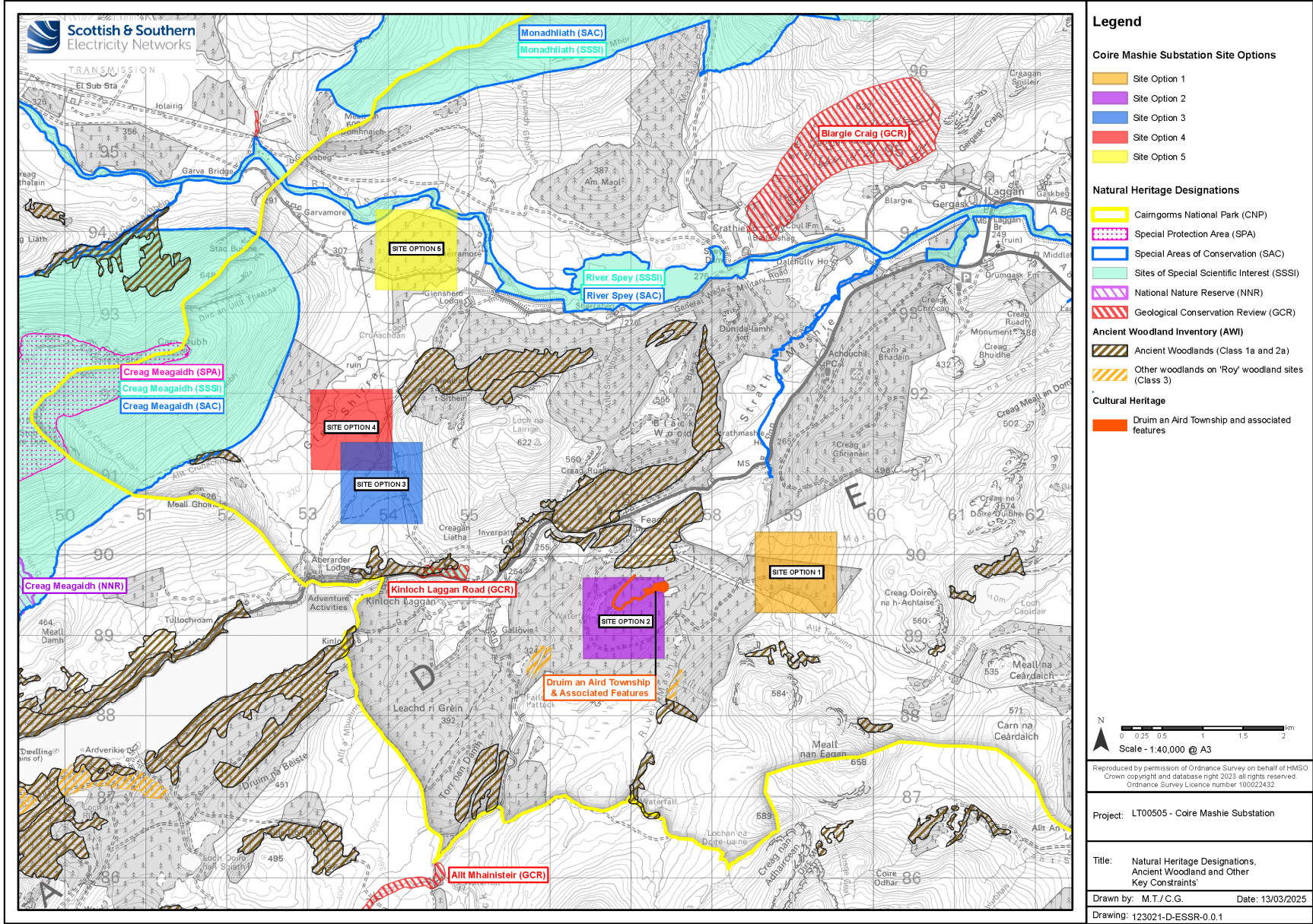


Site Selection Process

Site Selection / Consultation Process

- We hold site selection consultation where there's a number of potential options that could potentially be taken forward.
- If not, often straight to 'Pre Application' (PAC) events which are statutory.
- Site Selection engagement allows space to consider alternatives or revisit other initially assessed options.
- We present 'best scoring/preferred' when initially consulting on site selection.
- However, this doesn't guarantee it will be the option taken forward; that's why we seek stakeholder feedback first.





Site Options

Substation Site Options

Whilst the likes of Connectivity, Natural Heritage and Footprint Requirements across all sites are moderately constrained, **Option 1** scored best on balance and most favourably from an engineering and environmental perspective, particularly in regard to Planning and Environmental considerations, closely followed by **Option 2**.

Written feedback to date has not indicated a preference for **Sites 2, 3, 4 or 5** from a community nor statutory consultee perspective.

Category	Site 1	Site 2	Site 3	Site 4	Site 5
Connectivity					
Existing circuits/networks	A	G	R	A	G
Future development possibilities	R	R	R	R	R
Interface with SSEN Distribution and Generation	G	G	R	R	G
DNO connection	A	R	R	R	R
Footprint requirements					
Technology	R	R	R	R	R
Adjacent land use	A	A	A	A	A
Space availability	A	A	A	A	R
Hazards					
Unique hazards	A	G	R	R	A
Existing utilities	G	G	R	R	G
Ground conditions					
Topography	R	A	A	A	G
Geology	A	R	R	R	R
Environmental conditions					
Elevation	R	R	R	R	R
Salt pollution	G	G	G	G	G
Flooding	A	G	G	R	A
Carbon footprint	R	A	A	A	R
SF ₆	G	G	G	G	G
Contaminated land	G	G	G	G	G
Noise	R	R	A	A	R
Construction access					
Substation access road (from public road)	A	A	R	R	R
Transformer delivery route	A	A	A	A	R
Operation and maintenance					
Access	A	A	R	R	R

Category	Site 1	Site 2	Site 3	Site 4	Site 5
Natural heritage					
Designations	A	A	A	A	R
Protected species	A	A	A	A	R
Habitats	A	A	R	R	A
Ornithology	A	G	R	R	G
Hydrology/Geology	A	A	A	A	A
Cultural heritage					
Designations	A	A	G	A	A
Cultural heritage assets	G	R	G	G	G
Landscape and visual					
Designation	A	A	R	R	R
Landscape character	A	G	R	R	R
Visual	G	A	A	A	R
Land use					
Agriculture	G	G	G	G	G
Woodland/forestry	A	R	G	G	R
Recreation	A	A	A	A	A
Planning					
Policy	A	A	R	R	R
Proposals	G	G	R	A	G
Cost					
Capital	G	G	G	G	G
Operational	G	G	G	G	G

Case Study - Coachford

A new 400kV substation near Blackhillock

We have a similar example for a substation site on the Western Isles

Our initially preferred option:

- On balance, Site 10 was determined the Preferred Option for **consultation** due, in part, to perceived community benefits associated with the opportunity to avoid additional overhead lines, minimising the amount of new local infrastructure.



Responding to feedback:

- However, **consultation feedback demonstrated clear opposition to Site 10** from stakeholders.
- In response, further assessment of the alternative sites was undertaken to determine which could address the concerns raised about Site 10.
- As a result, Site 4 (one of the other sites initially assessed) was identified as an alternative to the initially Preferred Option and the decision was taken to take Site 4 forward to the pre-application consultation stage.

Typical Engagement Cycle



1. **Initial engagement** (consultation event, publication of materials, meetings with stakeholders etc).
2. **Feedback received during feedback period** – where stakeholders provide their comments.
3. **Feedback period close (31st July).**
4. **Internal review/workshopping of feedback received from stakeholders** – considering what feedback can be feasibly adopted. This might include further surveys and assessments.
5. **Communication/engagement on decisions made based on feedback** (this may be in the form of emails, meetings, reports on consultation).
6. **Further engagement** – typically formally consulting on updated and refined proposals following initial feedback.



Summary of feedback

Summary of feedback – General

- Maintaining safe access for walkers and climbers during construction.
- Requests for images of the proposed development in the landscape.
- Concerns about local roads, damage, volume of traffic and community safety.
- Additional housing and medical facilities for people moving to the area during construction.
- Risk to private water supplies during construction.
- Utilising Air Insulated Substation (AIS) Vs Gas Insulated Substation (GIS) technology.
- Impacts on wildlife during construction.
- Impacts to local properties.



Alternative sites suggested – feedback to date

- **New ‘Site Option 6’ - in Ardverikie Estate land**

Not initially assessed by the project team due to not being in close proximity to the existing Beauldy Denny line. It is approximately 4-5km away and will require overhead lines to connect into the Beauldy Denny line.

- **New ‘Site Option 7’ - Melgarve Extension**

Not initially assessed by the project team due to initial studies undertaken by our System Planning and Investment Team, which concluded that a new substation was required close to the existing Beauldy Denny line due to challenges crossing the A86 with underground cable and capacity availability at Melgarve to accommodate the output from the Earba Pumped Storage Hydro Scheme.



Question for the community:

We would also be keen to understand if any of the 5 sites initially proposed would be more preferential to the community than others

Unless feedback shows a very clear indication that any of the other initial sites (2, 3, 4 or 5) are considered much preferable to Site Option 1, they will likely be discounted at this stage

What happens next?

Assessment of Alternative Options

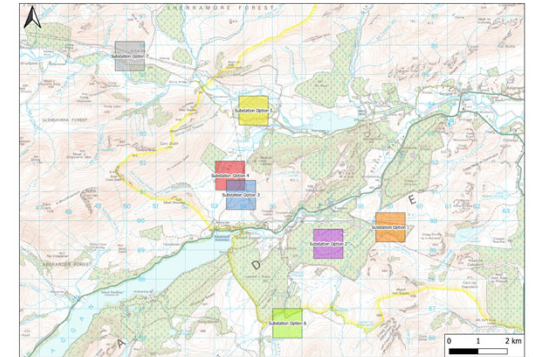
Regarding the alternative site options proposed during the consultation event, we will carry out the following activities over the coming months to assess whether either of them are viable or not:

Activities:

- Discussions with Landowners;
- Site walkovers/visits;
- Desktop information study; and
- Engineering and environmental appraisals.

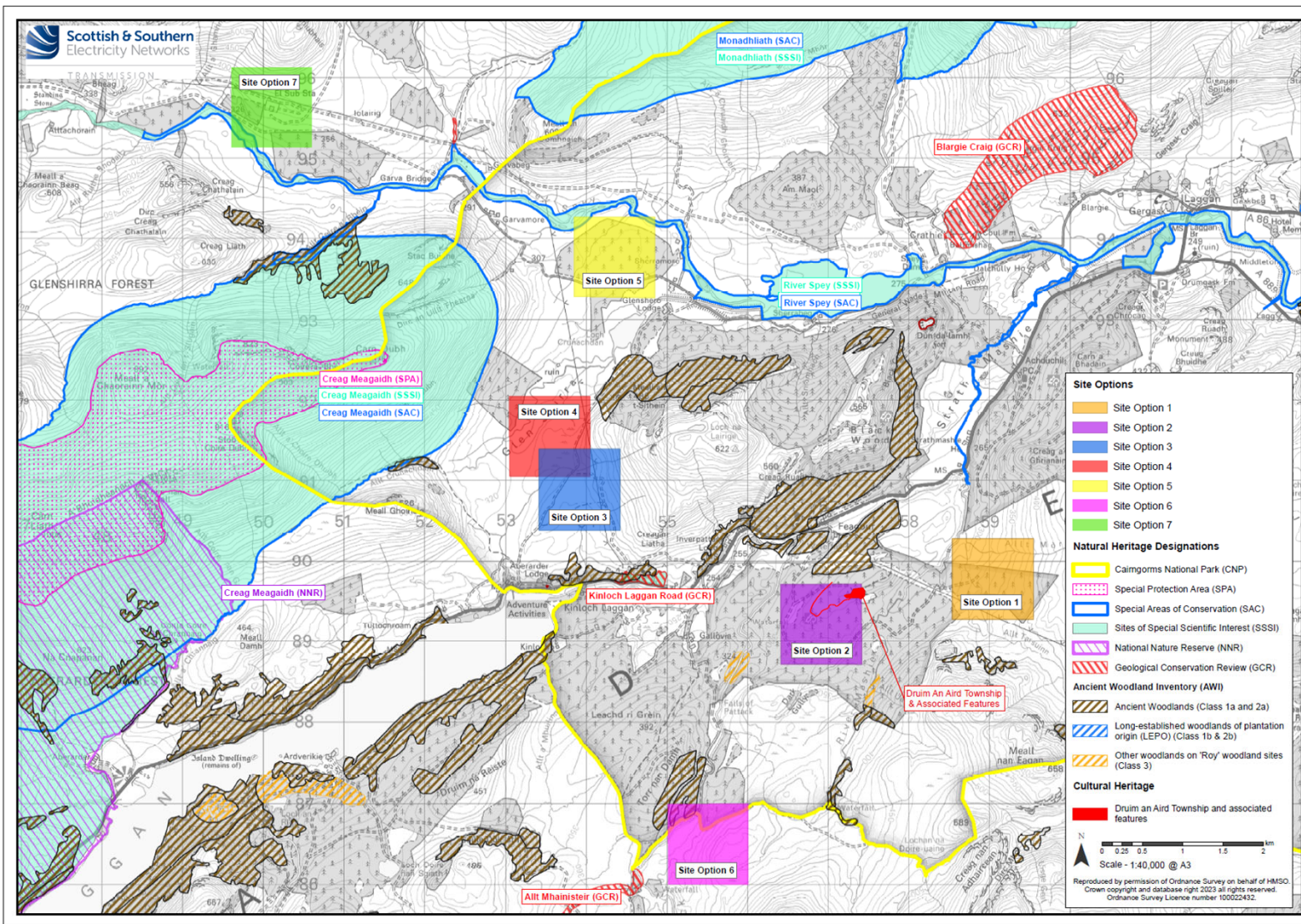
Outcomes:

- Red Amber Green (RAG) table with ratings against each pre-defined category; and
- Summary of key engineering and environmental constraints.



We are committed to assessing the following community suggested alternative sites:

- **New ‘Site Option 6’ in Ardverikie Estate land;**
- **‘Site Option 7’, Melgarve Extension**



Initially Assessed Site Options + New Community Proposed Options 6 and 7

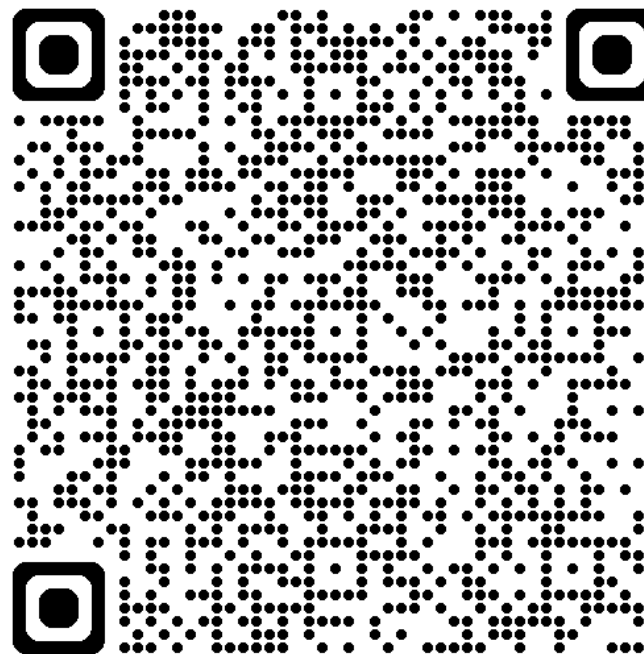
Next Steps Timeline (Substation Specific)

Activity	Date	Notes
Feedback Closes	31 st July 2025	We propose to keep the feedback period open until the end of the month to allow for any comments re the 5 potential sites in addition to alternatives already suggested.
Engagement Summary Report	Mid August 2025	This report will include a summary of the consultation, consolidated answers to questions and will list out key feedback themes.
Assessment of alternative sites	Late Summer 2025	This will take some time due to various discussions and assessments required.
Report on Consultation (ROC)	Autumn 2025	This report will outline which substation site we intend to take forward to pre-application consultation and for further development.
Engagement with CC / Wider Community regarding the ROC	Autumn/Dec 2025	
Project Refinement / Further Development	Winter 2025/2026	
Pre Application Consultation	Summer 2026	We will have two sets of consultation events, at least 6 weeks apart, to show our proposals for application, allow feedback and then report on how this feedback has been considered.
Planning Application Submitted	Winter 2026	

Feedback Form

If you haven't done so already, we'd appreciate if you could fill out the feedback form and indicate:

- Which of the 5 initially assessed site options you believe is most preferable.
- Use the comments box to tell us why/to also indicate if community Site Options 6 or 7 would be preferable to any of the already assessed Site Options (1 - 5).



ssen-transmission.co.uk/earba-connection