

APPLICATION NO	PA/2023/58
APPLICANT	Harmony KB Ltd
DEVELOPMENT	Planning permission for a battery energy storage system and associated works
LOCATION	Land north of Chapel Lane, Keadby
PARISH	KEADBY WITH ALTHORPE
WARD	Axholme North
CASE OFFICER	Paul Skelton
SUMMARY RECOMMENDATION	Approve with conditions
REASONS FOR REFERENCE TO COMMITTEE	Objection by Keadby with Althorpe Parish Council

POLICIES

North Lincolnshire Local Plan:

RD2 Development in the open countryside

T1 Location of development

T2 Access to development

LC7 Landscape protection

LC12 Protection of trees, woodland and hedgerows

DS1 General requirements

DS11 Polluting activities

DS12 Light pollution

DS14 Surface water drainage

DS16 Flood risk

DS21 Renewable energy

North Lincolnshire Core Strategy:

CS1 Spatial strategy for North Lincolnshire

CS2 Delivering more sustainable development

CS3 Development limits

CS5 Delivering quality design in North Lincolnshire

CS11 Provision and distribution of employment land

CS16 North Lincolnshire's Landscape, greenspace and waterscape

CS17 Biodiversity

CS18 Sustainable resource use and climate change

CS19 Flood risk

New North Lincolnshire Local Plan Submission: The new North Lincolnshire Local Plan was submitted for public examination to the Planning Inspectorate on 11 November 2022. Examination of the Plan has therefore commenced, although public hearing sessions are not anticipated until early 2024.

The Submitted North Lincolnshire Local Plan can be given some weight as a material planning consideration in the determination of planning applications. The relevant policies concerning this application are:

SS1 Presumption in favour of sustainable development

SS2 A spatial strategy for North Lincolnshire

SS3 Development principles

SS11 Development limits

RD1 Supporting sustainable development in the countryside

DQE1 Protection of landscape, townscape and views

DQE3 Biodiversity and geodiversity

DQE5 Managing flood risk

DQE7 Climate change and low carbon living

DQE8 Renewable energy proposals

T1 Promoting sustainable transport

T3 New development and transport

T4 Parking

DM1 General requirements

DM3 Environmental protection

Housing and Employment Land Allocations Development Plan Document:

PS1 Presumption in favour of sustainable development

National Planning Policy Framework:

2 Achieving sustainable development

4 Decision-making

6 Building a strong, competitive economy

8 Promoting healthy and safe communities

12 Achieving well-designed places

14 Meeting the challenge of climate change, flooding and coastal change

15 Conserving and enhancing the natural environment

Planning Practice Guidance: Renewable and Low Carbon Energy

The Noise Policy Statement for England (NPSE)

North Lincolnshire Council's Supplementary Planning Document – November 2011 – Planning for Renewable Energy Development

CONSULTATIONS

Highways: No objections subject to conditions requiring a scheme of pre/post development highway condition surveys; and a construction phase traffic management plan. An informative note regarding works required on the highway is also suggested.

LLFA Drainage: No objection subject to conditions requiring a detailed surface water drainage scheme for the site; an effective method of preventing surface water run-off from hard-paved areas within the site onto the highway; an effective method of preventing surface water run-off from the highway onto the developed site; and informative notes.

Environmental Protection: No objection following submission of additional noise information.

Ecology: Medium to major landscape and visual impacts likely for the nearest residents and users of the adjacent public right of way. The landscape proposals closely follow the adopted landscape guidelines, which is welcomed. However, it will take 10 years+ for landscaping to mature. In the short term, landscape and visual impacts will be at their most significant.

There is no likely significant effect on the Humber Estuary SAC/SPA/Ramsar site.

The Biodiversity Metric Assessment reveals biodiversity net gain of >10%, which is acceptable.

Planning conditions are proposed to minimise harm to protected and priority species and habitats and to seek a measurable net gain in biodiversity.

Tree Officer: The native planting proposed appears reasonable. Suggests a condition requiring maintenance.

Public Rights of Way Officer: No objection. The surface of the bridleway may need altering and would require express approval of the council, however any impact on users would be minimal given the short length of bridleway from the road to the site access.

Environment Agency: No objection following submission of Flood Risk Assessment addendum subject to a condition requiring mitigation measures to reduce the risk of flooding.

Natural England: No comments to make on the application.

Humberside Fire and Rescue: Advise development should be in accordance with Building Regulations in respect of adequate access for firefighting; adequate water supplies should be available.

Humberside Police Crime Reduction Officer: Sets out various recommendations to improve security.

Isle of Axholme and North Nottinghamshire Water Level Management Board: Provide general advice on the drainage requirements.

Canals and River Trust: The application falls outside the notified area for its scale. Therefore, no comments to make.

Northern Powergrid: No objections following submission of revised plans.

PARISH COUNCIL

Objects to the application and comments are summarised as follows:

- The amended proposals appear to be minimal. The community feels that it is saturated with industrial developments as there is a wind farm, two power stations and a third to come and does not want any further development in the area.
- We have also just come to the end of a three-year project on the Keadby Pumping Station, which caused disruption due to a traffic-light system which was in place for the majority of the period plus the ongoing traffic to and from PD Ports' Wharf in Keadby.
- The proposed route for the delivery of materials to the site would cause issues. 'Lived experience' shows that there would be problems negotiating Chapel Lane and feel that an independent Swept Path analysis, should be conducted. Access via the SSE road from the A18 is the preferred route. Alternatively Bonnyhale Road could be re-opened. These options would avoid use of the populated area of Chapel Lane.
- Deliveries should be made overnight, when traffic through the village is lightest, as 'lived experience' shows that, otherwise, such traffic will result in chaos on Station Road.
- Residents should be recompensed and local workers should be preferred.
- The weight of the delivery vehicles is a concern due to the very poor state of the road surface of Chapel Lane.

- Councillors expect (following assurance by the applicant) that, once the system is operational, noise impact will be minimal.

PUBLICITY

Advertised by site and press notice. Twelve separate responses have been received from nine individuals objecting to the application, which are summarised as follows:

- The area is already saturated with industrial developments as there is a wind farm, two power stations and a third to come and do not want any further development in the area.
- The proposal, along with the windfarm and power stations, will mean the area is turned into an industrial estate.
- This installation would be opposite our house and would ruin the view from our house and garden; what is open aspect now would be obstructed by trees and fencing.
- All of the batteries have cooling fans on top which emit noise pollution.
- Noise from the battery farm will affect lives, enjoyment of the natural countryside and possibly mental wellbeing of residents.
- This is a very quiet, rural area where families walk and children play, this development will have a detrimental impact on country living.
- There are more suitable areas closer to the power station where this development could be developed.
- It is the duty of the council to protect the public use and enjoyment of highways.
- The proposals would give rise to fire risks, with consequent toxic fumes and polluted water run-off.
- The fire brigade would have to be specially trained to cope with a fire from these batteries which can burn for hours once alight.
- Concerns about working hours and contractors parking on the already congested lane.
- Loss of habitat for birds and animals who use the site.
- The road is in a poor state of repair and is not suitable to cater for the proposal, particularly heavy construction traffic.
- Construction traffic should access the site from the A18 through the power station. Speed and vibrations from the vehicles using Chapel Lane would affect the residents and our homes.
- Concerns about security – are we all to experience a rise in insurance cost due to opportunist thefts; will there be 24-hour security in the area?
- What are the benefits to local residents?
- Maybe the village could get more help in respect of the energy on our doorstep.

- Either a direct supply at a cheaper rate from the farm, or grants for our own solar panels as well to further aid the growth of renewable energy in the area.

Two letters of support have also been received making the following comments:

- It's a good idea as we need more environmental options to help with the energy crisis. I hope this will go to help the people in the local village like me; we need to be more independent away from foreign imports of oil.
- I agree with this as it would be a great place for it to go within the power plant area, and in [the] location of the wind farms and solar farms, and would bring more job opportunities to the area.

STATEMENT OF COMMUNITY INVOLVEMENT

The applicants carried out community consultations in November 2022, including a leaflet drop to 'approximately 836' local residents, and held two consultation events, one in Keadby and one in Althorpe on 28th and 29th November 2022 respectively. The applicants presented the proposals to the parish council meeting on 16th November 2022 and on 18th November sent a copy of the above-mentioned leaflet to the three Axholme North ward members. The feedback received from the local community was considered in the application, and is representative of the issues raised by residents in respect of the current application.

ASSESSMENT

Application site

The application site comprises an undeveloped area of agricultural land to the north of Chapel Lane, west of Keadby village. The field the subject of the application is bounded on all sides by open ditches, with a hedgerow on the eastern boundary where it abuts a public bridleway.

On the south side of Chapel Lane, opposite the eastern portion of the site, lie two dwellings, Holly House and Hawthorn House. Keadby Power Station lies further to the south, with further energy infrastructure, including an electricity substation, to the west. There is open countryside to the north and west with further infrastructure in the form of rows of electricity pylons and wind turbines in close proximity to the site. The nearest dwellings in Keadby village itself are approximately 150m to the east of the site boundary, and 230m from the battery storage units proposed.

There are no landscape or heritage constraints affecting the site, which lies in SFRA flood zone 2/3 (a) tidal.

Planning history

There is no history of planning applications on the site. A screening opinion was provided in May 2022 that the development would not comprise EIA development.

The proposal

The application proposes a battery energy storage system (BESS) contained within a fenced compound, screened by acoustic fencing and surrounded by landscaping. The layout of the proposed development and detailed layout of the proposed equipment is shown on the

attached site layout plan. The operational lifetime of the development is expected to be 40 years.

The application sets out that the equipment proposed comprises of 56 high efficiency BESS units housed within individual containers, each with a height of 3m, and 28 transformer units with a height of 3.5m. None of the ancillary equipment would exceed 4m in height. The proposed 33kv transformer and associated equipment would have a maximum height of up to 7m.

In addition, there would be two switchgear rooms, at a height of 3.6m, as well as a transformer and a control room to be operated by Northern Powergrid, with heights of 7m and 4m respectively. A single auxiliary transformer is proposed within the site, also with a height of 7m.

It is proposed that the BESS units would be screened from the nearby dwellings by a 4m high acoustic fence.

The equipment is proposed to sit on concrete plinths within a fenced compound. The remainder of the compound surface would be finished in type 1 aggregate, with a harder sub-base used for the short section of access track within the site. The compound would be surrounded by a 2.4m palisade fence with 4m high CCTV and thermal imaging poles to ensure site security also proposed.

Access to the site would be taken via an improved access onto Chapel Lane via a short stretch of the public bridleway, and then along Chapel Lane to its junction with the B1392. Vehicle parking for site workers during all stages of construction and operation would be accommodated on site with no vehicles allowed to park or wait on the adjoining road network during any stage of the development.

Existing landscape features are proposed to be retained, with hedges and boundaries enhanced with additional native, tree, shrub and hedgerow planting. A SUDs pond is proposed both for drainage purposes and to aid biodiversity improvements.

The main issues in determining this application are:

- **the principle of development;**
- **landscape and visual issues;**
- **highway safety; and**
- **living conditions.**

Principle of development

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise. In this instance, the development plan consists of the North Lincolnshire Local Plan (NLLP), the North Lincolnshire Core Strategy (NLCS) and the Housing and Employment Land Allocations (HELA) DPD. Material considerations include the National Planning Policy Framework (NPPF), the Planning Practice Guidance (PPG) and the council's Supplementary Planning Documents in respect of renewable energy development (November 2011).

Local plan policy DC21 supports the generation of energy from renewable sources, but was drafted before the technology to store electricity in the way that is currently proposed, so whilst providing support for the industry generally, is not directly relevant.

Core Strategy policy CS18 is broader in its support for sustainable resource use, and provides that the council will actively promote development that utilises natural resources as efficiently and sustainably as possible. This includes supporting renewable sources of energy in appropriate locations, where possible.

The UK Government has declared a climate emergency and set a statutory target of achieving net zero emissions by 2050, and this is also a material consideration.

Paragraph 152 of the NPPF explains that:

‘The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.’

At paragraph 158 the NPPF sets out that applicants for energy development are not required to demonstrate the overall need for renewable or low-carbon energy and should recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions. Most importantly, a proposal should be approved if its impacts are, or can be made, acceptable.

The government’s existing and draft National Policy Statements (NPSs) set out the national position supporting the renewable energy industry. The draft NPS EN-1, whilst of limited weight as a material consideration, seeks to update national policy in the light of new technologies and explains that there are several different types of electricity infrastructure that are needed to deliver the government’s energy objectives, including storage facilities (BESS) as proposed here. Storage of electricity, increasingly generated from renewable sources, can provide flexibility, meaning that less of the output of the generating facilities is wasted as it can either be stored or exported when there is excess production. BESSs can supply electricity when domestic demand is higher than generation, providing enhanced energy resilience in the National Grid.

Planning Practice Guidance (PPG) on renewable and low carbon energy states that ‘there are no hard and fast rules about how suitable areas for renewable energy should be identified but, in considering locations, local planning authorities will need to ensure they take into account the requirements of the technology and, critically, the potential impacts on the local environment, including from cumulative impacts.’

Overall, both development plan policies and the NPPF support the delivery of renewable and low-carbon energy and associated infrastructure. Although the development is not itself designed to deliver renewable energy, it is clear that the proposal would directly support energy-generating facilities which will increasingly be delivered from renewable energy sources and therefore the proposal can be regarded as low carbon energy associated infrastructure. The acceptability of any particular proposal will be dependent on its environmental impacts, and these are considered below.

Landscape and visual impact

Local plan policy RD2 sets out that new development in the countryside should not be detrimental to the character or appearance of the open countryside or a nearby settlement in terms of siting, scale, massing, design or materials. Policies H5 and DS1 include similar criteria. Policy LC7 requires special attention to be given to the protection of the scenic quality and distinctive local character of the landscape. Development which does not respect the character of the local landscape will not be permitted.

Core Strategy policy CS2 requires a high standard of design. Development should contribute towards the creation of locally distinctive, sustainable, inclusive, healthy and vibrant communities. Policy CS5 requires good design which is appropriate to its context. Proposals should consider the relationship between any buildings and the spaces around them, and how they interact with each other as well as the surrounding area. Policy CS8 reflects this need for good design, in keeping with the character of the area, and protecting the rural landscape.

The NPPF also calls for high quality design (paragraph 130 refers). In respect of planning applications for low carbon energy development, paragraph 157(b) advises that local planning authorities should take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

In terms of its design, the proposals are of industrial form by their nature and there is little further in pure design terms that could be done to make the equipment more aesthetically pleasing.

The application is supported by a Landscape and Visual Appraisal (LVA) which confirms that the site is identified in the North Lincolnshire Landscape Character Assessment & Guidelines as being located in the Trent Levels landscape character area, and specifically the Flat Drained Farmland local landscape type. The application is also supported by a series of photomontages, showing the site as existing and how it would appear when developed, subject to landscaping.

The existing flat, arable site is (other than crops) largely devoid of vegetation, this being limited to the hedgerow on the eastern boundary which includes occasional trees. The structures on the site would be sited 0.55 above existing ground levels on the advice of the Environment Agency.

The LVA advises that, in terms of landscape condition (the physical state of the landscape) the site is considered to be 'poor'. This rating acknowledges that the site comprises agricultural land with limited landscape components apart from the drainage ditches, the eastern boundary vegetation and the bridleway to the site's eastern boundary. In terms of landscape value (how the landscape is valued by society), the LVA considers the site to be of overall low value.

The LVA identifies a number of visual receptors: residents of the single dwelling immediately adjacent the south-east corner of the application site (known as Holly House) and residents of the westernmost properties on Chapel Lane within the village of Keadby itself; and road users of Chapel Lane and the public footpath network, including the bridleway immediately to the east, and a connecting public footpath which runs east-west, to the north of the site.

The LVA concludes that open and partial views into the site are available from these receptors. Potential partial views and partial glimpses are also anticipated from Keadby

Power Station to the south and footpath NI|KEAD|9 to the north of the site. Where views are available they are seen within the context of the built form of the existing energy infrastructure (Keadby Power Station), the substation to the west and the pylons and wind turbines to the north/east, which are all in close proximity to the site.

The LVA explains that the proposed development has been laid out to largely retain the existing landscape features, including the mature boundary trees to the east of the site, hedges and ditches. Hedges and boundaries will be enhanced with additional (native) tree, shrub and hedgerow planting where appropriate. Effects of the development are anticipated to reduce over time as the proposed planting matures.

The LVA anticipates that minor to negligible adverse effects are anticipated in relation to vegetation and landscape features within the site. Minor to negligible adverse effects are anticipated to landscape character and minor adverse effects on the bridleway immediately adjacent to the site. This is all in the context of the existing landscape which is dominated by existing infrastructure. Visual effects are anticipated to range from major/moderate for receptors of the dwellings immediately adjacent to the site to negligible adverse for the majority of receptors and limited to those in close proximity to the site.

Overall, the LVA concludes that the proposed development would sit within the existing landscape character without causing significant harm. It should also be noted that the expected lifetime of the development is 40 years.

The Natural Environment Policy Specialist (NEPS) has been consulted and is happy that the submitted LVA has been produced following the relevant guidelines. The NEPS advises that the LVA highlights that the development is proposed in a landscape that is already significantly degraded by the prevalence of wind turbines and electricity pylons, with Keadby Power station dominating some viewpoints. Whilst the additional visual impact is likely to be of negligible significance for most receptors and viewpoints, medium to major effects are likely for the nearest residents and users of the adjacent public right of way, as described above. The conclusions of the LVA are noted; however, the NEPS highlights that it would likely take 10+ years for the proposed landscaping to mature and that the landscape and visual impacts would be at their most significant during this period.

The built development is proposed to the west of the application site, away from the existing dwelling, Holly House. Given the orientation of the house there would be very limited, oblique views of the development from upper floor windows in the rear elevation of Holly House; however, these views are already dominated by existing energy infrastructure. Views from ground floor and the garden are largely screened by the existing boundary hedge to Holly House.

The development would be visible in views from the public footpath network to the north; however, it would be very much read against the backdrop of the Power Station and other infrastructure. The developed site would be obvious in close proximity to it from the bridleway and Chapel Lane; however, this would not significantly alter the users' experience of travelling through this landscape which is already dominated by energy infrastructure.

Whilst the addition of the proposed BESS would add to the cumulative impact of energy infrastructure in the area, in views from all the identified receptors, it is not considered that the cumulative impact would be significant. The long-term impact of the proposals is tempered by the fact that the operational lifetime of the BESS is expected to be 40 years and a condition is suggested below to require the site to be decommissioned and all structures

etc. removed from the site in accordance with a decommissioning scheme which must be approved by the council.

Overall, the proposals would result in some harm to the existing landscape. This harm would reduce over time (and be removed in its entirety after 40 years) as the proposed landscaping matures, and it is also recognised that the proposals, from the majority of views, would be read in the context of existing energy infrastructure. This harm will need to be balanced against the benefits in the overall planning balance.

Highways

Policy T2 of the North Lincolnshire Local Plan states that all development should be served by a satisfactory access; policy T19 is concerned with parking provision as well as general highway safety. Both policies are considered relevant. Policy CS25 of the Core Strategy promotes sustainable transport and is in two parts: firstly, it sets out to manage demand; and secondly, it seeks to manage the transport networks that serve North Lincolnshire's settlements.

There have been a number of concerns raised by the local community, in particular regarding the use of Chapel Lane to access the site, including during construction. Further concerns are raised regarding the use of a short stretch of the bridleway immediately to the east of the site to access the development.

The application is supported by a Transport Statement (TS) which confirms that the BESS would operate on an unmanned basis most of the time and would generate approximately between 10 and 20 vehicle trips per annum to support site operations and general maintenance activities. These trips will be typically made by cars/vans. There would therefore be negligible impact on the local highway network following construction. For the same reasons there would be very limited impacts on users of the bridleway.

The TS estimates that construction would take place over a 16-month period, with the frequency of construction traffic movements depending on the individual activities taking place at any one time. At most there would be expected to be 15 staff on site at any one time. The total number of two-way heavy construction vehicle movements is expected to be 2,520, with a maximum of 260 trips in any one month, although generally the number would be less than this. Staff trips would generally be at the start and end of the working day and would not be expected to coincide with movements of heavy construction vehicles. Vehicle parking for site workers during all stages of construction would be accommodated on site.

The TA confirms that a swept path analysis has been undertaken to establish whether the largest vehicles proposed to access the site (an abnormal indivisible load vehicle (a low loader) and a heavy commercial vehicle) could adequately navigate Chapel Lane, the access junction and the Chapel Lane/Trent Lane priority junction, which appears to be of most concern to local residents. The results of the swept path analysis demonstrate that an abnormal indivisible load vehicle would be able to adequately enter and leave the site via Chapel Lane and the Chapel Lane/Trent Side priority junction, with the exception of some minor vehicle overhang of the footway on the northern side of Chapel Lane and the eastern grassed verge of Trent Side when turning in and out of the Chapel Lane/Trent Side junction.

The Highways Officer (HO) has been consulted and they share the local community's view that accessing the site via the A18 would have been preferable as this would lessen the potential impact on residents of Chapel Lane. However, they recognise that this land is in

third party ownership and as such permission to use this route may not be granted. The HO has reviewed the additional information submitted by the applicant (in the form of a Construction Traffic Management Plan), which addresses the HO's initial comments regarding the impact on Chapel Lane. The HO notes there would be eight movements per day on average during the peak period.

The HO recognises that, due to the nature of the proposals, the main impact in terms of vehicle movements will be during the construction phase and any movements during the operational phase will be minimal. The volume of HGVs during the construction phase means there would likely be a detrimental impact on the condition of Chapel Lane as a result, and a condition is therefore recommended to secure pre/post-construction condition surveys and a requirement for the applicant to rectify any defects. This has already been discussed with the applicant, who is amenable to this. Whilst it is noted the parish council has suggested deliveries should be made at night, this would likely result in undue impacts on residents of Chapel Lane. Overall, the HO has no objection to the proposals, subject to conditions securing condition surveys and a construction phase traffic management plan.

The Public Rights of Way (PROW) Officer has also commented and has highlighted various matters regarding the public bridleway immediately to the east of the site. The PROW Officer raises no objection as the access only affects the first 15m or so of the bridleway from its junction with Chapel Lane. Safe passage across this first 15 metres will need to be provided for users of the bridleway during construction. Confirmation of how this is proposed to be achieved can be secured as part of the construction phase traffic management plan required by condition as set out below.

Overall, whilst the concerns of the local community are not underestimated, in light of the views of the Highways Officer, it is not considered that the proposed development would give rise to unacceptable impacts on the local highway network, subject to the conditions explained above.

Living conditions

Local plan policies all seek to protect the living conditions of occupiers of nearby residential property. Local plan policy DS1 states, 'No unacceptable loss of amenity to neighbouring land uses should result in terms of noise, smell, fumes, dust or other nuisance, or through the effects of overlooking or overshadowing.' Policy DS5 of the local plan requires that new development must cause no harm to local amenity, including the amenity of neighbouring occupants.

Paragraph 130(f) of the NPPF requires new development to create places which, amongst other things, promote health and well-being, with a high standard of amenity for existing and future users. Paragraph 185 provides that new development should be appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment.

The Noise Policy Statement for England (NPSE) was published on 15 March 2010. It sets out the long-term vision of government noise policy, to promote good health and a good quality of life through the management of noise. The NPSE includes key phrases used to determine the levels of noise impacts, including the LOAEL (Lowest Observed Adverse Effect Level). British Standards BS4142 and BS8233 both deal with noise levels. BS4142 provides a method of assessing the impact of a source of industrial or commercial sound, including sound from, amongst other things, fixed installations, as proposed here.

Nearby residents have expressed concern that the proposed development could give rise to unacceptable impacts on the enjoyment of their property, in particular in respect of noise.

The application is accompanied by a Noise Assessment which advises that operational noise from the facility would come predominantly from the cooling fans. The assessment assumes that the technology provider for the site would be Tesla. The assessment has considered predicted operational noise levels at the closest noise sensitive receptors using 'likely case' real-world data measured by the applicant at an equivalent operational BESS facility, with additional predictions undertaken using 'worst-case' data provided by Tesla.

The noise assessment advises that assessment of the operational BESS site elsewhere indicates that noise arising from the battery cooling fans is less than has been predicted previously using the data provided by Tesla. Noise was measured at a point 90m from the facility, and noise from the battery cooling fans was assessed as inaudible at that location.

The closest noise sensitive receptors were identified as the residential dwelling approximately 120m south of the operational parts of the facility (Holly House), and those 170m east, on the western edge of Keadby village.

The application proposes noise mitigation in the form of 4m-high acoustic fences surrounding the noise-generating infrastructure within the site. Overall, the noise assessment concludes that the predicted noise levels for the proposed facility using the 'likely case' source noise levels meet the 35dB criterion which may be considered 'objectively low', during both the daytime and the night-time periods. As such, actual impacts associated with operation of the proposed facility are expected to be low at all the noise sensitive receptors, including the nearest dwellings. Even if a precautionary +2dB correction is applied, the rating level is marginally (1dB) above the objectively low criterion, however the noise assessment considers the associated noise impacts would remain low.

The noise assessment concludes that the assessment has determined, through supplementary consideration of predicted internal noise levels within bedrooms of Holly House, that the facility would meet BS8233 criteria, which is further evidence of the facility having a low noise impact and being highly unlikely to cause sleep disturbance.

Predicted daytime noise levels at the nearest dwellings in the village and more distant receptors meet the adopted evaluation criteria during both the daytime and night-time periods and resultant noise impacts are therefore low.

With reference to the NPPF and NPSE, the assessment has determined that predicted noise levels due to the facility are below the Lowest Observed Adverse Effect Level.

The Environmental Protection Officer (EPO) initially raised concerns as to whether the proposed development could operate in this location without causing adverse impact. However, following the submission of additional information by the applicant, and a meeting with the applicant's noise consultants, the EPO is satisfied that there would be no unacceptable noise arising from the proposals. The EPO therefore raises no objection subject to conditions, including post-development assessment. A condition is also suggested to deal with any valid complaints that are received, however it is considered that this would fall to be considered under Environmental Health legislation and is not therefore appropriate to be attached in this case.

Whilst there would inevitably be some noise and disturbance during the construction stage from associated traffic, including heavy construction vehicles, as described in the Highways section above, daily movements would be limited.

Overall, therefore, it is concluded that the proposals would not give rise to unacceptable noise impacts for nearby residents, and thus comply with local and national policies, and guidance in this regard.

Other matters

The site is located in flood zone 2/3 (a) tidal. Given the operational needs for the facility to be located close to the existing substation at Keadby, it is not considered that it is necessary to consider sequentially preferable locations in respect of flood risk. In any event, all the land in close proximity to the site is in the same flood zone, and the energy benefits of the scheme represent sustainability reasons which outweigh any risk from flooding, should the exceptions test be applied. The Environment Agency originally raised concerns; however, following submission of further information, raises no objection subject to a condition requiring the proposed equipment to be sited 0.55m above existing flood levels and implementation of an emergency shutdown procedure where the critical flood level is predicted.

In terms of ecology, the Natural Environment Policy Specialist has confirmed there would be no likely significant effect on the Humber Estuary SAC/SPA/Ramsar site as a result of the proposals. The applicant's Biodiversity Metric Assessment has been carried out fairly and reveals biodiversity net gain of greater than 10%, which exceeds current policy requirements. Therefore, subject to planning conditions to minimise harm to protected and priority species and habitats, and to seek a measurable net gain, there is no objection in respect of ecology.

Concerns have been raised regarding potential fire risks. The Planning Practice Guidance advises the relevant local fire service be consulted on applications for BESSs. The Humberside Fire and Rescue Service has been consulted and commented specifically that access for the fire service should be provided, along with adequate water supplies. The applicant has commented that the proposed access track is sufficient to allow access for firefighting/emergency vehicles as the access track must be sufficient to carry the weight of the construction vehicles/HGVs which will enter the site during the construction phase. Furthermore, the applicant will provide a hydrant on this project site if considered necessary and practical, which would be agreed during post-consent discussions with Humberside Fire and Rescue Service as a matter of course.

The site comprises grade 2 (good) agricultural land. The applicant comments that the loss of the land to agriculture would be temporary (albeit expected to have a lifetime of 40 years), and that there is no land of a lower classification which would meet the needs of the proposals given the requirement to be close to the substation at Keadby. In light of this, and the clear energy benefits associated with the proposals, the loss of this relatively small area (approximately 2.2ha) of good quality agricultural land is considered to be of very limited weight.

It is relevant that an EIA screening opinion request was received in May this year, on the land immediately to the west and north of the current application site for a BESS facility. The council deemed that in its view the proposal in that case was not EIA development. No further submissions have been made in respect of that proposal which was for a significantly larger facility than that the subject of the current application. There is no policy requirement to assess alternative sites and there is no indication that both proposals could not sit alongside

each other. The merits of the neighbouring site will need to be considered should a proposal come forward for it, but it is not considered that the possibility another site may come forward has any significant effect on the acceptability or otherwise of the current application.

Conditions

It should be noted that the applicant has agreed to the suggested pre-commencement conditions. It should also be noted that the applicant has requested an 8-year time limit for commencement of the development. Whilst it is hoped that development would commence sooner, this is requested because National Powergrid has offered, based on current grid offers in other areas, a connection date within the next 7 to 10 years. In this context, it is considered that the requested timescale for condition 1 is acceptable in this case.

Overall planning balance and conclusions

The benefits of the proposal, contributing to the statutory target of achieving net zero emissions by 2050, are clear. Both development plan policies and government policy and guidance support the delivery of renewable and low-carbon energy and associated infrastructure. This proposal will improve energy security and ensure energy generated close by would not be lost over time.

Whilst the comments of the local community are noted, impacts arising in respect of noise, highway safety/parking, fire safety and ecology can be satisfactorily addressed by condition and/or other legislation as explained above. There are no technical objections to the proposals.

Whilst the proposal is expected to have a life expectancy of 40 years, there would be obvious harm to the landscape as a result of developing what is currently open agricultural land. This harm would reduce over time (until the development is removed) as the proposed landscaping matures, and it is also recognised that the proposals, from the majority of views, would be read in the context of existing energy infrastructure. Despite the temporary nature of the development, there would also be some loss of good quality agricultural land.

Overall, it is concluded that the clear energy benefits arising from the proposals would outweigh the identified harms, and it is recommended that planning permission is granted subject to the conditions set out below.

RECOMMENDATION Grant permission subject to the following conditions:

1.

The development must be begun before the expiration of eight years from the date of this permission.

Reason

To comply with section 91 of the Town and Country Planning Act 1990.

2.

The development hereby permitted shall be carried out in accordance with the following approved plans:

- Drawing number KB_LP_RevC (Location Plan)
- Drawing number KB_PSP_RevO (Proposed Site Plan)

- Drawing number KB_SE_RevD (Site Elevations)
- Drawing Number UG_1635_LAN_SL_DRW_02 Revision P10.

Reason

For the avoidance of doubt and in the interests of proper planning.

3.

The planning permission hereby granted is for a period of 40 years beginning with the date of the facility hereby permitted being first brought into use. Written notification of the date of the facility hereby permitted being first brought into use shall be given to the local planning authority no later than 14 days after the event.

Reason

To define the temporary permission.

4.

Not less than 12 months before the cessation of the use of the site for electricity storage, a decommissioning method statement (DMS) shall be submitted to the local planning authority for its approval in writing. The DMS shall include details of the removal of all buildings, structures, hardstandings, underground equipment and fencing from the site, and a timetable for decommissioning the site. The DMS shall also include details of the proposed restoration and a decommissioning traffic management plan and access route, including provision for addressing any abnormal wear and tear to the highway. The site shall be decommissioned in accordance with the approved DMS and timetable within 6 months of the expiry of this permission or within 6 months of the cessation of the use of the site for electricity storage (whichever is sooner). For the purposes of this condition, the cessation of use shall be taken to mean a period of at least 24 months during which the site has not been used for the storage of electricity.

Reason

To ensure remediation of the site in accordance with the terms of the temporary permission.

5.

Operational hours of any site clearance and construction activity, including vehicle movements to and from the site, are restricted to 8am to 6pm Monday to Friday and 8am to 1pm on Saturdays, and at no time on Sundays or Bank and Public Holidays.

Reason

To protect the living conditions of nearby residents.

6.

The scheme of landscaping shown on Drawing Number UG_1635_LAN_SL_DRW_02 Revision P10 shall be completed within 16 months of development being commenced. Any trees or plants which die, are removed or become seriously damaged or diseased within five years from the date the scheme was completed shall be replaced in the next planting season with others of similar size and species to those originally required to be planted, unless the local planning authority agrees in writing to any variation.

Reason

To enhance the appearance of the development in the interests of amenity.

7.

The development hereby permitted shall be completed in accordance with details of all facing and surfacing materials proposed to be used which have first been submitted to and approved in writing by the local planning authority.

Reason

In the interests of good design.

8.

The noise level from the BESS hereby permitted shall not exceed a rating level (including any applicable character corrections) of 35 LAr,15min determined in accordance with BS4142:2014+A1:2019, when measured at a location within, or representative of, the garden area of the closest residential properties to the BESS.

Reason

To protect the living conditions of nearby residents.

9.

Within three months of the BESS first being brought into use for the storage of electricity, a noise validation report, to demonstrate that the requirements of condition 8 above have been complied with, shall be submitted to the local planning authority. The measurements and assessment within the validation survey shall be made according to BS4142:2014 + A1:2019.

Reason

To protect the living conditions of nearby residents.

10.

The development hereby permitted shall not be brought into use until acoustic fencing, in accordance with details which have first been submitted to and approved in writing by the local planning authority, has been erected on site in the locations indicated on drawing number KB-SE-RevD. The acoustic fencing shall then be retained and maintained in accordance with the approved details for the lifetime of the development.

Reason

In the interests of good design and to protect the living conditions of nearby residents.

11.

Prior to the development hereby permitted first being brought into use, a lighting plan for the operation phase of development shall be submitted to and approved in writing by the local planning authority. All lighting shall be designed in accordance with Bat Conservation Trust/Institution of Lighting Professionals Guidance Note 08/18 Bats and artificial lighting in the UK. Submitted lighting plans should be accompanied by contour diagrams that demonstrate minimal levels of lighting on receptor habitats, including trees and hedges. Development shall be carried out in accordance with the approved details and retained for the lifetime of the development.

Reason

To protect the amenity of nearby residents, the landscape and bats.

12.

No development shall start until details of a scheme of pre/post construction carriageway condition surveys of Chapel Lane have been submitted to and approved in writing with the local planning authority. The details shall include:

- a proposed survey methodology;
- a timetable for undertaking the surveys;
- a process for sharing the results with the local highway authority; and
- a process for agreeing and completing any necessary remedial works.

All survey and remedial works shall be completed in accordance with the details so approved.

Reason

In the interests of highway safety.

13.

Notwithstanding the submitted details, no development shall take place until a construction phase traffic management plan (CPTMP) has been submitted to and approved in writing by the local planning authority. The CPTMP shall include the following details:

- all associated traffic movements, including delivery vehicles and staff/construction movements;
- scheduling of deliveries;
- any abnormal load movements;
- contractor parking and welfare facilities;
- storage of materials;
- temporary signage strategy, including details of location, installation and removal of signs;
- traffic management requirements, including the means of controlling the deposition of mud onto the adjacent highway, along with appropriate methods of cleaning the highway, as may be required;
- how the public bridleway to the east of the site, and its users, will be protected during the construction phase.

The development hereby permitted shall be carried out in strict accordance with the terms of the CPTMP so approved.

Reason

In the interests of highway safety.

14.

The development hereby permitted shall be carried out in accordance with the Ecology Priority Matrix set out in section 4.5.31 of the submitted Preliminary Ecological Appraisal report dated November 2022.

Reason

To conserve and enhance biodiversity in accordance with policies CS5 and CS17 of the Core Strategy.

15.

Within 3 months of the commencement of development, the applicant or their successor in title shall submit a biodiversity management plan to the local planning authority for approval in writing. The biodiversity management plan include:

- (a) details of bat boxes and nest boxes to be installed;
- (b) restrictions on lighting to avoid impacts on bat roosts, bat foraging areas, bird nesting sites and sensitive habitats;
- (c) prescriptions for the creation of wildlife habitats in accordance with submitted drawing number UG_1635_LAN_SL_DRW_02 revision P06;
- (d) prescriptions for the ongoing management of habitats to achieve and maintain the target condition set out in the Biodiversity Metric 3.1, version V1 dated 10/11/2022;
- (e) provision for hedgehogs to pass through any boundary fencing installed;
- (f) proposed timings for the above works in relation to the installation of the batteries.

The biodiversity management plan shall be carried out in accordance with the approved details and timings for a period of at least 30 years, and the approved features shall be retained thereafter.

Reason

To conserve and enhance biodiversity in accordance with policies CS5 and CS17 of the Core Strategy.

16.

Prior to the first use of the site for the storage of electricity, the applicant, or their successor in title, shall submit a report to the local planning authority providing evidence of compliance with the biodiversity management plan.

Reason

To conserve and enhance biodiversity in accordance with policies CS5 and CS17 of the Core Strategy.

17.

The development shall be carried out and maintained in accordance with the submitted flood risk assessment (ref GON.0070.0038, dated 9 November 2022) and the Flood Risk and Drainage Assessment Addendum (dated 6 March 2023) and the following mitigation measures detailed therein:

- the equipment to be raised at least 0.55m above existing ground levels
- an emergency shutdown procedure to be implemented should the critical flood level be predicted.

Reason

To reduce the risk of flooding to the proposed development in accordance with the North Lincolnshire Core Strategy 2011.

18.

No development shall take place until a detailed surface water drainage scheme for the site has been submitted to and approved in writing by the local planning authority. The scheme shall be based on sustainable drainage principles and an assessment of the hydrological and hydrogeological context of the development and the submitted Flood Risk & Drainage Assessment Report, Version 1, dated 09/11/2022, submitted by Gondolin, Land & Water Civil Engineers. The scheme shall include proposed drainage layouts, details of raising of land levels and detailed site investigation. The drainage scheme shall demonstrate that surface water run-off generated up to and including the 1 in 100-year critical storm (including an allowance for climate change which should be based on the current national guidance) will not exceed the run-off from the existing site. It shall also include details of how the development would be maintained and managed for its lifetime, including the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime so that flood risk, both on and off the site, is not increased. SuDS must be fully considered in accordance with current PPG guidance. Reference should be made to North Lincolnshire Council's SuDS and Flood Risk Guidance Document. Should infiltration not be feasible at the site, alternative sustainable drainage should be used, focusing on above-ground solutions. The surface water drainage scheme shall be completed prior to the development hereby permitted first bring brought into use and thereafter retained and maintained for the lifetime of the development.

Reason

To prevent the increased risk of flooding to themselves and others, to improve and protect water quality, and to ensure the implementation and future maintenance of the sustainable drainage structures in accordance with policy DS16 of the North Lincolnshire Local Plan, policies CS18 and CS19 of the North Lincolnshire Core Strategy, and paragraphs 159 to 169 of the National Planning Policy Framework.

19.

No development shall take place until details showing an effective method of preventing surface water run-off from hard paved areas within the site onto the highway, and an effective method of preventing surface water run-off from the highway onto the developed site, have been submitted to and approved in writing by the local planning authority. These facilities shall be implemented prior to the access and parking facilities being brought into use and thereafter so retained.

Reason

In the interests of highway safety, to prevent the increased risk of flooding to themselves and others, to improve and protect water quality and to ensure the implementation and future maintenance of the sustainable drainage structures in accordance with policies DS16 and

T19 of the North Lincolnshire Local Plan, policies CS18 and CS19 of the North Lincolnshire Core Strategy, and guidance in the National Planning Policy Framework.

Informatives

1.

In determining this application, the council, as local planning authority, has taken account of the guidance in paragraph 38 of the National Planning Policy Framework in order to seek to secure sustainable development that improves the economic, social and environmental conditions of the area.

2.

The development hereby granted planning permission requires works to be carried out within the limits of the adopted (public) highway. Therefore:

- before ANY construction works take place within the limits of the highway you MUST contact the highway authority on telephone number 01724 297000 to arrange for the relevant permissions/licenses to be issued;
- before ANY service (utility) connections take place within the limits of the highway you MUST contact the highway authority on telephone number 01724 297319 to arrange for the relevant permissions/licenses to be issued.

3.

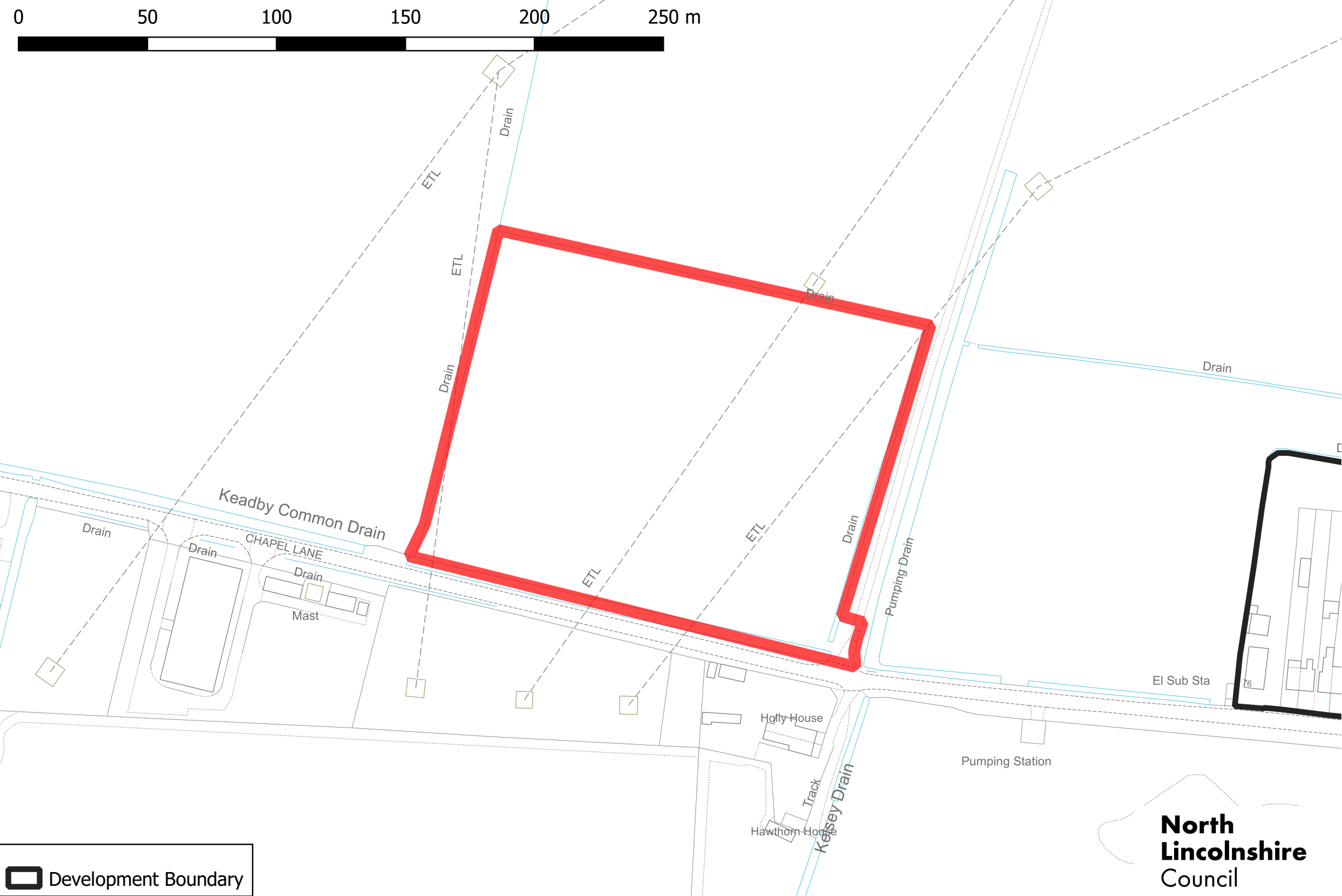
The applicant's attention is drawn to the informative advice set out in the Environment Agency's consultation response letter dated 3rd April 2023.

4.

The site lies within the Isle of Axholme and North Nottinghamshire Water Level Management Board area of jurisdiction. The development site is bounded by watercourses on the southern (internal drainage board maintained) and eastern (riparian) boundaries. An easement adjacent to the watercourse may need to be provided for future maintenance. Please refer to North Lincolnshire Council's 'Guide to Watercourses and Riparian Ownership' detailing riparian rights and responsibilities. Compliance with this guidance is to ensure the free flow of surface water is maintained throughout the development. Alterations and/or connections into the above watercourse network must be consented by the local Internal Drainage Board through an Ordinary Watercourse Consent and appropriate discharge rates must be agreed. Compliance with this guidance is to ensure the free flow of surface water is maintained throughout the development.

5.

The proposals indicate a new entrance to be provided onto Chapel Lane. A surface water culvert exists at this location and therefore consent is required to carry out this work. This must be consented by North Lincolnshire Council's LLFA Drainage Team, in their capacity as Lead Local Flood Authority through an Ordinary Watercourse Consent. Please contact the LLFA Drainage team on 01724 297522 or via email to llfadrainageteam@northlincs.gov.uk for further details. Compliance with this guidance is to ensure the free flow of surface water is maintained throughout the development.

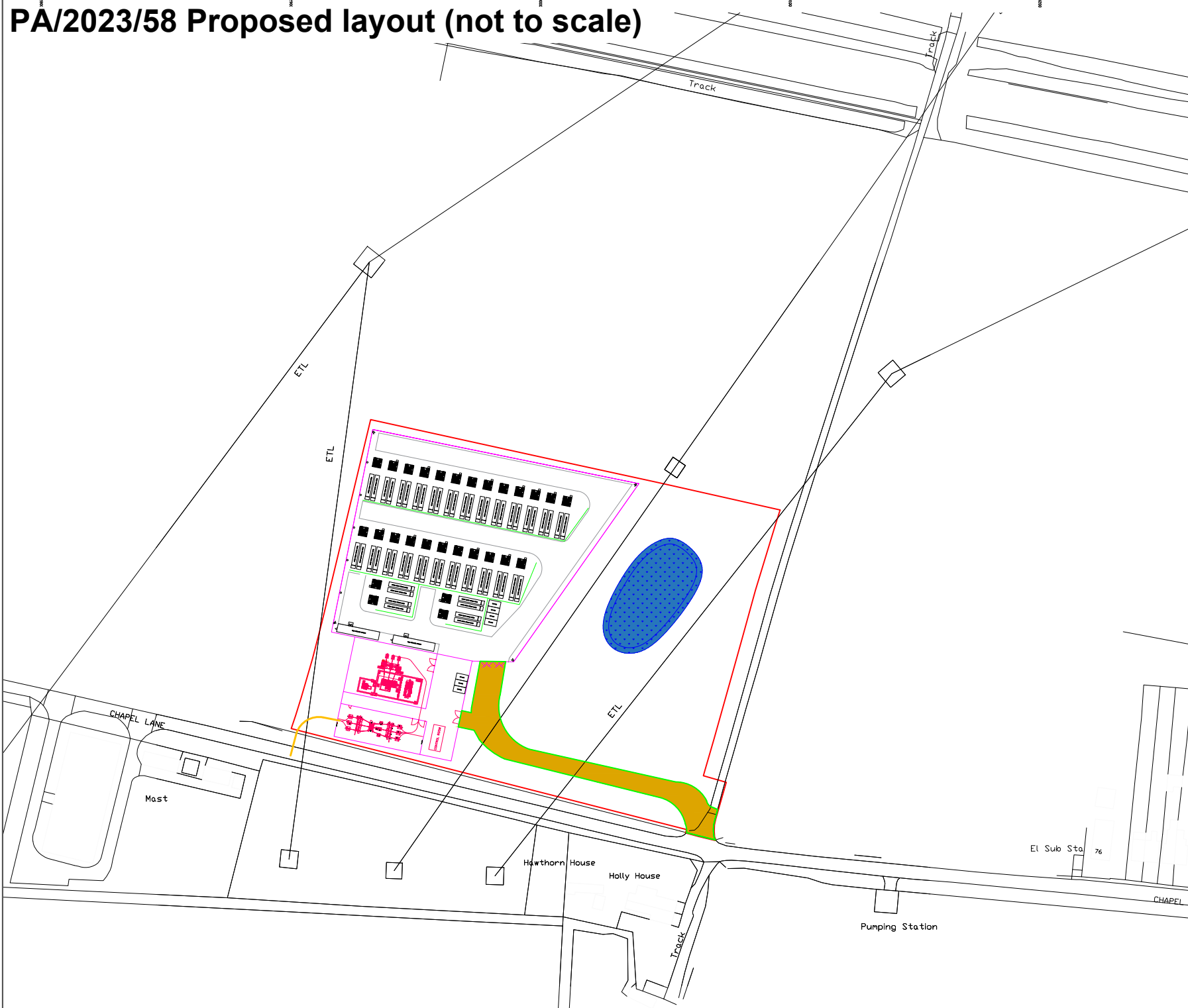


 Development Boundary

PA/2023/58

**North
Lincolnshire
Council**







PA/2023/58 Proposed layout (not to scale)

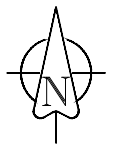


Notes:

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KEY:

	Cable Route
	Site Access
	Planning Application Boundary (2.23ha)
	4m High Acoustic Fence
	Internal BESS Road
	SUDS Pond



REV:	DESCRIPTION:	BY:	DATE:
STATUS:			



HARMONY ENERGY
 Conyngham Hall
 Knarborough
 HG5 9AY

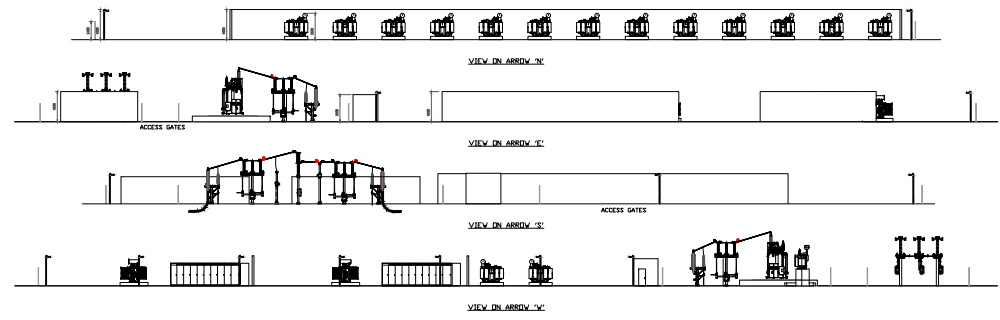
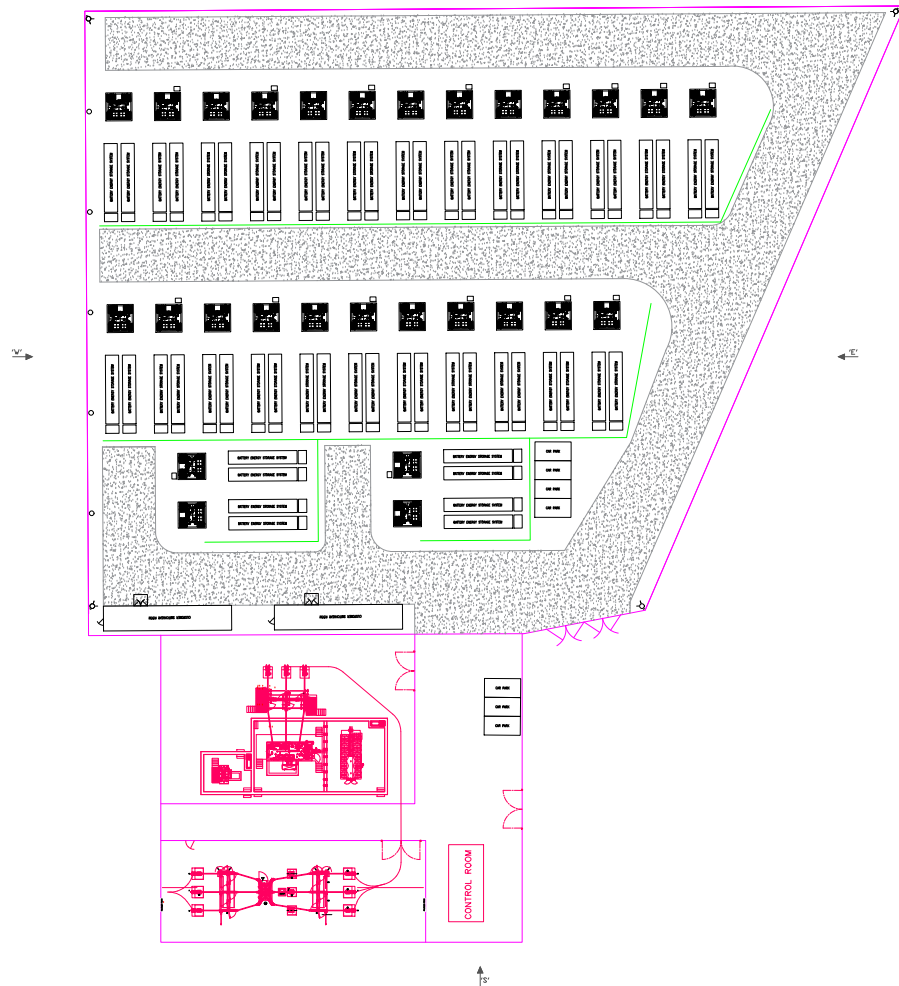


PROJECT: **KADBY**

TITLE: **PROPOSED SITE PLAN**

SCALE:	DATE:	DRAWN:	CHECKED:
A0 @ 1:500	24/05/2022	EL	HC
DRAWING NO:	REVISION:		
KB_PSP_Rev0			0

PA/2023/58 Proposed elevations (not to scale)



Notes:

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- KEY:
- 2.4m High Paillisade Fence
 - Internal BESS Road
 - 4m High Acoustic Fence



2.4m High Paillisade Fence

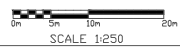


4m High Acoustic Fence

REV:	DESCRIPTION:	BY:	DATE:
STATUS:			

HARMONY ENERGY

Conyngam Hall
Knaresborough
HG5 9AY



PROJECT:
KADBY

TITLE:
SITE ELEVATIONS

SCALE: A0 @ 1:150	DATE: 17/07/2023	DRAWN: EL	CHECKED: HC
DRAWING NO: KB_SE_RevD		REVISION: D	

PHOTOGRAPHY AND ACCURATE VISUAL REPRESENTATION METHODOLOGY

Photography by:

Robert Aspray Digital, <http://robert-aspray-digital.com/>

Photomontage views produced by Robert Aspray Digital follows the guidance of Visual Representation of development Proposals by the Landscape Institute, Technical Guidance Note 06/19 17 September 2019. Please refer to these documents for detailed information.

The following equipment was used on site to carry out the photography.

Photographic Equipment

- Digital SLR Camera with full frame sensor: Canon EOS 5D Mk II
- Fixed focal length prime Lens: Canon EF 50mm - f/1.4 USM Lens
- Hoya 58mm Pro-1 Digital UV Screw in Filter
- Remote Shutter release
- Panoramic Head: Nodal Ninja 6
- Leveller: Nodal Ninja EZ Levelling Base
- Tripod: Manfrotto 190XDB/496RC2 Tripod

Other Equipment

- GPS locator
- Digital compact camera
- Tape measure
- Plumb Line
- Line spray and survey nails

Software

- PTGui
- 3DS Max
- Corona Renderer
- Affinity Photo
- Affinity Publisher

Site Photography

At each receptor survey station, the following procedure was carried out in sequence, during suitable day light hours:

- Set up the camera time and date and ensure setup to capture images in RAW format.
- Determine the best position for camera location in relation to the type of receptor (specific or representative).
- Determine the approximate angle of view to the nearest visible feature of the proposed new scheme using detailed scheme proposals overlaid on a detailed OS plan.
- Setup the tripod with a camera height of 1.6m above ground, using a tape measure.
- Level the camera on the horizontal plane using the tripod mounted levelling base and check level through 360 degrees.

- Set up first camera shot, centred on the nearest visible feature (as determined above) and set the fixed increments on the panoramic head to 10 degrees.
- Manually focus the camera to infinity and ensure all setting are set to manual mode.
- Take a full panoramic sequence of 36 shots (clockwise) at 10 degree fixed intervals, to give a full 360 degree sweep, using the remote shutter release to avoid accidental adjustment of the camera settings.
- Record GPS location of the camera.
- Mark the centre location of camera using a line spray. Take a photo of the camera setup and location using a compact camera to allow for reproduction.

Panoramic Stitching

- Composite 360 degree panoramic images were created by stitching and blending using cylindrical projection, all using the automated PT GUI photo-merge application.
- After stitching, the composite image was cropped top and bottom to maintain a vertical field of view.
- Using Affinity Photo the resulting 360 degree panoramic images were proportionally resized and cropped to produce a accurate 120 degree field of view.

Photomerge Methodology

- The camera view points, reference points from the Survey and a 3D model of the proposed structures were created in 3DS Max and digital wireframe 'snapshots' of each view were saved using a virtual 120 degree lens selected from within the software.
- The digital wireframe 'snapshots' for each viewpoint were then superimposed on top of the existing viewpoint panoramas in Affinity Photo and positioned accurately over the reference points.
- A rendered image using corona renderer plugin for each view was then created.
- The rendered images were then superimposed onto the photo using the previous correctly located wireframe. The rendered images were then masked out where existing topography or vegetation would appear in front of the proposals.



Project

Keadby Energy Storage

RAD

Architectural Illustration

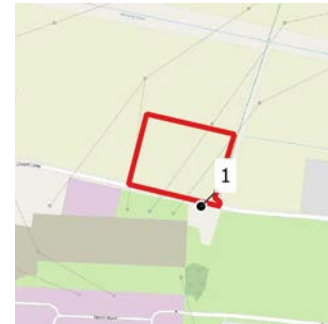
www.robert-aspray-digital.com



Project	Keadby Energy Storage
Title	Verified View 01 - Existing

Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.6m
Horizontal field of view:	120 Degrees

OS X (Eastings)	442620.437m
OS Y (Northings)	428215.997m
OS Z (Height)	17.249m



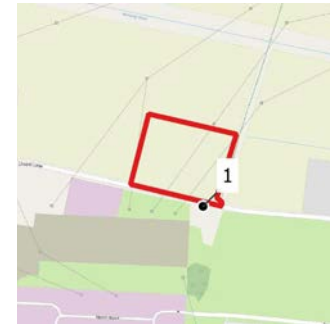


Project	Keadby Energy Storage
Title	Verified View 01 - Proposed Year 1

Shrub Planting 1m Approx.
Tree Planting 4m Approx.

Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.6m
Horizontal field of view:	120 Degrees

OS X (Eastings)	442620.437m
OS Y (Northings)	428215.997m
OS Z (Height)	17.249m



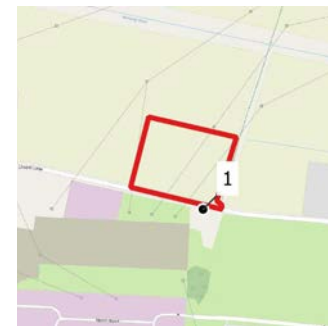


Project	Keadby Energy Storage
Title	Verified View 01 - Proposed Year 10

Shrub Planting 3m Approx.
Tree Planting 6m Approx.

Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.6m
Horizontal field of view:	120 Degrees

OS X (Eastings)	442620.437m
OS Y (Northings)	428215.997m
OS Z (Height)	17.249m





Project	Keadby Energy Storage
Title	Verified View 01 - Survey Locations

Shrub Planting 3m Approx.
Tree Planting 6m Approx.

Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.6m
Horizontal field of view:	120 Degrees

OS X (Eastings)	483036.277m
OS Y (Northings)	411899.997m
OS Z (Height)	2.7m

