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SPALDING ENERGY BESS ENVIRONMENTAL AND TECHNICAL REPORT - ADDENDUM

SECTION 73 APPLICATION

RAMBOLL Bright ideas. Sustainable change.

Environmental and Technical Report - Addendum

Section 73 Application

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Executive Summary

This Environmental and Technical Report Addendum for the Spalding BESS project has been produced following design changes that reduce the development footprint while maintaining capacity. These amendments are seeking approval under a Town and Country Planning Act, Section 73 Application . The report outlines amendments to the site layout and assesses environmental, ecological, transport, ground conditions, landscape, noise, and flood risk impacts in light of the revised design.

- **Project background and purpose:** The Spalding Energy Park Limited received planning consent in June 2023 for a 550 MW Battery Energy Storage System (BESS). The applicant proposes variations to conditions to reduce the developable footprint by relocating infrastructure to the southern site area, releasing approximately 2.8 hectares of land in the north.

- **Site layout and components:** The BESS will continue to include battery containers, control and protection systems, power conversion systems, temperature regulation, an electrical banking station, welfare facilities, cabling, security, landscaping, site preparation, and drainage, connected to the National Grid 400 kV Spalding North Substation. Construction may occur in one or multiple phases, with an assumed 24-month period for assessment.

- **Environmental Impact Assessment status:** The BESS is classified as Schedule 2 development but is not likely to have significant environmental effects, thus not requiring an Environmental Impact Assessment (EIA). The original outline Construction Environmental Management Plan (CEMP) remains applicable with minor clarifications, and detailed CEMP development by the contractor is committed.

- **Ecological assessment findings:** A 2026 survey confirmed the site remains of low ecological value with habitats dominated by ruderal grassland and no significant protected species presence. Mitigation measures include vegetation clearance outside bird nesting seasons, maintaining low grass height, and preserving the southern bund for reptiles with a buffer zone mean that the original ecological conclusions remain valid.

- **Transport assessment update:** Construction traffic estimates remain robust and unchanged despite the reduced site footprint. Updated baseline traffic data shows increased background flows, reducing the relative impact of construction traffic. The original transport and highways conclusions remain valid.

- **Ground conditions assessment:** The preliminary environmental risk assessment from 2021 remains applicable, with no significant changes in site conditions or contamination risks. Historical site use and existing nearby infrastructure pose limited contamination concerns. Potential ground gas generation from made ground is unchanged by the amendments.

- **Landscape and visual impact:** The revised layout improves local screening by concentrating infrastructure in a more sheltered southern area, reducing potential visual exposure without altering maximum heights or nearby receptor sensitivities. The landscape context remains industrial and fenland, and the redesign is considered neutral to beneficial for visual amenity.

- **Noise:** The updated Noise Impact Assessment (NIA) reflects the changes to operational noise conditions for the Proposed Development. The conclusions of the original NIA remain materially unchanged, and the updated Proposed Development is not anticipated to result in significant adverse operational noise effects on the surrounding environment.

- **Flood risk assessments:** An updated Flood Risk Assessment reflects current data and revised design, confirming no material changes to the previous flood risk outcomes.

The report concludes there to be no material changes to the previous assessments undertaken in support of the Proposed Development as a result of the proposed amendments.

1. Introduction

Spalding Energy Park Limited ('the Applicant') received planning consent on 14 June 2023 (Planning Reference: H16-1327-2) for the construction and operation of an unmanned Battery Energy Storage System ('BESS') with a power capacity of up to 550 megawatt ('MW') with associated works including control and protection systems, power conversion systems (and associated transformers), temperature regulation systems, a main step-up transformer(s) and switchgear, welfare facilities, electrical cabling and electrical connection, and other associated works on land at Spalding Power Station West Marsh Road, Spalding ('The Site'). Following detailed design work, the Applicant has determined that the development can be accommodated with a significantly reduced developable footprint. Therefore, the Applicant is seeking to vary condition(s) application under Section 73 of the Town and Country Planning Act 1990 (as amended) to vary conditions 4,5,6 and 7 attached to planning permission H16-1327-21.

An Environmental and Technical Report, with supporting appendices, was submitted as part of the original planning application. This Addendum Report summarises the relevant updates and changes to these assessments resulting from changes to the BESS design.

2. Project Amendment Description

2.1 Overview and matters unchanged

The approved planning application included an appropriate degree of flexibility within the Indicative Site Layout. To support this approach, a parameter envelope was determined based on the required flexibility. Appropriate control is afforded by the parameter plans, in particular, by defining maximum extents (horizontal plane) and heights (vertical plane) of the Electrical Banking Station, and the BESS containers / enclosures, which also act to constrain the overall scale and amount of storage. With the exception of the landscaping zone, which is fixed, the other development zones provide some overlap so if one component is built out to its maximum adjacent development zones would reduce.

The Application was also supported by indicative plans and drawings detailing a potential layout and design for the Proposed Development, for information/illustrative purposes only. These demonstrate how a 550 MW BESS, with subsequent augmentation, could be delivered within the parameters. The assessment of environmental effects in the Environmental and Technical Report is generally based on the parameters as well as associated assumptions identified in the Application; however, where relevant/helpful reference was made to the revised Indicative Scheme.

The Site remains located off West Marsh Road, to the south of the existing InterGen-owned Spalding combined cycle gas turbine generating station, and to the west of the existing InterGen-owned Spalding open cycle gas turbine generating station. The Ordnance Survey (OS) Grid Reference for the centre of the Application Site is approximately 525801, 324553. The site Red Line Boundary is unchanged from the original application.

The Spalding Energy Park BESS will continue to comprise:

- Batteries, housed in containers / enclosures, also including:
  - Control and protection systems.
  - Power conversion systems and associated transformers.
  - Temperature regulation systems.
- An Electrical Banking Station (comprising a main step-up transformer(s) and switchgear).

- A Welfare Compound (comprising office areas, kitchen facilities, changing / toilet facilities and car parking).
- Electrical cabling and electrical connection.
- Site security (including: fencing, CCTV / security cameras and operational (intermittent) lighting columns).
- Landscaping.

Other associated development works include:
- Site preparation (including any necessary ground works to raise the site to the required levels); and,
- Provision of site drainage.

The Spalding Energy Park BESS will be connected to the existing National Grid 400 kV Spalding North Substation.

Spalding Energy Park BESS development and construction may take place in one phase, or over a number of phases. For one construction phase (or the first construction phase), the construction period will likely last between one-and-a-half to two-and-a-half years (18 – 30 months). For any subsequent construction phase, each additional construction period will likely last between one-and- a-half to two years (18 – 24 months). For the purposes of assessment, one construction phase with a construction period lasting two years (24 months) has been assumed.

2.2 Summary of Changes

Due to the rapid advancement in BESS technology since the Application was approved in 2023, the development is now capable of being erected with a reduced developable footprint whilst retaining the required generation capacity. Therefore, the Applicant is seeking to vary conditions attached to the planning permission to amend the Site layout, which will release land in the north of the Site.

The Applicant is now proposing to amend the Indicative Site Layout and Parameter Plans to relocate all infrastructure to the southern portion of the Site. An updated Indicative Site Layout is provided as part of this Section 73 submission, for information only. The Applicant seeks to make the following changes to the BESS layout:

- Reduction of development footprint.
- Relocation of all above ground infrastructure (battery arrays, transformers and switch gear, substation, welfare facilities, and access tracks) to the south of the Site.
- Northern site area used for temporary laydown and construction area.
- Submission of updated Indicative General Arrangement detailing the new site layout.
- Updated site parameters to accommodate relocation of welfare facilities and substation in the south of the Site.
- Submission of new battery container plans to supersede previously double stacked containers.

3. Environmental Screening and Management

3.1 EIA Screening

The 2017 Town and Country Planning (Environmental Impact Assessment) Regulations[1] (the Environmental Impact Assessment (EIA) Regulations) apply to applications for planning permission under the 1990 Town and Country Planning Act[2].

Based on the relevant environmental assessment information, it is considered that:

- The Spalding Energy Park BESS is not Schedule 1 development; and,
- Whilst the Spalding Energy Park BESS is Schedule 2 development, it is not likely to have significant effects / impacts on the surrounding environment.

As such, it is considered that the Spalding Energy Park BESS, as amended, is not EIA Development.

3.2 Outline Construction Environmental Management Plan (CEMP)

The original outline CEMP was written in support of the 2021 BESS design and submitted as Appendix B to the Environmental and Technical Report. The document set out a framework of environmental management measures to be implemented during the construction phase, supported by a suite of aspect-specific management plans covering air quality, noise, releases to land/water, emergency response, contaminated land and site waste management.

Given the limited nature of design changes and construction methods, the overarching principles and mitigation measures set out in the 2021 outline CEMP remain applicable and do not require substantive revision. This short addendum therefore focuses on confirming the continued applicability of the previously defined mitigation measures, alongside providing minor clarifications and qualitative updates where relevant.

The commitment to develop a detailed CEMP by the appointed Principal Contractor, in line with the outline framework and secured planning conditions, remains unchanged.

3.2.1 General Measures

The 2021 outline CEMP assumed a likely construction start date of Q1/Q2 2023. It is now anticipated that construction start will commence in 2027. Construction programme, phasing, sequencing and working hours assumptions are unchanged.

3.2.2 Aspect Specific Management Plans

A review of the aspect-specific management plans included within the 2021 Outline CEMP has been undertaken. Given the limited nature of the design changes and the absence of any material alterations to construction activities or environmental sensitivities, it is considered that these outline management plans remain appropriate for the updated proposed development. As such, no updates or amendments to the individual aspect-specific management plans are considered necessary.

[1] The 2017 Town and Country Planning (Environmental Impact Assessment) Regulations. Available at: https://www.legislation.gov.uk/uksi/2017/571/contents/made

[2] The 1990 Town and Country Planning Act. Available at: https://www.legislation.gov.uk/ukpga/1990/8/contents

The existing plans continue to provide a robust and flexible framework to manage environmental risks during construction.

However, it is noted that all measures will be reviewed and, where necessary, updated at the detailed CEMP stage to reflect:

- The final construction programme and sequencing.
- The appointed contractor's methods, plant and supply chain.
- Any updates to relevant legislation, guidance, or industry best practice at the time of construction.
- Any site-specific requirements arising from detailed design or pre-construction surveys.

4. Ecological Impact Assessment

Ecological Impact Assessment was covered in Appendix C of the 2021 Environmental and Technical Report. The original planning permission was granted on the basis that the Spalding Energy BESS was not likely to have a significant effect on areas or ecological value, nor on protected, important or sensitive species of fauna or flora.

4.1 2026 Survey Notes

An ecological walkover survey was undertaken on 4th February 2026 to inform pre-commencement works and provide an updated assessment of the baseline habitat and species assemblage at the development site.

4.1.1 Habitat

In accordance with the existing planning consent and Outline Construction Environmental Management Plan (CEMP), vegetation management has been undertaken across the site. This has maintained habitats in a condition of reduced suitability for protected and notable species, particularly through control of grassland height and structure, thereby limiting opportunities for ground-nesting birds and other sensitive receptors to establish.

The site remains consistent with the baseline conditions previously reported, comprising a spoil heap with predominantly ruderal grassland vegetation, bounded by a tree line to the west and earth bunds to the north and south. The site flora is typical of this type of habitat, dominated as it is by hardy perennial species such as hemlock, cow parsley, broad-leaved dock and mugwort. There is some compaction leading to impacted drainage marked by several stands of common reed. All these species provide abundant seeds for foraging birds and insects. An updated UK Habitat Plan (Figure 1) has been prepared to reflect site conditions and habitat extents as recorded in February 2026 (prior to vegetation management).

The site continues to be of generally low ecological value, reflecting its artificial origin, compacted substrates, and ongoing vegetation management.

4.1.2 Species

The survey identified that the site provides suitable habitat for a range of common and widespread species. Evidence and habitat suitability were recorded for small mammals, breeding and foraging birds (including ground-nesting species such as meadow pipit), reptiles (including potential for common lizard and slow worm), and a range of terrestrial invertebrates. The southern bund in particular was noted as offering more suitable conditions for reptiles, including potential hibernacula, this supports the intent within the plans to retain this area during construction and in operation, and suitable management measures to be implemented through the CEMP.

No evidence of badger activity was recorded during the survey, and no suitable roosting or hibernation features for bats were identified within the site. Similarly, no evidence of amphibian presence was found, and habitats on site are considered generally unsuitable for amphibians.

4.2 Mitigation Measures

Table 5-1 of the original Ecological Impact Assessment set out a summary of mitigation measures to be adopted by the principal contractor and included in the CEMP.

As previously recommended, with respect to nesting birds, vegetation clearance works must be appropriately timed (i.e. to be undertaken between September and February, outside of the bird nesting period, as was done for the recent vegetation management). To further deter ground-nesting bird risk, grassland areas within the red line boundary should be cut, regularly maintaining a sward height of no greater than 50mm, and a minimum height of 20mm.

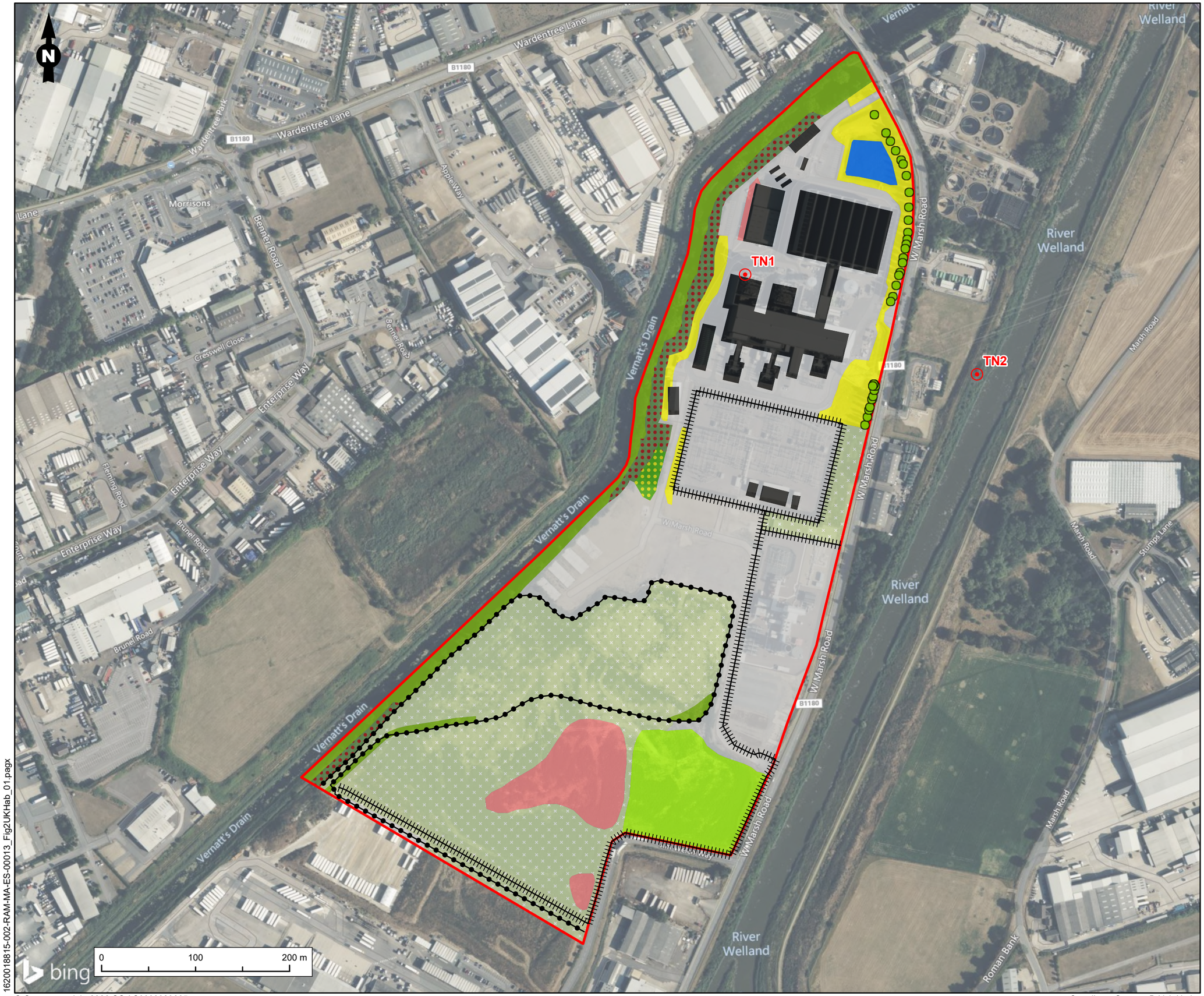
If there is a substantial lapse in the cutting regime and the grassland exceeds this height, it is advised that a suitably qualified and experienced ecologist is contacted and a walkover survey carried out immediately before the next scheduled cut to ensure breeding birds are not nesting within this habitat.

The bund to the south of the site remains part of the Spalding Energy BESS design. It is recommended that this habitat is enhanced by providing suitable hibernacula and opportunities for shelter to ensure reptiles favour this habitat over the grassland areas. This habitat is not currently due to be affected by the development, with a 3m buffer zone around the bund area incorporated into the Indicative Site Layout.

4.3 Summary

The findings of the 2026 survey confirm that the ecological baseline remains broadly unchanged from that presented within the original Environmental and Technical Report. The design changes are not expected to have a greater or lesser impact on the species and habitats surveyed, therefore the original ecological assessment conclusions remain valid.

Figure 1 - 2026 UKHab Classification



Legend

- Site Boundary

UKHab Classification

- Broadleaved Tree
- Target Note
- u1e - Built Linear Features: 112 - Earthbank
- u1e - Built Linear Features: 612 - Fence
- g3 - Neutral Grassland
- g3c - Other Neutral Grassland
- g3c - Other Neutral Grassland: 16 - Tall Forbs
- g4 - Modified Grassland: 81 - Ruderal or Ephemeral
- h3 - Dense Scrub
- r1 - Standing Open Water and Canals
- u1b5 - Buildings
- u1b - Developed land, sealed surface,<Null>
- w1 - Broadleaved and Mixed Woodland
- w1 - Broadleaved and Mixed Woodland: 29 - Plantation

Figure Title
UKHab Classification - Baseline

Project Name
Spalding Energy BESS

Project No./Filery ID
1620018815-002 / REN2023N00546

Date	Figure No.	Revision
May 2026	1	1.0

Prepared By	Scale
AB	1:3,800 @A3

Client
Intergen UK Ltd

RAMBOLL

1620018815-002-RAM-MA-ES-00013_Fig2UKHab_01.pagx

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Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

5. Transport Assessment

5.1 Background

Transport assessment was covered in Appendix H[3] of the 2021 Environmental and Technical Report. The original planning permission was granted on the basis that construction phase traffic would result in low to negligible impact on the local highway network, with operational traffic considered negligible.

The assessment of impact was undertaken by comparing the estimated traffic generated by the proposed development versus baseline traffic conditions on the surrounding highway network.

5.2 Development Trip Generation

Total construction traffic generation for the original scheme was summarised in Table 4-3 of Appendix H, reproduced here as Table 5.1.

Table 5.1: Total Anticipated Daily Construction Traffic Movements (Two-Way Trips)

Timescale (months)	Construction Activity	Daily Construction HGV Movements	Daily Construction Personnel Movements
1-3	Site Preparation (Site Mobilisation)	50	80
4-6	Site Preparation (Pre-Construction Activities)	80	120
7-9	Site Preparation (Pre-Construction Activities)	100	160
10-12	Site Preparation (Pre-Construction Activities)	100	190
13-15	Equipment Delivery and Installation	100	290
16-18	Electrical Works and Pre-Commissioning Activities	100	290
19-21	Commissioning	80	190
22-24	Post-Construction Activities	50	80

Considering the proposed changes to design, the previous construction traffic generation has been reviewed, with the following results:

- The overall scale and nature of construction vehicle movements remain appropriate.
- Overall duration and phasing remain suitable.

[3] ENVIRONMENTAL AND TECHNICAL REPORT APPENDIX H: TRANSPORT STATEMENT - Document ID: 1433618-14 v4, December 2021.

- The previously estimated vehicle numbers are considered suitably robust and conservative, especially noting that the amended scheme involves a reduced site area compared with the consented layout.

Accordingly, the construction traffic movements and timings approved under the existing planning permission remain appropriate for the amended scheme.

5.3 Baseline Traffic

Baseline traffic conditions for the original Transport Statement were derived from DfT Automatic Traffic Count data up to the year 2020, with traffic growth applied to represent future year conditions. A 9% traffic growth rate of the baseline data was derived as an average of the count points used.

Updated DfT traffic data is now available for the same count locations used in the original assessment. This data indicates that background traffic flows on the surrounding highway network have increased since the original baseline was established. Table 5.2 shows the up-to-date data for the count points used in the previous transport statement.

Table 5.2: Average Annual Daily Flow (All Motor Vehicles)

Count Point Year	Average Annual Daily Flow (All motor Vehicles)			
	A16 (99186)	A16 (99187)	A16 (81537)	A151 (77469)
2024	16,745	23,919	16,188	-
2023	16,570	23,678	16,037	-
2022	16,285	20,696	15,838	-
2021	15,141	19,248	9,783	-
2020	11,664	17,521	8,960	-
2019	15,211	22,649	11,467	10,480

As such, higher baseline traffic flows mean that the impact of the unchanged development traffic results in a **lower** proportional impact than the levels previously assessed as acceptable.

5.4 Summary/Conclusion

In respect of the revised development proposals:

- Construction traffic generation assumptions remain unchanged from the previous assessment and remain suitably robust and conservative.
- Baseline traffic flows have increased since the previous assessment described in Appendix H.

As such, the relative highways impact of proposed development construction traffic is lower than previously assessed.

Therefore, there are no grounds to revise the conclusions of the original Transport Statement, and no reason to reconsider the transport and highways basis on which planning permission was granted.

6. Ground Conditions Assessment

A Ground Conditions Phase I Preliminary Environmental Risk Assessment was covered in Appendix D to the 2021 Environmental and Technical Report. This document provided a preliminary desktop review of available evidence, review of existing reports and an assessment of the potential for soil and/or groundwater contamination on or in the vicinity of the site, and its potential significance in the context of the planned development.

Given the lack of significant changes on or in the vicinity of the site since 2021 it is considered that the conclusions of the previous Environmental Risk Assessment remain applicable and do not require substantive revision. The site area has remained to be vacant land and no fuel or chemical storage has occurred directly within the planning application area.

The site was historically in use as a sugar beet factory, with railway lines and sidings present on and in the vicinity of the site, settlement ponds were also present on site. During the construction of the existing Spalding CCGT generating station immediately to the north of the site, sugar beet washings from settlement lagoons and ponds to the north were placed on site in a mound. As a result, at present the site is approximately 4m higher than the surrounding area. This material is considered to be a fairly limited potential source of contamination with the potential for organic material to be present capable of generating ground gases.

No significant contaminative activities or conditions have been identified relating to the adjacent activities on the existing InterGen-owned Spalding CCGT generating station and existing InterGen owned Spalding OCGT generating station (chemicals / oils are present, but no material / significant leaks have taken place).

With respect to hydrological / surface water receptors, the sensitivity of the site is considered to be moderate, and the associated vulnerability is considered to be high. This is due to the proximity of two main surface watercourses to the site. However, risks to these are considered to be low given the lack of significant historic sources of leachable contamination from previous site investigation data.

The previous report identified potentially relevant pollutant linkages in relation to the Made Ground on site associated with the potential for ground gases to be generated within the Mound on site and their potential to affect future site structures and site users, following development of the site resulting in the compaction and creation of new migration pathways. The proposed amendments have no material change on these assessment outcomes.

7. Landscape & Visual Amenity

A landscape and Visual Amenity was considered within the 2021 Environmental and Technical Report and an indicative landscaping plan was produced in Appendix F. The Proposed Development was considered unlikely to have potential for significant visual effects. This section considers if there have been any changes (in either baseline or the Proposed Development) which would affect this conclusion.

The surrounding land use remains predominantly commercial and industrial. Nearby features such as the National Grid 400 kV Spalding North Substation, the InterGen Spalding CCGT and OCGT generating stations, Fowler Welch Transport Depot and adjacent industrial estates continue to form the prevailing context within which the Spalding Energy Park BESS will be read. Reducing the developed footprint and locating the storage units in a more screened part of the site does not change this context or introduce new adjoining land uses. The site's topography remains unchanged, so the revision does not alter topographic relationships or the character of the wider fenland landscape.

The revised layout improves local screening and containment. Concentrating the BESS within a smaller, more sheltered area increases the degree to which the proposal will be contained by utilising industrial buildings, bunds, and vegetation. This improved containment reduces the likelihood of low-level visibility from nearby vantage points and reinforces the perception of the BESS as part of the existing industrial/energy infrastructure rather than as a conspicuous new element in the open landscape. The change therefore reduces the extent of potential visual exposure at close range while retaining similar maximum element heights and overall vertical profile.

The identities, locations and sensitivities of visual receptors are unaffected by the design change. Distances to nearby settlements (including Spalding and the smaller adjacent villages) remain unchanged and no new residential areas are introduced closer to the site. Views from these settlements continue to be constrained by existing development, hedgerows, bunding and planted slopes alongside watercourses. Transport corridors and recreational routes within the vicinity, such as the A16, the local B and A roads, and nearby public rights of way, retain the same spatial relationship to the site. The revised siting and reduced footprint are likely to marginally diminish visible extent from these routes and footpaths, particularly at lower elevations, but do not alter receptor types or their assessed sensitivity.

Land cover on the site remains predominantly brownfield following clearance and levelling; the revised footprint does not create new habitat types or reinstate land cover of public amenity value. The broader landscape character which is flat, drained fenland dissected by ditches, drains and infrastructure and characterised by a mix of agricultural land and industrial/energy development, remains as previously described. Overhead transmission lines and other vertical industrial elements continue to be prominent features in the surrounding landscape, so long-distance skyline and visibility relationships are unchanged.

Overall, the redesign is a neutral-to-beneficial change, relative to the consented development, from a landscape and visual perspective. By improving local containment and slightly reducing proximate visibility, the revised footprint and more screened siting reduce potential localised visual effects without altering the development's relationship to the wider industrial and fenland context. Because maximum heights are unchanged and no new sensitive receptors are exposed, the original conclusions regarding low landscape sensitivity and the site's capacity to accommodate the BESS remain valid.

8. Noise Impact Assessment

A Noise Impact Assessment was provided in Appendix G of the 2021 Environmental and Technical Report. The Proposed Development was considered likely to have no residual significant effects / impacts. Given the potential for changes in operational noise, the Noise Impact Assessment has been revised and is presented in Appendix 1. The updated assessment demonstrates that, with the incorporation of the embedded mitigation measure comprising the attenuated main step-up transformer, operational noise impacts at all assessed Noise Sensitive Receptors (NSRs) are predicted to be Minor Adverse and Not Significant.

9. Flood Risk Assessment

A Flood Risk Assessment (FRA) was provided in Appendix E of the 2021 Environmental and Technical Report. The Proposed Development was considered likely to have no residual significant effects / impacts. Given the potential for changes in the baseline flood data and the introduction of a revised site design the FRA was amended to reflect the latest position and this is available in Appendix 2. This demonstrates that is no material change to the FRA outcomes for those approved.

10. Summary/Conclusion

This addendum of the 2021 Environmental and Technical Report undertaken to assess the proposed amendments within the Section 73 application has shown there to be no material changes to the previous assessments undertaken in support of the Proposed Development.

Appendices

Appendix 1 – Noise Impact Assessment Addendum
Appendix 2 - Flood Risk Assessment

Appendix 1 - Noise Impact Assessment Addendum

Project name	**Spalding Energy Park BESS Addendum**
Project no.	**1620002349**
Client	**InterGen UK Developments Limited**
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Version	**1.0**
Prepared by	**MB & JK**
Checked by	**PM**
Approved by	**CB**

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1 Introduction

Ramboll was appointed by the Client ("InterGen UK Developments Limited") in 2021 to support the planning application for the proposed Spalding Energy Park Battery Energy Storage System (BESS) in Spalding, Lincolnshire.

This document comprises an Addendum to the previously submitted Noise Impact Assessment (NIA document 1433618-9) which assessed the operational noise impact associated with the scheme layout and equipment configurations previously available.

Following ongoing design development, the proposed scheme has subsequently undergone revisions including:

- The site layout;
- Reduction in the number of BESS units; and,
- The proposed BESS equipment model/configuration.

Accordingly, this Addendum has been prepared to review the operational noise implications associated with the updated scheme proposals.

The assessment presented within this report has been undertaken with reference to the methodology, baseline conditions and assessment criteria adopted within the original NIA.

1.1 Scope

The purpose of this Addendum is to:

- Summarise the updated development proposals;
- Confirm the continued applicability of the previously established baseline noise environment;
- Review the operational noise impact associated with the revised BESS layout and equipment assumptions; and,
- Confirm whether the conclusions of the original NIA remain materially unchanged.

This Addendum considers operational noise effects only. Construction noise effects remain as previously assessed within the original NIA and are not considered to materially change as a result of the updated development proposals.

1.2 Proposed Development

The proposed development is presented in Figure 1.1, located approximately 2 kilometres north of Spalding town centre. The revised layout features 296 Battery Energy Storage System (BESS) units and 74 Medium Voltage Station (MVS) units, significantly fewer total units than the 520 to 2,410 BESS units assumed in the original NIA.



Figure 1.1: Spalding BESS Proposed Development

The updated development proposals comprise revisions to the internal arrangement of the BESS infrastructure alongside amendments to the quantity and model of the proposed battery units.

At the time of undertaking this Addendum, detailed manufacturer operational noise data for the revised BESS units had not been made available.

In the absence of confirmed manufacturer sound power level data, operational noise levels have been derived based on comparable, previously assessed utility-scale BESS developments of a similar scale and specification where measured noise data has been provided. Additionally, where only single figure A weighted noise levels have been provided (harmonic Filters/MVS units) we have used professional

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judgment and previous experience to assign a suitable spectral weighting to these items. Dimensions of the proposed plant/equipment have been supplied by the client.

1.3 Assumed Operational Noise Data

Table 1.1 presents the operational noise data, the dimensions and the noise levels associated with each noise generating face.

Table 1.1: Plant equipment list and sound pressure levels at 1m

Equipment / Plant	Dimensions (L x W x H) (m)	Right/ dBA @ 1m	Rear/ dBA@ 1m	Left/ dBA@ 1m	Front/ dBA@ 1m	Top/ dBA@ 1m
Battery Enclosures / Containers	6.1 3 2.9 3 2.4	61.1	62.4	60.9	65.7	67.7
MVS Stations	12.2 3 2.9 3 2.4	50.6	66.1	59.3	54.8	57.5

The operation noise emissions have been modelled in Datakustik CADNA A 2024. Within CadnaA, each BESS and MVS unit has been modelled as a cuboid comprising of rectangular area sources with dimensions given in Table 1.1. Assumed third-octave band sound pressure data has been incorporated, and source levels have been calibrated to achieve agreement between predicted and measured receptor levels within ±0.5 dB(A).

Figure 1.2 presents the assumed operational plant from Table 1.1 as modelled with each surface labelled.

The sound pressure levels adopted within the updated assessment are considered representative of typical modern containerised BESS units and associated auxiliary cooling systems and MVS units.

The assumptions adopted are considered suitably robust and representative for planning assessment purposes and are considered to provide a reasonable worst-case operational assessment scenario.

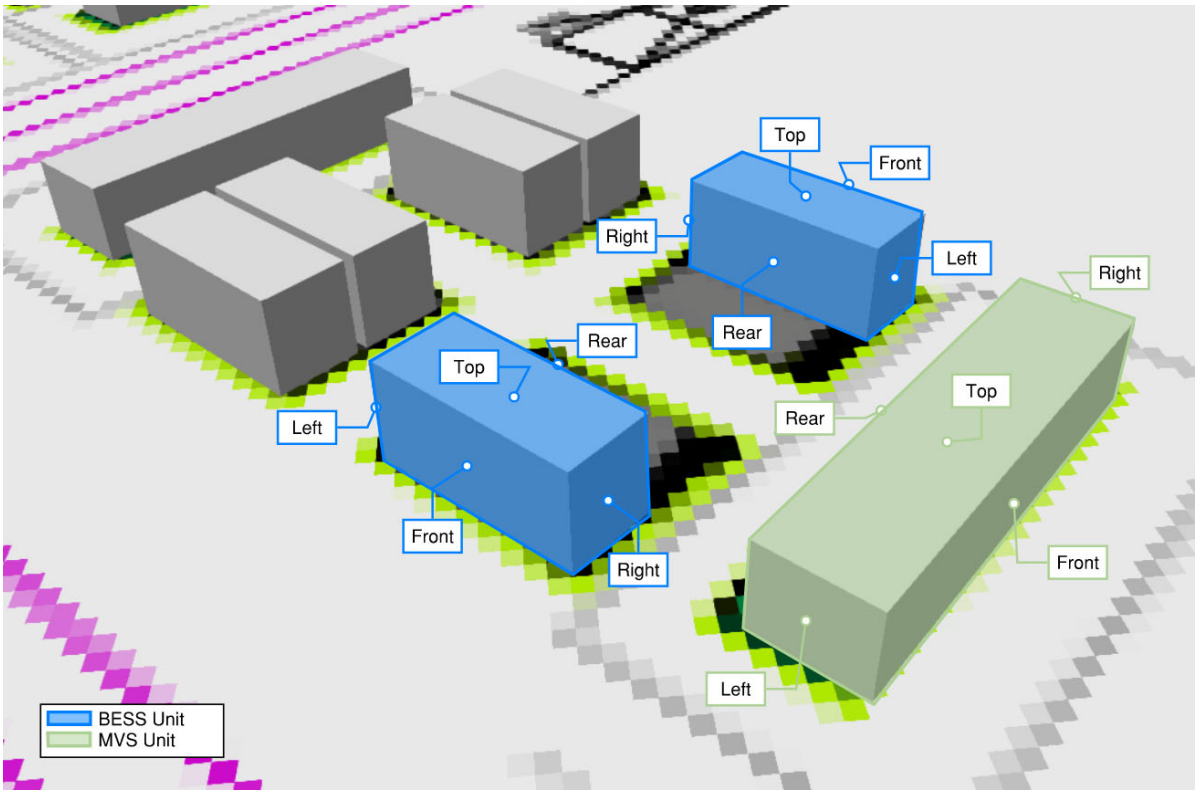


Figure 1.2: BESS and MVS unit surfaces and orientation

Overall noise level data was provided for the plant items in Table 1.2 below. Spectral data was assumed for each based on professional experience and archive data of similar plant items. This is presented in Table 1.2.

Table 1.2: Provided operational noise data

Equipment / Plant	Dimensions (L x W x H) (m)	Sound Pressure Level/dBA @ 1m
'Main' HV Transformers	Modelled as point source at 12m height	95
Harmonic Filter	15.0 3 15.0 3 5.0	70 – 95 (Assumed 90)

The noise spectrum data for the plant items presented in Table 1.2 was not provided, therefore a typical transformer spectrum was used and adjusted to the overall sound pressure level shown above.

Should detailed manufacturer noise data become available during detailed design, the assessment may be refined accordingly. However, based on experience of comparable projects, no material change in assessment conclusions is anticipated.

2 Assessment Methodology

The assessment methodology and significance criteria adopted for the original 2021 NIA remain suitable and valid, and have been adopted for this revised assessment.

The assessment has therefore been undertaken with reference to:

- BS 4142:2014+A1:2019 – Methods for Rating and Assessing Industrial and Commercial Sound;
- The Noise Policy Statement for England (NPSE);
- Planning Practice Guidance (PPG) relating to noise; and,
- Relevant national and local planning policy.

In accordance with BS 4142, the operational rating level associated with the proposed development has been compared against representative background sound levels at the nearest Noise Sensitive Receptors (NSRs).

As per the original assessment, the significance of effects has been determined based upon the difference between the operational rating level and the representative background sound level. Table 2-3 in the original NIA presents the significance criteria which has been maintained and adopted for the assessment within this report.

3 Baseline Noise Conditions

The baseline noise environment remains as described within the original NIA.

The nearest assessed NSRs remain unchanged from the original assessment and comprise:

- NSR A – Crown Cottage;
- NSR C – Roman Bank;
- NSR D – Chiltern Drive;
- NSR E – Sherwood Drive; and,
- NSR F – Wardentree Lane.

Table 3.1 presents the NSR baseline noise levels from the original 2021 NIA. As stated in paragraph 4.2.1 in the original NIA, background noise levels for the daytime and night-time periods are defined as 07:00–23:00 and 23:00–07:00 respectively. The report states that, where continuous long-term measurements were undertaken, representative values were determined from statistical analysis, although it does not provide the detailed underlying time-history data or clearly identify the statistical sample basis for each adopted value. Ramboll is therefore reliant on the background sound levels as reported in the original NIA.

Table 3.1: Representative background noise levels

NSR	Representative background sound level, dB $L_{A90,T}$	
	Day [07:00-23:00]	Night [23:00-07:00]
NSR A – Crown Cottages	43	47
NSR C – Roman Bank	49	45
NSR D – Chiltern Drive	46	43
NSR E – Sherwood Drive	44	42
NSR F – Wardentree Lane	59	50

The previously measured representative background sound levels remain applicable to the updated assessment.

A review of historical online mapping data was undertaken, and no substantive changes to the surrounding acoustic environment or additional noise sensitive receptors have been identified which would materially alter the conclusions of the original baseline assessment.

4 Embedded Mitigation

The embedded mitigation measures presented within the original Noise Impact Assessment (NIA) remain applicable to the updated Proposed Development. Whilst the scheme has undergone revisions to the site layout, number of BESS units and proposed equipment configuration, the operational noise mitigation strategy remains unchanged from that previously assessed.

As identified within Section 5.4 of the original NIA, the assessment identified the potential for adverse operational noise effects at NSR C (Roman Bank) in the absence of mitigation. Accordingly, mitigation measures were developed to ensure that operational noise impacts remain acceptable in accordance with the adopted BS 4142 assessment methodology.

The embedded mitigation measure which needs to be incorporated within the updated scheme proposals comprises the use of an attenuated main step-up transformer and Harmonic Filter. As set out within the original NIA, the main step-up transformer is specified with an operational noise level of 90 dB(A) at 1 m, representing a reduction from the provided transformer sound pressure level of 95 dB(A) at 1 m. Additionally, the main Harmonic Filter, must also achieve a sound pressure level of no greater than 90dB(A) at 1m as part of the embedded mitigation measures. The remaining transformer parameters and operational assumptions remain unchanged.

The original NIA demonstrated that incorporation of the attenuated main step-up transformer reduced the operational rating level at all assessed Noise Sensitive Receptors (NSRs) such that impacts were classified as Minor Adverse and Not Significant. In particular, the predicted BS 4142 rating level difference at NSR C reduced from +8 dB to +5 dB following implementation of the attenuated transformer mitigation measure.

Accordingly, the updated Proposed Development continues to incorporate the attenuated main step-up transformer as an embedded mitigation measure and the operational noise mitigation approach previously established within the original NIA remains applicable to the revised scheme proposals.

5 Operational Noise Assessment

In order to predict the level of commercial sound from the proposed development at each receptor building, a three-dimensional sound propagation model has been constructed using the Datakustik Cadna/A software. The software carries out sound propagation predictions in accordance with ISO 9613-2 'Acoustic – Attenuation of sound during propagation outdoors -Part 2: General method of calculation' (2024).

Predictions of the specific sound level (dB $L_{Aeq,T}$) were carried out by introducing the proposed development, including the expected sources of commercial/industrial sound, into the sound propagation model. The model then allows for specific sound level to be predicted at each assessment location accounting for factors such as geometric spreading and ground absorption over distance, the effect of any intervening buildings walls or ground features, as well as reflections from hard surfaces that are part of the proposed development.

Free-field calculation points were included in the model to represent the nearest receptors to the site.

The operational noise assessment has been updated to reflect the revised site layout and assumed BESS equipment arrangement.

5.1 Predicted Specific Sound Levels

Based on the input data and assumptions, the predicted specific sound levels at each assessment location are as shown in Table 5.1.

Contour maps showing predicted specific sound levels at first floor height are shown in Annex 1.

Table 5.1: Predicted specific sound levels

Location	Predicted specific sound level at receptor [dB $L_{Aeq,T}$]
NSR A	37
NSR C	47
NSR D	41
NSR E	39
NSR F	41

5.2 Assessment Assumptions

The updated assessment has been undertaken on the basis of conservative operational assumptions including:

- Simultaneous operation of all BESS units;

- Continuous operation during both daytime and night-time periods; and,
- Worst-case operational loading conditions.

The location and of the proposed BESS and associated units have been modelled using drawings provided by the Client. The sound level predictions allow for second order reflections of sound from surrounding buildings which are assumed to be reflective to sound (e.g. masonry, steel or glass).

The intervening ground between the proposed development and the nearest receptors is assumed to be soft ground (α=1.0) with the area within the site boundary assumed to be hard ground (α=0, reflective to sound).

Calculations have been carried out in octave frequency bands from which the total specific sound level, dB $L_{Aeq,T}$, is then determined.

Predicted specific sound levels are presented as the specific sound level at the approximate NSR locations as shown in Table 2-1 in the original NIA.

5.3 Assessment

An updated operational noise assessment has been undertaken to review the potential noise effects associated with the revised Proposed Development, reflecting the updated site layout, revised number of BESS units and amended equipment configuration. The assessment has been completed with reference to the methodology and assessment criteria adopted within the original Noise Impact Assessment (NIA), including BS 4142:2014 for the assessment of industrial and commercial sound.

The assessment considers the predicted operational noise levels associated with the updated scheme at the nearest identified Noise Sensitive Receptors (NSRs), taking account of the embedded mitigation measures incorporated within the design, namely the attenuated main step-up transformer. The predicted rating levels have been compared against the representative background sound levels established within the original NIA in order to determine the likely significance of operational noise effects.

Table 5-4 within the original 2021 NIA presents the acoustic feature correction penalties, which considers tonality, impulsivity, intermittency and other. In accordance with the original NIA a +2 dB penalty has been applied for tonality as a tonal component from the main transformer may be perceptible.

As per the original NIA the lowest background noise level across both the day and night-time forms the basis of the assessment. The assessment results are presented in Table 5.2 below.

Table 5.2: Assessment of impacts

Receptor	Assessment of impact					
	Specific sound level	Feature correction	Rating level	Lowest background noise level	Difference	Significance
NSR A	37 dB $L_{Aeq,T}$	+2 dB	39 dB $L_{Ar,Tr}$	43 dB $L_{A90,T}$	-4 dB	Minor adverse **Not Significant**
NSR C	47 dB $L_{Aeq,T}$	+2 dB	49 dB $L_{Ar,Tr}$	45 dB $L_{A90,T}$	+4 dB	Minor adverse **Not Significant**
NSR D	41 dB $L_{Aeq,T}$	+2 dB	43 dB $L_{Ar,Tr}$	43 dB $L_{A90,T}$	0 dB	Minor adverse **Not Significant**
NSR E	39 dB $L_{Aeq,T}$	+2 dB	41 dB $L_{Ar,Tr}$	42 dB $L_{A90,T}$	-2 dB	Minor adverse **Not Significant**
NSR F	41 dB $L_{Aeq,T}$	+2 dB	43 dB $L_{Ar,Tr}$	50 dB $L_{A90,T}$	-7 dB	Minor adverse **Not Significant**

6 Conclusions

An updated operational noise assessment has been undertaken to review the potential noise effects associated with the revised Spalding Energy Park BESS proposals, reflecting the updated site layout, revised number of BESS units and amended equipment configuration.

The assessment has been completed using the methodology, baseline noise conditions and assessment criteria adopted within the original Noise Impact Assessment (NIA), including assessment in accordance with BS 4142:2014.

The updated assessment demonstrates that, with the incorporation of the embedded mitigation measure comprising the attenuated main step-up transformer, operational noise impacts at all assessed Noise Sensitive Receptors (NSRs) are predicted to be Minor Adverse and Not Significant.

The revised scheme proposals are predicted to achieve rating levels ranging from 7 dB below to 4 dB above representative background sound levels at the assessed receptors. The highest predicted impact occurs at NSR C (Roman Bank), where the rating level is predicted to be +4 dB above background sound level, which remains within the Minor Adverse / Not Significant category in accordance with the adopted assessment criteria. This is a slight betterment of 1dB from the original NIA residual effects.

Accordingly, the conclusions of the original NIA remain materially unchanged, and the updated Proposed Development is not anticipated to result in significant adverse operational noise effects on the surrounding environment.

A statement of uncertainty has been provided in Annex 2.

ANNEX 1
NOISE CONTOUR MAP

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Legend

- Site Boundary
- Buildings & Plant Items

dB LAeq

- 0 - 25
- 25 - 30
- 30 - 35
- 35 - 40
- 40 - 45
- 45 - 50
- 50 - 55
- 55 - 60
- 60 - 65
- >65

Figure Title
Noise contour map at 4m height

Project Name
Spalding BESS

Project No./Filery ID
1620018815-002

Date	Figure No.	Revision
May 2026	1	1.0

Prepared By	Scale
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Client
InterGen UK Developments Limited

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Google Maps satellite imagery (Imagery © 2025 Google, Maxar Technologies)

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

ANNEX 2
STATEMENT OF UNCERTAINTY

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An assessment in accordance with BS 4142:2014+A1:2019 requires consideration of the potential effects of uncertainty on the assessment outcome. The effect of some types of uncertainty cannot be easily quantified. For this reason, the approach taken during this assessment has been to ensure control measures are in place to minimise uncertainty as far as practicable. The control measures are listed below. Primarily, the assessment was undertaken by suitably qualified practitioners, using established best practice methods of measuring and predicting sound levels and applying professional judgement throughout the assessment.

After minimising uncertainty through these measures, the resulting assessment is deemed suitable for establishing the potential for long-term effects due to operational industrial noise.

Table A5-1: Control measures taken to reduce uncertainty

Possible source of uncertainty	Control measures to reduce uncertainty
Selection of representative assessment locations	Assessment locations selected previously within the original NIA. A review of historical online mapping data was undertaken, and no substantive changes to the surrounding acoustic environment or additional noise sensitive receptors have been identified which would materially alter the conclusions of the original baseline assessment
Background sound level: measurement uncertainty	The baseline background sound levels adopted within this Addendum have been taken from the original Noise Impact Assessment. Ramboll did not undertake the original surveys and is therefore reliant on the reported methodology, survey conditions and results. However, as the original data represents the available site-specific baseline evidence and there is no indication that the prevailing acoustic environment has materially changed, its use is considered appropriate and proportionate for this Addendum.
Background sound level: effects of weather	The original NIA states that the baseline noise surveys were undertaken in accordance with BS 7445 and BS 4142, although detailed weather conditions during the survey period are not reported. Ramboll did not undertake the original measurements and is therefore reliant on the suitability of the survey conditions as presented within the original assessment. In the absence of any identified evidence that adverse weather conditions materially influenced the adopted background sound levels, the baseline data is considered appropriate for use within this Addendum.
Specific sound level: source level uncertainty	Source emission levels for all noise sources were agreed with the client beforehand. Where spectral noise data was not provided, professional judgement, experience and data from similar projects was used to provide the most accurate source data.
Sound propagation uncertainty	Sound propagation predictions carried out using best industry practice (computational modelling applying ISO 9613-2:2024). Industrial sound level predictions apply under moderate downwind conditions at the assessment location (a moderate wind between source and receptor). This is considered suitable for evaluating the worst-case condition.
Rating level: acoustic feature corrections	Acoustic feature corrections applied based on subjective observations at the assessment location and analysis of noise measurement frequency data for existing sources. A correction was applied to account for the distinctive nature of the sound sources on precautionary basis.
Context	This Addendum has been prepared to review the noise implications of the revised BESS proposals, with reference to the baseline conditions and assessment methodology presented in the original Noise Impact Assessment. The original assessment included baseline noise surveys undertaken in June 2021, concluding that the baseline noise conditions at the noise-sensitive receptor locations were relatively stable. On this basis, the previously established baseline sound levels are considered to provide an appropriate context for the updated assessment.

Intended for
InterGen

Document type
Report

Date
May 2026

SPALDING ENERGY BESS
APPENDIX 2 - FLOOD RISK ASSESSMENT

RAMBOLL Bright ideas. Sustainable change.

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SPALDING ENERGY BESS
APPENDIX 2 - FLOOD RISK ASSESSMENT

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APPENDICES

Annex 1
Proposed Development Plan

1. EXECUTIVE SUMMARY

Ramboll UK Limited has prepared this Flood Risk Assessment on behalf of InterGen to accompany a Section 73 planning application for the Spalding Energy Park Battery Energy Storage System (BESS) near West Marsh Road, Spalding. Occupying approximately 12.6 hectares of previously developed land south-west of the existing power-generation facilities, the proposal seeks to install containerised batteries, an electrical banking station, welfare accommodation and associated infrastructure for an operational life of approximately twenty-five years. Ground levels across the site range from 4.8 m to 11.0 m AOD, with the principal BESS compound located on plateaus between 7.7 m and 11 m AOD, well above surrounding fenland.

Environment Agency Flood Map for Planning places the whole site within Flood Zone 3, indicating a high probability of fluvial or tidal inundation. Detailed hydraulic modelling commissioned by the Environment Agency confirms that tidal influences from the Wash propagate upstream along the River Welland as far as Spalding. Climate-change design runs applied a precautionary uniform sea-level rise of 1.1 m. Under an undefended 1 per cent AEP plus climate-change scenario, flood levels at the nearest model node could reach 5.48 m AOD, potentially affecting land below roughly 5.6 m AOD, although the proposed BESS platform itself would remain dry.

Substantial engineered flood defences protect the locality, notably earth embankments along the River Welland with crest heights between 6.84 m and 7.42 m AOD, augmented by Fulney Lock and Marsh Road Sluice. These assets provide protection against events of 0.5 per cent annual probability with allowances for sea-level rise to 2055. Environment Agency mapping identifies the risk of surface-water flooding across most of the site as Low or Very Low, with only isolated pockets of higher susceptibility attributable to local depressions. Risks from groundwater emergence, reservoirs and historic flooding are all classed as low.

The BESS qualifies as Essential Infrastructure under National Planning Policy Framework guidance and therefore requires both the Sequential and Exception Tests. The Application Site forms part of allocated Restricted Use Employment Sites SP037 and SP038, which were previously subjected to and passed the strategic sequential test. Wider sustainability benefits include the efficient reuse of brownfield land, connection to the existing 400 kV Spalding North Substation and support to national energy-security and decarbonisation objectives. Safety over the project lifetime is secured by setting finished platform levels at or above 6.7 m AOD, providing more than one metre of freeboard above the modelled extreme undefended flood level, with scope for local raising of critical equipment and incorporation of resilient design features.

A surface-water strategy based on Sustainable Drainage Systems will seek to attenuate runoff in an on-site pond, discharge at controlled rates to the River Welland and deploy permeable paving where practicable, thereby preventing increased flood risk downstream. On the basis of the baseline analysis, the adopted mitigation measures and compliance with national policy, the FRA demonstrates that the proposed development can proceed without elevating flood risk elsewhere and will remain safe for its intended life, such that no further flood risk assessment is required. This is a consistent outcome with the previously consented project layout.

2. INTRODUCTION

2.1 Appointment and Brief

2.1.1 Ramboll UK Limited (Ramboll) has been commissioned by InterGen to undertake a Flood Risk Assessment (FRA) for planning to be submitted to South Holland District Council (the Council) for the Spalding Energy Park Battery Energy Storage System (BESS).

2.1.2 This FRA supports a Section 73 application under the Town and County Planning Act 1990[1] to vary the existing planning consent granted by the Council in 2022 (application number H16-1327-21). The FRA has been amended and reproduced for this application due to the notable change in baseline flood data since the original consent.

2.2 Scope and Objectives

2.2.1 This report considers the risks of various sources of flooding to the site and the consequent risk of flooding to downstream receptors (such as people, property, habitats, infrastructure and statutory sites) from the proposed development as a result of surface water runoff. A comparison is made between the current situation and the proposed future development.

2.2.2 This FRA has been carried out in accordance with the National Planning Policy Framework (NPPF)[2]. It is to be used to assist the Local Planning Authority (LPA) and relevant statutory consultees when considering the flooding issues of the proposed development, as part of a planning application.

2.2.3 This report provides the following information:

1. A review of the flood risk to the site based upon flood data and the flood maps provided by the Environment Agency (EA) and the relevant Strategic Flood Risk Assessment (SFRA)[3];
2. An assessment of flood risk from all sources including tidal, fluvial, pluvial, groundwater and infrastructure failure to the proposed development;
3. An assessment of the compatibility of the proposed development for its location based on flood risk and its proposed usage;
4. An assessment of the impact of the proposed development in terms of surface water runoff;
5. Proposals for measures to mitigate the generation of surface water runoff as a result of the proposed development; and,
6. Proposals to mitigate any residual flood risks to the development.

2.3 General Limitations and Reliance

2.3.1 In preparation of the report and performance of any other services, Ramboll has relied upon publicly available information, information provided by the client and information provided by third parties. Accordingly, the conclusions reached in this report are valid only to the extent that the information provided to Ramboll was accurate, complete and available to Ramboll within the reporting schedule.

[1] GOV.UK, The 1990 Town and Country Planning Act 1990. Available at: https://www.legislation.gov.uk/ukpga/1990/8/contents (accessed 05/2026)

[2] GOV.UK, National Planning Policy Framework (updated February 2025), available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 (accessed 05/2026)

[3] South East Lincolnshire Joint Strategic Planning Committee (2017), South East Lincolnshire Strategic Flood Risk Assessment, available at: https://southeastlincslocalplan.org/media/23906/South-East-Lincolnshire-Strategic-Flood-Risk-Assessment/pdf/SE-Lincolnshire-SFRA-2017-v6-24th-Jan-2018.pdf?m=1703944317647 (accessed 05/2026)

2.3.2 The key sources of information used to prepare this report are footnoted within the document. Ramboll cannot accept liability for the accuracy or otherwise of any information derived from third party sources.

2.3.3 Ramboll's services are not intended as legal advice, nor an exhaustive review of site conditions and/or compliance. This report and accompanying documents are initial and intended solely for the use and benefit of the client for this purpose only and may not be used by or disclosed to, in whole or in part, any other person without the express written consent of Ramboll. Ramboll neither owes nor accepts any duty to any third party, unless formally agreed by Ramboll through that party entering into, at Ramboll's sole discretion, a written reliance agreement.

2.3.4 Unless otherwise stated in this report, the scope of services, assessment and conclusions made assume that the site will continue to be used for its current purpose and end-use without significant changes either on-site or off-site. Unless stated otherwise, the geological information provided is for general environmental interpretation and should not be used for geotechnical and/or design purposes.

3. SITE DESCRIPTION

3.1 Application Site Description

3.1.1 The Application Site is located off West Marsh Road in Spalding, to the south of the existing InterGen owned Spalding CCGT generating station, and immediately to the west of the existing InterGen-owned Spalding OCGT generating station.

3.1.2 The Ordnance Survey (OS) Grid Reference for the approximate centre of the Application Site is 525801, 324553. The Application Site covers a total area of approximately 12.6 hectares (ha) (31.1 acres), and is located at an elevation / level between 4.8 – 11.0 metres (m) Above Ordnance Datum (AOD).

3.1.3 The site location is shown in Figure 3-1 below.

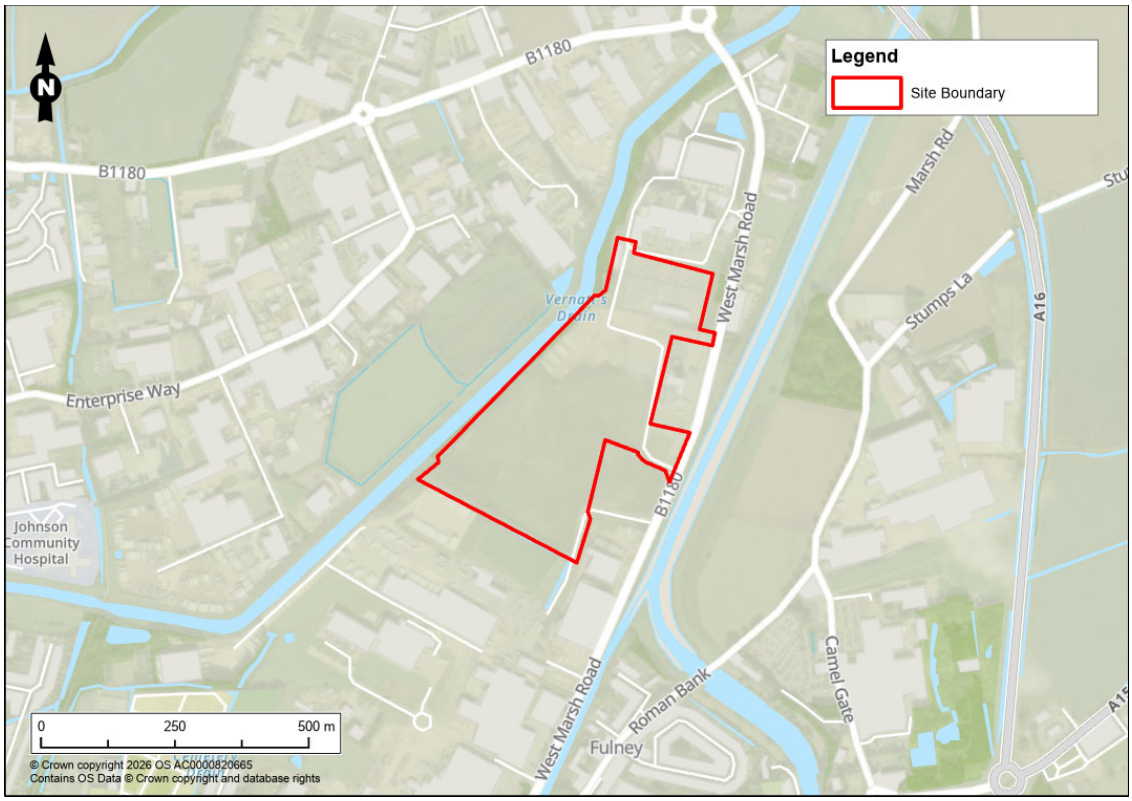


Figure 3-1: Site Location

3.2 Existing Site Drainage

3.2.1 It is assumed that there is no management of existing surface water runoff for the site except for those areas within the planning boundary that extend to the existing Spalding Power Station. Runoff therefore discharges onto the surrounding grass areas where infiltration occurs.

3.2.2 A review of East Anglian Water wastewater records has determined the site has no connections to a public surface water sewer or combined sewer. A foul sewer is present on West Marsh Road where there are connections to the existing adjacent developments.

3.3 Proposed Development

3.3.1 The Proposed Development consists of the Battery Energy Storage System (BESS) which is to be provided in land adjacent to the existing Combined Cycle Gas Turbine (CCGT) and Open Cycle Gas Turbine (OCGT) at Spalding Energy Expansion (SEE), West Marsh Road, Spalding.

3.3.2 The Spalding Energy Park BESS will comprise:

- Batteries, housed in containers / enclosures, also including:
  - Control and protection systems;
  - Power conversion systems and associated transformers; and,
  - Temperature regulation systems;
- An Electrical Banking Station (comprising a main step-up transformer(s) and switchgear);
- A Welfare Compound (comprising office areas, kitchen facilities, changing / toilet facilities and car parking);
- Electrical cabling and electrical connection;

- Site security (including: fencing; Closed Circuit Television (CCTV) / security cameras; and, operational (intermittent) lighting columns); and,
- Landscaping.

Other associated development works include:

- Site preparation (including any necessary ground works to raise the site to the required levels); and,
- Provision of site drainage.

3.3.3 The proposed development layout is shown in Annex 1.

4. REVIEW OF BASELINE DATA

4.1 Site Topography

4.1.1 Site level has been reviewed using LiDAR (Light Detection and ranging) and topographical survey data. Site level is variable, consisting mainly of several plateaus of different height.

4.1.2 LiDAR (Light Detection and ranging) aerial topographic survey data produced by the EA has been acquired through DEFRA's online spatial data download service in the form of a Digital Terrain Model (DTM) at a 1 m resolution[4]. A DTM is filtered to remove buildings and structures such that it represents a bare-earth scenario. The available data indicate the south of the site area comprises a raised plateau of approximately 7.7 – 8.3 metres above ordnance datum (mAOD), which is approximately 3 – 4 m higher than the surrounding land beyond the site boundary, and a higher central plateau of approximately 10.7 – 11.5 mAOD. Elevation in the north of the site is lower at approximately 4 – 5 mAOD

4.1.3 The EA DTM is presented in Figure 4-1 below and referenced in footnote 4 below.

[4] Environment Agency, LIDAR Composite Digital Terrain Model (DTM) - 1m, available at: https://environment.data.gov.uk/dataset/13787b9a-26a4-4775-8523-806d13af58fc (accessed 05/2026)

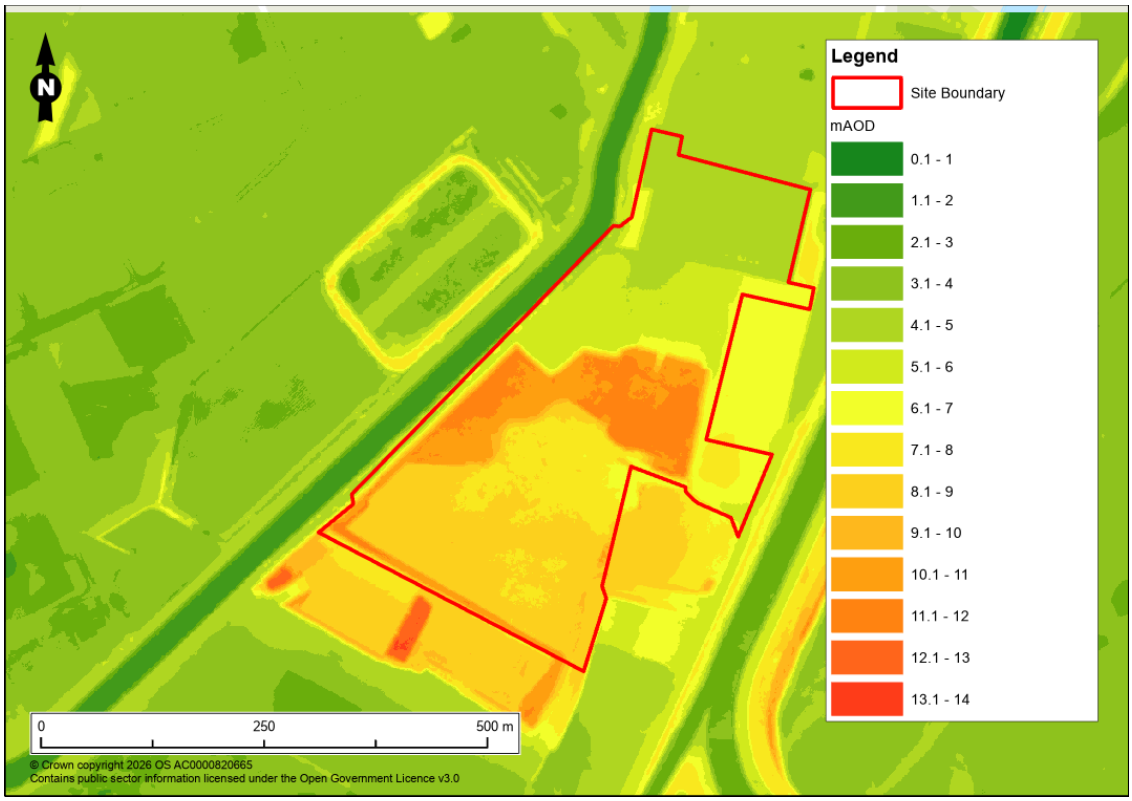


Figure 4-1: LiDAR 1m DTM

4.1.4 A topographic survey provided by Daniel Charles Surveys Ltd covers the middle section of the application boundary where the Proposed Development is to be centred and covers the majority of the planning boundary area not captured by the LiDAR data. The topographic survey indicates another raised plateau of approximately 10.5 – 11 mAOD at the cite centre. To the north of this is a lower, level area of approximately 5.5-6 mAOD. This lowers again to approximately 4.8-5.5 mAOD north of the access road and south of the existing power station.

4.1.5 The topographic survey indicates that the northern part of development area is at a general level of approximately 4.80 mAOD and areas to the southern extent of the survey are at approximately 8.00 mAOD. In the southern part of the development area a large extent of higher ground exists (locally referred to as "the mound") with the bottom of the northern-most sloping banks at approximately 5.50 to 6.0 mAOD rising to varying levels generally between 10.00 and 11.00 mAOD. At the southern-most face of "the mound" ground levels vary from approximately 6.50 to 8.00 mAOD at the foot of the slope, rising to approximately 10.00 to 10.50 mAOD at the top of the sloping face.

4.2 Geological Setting

4.2.1 British Geological Society (BGS) mapping of the area (1:50,000 scale map series) was accessed via the online BGS Onshore GeoIndex digital mapping database[5]. The map indicates that bedrock geology beneath the site consists of the Oxford Clay Formation - Mudstone. Superficial deposits are indicated to consist of Tidal Flat Deposits – clay and silt. Made Ground is also indicated throughout most of the site.

[5] The British Geological Survey (BGS) Onshore GeoIndex, available at: http://mapapps2.bgs.ac.uk/geoindex/home.html (accessed 05/2026)

4.2.2 Previous ground investigations carried out at the SEE site generally concur with the BGS data, however, glacial deposits were also encountered.

Table 4.1 : BGS Borehole Records Summary

Strata	Description	Max. thickness (m)
Made Ground	Brown-grey black silty clay with roots and vegetation	Highly variable
Alluvium	Silty fine-medium sand, occasionally with a little to some gravel and a little to some shell fragments	15.7
Glacial Sand and Gravel	Similar to the alluvial sand	2.7
Glacial Till	Brown / grey stiff to very stiff sandy clay with gravel of chalk and limestone	6.2
Oxford Clay	Stiff to very stiff green grey silty clay with occasional limestone nodule bands	Not proven

4.3 Hydrogeological Setting

4.3.1 The BGS 1:625,000 scale Hydrogeology Map series indicates the site is underlain by the Kellaways Formation and Oxford Clay Formation rock unit. This is characterised as 'containing essentially no groundwater'.

4.3.2 The Defra MAGIC Map[6] indicates no groundwater vulnerability (unproductive) and no principal or secondary aquifers in the vicinity.

4.3.3 The previous ground investigations noted some shallow groundwater encountered within the Made Ground. Groundwater within Made Ground depends upon ground composition and can be unevenly distributed.

4.3.4 The site is not situated within a groundwater Source Protection Zone (SPZ) according to the Defra mapping.

4.4 Hydrological Setting

4.4.1 The site is situated between Vernatt's Drain (west) and the River Welland (east). Vernatt's drain is less than 10 m from the site boundary, at the foot of the embankment, and the River Welland is situated to the east of West Marsh Road, roughly 40 m from the site. The River Welland is a tidally influenced river and flows to the Wash coastline approximately 20 km north-east. The reach of the River Welland east of the site has been straightened and Vernatt's drain is to the west of the site. Both watercourses flow north and converge approximately 4.7 km north of the site.

4.4.2 The site is situated entirely within the Lower Welland catchment area.

4.5 Fluvial and Tidal Flood Risk

4.5.1 The EA floodplain maps identify areas in England and Wales at risk of flooding by allocating them into flood risk zones. The flood risk zones shown on the flood maps are defined in Table 1 (Flood Zones) of the Guidance (NPPG), and are as follows:

[6] Defra MAGIC Map, available at: https://magic.Defra.gov.uk/MagicMap.aspx (accessed 05/2026)

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- *Zone 1: Low Probability. According to the NPPG, land in this zone is considered to have less than 1-in-1000 annual probability of river or sea flooding in any year.*
- *Zone 2: Medium Probability. According to the NPPG, land in this zone is considered to have between a 1-in-100 and 1-in-1000 annual probability of river flooding in any year (between 1% and 0.1%) or between a 1-in-200 and 1-in-1000 annual probability of sea flooding in any year (0.5% to 0.1%).*
- *Zone 3a: High Probability. According to the NPPG, land in this zone is considered to have a 1-in-100 or greater annual probability of river flooding in any year (>1%) or a 1-in-200 or greater annual probability of flooding from the sea in any year (>0.5%).*
- *Zone 3b: The Functional Floodplain. According to the NPPG, land in this zone is used for water flow or storage in times of flood. This flood zone should be identified by a Strategic Flood Risk Assessment (SFRA). It is considered to have a 1-in-20 or greater chance of river flooding in any year which is >5%. Another probability, however, can also be agreed between the Local Planning Authority (LPA) and the EA.*

4.5.2 According to the Flood Map for Planning[7] the site and surrounds are located entirely within Flood Zone 3. Fluvial flood risk to the site is therefore considered to be high (>1%).

4.5.3 Because the River Welland is tidally influenced in this area, flood risk is closely associated with tide levels.

4.6 Flood Modelling and Tidal Flood Risk

4.6.1 In 2016 the EA commissioned Mott MacDonald to update the hydraulic understanding of the River Welland and its tributaries from the headwaters near Market Harborough, through Stamford and Spalding, to The Wash. To achieve this, a suite of MIKE-based models was assembled. A fully hydrodynamic one-dimensional MIKE 11 model represents the defended situation along the main stem of the Welland and the upper Glen, while a complementary MIKE 21 two-dimensional model captures the more complex flood-plain behaviour in the low-lying fenland downstream of Kates Bridge and Market Deeping.

4.6.2 It is determined that the lower River Welland is tidally influenced. Spalding lies towards the downstream of the Welland catchment, within that lower reach. The model's sensitivity testing showed that changes applied at the tidal boundary propagate as far upstream as Peakirk gauging station on the River Welland. Peakirk is situated upstream of Spalding and any tidal effect that is discernible at Peakirk will affect Spalding.

4.6.3 The EA identified two critical storm durations from analysis of historic events: 25.9 hours for the upper catchment and 37.8 hours for the lower fen. The models were run for a wide suite of return-period events, spanning 50 % to 0.1 % Annual Exceedance Probability (AEP), together with 1 % + climate-change and 0.1 % + climate-change scenarios. To represent a climate change scenario event for fluvial design events, the model parameters were adjusted to produce inflows with an increase in peak flow of 20%.

4.6.4 Sea-level rise was represented in the hydraulic design simulations by raising the model's downstream tidal water-level boundary (set at Fosdyke Bridge) by +1.1 m above the (then) present-day spring high-tide level. This uniform 1.1 m uplift was applied to all climate change design runs and derives directly from the Defra 2006 climate-change guidance.

[7] Environment Agency Flood Map for Planning, available at: https://flood-map-for-planning.service.gov.uk/ (accessed 05/2026)

4.6.5 The modelled extents for the lower welland 0.1% AEP plus climate change (CC), which is the most extreme scenario modelled, shows that flooding would not extend beyond the defences along the banks of the River Welland, meaning the site would not be affected. See Figure 4-2 below.

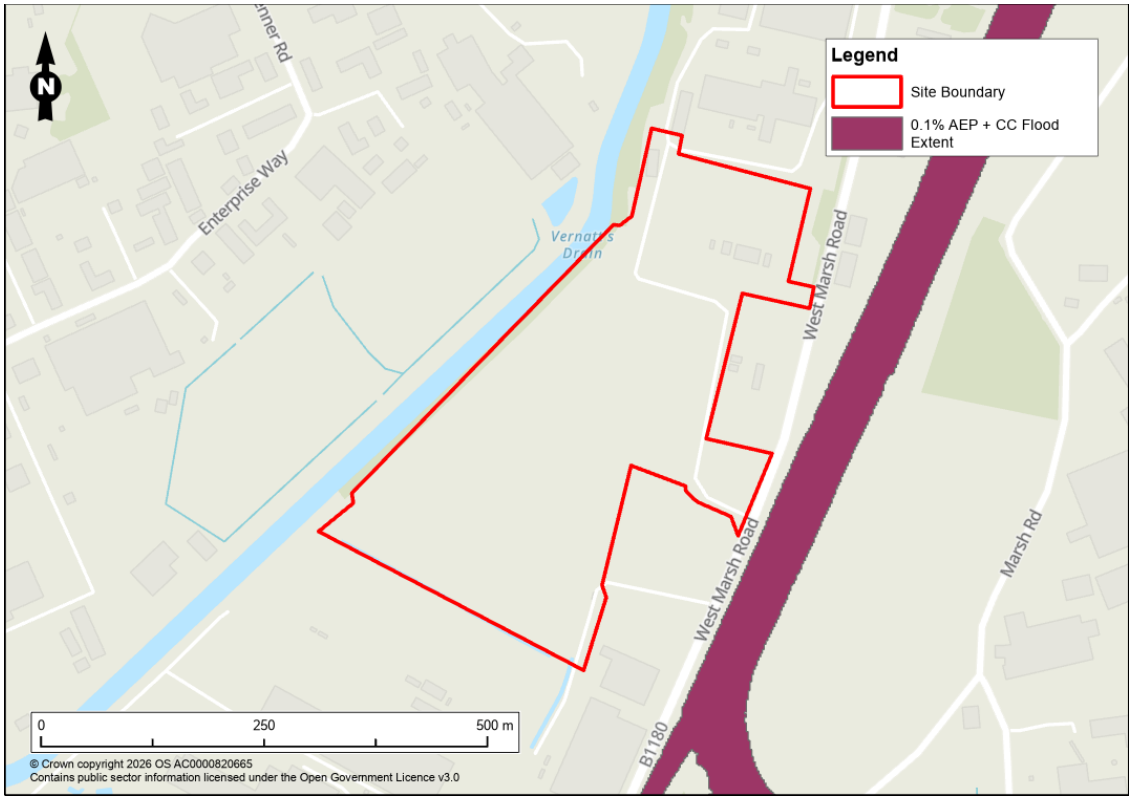


Figure 4-2: River Welland defended 0.1% AEP + climate change modelled flood extent

4.6.6 However, this does not represent a scenario in which the defences are breached. Breached scenario extents were not available at a useful resolution for site-specific assessment so levels at modelled at nodes close to the site have been used to determine risk to the site area.

4.6.7 At the node ~100 m east of the site (NGR 526079, 324608) the peak undefended flood levels are as follows:

- 1.0% AEP: 4.431 m AOD
- 0.5% AEP: 4.426 m AOD
- 0.1% AEP: 4.419 m AOD
- 1.0% AEP + CC: 5.484 m AOD
- 0.1% AEP + CC: 5.491 m AOD

4.6.8 The differences between the AEPs are generally small (7 cm or less), but the climate change allowances increased flood levels by more than 1 m as discussed above. Based on these flood levels at the River Welland, in an undefended scenario the northernmost section of the site, which is below 4.5 m AOD, would flood in a present-day event and the northern half of the site, which is below 5.6 m AOD, would flood in a future climate change event. The southern half of the site (where the main BESS compound and substation are proposed) remains above flood level in all events.

4.7 Flood Defences

4.7.1 The Application Site is located within an area benefitting from flood defences. These flood defences comprise:

- Raised earth embankments along the River Welland (approximately 30 m east); and,
- The Fulney Lock and Marsh Road Sluice (upstream (to the south / south east)

4.7.2 In terms of the raised earth embankments along the River Welland, the 'Environment Agency Northern Area Defence Crest Levels' (August 2008) noted that the crest heights of the earth embankments (at the Application Site) are at three levels: 6.99 m AOD (WELLAND 10489); 6.97 m AOD (WELLAND 10090); and, 7.42 m AOD (WELLAND 9691). In addition, it was noted that the earth embankments provided protection against a flood event with a 1 in 100 (1%) annual probability.

4.7.3 Additionally, in terms of the raised earth embankment along the River Welland, Ramboll understands that (based on 2008 / 2009 surveys) the current minimum defence crest levels are 6.84 m AOD.

4.7.4 The Fulney Lock is located approximately 200 m south of the Application Site, and the Marsh Road Sluice approximately 350 m south-east of the Application Site. As the tide / water levels rise, the gates close to prevent floodwater ingress. Conversely, as the tide / water levels lower, the gates open to facilitate discharge from drains / rivers. In addition, whilst the March 2017 SFRA does not specifically comment on the Fulney Lock / Marsh Road Sluice, it is noted that all such systems of relevance were assessed as being secure against a climate-change adjusted flood event with a 1 in 200 (0.5%) annual probability up to 2055.

4.7.5 The EA's AIMS Spatial Flood Defences records are shown in Figure 4-3 below:

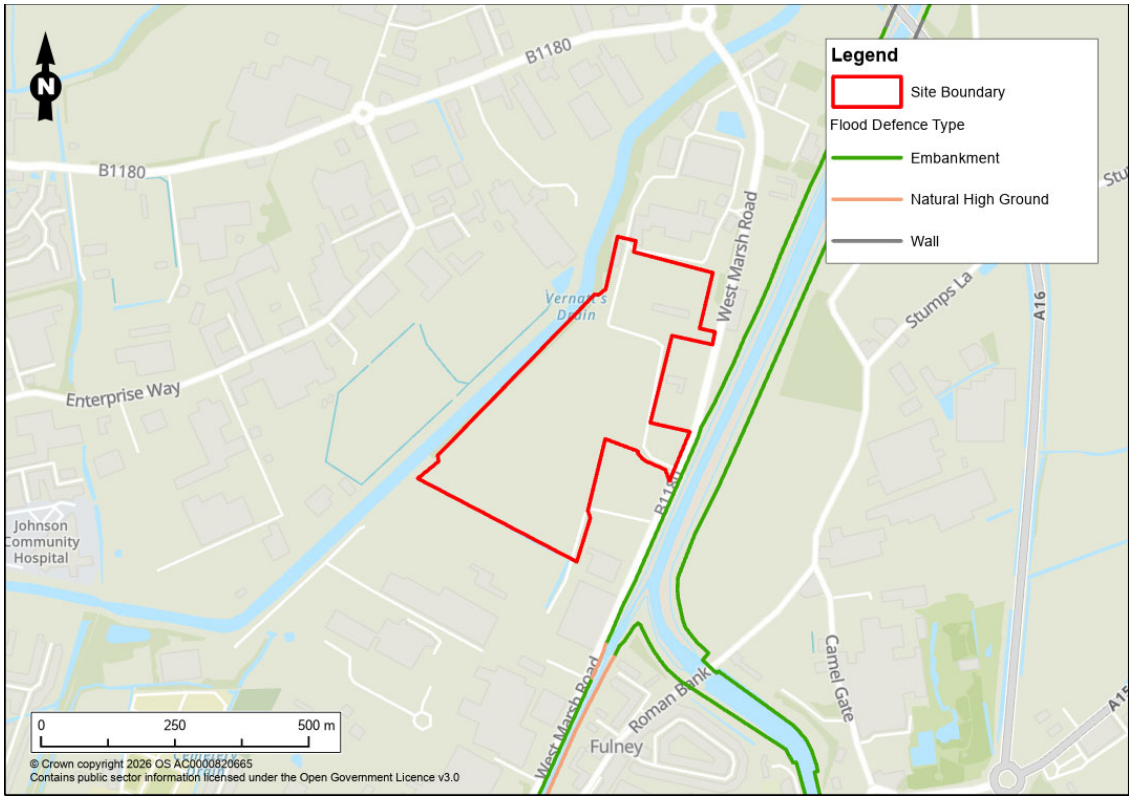


Figure 4-3: Flood Defences

4.8 Surface Water and Sewer Drainage Flood Risk

4.8.1 The Flood and Water Management Act 2010 defines surface water flooding as flooding that takes place when surface runoff generated by rainwater falls on to the surface of the ground and has not yet entered a watercourse, drainage system or public sewer.

4.8.2 The EA's Long-Term Flood Risk Map[8] identifies areas in England and Wales at potential risk of surface water (pluvial) flooding. The surface water flood maps define flood risk as follows:

- *High Risk. Considered to have a greater than 1-in-30 annual probability of surface water flooding in any year (>3.3%).*
- *Medium Risk. Considered to have between a 1-in-30 and 1-in-100 annual probability of surface water flooding in any year (between 3.3% and 1%).*
- *Low Risk. Considered to have between a 1-in-100 and 1-in-1000 annual probability of surface water flooding in any year (between 1% and 0.1%).*
- *Very Low Risk. Considered to have a less than 1-in-1000 annual probability surface water flooding in any year (<0.1%).*

4.8.3 The EA's mapping (last updated in September 2025) indicates the majority of the site area is at 'Low' or 'Very Low' risk of surface water flooding. There are some small, isolated areas of 'Low' to 'High' risk through the site, which would largely be dependent upon existing topography.

4.8.4 The EA's guidance on the Flood Map for Surface Water, published in 2013, has confirmed that there are many assumptions in the modelling which will affect the accuracy:

1. The main assumption related to urban drainage capacity and a national average 'drainage removal rate' of 12mm/hr is assumed unless otherwise specified by an LLFA.
2. The underlying digital terrain mapping (DTM) was derived from LiDAR data which varies in horizontal resolution from 0.25 to 5.0 m. However, the DTM for the modelling was re-sampled to 2 m so local variation in topography is lost in the modelling.
3. Road surfaces within Ordnance Survey (OS) mapping data were lowered by 0.125 m in order to delineate flow paths along road surfaces.

4.8.5 The EA conclude that, because of the assumptions in the modelling, the resulting mapping should not be used to definitively show that an area of land or property is, or is not, at risk of flooding, and the maps are not suitable for use at an individual property level.

4.8.6 The EA's surface water flood risk map is shown in Figure 4-4 below.

[8] Environment Agency Long-Term Flood Risk Map, available at https://check-long-term-flood-risk.service.gov.uk/map (accessed 05/2026)

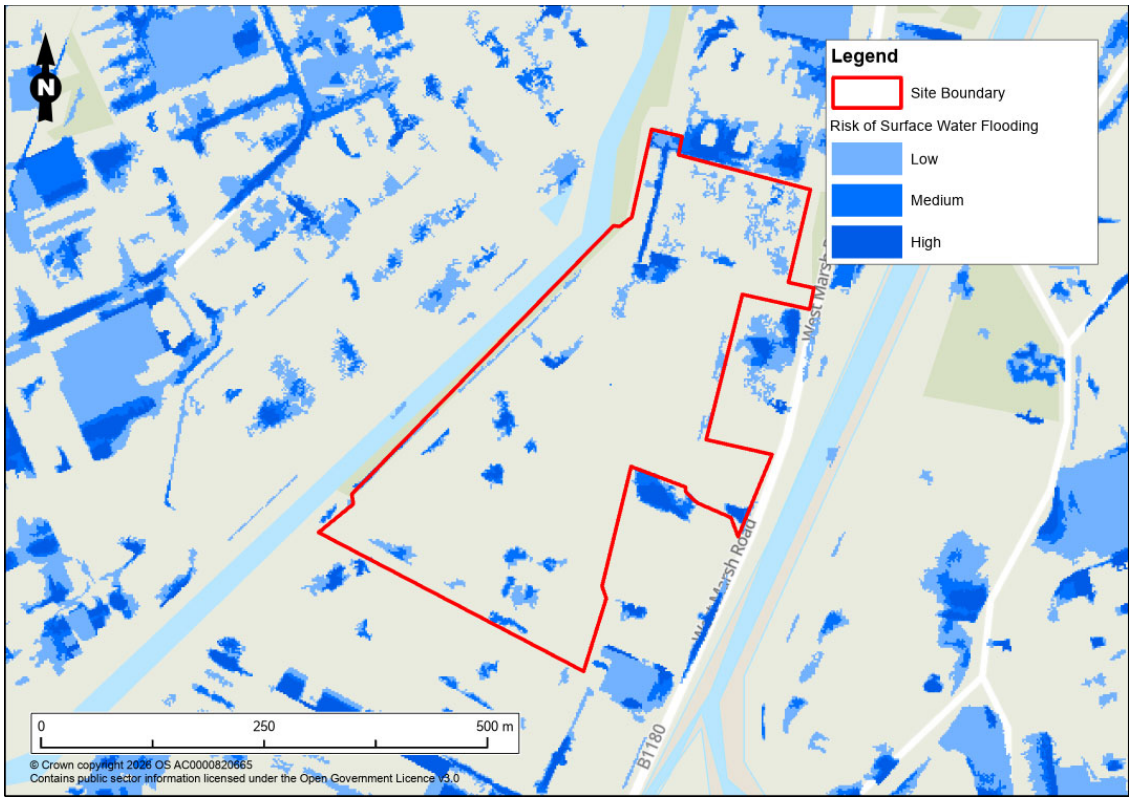


Figure 4-4: Surface Water Flood Risk

4.9 Groundwater Flood Risk

4.9.1 Groundwater flooding is caused by the emergence of water originating from sub-surface permeable strata. A groundwater flood event results from a rise in groundwater level sufficient enough for the water table to intersect the ground surface and inundate low lying land and/or infrastructure below ground. Groundwater floods may emerge from either point or diffuse locations. They tend to be long in duration developing over weeks or months and prevailing for days or weeks.

4.9.2 There are no aquifers present beneath the site. However, shallow groundwater may be present in areas of the Made Ground which is common throughout the site. There may therefore be areas of localised medium or high risk of groundwater emergence (at baseline) depending on conditions. Much of this is dependent on present surface permeability, however, which would be greater pre-development.

4.10 Risk from Reservoirs, Canals and Other Artificial Sources

4.10.1 According to the EA's reservoir flood risk dataset[9] the site north and eastern site boundary are within the extent of reservoir flooding risk when there is also flooding from rivers ('Wet Day' event). The source reservoir is identified as Rutland Water, Empingham.

4.10.2 It should be noted that reservoirs are regularly inspected by the EA for possible risk of failure and to ensure integrity. Reservoir flooding is generally an infrequent occurrence and should be considered a low risk to the site overall.

[9] UK Government (2022). Check the long term flood risk for an area in England, available at: https://www.gov.uk/check-long-term-flood-risk (accessed 05/2026)

4.10.3 The Wet Day and Dry Day reservoir flood risk extents are shown in Figure 4-5 below.

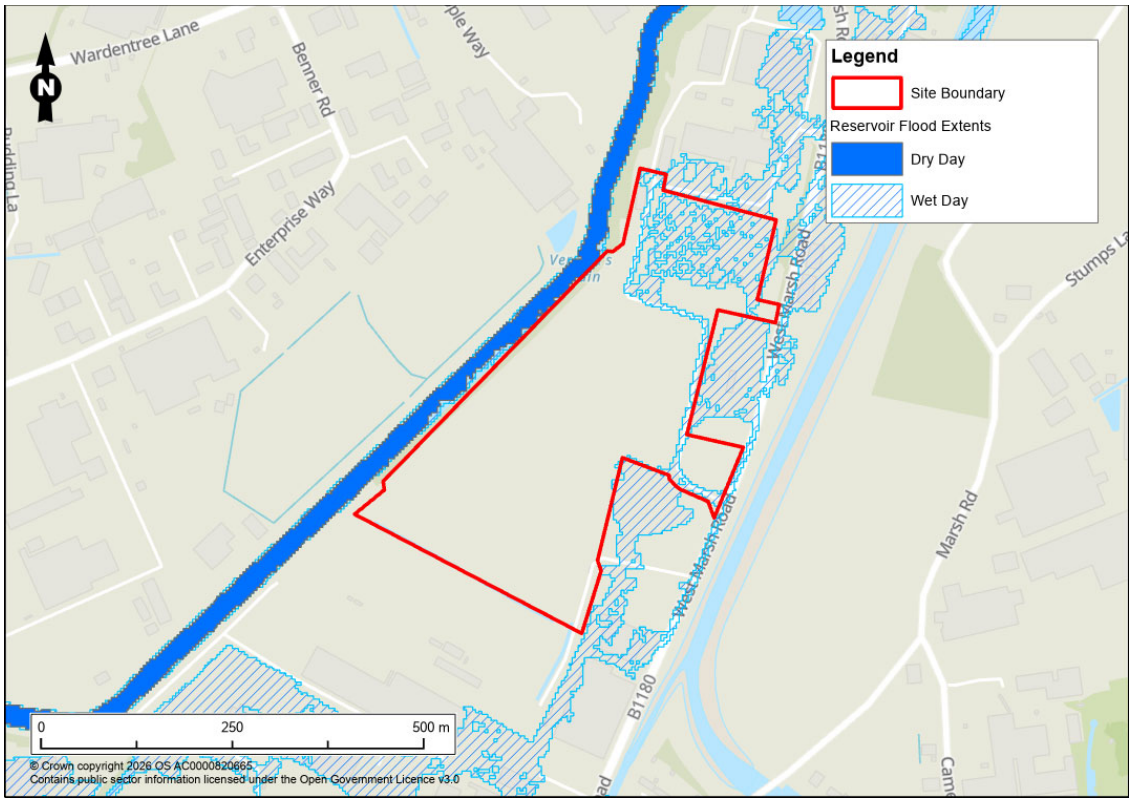


Figure 4-5: Reservoir Flood Risk

4.11 Historical Flooding

4.11.1 According to Defra spatial data[10] the site is not situated within an area where there are records of historical flooding. There is no historical flooding recorded by the EA with at least 1 km of the site.

5. ASSESSMENT OF FLOOD RISK

5.1 Sequential Test

5.1.1 The NPPF states (in paragraph 170) that: *"Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere".*

5.1.2 The NPPF further states (in paragraph 172) that: *"All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property. They should do this, and manage any residual risk, by:*

(a) applying the sequential test and then, if necessary, the exception test […]".

5.1.3 With regards to the sequential test, the NPPF states (in paragraph 174) that: *"Within this context the aim of the sequential test is to steer new development to areas with the lowest risk of*

[10] Defra Spatial Data Services Platform, Historic Flood Map, available at: https://environment.data.gov.uk/DefraDataDownload/?mapService=EA/HistoricFloodMap&Mode=spatial (accessed 05/2026)

flooding from any source"; and (in paragraph 177) that *"Having applied the sequential test, if it is not possible for development to be located in areas with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in Annex 3."*

5.1.4 The Application Site is located within a Flood Risk Zone 3 (High Probability).

5.1.5 Notwithstanding, within the South East Lincolnshire Local Plan, the Application Site is located on land designated under:

- Policy 7 on Improving South East Lincolnshire's Employment Land Portfolio, and more specifically as sites SP037 ('Spalding Power Station') and SP038 ('Spalding Power Station B') noted to be 'Restricted Use Employment Sites'.

5.1.6 It is noted that the 'Restricted Use Employment Sites' designation is: *"to encourage investment in port-related and power-generation related industries".*

5.1.7 Through the March 2017 SFRA, and during designated, these broad location areas / sites were subject to, and passed, sequential testing.

5.1.8 In addition, it could also be considered that the Application Site / Spalding Energy Park BESS would also pass the sequential test by replacing the remaining unbuilt elements of the current committed development (the Spalding Energy Expansion generating station) on the site, where this current committed development has established the acceptability for this type of development to be located at this broad location / within the Flood Risk Zone 3.

5.2 Exception Test

5.2.1 Table 2 (Flood Risk Vulnerability and Flood Zone Compatibility) in the Flood Risk and Coastal Change Guidance[11] indicates "Essential Infrastructure" must be subject to the Exception Test if situated in Flood Zone 3.

5.2.2 In the Planning Practice Guidance, Annex 3[12] (Flood Risk Vulnerability Classification), it is stated hat "Essential Infrastructure" includes: *"Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including infrastructure for electricity supply including generation, storage and distribution systems; including electricity generating power stations, grid and primary substations storage; and water treatment works that need to remain operational in times of flood."*

5.2.3 The Spalding Energy Park BESS is therefore considered to represent essential infrastructure and is subject to the Exception Test.

5.2.4 With regards to the exception test, the NPPF states (at paragraph 178) that: *"[…] To pass the exception test it should be demonstrated that:*

(a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

(b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

5.2.5 In terms of the exception test element regarding sustainability benefits, the Planning Statement (prepared for the original planning application by DWD Ltd for InterGen) provides further

[11] Gov.uk (2014) Planning Practice guidance: Flood Risk and Coastal Change https://www.gov.uk/guidance/flood-risk-and-coastal-change (accessed 05/2025)

[12] Gov.uk, National Planning Policy Framework, Annex 3: Flood Risk Vulnerability Classification, available at: https://www.gov.uk/guidance/national-planning-policy-framework/annex-3-flood-risk-vulnerability-classification (accessed 05/2025)

information, alongside the relevant planning assessment information. In summary, the Spalding Energy Park BESS is sustainably located as: it uses previously developed land (historically, the Application Site was used as a sugar beet factory (including railway lines and sidings, and settlement lagoons / ponds); it makes efficient use of land; it makes use of an onsite electrical connection into the existing National Grid 400 kV Spalding North Substation); and, more generally, will realise indirect economic benefits by providing essential support to the UK's energy market evolution, and delivering significant benefits in addressing the UK's 'Energy Trilemma'[13].

5.2.6 In terms of the exception test element regarding safety, and to demonstrate that the flood risks would be acceptable over (each phase of) the Spalding Energy Park BESS operational lifetime of approximately 20 to 25 years, measures to avoid / prevent significant adverse effects are discussed below.

5.3 Development Layout

5.3.1 During detail design, consideration will be given to additional raising of any vulnerable aspects of the Spalding Energy Park BESS. For example, formal / final flood escape routes should be situated in areas less likely to flood and on accessible areas of land. In addition, overland flow should be directed away from any vulnerable aspects of the Spalding Energy Park BESS.

5.4 Finished Floor Levels

5.4.1 Relevant parts of the Application Site (i.e. BESS Zone, Electrical Banking Station Zone, and Welfare Compound Zone) will be at or above 6.7 m AOD. This is more than 1 m above the 'worst case' undefended 1-in-1,000 (0.1%) water levels at the River Welland with a climate change allowance added. Notwithstanding, during detailed design, additional consideration may be given to additional features / measures, such as the raising of specific items of equipment / plant (e.g. such as the BESS containers / enclosures and the Electrical Banking Station) above this site level. Additional features / measures (to avoid / prevent adverse effects) are not required.

5.5 Flood Resistance / Flood Resilience

5.5.1 During detailed design, consideration may be given to additional flood resistance / flood resilience measures. For example, the use of sealed, flood resistant barriers / fences can act to keep flood waters from inundating the site, parts of the site, or buildings.

5.6 Surface Water Management

5.6.1 Effective surface water management / drainage design acts to mitigate surface water flooding risk and divert overland flow away from vulnerable areas or the site as a whole. The surface water drainage strategy is outlined in the section below.

6. SURFACE WATER DRAINAGE STRATEGY

6.1.1 According to the EA's surface water flood mapping the site is at very low risk of flooding from surface water. However, as the Spalding Energy Park BESS will comprise the redevelopment of a brownfield site with limited hardstanding, there is potential for the impermeable surface area to increase.

[13] The UK's 'Energy Trilemma' is widely accepted to represent the key challenges of: ensuring security of supply; decarbonising; and, containing costs.

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6.1.2 With regards to the surface water drainage strategy, best practice dictates this incorporates Sustainable Drainage Systems (SuDS) to restrict run-off following the drainage hierarchy, comprising:

- Storage (for later use); or,
- Infiltration;
- Attenuation in ponds / open water features for gradual release; then
- Attenuation in sealed water features / tanks for gradual release.

6.1.3 In terms of the gradual release, this would be:

- Discharge direct to a watercourse;
- Discharge to a surface water drain / sewer; then,
- Discharge to a combined sewer.

6.1.4 A review of Anglian Water public sewer record indicated no surface water services adjacent the site, meaning a public sewer connection to discharge surface water is unfeasible.

6.1.5 The use of attenuation options / SUDS techniques provides a significant contribution towards more sustainable development as they:

- Address potential environmental effects / impacts at source, rather than downstream;
- Attenuate surface run-off rates, reducing the impact of development on flooding;
- Protect and / or enhance water quality;
- Can be engineered to be sympathetic to the environmental setting and the needs of the local community;
- Provide opportunities for ecological habitat creation; and,
- Can encourage natural groundwater recharge.

6.1.6 It is proposed that surface water be collected in an attenuation pond or basin at a suitable location within the site boundary (an indicative location is shown in the site layout in Annex 1) and then discharged to The River Welland at a controlled rate (possibly at or close to greenfield rate, to be agreed with the Council). The River Welland is tidally influenced, discharge of surface water is anticipated to be allowed at greater rates than would generally be accepted into an ordinary fluvial river.

6.1.7 It may also be possible to discharge surface water to Vernatt's Drain to the west of the site. However, this would require consent from the Welland & Deepings Internal Drainage Board (IDB) and discharge limits may be stricter due to the smaller size of the watercourse relative to the Welland and its role in flood alleviation.

6.1.8 In addition to attenuation and discharge to a watercourse, it is proposed to incorporate permeable paving into the site's hardstanding where practical. This would restore some of the infiltration to ground lost from baseline conditions and thereby reduce the necessary storage capacity and size of the attenuation pond/basin. Additionally, 20-40mm single size no-fine material of approximately 150mm depth has been proposed at the BESS compound which would assist attenuation at the site (surface water would infiltrate through the material and be held just below surface level before being discharged from the site at a controlled, agreed rate).

6.1.9 The specific design of the surface water drainage system and the surface water discharge rates will be determined at the detailed design stage and following consultation with the Council and relevant bodies.

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7. CONCLUSIONS

7.1.1 Based on the findings of this Flood Risk Assessment and in consideration of the recommendations made, it is concluded that any flood risk will continue to be appropriately managed by the development proposals over the lifetime of the development, taking climate change into account and fittingly for the vulnerability of proposed users.

7.1.2 No further flood risk assessment is deemed necessary for the proposed amendment and there is no change to outcome of the previous FRA submitted in support of the 2022 planning application.

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ANNEX 1
1.PROPOSED DEVELOPMENT PLAN

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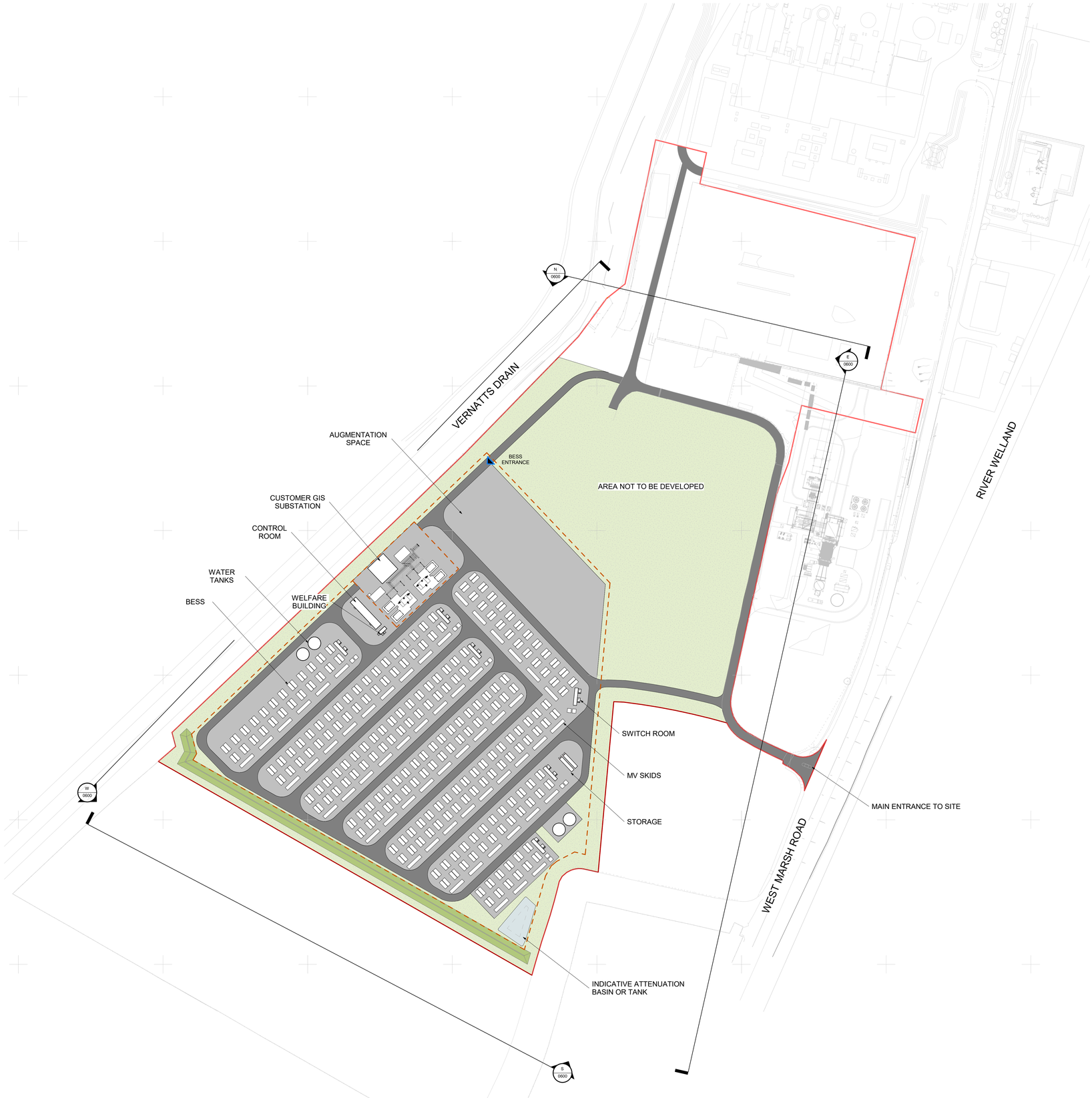
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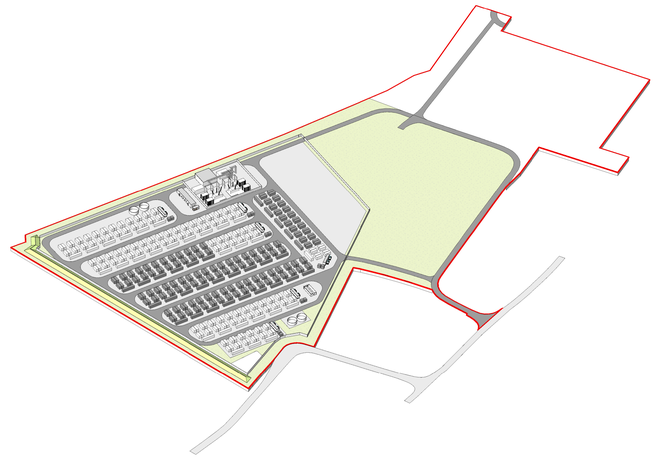
SITE PLAN KEY

- Bund at site boundaries: 8m wide, 2m high
- Fence: 2.9m high
- Application Site



INDICATIVE GENERAL ARRANGEMENT PLAN

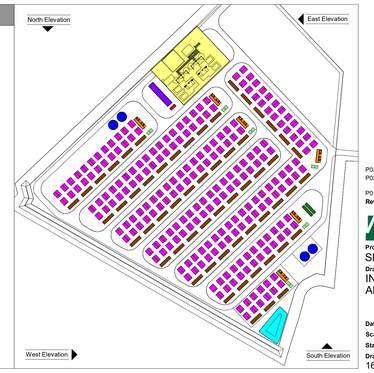
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INDICATIVE 3D VIEW

SITE PLAN KEY

- WELFARE BUILDING
- STORAGE
- ATTENUATION BASIN
- WATER TANKS
- HV SUBSTATION
- SWITCH ROOM
- BESS
- CONTROL ROOM
- MV SKIDS
- AUX TRANSFORMERS



Rev	Drawn	Date	Comment
P03	OR	29.06.26	Updated for Section 73
P02	MD	13.12.21	Minor amendments incorporated and issued for approval
P01	NR	06.12.21	Issued for approval

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Project
SPALDING ENERGY PARK

Drawing Title
INDICATIVE BESS GENERAL ARRAGEMENT PLAN

Date JULY 21
Scale 1 : 1000@A0
Status PLANNING
Drawing Number 16181- WDN- XX- XX- DR- A- 0500

Drawn NR
Checked MD
Revision P03