BALLYROSS BATTERY ENERGY STORAGE SYSTEM

Planning, Design and Access Statement

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1 INTRODUCTION

This Planning, Design, & Access Statement (PDAS) has been prepared by RPS on behalf of Renewable Energy Systems 'RES' ('the Applicant'), in support of an application for full planning permission for the installation and operation of a Battery Energy Storage System ('BESS') with associated infrastructure (the Proposed Development) on a parcel of land approximately 150m south-west of no 34 Ballyvallagh Road, outside the small settlement of Gleno ('the site'). The site is agricultural in nature and measures approximately 6.6ha in size.

1.1 Proposed Development

The description of the Proposed Development is:;

"Construction and operation of a Battery Energy Storage System (BESS) facility, consisting of battery storage enclosures, PCS/inverter units, associated substation infrastructure, CCTV and lighting columns, palisade and acoustic fencing, access tracks, drainage systems including attenuation ponds and other ancillary works'.

1.1.1 Application Documents

This combined Planning, Design & Access Statement (PDAS) is provided in line with the requirements of the Planning (General Development Procedure) Order (Northern Ireland) 2015, which requires applications for major development to be accompanied by a Design & Access Statement.

The proposals are deemed major development in line with Category 9 of the Planning (Development Management) Regulations (Northern Ireland) 2015 (DM Regulations). Prevailing case law directs that Battery Energy Storage System (BESS) are not considered to fall within Category 2 of the regulations (Electricity Generating Stations) for the purposes of development.

In that context (major development) the Applicant has undertaken Pre-Application Community Consultation (PACC) as required by Section 27 of the Planning Act.

This report should be read alongside the planning drawing package prepared by the Applicant and the suite of technical reports submitted, which are outlined in Table 1.1 below.

Table 1: Application Documents

Title	Author
Planning Application Drawing Pack	RES
Planning, Design, & Access Statement	RPS
Pre-Application Consultation Report	RES
Landscape and Visual Impact Assessment	RPS
Ecological Impact Assessment	RPS
Shadow Habitats Regulation Assessment	RPS
Drainage Strategy & Flood Risk Assessment	RPS
Acoustic Impact Assessment	RES
Transport Statement	RES
Fire Risk Statement	RES
Cultural Heritage Assessment	John Cronin & Associates (JCA)
Outline Construction Environmental Management Plan	RES

1.2 The Applicant

The Applicant, RES is the world's largest independent renewable energy company, working across 24 countries and active in wind, solar, energy storage, biomass, hydro, green hydrogen, transmission and distribution. As an industry innovator for over 40 years, RES has delivered more than 26GW of renewable energy projects across the globe and supports an operational asset portfolio exceeding 41GW worldwide for a large client base.

Drawing on our decades of expertise in the renewable energy and construction industries, RES has the expertise to develop, construct and operate projects of outstanding quality which contribute to a low carbon future by providing a secure supply of sustainable, low cost, clean green energy. RES is committed to finding effective and appropriate ways of engaging with all its stakeholders, including local residents and businesses, and believes that the views of local people are an integral part of the development process. RES is also committed to developing long term relationships with the communities around its projects, proactively seeking ways in which it can support and encourage community involvement in social and environmental projects near its developments.

RES is the power behind a clean energy future where everyone has access to affordable zero carbon energy. We bring together global experience, passion, and the innovation of 4,500 people to transform the way energy is generated, stored and supplied.

1.3 Need for the Proposed Development

Northern Ireland had previously set a target for 40% of electricity consumption from renewables generated energy by 2020. Figures from the Department for the Economy (DfE) and SONI confirm that this target has been achieved. This figure was always intended as a target and not a ceiling.

Non-synchronous generation produces a different amount of electricity depending on the energy available. It does not produce the same amount of electricity all of the time and is accordingly more unpredictable. Solar and wind energy are types of non-synchronous electricity as their power outputs can fluctuate depending on the amounts of wind and sun.

Renewables Targets

In December 2021 the Northern Ireland Executive published the Energy Strategy for Northern Ireland - "*The Path to Net Zero*" - setting out a vision for net zero carbon energy which entails reducing emissions from the energy we use for transport, electricity generation, industry and the built environment. A stated target to, "*Meet at least 70% of electricity consumption from a diverse mix of renewable sources by 2030*" was included within this document as part of the drive towards a carbon neutral 2050 society.

This commitment is in keeping with the wider UK direction of travel which includes a legal obligation to reduce greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050 with the introduction of the Climate Change Act 2008 (2050 Target Amendment) Order 2019, which came into force on 27th June 2019. This includes reducing emissions from the devolved administrations (Scotland, Wales and Northern Ireland), which currently account for about 20% of the UK's emissions.

The Energy Strategy Action Plan, published in March 2023 reaffirms the commitment to replace fossil fuels with renewable energy. To help achieve this, Chapter 6 of the document sets out an objective to, "Develop markets and infrastructure that integrate low carbon sources and meet our energy needs in a secure and cost-effective way" as part pf a flexible, resilient and integrated energy system. The Action Plan also sets out a more aggressive target to meet at least 80% of electricity consumption from renewables by 2030.

Challenges

Northern Ireland operate on an Integrated Single Electricity Market (I-SEM), the two Transmission System Operators (TSO) are SONI (NI).

Whilst in their role as TSO, SONI monitor the predicted levels of renewables that will enter the grid, it remains that the weather can be unpredictable in terms of the amount of wind or sun and accordingly the grid penetration from renewables electricity can also be intermittent and unpredictable, creating challenges.

Due to the necessity to operate a secure electricity system the TSO therefore must rely on coal and oil generated energy more than it should do. These traditional (oil / coal) Power Plants have long start up times and minimum operating thresholds. To ensure security of supply therefore, the TSO must ensure that these plants always keep operating at some level. This means when the extent of renewables generation increases, this clean energy can be lost to the system through curtailment of renewable generating facilities.

To ensure the TSO can continue to operate a secure electricity system with an ever-increasing level of renewables, they require new system tools which are flexible and adaptable, help facilitate clean renewables electricity and reduce dependency on high levels of thermal (oil/coal) generation in accordance with carbon neutral 2050 targets, but which still facilitate system stability.

The Technology

Enhancements to the system network and its infrastructure are therefore essential.

The Regional Development Strategy (RDS) 2035 acknowledges that to facilitate the provision of additional renewable power generation and to address current areas of weakness in the grid, it will be necessary to strengthen the electricity grid in many parts of Northern Ireland.

The SONI publication, *"Shaping our electricity future – A roadmap to achieve our renewable ambition"* informs a pathway to achieving energy and climate ambitions and objectives across the island of Ireland. It recognises that operating the future power system with fewer conventional generators will be technically challenging. Similarly, it recognises that to deliver on government renewables and climate change policies will require accommodation of unprecedented penetrations of variable renewables including wind and solar. To facilitate this will require significant evolution of the operation of the existing power system and transformational change in the volume of network reinforcements delivered across the island.

Whilst not an electricity generator in its own right, the Proposed Development is a key piece of the overall alternative grid system mix and will provide a flexible and rapid release of electricity helping to regulate electricity supply and demand without any operational greenhouse gas emissions. Conversely, the Proposed Development will also have the capacity to store electricity quickly which will allow for the oversupply of the grid to be managed at times of maximum renewables production, reducing / avoiding the need to curtail power production.

Existing Generation - Northern Ireland Latest Figures

The latest Electricity Consumption and Renewable Generation in Northern Ireland report was published on the 6th of June 2024 and confirms that:

1. For the 12 month period to March 2024, 45.4% of electricity consumption in Northern Ireland was generated from renewable sources – a decrease on the previous 12 months of 3%; and
2. Of the renewable energy generated, 81.7% was generated from wind.

Clearly this demonstrates that as a region Northern Ireland has some way to go to meet the environmental commitments set out to help address the climate emergency. There is also an over-whelming dependency on wind energy, most of which blows at night when energy demands are lower. To capitalise on this, complementary storage facilities are essential.

2 SITE & SURROUNDING CONTEXT

The site lies approximately 1.8km south-west of the village of Gleno and approximately 8km south-west of the town of Larne. The surrounding area in rural in character mainly agricultural fields, with dispersed dwellings and operational farm buildings along Ballyvallagh Road.

The site is located on a parcel of agricultural land used for grazing cattle, approximately 150m south west of no. 34 Ballyvallagh Road and approximately 650m south-east of the existing Ballyvallagh substation into which it is proposed to connect. The site is linear in shape and measures approximately 6.6 ha hectares as shown in Figure 2-1 Site Location Map below.

The site benefits from an existing access from the Ballyvallagh Road via an existing track serving no. 34. This dwelling (no. 34) and farm outbuildings lie outside and adjacent to the site boundary.

Overhead lines traverse the northern boundary along the Ballyvallagh Road and access track. A watercourse runs along the site's south-eastern boundary.

The topography of the site is generally flat and gradually sloping in areas.

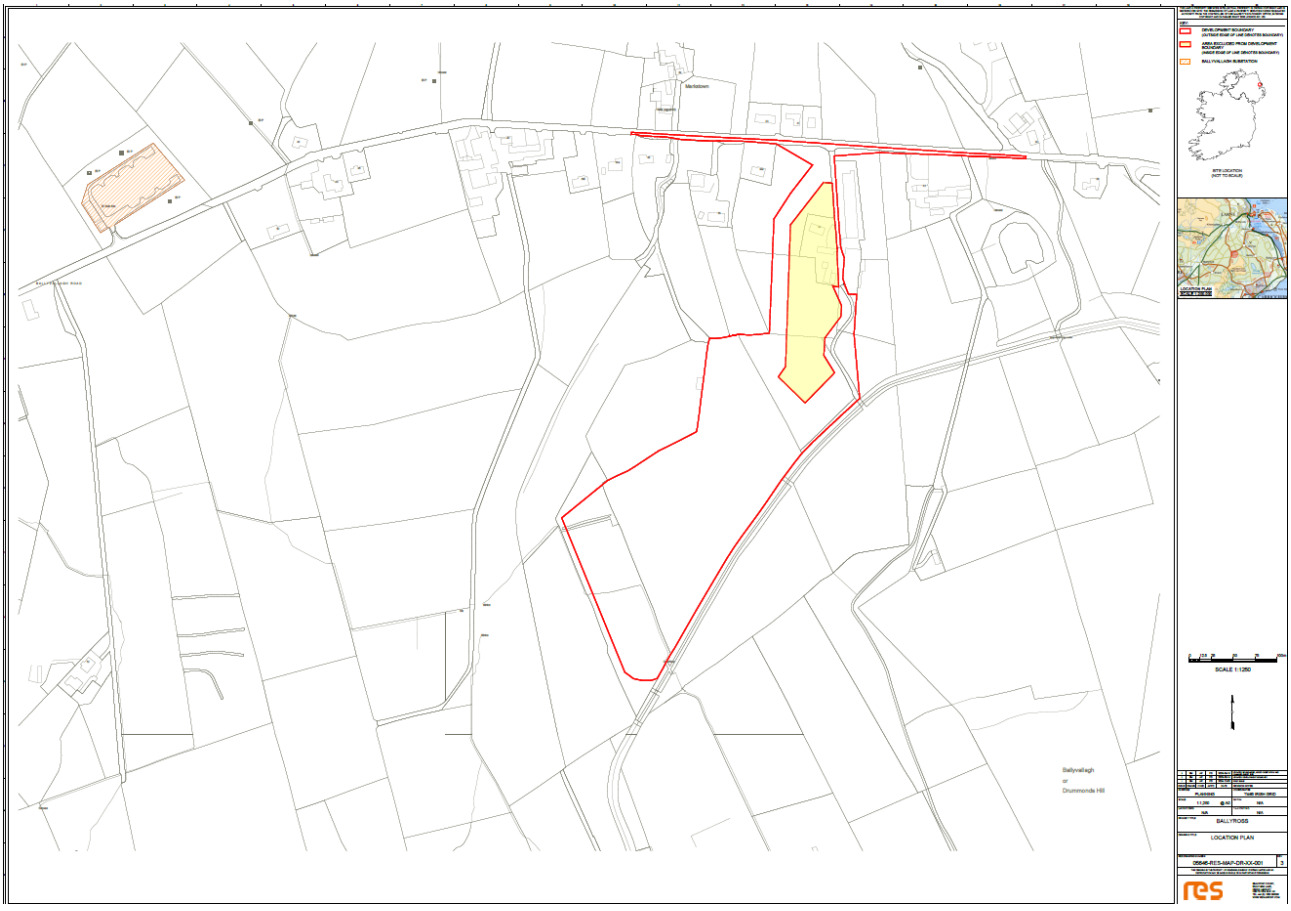

Figure 2-1 Site Location Map

2.1 Planning History

Table 2: Planning History of Site and the Surrounding Area.

Planning Reference	Date of Determination	Description	Address
LA02/2022/0522/F	27.01.2023	Proposed battery energy storage facility and associated access, lighting, CCTV cameras and other ancillary development	Lands to the rear of existing electricity substation 130m NE of No 54 Ballyvallagh Road, Larne
LA02/2025/0284/NMC	Pending	Amendments to previously approved scheme re internal layout	
LA02/2022/0739/F	27.09.2023	Proposed battery energy storage system, associated electricity substation compound, access and associated ancillary development/site works	Lands approx, 150m SE of 37 Ballyhampton Road, Larne
LA02/2024/0259/F	19.11.2024	Proposed erection of Battery Energy Storage System 50MW inc transformers, switch house, lighting CCTV, new boundary fencing, new access and ancillary development	Lands approximately 130m south of 30 Hanna's Road, Larne
LA02/2025/0342/RM	Pending (received 25/04/2025)	New dwelling and garage	Between No 34 & 36 Ballyvallagh Road
LA02/2025/0314/F	Pending (received 11/04/2025)	Proposed battery energy storage facility	Lands West/NW of existing substation & 150m NW of N 50 Ballyvallagh Road

Contained within Table 2 is a review of planning permissions within and beyond the site's boundaries. The review was undertaken to identify whether there is any planning history on or adjacent to the site which may be a material consideration as part of this application's assessment. A search was undertaken using the Northern Ireland Planning Portal. The potential for cumulative impacts between the Proposed Development and other development could potentially give rise to impacts during construction in the event of other timelines overlapping or cumulative visual impact on receptors. The presence of a consented BESS is acknowledged c. 0.7km north of the Proposed Development. The separation distance and intervening landscaping features mean that there is no potential for cumulative visual impacts. The construction phase will only have temporary impact on the road network.

3 DESCRIPTION OF DEVELOPMENT

The application is for the construction and operation of a Battery Energy Storage System (BESS) facility with an installed maximum capacity of approximately 120MW.

The Proposed Development consists of a BESS facility set within a compound area, ancillary infrastructure, fencing, access roads, landscaping and all other site works and is illustrated in Figure 3-1 Site Layout.

The scheme comprises:

- 136 Battery Energy Storage Units and 34 associated Power Conversion System (PCS) units;
- Internal access roads opening onto the Ballvallagh Road and secondary via existing agricultural track
- 5 x no. spares container units;
- Primary 110kV substation compound and DNO substation compound;
- Auxiliary transformer
- Attenuation pond/s
- CCTV cameras and lighting columns;
- Temporary construction compound;
- Fire water tank;
- Fencing around the facility perimeter; and
- Associated landscape planting.

It is recognised that the technologies associated with these types of storage schemes are rapidly advancing and there may be changes to the components detailed between the planning application stage and the construction stage. This is common for renewable energy schemes, which usually require a degree of design flexibility at the construction stage. We have therefore adopted the Rochdale Envelope approach when assessing the impacts of the Proposed Development. The specifications included within the application represent the upper thresholds for the final development in terms of the environmental impacts of the scheme, for example, landscape and visual and noise. The proposal should be assessed and consented on the basis that the final scheme would not be more impactful than what is depicted within the planning application pack submitted.

Figure 3-1 Site Layout

3.1 BESS Units

The overall facility will comprise 136 BESS units. These are arranged in 2 groups of parallel facing units. These units are then facilitated by associated 34 PCS units. The BESS units will typical measure 6.1m (l) x 2.4m (w) x 2.9m (h) and will be set 1m apart. The BESS units will sit atop plinths/upstands typically measuring 300m high but within a range of 100mm to 500mm. Concrete will be limited to the upstands and will not be placed across the entirety of the compound. The plinths will be placed atop a permeable surface. Access to the units will be off internal tracks.

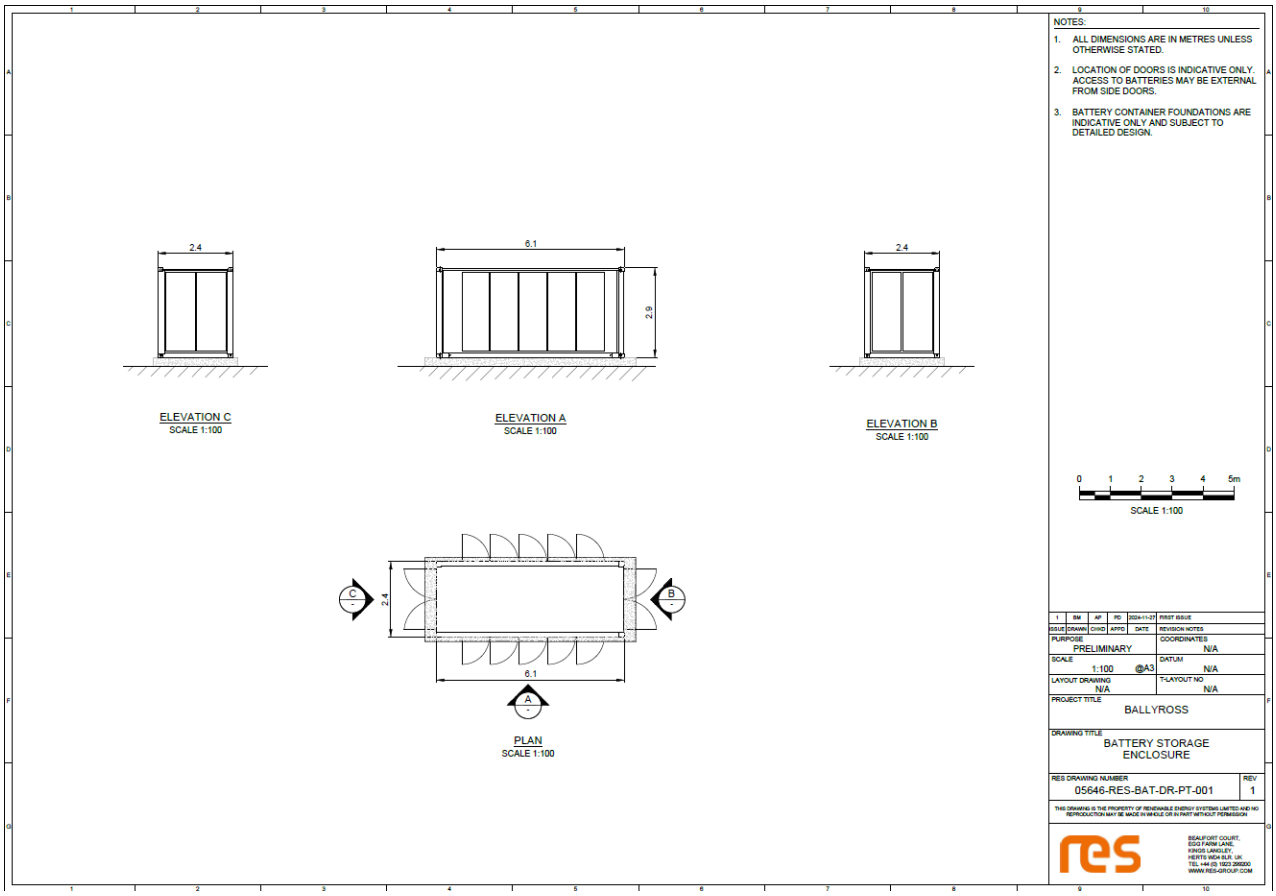

Figure 3-2 Battery Storage Unit

3.2 PCS Units

As stated, each pair of BESS units will be facilitated by an associated PCS unit with typical dimensions of 10.3m (L) and 6m (W) and 2.4m (H) resembling modified ISO-style shipping containers and typically finished in white/grey. The PCS units will sit atop plinths / upstands typically measuring 300mm high but within a range of 100mm to 500mm. Concrete will be limited to the extent of the upstands; the plinths will be placed atop a permeable surface. Access will be off internal tracks.

3.3 Preferred Battery Storage Technology

The preferred battery technology for the Proposed Development is Li-ion batteries which the client has deployed at multiple projects across Ireland, England, Scotland, USA and Canada. These batteries are used widely as an energy storage technology because of their high energy density and charge/discharge cycle fatigue resistance in comparison to some competing technologies.

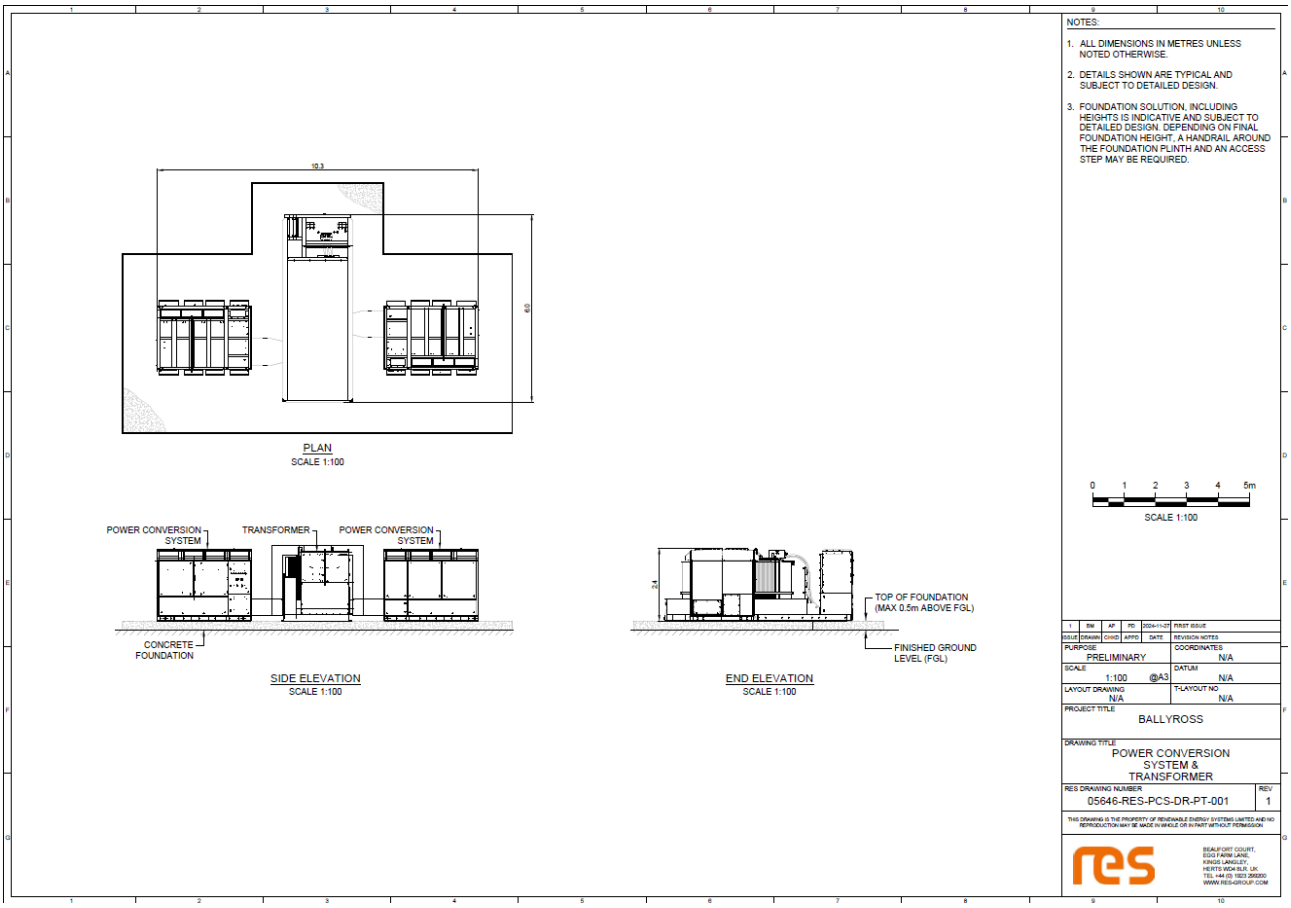

Figure 3-3 Power Conversion Unit & Transformer

3.4 Battery BESS Substation & DNO Compound

The compound will be located in the middle of the site and will accommodate customer substations and DNO substation. Electricity stored in the BESS units will be relayed via the PCS units to the substation for transmission to the grid network. The substations will accommodate all necessary equipment to enable the BESS system to be monitored, metered and connected to the network. The substation buildings will comprise a multi-compartment prefabricated structure atop a concrete foundation measuring 10m (L) x 5m (W) and 4.5m (H) and 11m (L) x 6m (W) and 4.5m (H) respectively and will sit atop a concrete pad. Equipment to be accommodated within the substation typically includes metering equipment, the central computer system and electrical control panels.

Lighting columns will be located within the compound which in itself will be finished in gravel or asphalt materials.

3.5 Auxiliary Transformer and Other Electrical Equipment

An auxiliary transformer with typical dimensions of 2.5m (L), 2.3m (W) and 2.7m (H) would be installed within the compound. This would be set on a concrete foundation and finished in grey.

A harmonic filter with typical dimensions of 6.3m (L), 3.3m (W) and 2.7m (H) would be installed within the compound. A pre insertion resistor with typical dimensions of 3.3m (L), 2.7m (W) and 2.7m (H) would be installed on site within the security/acoustic fencing. A capacitor bank with typical dimensions of 6.4m (L), 2.8m (W) and 2.6m (H) would be installed within the compound. All these components would be set on top of concrete foundations and finished grey.

3.6 Spares Container

Five ISO style shipping containers will be located adjacent to the battery enclosures with typical dimensions of 12.2m (L), 2.4m (W) and 2.9m (H), set upon concrete plinth of maximum 0.5m, finished in white/grey/green will be located within the compound.

3.7 Grid Connection

It is anticipated that the likely grid connection point for the proposed project is the existing Ballyvallagh substation to the north-west of the site. Connection is likely to be facilitated by an underground cable however this does not form part of this planning application, and instead will be delivered via a separate consenting process. If undertaken by a statutory undertaker, the connection would normally benefit from permitted development rights under the terms of Class C of Part 14 of the Schedule to the Planning (General Permitted Development) Order (NI) 2015.

3.8 Fencing

For security purposes the proposed site will be enclosed approximately 3m high palisade fencing with security gates to facilitate access to the south. Following acoustic analysis, the fencing will be closed boarded timber acoustic fencing approximately 4m (H) surrounding the compounds.

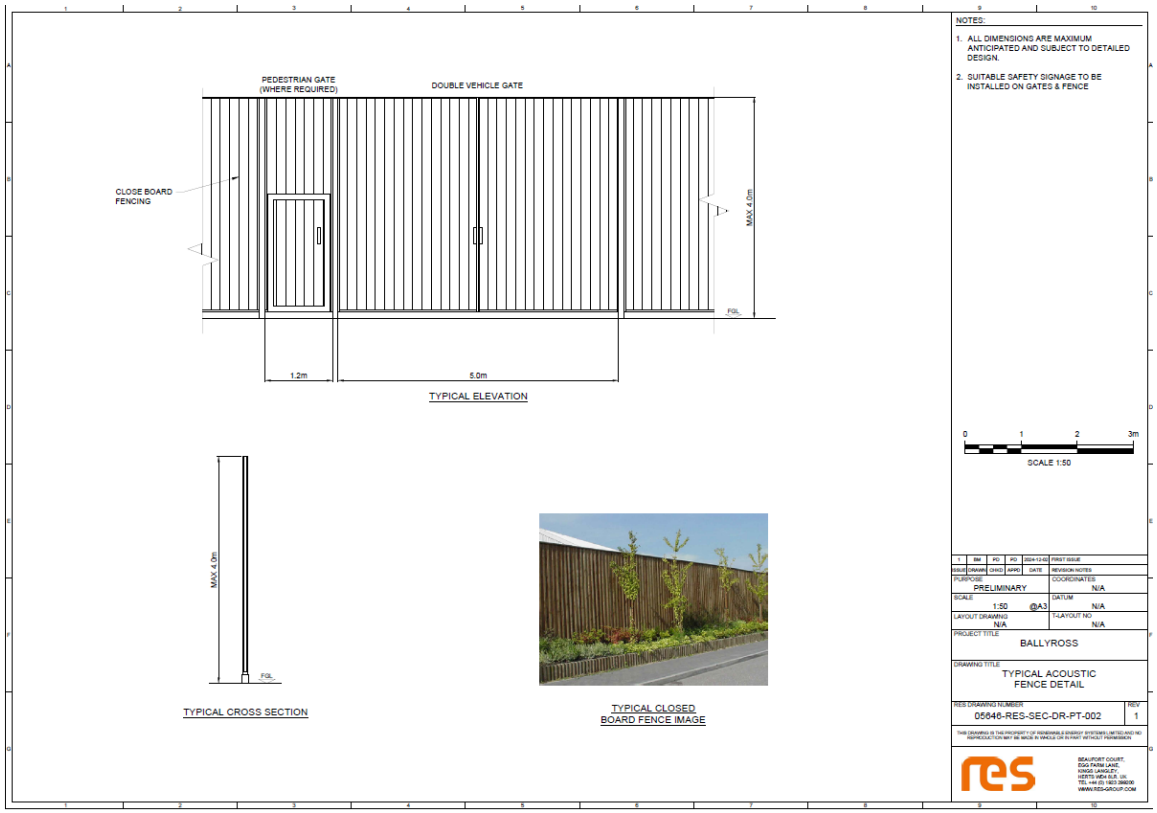

Figure 3-4 Acoustic Fencing

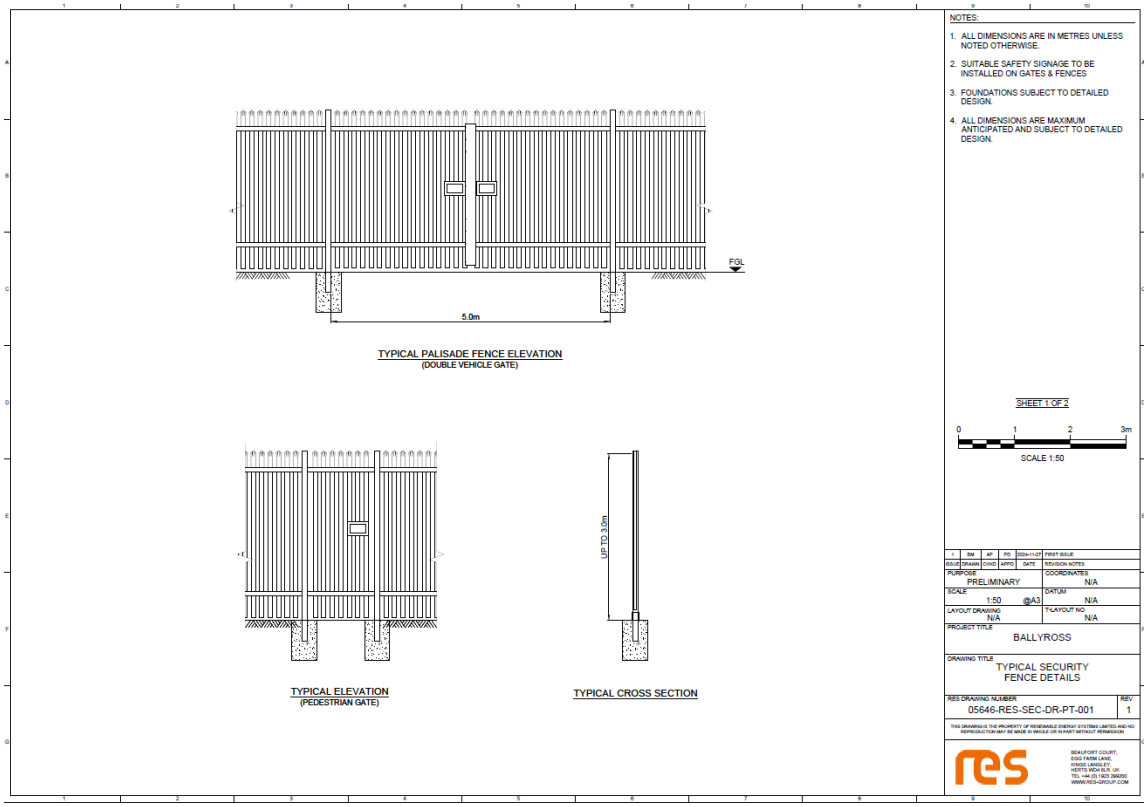

Figure 3-5 Palisade Fencing

3.9 CCTV and Lighting

For security purposes there will be CCTV cameras and lighting placed strategically throughout the development site. These will be pole mounted to heights of approximately 4m, be directed along fence-lines and utilise infra-red technology. These will enable remote surveillance of the site. Cameras are designed to not move either intentionally or unintentionally due to adverse weather conditions or animal activity. Adequate safeguards are in place to ensure that privacy interests are not compromised and the rights of individuals whose personal data may be recorded by the cameras are protected.

Usage is proposed to be minimal during hours of darkness for the safe movement around the site.

3.10 Waste

The Proposed Development will not generate any waste during the operational stage. Toilet facilities on-site during construction will be self-contained to be appropriately disposed of off-site by qualified contractors. Toilet facilities are proposed within the main compound as well as within the customer and control buildings. Again, these will be self-contained and disposed of off-site by approved contractors.

3.11 Access & Traffic

The site will be accessed from the Ballyvallagh Road adjacent to no. 34. Project components will be delivered to site via standard HGV. The Proposed Development would give rise to a maximum of 40 HGV movements per day on average during the 20-month construction phase. Workers will be encouraged to car/van share and parking will be fully accommodated on site.

3.12 Internal Service Tracks

The development will be serviced by proposed internal access tracks opening onto the adjacent laneway to the immediate north of the site and onto Ballyvallagh Road. Where proposed these tracks will be of permeable stone construction.

3.13 Drainage

A sustainable drainage system (SUDS) will be used to manage on site surface water runoff. Proposed attenuation ponds sited to eastern boundary of the site measure circa 1900m3 capacity.

3.14 Temporary Construction Compound

A temporary construction compound will be sited either side of the proposed access within the mid-section of the Proposed Development.

3.15 Construction Period

The proposal will be constructed over a 20-month period – not allowing for holiday periods or any potential work embargos placed on construction via any planning conditions during certain periods, should such embargo be required. Working times are envisaged to be 7am to 7pm, Monday to Friday and 8am to 1pm on Saturdays. No works are anticipated outside of these times. Car parking will be fully accommodated on site.

3.16 Operational Period

It is anticipated that the Proposed Development will have an operating life of 40 years after such the BESS, PCS and associated infrastructure will be removed and the site reinstated in accordance with a scheme to be agreed in writing with the Planning Authority at that time. This requirement is likely to be attached as a condition of compliance to any notice of planning consent.

During operation the site may be unmanned, however it is envisaged that 1 vehicle per month will visit the site for maintenance purposes.

3.17 Decommissioning

At the end of its lifetime the Ballyross site will be returned to its original agricultural use. All materials and components will be removed. The applicant aims on decommissioning, to prioritise reuse and recycling of the batteries, transformed, cabling and components.

3.18 Design Principles

A set of best practice design principles underpin the approach to development including:

- Undertaking development proposals within the existing site constraints including the majority of field boundaries, existing vegetation and site topography.
- Maximum possible tree protection across the site and accommodation of development proposals within existing landscape features. Access will be facilitated via existing gateways.
- Buffers from internal hedgerows and other features.
- Areas of greatest environmental sensitivity within the wider site are excluded from development based on landscape and environmental assessments and engagement with the local community.
- A package of environmental management proposals including landscaping and ecological enhancements from integral components of the project.

4 PLANNING & LEGISLATIVE CONTEXT

4.1 The Planning Act (NI) 2011

Section 6(4) of the Planning Act (NI) 2011 (the Act) requires that the determination of proposals must be in accordance with the prevailing local development plan unless material considerations indicate otherwise.

Section 45(1) of the Act provides meaning on the weight to be afforded to the plan in determining planning applications subject to this part and section 91(2);

'Where an application is made for planning permission, the Council, or as the case may be, the Department, in dealing with the application must have regard to the local development plan, so far as material to the application, and to any other material considerations.'

As set out previously and as elaborated upon in Section 4.2 of this statement, the Proposed Development is classed as a major development. Section 27 of the Act requires anyone proposing to submit a planning application for a major development to undertake Pre-Application Community Consultation (PACC) in advance of submitting any planning application. As part of this requirement, applicant's need to submit a Proposal of Application Notice (PAN) to the planning authority at least 12 weeks before submission of a formal planning application. The PAN should explain the nature of the proposed development and details of community consultation, including details on who will be engaged, the form of the engagement and timetable. The planning authority has 21 days to responds to the PAN and if required, comment on the proposed community consultation.

A PACC Report has been prepared by the Applicant and accompanies this submission. The report sets out details of the pre-application engagement to date and provides clear evidence on how an effective PACC process has been undertaken through meaningful engagement with the community.

4.2 The Planning (Development Management) Regulations (NI) 2015

Under Section 25 of The Planning Act (Northern Ireland) 2011 ('the 2011 Act') there is a hierarchy of developments within Northern Ireland. Any proposal can belong to either the category of 'major developments' or 'local developments.'

The Planning (Development Management) Regulations (Northern Ireland) 2015 (DM Regulations) further define development proposals as either "Major" or "Major prescribed for the purpose of Section 26 (1) of the Planning Act (Northern Ireland) 2011" – which refers to Developments of Regional Significance.

The classification of the application determines the processing route to be followed to obtain planning permission as well as the nature of the reports and other supporting information required to accompany the application.

As set out within Section 1,1,1 of this Statement, the Proposed Development constitutes a Major – although not Regionally Significant – Development under Category 9 of the DM Regulations as the site exceeds 1 hectare in area. Please also refer to Section 4.3.1 of this Statement.

4.2.1 Design and Access Requirements

The types of planning applications which are required to be accompanied by a D&AS, and the form and content of the same, are outlined within The Planning (General Development Procedure) Order (Northern Ireland) 2015.

The application is required to be accompanied by a D&AS on the basis that it is deemed a major application.

Development Management Practice Note 12 which outlines the key requirements of a D&AS setting out that it should explain inter-alia:

- The design principles and concepts applied to the development;
- How issues relating to access have been dealt with; and
- How the proposals consider environmental sustainability.

The level of information and detail in a D&AS should be proportionate to the scale, complexity and nature of the application.

This PDAS fully meets the requirements and recommendations in respect of same.

4.3 The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017

Environmental Impact Assessment (EIA) is the process of compiling, evaluating and presenting all the likely significant environmental effects of a proposed development. The need to undertake an assessment is governed by EC Directive 2011/92/EU as amended by Directive 2014/52/EU. These Directives have been implemented in Northern Ireland under the terms of The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017 hereafter referred to as the 'EIA Regulations'.

The EIA Regulations set out Schedule 1 and 2 developments and provide thresholds pertaining to each category of development contained therein. Proposals which breach Schedule 1 thresholds are deemed to be mandatory EIA projects. The proposal does not fall within any description of development under Schedule 1.

Those which breach Schedule 2 thresholds require a determination to be made as to the application of EIA. Category 3(a) contained within Schedule 2, Energy Industry, sets out that where an application is made for "*Industrial installations for the production of electricity, steam and hot water*" over 0.5 hectares in area, then a formal EIA determination will be required to be undertaken by the planning authority.

As set out in Section 4.3.1 below whether or not Energy Storage Systems are deemed to fall under this description of development, remains a matter for consideration.

4.3.1 Chief Planners Update 7 (CPU 7)

The Department For Infrastructure Planning's Chief Planner, issued an update 'CPU 7' in December 2020 which provided clarification on DFI's position as to whether BESS facilities were 'energy generating' facilities and therefore assessed within the context of Category 2 of the DM Regulations as major development.

As an associated matter, the update also considered whether BESS facilities fell under Schedule 2 – 3 (a) of the EIA Regulations 'industrial installations for the production of electricity' whereby if the site area exceeds 0.5ha, this would require the Planning Authority to undertake a screening exercise.

It was noted that a PAC decision had been issued (ref. 2018/A0248) in which the Commission had concluded that BESS facilities are not 'electricity generating.' However, DFI took a different stance in the Chief Planner update following a review of planning decisions in England, Scotland and Wales, and advised that the Department considered electricity storage development to meet the definition of an 'electricity generating station.'

The CPU further concluded that;

'…while the decision on whether a development proposal constitutes 'EIA development' is ultimately a matter for each local planning authority on a case-by-case basis, the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017 contain a Schedule 2 category with the description: 'industrial installations for the production of electricity.' In keeping with the Department's opinion that electricity storage systems are a form of electricity generation, it would appear appropriate that electricity storage is considered to fit within this description.'

This led to a legal challenge by ABO Wind Limited and Energia Renewables Company 1 Ltd, who contended that CPU 7 was lawfully incorrect on the grounds of Statutory Interpretation, Legality and Wednesbury Rationality.

The High Court considered these grounds and published their judgement in October 2021 (ref. HUM11648). Paragraph 79 of the Judgement provides clarification and concludes;

'A storage facility carries out more than one task. It converts imported electricity into a form which can be stored; it stores the converted energy; and it re-converts the stored energy into electrical energy. In only one of these processes can it be said to be 'generating' electricity. Depending on demand, such a facility may not be called upon to generate electricity for some time. Applying the natural and ordinary meaning of all the words in the 2015 Regulations, a BESS facility does not fall wholly within any single class of development. It therefore falls within the 'all other development' of Class 9.'

The High Court Judgement, whilst not dealing with the point head on, does provide some commentary in respect of whether an EIA screening is required, by drawing comparisons to An Bord Pleanála's (the Board) position in respect of similar developments under the Republic of Ireland regime. The High Court Judgement sets out than given the operation of the Integrated Single Electricity Market (I-SEM), the treatment of BESS within the other jurisdiction in the island is significant.

Schedule 5 Part 2, Class 3(a) of the Planning and Development Regulations 2001 (as amended), refers to "Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more."

The Judgement notes that in two 2019 decisions, the Board determined that BESS facilities did not fall within Schedule 5 of the Planning and Development Regulations. As a result, there was no requirement for an EIA Screening. The Judgement further refers to an Irish High Court Judgement in the field of solar energy which

confirms there is no screening requirement since they are not expressly referenced in Schedule 5 and since they do not produce heat and steam as well as electricity. The judgement concludes, that, “By analogy, it must be the case that BESS facilities would be similarly treated.”

4.3.2 EIA Determination

Without prejudice to the RPS position in respect of same, it is accepted that the obligation to screen a qualifying application sits with Mid and East Antrim Area Council (‘the Council’) as the planning authority.

Having regard to the above referenced background, In the event that the Council feel a screening determination is necessary then it must take account of;

- Any information provided by the applicant;
- The results of any environmental assessments; and
- Those selection criteria as are relevant to the Proposed Development.

The project team has undertaken a systematic assessment of the potential for likely significant environmental effects to arise as a result of the development.

Based on that assessment, on the characteristics of the site and nature of the Proposed Development, it is our considered view that the Proposed Development will not result in significant effects on the environment.

The potential impacts on specific environmental issues are considered further in Section 5 of this PDAS which further deals with the acceptability of the proposal in the context of prevailing planning policy and other material considerations.

In that context the Applicant has adopted an appropriate and proportionate approach in accordance with methods of best practice, which is to supplement the planning application with a suite of tailored environmental reports that address issues of relevance to the project as listed within Table 1 of this PDAS.

4.4 The Planning (Hazardous Substances) Regulations (Northern Ireland) 2015

Consent under The Planning (Hazardous Substances) Regulations (Northern Ireland) 2015 is not required for the Proposed Development, because batteries are defined as articles under the REACH Regulations (EC No 1907/2006 Registration, Evaluation, Authorisation, and Restriction of Chemicals).

4.5 Regional Development Strategy

The Regional Development Strategy (RDS) for the future development of Northern Ireland to 2035 was published in March 2012 and is the spatial strategy of the Northern Ireland Executive.

The Strategy outlines Regional Guidance, which applies to all of Northern Ireland, presented under three sustainable development themes of Economy, Society and Environment.

The following regional guidance within the strategy is applicable to this application;

- RG5: Deliver a Sustainable and Secure Energy Supply; and
- RG9: Reduce Our Carbon Footprint and Facilitate Mitigation and Adaptation to Climate Change Whilst Improving Air Quality

RG5 acknowledges that Northern Ireland needs robust and sustainable energy infrastructure and identifies a need to deliver a significant increase in all types of renewable electricity installations and renewable heat installations, including a wide range of renewable resources for electricity generation both onshore and offshore to meet the Region's needs.

RG9 seeks to reduce the region's carbon footprint and facilitate mitigation and adaption to climate change.

Chapter 4 of the RDS relates to regionally significant economic infrastructure. It includes a section on renewable energy development describing it as 'vital'. Paragraphs 4.16 and 4.17 are of particular relevance;

"To facilitate the provision of additional renewable power generation, primarily from onshore wind energy, and the need to address different areas of weakness in the grid, it will be necessary to strengthen the electricity grid in many parts of Northern Ireland. Grid up-grading will also be needed to ensure that proposed tidal stream and offshore wind developments are planned for properly. This will involve a significant programme of investment and grid strengthening, in the north and west, of the region.

Increased electricity interconnection capacity, allowing for the export and import of power, will help to ensure security and stability of electricity supply. It will provide increased opportunities for competitive trading in wholesale electricity, encourage new investment in generation and supply and enhance Northern Irelands security of supply. It is also important to facilitate the growth in power generation from renewable sources, while managing the challenging network management issues that increasing amounts of renewable integration on to the grid brings".

4.6 Strategic Planning Policy Statement (SPPS) 2015

A Strategic Planning Policy Statement (SPPS) for Northern Ireland was published in September 2014 and replaces the suite of planning policy statements (subject to the transitional arrangements). Whilst the SPPS rationalises and consolidates policy into a single document, there is not significant shift for the vast majority of policies.

It is set out in the Strategic Planning Policy Statement for Northern Ireland 2015 (SPPS) that;

'The 2011 Act transfers responsibility for the preparation of LDPs from the Department to Councils and establishes a plan-led planning system which gives primacy to the plan in the determination of planning applications unless other material considerations indicate otherwise.'

Sustainable development is stated as being at the heart of the SPPS. It recognises that, "A central challenge in furthering sustainable development is mitigating and adapting to climate change whilst improving air quality.

This includes the need to reduce emissions of greenhouse gases...and to respond to the impacts brought about by climate change"'.

The aim of the SPPS in respect of renewable energy is;

'…to facilitate the siting of renewable energy generating facilities in appropriate locations within the built and natural environment to achieve Northern Ireland's renewable energy targets and to realise the benefits of renewable energy without compromising other environmental assets of acknowledges importance.'

Regional strategic objectives in respect of renewable energy are to;

- Ensure that the environmental, landscape, visual and amenity impacts associated with or arising from renewable energy development are adequately addressed;
- Ensure adequate protection of the region's built, natural, and cultural heritage features; and
- Facilitate the integration of renewable energy technology into the design, siting and layout of new development and promote greater application of the principles of passive solar design.

4.7 Mid and East Antrim Local Development Plan 2030 Plan Strategy

The Council adopted the Local Development Plan 2030 Plan Strategy on 16th October 2023 as the first part of a 2-stage approach to local development planning which involves developing a Plan Strategy (PS) and then a Local Policies Plan (LPP).

Section 6(4) of the Planning Act (Northern Ireland) 2011 states that where, in making any determination under the Act, regard is to be had to the local development plan, the determination must be made in accordance with the plan unless material considerations indicate otherwise.

However, when considering land use zonings, designations, and proposals maps, the Council will still have regard to those contained in The Larne Area Plan 1984-2010, until such times as the new Local Policies Plan (LPP) is adopted.

The Plan Strategy sets out the following vision;

'Mid and East Antrim will be shaped by high quality, sustainable and connected places for people to live, work, enjoy, invest and visit, so as to improve the quality of life for all.'

The following policies are relevant to the determination of this application for energy storage in this location;

- SGS1 Spatial Growth Strategy;
- CS1 Sustainable Development in the Countryside;
- Policy GP1 General Policy for all Development;
- Policy TR1 Access to Public Roads;
- Policy TR6 Parking and Servicing;
- Policy FRD3 Management of Development in regard to Surface Water Flood Risk;
- Policy FRD4 Sustainable Drainage (SuDS);
- Policy RE1 Renewable Energy Development;
- Policy HE1 Archaeological Remains and their Settings;
- Policy NAT2 Species Protected by Law;
- Policy NAT5 Habitats, Species or Features of Natural Heritage Importance.

Policy RE1 ‘Renewable Energy Development’ is of particular importance in the determination of this application. The Council will permit proposals for renewable energy development together with any associated buildings and infrastructure, where it meets General Policy GP1 and accords with other provisions in the LDP. In addition, the proposal must meet all the following criteria:

a) it will not have an unacceptable adverse impact on visual amenity or landscape character including the cumulative effect of development on the landscape;
b) it will not cause significant harm to the safety or amenity of any sensitive receptors (including future occupants of committed developments) arising from noise; shadow flicker; ice throw; and reflected light;
c) it will not unacceptably restrict public access to the countryside or coast, or recreational/tourist use of the area;
d) no part of it will have an unacceptable impact on roads, rail or aviation safety;
e) it will not have an unacceptable adverse impact on built heritage or on biodiversity or nature conservation (including cumulative effects);
f) it avoids active peatland, unless it is demonstrated there are imperative reasons of overriding public interest as defined under The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 as amended;
g) it will not have an unacceptable adverse impact on local natural resources such as air quality, water quality and quantity; and
h) it will not prejudice the operational effectiveness of existing or approved energy infrastructure.

4.8 Larne Area Plan 1984-2010

The Larne Area Plan 1984-2010 was adopted in March 1998.

As the Council have not yet published a Local Policies Plan, which is the next stage in the new LDP process, only the sections of the Larne Area Plan, which contain District Proposals and site-specific policies and zonings, can be given weight in the consideration of any application on this site.

There are no specific definitions of relevance to the site or proposal within the Plan. The site is located within the rural setting as identified within the Larne Area Plan 1984-2010 and is not subject to any further specific zonings or designations. The site is situated outside settlement development limits, approximately 2km southwest of Gleno village, 5.8km north of Carrickfergus, 6.1km west of Ballycarry, and 6.4km east of Ballynure village.

The Larne Area Pan does not have any specific policies relating to BESS however p.41 ‘Energy’ confirms its support for developments that support the reduction of fossil fuels as an energy source.

4.9 Other Material Considerations

4.9.1 The Climate Change Act (Northern Ireland) 2022

The Climate Change Act (NI) 2022 was introduced to set out a government requirement for a reduction in greenhouse gas emissions. The target for the Act is at least a 100% reduction in greenhouse gas emissions by 2050.The Act also sets other sectoral targets including 2030 targets of at least 80% electricity consumption from renewable sources Department for Education (DfE) and 70% of waste recycled Department of Agriculture, Environment and Rural Affairs (DAERA) as well as a minimum spend of 10% of overall transport budgets on active travel Department for Infrastructure (DfI). The Proposed Development supports Section 52 of the Act to ensure that targets are met.

4.9.2 Energy Strategy for NI – The Path to Net Zero

In December 2021 the Northern Ireland Executive published the Energy Strategy for Northern Ireland – 'The Path to Net Zero' - setting out a vision for net zero carbon energy which entails reducing emissions from the energy we use for transport, electricity generation, industry and the built environment. A stated target to, 'Meet at least 70% of electricity consumption from a diverse mix of renewable sources by 2030' was included within this document as part of the drive towards a carbon neutral 2050 society.

The Energy Strategy Action Plan, published in March 2023 reaffirms the commitment to replace fossil fuels with renewable energy.

Chapter 3 of the document, 'Grow the Green Economy' sets out objectives:

- To double the size of our low carbon and renewable energy economy to more that £2bn turnover by 2030; and
- For Northern Ireland to become a leading energy decarbonisation innovation hub.

Chapter 5 'Replace Fossil Fuels with Renewable Energy' reaffirms the objectives to:

- Meet at least 80% of electricity consumption from a diverse mix of renewable sources (original 70% target superseded by the Climate Change Act);
- Replace high carbon heating sources with lower and zero carbon sources in households and businesses; and
- Support the transition to low and zero carbon fuels for vehicles.

The Energy Strategy also sets objectives to create a flexible, resilient & integrated energy system:

- Develop an energy system that delivers energy decarbonisation in a secure and cost-effective way; and
- Support the development and delivery of solutions that enable people and communities to be active participants in the energy decarbonisation.

The UK Climate Change Committee 2023 Progress Report to Parliament on 28th June 2023 is a statutory report that provides a comprehensive overview of the UK Government's progress to date in reducing emissions. That report concludes:

- Policy development continues to be too slow, and the assessment of the Carbon Budget Delivery Plan (CBDP) has raised new concerns and Committee confidence in the UK meeting its medium-term targets has decreased in the past year.
- A lack of urgency. While the policy framework has continued to develop over the past year, this is not happening at the required pace for future targets.
- Immediate priority actions and policies. Action is needed in a range of areas to deliver on the Government's emissions pathway.
- Planning policy needs radical reform to support Net Zero. The planning system must have an overarching requirement that all planning decisions must be taken giving full regard to the imperative of Net Zero.

All evidence points to an urgent imperative to address climate change.

4.9.3 Mid and East Antrim Climate and Sustainability Action Plan 2023 - 2027

The Climate and Sustainability Action Plan 2023 - 2027 sets out the Council's plan to address climate change in Mid and East Antrim over the next five years.

Illustrating the current and projected impacts of climate change throughout the borough, the plan looks at how the Council propose to tackle these effects, meet the requirements within the Climate Change Act (NI) 2022, and deliver on the Council's commitments within Mid and East Antrim's Climate and Sustainability Policy.

The Action Plan sets out the following vision;

'Mid and East Antrim will be a strong, vibrant, safe and inclusive community where people work together to improve the quality of life for all." It is important that we achieve this sustainably to allow us to meet our needs in a way that allows future generations to also meet their needs.'

4.10 Consultation & Engagement

Prior to the submission of this application, pre-application discussions were held between the client and the Council and a request for pre-application advice submitted on the 14th March 2025.

During this process, a number of key points, relevant policies and potential issues were discussed which informed the progression and design evolution of Proposed Development.

This application falls under the definition of a major application in that it falls under Category 9 of the Planning (Development Management) Regulations (Northern Ireland) 2015 and exceeding 1ha in size.

Pre-application discussions took place in January 2025 which highlighted drainage, habitats regulation assessment and archaeology as points of consideration.

Public Consultation events took place on 23rd January 2025 and 28th April 2025.

4.10.1 Pre application Community Consultation (PACC)

A full PACC Report which accompanies this application, outlines how RES has engaged with the local community to inform of the Proposed Development. The report explains when, where and how the community was consulted before the planning.

The PACC report summarises these activities undertaken, details how comments received from the community were considered and sets out if any consequent changes or mitigating measures have been included in the Proposed Development.

The consultation activities described within the PACC Report demonstrates how PACC has been undertaken in accordance with the requirements set out in the Planning Act (NI) 2011, Regulation 5 of the Planning (Development Management) Regulation (NI) 2015 and other guidance including Development Management Practice Note 10 – Pre-Application Community Consultation.

In summary, a range of engagement and communication activity was undertaken as part of the pre-application community consultation to local stakeholders and residents. This included: -

- Letters to elected representatives;
- Advertisement for the public consultation in the local press;
- Newsletters informing local residents and elected representatives about the public exhibition;
- Two Public Exhibitions and follow-up public information sessions; and
- Project website information.

The Applicant engaged early with the local community to encourage a constructive consultation process and has undertaken all necessary statutory pre-application consultation. All feedback received during the pre-application consultation period, through all consultation activities, has been considered by the Applicant through design review and pre-planning stages. A summary of the feedback, issues and concerns raised, together with the Applicant's response is contained within the PACC Report.

5 PLANNING ASSESSMENT

The suite of documents that accompany the planning application, as set out within Section 1.1.1 of this PDAS, are prepared cognisant of the relevant operational planning policy that will apply to this application. This section of the PDAS summarises the conclusions of the environmental assessments, confirming there are no associated significant environmental impacts associated with the proposal and that the Proposed Development is compliant with planning policy.

Design of the Proposed Development has evolved from the initial concept design, through the PACC process, and in response to technical and environmental assessment.

5.1.1 Principle of Development

The Proposed Development is considered to be in line with the RDS, in particular RG5, which recognises the requirement for robust and sustainable energy infrastructure in Northern Ireland, that delivers reliable and secure sources of energy to communities and businesses across the region.

RG5 seeks to increase the contribution that renewable energy can make to the overall energy mix and notes that there will need to be a significant increase in all types of renewable energy electricity installations.

It recognises the need to strengthen the grid as a result of the increasing number of renewable electricity installations – energy storage systems such as the Proposed Development, whilst not classified as generating facilities, play a pivotal role in distributing renewable energy to the grid, minimising reliance on non-renewable energy such as coal, gas and oil.

The Proposed Development clearly aligns with The Climate Change Act (Northern Ireland) 2022, as the proposal would contribute to the Path to Net Zero, a 100% reduction in greenhouse gas emissions by 2050, helping to tackle climate change.

The principle of developing the site for an energy storage system is therefore considered acceptable.

5.1.2 Landscape & Visual Impact

A Landscape & Visual Impact Assessment (LVIA) has been undertaken based on the relevant guidance described in the Guidelines for Landscape and Visual Impact Assessment, Third Edition (The Landscape Institute and Institute of Environmental Management & Assessment, 2013) (GLVIA3) and the Technical Guidance Note 06/19 Visual Representation of Development Proposals (The Landscape Institute, 2019).

The purpose of the LVIA is to identify and determine the effects on landscape character, landscape features, visual receptors and visual amenity as a result of the works proposed as part of the construction and the future presence and operation of the Proposed Development.

The Proposed Development lies within Northern Ireland Landscape Character Assessment area of *South Antrim Hills and Six Mile Water – RLCA 19*. The significance of visual effect during construction is considered moderate as the Proposed Development will be locally noticeable and temporary. The significance of visual

effect during operation is considered minor, limited by existing vegetation providing screening and surrounding topographical changes.

The Proposed Development lies within the Landscape Character Area *Carrickfergus Upland Pastures (89)*. The significance of visual effect during construction is considered moderate, temporary as the surrounding undulating landscape and vegetation will absorb activities. The significance of visual effect during operation is considered minor, medium term prior to establishment of planting associated with the Proposed Development.

A series of 6 representative viewpoints were assessed.

VP1 located on Watch Hill Road 1km from the south-western boundary of the Proposed Development is representative of recreational receptors using the road network and residential receptors within the immediate vicinity. The significance of visual effect during construction is considered moderate, short term, temporary as operations and machinery will be visible a long distance against a well vegetated backdrop. The significance of visual effect during operation is considered to be minor, assessed as not significant as existing vegetation surrounding the site provides some screening and aids integration.

VP2 located on the Ballyrickard Road 1.5km from the north-western boundary of the site is representative of receptors using the road network. The significance of visual effect during construction is considered small as machinery movements may only just be discernible. The significance of visual effect during operation if considered to be negligible, as the small change to the visual receptor will diminish as planting matures.

VP3 located on the Tureagh Road is located 1.2km north of the site and is considered representative of road users using Tureagh Road and recreational and local residential receptors. The significance of visual effect during construction is considered equivalent to no change as operations associated with the Proposed Development will not be visible due to intervening topography and vegetation. The significance of visual effect during operation is also considered equivalent to no change due to intervening topography and vegetation.

VP4 located on Ballyvallagh Road 1km from the western boundary is representative of glimpsed views by road users and recreational and residential receptors. The significance of visual effect during construction is considered localised minor, short term temporary due to the well vegetated backdrop to aid integration. The significance of visual effect during operation is considered minor to negligible as existing vegetation surrounding the site and in the middle distance provides screening and aids integration.

VP5 located on the Ballyvallagh Road at the entrance of the Proposed Development site is representative of road users travelling west and local residential and recreational receptors. The significance of visual effect during construction is considered moderate, short term and not significant and significance of visual effect during operation is considered minor as the existing vegetation surrounding the site and middle distance provides screening and aids integration.

VP6 located on Uppertown Road 3.2km north of the site is considered representative of glimpsed views by road users and views of local recreational and residential receptors. The significance of visual effect during construction and operation are considered to be no change due to the screening effects of intervening topography and vegetation cover.

Residential receptors no's 8, 9, 10 & 11 are considered to have similar views as in VP4 Ballyvallagh Road and a minor significance of effect as existing vegetation surrounding the site and middle distance and intervening topography provide some screening and aid integration.

Residential receptors no's 18, 19, 20,21, 22 & 24 are considered to have similar views as in VP06 Uppertown Road and significance of effect considered as no change due to low undulating landscape combined with intervening built form.

Residential receptors no's 1, 2, 3, 14, 15 & 16 are considered to have similar views as in VP05 Ballyvallagh Road and moderate significance of effect during construction which will diminish to minor effect as mitigation planting establishes.

Mitigation planting is proposed along the western boundary to reduce visual effects to the closest residential receptors and other existing boundaries are proposed to be augmented with native hedgerow, wood land and specimen tree planting. Seeding areas are proposed surrounding the infrastructure and the proposed attenuation ponds which will aid integration of these components.

Due to separation distance, intervening vegetation, topography and built form, there are no significant effects predicted for any of the identified landscape designations, representative viewpoints or residential receptors.

Overall, the surrounding landscape and its visual resources have the ability to accommodate the changes associated with the Proposed Development.

5.1.3 Ecological Impact Assessment

An Phase 1 Habitat Survey was carried in January 2025 which was extended to include a Preliminary Ecological Appraisal for Bats (PEAB), Preliminary Badger Survey and Preliminary Otter Survey and incidental observations of bird species within the site.

Designated sites - The site is not located within the boundary of any statutory or non-statutory designated sites of international, national or local nature conservation importance. However, the site is hydrologically connected to Ardboley Site of Local Nature Conservation Importance (SLNCI), Slimero Mountain Wet Grassland SLNCI, Carneal Area of Special Scientific Interest (ASSI), Glynn Woods ASSI, Larne Lough Ramsar, Larne Lough Special Protection Area (SPA), East Coast marine SPA, The Maidens Special Area of Conservation (SAC), North Channel SAC, Larne Lough ASSI, Glynn Woods ASSI and Swan Island National Nature Reserve (NNR).

A stream to the east lies at higher elevation and therefore it is unlikely that any pollutants or runoff from the site would be able to enter this watercourse. A stream to the west however is located at lower lying topography and is connected to the site via a series of drainage ditches.

The construction phase may have potential to have significant negative effect on designated sites however, through adhering to best practise pollution prevention guidance, by providing a 10m buffer between the construction works and drainage ditches, this level of predicted effect can be reduced to no significant effect..

Habitats – The majority of the site is improved agricultural grassland grazed by sheep with area of marshy grassland to the southern field. Some water from nearby streams is apparent within the marshy area which is

considered of site ecological value. Species poor hedgerow with trees lining the northwestern boundary are considered of regional ecological value. Several fields are bound by hawthorn and gorse native species rich hedgerow considered of regional ecological value. Semi-mature native species hedgerow line field boundaries which are considered regional ecological value. A ditch with standing water runs along the southwestern boundary eventually draining to Raloo water. The site is bound by post and wire fencing and a small wall to Ballyvallagh Road.

The Proposed Development will result in the loss of grasslands, marshy lands, bare ground and hedgerow. The design of the proposed compound, however, is generally within the larger field boundaries. Landscape mitigation plan incorporates locally appropriate native species hedgerow and woodland planting to augment the field boundaries and establish the site boundaries. Large areas of grass and flower seedling planting within the site is also proposed around the compounds and attenuation ponds.

Invasive non-native species – None were recorded on site and therefore there is no effect.

Bats – There are no historical records of bat species on site. Following the preliminary roost assessment of trees, two trees were found to have potential roost potential. These trees will be retained. Lighting will only be installed where necessary and designed to comply with best practise for the reduction of obtrusive light. Following these measures the Proposed Development it not anticipated to have any significant effect on bats.

Otter – There are no historical records of otter within 1km of the site and no evidence recorded on the site or within 150m of the site boundary and therefore there are no predicted effects.

Badger – There are no historical records of badger within 1km of the site and no evidence of the presence of the species within a 30m radius of the site and therefore there are no predicted effects.

Birds – Incidental site survey sightings recorded no Schedule 1 species. The Proposed Development will result in the loss of some hedgerow and two rowan trees; therefore, the timing of works will ensure that any removal is carried out outside the bird breeding season. Hedgerows will be replaced at a ratio of 2:1 and bird boxes provided on nearby trees, resulting in a gain of foraging and nesting habitats and a significant positive effect for biodiversity.

An Ecological Clerk of Works (ECoW) will be employed during pre-construction and construction works to undertake a preconstruction species survey and to undertake a post-construction site visit.

5.1.4 Shadow Habitats Regulation Assessment

A shadow Habitats Regulation Assessment (sHRA) was undertaken due to the hydrological connectivity of the site to designated sites of Larne Lough SPA and Larne Lough Ramsar which were considered within the Zone of Influence (ZoI) via the Carneal Water, Raloo Water and Glenco Water. Stage one screening concluded that there will likely be effects due to diminution of water quality.

Of the streams adjacent to the site, the eastern stream (c. 10m from the site boundary) was deemed inaccessible due to its location upstream of the site. The lower western stream poses connectivity though a series of field drains into Raloo Water, into Larne Lough.

Mitigation measures will be implemented to prevent adverse impacts on these downstream designated sites will include a 10m buffer from the drainage ditches/streams and all construction works. An ECoW will oversee any works within the buffer. Pollution mitigation measures are further outlined in the associated outline Construction Environmental Management Plan (oCEMP). Implementation of the mitigation measures will reduce likely significant effects to no significant effect.

5.1.5 Archaeology & Cultural Heritage

The Council adopted the Local Development Plan Strategy 2030 in October 2023.

Policy HE1 Archaeological Remains and their Settings; sets out the presumption in favour of physical preservation in situ of archaeological remains of regional importance and their settings, and the protection of archaeological remains of local importance and their settings. This policy also requires archaeological assessment and evaluation.

There are no recorded built heritage sites or features located within the site. Within a 1km study area there are two archaeological sites recorded in the Sites and Monuments records (SMR) namely ANT046:070 an unlocated Cairn c.350m from the site boundary; and ANT046:071 a non-antiquity c.735m from the site boundary. Within the study area there is a Motte to the north; historic settlements of Raloo and Gleno; a medieval church and graveyard at Raloo; raised rath to the northwest; and to the south there are several AP sites (enclosures) as well as standing stones.

There are six Industrial Heritage Record (IHR) sites within the study area but in excess of 500m from the site boundary, including two bridges and milling complex in Tureagh. Therefore, there is no predicted impact on any recorded IHR sites.

There are no Scheduled Monuments within the 1km study area, the nearest being ANT046:016 c.1.2km to the northeast.

There are no Historic Parks, Gardens & Demesnes within the 1km study area, the nearest being Redhall (AN-071) c.5.5km east.

There are no Areas of Significant Archaeological Interest (ASAI) within the 1km study area, the nearest being Ballycarry c.6.2km to the south-east of the site boundary.

There are no Defence Heritage sites within the study area, the nearest being Knockdhu c.11.3km to the northwest. Likewise, there are no Battle sites within the study area, the nearest being Mounthill (AD1315) c.2.8km to the northwest.

The assessment that forms part of the planning application pack acknowledges that the site is set within an undeveloped parcel of agricultural land with the potential for previously unrecorded archaeological features. The Proposed Development area is considered to have moderate archaeological potential however there are no potential archaeological features depicted within the site on historic maps or discernible on aerial photography.

5.1.6 Noise Impact Assessment

An Acoustic Impact Assessment (AIA) has been undertaken in respect of the Proposed Development to assess noise impacts during both construction and operation.

The noise assessment has appropriately considered and been informed by the following relevant policy and guidance documents:

- Noise Policy Statement for Northern Ireland (NPSNI);
- Strategic Planning Policy Statement for Northern Ireland (SPPS);
- Mid and East Antrim Borough Council Local Development Plan 2030 – Plan Strategy;
- Planning Policy Statement 18 – Renewable Energy; and
- British Standard BS4142:2014 Methods for Rating and Assessing Industrial and Commercial Sound (BS, 2014).

The AIA considered the nearest noise sensitive receptors to the site, which comprised solely residential dwellings. The operational assessment was based on overall sound power levels for each piece of equipment at the site, at maximum output. The AIA accordingly represents a conservative scenario, and the actual noise levels would be expected to be less when the Proposed Development is not operating at maximum capacity. The construction assessment considered sound and vibration levels from a wide selection of plant, typically utilised for the construction of BESS facilities.

The predominant sources of sound as part of the Proposed Development are the PCS units, auxiliary transformers, BESS and substation. The Proposed Development has been designed to minimise, as far as possible, the projected operational sound levels with due regard to the relative sensitivity of neighbouring premises and site constraints.

During construction it is proposed that the main noise generating activities will be confined to normal working hours (0700 – 1900 on weekdays / 0800 – 1300 on Saturdays). The AIA concludes that sound and vibration resulting from the construction phase will be temporary and controlled to a negligible level through measures set out in the oCEMP.

During operation the assessment concludes that predicted noise levels will be low at all neighbouring residences during daytime and night-time.

As per the results of the absolute and relative noise impact assessments, the overall noise impact of the Proposed Development is expected to be low at all neighbouring residences and therefore the sound emitted by the Proposed Development can be considered to have ‘No Observed Effect Level’.

Cumulative consideration of planning application reference LA02/2022/0522/F Ballyvallagh Road Larne BESS approximately 700m to the northwest indicated two common receptors. The predicted sound level of the Proposed Development is less than the predicted sound of LA02/2022/0522/F and therefore cumulative assessment is not required.

5.1.7 Conceptual Drainage Design & Flood Risk Assessment

A Flood Risk Assessment and Drainage Management report has been undertaken for the Proposed Development.

An assessment of the drainage options has been undertaken, concluding that as the site is underlain by superficial deposits of till – Diamicton, the site will be lined and flows will outfall to a surface body water.

The required attenuation volume is circa 1900m3.

This should be considered a maximum volume, based on the assumption that all permanent infrastructure (other than the access track) has an impermeable surface area and that drainage by infiltration methods is not possible. BESS subbases will be lined to prevent seepage of groundwater and avoid potential contamination in the event of fire. A petrol/silt interceptor is proposed downstream of the three attenuation basins to provide an additional stage of surface water treatment.

A site investigation, detailed 3D earthworks design, earthing design, and further assessment of discharge will be undertaken to inform detailed drainage design.

The conceptual drainage strategy will provide sufficient water quality treatment as demonstrated using the Simple Index Approach.

An existing drain to the south of the site is proposed to be diverted and connected to an existing drain to accommodate the compound.

5.1.8 Access, Transport & Traffic

As set out in Section 3.15 of this PDAS, the construction period is anticipated to be 20 months. During this time, construction traffic will peak at a maximum of 40 movements per day. Construction hours will be from 07.00 – 19.00 during weekdays and 08.00 – 13.00 on Saturdays. Breaking down the number of deliveries across a standard 12-hour day equates to less than 1 delivery an hour.

Whilst it is appreciated that deliveries will not be staggered in this manner, neither will they come in convoy to the site. Further, as referred to in Section 3.3 of the Transport Statement, traffic management arrangements will be agreed with the Council in advance of construction commencing on site. Construction traffic will be via the A8 and B58.

It is anticipated the submission of a Construction Traffic Management Plan will be a requirement of any emerging consent for the proposal. Allowing for this it is proposed that HGV traffic increases will equate to an imperceptible increase on the road network.

Workers will be encouraged to commute to site in shared work vehicles (hi-ace vans or similar). Parking will be facilitated within the temporary construction compound, the details of which, as stated previously, will be agreed with the Council through an OCEMP to be provided by the appointed contractor in advance of construction.

The Transport Statement confirms it is anticipated that project components will be delivered to site using standard articulated lorries and 2 x abnormal loads, and further that the existing road network can

accommodate these vehicles without the need for upgrades. Access from the Ballyvallagh Road is via the existing laneway serving no. 34 Ballyvallagh Road which is proposed to be widened at the junction to accommodate construction vehicles. Beyond this a new track will be constructed to connect the junction to the main compound.

During operation the site will be largely unmanned save for routine maintenance activities occurring around once per month.

In summary, the Proposed Development will not result in any significant effects on the highway network.

5.1.9 Health and Safety

An outline Fire Risk Statement Management Plan accompanies this application and includes an emergency response plan and risk management plan. This management plan sets out embedded mitigation in the design and contains mitigation measures against fire ignition and propagation.

A detailed Fire Risk Management Plan will be developed during detailed design stage, following battery selection to include a project specific fire risk appraisal and an emergency response plan.

The overarching fire risk management strategy will adopt the following controls:

- Implement measures that result in a very low risk of fire ignition and any suitable environment for sustaining fire;
- Implement measures that result in a very low risk of fire propagation and spread within a fire source
- Ensure fire spread between significant elements of the project is not expected, through application of design standards and use of calculations/modelling as necessary; and
- Include adequate provisions to allow the fire service to monitor a fire event, intervening only if there is a failure of the controls above.

Mitigation measures against fire ignition and propagation include: -

- Equipment spacing – the site layout aligns with NFPA 855 spacing criteria;
- Protection systems – each BSE will have a dedicated fire protection system;
- Access to battery storage enclosure – all BSE will be accessed via external doors only;
- Location of BESS facility – the location has been selected considering distances from nearby premises; and
- Access for emergency services – the fenced compound has wide access routes through the site to allow effect respond delivery in event of an accident;
- Water supply – it is not intended to create on site water supply however if agreed as necessary it can be facilitated by provision of a piped hydrant sourced from an existing water main at the Ballyvallagh Road or permanent storage tank.

Following an assessment for toxic cloud and explosion over-pressure this strategy concludes that the probability of a thermal run-away event is low and therefore the overall risk to public is low.

5.1.10 oCEMP

An oCEMP outline best practice methods for managing the environmental impacts, including mitigation and monitoring, during construction, accompanies this planning submission.

The proposed construction hours are Monday to Friday 07:00 to 19:00 inclusive and Saturday 08:00 to 13:00 inclusive. There are no works or traffic movements anticipated on Sundays or Bank holidays unless otherwise agreed.

Construction deliveries will approach the site from the Ballyvallagh Road from the B58 and wider trunk road network beyond. HGV movements are expected to be most intense throughout the first few weeks of construction. Car/van movements are expected to be constant throughout the construction period and parking provision will be fully within the site. Temporary signage will highlight the entrance for construction traffic.

The oCEMP identifies best practice pollution prevention and mitigation measures for mud; noise and vibration, dust and airborne pollutants.

The oCEMP outlines the SUDS water pollution principles which will be followed, and further details are outlined in the conceptual drainage report which accompanies this application.

6 CONCLUSIONS

The preceding assessment of the Proposed Development supports the following conclusions;

- There is an over-riding acknowledgement of a climate emergency which is reflected in international and national legislation and policy including the UK commitment to reduce greenhouse gas emissions by at least 100% from 1990 levels (net zero) by 2050, reflected locally within the NI Energy Strategy;
- Relevant planning policies offer support to renewable energy proposals providing there are no significant impacts that cannot be appropriately mitigated. The suite of environmental reports that accompany the planning application demonstrate that there will be no significant impacts associated with the development;
- The proposal brought forward constitutes a Major – although not Regionally Significant – Development. Accordingly, an appropriate PACC exercise was undertaken in accordance with Section 27 of the Planning Act (Northern Ireland) 2011. The corresponding PACC Report forms part of this submission; and
- This PDAS meets the requirements in respect of same, as defined by the Planning Act (Northern Ireland) 2011 and the Planning (Development Management) Regulations (Northern Ireland) 2015.

The SPPS states at paragraph 5.73 that;

'Planning authorities should be guided by the principle that sustainable development should be permitted, having regard to the local development plan and all other material considerations, unless the proposed development will cause demonstrable harm to interest of acknowledged importance.'

In conclusion, the Proposed Development accords with the relevant local development plan policies and will make an important contribution to the national effort to tackle climate change. Northern Ireland has some way to go to meet the environmental commitments set out to help address the climate emergency. There is also an over-whelming dependency on wind energy, most of which blows at night when energy demands are lower. To capitalise on this, complementary storage facilities are essential.

In that context and given that there are no predicted unacceptable environmental impacts arising from the Proposed Development, there is no known sustainable reason why planning permission should not be granted for this proposal. We would respectfully request that the Council grant planning permission at the earliest opportunity.