

LINCOLNSHIRE COUNTY COUNCIL'S RESPONSE TO CONSULTATION ON THE FOLLOWING DEVELOPMENT PROPOSAL

District: Boston Borough Council

Application number: B/24/0415

Application Type: Full - Major

Proposal: Proposed installation and operation of a Battery Energy Storage System (BESS) and ancillary infrastructure and landscaping and biodiversity enhancements

Location: Land off Vicarage Drove, Bicker Fen, Bicker, Boston

Response Date: 18 December 2024

This report includes the Substantive response of the Local Highway and Lead Local Flood Authority to a planning consultation received under the Development Management Order and includes details of any planning conditions or informatives that should be attached in the event that permission is granted and any obligations to be secured by way of a S106 agreement.

General Information and Advice

Please note that although the Definitive Map and Statement proves the existence of any recorded rights of way, there may be further or higher rights that are not shown on this document that the County Council is not currently aware of. This would be especially relevant where the public has had informal access to the site or where there are references to routes across this in maps or other historic documents. As the County Council has received no application to recognise further rights of way affecting the site, no more informed guidance can be offered at this stage.

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Highway and Lead Local Flood Authority Report

Substantive Response provided in accordance with article 22(5) of The Town and Country Planning (Development Management Procedure) (England) Order 2015:

Recommendation:

Approve with conditions

Introduction/Site Location

The proposal is for the installation and operation of a Battery Energy Storage System (BESS) and ancillary infrastructure and landscaping and biodiversity enhancements. Access to the site will utilise the construction access road from Vicarage Drove that was approved as part of the planning permission for B/21/0443. The site will be provided with a temporary compound where site vehicles will park, and deliveries will occur. The site is bounded by agricultural fields to the north, east and south with the Bicker Fen Wind Farm located adjacent to the north-east of the site. The site is located close to the National Grid Substation on Vicarage Drove and west of Bicker Village.

Existing Conditions

The site is an arable field of 10.35Ha. The roads leading to the site are not in a good state of repair in some places due to the heavy vehicles travelling this route to the other Battery Storage, wind and solar sites. Highway improvements will be conditioned.

Highway safety

All deliveries will occur outside of the peak hours of 0800-0900 and 1700-1800. The contractor will be expected to manage an even distribution of deliveries throughout the day to avoid multiple HGVs on site at any one time by initiating a booking system. The stacking of vehicles on the public highway will not be permitted.

Construction vehicle access route will be via the existing Viking haul road that connects with the A52 directly from Ing Drove. From turning onto Ing Drove, vehicles will continue westwards along Cowbridge Road, Bicker Drove and Vicarage Drove to access the site. No construction vehicles will go through Bicker Village.

There are no recorded personal injury accidents in the vicinity of the site.

Highway capacity

Two-way movements are expected to be – light vehicles up to 24 two-way movements per day, OGV1 up to 6 two way movements per day, OGV2 up to 4 two way movements per day. In addition to the vehicle movements above there will be approximately 30 two-way vehicle movements per day associated with construction staff accessing the site. The construction period is likely to last 18 months.

There are two other Renewable Energy projects currently under construction in the vicinity of the site, we discussed the cumulative impact of the site on the highway network. The same construction route is proposed but it is not anticipated that the construction of this proposed development will overlap with the two projects currently being constructed. In accordance with the previously approved Construction Management Plans the dates should not collide. Due to the National Grid connection dates, it is unlikely the schemes will come forward at the same time. A Construction Traffic Management Plan will be conditioned.

There is no precise definition of "severe" with regards to NPPF Paragraph 115, which advises that "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe." Planning Inspector's decisions regarding severity are specific to the locations of each proposal, but have common considerations:

- The highway network is over-capacity, usually for period extending beyond the peak hours
- The level of provision of alternative transport modes
- Whether the level of queuing on the network causes safety issues

In view of these criteria, the Highways and Lead Local Flood Authority does not consider that this proposal would result in a severe impact with regard to NPPF.

Site Layout

The access to the site runs from the end of the public highway on Vicarage Drove. There is no public right of Ways effected by the proposal. Public Bridleway (Bick 1/1) runs north-south along the western border of the site but does not enter the site. Fencing will be erected around the Development to keep the site secure and to ensure the safety of the users of the Bridleway. Cable laying will be done at a later date under Permitted Development.

Flood Risk and Drainage

The topographical survey found that the highest points are located along the western edge of the development parallel to the SFFD watercourse. The elevated height is due to the local earth embankments used as flood defences which are around 4m AOD. Behind the embankment, the site elevation is 2m AOD at the highest point found in the south-west and the lowest point of the site is around 1.2m AOD along the centre of the site between the small field drain which divides the two parcels of land. In reference to the National Soils Resources Institute the soils at the site are shown to wholly consist of loamy and clayey soils of coastal flats with naturally high groundwater.

SFFD is approximately 25m west of the site and flows south to north. The SFFD operational catchment covers the SFFD and its tributaries from its headwaters at Guthram Gowt to the tidal limit in Boston. The SFFD drains the fenland areas of south Lincolnshire to the south-west of Boston, and it discharges into the Witham Haven in Boston via the Black Sluice pumping station. There is no existing public sewer network in the vicinity of the site. Surface water is mainly drained through the site via a series of 80mm drainage runs across both fields, with 160mm drainage pipes located in the far north of both fields, leading to the field drains network. The outfall points run between the two fields and are also located to the north-east of the site. The site is greenfield, observation on site determined that the site positively drains from the site toward the south-west corner via the camber of the roads and surrounding ditches and eventually discharges into the watercourse – SFFD. The site is at very low risk from surface water flooding. The drainage principles of the site details the boundary between the two fields as being left undeveloped which is the location of the field drain, with the main BESS Unit installed in the south-east from the area where water would gather should any breach occur. To provide betterment and to futureproof the scheme against climate change, the proposals will include an attenuation pond for the surface water run-off and volumes from the site. A swale is also detailed that will connect into the attenuation Pond. In order to control the discharge at the greenfield rate throughout the lifetime of the scheme a flow control device will be installed. The drainage principle is acceptable subject to a more detailed design.

Offsite Improvements

Widening of the bend, widening of the carriageway on Bicker Drove between the bend and Vicarage Drove and the installation of two number passing places on Cowbridge Road. The passing Places should be of sufficient size to allow a HGV to pull over and another one to pass.

Planning Conditions:

In the event that permission is to be given, the following planning conditions should be attached:

Highway Condition 00

The development hereby permitted shall be undertaken in accordance with a Construction Traffic Management Plan and Method Statement that shall first be approved in writing by the Local Planning Authority. The Plan and Statement shall indicate measures to mitigate the adverse impacts of vehicle activity and the means to manage the drainage of the site during the construction stage of the permitted development. It shall include;

- the phasing of the development to include access construction;
- the on-site parking of all vehicles of site operatives and visitors;
- the on-site loading and unloading of all plant and materials;
- the on-site storage of all plant and materials used in constructing the development;
- wheel washing facilities;
 - Details of how the cumulative impact of the construction vehicles will be managed.
- the routes of construction traffic to and from the site including any off-site routes for the disposal of excavated material and;

- strategy stating how surface water run off on and from the development will be managed during construction and protection measures for any sustainable drainage features. This should include drawing(s) showing how the drainage systems (temporary or permanent) connect to an outfall (temporary or permanent) during construction.

Reason: In the interests of the safety and free passage of those using the adjacent public highway and to ensure that the permitted development is adequately drained without creating or increasing flood risk to land or property adjacent to, or downstream of, the permitted development during construction.

Highway Condition 33

The permitted development shall be undertaken in accordance with a surface water drainage scheme which shall first have been approved in writing by the Local Planning Authority.

The scheme shall:

- be based on the results of evidenced groundwater levels and seasonal variations (e.g. via relevant groundwater records or on-site monitoring in wells, ideally over a 12-month period);
- be based on sustainable drainage principles and an assessment of the hydrological and hydrogeological context of the development;
- provide flood exceedance routing for storm event greater than 1 in 100 year;
- provide details of how run-off will be safely conveyed and attenuated during storms up to and including the 1 in 100 year critical storm event, with an allowance for climate change, from all hard surfaced areas within the development into the existing local drainage infrastructure and watercourse system without exceeding the run-off rate for the undeveloped site;
- provide attenuation details and discharge rates which shall be restricted to greenfield run off rate;
- provide details of the timetable for and any phasing of implementation for the drainage scheme; and
- provide details of how the scheme shall be maintained and managed over the lifetime of the development, including any arrangements for adoption by any public body or Statutory Undertaker and any other arrangements required to secure the operation of the drainage system throughout its lifetime.

No dwelling/ no part of the development shall be occupied until the approved scheme has been completed or provided on the site in accordance with the approved phasing. The approved scheme shall be retained and maintained in full, in accordance with the approved details.

Reason: To ensure that the permitted development is adequately drained without creating or increasing flood risk to land or property adjacent to, or downstream of, or upstream of, the permitted development.

Highway Condition 21

No part of the development hereby permitted shall be occupied before the works to improve the public highway (by means of widening of the bend, widening of the carriageway on Bicker Drove between the bend and Vicarage Drove and the installation of two number passing places on Cowbridge Road. The passing Places should be of sufficient size to allow a HGV to pull over and another one to pass) have been certified complete by the Local Planning Authority.

Reason: To ensure the provision of safe and adequate means of access to the permitted development.

Condition – Prior to commencement of any part of the development hereby permitted, the condition of the parts of the public highway affected by the proposal (namely Vicarage Drove, Bicker Drove, Cowbridge Road and Ing Drove) shall be recorded by written notes, still and moving photographic images during an inspection that shall be undertaken by the Applicant's representatives in the company of an Officer of the Local Highway Authority. Those public roads shall be maintained, at the cost of the Applicants, in a safe and suitable condition throughout construction of the permitted development and shall be reinstated to no less than the standard of their pre-commencement condition following completion of the construction

Reason: In the interests of safety and convenience to other road users and in accordance with Section 59 of the Highways Act 1980.

Informatives

Highway Informative 08

Please contact the Lincolnshire County Council Streetworks and Permitting Team on 01522 782070 to discuss any proposed statutory utility connections, Section 50 licences and any other works which will be required within the public highway in association with the development permitted under this Consent. This will enable Lincolnshire County Council to assist in the coordination and timings of these works. For further guidance please visit the Highway Authority's website via the following link: Traffic Management - <https://www.lincolnshire.gov.uk/traffic-management>

Highway Informative 02

In accordance with Section 59 of the Highways Act 1980, please be considerate of causing damage to the existing highway during construction and implement mitigation measures as necessary. Should extraordinary expenses be incurred by the Highway Authority in maintaining the highway by reason of damage caused by construction traffic, the Highway Authority may seek to recover these expenses from the developer.

Highway Informative 07

The highway improvement works referred to in the above condition are required to be carried out by means of a legal agreement between the landowner and the County Council, as the Local Highway Authority.

For further guidance please visit our website; www.lincolnshire.gov.uk/highways-planning/works-existing-highway

Officer's Name: Samantha Legg

Officer's Title: Principal Development Management Officer

Date: 18 December 2024



Lincolnshire
FIRE & RESCUE

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My Ref: Bicker Fen Vicarage Drove BESS/TP
Your Ref: B/24/0415

For the attention of: Highways SuDS Support
Sent by email to: HighwaysSUDsSupport@lincolnshire.gov.uk

5th December 2024

Dear Sir/Madam

TOWN AND COUNTRY PLANNING ACT 1990

PLANNING CONSULTATION: Request by FRV Powertek for proposed installation and operation of a Battery Energy Storage System (BESS)

LOCATION: BESS site at land off Vicarage Drove, Bicker Fen, Bicker, Boston

Due to the nature of this request, the Fire Authority requires that the below items are included within the development. Provided that these requirements are met, the Fire Authority would make no objection to the application.

I. ACCESS

Access for fire appliances and fire fighters must meet with the requirements specified in Building Regulations 2010 (As Amended), Approved Document B, Part B5. These requirements may be satisfied with other equivalent standards relating to access for fire-fighting, in which case those standards should be quoted in correspondence.

II. CARRYING CAPACITY

Lincolnshire Fire and Rescue requires a minimum carrying capacity for hard standing for pumping appliances of 18 tonnes, not 12.5 tonnes as detailed in the Building Regulations 2010 (As Amended), Approved Document B, Part B5. This weight limit would also apply to any private/shared access roads in order to achieve the above item.

If it is not possible to provide access to the proposed development in accordance with the guidance details within Part B5 of Approved Document B, as compensation, Lincolnshire Fire and Rescue may accept the provision, at the developer's expense, of an automatic sprinkler system, designed, fitted and maintained in accordance with the relevant sections of BS5306/BSEN12845:2004.

Should this option be considered, our Fire Safety advisers must be provided with detailed plans of the proposed sprinkler installation. Any scheme proposed should not be of a lesser standard than any provision as may be required by the Building Regulations.

III. WATER SUPPLY

Lincolnshire Fire & Rescue requires an adequate provision of water supply for firefighting purposes in respect of this planning application in accordance with the guidance set out in Approved Document B, Part B5, Section 16 “Fire mains and hydrants”.

In accordance with this guidance, Lincolnshire Fire and Rescue recommends the suitable provision of fire hydrants to be provided at the developer’s expense or an alternative supply of water where appropriate. If fire hydrants are preferred, all hydrants should conform to BS750-2012.

Further guidance on the provision and siting of private fire hydrants is given in BS 9990. Reference should also be given to BS9999:2017 Section 22, ‘Water supplies for fire and rescue service use’. Hydrants should be clearly indicated by a plate, fixed nearby in a conspicuous position, in accordance with BS 3251.

Fire hydrant acceptance testing will be carried out by a Hydrant Inspector on completion and a standard hydrant marker “H” plate will be fitted nearby. Following adoption the Fire Service will be responsible for the ongoing maintenance and repairs for the lifetime of the fire hydrant.

If an alternative supply of water for firefighting purposes is preferred, then this would be accepted subject only to meeting the criteria set out in Approved Document B, Part B5, Section 16. To be accepted, Lincolnshire Fire & Rescue will require suitable evidence detailing the proposal for an alternative supply of water and demonstrating its compliance with relevant guidance.

IV. ENVIRONMENTAL

Bulk storage of highly flammable/explosive/water reactive/toxic substances and any site whereas large scale recycling activities are proposed will need to be specifically consulted with Fire Authority to ensure that the full operational impact, should a fire occur, is assessed and that an adequate provision is recommended.

There are a number of methods available, through which the fire water runoff problem can be addressed, the most obvious being to use a fire suppression system to contain a fire, thus not requiring large volumes of water and containment measures, such as bund walls or drainage systems with lagoons, interceptors, reed beds or treatment plants. It is not for the fire service to stipulate which approach to take, simply to ensure that suitable measures are made a condition of planning approval through a firefighting water run-off strategy.

Battery Energy Storage System (BESS) Requirements

Lincolnshire Fire and Rescue (LFR) recognises the use of batteries (including lithium-ion) as Energy Storage Systems (ESS) is a new and emerging practice in the global renewable energy sector. As with all new and emerging practices within UK industry the Service would like to work with the developers to better understand any risks that may be posed and develop strategies and procedures to mitigate these risks.

We will work and engage with the developer as the project evolves, to ensure it complies with the statutory responsibilities that we enforce.

The developer should produce a risk reduction strategy (Regulation 38 of the Building Regulations) as the responsible person for the scheme as stated in the Regulatory Reform (Fire Safety) Order 2005. We would also expect that safety measures and risk mitigation is developed in collaboration with LFR.

The strategy should cover the construction, operational and decommissioning phases of the project.

During the construction phase the number of daily vehicle movements in the local area will significantly increase. The Service will want to view the transport strategy to minimise this impact and prevent an increase in the number of potential road traffic incidents. Any development should not negatively impact on the Service's ability to respond to an incident in the local area.

LFR works within the guidance of the National Fire Chief's Council (NFCC) who have been working with several government departments to ensure that fire and rescue services are made aware of any new proposals. NFCC have created a guidance document (link below) that constitutes LFR's requirements for new BESS development proposals.

[NFCC Grid Scale BESS planning – Guidance for FRS \(nfcc.org.uk\)](https://www.nfcc.org.uk/guidance/grid-scale-bess-planning)

Following the work of NFCC, the Department for Levelling Up, Housing and Communities (DLUHC) has revised its Planning Policy Guidance to include reference to BESS. The guidance is available here: <https://www.gov.uk/guidance/renewable-and-low-carbon-energy>

LFR are aware that large scale BESS is a fairly new technology, and as such risks may or may not be captured in current guidance in pursuance of the Building Regulations (as amended) and the Regulatory Reform (Fire Safety) Order 2005. This will highlight challenges the FRS have when responding to Building Regulations consultations. For this reason, we strongly recommend applying the National Fire Protection Association (NFPA) 855 Standard for the Installation of Stationary Energy Storage Systems.

Failure to comply with the above requirements at planning stage can seriously compromise firefighting operations resulting in unnecessary risk to life, loss of property and unnecessary damage to the environment.

Should you wish to discuss adequacy of access or water supplies to your proposed development, please contact the Community Fire Protection department on 01522 553868.

Should you wish to discuss this matter, please do not hesitate to contact me on the details below.

Yours faithfully

Thomas Patrick
Station Manager Prevention & Protection
Community Fire Protection
Lincolnshire Fire & Rescue
Lincolnshire County Council
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Tel : 01522 553868