

Welcome to the Thornton Battery Storage Public Exhibition

Thornton Battery Storage (REWE 9 Limited) is being proposed
by Windel Energy Limited & Recurrent Energy.



Founded in 2018, Windel Energy is a privately held company that specialises in the development and asset management of renewable energy projects and low carbon technologies.

With more than 4 gigawatts (GW) of clean, renewable power and battery energy storage in various stages of development, Windel is at the forefront of low carbon technologies including solar, energy storage, and onshore wind, and are helping to pave the way to achieve the UK Government net zero target by 2050.

Windel Energy is committed to responsible land use and believe that the development and delivery of a Battery Energy Storage System (BESS) can be achieved in harmony with its surroundings.



A subsidiary of Canadian Solar

Recurrent Energy is one of the world's largest and most geographically diversified utility-scale solar and energy storage project development, ownership and operations platforms. With an industry-leading team of in-house energy experts, we are a wholly owned subsidiary of Canadian Solar Inc. and function as Canadian Solar's global development and power services business.

Recurrent Energy has completed the development of 11 gigawatts (GWp) of operating utility-scale solar projects and 3.7 gigawatt hours (GWh) of energy storage projects across six continents. Recurrent Energy have more than 27GWp of solar and 63GWh of energy storage projects under development.

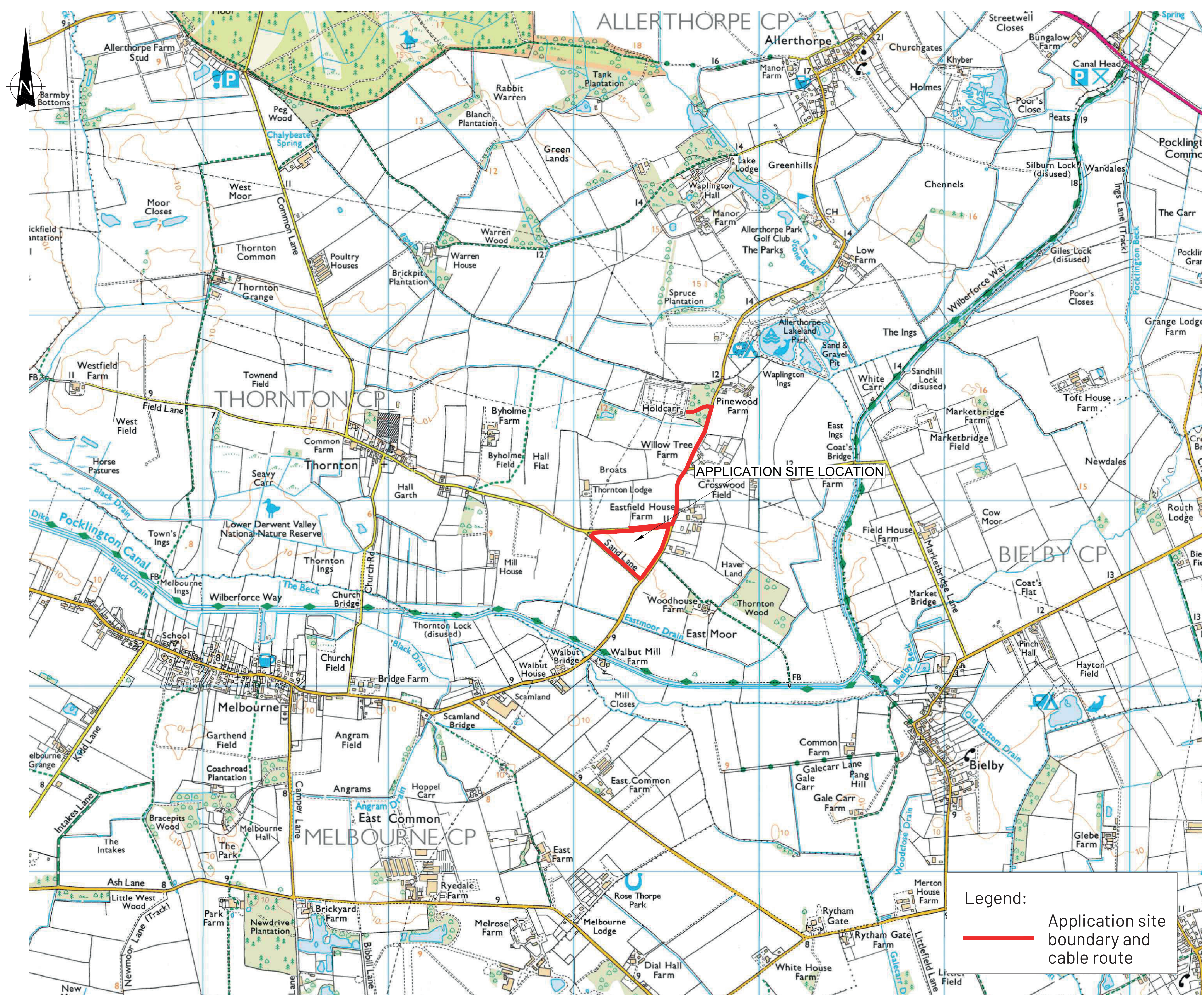
To find out more visit www.thorntonbatterystorage.co.uk

\ Application site location

Thornton Battery Storage is a proposal for a Battery Energy Storage System (BESS) and associated infrastructure, with a proposed storage capacity of up to 200MW. The proposal is to be located on land to the east of the village of Thornton requiring a planning application to be submitted to East Riding of Yorkshire Council.

Proposed site location plan

The site location plan below shows the area to be developed and underground cable route required to connect to the national grid via Thornton substation.

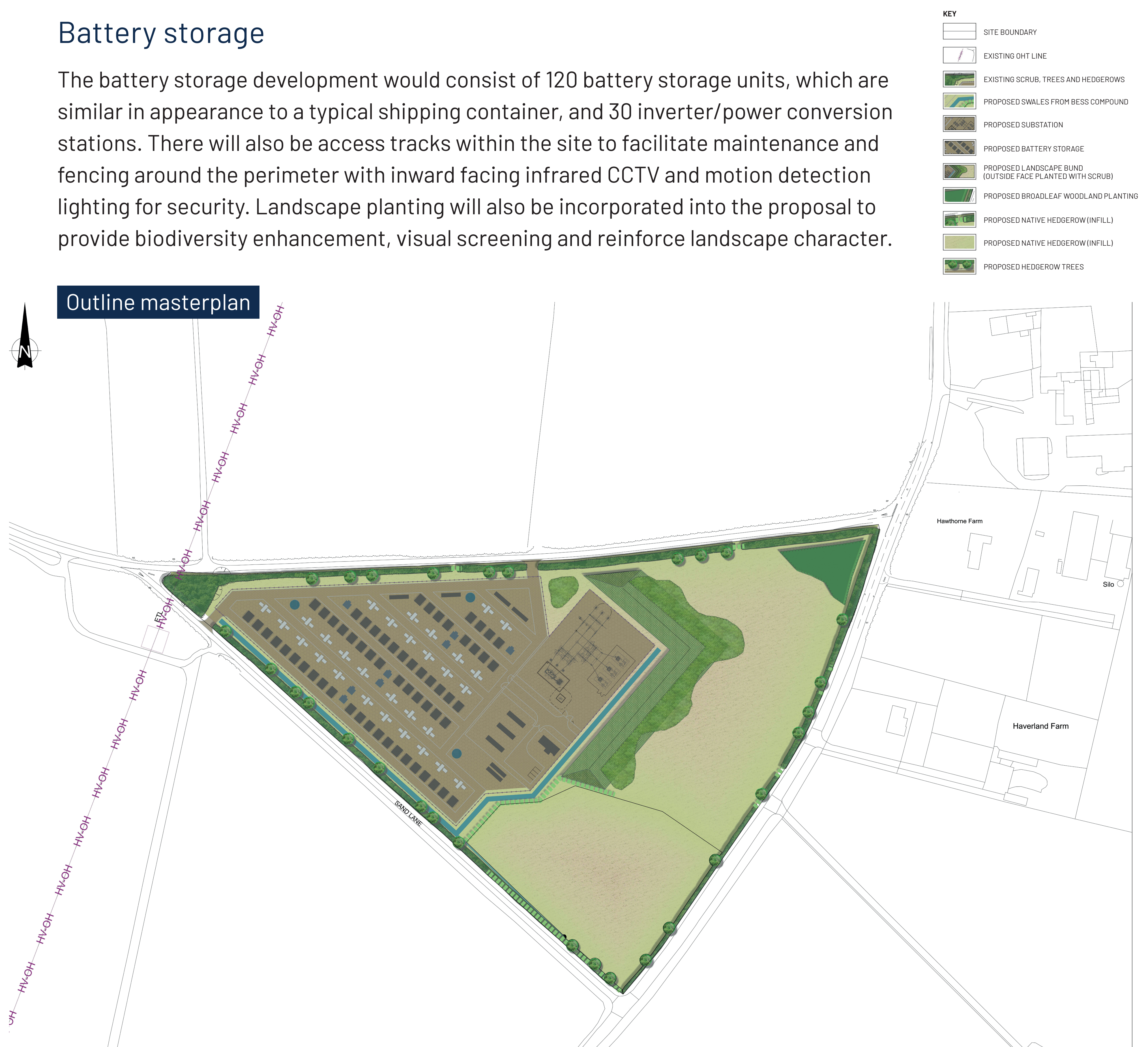


\ Proposal

The proposal consists of a development area of approximately 5 acres (2 hectares), with the area within the red line boundary being approximately 16 acres (6.5 hectares). Connection to Thornton substation will be via underground cabling within the highway which would be subject to appropriate construction phasing, management and agreement with the highways authority.

Battery storage

The battery storage development would consist of 120 battery storage units, which are similar in appearance to a typical shipping container, and 30 inverter/power conversion stations. There will also be access tracks within the site to facilitate maintenance and fencing around the perimeter with inward facing infrared CCTV and motion detection lighting for security. Landscape planting will also be incorporated into the proposal to provide biodiversity enhancement, visual screening and reinforce landscape character.



\ Environment

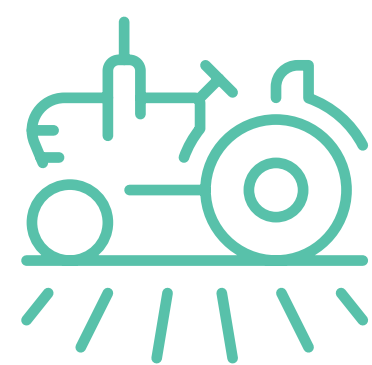
The following considerations will inform the final design of the development to support the planning application.



Site selection

The application site for this proposal is considered to be suitable for a development of this nature for the following reasons:

- It is not subject to any environmental, landscape or heritage designations and is not allocated for any other purposes.
- It is not classified as best and most versatile agricultural land. A recent survey determined the application site was grade 3b.
- It is well screened and contained by existing mature hedgerows and woodland, limiting potential visual impacts.
- It has safe, suitable access and is well connected to the wider highway network.



Agricultural land classification

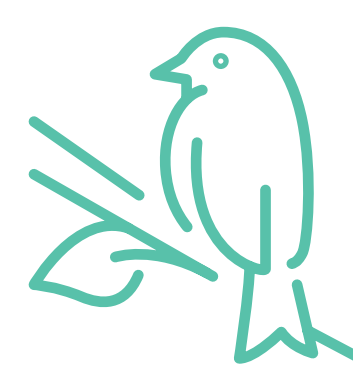
A soil survey has been undertaken which identified that the land is not best and most versatile agricultural land (Grade 3b).



Landscape and visual impact

A Landscape and Visual Impact Assessment (LVIA) is being undertaken to understand and help mitigate the landscape and visual impacts of the proposed development. Consultation on the scope of the LVIA and agreed viewpoints for the assessment have been agreed and progressed with East Riding of Yorkshire Council.

Planting and hard landscaping will be incorporated into the proposal to provide mitigation and enhancements.



Ecology

A Phase 1 habitat survey has been undertaken to understand the ecological baseline conditions of the application site. Detailed survey and assessment work is currently underway, including Habitat and Preliminary Protected Species Surveys, Wintering Bird and Passage Bird Surveys and a Scoping Breeding Bird Survey. The survey works and a detailed plan of landscape mitigation will be used to inform a Biodiversity Net Gain (BNG) assessment.

\ Environment



Flood risk

The application site is located within flood zone 1 and is therefore not at risk of flooding. However, a flood risk assessment is being undertaken to demonstrate how flood risk would be managed on site.

A drainage strategy considering how surface water would be managed on site is also being developed.

Both will be submitted as part of the planning application.



Heritage

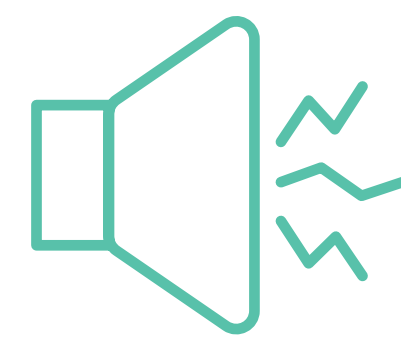
The application site is not located within a conservation area or adjacent to any statutorily or locally listed buildings. A heritage desk-based assessment is being undertaken and will be submitted as part of the planning application to understand the heritage impacts of the development and how these can be mitigated. Given the distances, intervening features and vegetative screening, the development is unlikely to have any effects to the settings of nearby built heritage assets.



Transport

A Construction Traffic Management Plan and Transport Statement will be produced to accompany the planning application

to understand the transport impacts of the proposal during construction and operation and set out mitigation measures. Once operational, the development will generate very little traffic or vehicle movement.



Noise

Battery Energy Storage Systems may generate some noise from inverters, switchgears and fans. Where required, mitigation will be integrated into the design, to minimise noise impacts to acceptable levels. A Noise Impact Assessment will be provided as part of the planning application. A baseline assessment has been undertaken on site and at nearby sensitive noise receptors to establish the baseline noise levels to inform considerations of required mitigation.

To manage noise through construction, a Construction Environmental Management Plan and Construction Traffic Management Plan will provide details of measures to minimise potential environmental and amenity effects, proposed access arrangements, the anticipated programme, construction vehicle numbers and type, construction worker numbers and the proposed construction hours. This will need to be agreed with the local planning authority prior to commencement of construction.

\ Frequently asked questions



Why battery storage?

Battery storage has an important role to play in decarbonising the UK's energy supply as it provides a balancing mechanism to reduce the risk of power shortages and blackouts.

This is done by drawing electricity from the national grid when levels of generation on the network outweigh the levels of demand. The electricity is then discharged back onto the national grid during periods of higher demand to ensure any energy generated is not wasted and there is no loss of power to end users.

National Grid have stated that "battery storage systems will play an increasingly pivotal role between green energy supplies and responding to electricity demands".

Additionally, the Labour Government manifesto includes significant commitments to battery storage as part of their broader strategy for a Green Industrial Revolution, with aims to significantly expand the use of battery storage to enhance energy storage and grid stability.

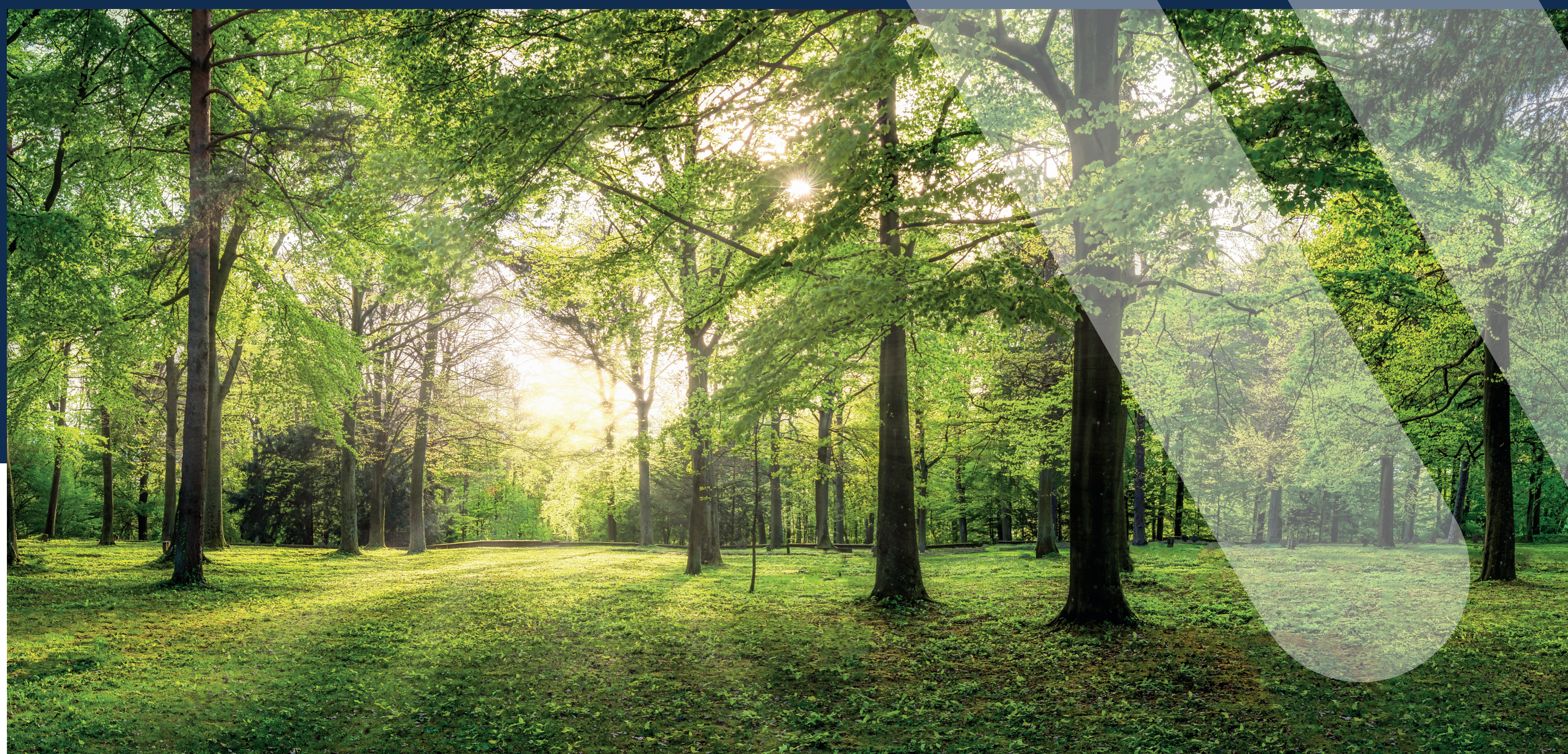
The recently published National Policy Statement for Energy states battery storage should be considered a critical national priority and the proposed amendments to the National Planning Policy Framework (NPPF) by the Government provides greater policy support for renewable energy.

Are battery energy storage systems safe?

Battery Energy Storage Systems use the same Lithium-Ion technology as in our smartphones and laptops, which we use with ease and relative comfort every day. There are currently over 1,500MW of battery storage projects operating safely around the UK over 90 separate sites, with the majority being fitted with cooling and fire suppression systems alongside hyper-sensitive sensors which can detect defects in the batteries long before a fire would commence, meaning that these units are safer than ever. Should a sensor detect even the slightest anomaly, it will automatically shut off the battery unit instantaneously, well in advance of any possible fire. The batteries will also be monitored 24/7 by a person, and regularly inspected to ensure safety and compliance.

The development will be designed to meet industry guidelines and statutory regulations such as sufficient spacing between battery units in accordance with National Fire Chiefs Council (NFCC) guidance. The regional Fire and Rescue will be consulted through the application process in line with Planning Practice Guidance (PPG). The application will be supported by an Outline Battery Safety Management Plan. A detailed Battery Safety Management Plan will be agreed with the local planning authority prior to commencement of development.

\ Frequently asked questions



Will the proposal impact the local environment?

For proposed developments such as Thornton Battery Storage we will need to undertake assessments and prepare reports considering the potential environmental impacts of the proposed development. These environmental topic areas include agricultural land quality, landscape and visual impacts, ecology and biodiversity, flood risk and drainage and heritage and archaeology. Other amenity considerations, including noise and highways and traffic impacts, will also be assessed.

A Battery Safety Management Plan report will be produced which will detail our approach to fire safety and how we will meet industry guidelines and statutory regulations.

The feedback from the assessments will be carefully considered and will help to shape the final design and layout of the development whilst also providing mitigation/enhancements where possible and suitable to limit any adverse impacts on the local environment.

How long would it take to build?

The construction phase would last approximately 18 months after which the development will operate for a temporary period of up to 40 years. Following the operational phase the site will be decommissioned, and the land returned to its original use.

A temporary set down and vehicle parking area will be provided for the construction phase within the application site boundary.

Who will decide whether this project receives planning permission?

A planning application will be made to East Riding of Yorkshire Council under the Town and County Planning Act (1990) and the Council will make the decision on whether to grant planning permission in their role as Local Planning Authority. Once submitted, details of the planning application will be available to view online via the Council's planning portal, and interest persons will be able to make comments on the application during the statutory consultation period.

During the planning process stakeholders will have an opportunity to provide their comments on the development directly to the Local Planning Authority.

\ Have your say

We want to hear your feedback on our proposal. You can send us your thoughts via any of the channels listed below.



Feedback form

Available at the public exhibition and online at **www.thorntonbatterystorage.co.uk**. On the website you can also register for project updates. We will post hard copies upon request.



Email

Written feedback can be sent to **info@thorntonbatterystorage.co.uk**



Post

You can send feedback via post to **FREEPOST PC CONSULTATION** (no stamp required)



Phone

Register your views or request a call back from the communications team on **07493 060539**.

The deadline for response to the developer consultation is **Monday 25th November 2024**. All responses received will be analysed as we refine our proposal ahead of submitting a planning application. A Statement of Community Involvement will accompany the planning application, which will set out the methods used to consult, the views expressed and how these have been considered in relation to the project.

\ Project timeline

Summer 2024

- Commenced surveys and development of early proposal.

Autumn 2024

- Environmental Impact Assessment screening request submitted to East Riding of Yorkshire Council.
- Developer formal consultation with local communities and stakeholders.
- Ongoing development of the proposal.
- Final survey work.

Winter 2024/2025

- Planning application submission to East Riding of Yorkshire Council.