

# 01 – Welcome

## Public Consultation Event 2

## Welcome

Thank you for taking the time to come along to today's consultation. This event is being held to give the local community an opportunity to find out more about the proposed repower of the Burgar Hill Wind Farm and to provide information on the Environmental Impact Assessment (EIA) and surveys which are being undertaken to support the Planning Application.

Please take your time to review the information presented today. Members of the project team from both **Burgar Hill Energy** and **Green Cat Renewables**, the appointed planning consultant, are present today to answer any questions you may have.

We value your feedback as we seek to review and refine our plans and would be grateful if you could take a few minutes to share your views and any comments.

For further information please email us at:

[hello@burgarhillenergy.co.uk](mailto:hello@burgarhillenergy.co.uk)

Or contact us via the Project website at:

[burgarhillenergy.co.uk/contact-us](http://burgarhillenergy.co.uk/contact-us)



**Burgar Hill Energy (BHE)** is a joint venture between **Burgar Hill Renewables (BHR)** and **Thrive Renewables plc**. BHE was created to repower the wind farm on Burgar Hill as it reaches the end of its current life.

Burgar Hill Renewables Limited owns the majority of the land on Burgar Hill and is the operator of a 2.3MW Enercon E-70 on the site, which was commissioned in 2009. Burgar Hill Renewables Limited is owned by Orcadians Mervyn and Maureen Spence and their children.

Thrive exists to tackle the climate emergency, working with investors, developers, businesses and communities to fund, build and operate clean energy projects since 1994. The company has operated a 1.3MW turbine at Burgar Hill for more than ten years.





# 02 - Bugar Hill History

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Bugar Hill holds a **significant place in the history of wind power development**, both in the UK and globally. The site has been at the **forefront of wind energy research and innovation** since the 1980s.

**Early Developments - 1980s:** Bugar Hill was established as a test site for wind energy technologies in the early 1980s. The windy climate of Orkney made it an **ideal location for studying wind turbine performance under challenging conditions**. The site was part of a broader effort to explore renewable energy solutions in response to the energy crises of the 1970s.

One of the most notable installations at Bugar Hill during this period was the 3MW experimental wind turbine. At the time of its commissioning, this was one of the largest wind turbines in the world, featuring advanced design elements including variable pitch blades to cope with high wind speeds. Smaller designs were also installed to study different blade designs and generator systems.

**Transition to Modern Day - 1990s:** By the early 1990s, the focus at Bugar Hill **shifted from experimental research to more commercial wind energy production**. Advances in turbine technology and growing need for renewable energy led to the development of a modern wind farm on the site.

In the late 1990s, Bugar Hill became home to several modern wind turbines, marking a transition from experimental to operational wind energy projects. These turbines, while smaller than the pioneering 3MW unit, were representative of the growing wind energy industry.

**Early 2000s:** There are **currently 6 turbines operating** on Bugar Hill, of varying makes and models, including Nordex, NEG Micon and Enercon machines. Total capacity generated on the hill is approximately 12.5MW. The turbines currently age between 16 - 25 years old. Given the windy site conditions, **these turbines have had a very productive life**.

**2020s and Beyond: Bugar Hill Energy:** At Bugar Hill Energy, as the UK seeks to reach 2030 clean energy targets and net zero, we want to ensure that the historic Bugar Hill site remains at the **forefront of renewable energy generation in the UK**.





# 03 - Proposed Repower

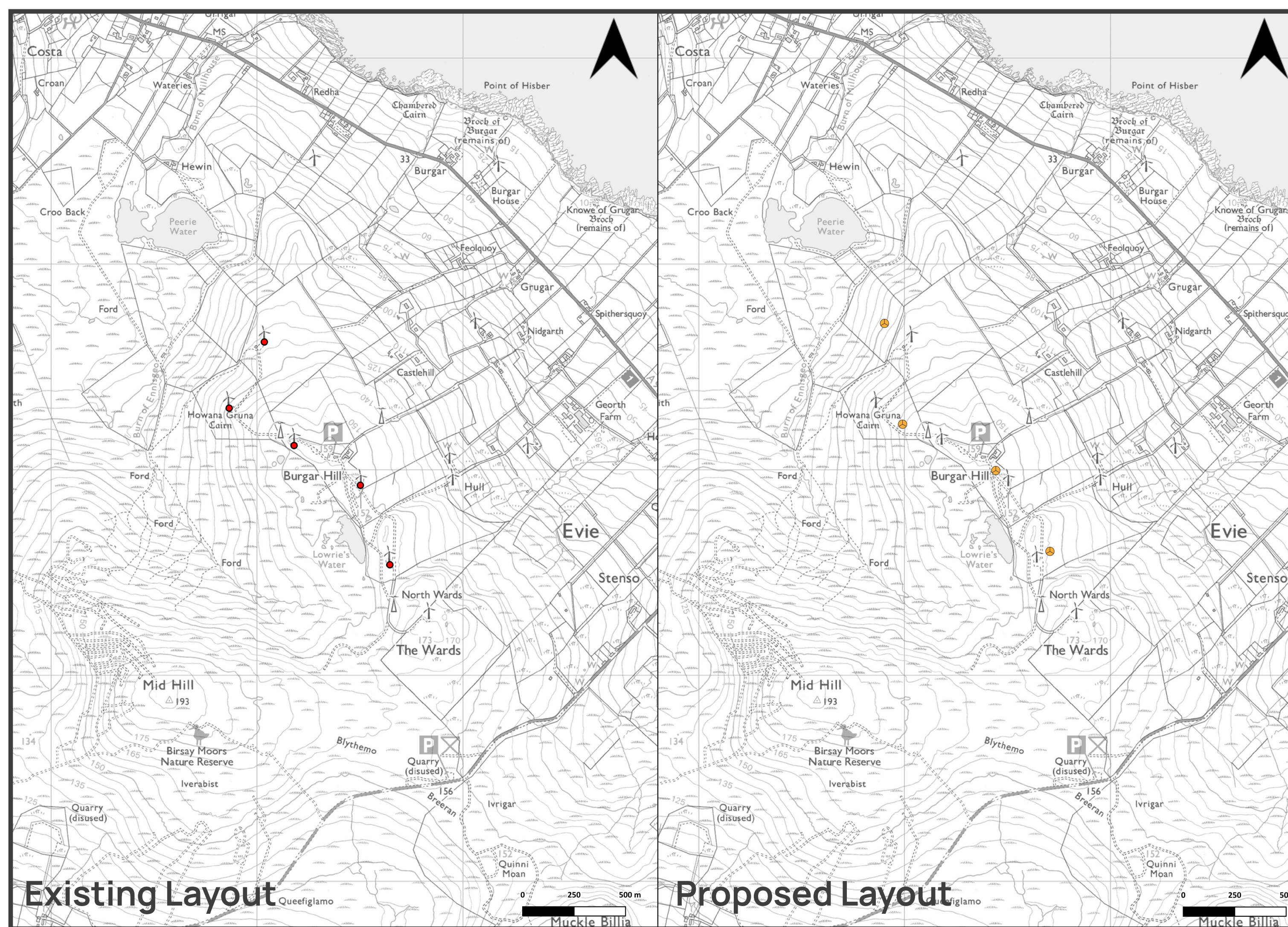
## Public Consultation Event 2



The proposed repowering of Burgar Hill Wind Farm represents the third cycle of energy development on the site.

The repowering proposal will see **five of the existing turbines replaced with four modern turbines up to 200m to blade tip, delivering a total generating capacity of around 30MW, tripling the current capacity of the site.** As the project is under 50MW, the planning application will be submitted to the Local Planning Authority (Orkney Islands Council).

If planning permission is granted in 2026, Bugar Hill Energy anticipates that development could begin by 2029, subject to compliance with planning conditions.

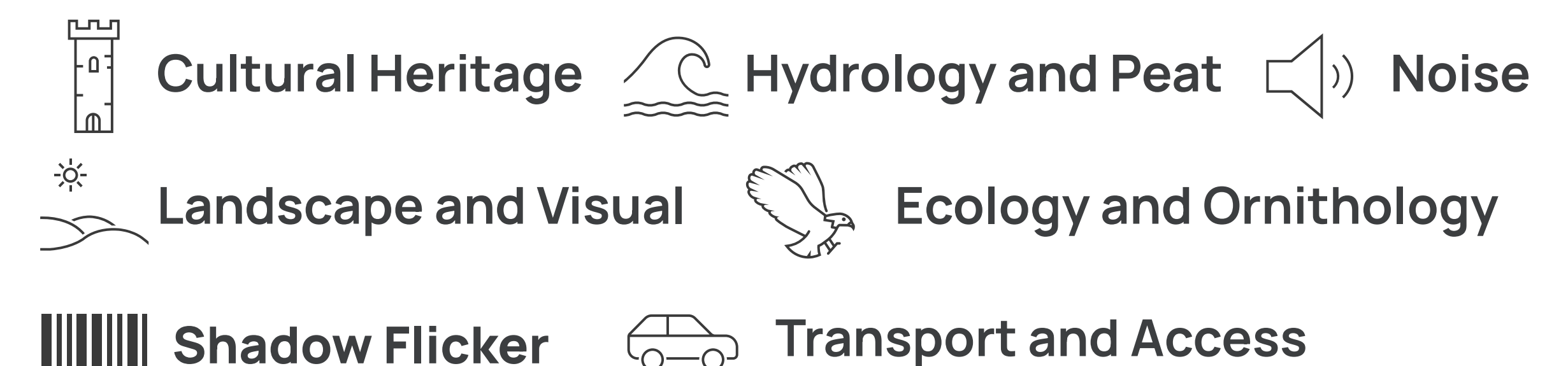


## Design Evolution

Ecological surveys have guided the project design to help protect sensitive habitats. Wherever possible, existing tracks will be used, while new sections have been carefully planned to avoid watercourses and take account of sensitive ground constraints, including soils and archaeological features.

Since the first consultation event, and through ongoing conversations with local residents, consultees, and stakeholders, the design has continued to develop. Key concerns raised included visual effects, the setting of nearby heritage sites, and the protection of wildlife. In response, further studies have been carried out and design changes made to help reduce potential impacts.

This collaborative approach is shaping a repowering proposal that respects Bugar Hill's history as a pioneering renewable energy site while reflecting the needs and expectations of the local community. The design process is ongoing, and we remain committed to listening and adapting as feedback and assessments continue.



To share your feedback or learn more, please complete the form provided, visit [www.burgarhillenergy.co.uk](http://www.burgarhillenergy.co.uk), or scan the QR code.





# 04- Cultural Heritage

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Our cultural heritage consultants have undertaken detailed surveys of the Bugar Hill site and its surroundings. This work includes an archaeological walkover survey of the site, a setting assessment of designated assets and visits to the Orkney Islands Archives to inform the assessment.

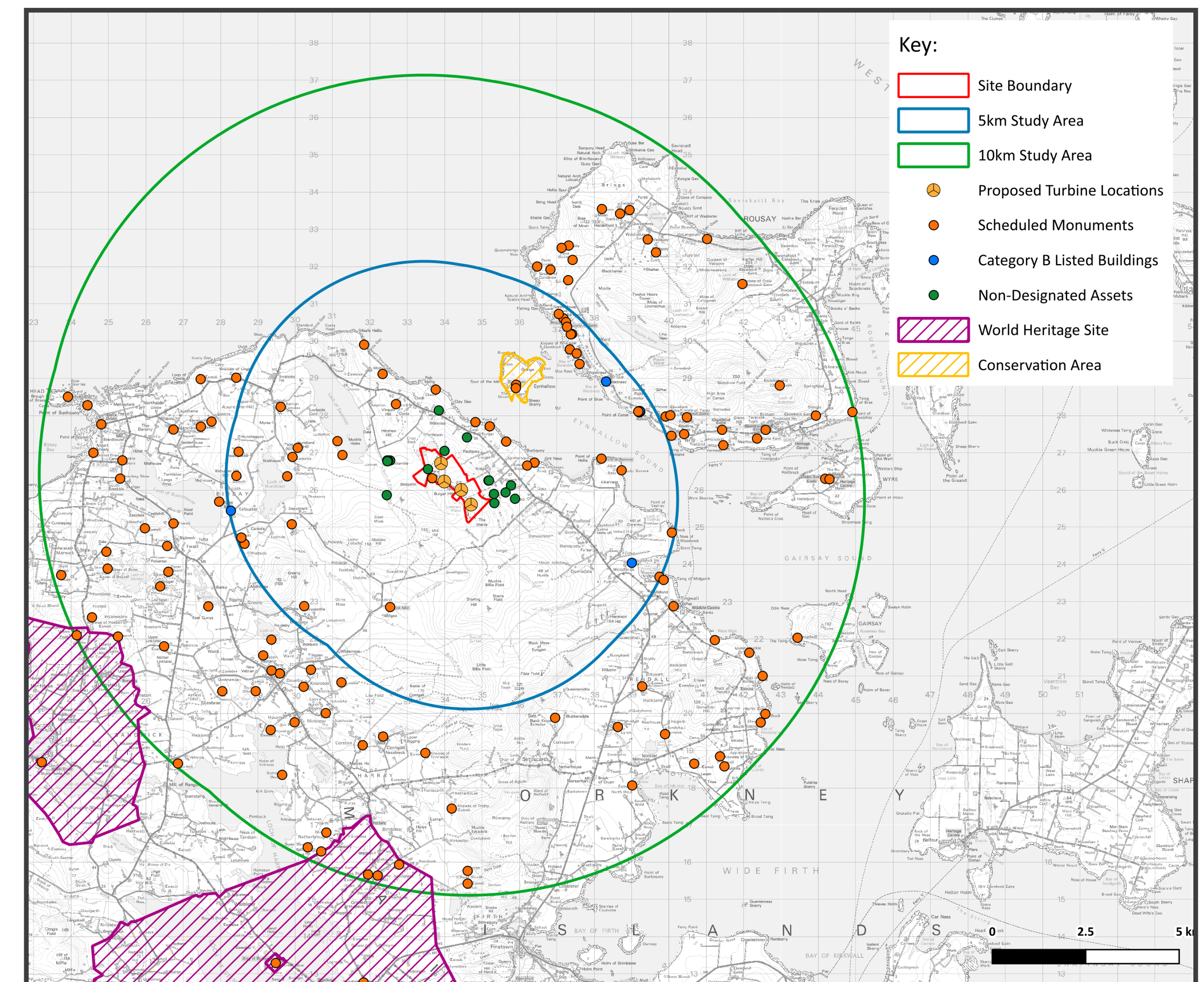
Key features being considered as part of the cultural heritage assessment include:

- Howana Gruna Cairn
- Broch of Gurness
- Skara Brae
- Ring of Brodgar
- Maeshowe
- Stones of Stenness

The submission will include visual representations in the form of photomontages and wirelines from a number of key heritage assets.



Following scoping consultation with the OIC Archaeologist and Historic Environment Scotland (HES) we have increased the scope of our assessment to include further heritage assets and viewpoints. Further consultation with the OIC Archaeologist and HES is ongoing.





# 05 – Ecology and Ornithology

## Public Consultation Event 2

### Ecology

Non-avian ecological surveys are being carried out by specialist consultants across the Bugar Hill site, with input from consultees including Scottish Environment Protection Agency (SEPA), NatureScot and the OIC. These surveys cover habitats, mammals and other protected species.

The surveys include, but are not limited to:

- Ground Water Dependent Terrestrial Ecosystems - September 2025;
- Otters - October 2025;
- Orkney vole - October 2025; and
- Habitat surveys - September 2025.

Ecological assessments are ongoing and their results have been used to inform the infrastructure design to date. Sensitive habitats, such as white sedge, have been avoided as far as possible. No significant effects are anticipated as a result of the proposed repower, with potential impacts mitigated through the design process. The EIA will also identify measures to retain, protect and enhance biodiversity throughout the development.

### Ornithology

Bugar Hill Wind Farm has coexisted with local wildlife for over 40 years, with frequent impact monitoring undertaken in recent years. These monitoring programmes, together with a range of additional ornithological surveys and consultation with key stakeholders including NatureScot, are providing a robust dataset to inform the updated assessments that will accompany the planning application.

The key species considered in these surveys include Red-throated Diver, Great Skua, Hen Harrier, Short-eared Owl and Arctic Skua.





# 06 – Hydrology, Transport and Access

## Public Consultation Event 2

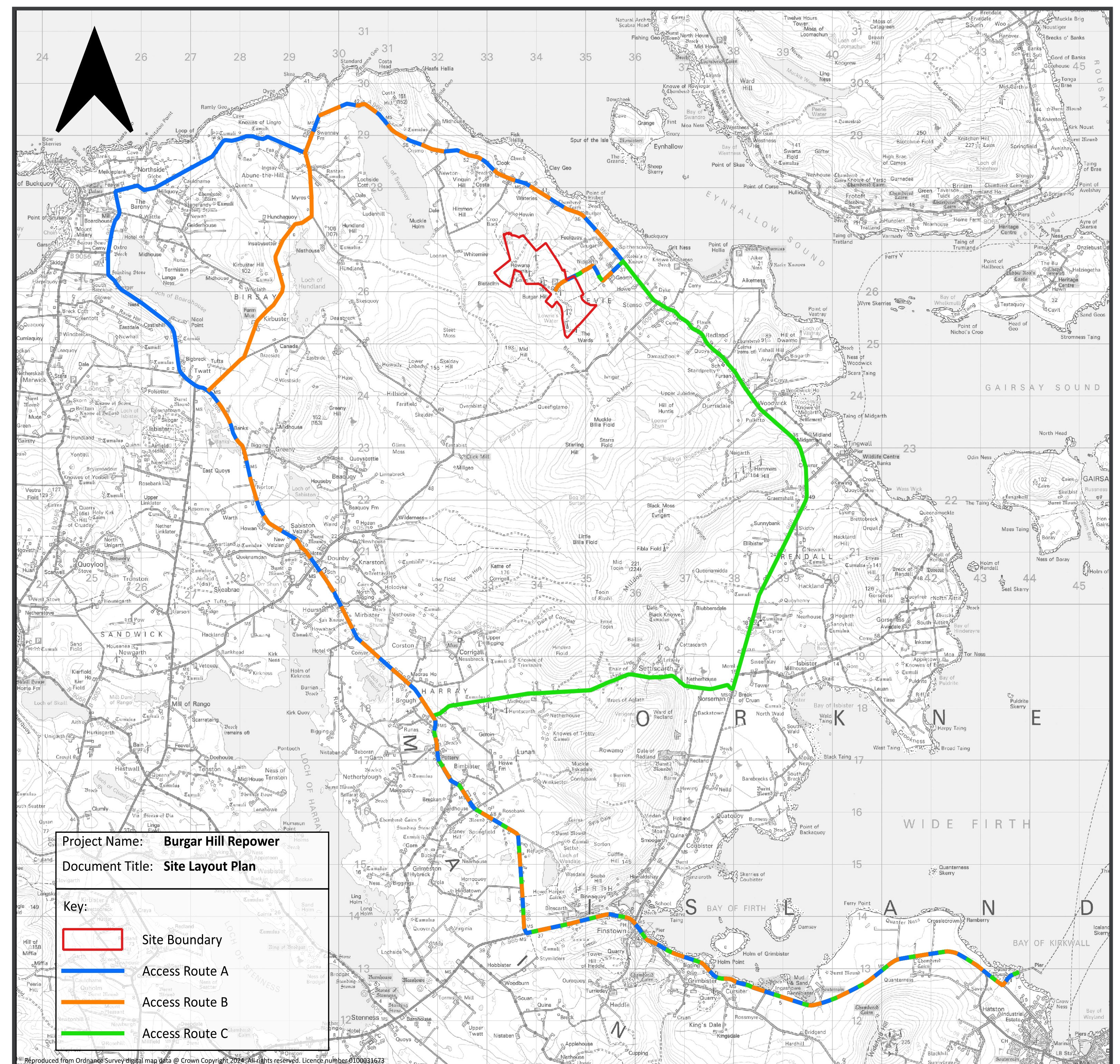
### Hydrology

An initial desk-based study has been undertaken to identify hydrologically sensitive areas within the study area. A site visit will be carried out in the coming weeks following the initial infrastructure design to verify this information, assess potential watercourse crossings, and review ground conditions and topography on site.

The assessment is ongoing; however, carbon-rich peat, ecological designations and watercourses have already been identified as sensitive receptors. These have been given due consideration within the repower design, with avoidance built into the layout where possible. Any potential impacts identified will be assessed, and appropriate mitigation measures will be proposed where required.

### Transport and Access

A detailed technical review of several transport routes are underway, to ensure turbine components to the Site. Three viable routes have been identified, shown in the figure, and these are being explored further in consultation with the OIC and through swept path analysis.





# 07 - Shadow Flicker and Noise

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### Shadow Flicker

Shadow flicker can occur when the sun passes behind the blades of a turbine, causing a flicking shadow effect on nearby properties at certain times of day and year. This can be predicted, modelled, and managed using specialised software.

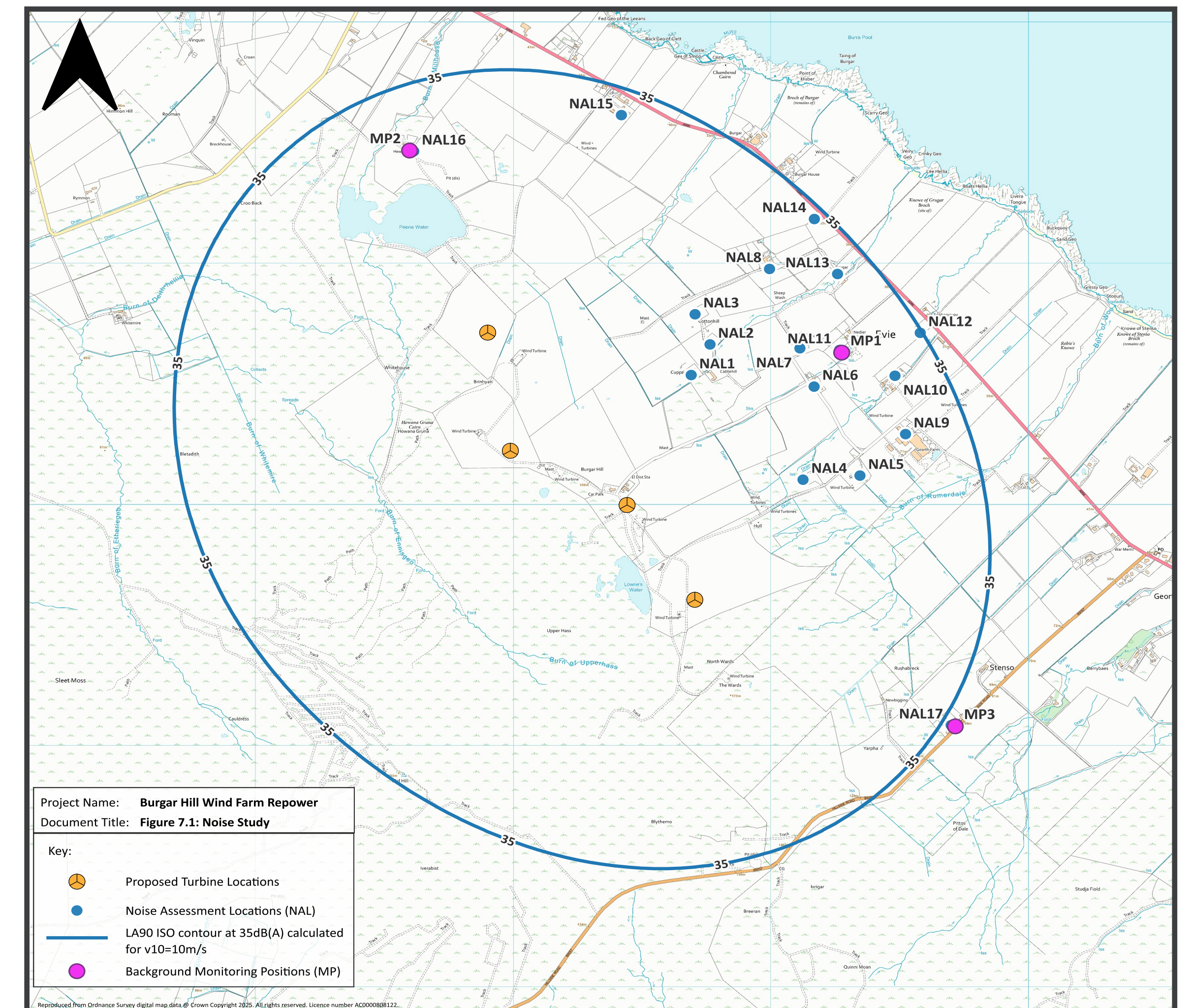
The Bugar Hill repower is being designed to minimise the potential for shadow flicker. Where it is predicted, monitoring software can automatically shut down specific turbines at certain times or in certain weather conditions. The results of this modelling, along with the proposed mitigation measures, will be set out in the EIA Report and secured through planning conditions if consent is granted.

### Noise

Noise is an important consideration in the planning process, as it can affect both the environment and people's quality of life.

Although wind turbines generate only a low level of noise during operation, they can run continuously throughout the day and night. To address this, planning noise constraints are applied to ensure operational noise remains at low levels at all times. During the daytime, these limits are set relative to the existing background sound level in the absence of any noise generated from turbines.

During construction, noise levels may be higher but only for a short period of time. These impacts will be carefully managed through best practice measures, and strict planning controls.



Background noise surveys are currently underway in the illustrated locations and the results of these surveys will be used to inform the final design.





# 08 – Landscape and Visual Impact

## Public Consultation Event 2

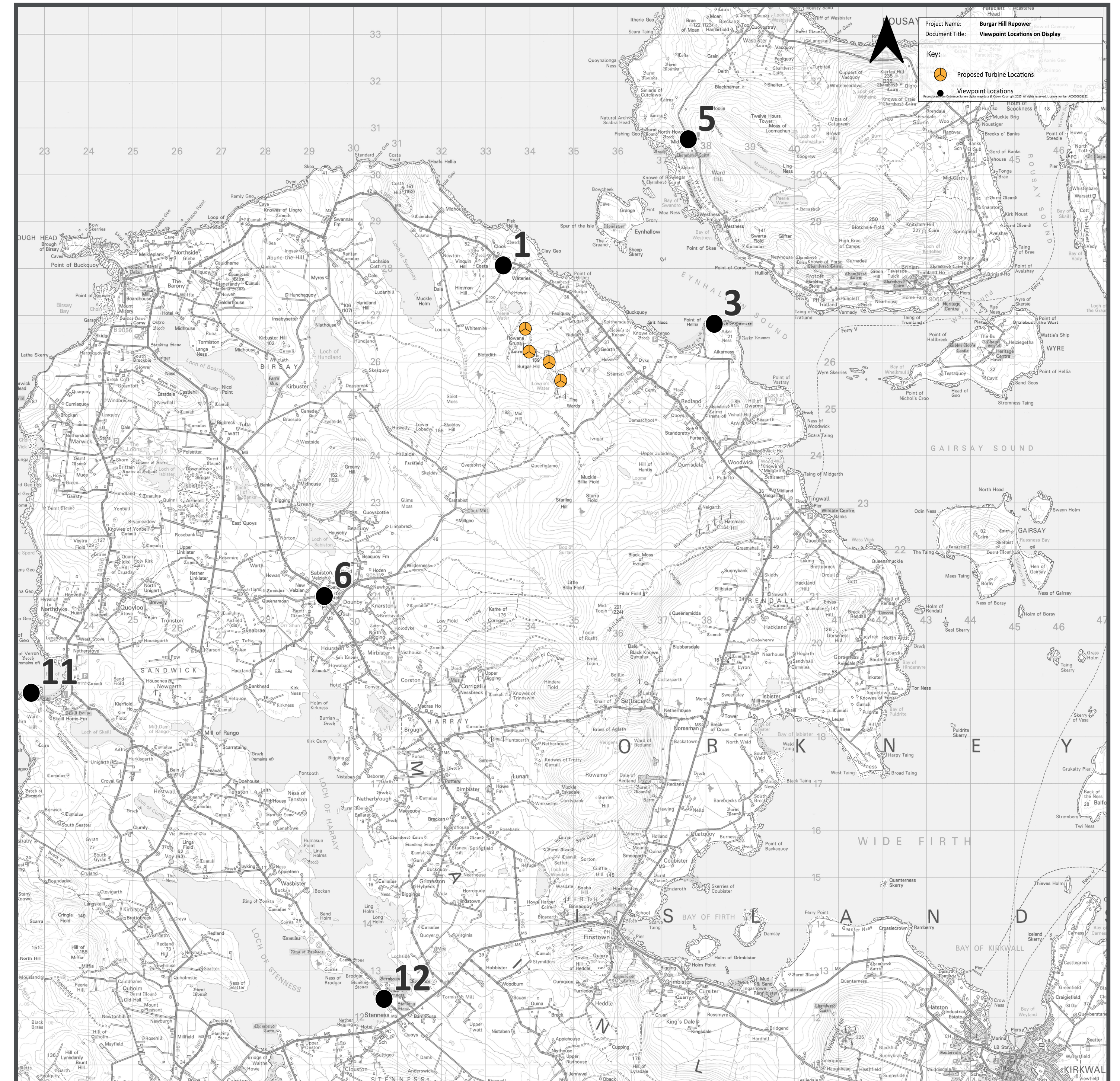
A Landscape and Visual Impact Assessment (LVIA) is being carried out to understand how the proposed repower may affect the local landscape and views. This includes looking at landscape character, designated areas, and how the turbines might be seen by local residents, visitors, and road users. We are also assessing the potential for cumulative effect alongside other existing and planned wind farms within 45 km of the site.

Following consultation, an additional viewpoint has been included from the Ring of Brodgar and the proposed nighttime visualisations have been selected. These can be seen illustrated on the Zone of Theoretical Visibility (ZTV) board.

The photomontages on display here today have been prepared in line with NatureScot guidance and show how the proposals could look from six key locations around the site:

- 1 - A966, Evie
- 3 - Broch of Gurness
- 5 - Midhowe, Rousay
- 6 - Dounby
- 11 - Skara Brae
- 12 - Standing Stones of Stenness

These photomontages are intended to help illustrate how the repower may appear in the local landscape.





# 09 - Community Support Fund

## Public Consultation Event 2

Based on the proposed capacity, it is expected that there will be a fund of **£150k per year to support the local community.**

Following the previous event, we have shared some ideas below for how this fund could support Evie, Rendall and the wider Orkney community.

Vote for your favourites with a sticker or add your own suggestion with a sticky note!

Have your say!

ADDRESS  
LOCAL FUEL  
POVERTY

Funding for school  
clubs - equipment

CREATE A  
RENEWABLE  
ENERGY  
TRAIL

COMMUNITY  
FUNDED  
BUS

Support  
School  
community  
event

LOCAL BENEFIT  
TO BE BASED  
ON GENERATION  
ACHIEVED NOT  
JUST CAPACITY



SCAN TO GIVE YOUR  
FEEDBACK  
or by filling out  
one of the forms  
provided here today

### People

Education (e.g. grants  
and workshops)



Supporting the elderly  
population



Increasing fuel efficiency



### Community

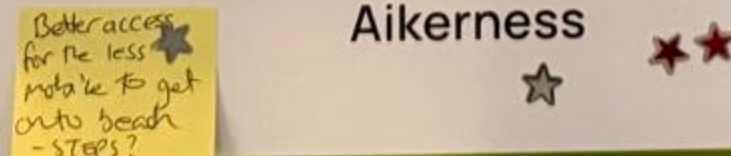
Free access to visitor centre



Sponsorship of local sport clubs



Sea swimming/clean water tap at  
Aikerness

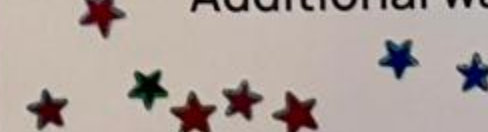


### Recreation

Benches at key viewpoints



Additional walking tracks



Other recreational tracks



Potential sports  
improvement  
at Evie School  
Pitch, Goals  
etc.

FUNDS TOWARDS  
ROADSIDE  
FOOT PATHS IN  
HEAVILY USED  
AREAS.

SYSTEMATIC  
MULTI YEAR  
INSULATION  
PROGRAMME  
FOR AREA + BATHS

Better access  
for the less  
mobile to get  
onto beach  
- STAIRS?





# 10 – Next Steps

## Public Consultation Event 2



Thank you for coming along to today's event. We hope that you have found it informative and have had an opportunity to find out more about the proposed repower of Burgar Hill and to ask questions of the project team.

We would be grateful if you could complete the available feedback form and return it to us. Please note comments to Burgar Hill Energy at this stage are not comments to the Local Planning Authority.

Once the planning application is submitted to the OIC, there will be a consultation period where members of the public will have an opportunity to formally make comment. This will be considered in the determination of the planning application. The timescales for submitting public comments will be advertised by the OIC.

These exhibition boards and a feedback form are also available on our website at [www.burgarhillenergy.co.uk](http://www.burgarhillenergy.co.uk)

**We'd love to hear from you!**

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**Phone:**

(+44) 01856 700 099

**Postal Address:**

Roshaven, Evie, Orkney, KW17 2NJ

May 2025  
**Submission of Scoping Report**

July 2025  
**Public Consultation Event 1**

September 2025  
**Public Consultation Event 2**

Late 2025  
**Submit Planning Application**

2026  
**Decision Issued**

2029/30\*  
**Start Construction**

2030/31\*  
**Wind Farm Operational**

\* dependent on grid constraints

To share your feedback or learn more, please complete the form provided, visit [www.burgarhillenergy.co.uk](http://www.burgarhillenergy.co.uk), or scan the QR code.

