Proposed Battery Energy Storage System, Stocking Pelham

EIA Screening Request

March 2024



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EIA Screening Request

1. Introduction

- 1.1 On behalf of Pelham Power Ltd (the 'Applicant'), Savills UK Ltd ('Savills') is writing to request a formal Environmental Impact Assessment ('EIA') Screening Opinion from East Hertfordshire District Council ('the Local Planning Authority' / 'LPA' / 'EHDC') in connection with proposed development of a Battery Energy Storage System ('BESS') facility ('the Project') on land at Green's Farm, Stocking Pelham (the 'Application Site').
- 1.2 The description of development for the purpose of this EIA Screening Request is:

"Construction of a 50MW battery energy storage system facility and associated access, landscaping and other infrastructure works."

- 1.3 The above description reflects the description given to application reference 3/21/0969/FUL, which was registered by EHDC on 5th May 2021 and remains undetermined.
- 1.4 This request for a Screening Opinion relates to the abovementioned application and is made under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations'). In accordance with Regulation 6(2) of the EIA Regulations, this report contains:
 - A Site Plan (see Appendix 1);
 - A description of the Proposed Development, including any demolition works (see Section 3 below);
 - A description of the aspects of the environment likely to be significantly affected by the Proposed Development (see Section 5 below); and
 - Where information is available, a description of any likely significant effects of the Proposed Development on the environment (see also Section 5 below).
- 1.5 This request for a Screening Opinion is submitted alongside the submission of a comprehensive package of updated and further information in support of that application. The findings of the information submitted as part of that application has informed the preparation of this EIA Screening request, including the consideration of the likelihood of there being significant effects on the environment arising from the proposals, as detailed below.

2. The Site

- 2.1 The application site extends to 2.91 hectares (ha) and comprises five parts:
 - The main part, which will be the location of the BESS facility;
 - A proposed operational access track connecting the main part of the Site to the public highway (Lower Farm Lane) to the south;
 - A proposed secondary access, for emergency use only, also connecting the main part of the Site to the public highway to the south;

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- A proposed temporary construction access connecting the main part of the Site to the public highway (Ginns Road) to the west; and
- The route of the cable that will connect the BESS to the nearby substation.
- 2.2 The main part of the Application Site is partially bounded by mature vegetation, with tree cover around three sides providing some visual containment. The Site is particularly well-enclosed by the woodland to the east and the well-established hedgerow to the south. The western boundary of the Application Site is open to the Public Footpath that runs adjacent (see below under 'Access'), however the mature tree belt that runs to the west of the Footpath provides further visual enclosure. The Site is less well-enclosed on its northern boundary, along which there is only a low hedgerow. Within the north-eastern corner of the main part of the Site there is a large electricity pylon carrying overhead power lines that connect to the Stocking Pelham substation to the north-east.
- 2.3 Between the main part of the Application Site and the proposed operational access track there is currently a field gate. To the west of the operational access track part of the Site is a collection of mature trees and hedgerows, whilst to the east is the remainder of the agricultural field. Along the southern boundary of this part of the Site is a low hedge that runs alongside Lower Farm Lane, and a number of mature hedgerow trees.
- 2.4 Maps published by Natural England show the Application Site as being Grade 2 agricultural land.
- 2.5 There are no heritage assets or previously-recorded archaeological sites or finds on the Application Site itself, and it does not form any part of the setting of any Listed Building, nor is it in close proximity to any Conservation Area.
- 2.6 The application site is located almost entirely¹ within Environment Agency Flood Zone 1, where there is a 'low' probability of flooding.

Local Context

- 2.7 The landscape within which the Application Site is located is predominantly agricultural farmland, with scattered small settlements, woodland blocks, mature hedgerows providing a structure to the countryside that results in an irregular pattern of small to medium-sized fields. The area is visually dominated by the Stocking Pelham substation, and associated myriad of pylons and overhead power lines, that crisscross the landscape. The pylon in the north-eastern corner of the Site forms a prominent and visually incongruous feature in the landscape.
- 2.8 Much of the surrounding area is also shown as Grade 2, with some areas of Grade 3 (likely Grade 3a and thus also BMV), in valleys.
- 2.9 The closest designated heritage assets are Greens Farmhouse, a Grade II Listed Building approximately 250m to the south of the Site. There is also a collection of Listed Buildings – Crabb's Green Farmhouse, Barn at Crabb's Green Farm, and The Cottage, which are all also Grade II Listed Buildings, approximately 400m to the north of the Site, and which also lie within

¹ As noted in the submitted FRA there is a small sliver of land on Ginns Road at the construction access that falls within Flood Zone 2 as shown on the Flood Map for Planning.

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the Crabb's Green Conservation Area, the boundary of which is also approximately 400m to the north of the Site.

- 2.10 The closest residential property is located approximately 250m to the south of the main part of the Application Site and is also owned by the same landowner.
- 2.11 A Public Footpath (Route 008 / 016) runs adjacent to the Application Site, alongside the western and northern boundaries, along the aforementioned existing access track. This route connects through the Green's Farm farmyard to Lower Farm Lane as a Public Byway (Route 0169). To the north, the Footpath connects with other footpaths, providing access to various locations around Stocking Pelham.

3. The Proposed Development

3.1 The application seeks full planning permission for the

"Construction of a 50MW battery energy storage system facility and associated access, landscaping and other infrastructure works."

In summary, the Proposed Development will comprise the following components:

- A Main Compound incorporating:
 - the BESS facility and associated ancillary infrastructure;
 - a Customer High Voltage Infrastructure Compound ('CHVIC') *;
 - a Distribution Network Operator ('DNO') Infrastructure Compound ('DNOIC')
 *; and
 - a DNO Switchroom and Metering Cabinet;
- A surface water detention basin;
- Water tanks;
- Landscaping around the perimeter of the Application Site (within the application boundary but outside the Main Compound);
- A crushed / compacted stone operational access track through the field to the east of Green's Farm, connecting the main compound to the public highway to the south;
- A secondary, emergency, access route through Green's Farm, connecting to the public highway to the south;
- A construction access connecting to the public highway to the west of the site; and
- The cable connecting the BESS to the nearby substation.
- 3.2 Given the technical nature of the Proposed Development, significant detail was provided as part of application (LPA Ref. 3/21/0969/FUL) and so the full description of the proposed development that was supplied in the accompanying Planning Statement is appended at Appendix 2 for reference.

4. EIA Screening

Introduction

- 4.1 In determining whether the Proposed Development constitutes EIA development, consideration should be given to the following:
 - If the proposed development is of a type listed in Schedule 1 of the EIA Regulations;
 - If not, whether it is listed in Schedule 2 of the EIA Regulations;
 - If it is listed in Schedule 2 Regulations, whether:
 - Is it located within or partly within a sensitive area;
 - Does it meet any of the relevant thresholds and criteria set out in Schedule 2 of the EIA Regulations; and/or
 - o Would it lead to likely significant effects on the environment?
- 4.2 These points are explored further in this section with reference to the EIA Regulations and supporting Planning Practice Guidance ('PPG').

Schedule 1 Projects

4.3 The Proposed Development is not of a type listed in Schedule 1.

Schedule 2 Projects

4.4 Schedule 2 identifies development types where, if the relevant threshold criteria are exceeded, further consideration is required (with reference to Schedule 3) in order to determine whether significant effects are likely, in which case, EIA is required. We consider that the Proposed Development falls within Part 3 (a) of Schedule 2:

"(a) Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1)'

- 4.5 The criteria to be considered for Part 3 (a) is whether the area of the development exceeds 0.5ha.
- 4.6 The proposal is for a Battery Energy Storage System with a site area of 2.91ha (including the construction access). The proposal is therefore, Schedule 2 development for which screening the need for EIA should be conducted. The EIA Regulations provide that development listed in Schedule 2 is EIA development if it is likely to have a significant effect(s) on the environment by virtue of certain factors such as its nature, size or location.
- 4.7 The PPG sets out further guidance and criteria against which Schedule 2 developments should be considered and states at ID: 4-018-20170728 that:

"Only a very small proportion of Schedule 2 development will require an assessment. While it is not possible to formulate criteria or thresholds which will provide a universal test of whether or not an assessment is required, it is possible to offer a broad indication of the type or scale of development which is likely to require an assessment...To aid local planning authorities to determine whether a project is likely to have significant environmental effects, a set of indicative thresholds and criteria have been produced."

- 4.8 The PPG continues by stating '...it should not be presumed that developments above the indicative thresholds should always be subject to assessment, or those falling below these thresholds could never give rise to significant effects, especially where the development is in an environmentally sensitive location. Each development will need to be considered on its merits."
- 4.9 This screening assessment has been prepared to indicate whether the Proposed Development would be likely to result in significant environmental effects. In order to achieve this, Schedule 3 of the EIA Regulations and the PPG need to be taken into account. Information on these is set out below.
- 4.10 Sensitive areas are defined in the EIA regulations as:
 - Sites of Special Scientific Interest and European Sites;
 - National Parks, the Broads, and Areas of Outstanding Natural Beauty; and
 - World Heritage Sites and Scheduled Monuments.
- 4.11 In certain cases, local designations which are not included in the definition of sensitive areas, but which are nonetheless environmentally sensitive, may also be relevant in determining whether an assessment is required. Furthermore, in considering the sensitivity of a particular location, regard should also be had to whether any national or internationally agreed environmental standards (e.g. air quality) are already being approached or exceeded.

Schedule 3 Criteria

- 4.12 Regulation 5 of the EIA Regulations states that when determining whether a Schedule 2 project is EIA development, the relevant local planning authority must take into account in making that decision:
 - (a) any information provided by the applicant;

(b) the results of any relevant EU environmental assessment which are reasonably available to the relevant planning authority; and

(c) such of the selection criteria set out in Schedule 3 of the EIA Regulations as are relevant to the development. The three broad selection criteria included at Schedule 3 that should be considered are: 1. Characteristics of the development; 2. Location of the development; 3. Types and characteristics of the potential impact

- 4.13 We have considered the Proposed Development against these below, having regard to the characteristics of the potential impacts.
- 4.14 The characteristics of the development much be considered with particular regard to:
 - The size and design of the whole development;
 - cumulation with other existing and/or approved development;
 - The use of natural resources, in particular land, soil, water and biodiversity;

- The production of waste;
- Pollution and nuisances;
- The risk of major accidents and/or disasters relevant to the development concerned, including those caused by climate change, in accordance with scientific knowledge;
- Risks to human health (for example, due to water contamination or air pollution).

4.15 Location:

- The environmental sensitivity of geographical areas likely to be affected by development must be considered, with particular regard, to:
 - (a) the existing and approved land use;
 - (b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;
 - (c) the absorption capacity of the natural environment, paying particular attention to the following areas—
 - (i) wetlands, riparian areas, river mouths;
 - (ii) coastal zones and the marine environment;
 - (iii) mountain and forest areas;
 - (iv) nature reserves and parks;
 - (v) European sites and other areas classified or protected under national legislation;
 - (vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;
 - (vii) densely populated areas;
 - (viii) landscapes and sites of historical, cultural or archaeological significance.
- 4.16 Potential Impact:
 - (a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);
 - (b) the nature of the impact;
 - (c) the transboundary nature of the impact;
 - (d) the intensity and complexity of the impact;
 - (e) the probability of the impact;
 - (f) the expected onset, duration, frequency and reversibility of the impact;

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- (g) the cumulation of the impact with the impact of other existing and/or approved development;
- (h) the possibility of effectively reducing the impact.

Consideration of Cumulative Effects

4.17 PPG (ID: 4-024-20170728) states:

Each application (or request for a screening opinion) should be considered on its own merits. There are occasions, however, when other existing or approved development may be relevant in determining whether significant effects are likely as a consequence of a proposed development. The local planning authorities should always have regard to the possible cumulative effects arising from any existing or approved development.

4.18 In addition the PPG (ID: 4-025-20170728) states:

An application should not be considered in isolation if, in reality, it is an integral part of a more substantial development (Judgment in the case of R v Swale BC ex parte RSPB [1991] 1PLR 6). In such cases, the need for Environmental Impact Assessment must be considered in the context of the whole development. In other cases, it is appropriate to establish whether each of the proposed developments could proceed independently (R (Candlish) v Hastings Borough Council [2005] All ER (D) 178 (Jul); Baker v Bath & North East Somerset Council [2009] All ER (D) 169 (Jul)).

- 4.19 Cumulative impacts are also considered in the table below (see Page 21).
- 4.20 Potential cumulative impact has been assessed in relation to the Pelham BESS (Uttlesford planning permission ref. UTT/16/2316/FUL), which was completed in 2019 and is now operational so forms part of the baseline.
- 4.21 It is also noted that there is a further BESS proposed at Crabbs Green (EHDC application ref. 3/22/0806/FUL / Uttlesford ref. UTT/22/1203/FUL (only the access is within Uttlesford), for which planning permission has not yet been granted.
- 4.22 Separate requests for an EIA Screening Opinion (EHDC ref. S/23/1248/SCREEN / Uttlesford ref. UTT/23/1599/SCO) were submitted in relation to the latter. Having noted the proposed Green's Farm BESS proposal, both East Herts and Uttlesford adopted a Screening Opinion that an EIA was not required.
- 4.23 In addition, a 49.99MW solar farm at Berden Hall Farm in Uttlesford District was granted planning permission by the Planning Inspectorate in May 2023 (ref. S62A/22/0006), but this permission was then the subject of a successful legal challenge and is currently being redetermined.

Checklist

4.24 The following Environmental Impact Assessment screening checklist is to aid the Council and ensure that the relevant issues are considered and to provide a clear audit trail, as suggested by the PPG.

5. Consideration of the Proposed Development

Application Thresholds								
i. Does the Proposed development fall within Schedule 1 (Y/N)?	Ν							
ii. If yes, what is the applicable description?	n/a							
iii. Does the Proposed development fall within Schedule 2 (Y/N)?	Y							
iv. If yes, what is the applicable description?	(a) Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1).							
 v. Is any part of the Proposed development to be carried out in a defined Sensitive Area (see Regulation 2(1)) 	Ν							
vi. What is the applicable threshold/criteria in Schedule 2?	the area of the development exceeds 0.5ha.							
vii. Does the Proposed development meet/exceed the applicable threshold (Y/N)?	Y							
If yes to (v) or (vii) the proposed development should be considered against the Schedule 3								

If yes to (v) or (vii) the proposed development should be considered against the Schedule 3 criteria.

Possible effects on the environment

The following information has been prepared with reference to the selection criteria for screening Schedule 2 development, provided in Schedule 3 of the EIA Regulations:

- 1. Characteristics of development (a) (g)
- 2. Location of development (a) (c)
- 3. Characteristics of the potential impact (a) (h)

Features of the proposed development and any measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment have been identified as per the PPG guidance at Paragraph 023 of the Environmental Impact Assessment chapter (ID 4-023-20170728).

A Screening Criteria Question	B R and e (Yes	esponse to the Screening Criteria question explanation of reasons / No or N/A)	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
	Briefl know site(s	y explain reasons and, if applicable and/or if n, include name of feature(s) and proximity to s).	ble and/or if d proximity to d proximity to ble and/or if d proximity to ble and/or if d proximity to ble and/or if d proximity to ble and/or if d proximity to ble and population size affected), nature, intensity and complexity, probability, expected onset, duration frequency and reversibility of the impact and the possibility to effectively reduce the impact? If the finding of no significant effect is reliant on specific features or measures of the project envisaged to avoid, or prevent what might otherw have been, significant adverse effects on the environment these should be identified in bole		
Natural Resources					
Will construction, operation or decommissioning of the project involve actions which will cause physical changes in the topography of the area?	No	A detailed site selection process was undertaken to establish a suitable site for the BESS and the site's levels formed part of that process. A relatively flat surface was required to install the facility and the associated infrastructure. Site ground levels fall modestly towards the south east (from circa. 120.93 AOD in the north west to 119.28m AOD in the south east, which has determined the location of a proposed SuDS feature (a detention basin). As such, the development of this detention basis will result in some minor alterations to topography but only to an isolated subsection of the application site and would not result in any	No	There will be minor physical changes made to the topography of the area as a result of the creation of drainage and detention basin and the two accesses, however these would be minimal and not significant.	

A Screening Criteria Question		B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)	
		perceived physical changes to the topography of the area.			
Will construction or operation of the project use natural resources above or below ground such as land, soil, water, materials / minerals or energy which are non-renewable or in short supply?	Yes	The premise of the BESS is to provide a 'balancing service' to the Grid, helping to regulate peaks and troughs in demand, which may not always coincide with the peaks and troughs in supply. The principal role of a BESS is thus to contribute towards ensuring that there is a reliable and constant supply of electricity across the transmission network. A BESS both exports and imports energy from / to the grid and during that process, transmission losses occur during both phases. As such, some loss in energy is inevitable. However, the extent of any loss is significantly affected by the distance between the Grid and the BESS and as such, the site selection process has taken care to ensure a site as close as possible to the Grid. This approach minimises any potential loss of energy and ensures that the benefits to the reliability of the Grid's supply, significantly outweigh any modest loss of energy.	No	Any resulting loss of energy through the transmission between the Grid and the BESS, is considered minimal and not deemed significant.	

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A) C Is a Significant Effect L (Yes / No and explanation of		s a Significant Effect Likely? / No and explanation of reasons)	
Are there any areas on / around the location which contain important, high quality or scarce resources which could be affected by the project, e.g. forestry, agriculture, water/coastal, fisheries, minerals?	Yes	Maps ² published by Natural England show most of the Application Site as being Grade 2 agricultural land., which falls within the definition of 'best and most versatile' agricultural land. Much of the surrounding area is also shown as Grade 2, with some areas of Grade 3 (likely Grade 3a and thus also BMV), in valleys.	No	By definition, Grade 2 agricultural land can be considered 'high quality'. However, the proposed loss of 1.42 ha is not considered significant in the wider context. Furthermore, the operational lifespan of the proposed development is 40 years after which it would be returned to its former agricultural use, in accordance with a Site Decommissioning and Restoration Strategy to be secured by a planning condition. As such, the proposals merely result in a modest and temporary loss of BMV agricultural land as opposed to a permanent loss. Such a circumstance is not considered likely to result in a significant effect.
Waste				
Will the project produce solid wastes during construction or operation or decommissioning?	Yes	No waste would result from the operation of the development. No notable solid wastes would result during the construction stage, beyond soil generated by the creation of the detention based and potentially packaging as equipment is delivered to site. However, it is	No	A significant effect is not considered likely. Solid Wastes associated with a development of this nature are considered particularly negligible during the construction and operational stages. At the time of decommissioning, all the equipment would evidently need to be decommissioned and

² The maps published by Natural England is intended for strategic uses only. Natural England advise that the maps are not sufficiently accurate for use in assessment of individual fields or sites and any enlargement could be misleading.

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
		intended that soil generated would be spread across the remainder of the site and not require removal from the site. Any such packaging would be removed from site and taken to an appropriate waste and recycling centre. The proposed operational access would be constructed of crushed / compacted stone and would be removed at the time of decommissioning, along with all other material and equipment forming part of the BESS facility such that the Application Site would revert back to agricultural use, in accordance with a Site Decommissioning and Restoration Strategy to be secured by a planning condition. At the time of decommissioning, focus will be placed on the sequential principle to reduce, reuse and recycle. The proposed temporary construction access track would also be constructed of crushed / compacted stone. This would be removed on completion of construction.		removed from site. However, the principles of reduce, reuse and recycle would apply and the materials used in a number of the structures (such as steel and GRP) do lend themselves to recycling principles should no further use exist in their current form. As noted, the temporary construction access track would be removed on completion of construction. Minimising general waste during construction would be addressed through the CEMP to be secured by Condition. Removal of all other equipment would follow decommissioning and be addressed through a Site decommissioning and Restoration Strategy to be secured by condition. Batteries would be recycled in accordance with relevant regulations.	
Pollution and Nuisances					
Will the project release pollutants or any hazardous, toxic or noxious substances to air?	Yes	The proposed development seeks to store energy from the grid and transfer it back to the Grid, depending on the peaks and	No	Any dust or vehicle emissions during construction will be short-term and temporary, and will be low magnitude and negligible	

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
		troughs in supply and demand. This process is not associated with any pollutants. There are no emissions arising from the operation of the BESS. Measures will be put in place to ensure that in the highly unlikely event of a fire incident that any contaminated fire water would be captured and safely disposed of to prevent pollution to water. Tests from other fires have shown a low toxicity to any smoke plumes.		significance. Construction impacts will be controlled / mitigated through standard techniques to be set out in a CEMP and secured by planning condition. In the highly unlikely event of a fire incident, available evidence indicates plumes to be associated with negligible toxic gases and suggests that in rural locations such as Stocking Pelham it can be preferable to let a fire run its course and burn out to minimise the risk of HF acid. However, in any event, available evidence has found that the lime gravel used as the base of the BESS acts to neutralise any resulting acidity. Further detail is provided within Annex A Row 8 of the OBMSP. In light of this information a significant effect is not deemed likely.	
Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Yes	 The project will include noise generating equipment including: A 132kv transformer with a sound power level of 78dB Lw,A; 33kv transformers with a sound power level of 48dB Lw,A; PCS units with a sound pressure level of less than 76dBA at 1m above ground; the main noise source emanating from the louvers of the PCS units that are located on two of the facades; and 	No	See also Appendix 3 to this request: 'Proposed BESS Site, Stocking Pelham – EIA Screening Input for Noise' (Professional Consult, 27/02/24) (bound separately). The equipment that comprises the proposed BESS facility is not located in close proximity to any residential receptors, the nearest being 250m to the south. A detailed Noise Impact Assessment (NIA) has already been conducted and has concluded that, overall, with the proposed mitigation	

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
		 Battery Units with a sound pressure Level of less than 75dBA at 1m above ground; the maximum noise emitting component being on the left side of each battery, and the main noise source being the cooling HVAC unit. The equipment can be operational at any time of day. There will be noise generation during construction, derived from mechanical equipment on site, as well as HGV movements. It is anticipated that the project would result in between 3 and 20 weekly HGV deliveries across the 42 week construction period. Any noise impact would be short term, intermittent and temporary that can be controlled through best practice mitigation measures. No Pilling is expected to take place during the construction phase. Proposed construction hours will be restricted to within 09:00-15:00 Mondays to Fridays and 10:00-12:00 on Saturdays with no construction or deliveries outside of these hours, nor on bank holidays. Use of lighting during construction will be limited to within those hours. 		measures in place predicted noise levels will be sufficiently low that they will comply with the 'No Observed Effect Level' set out in Planning Practice Guidance. In light of this context and available information, a significant effect is not considered likely. Any impacts from the construction access will be short-term, intermittent and temporary and will be controlled / mitigated through a CTMP secured by condition such that impacts will not be significant.	
Will the project lead to risks of contamination of land or water from releases of pollutants	Yes	No pollutants are associated with the project once operational.	No	Assuming best practice measures are secured (a Construction Environmental Management	

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)	
onto the ground or into surface waters, groundwater, coastal waters or the sea?		There is minimal risk associated with any petrol or diesel used for the machinery during the construction and decommissioning phases.		Plan, any potential risk from fuel leaks are considered negligible and not likely to be significant.
Are there any areas on or around the location which are already subject to pollution or environmental damage, e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	No	There is no indication of any areas on or around the Application Site that are already subject to pollution or environmental damage.	n/a	n/a
Population and Human Health				
Will there be any risk of major accidents (including those caused by climate change, in accordance with scientific knowledge) during construction, operation or decommissioning?	Yes	Given the nature of the project, there is a risk of equipment fault or failure. At the time of construction and decommissioning, the high voltages involved will require operatives to have the necessary expertise and training to avoid risk of any major accidents.	No	It is commonplace for projects of this nature to incorporate a battery management system, which avoids battery cells becoming overloaded and protects the cells from deep discharge and over-voltage. The Applicant has commissioned an 'Outline Battery Safety Management Plan' ('OBSMP') (February 2024). The OBSMP has been prepared following consultations with Hertfordshire Fire and Rescue Service and concludes that with the recommended mitigations and management arrangements in place the risk posed by the BESS is acceptable and within the bounds required by the Health and Safety Executive ('HSE'). It is proposed that a Detailed Battery Management Safety Plan

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)	
				would be prepared prior to the first operation and secured by planning condition. With such measures in place, it is not considered likely that there would be a significant effect. Furthermore, appropriate skills and trained operatives working on site during construction and decommissioning with all appropriate PPE and health and safety strategies avoid a likely significant effect at all stages of the project.
Will the project present a risk to the population (having regard to population density) and their human health during construction, operation or decommissioning? (for example due to water contamination or air pollution)	No	There are limited residential receptors within proximity of the project with the nearest residential property being approximately 250m to the south of the proposed BESS facility.	n/a	n/a
Water Resources				
Are there any water resources including surface waters, e.g. rivers, lakes/ponds, coastal or underground waters on or around the location which could be affected by the project, particularly in terms of their volume and flood risk?	Yes	The Site is situated within the Lee Upper Surface Water Operational Catchment. Drainage ditches are located on the northern, western and southern site boundaries. A pond is then located within the wooded area to the west of the site boundary and another circa. 140m to the east. In terms of groundwater vulnerability, the site is within an area classified as 'Secondary Undifferentiated' with respect to the	No	The soil typology of the area has very low permeability and consequently limited infiltration. As such, the likelihood of any impacts on groundwater are considered particularly low in this context. Furthermore, sustainable drainage measures are secured as part of the project, with the use of a detention basin, to ensure existing greenfield runoff rates are achieved to the

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is (Yes	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)	
		superficial geology. The underlying bedrock is shown as a 'Principal Aquifer'. The Site is located within a Groundwater Source Protection Zone – Zone III, Total Catchment. For the nearby BGS borehole record, the hole remained dry to 3.04m depth. The risk of groundwater flooding occurring is considered to be 'low'.		adjacent ditch network, including betterment to allow for climate change. In light of the above, a significant effect on water resources is not considered likely as a result of this project.	
Biodiversity (Species & Habitats)					
Are there any protected areas which are designated or classified for their terrestrial, avian and marine ecological value, or any non-designated / non-classified areas which are important or sensitive for reasons of their terrestrial, avian and marine ecological value, located on or around the location and which could be affected by the project? (e.g. wetlands, watercourses or other water- bodies, the coastal zone, mountains, forests or woodlands, undesignated nature reserves or parks. (Where designated indicate level of designation (international, national, regional or local)).	Yes	 The designated sites within 2km are summarised as follows: Statutory – National: Hillcollins Pit Site of Special Scientific Interest (SSSI). Non-statutory: three Ancient Woodland Inventory Sites (AWIS), and fourteen Local Wildlife Sites (LWS). The Stocking Pelham Nature Reserve is adjacent to the Site. It is believed to have been established in conjunction with the substation in the 1960s or early-1970s and has non-statutory designation as Stocking Pelham Field Centre Local Wildlife Site. 	No	The proposed construction, operation and decommissioning of the project is not considered to have any notable impacts on the designated sites within proximity. This is particularly due to the nature of the proposals which are not associated with any notable personnel presence. On this basis, the likelihood of a significant effect is deemed low.	
Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, e.g. for breeding, nesting,	Yes	Most species of conservation concern were scoped out of the ecology work undertaken for the project. The exceptions are:	No	Whilst there is potential for protected or important species to be affected by the project, qualified ecologists have reviewed the	

A Screening Criteria Question	B R and ((Yes	esponse to the Screening Criteria question explanation of reasons / No or N/A)	C Is (Yes	s a Significant Effect Likely? / No and explanation of reasons)
foraging, resting, over-wintering, or migration, be affected by the project?		 Foraging bats along the hedgerows and woodland edge areas as a small assemblage; Nesting birds; Hedgehogs; Widespread moths. The potential impacts on the above are primarily related to potential impacts on the boundary hedgerows and field margins. However, the more open agricultural area could also have impact on nesting birds, such as skylark, yellowhammer and grey partridge. As such the projects potential impacts on the abovementioned species have been assessed by qualified ecologists who conclude that the proposals result in an overall net biodiversity gain led by the proposed landscaping enhancements. This includes additional hedgerows, scrub and wildflower sward. Further mitigation is also proposed by ensuring construction avoids the nesting bird season or ensures predevelopment site inspections are conducted. 		proposed project and confirm that any such impacts would be low and can be suitably mitigated (such as nesting bird inspections) and the resulting landscaping proposals of the project result in a net gain to biodiversity. In this context it is deemed unlikely that a significant effect would result.
Landscape and Visual				
Are there any areas or features on or around the location which are protected for their	No	There are no designated or non-designated areas of high landscape or scenic value	n/a	

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)	
landscape and scenic value, and/or any non- designated / non-classified areas or features of high landscape or scenic value on or around the location which could be affected by the project? ³ Where designated indicate level of designation (international, national, regional or local).	within proximity of the project. The Site lies within the Anstey and Pelhams Plateau where mature hedgerows enclose medium scale arable fields dividing up the gently undulating landscape. However, the presence of infrastructure including the existing substation and the associated overhead wires and pylons that converge here, are intrusive and prominent features that introduce an industrial element locally, imparting some influence on the local landscape character and the susceptibility of this location.		
Is the project in a location where it is likely to be highly visible to many people? (If so, from where, what direction, and what distance?)	No The project is located in the countryside with no adopted roads or settlements in close proximity. The site is also within the setting of the existing substation. Whilst Public Rights of Way bound the site to the north and west, these are not significantly well used routes so as to consider the project will be highly visible to many people.	 n/a As set out in the revised (February 2024) Landscape and Visual Impact Assessment ('LVIA'), an approach to mitigating the impact of the Proposed Development has been adopted that is based on the recommendations in the Landscape Character Assessment ('LCA'). This will enable the aims of the LCA to be delivered, provide new features that fit the key characteristics of the character area, ensure that the potential adverse landscape and visual effects of the Proposed 	

³ See question 8.1 for consideration of impacts on heritage designations and receptors, including on views to, within and from designated areas.

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
		 Development will be suitably mitigated, and result in the Proposed Development being integrated into the surrounding landscape. As the Proposed Development is only temporary (it is proposed for a period of 40 years), once the proposed BESS ceases to operate the land would be restored to its current use, but the established landscape features proposed as part of the Development would be retained, to the benefit of the surrounding landscape. As noted in the revised LVIA, the Proposed Development includes new mixed species native hedgerows with trees, a 5m-wide conservation buffer / wildflower corridor, and two small copses, to not only screen views of the Proposed Development, but to also enhance biodiversity and provide an attractive edge to the PRoW. It is anticipated that a grant of planning permission will include a condition requiring the approval and implementation of the submitted detailed planting scheme. Given that the site is not in a highly visible location and the project will be associated with a notable mitigation and enhancement package, a significant effect is not deemed likely. 		

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)	
Cultural Heritage/Archaeology				
Are there any areas or features which are protected for their cultural heritage or archaeological value, or any non-designated / classified areas and/or features of cultural heritage or archaeological importance on or around the location which could be affected by the project (including potential impacts on setting, and views to, from and within)? Where designated indicate level of designation (international, national, regional or local).	Yes	The closest to the Site is the Crabb's Green Conservation Area situated approximately 400m north of the Site, and adjacent to the northern boundary of Stocking Pelham Substation. Those Listed Buildings closest to the site are Greens Farmhouse, East End (National Heritage List for England (NHLE) 1307885) and Tye Cottage (NHLE 1347722), located 270m to the south and 370m to the south- west, respectively. Both buildings are Grade II Listed. To the north of the site, there are three further Grade II listed buildings at Crabb's Green: Crabb's Green Farmhouse (NHLE 1101863) and an associated 17th - century barn (NHLE 1176566; 450m north- east of the site), and 'The Cottage' or 'The Blessings' (NHLE 1101862; 430m north). These latter three buildings are located within the Crabb's Green Conservation Area. All of these historic buildings are well- screened from the site by mature trees and hedges along field boundaries. In the case of Greens Farmhouse, visibility to the north is also blocked by the associated complex of other (undesignated) farm buildings.	No	Assessments already undertaken have found no intervisibility between the project site and the aboveground heritage assets. Views and settings are not impacted. In terms of archaeological interest, there is potential for archaeological finds and artefacts on site. As advised by the Hertfordshire County Council Natural, Historic and Built Environment Advisory Team, suitable mitigation can be secured by way of condition securing further field evaluation in the form of linear trenching. Based on the above and the intended mitigation (which can be secured by a planning condition), the likelihood of significant effects is low.

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)	
		Between the site and the listed buildings at Crabb's Green Farm are extensive areas of planting around the existing substation. As such, there is no intervisibility between the site and any of these built heritage assets. Hertfordshire Historic Environment Record (HHER) records known archaeological sites in the surrounding landscape. In particular, the site is directly adjacent to the remains of a medieval moated site (HHER 4535), the eastern arm of which is still visible and filled with water. The development site is likely to be entirely outside the moat, but it has potential to contain evidence of associated ancillary activity. The countryside in this part of Hertfordshire also has known potential for previously unrecorded archaeological remains of other periods, particularly the Late Iron Age and Romano-British periods.		
Transport and Access				
Are there any routes on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?	Yes	Whilst no adopted highways are within proximity of the project site, Public Rights of Way are located on the northern and western boundaries, as well as within the wider area. These routes will primarily be used for recreation, though given the small scale	No	The likelihood of a significant effect on the usage or enjoyment of the PRoW is considered low. The project is located in the setting of the existing substation and pylon, contributing to an industrialisation in the character of the locality. Given the relatively low footfall usage

A Screening Criteria Question	creening Criteria Question B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is (Yes	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
		nature of the proximate settlements, they are not considered to have significant levels of foot traffic. No diversions or impacts on the specific routes would result from the project. However, the project would be visible from the PRoW.		on the proximate routes and the relatively short extent that adjoins the project site, impacts are deemed low and not likely to be significant. This is further supporting by the proposed landscaping, including new hedgerows that are proposed on the perimeter.		
Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	No	The project site is in a rural locality with no major transport routes in the vicinity. The project must instead focus on securing a suitable construction route on the rural rounds to avoid significant adverse impacts.	n/a	Operational Access Lower Farm Lane is extremely lightly trafficked with vehicle speeds significantly below the speed limit, and operational traffic generated by the Proposed Development would be essentially negligible. Impacts would not therefore be significant. <u>Secondary / Emergency Access</u> The secondary, emergency only, access is proposed to provide a second, alternative point of access to the main part of the Application Site from the public highway in the case of an emergency – i.e. a fire. No physical works are proposed in connection with this part of the Proposed Development; top dressing has separately been approved by the Rights of Way Officer and will be carried out during early 2024. <u>Construction Access</u> Ginns Road is relatively lightly trafficked. The proposed construction access, and routing of		

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
		 construction vehicles to and from the site, has also been the subject of extensive discussions with both Hertfordshire and Essex County Councils (beyond the site traffic would pass through both counties), with the proposals contained in the revised (February 2024) Access Technical Note and Outline Construction Traffic Management Plan reflecting these proposals. As discussed in depth in the revised Access Technical Note (WSP, 23rd February 2024), it is proposed that construction vehicles will access the Application Site via the proposed temporary construction access on Ginns Road, and be reached by two routes depending on the type of vehicle – one extending from the construction access to the north, and the other to the south. The northerly route would be used by HGV construction traffic only (i.e. OGV1s and OGV2s), with the southerly route being used by contractor, staff and visitor vehicles only (i.e. cars and LGVs). In proposing these routes (both of which have been discussed with Hertfordshire and Essex County Councils), it is noted that there are no HGV restrictions on either route, no history of accidents, and traffic data collected demonstrates that the routes are already used by both OVG1s and OVG2s HGVs. 		

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
		 Detailed information has been gathered on the two routes, and although there are some restrictions and constraints, these are not extensive and only cover a small proportion of either route. Based on this information, it is proposed that a comprehensive package of proposed mitigation and management measures will be implemented along each route, and that conditions will be applied as suggested in the revised Technical Note, including a requirement for a final Construction Traffic Management Plan to be submitted and approved prior to commencement of development based on that included in the revised submission. Based on the assessment carried out, discussions with the Councils, and with the proposed mitigation and management measures in place, the proposed temporary construction access and associated routes will be both safe and suitable and impacts will not be significant. Summary In summary, it is considered that the traffic generated by the Proposed Development will not result in any significant environmental effect, during either construction or operational phases. 		

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is (Yes	s a Significant Effect Likely? / No and explanation of reasons)
Land Use				
Are there existing land uses or community facilities on or around the location which could be affected by the project? E.g. housing, densely populated areas, industry / commerce, farm/agricultural holdings, forestry, tourism, mining, quarrying, facilities relating to health, education, places of worship, leisure /sports / recreation.	No	The site is in a rural area with no specific uses in proximity that could be impacted by the project. The main part of the Application Site is not adjacent to, or in close proximity to, any residential property. The closest residential property to the main part of the Application Site (i.e. that part on which there would be noise-generating equipment) is located approximately 250m to the south. The secondary access route would pass through Lower Farm farmyard and close to the farmhouse but would only be used in an emergency. The construction access route to Ginns Road would also pass close to a few residential properties. The Proposed Development would not have any permanent impact on the amenity of any residential property (see comments elsewhere in this request in relation to 'noise'). Whilst there would be some impacts during construction, these can be mitigated and managed in the usual way through a conditional requirement for a Construction Traffic Management Plan and Construction Environmental Management Plan.	n/a	
Are there any plans for future land uses on or	No	The adopted Local Plan and Minerals and	n/a	

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)
around the location which could be affected by the project?	 Waste Plan do not indicate any intended allocations for development within proximity of the project. Furthermore, all pending and recently approved planning applications in proximity would appear residential or agricultural in nature and would not be impacted by the project. Whilst a proposed 49.9MW solar PV application was located to the east of the substation, this was withdrawn in February 2022 and no public information has been found to indicate this project may progress in the future. It is noted that another BESS is proposed to the north of the project site, to the east of Crabbs Lane. This has been submitted to the local planning authority and given application reference 3/22/0806/FUL. The application remains undetermined. However, this application is not affected by the proposed project as both facilities can connect to the Grid and operate effectively in tandem. Potential cumulative effects are addressed within a separate section of this table (see below). 	
Land Stability and Climate		
Is the location susceptible to earthquakes,	No There is no evidence of such issues within	n/a

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)
subsidence, landslides, erosion, or extreme /adverse climatic conditions, e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	the locality of the project or considered likely in the foreseeable future.	
Cumulative Effects		
Could this project together with existing and/or approved development result in cumulation of impacts together during the construction/operation phase?	No No existing or approved development in the locality could be seen to produce cumulative effects with the project. There is an existing BESS to the north of the existing Stocking Pelham substation and circa. 0.5km from the proposed project. However, this is separated by established planting and no intervisibility exists between the two sites. Furthermore, there are no PRoW where both sites can be perceived within a single viewpoint. The potential for cumulative impacts on noise are addressed in more detail within the accompanying technical note on noise, which considers the impact of the proposed project on the existing baseline and concludes no cumulative impacts (see Appendix 3). It is noted that another BESS is proposed to the north but remains undetermined and so is not a committed development. Nevertheless, it is not considered to result in	n/a

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)	C Is a Significant Effect Likely? (Yes / No and explanation of reasons)	
	a cumulative effect in any event. There is no intervisibility between the two project sites and the intended construction routes are standalone. Furthermore, there is Grid capacity for both facilities to operate in tandem and with no impact on one another. A final project that has been considered for potential cumulative impacts is the Berden Hall Solar Farm, although it is not yet a committed development. Following a successful legal challenge, the application will be redetermined. Nevertheless, the proposed solar farm is not considered to have a prominent visual relationship with the project, nor form part of any shared prominent viewpoints. Given the intervening landscape and vegetation, a cumulative impact is not considered to result. In terms of construction traffic, it is noted that of those projects set out above that are not yet constructed (some not yet determined), they all have different grid connection and implementation timescales to the project the subject of this screening request. It is therefore not anticipated that there should be any overlap in the construction period of the projects.		

A Screening Criteria Question	B Response to the Screening Criteria question and explanation of reasons (Yes / No or N/A)		C Is a Significant Effect Likely? (Yes / No and explanation of reasons)		
Transboundary effects					
Is the project likely to lead to transboundary effects? ⁴	Yes	It is crucial to note that there is a fundamental difference between the access required and proposed for 'construction' traffic, and that required and proposed for 'operational' traffic. For the reasons detailed below and discussed previously in this request, only construction traffic is relevant in this regard. It is proposed that all access for construction traffic be taken from Ginns Road, as described in the enclosed revised Outline Construction Traffic Management Plan (CTMP), and revised Transport Technical Note, and as shown on the additional submitted drawings. There is thus the potential for transboundary effects during the construction phase as the northerly construction route crosses into Uttlesford District as it connects to the major transport network.	No	Construction traffic, vehicle flows and routes is assessed in the CTMP. The principle of the proposed access and routes has been discussed in meetings with both Hertfordshire and Essex County Councils and the CTMP and revised Transport Technical Note address the comments received from both. It is expected that a condition will require the submission of a final CTMP (reflecting the Outline CTMP) that will be agreed with stakeholders including the County Council, which will control the impact and effect of construction traffic. As such, although an impact on the local road network is anticipated during this time, it is not likely to be significant.	

⁴ The Regulations require consideration of the transboundary nature of the impact. Due to the England's geographical location the vast majority of TCPA cases are unlikely to result in transboundary impacts.

6. Conclusion

- 6.1 On behalf of Pelham Power Ltd, Savills is writing to request a formal EIA Screening Opinion from EHDC in connection with the proposed development of a BESS facility at Stocking Pelham.
- 6.2 The description of development for the purposes of this screening request is:

"Construction of a 50MW battery energy storage system facility and associated access, landscaping and other infrastructure works."

- 6.3 The above description reflects that given to application reference 3/21/0969/FUL, which was registered by the Local Planning Authority on 5 May 2023 and is awaiting determination. This request for a Screening Opinion relates to the project comprised within that application.
- 6.4 This request for a Screening Opinion is submitted alongside the submission of a comprehensive package of updated and further information in support of that application. The findings of the information submitted as part of that application has informed the preparation of this request, including the likelihood of significant effects on the environment.
- 6.5 The Application Site measures 2.91 ha and comprises predominantly cultivated agricultural land with mature vegetation along three of its boundaries and some screening to the north.
- 6.6 Potential effects that may arise from the project are explored within the Table at Section 5. These include but are not limited to such matters as temporary loss of Grade 2 agricultural land, some energy loss as part of the storage process, elements of solid waste as a result of the construction and decommissioning process, potential effects on greenfield runoff rates, noise and pollutant impacts, potential impacts on archaeological remains, risk of accidents, potential effects on the views from the PRoW and potential effects on nesting birds, foraging bats, hedgehogs and widespread moths.
- 6.7 There are few sensitive receptors that could be affected by the project. However, these would include users of the PRoW adjacent and in close proximity to the site, road users during the construction stage, as well as protected species that may reside or use the site, whether for foraging, nesting or general habitat.
- 6.8 Given that the project has already progressed to a planning application (reference 3/21/0969/FUL), detailed assessment on the potential effects and impacts to sensitive receptors have already been assessed as part of the application process. This has confirmed how inherent design mitigation measures have been utilised to minimise any impacts on sensitive receptors as well as reduce the likelihood of potential effects. Such mitigation measures include but are not limited to landscaping enhancements, controlling construction traffic, noise, and fire risk, together with minimising visual and biodiversity impacts (with a net gain in biodiversity achieved), as well as further archaeological field evaluation being proposed and intended to be secured by way of condition, a sustainable drainage scheme and an intended condition to secure the reinstatement of the site to agricultural use on the cessation of the BESS facility. Further detail is provided within the Table at Section 5 or review of the supporting material provided as part of application 3/21/0969/FUL. In light of the evidence supplied, it is not considered likely that any of the potential effects are likely to be significant so as to warrant an Environmental Statement to be prepared under the EIA Regulations.
- 6.9 It should be noted that Regulation 6(6) of the EIA Regulations advises that a local planning authority shall adopt a screening opinion within three weeks of the date of receipt of a request,

and Regulation 5(5)(a) requires the main reasons for its conclusion to be identified, with reference to the relevant criteria listed in Schedule 3. It is requested that East Hertfordshire District Council review this screening request in line with the abovementioned Regulations.

Proposed Battery Energy Storage System at Stocking Pelham EIA Screening Request

Appendix 1: Site Plan

Appendix 2: Full Description Of Development

NB The following replicates Section 5 of the latest version of the Planning, Design & Access Statement.

1.1. Description of the Proposed Development

The application seeks full planning permission for the:

"Construction of a 50MW battery energy storage system facility and associated access, landscaping and other infrastructure works."

In summary, the Proposed Development will comprise the following components, each of which are then described in further detail below:

- A Main Compound incorporating:
 - the BESS facility and associated ancillary infrastructure;
 - a Customer⁵ High Voltage Infrastructure Compound ('CHVIC') *;
 - a Distribution Network Operator⁶ ('DNO') Infrastructure Compound ('DNOIC') *; and
 - a DNO Switchroom and Metering Cabinet;
- A surface water detention basin;
- Water tanks;
- Landscaping around the perimeter of the Application Site (within the application boundary but outside the Main Compound);
- A crushed / compacted stone operational access track through the field to the east of Green's Farm, connecting the main compound to the public highway to the south;
- A secondary, emergency, access route through Green's Farm, connecting to the public highway to the south;
- A construction access connecting to the public highway to the west of the site; and
- The cable connecting the BESS to the nearby substation.

1.2. Main Compound

The Main Compound will include the following:

- The BESS facility and associated ancillary infrastructure includes:
 - 28 x Battery Racks, arranged in pairs of pairs;

⁵ The 'Customer' / 'Client' is Pelham Power Ltd.

⁶ The DNO will be UKPN.

- 14 x PCS Inverter Unit Skids, arranged in pairs;
- 7 x 33 / 0.4 kV Transformers;
- 1 x Auxiliary 33 / 0.4kV Transformer;
- 6 x Water Tanks;
- 1 x Client Control Room;
- 1 x Customer Storage Room; and
- 1 x DNO Switchroom and Metering Cabinet
- The CHVIC would be located within the centre of the northern part of the main compound, adjacent and immediately to the east of the DNOIC, and would include:
 - 1 x 132kV Disconnector;
 - 3 x 132kV High Accuracy Metering Units;
 - 1 x 132 / 33 kV Power Transformer;
 - 1 x Earthing Transformer; and
 - 1 x Neutral Earthing Resistor.
- The DNOIC would be located within the north-west part of the main compound and would include:
 - 1 x 132kV Circuit Breaker; and
 - 1 x 132kV Disconnector.
- Permeable hardstanding consisting of 20mm clean stone; running north-south through the centre of the Compound there will be a driveway surfaced in gravel.
- Surface water drainage provided by French drains alongside the gravel driveway through the centre of the Compound, leading to the detention basin located to the south of the Compound.
- 3.50 m high timber acoustic fencing around that part of the Main Compound that includes the Battery Racks, and in-between some of the Battery Racks; along the southern boundary the fence will incorporate 4.00 m wide (in total) double-leafed access gates across the proposed access track.
- 2.40 m high steel weldmesh security fencing around the northern part of the Main Compound and Water Tanks; to the south of the Water Tanks there would be 2.40m wide (in total) double-leafed access gate, and to the north there is an emergency pedestrian gate.
- 2.40 m high steel palisade fencing around the CHVIC and DNOIC.

All components will be installed on pre-fabricated concrete strip foundations / plinths / bunded

pads as indicated on individual drawings, which will rise approximately 300 mm above surrounding ground level (except where otherwise specified). All other dimensions stated exclude this height unless otherwise stated (e.g. 'height above surrounding ground level').

The BESS Facility

Battery Racks

The primary component of the BESS facility will be the 28 Battery Racks. These will be arranged in pairs of pairs, in two rows running north-south, to either side of the gravel driveway.

Each of the Battery Racks will be 7.81 m by 1.72 m and 2.645 m in height, and will be mounted on 5 concrete strip foundations.

PCS Inverter Unit Skids

Associated with each pair of two Battery Racks will be a PCS Inverter Unit, each mounted on a 'skid' constructed of galvanised steel.

Each of the PCS Inverter Units will be 3.00 m by 2.017 m and 2.283 m in height. Combined, the skid and PCS Units will be 2.330 m in height. The skid will be mounted on 3 concrete strip foundations.

33 / 0.4 kV Transformers

Associated with each pair of PCS Inverter Units will be a 33 / 0.4 kV Transformer.

Each Transformer will measure 3.37 m by 2.40 m and 3.25 m in height. The Transformers will be mounted on steel supports on a concrete bunded pad 4.60 m long by 3.48 m wide. Together the steel supports and pad will be approximately 685 mm high.

Auxiliary 33 / 0.4kV Transformer;

The Auxiliary Transformer will be located to the north of the western row of Battery Racks, to the east of the Client Control Room. It will measure 3.22 m by 1.83 m and 2.34 m in height. Similarly to the 7 other 33 / 0/4 kV Transformers (see above), it will be mounted on a concrete bunded pad.

Client Control Room

The Client Control Room will also be located to the north of the western row of Battery Racks, to the west of the Auxiliary Transformer (see above). It will measure 12.19 m by 2.44 m.

Customer Storage Room

The Customer Storage Room will also be located to north of the eastern row of Battery Racks. It will measure 12.19 m by 2.44 m.

The Customer High Voltage Infrastructure Compound

The Customer High Voltage Infrastructure Compound ('CHVIC') will be located within the

centre of the northern part of the main compound, adjacent and immediately to the east of the DNOIC (see below).

The CHVIC will be enclosed around its perimeter by a 2.50 m high steel palisade security fence. Along the southern boundary of the CHVIC, the fence will incorporate 4.80 m wide double-leafed access gates.

The CHVIC will be surfaced with permeable hardstanding consisting of 20mm clean stone.

All components will be installed on pre-fabricated concrete strip foundations / plinths / bunded pads, which will rise approximately 300 mm above ground level.

132kV Disconnector

The Disconnector will be located within the western part of the CHVIC, and will be 5.94 m in height.

• 3 x 132kV High Accuracy Metering Units

The High Accuracy Metering ('HAM') Units will be located within the centre of the CHVIC, between the Disconnector (see above) (to the west) and the Power Transformer (see below) (to the east). The HAM Units will be 6.02 m in height.

 132 /33 kV Power Transformer, 33kV Earthing Transformer and 33kV Neutral Earthing Resistor.

These three components will be grouped together within the eastern part of the CHVIC, on a concrete bunded pad. The Power Transformer will be located to the north of the Earthing Transformer (to the south-east) and the Neutral Earthing Resistor ('NER') (to the south-west). The Power Transformer will measure 6.84 (+/- 0.3 m) by 4.58 m (+/- 0.2 m) and be 5.33 m in height (+/- 0.2 m).

The Distribution Network Operator Infrastructure Compound

The Distribution Network Operator Infrastructure Compound ('DNOIC') will be located within the north-west part of the main compound, adjacent and immediately to the west of the CHVIC (see above).

The DNOIC will be enclosed around its perimeter by a 2.50 m high steel palisade security fence. Along the southern boundary of the DNOIC, the fence will incorporate 4.80 m wide double-leafed access gates.

The DNOIC will be surfaced with permeable hardstanding consisting of 20mm clean stone.

All components will be installed on pre-fabricated concrete strip foundations / plinths / bunded pads, which will rise approximately 300 mm above ground level.

132kV Circuit Breaker

The Circuit Breaker will be located within the western part of the DNOIC, and will be 5.24 m in height.

132kV Disconnector

The 132kV Disconnector will be located within the eastern part of the DNOIC, and will be 5.94 m in height.

DNO Switchroom and Metering Cabinet

The DNO Switchroom will be located to the east of the CHVIC and DNOIC, with the Metering Cabinet adjacent to the southern elevation of the Switchroom, to the left of the doors to the Switchroom. The Switchroom will measure 4.44 m by 5.03 m and 3.72 m in height. The Switchroom will be constructed of Glass(fibre) Reinforced Plastic ('GRP') over a steel frame. The Metering Cabinet will be constructed of GRP.

1.3. Detention Basin

The submitted Flood Risk Assessment / Surface Water Drainage Strategy proposes the use of a Sustainable Drainage System (SuDS). This includes French drains alongside the gravel driveway through the centre of the Main Compound, which will collect and transfer surface water run-off to a detention basin in the southern part of the Application Site (to the south of the Main Compound), where it will be stored and then discharged at a controlled rate into existing ditches off-site.

1.4. Landscaping

The revised LVIA proposes the implementation of a landscape scheme that includes the following:

- A new mixed species native hedgerow with trees along the western boundary, adjacent to the existing access track / PRoW, to screen views of the Proposed Development and the existing substation.
- A 5m-wide conservation buffer / wildflower corridor with trees along the western and southern boundaries of the Application Site, to enhance biodiversity and provide an attractive edge to the PRoW.
- A new mixed species native hedgerow and small woody copse along the northern edge of the Application Site to add to the woody structure of the landscape backdrop on the plateau and soften views of the Proposed Development and existing electricity infrastructure from the west and north-west.
- A small woody copse in the south-west corner of the Application Site to add to the woody structure of the landscape backdrop on the plateau and soften views of the Proposed Development and existing electricity infrastructure when approaching the Site from Green's Farm along the PRoW.
- A new hedgerow along the eastern boundary of the Application Site to provide additional biodiversity benefits and ecological links;
- Marginal planting around the detention basin.
- Elsewhere, mown grass and proposed wildflower mixture.

1.5. Operational Access & Access Track

Operational access to the Proposed Development will be taken from the public highway (Lower Farm Lane) to the south of the of the Application Site. The operational access track

will be 4m in width other than for two passing places, and for a short stretch at its southern end where it joins the public highway, where it will be approximately 6m in width.

The operational access track will be constructed using a crushed / compacted stone to retain a rural appearance.

1.6. Secondary / Emergency Access

A secondary, emergency only, access is proposed also connecting the main part of the Application Site to the public highway (Lower Farm Lane) to the south. This proposed secondary access is for emergency use only, and has been included following updated national planning, and safety, guidance.

1.7. Construction Access & Track

Construction access to the Proposed Development will be taken from the public highway (Ginns Road) to the west of the main part of the Application Site. The construction access track will be generally 4m in width other than for two passing places and where tracking requires, plus for a short stretch at its western end prior to it joining the public highway, where it will be approximately 6m in width and sufficient in length to provide a passing and holding area for construction vehicles to facilitate appropriate traffic management.

The construction access track will be constructed using a crushed / compacted stone to retain a rural appearance.

1.8. Delivery

The construction access from the public highway (Ginns Road) will be constructed first, followed by the operational access track, then the main compound, and then the cable connecting to the substation.

It is projected that the Proposed Development would be completed within nine to ten months of construction commencing.

1.9. Operation & Maintenance

Once operational, the Proposed Development will be unmanned and operated remotely. Visits will be limited to those required for occasional maintenance purposes. Traffic movements will be limited to occasional visits for maintenance purposes.

The operator of the BESS will be responsible for the maintenance of the Proposed Development, including the French drains and the detention basin and the proposed landscaping and biodiversity enhancements. It is anticipated that a condition will be applied to the grant of planning permission requiring the preparation of a 'SuDS Management and Maintenance Plan' that can be prepared alongside the post-planning detailed technical design of the drainage system. It is also anticipated that a condition will be applied requiring the preparation and implementation of a Landscape Management and Maintenance Plan which is based on the submitted detailed planting plans.

1.10. Lifetime & Decommissioning

It is intended that the Proposed Development be temporary and that it would operate for a period of 40 years. Following the cessation of energy operations, the proposed infrastructure would be removed and the Application Site restored to its current agricultural use.

Appendix 3: Proposed BESS Site, Stocking Pelham – EIA Screening Input for Noise' (Professional Consult, 27/02/24)

See bound separately.