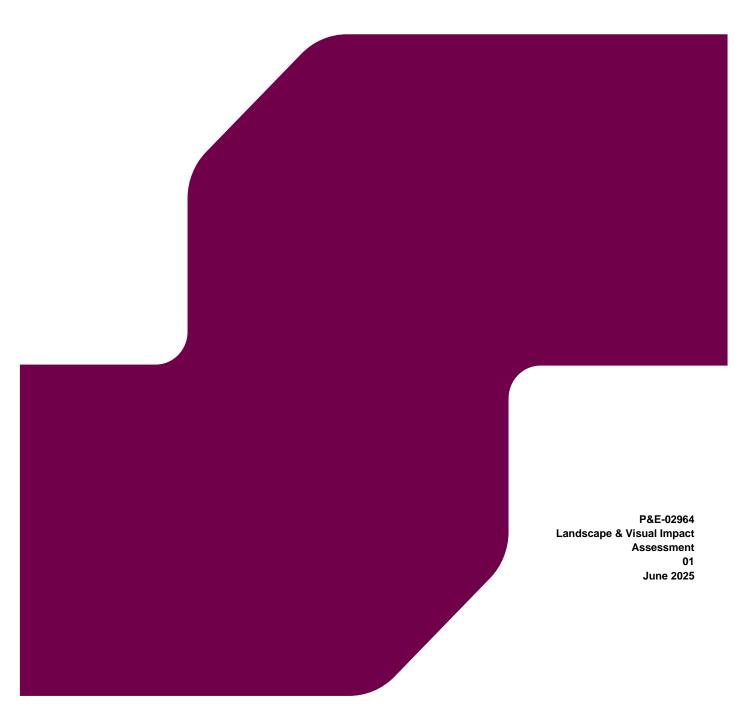


# LANDSCAPE AND VISUAL IMPACT ASSESSMENT

**Ballyross Battery Energy Storage System** 



Quality Management					
Versio	n Status	Authored by	Reviewed by	Approved by	Review date
01	Draft	AAM	SA	RH	

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## 1 LANDSCAPE AND VISUAL IMPACT

### 1.1 Introduction

RPS was commissioned by RES to undertake a Landscape and Visual Impact Assessment (LVIA) to support a planning application for which seeks permission for the:

"Construction and operation of a Battery Energy Storage System (BESS) facility with an installed maximum capacity of approximately 120MW, consisting of PCS/inverter units, associated substation infrastructure, access tracks, drainage systems and other ancillary works."

The Proposed Development site is located on agricultural land approximately 150m south west of No 34 Ballyvallagh Road and approximately 650m south-east of the existing Ballyvallagh substation. The site lies approximately 1.8km south-west of the village of Gleno and approximately 8km south-west of the town of Larne (refer to Appendix A; Figure 1.2).

The purpose of this LVIA is to identify and determine the effects on landscape character, landscape features, visual receptors, and visual amenity because of the works associated with the construction of the Proposed Development.

This assessment has been prepared and reviewed by chartered landscape architects at RPS.

# 1.2 Methodology

## 1.2.1 General Approach

The methodology and approach to the assessment contained within this chapter has been carried out in accordance with best practice guidance described in the following documents;

- Guidelines for Landscape and Visual Impact Assessment, Third Edition (The Landscape Institute and Institute of Environmental Management & Assessment, 2013) (GLVIA3);
- Technical Guidance Note 06/19 Visual Representation of Development Proposals (The Landscape Institute, 2019).

GLVIA3 recommends that an LVIA 'concentrates on principles and process' and 'does not provide a detailed or formulaic 'recipe" to assess effects, it being the 'responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand' (preface to the third edition).

The effects on the landscape resources and visual receptors (people) have been assessed by considering the proposed change in the baseline conditions (the impact of the development) against the type of landscape resource or visual receptor (including the importance and sensitivity of that resource or receptor). These factors are determined through a combination of quantitative (objective) and qualitative (subjective) assessment using professional judgement. The assessment methodology is summarised in **Figure 1-1** below.

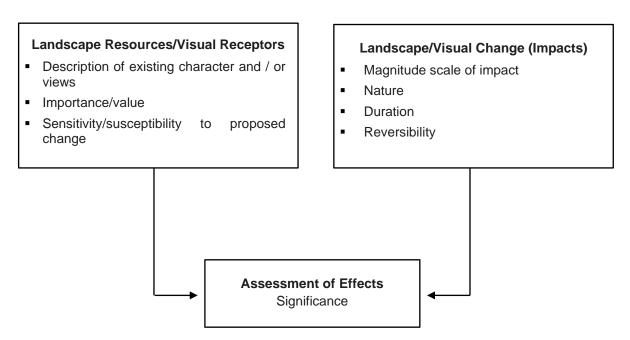


Figure 1-1: Assessment Methodology Summary

The LVIA considers the potential effects of a project upon:

- Individual landscape features and elements;
- Landscape character; and
- Visual amenity and the people who view the landscape.

### 1.2.2 Identification of Baseline Conditions

Baseline conditions have been identified and assessed through analysis of;

- Up to date digital copies of Ordnance Survey Discovery Series raster and OS vector maps;
- Aerial photography;
- Northern Ireland Regional Landscape Character Assessment (NIRLCA);
- Northern Ireland Landscape Character Assessment 2000 (NILCA);
- Area Development Plans;
- Northern Ireland Environment Agency Register of Historic Parks, Gardens and Demesne; and
- Drawings of the Proposed Development.

Site visits were undertaken to assess the existing environment, to establish the existing visual resource and to identify sensitive receptors, i.e. residential properties, scenic viewpoints.

Site visits were also used to consider the potential effects on landscape character and visual impacts arising because of the Proposed Development.

## 1.2.3 Identifying Effects

Assessing the significance of an effect is a key component of the LVIA and is an evidence-based process combining professional judgement on the nature of a landscape or visual receptor's sensitivity, their susceptibility or ability to accommodate change and the value attached to the receptor. It is important to note that judgements in this LVIA are impartial and based on professional experience and opinion informed by best practice guidance.

The effects of a proposed development are of variable duration and are assessed as being of either short-term, medium-term or long-term duration, and permanent or reversible. Effects are long-term during the operational phase of the development, whilst operations and infrastructure works apparent during the construction and initial operating period are temporary, short-term effects.

The reversibility of an effect is also variable. The effects on the landscape and visual resource that occurs during the construction period such as the use of construction machinery are reversible.

Where effects arise during the construction period, these are most likely to be as a result of: movement of construction machinery within the landscape; construction of new structures and construction activities within the site boundary all of which are considered to be short term in duration.

To avoid repetition, the duration and reversibility of effects are not reiterated throughout the assessment.

## 1.2.4 Study Area

Using terrain-modelling techniques combined with the Proposed Development specification a map was created which identified areas from which the Proposed Development may theoretically be visible. This Zone of Theoretical Visibility (ZTV) is the area within which views of the Proposed Development can theoretically be obtained, determined by the topography of the area and is representative of a theoretical worst-case scenario in line with current guidance (refer to Appendix A; Figure 1.5). The study area associated with the Proposed Development has been indicated as 5km buffer from the Proposed Development site boundary as this is considered to be the extent to which elements of the Proposed Development may have potential to influence or affect either adversely or beneficially landscape or visual receptors.

The ZTV forms the basis for the study area associated with the Proposed Development for both landscape and visual impact assessment. It is noted that the ZTV does not consider local features such as; roadside hedgerows, field boundary hedgerows, woodland planting, coniferous forestry or buildings. In theory the ZTV illustrated on Figure 1.5 is representative of the 'worst case scenario' and shows the maximum visibility available within the study area. In practice the actual visibility of the Proposed Development is considerably less in extent than the theoretical one, since individual elements of the proposal are difficult to focus on at long distances and localised changes in topography, hedges, trees, and woodlands tend to restrict views.

The ZTV was assessed against the elements of the Proposed Development, the footprint of the Proposed Development, the receiving landscape and perceptibility of elements of the Proposed Development particularly when viewed against surrounding topographical changes and vegetation cover. Survey and assessment established that vertical elements associated with the Proposed Development are not easily perceived within the wider landscape due to intervening topographical changes and vegetation cover.

### 1.2.5 Assessment Criteria

The objective of the assessment process is to identify and evaluate the predicted significant effects arising from a proposed development. Significance is a function of the:

 Sensitivity of the affected landscape or visual receptors, determined through consideration of the susceptibility of the receptor to the type of change arising from the specific proposals and the value attached to the receptor; and • Secondly its Scale or Magnitude, derived from a consideration of the size/ scale, geographical extent, duration, and reversibility of the proposed development.

These definitions recognise that landscapes vary in their capacity to accommodate different forms of development according to the nature of the receiving landscape and the type of change being proposed.

As with any new development, it is acknowledged that, the introduction of a proposed development into the existing landscape or visual context could cause either a deterioration, improvement or neutral impact on the existing landscape or visual resource.

### 1.2.6 Landscape Impact Assessment

The LVIA firstly assesses how a proposed development would impact directly on any landscape features and resources. This category of effect relates to specific landscape elements and features (e.g. woodlands, trees, walls, hedgerows, watercourses) that are components of the landscape that may be physically affected by the proposed development, such as the removal or addition of trees and alteration to ground cover.

The LVIA then considers impacts on landscape character at two levels. Firstly, consideration is given to how the landscape character is affected by the removal or alteration of existing features and the introduction of new features. This is considered to be a direct impact on landscape character.

Secondly, the indirect impacts of a proposed development on the wider landscape are considered. The assessment of impacts on the wider landscape is discussed using the surrounding character areas identified in the relevant landscape character assessments. It is acknowledged there is an overlap between perception of change to landscape character and visual amenity, but it should be remembered that landscape character in its own right is generally derived from the combination and pattern of landscape elements within the view.

The significance of effects on landscape features and character is determined by considering both the sensitivity of the feature or landscape character and the magnitude of impact.

Consideration of the sensitivity of the landscape resource against the magnitude of impact caused by the proposed development is fundamental to landscape and visual assessment and these two criteria are defined in more detail below.

# 1.2.7 Landscape Sensitivity

The determination of the sensitivity of the landscape receptor is based upon an evaluation of the elements or characteristics of the landscape likely to be affected. The evaluation reflects such factors as its quality, value, contribution to landscape character and the degree to which the particular element or characteristic can be replaced or substituted.

GLVIA 3 at paragraph 5.39 states that 'landscape receptors need to be assessed firstly in terms of their sensitivity, combining judgments of their susceptibility to the type of change or development proposed and the value attached to the landscape.

Susceptibility is defined by GLVIA 3 at paragraph 5.40 as 'the ability of the landscape receptor (whether it be the overall character or quality/ condition of a particular landscape type or area, or an individual element and/ or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without due consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies'.

The value of a landscape receptor is determined with reference to the presence of relevant landscape designations, such as Areas of Outstanding Natural Beauty (AONB) and their level of importance. For the purpose of this assessment, landscape value is categorised as:

- Very High: Areas of landscape acknowledged through designation such as AONB or other landscape based sensitive areas. These are of landscape significance within the wider region or nationally;
- High: Areas that have a very strong positive character with valued and consistent distinctive features
  that gives the landscape unity, richness, and harmony. These are of landscape significance within the
  district;
- Medium: Areas that exhibit positive character, but which may have evidence of alteration/degradation or
  erosion of features resulting in a less distinctive landscape. These may be of some local landscape
  significance with some positive recognisable structure; and
- Low: Areas that are generally negative in character, degraded and in poor condition. No distinctive
  positive characteristics and with little or no structure where there may be scope for positive
  enhancement.

As previously discussed, landscape sensitivity is influenced by a number of factors including susceptibility to change, value and condition. In order to assist with bringing these factors together judgements regarding susceptibility and value have been used which define the landscape resource as being either, negligible, low, medium, high or very high. **Table 1** defines the criteria that have guided the judgement as to the overall sensitivity of the Landscape Resource.

Assessments of susceptibility and value of a particular landscape resource may be different and professional judgement will always be used to conclude on the judgement of sensitivity. For example, value may be high and susceptibility may be low, and a professional judgement will be made to determine whether sensitivity is high, low or in between, supported by narrative explanation.

**Table 1: Landscape Sensitivity** 

Definition	Sensitivity	
Landscape resource susceptibility	Landscape resource value	
Exceptional landscape quality, no or limited potential for substitution. Key elements / features well known to the wider public.	Nationally / internationally designated/valued landscape, or key elements or features of national/internationally designated landscapes.  Little or no tolerance to change.	Very High
Little or no tolerance to change.	Little of no tolerance to change.	
Strong/ distinctive landscape character; absence of landscape detractors.	Regionally/ nationally designated/ valued countryside and landscape features.	High
Low tolerance to change.	Low tolerance to change.	
Some distinctive landscape characteristics; few landscape detractors.	Locally regionally designated/ valued countryside and landscape features.	Medium
Medium tolerance to change.	Medium tolerance to change.	
Absence of distinctive landscape characteristics; presence of landscape detractors.	Undesignated countryside and landscape features.	Low

Definition	Sensitivity	
Landscape resource susceptibility	Landscape resource value	
High tolerance to change.	High tolerance to change.	
Absence of positive landscape characteristics. Significant presence of landscape detractors.	Undesignated countryside and landscape features.	Negligible
High tolerance to change.	High tolerance to change.	

# 1.2.8 Magnitude of Landscape Effect

The effect on landscape receptors and the overall judgement of the magnitude of landscape effect is based on combining judgements on 'size or scale, the geographic extent of the area influenced, and its duration and reversibility' (GLVIA3, paragraph 5.48),

Direct resource changes on the landscape character in the study area are brought about by the introduction of a proposed development and its impact on the key landscape characteristics. Judgements regarding the magnitude of landscape impact are indicated in **Table 2** below.

**Table 2: Magnitude of Landscape Impact** 

Definition	Magnitude of Impact
Total loss or addition or/ very substantial loss or addition of key elements / features / patterns of the baseline, i.e., pre-development landscape and/ or introduction of dominant, uncharacteristic elements with the attributes of the receiving landscape.	Large
Partial loss or addition of or moderate alteration to one or more key elements / features / patterns of the baseline, i.e., pre-development landscape and / or introduction of elements that may be prominent but may not necessarily be substantially uncharacteristic with the attributes of the receiving landscape.	Medium
Minor loss or addition of or alteration to one or more key elements / features / patterns of the baseline, i.e., pre-development landscape and or introduction of elements that may not be uncharacteristic with the surrounding landscape.	Small
Very minor loss or addition of or alteration to one or more key elements / features / patterns of the baseline, i.e., pre-development landscape and/or introduction of elements that are not uncharacteristic with the surrounding landscape approximating to a 'no-change' situation.	Negligible
No loss, alteration or addition to the receiving landscape resource.	No change

# 1.2.9 Visual Impact Assessment

As outlined in GLVIA 3 (Paragraph 6.1) 'An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity'. The assessment of effects on views is an assessment of how the introduction of a proposed development will affect views within the study area. The Assessment of visual effects therefore needs to consider:

• Direct impacts of a proposed development upon views of the landscape through intrusion or obstruction;

- The reaction of viewers that may be affected, e. g. residents, walkers, road users; and
- The overall impact on visual amenity.

### 1.2.10 Sensitivity of Visual Receptors

For visual receptors, judgements of susceptibility and value are closely interlinked. For example, the most valued views are likely to be those which people go and visit because of the available view. The value attributed to visual receptors also relates to the value of the view – for example a National Trail is nationally valued for its access, not necessarily for its views.

Paragraph 6.32 of the GLVIA refers to the susceptibility of different visual receptors to changes in views and states that susceptibility is mainly a function of "the occupation or activity of different people experiencing the view at particular locations" and "the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations."

Other factors affecting visual sensitivity include:

- The location and context of the viewpoint;
- The expectations and occupation or activity of the receptor; and
- The importance of the view.

Judgements on the overall visual sensitivity/ susceptibility are provided in **Table 3** below and overall sensitivity of the visual resource is based on combining judgements on the sensitivity of the human receptor (for example resident, commuter, tourist, walker, recreationist or worker, and the numbers of viewers affected) and judgements on the visual resource value (for example views experienced from residential properties, workplace, leisure venue, local beauty spot, scenic viewpoint, commuter route, tourist route or walkers' route).

**Table 3: Visual Resource Sensitivity** 

Definition	Sensitivity	
Visual resource Susceptibility	Visual resource value	
Views of remarkable scenic quality, of and within internationally designated landscapes or key features or elements of nationally designated landscapes that are well known to the wider public.  Little or no tolerance to change.	Observers, drawn to a particular view, including those who have travelled to experience the views.  Little or no tolerance to change	Very High
Views from residential property. Public rights of way, National Trails, Long distance walking routes and nationally designated countryside/landscape features with public access.  Low tolerance to change.	Observers enjoying the countryside from their homes or pursuing quiet outdoor recreation are more sensitive to visual change.  Little tolerance to change	High
Views from local roads and routes crossing designated countryside / landscape features and 'access land' as well as promoted paths.	Observers enjoying the countryside from vehicles on quiet/ promoted routes are moderately sensitive to visual change.	Medium

Definition	Sensitivity	
Visual resource Susceptibility	Visual resource value	
Medium Tolerance to change.	Medium tolerance to change	
Views from workplaces, main roads and undesignated countryside / landscape features.  High tolerance to change.	Observers in vehicles or people involved in frequent or infrequent repeated activities are less sensitive to visual change.  High tolerance to change	Low
Views from within and of undesignated landscapes with significant presence of landscape detractors.  High tolerance to change.	Observers in vehicles or people involved in frequent or frequently repeated activities are less sensitive to visual change.  High tolerance to change	Negligible

# 1.2.11 Magnitude of Visual Effects

The magnitude of impact on the visual resource results from the scale of change in the view, with respect to the loss or addition of features in the view, and changes in the view composition. Important factors to be considered include: proportion of the view occupied by a proposed development, distance and duration of the view. Other vertical features in the landscape and the backdrop to the proposed development will all influence resource change. Judgements regarding the magnitude of visual impact are provided in **Table 4** below.

**Table 4: Magnitude of Visual Impact** 

Definition	Magnitude
Complete or very substantial change in view dominating or involving complete or very substantial obstruction of existing view or complete change in character and composition of baseline, e.g., through removal of key elements.	Large
Moderate change in view: which may involve partial obstruction of existing view or partial change in character and composition of baseline, i.e., pre-development view through the introduction of new elements or removal of existing elements. Change may be prominent but would not substantially alter scale and character of the surroundings and the wider setting. Composition of the view would alter. View character may be partially changed through the introduction of features which, though uncharacteristic, may not necessarily be visually discordant.	Medium
Minor change in baseline, i.e., pre-development view - change would be distinguishable from the surroundings whilst composition and character would be similar to the pre change circumstances.	Small
Very slight change in baseline, i.e., pre-development view - change barely distinguishable from the surroundings. Composition and character of view substantially unaltered.	Negligible
No alteration to the existing view.	No change

## 1.2.12 Significance of Effects

The purpose of this LVIA is to determine, in a transparent way, the likely significant landscape and visual effects of the Proposed Development. It is accepted that, due to the nature and scale of development, the Proposed Development could potentially give rise to some notable landscape and visual effects.

GLVIA3 identifies that '....... a final judgment is made about whether or not each effect is likely to be significant. There are no hard and fast rules about what effects should be deemed 'significant' but LVIAs should always distinguish clearly between what are considered to be significant and non-significant effects'.

Significance can only be defined in relation to each particular development and its specific location. The relationship between receptors and effects is not typically a linear one. It is for each LVIA to determine how judgements about receptors and effects should be combined to derive significance and to explain how this conclusion has been arrived at.

The identification of significant effects would not necessarily mean that the effect is unacceptable in planning terms. What is important is that the likely effects on the landscape and visibility are transparently assessed and understood in order that the determining authority can bring a balanced, well-informed judgement to bear when making the planning decision.

The significance of effects on landscape, views and visual amenity have been judged according to a six-point scale: Substantial, Major, Moderate, Minor, Negligible or None as presented in **Table 5** below, which contains a description of the Significance of Effect Criteria.

**Table 5: Significance of Effect Criteria** 

Significance of Effect	Landscape Resource	Visual Resource	
None	Where the project would not alter the landscape character of the area.	Where the project would retain existing views.	
Negligible	Where proposed changes would have an indiscernible effect on the character of an area.	Where proposed changes would have a barely noticeable effect on views/visual amenity.	
Minor	Where proposed changes would be at slight variance with the character of an area.	Where proposed changes to views, although discernible, would only be at slight variance with the existing view.	
Moderate	Where proposed changes would be noticeably out of scale or at odds with the character of an area.	Where proposed changes to views would be noticeably out of scale or at odds with the existing view.	
Major	Where proposed changes would be uncharacteristic and/or would significantly alter a valued aspect of (or a high quality) landscape.	Where proposed changes would be uncharacteristic and/or would significantly alter a valued view or a view of high scenic quality.	
Substantial	Where proposed changes would be uncharacteristic and/or would significantly alter a landscape of exceptional landscape quality (e.g., internationally designated landscapes), or key elements known to the wider public of nationally designated landscapes (where there is no or limited potential for substitution nationally).	Where proposed changes would be uncharacteristic and/or would significantly alter a view of remarkable scenic quality, within internationally designated landscapes or key features or elements of nationally designated landscapes that are well known to the wider public.	

For the purposes of this assessment those effects indicated, in **Table 6** below, as being Substantial or Major to Substantial are regarded as being significant. Effects of 'Minor to Moderate' and lesser significance have been identified within the assessment, though are not considered significant.

For those effects indicated as being of 'Moderate' or 'Moderate to Major' the assessor has exercised professional judgement in determining if the effect is considered to be significant, taking account of site specific or location specific variables which are given different weighting in each instance according to location.

Table 6: Significance of effects matrix

Magnitude of	Sensitivity				
Impact	Negligible	Low	Medium	High	Very High
No Change	No Change	No Change	No Change	No Change	No Change
Negligible	Negligible	Negligible to Minor	Negligible to Minor	Minor	Minor
Small	Negligible to Minor	Negligible to Minor	Minor	Minor to Moderate	Moderate to Major
Medium	Negligible to Minor	Minor	Moderate	Moderate to Major	Major to Substantial
Large	Minor	Minor to Moderate	Moderate to Major	Major to Substantial	Substantial

A conclusion that an effect is 'significant' should not be taken to imply that the Proposed Development is unacceptable. Significance of effect needs to be considered with regard to the scale over which it is experienced and whether it is beneficial or adverse.

# 1.3 Receiving Environment

### 1.3.1 General Overview

The Proposed Development site is located on a parcel of agricultural land, approximately 150m south west of No 34 Ballyvallagh Road and approximately 650m south-east of the existing Ballyvallagh substation. The Proposed Development site is linear in shape measuring approximately 8.35ha in area. The closest urban area to the Proposed Development site is associated with the urban area of Larne, which is located approximately 8km south-west of the Proposed Development site, though the small village of Gleno is approximately 1.8km south-west.

The western and southern boundaries to the Proposed Development site are well defined by existing farm access track bound by vegetation and field boundary hedgerows and hedgerows with maturing trees which. This forms a visual sense of enclosure and partially screen the Proposed Development site within views from the surrounding landscape. The northern boundary is defined by Ballyvallagh Road. The eastern boundary is defined by a farm access track from both Ballyvallagh Road and Loughmourne Road both of which are lined with native vegetation that partially screen views.

The landform associated with the Proposed Development site and the surrounding agricultural lands is characterised by a smooth flowing, gently undulating topography. The surrounding landscape is well served by the local road network, with Ballyvallagh Road located aside the Proposed Development site. Further west lies the main transport route, the A8 (which links to the M2) and provides direct access to main urban areas north and south.

The surrounding landscape is mainly characterised by scattered residential development, single dwellings and farm steadings located along the local road networks, with larger clusters of residential development located at road intersections are also a feature of the landscape. Large scale farm buildings are present within the landscape surrounding the Proposed Development site; however, these are often viewed as minor elements of the landscape due to screening effects of vegetation cover.

Large scale man-made elements such as pylons are generally not present within the landscape, however timber poles carrying overhead lines are observed within the Proposed Development site and throughout at varying distances.

## 1.3.2 Northern Ireland Regional Landscape Character Assessment

In recognising the importance of sustaining regional identity, the Northern Ireland Environment Agency (NIEA), commissioned the Northern Ireland Regional Landscape Character Assessment (NIRLCA), which resulted in the identification of distinct regional character areas within Northern Ireland.

The assessment provides a strategic overview of the Northern Ireland landscape and subdivides the countryside into 26 Regional Landscape Character Areas (RLCAs) based upon information on people and place and the combinations of nature, culture and perception which make each part of Northern Ireland unique and has been developed to meet commitments set out in Northern Ireland's Landscape Charter.

A review of the NIRLCA indicates that the Proposed Development is located entirely within one RLCA namely: RLCA 19 – South Antrim Hills and Six Mile Water (refer to Appendix A; Figure 1.3).

#### South Antrim Hills and Six Mile Water - RLCA 19

The most northerly portion of the Proposed Development is partially located within this RLCA and the key characteristics identified from the NIRLCA are as follows;

- The hills have a similar geology to that of the main Antrim Plateau to the north, with limestone, chalk and lias clay overlain by a layer of basalt as a result of volcanic activity.
- Divis Mountain is the highest of the Belfast Hills at 478m AOD and was previously used as a military training area. It is now popular for recreational activity, primarily walking and cycling, along with much of the Belfast Hills area, with wide views from hilltops.
- A mosaic of grassland, heath and bog habitat is found on the hills, which supports upland bird species including red grouse, stonechats, skylark and snipe.
- Six Mile Water flows westwards from its origin at Shane's Hill to the west of Larne towards Lough Neagh. It is famous for angling, particularly trout fishing.
- The land is mostly enclosed elevated farmland, with a rural character influenced by settlement and transport links.
- Communication masts are found on many of the hills, with pylons and electricity lines, crossing the area which can detract from the remote, undeveloped feel on the highest uplands.
- A medium scale rural and mostly tranquil landscape with scattered small settlements. The scale is smaller in the valleys and larger scale on the hill summits where there is no enclosure.
- Field cover consists of medium scale, rolling elevated pastoral farmland, which can be irregular and patchy
  on higher ground. Most field boundaries are hedgerows with many beech trees.
- Former quarrying and mineral workings are scattered throughout the landscape as hard rock quarrying was once widespread.

The RLCA 19 within the vicinity of the Proposed Development is described "This RLCA comprises the Six Mile Water valley and the hills that surround it, including the southern flanks of the Antrim Plateau at Browndod and Drumadarragh Hill. To the south of the Six Mile Water, the Belfast Hills form a prominent ridge to the north of the Belfast Lough, overlooking both the lough and the city.

The Six Mile Water rises in the hills to the west of Larne and follows a broad undulating valley carved between the Antrim Plateau and the Belfast Hills towards Lough Neagh. Three Mile Water is a tributary of the river which flows north-west from Newtownabbey. The Six Mile Valley is well settled from Antrim through to Templepatrick and Ballyclare towards Larne, and the dense infrastructure network also follows this corridor. The M2 crosses the valley between Antrim and Newtownabbey and industrial development becomes more prominent in this south-easterly direction."

## 1.3.3 Northern Ireland Landscape Character Assessment 2000

The Northern Ireland Landscape Character Assessment 2000 (NILCA 2000) contains landscape briefs for each of the 130 landscape character areas in Northern Ireland surveyed in 1999. It provides a baseline description of the landscape at a point in time based upon local patterns of geology, landform, land use, cultural and ecological features. This base information is still a valuable resource and has informed the 26 regional landscape character areas of the NIRLCA. However, there has been substantial development in both rural and urban areas of Northern Ireland since the NILCA 2000 was surveyed which has impacted on many of its local landscape character areas.

A review of the NILCA 2000 indicates that the Proposed Development is located within one Landscape Character Area (LCA); Carrickfergus Upland Pastures LCA (98) (refer to Appendix A; Figure 1.3).

### Carrickfergus Upland Pastures LCA (98)

The key characteristics, identified by NIEA, of the LCA are as follows:

- Undulating landscape of low ridges and shallow valleys.
- Small fields of pasture enclosed by gappy hedges, earth banks and neglected stone walls; beech and conifer shelterbelts along roads.
- Small, wind-blown trees on exposed upland pastures.
- Extensive tracts of plantation forest, often enclosing loughs and reservoirs.
- Some fields encroached by scrub and heather; rushy bogs in small hollows.
- · Pylons and transmission lines along the skyline.
- New houses and bungalows in exposed locations.

NIEA state; "The landscape reaches an elevation of 200-250m. The area is underlain by basalt, but the shallow soils, rocky exposures and wet climate create less productive farmland than elsewhere. Shallow ridges extend from the basalt escarpment to the south to create an undulating plateau. The landuse is predominantly pastoral with small, regular fields enclosed by gappy hedges, as well as by earth banks and stone walls. There is a large-scale pattern of plantation forests and exposed pasture on the uplands, with dramatic contrasts in colour and scale. A number of loughs are also found within this character area. The visual influence of these waters on the landscape is limited owing to the forest screen, but they are significant local features.

The wind-blown profile of small hedgerow trees and shelterbelts, emphasises the exposed feel of this landscape. Transmission lines from the Kilroot Power Station extend up from the coast and, with a telecommunications mast, exert a strong presence along the skyline. Settlement is scarce but new houses, often in exposed locations, contrast with the sheltered locations and unassuming styles of stone farm buildings.

The landscape is of a moderate scale; views within the area are restricted by the enclosure of landform and woods. However, due to its elevated position, some longer views are possible from the edges of this area."

# 1.4 Landscape Designations

This section reviews relevant landscape designations in Northern Ireland. A brief explanation of these has been given below:

### Areas of Outstanding Natural Beauty (AONB)

These are designated either under the Amenity Lands Act (Northern Ireland) 1965 or the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985. They cover huge areas of land, embracing a range of landscape types including limestone cliffs, sweeping moorlands and important geological landforms. They also include farmland, forest, lakes, coastline, and settlement. They are generally subject to planning conditions.

The Proposed Development is not located within proximity to any AONBs, and as such this designation is not carried forward for further assessment.

#### Historic Parks and Gardens

Country houses, some of which are listed buildings, set in landscaped parkland or within demesnes, are an important part of the landscape. NIEA has identified a number of these parks, gardens, and demesnes that it considers represents a significant historic and landscape resource. Any development that is likely to have an adverse impact on the planned layout, including views in and out of quality or character of these areas will normally be refused planning permission.

The closest Historic Park and Garden (HPG) is Magheramorne (refer to Appendix A; Figure 1.4), which is located approximately 5.5km northeast of the Proposed Development site. Despite the Proposed Development being near this HPG, site survey and assessment has established that due to screening provided by mature tree planting forming the north-eastern boundary of the HPG, intervening topographical changes and built form associated with Lurgan the HPG does not have any visual interaction with the Proposed Development and is therefore not predicted to experience any significant effects because of the Proposed Development. As such this HPG has not been carried forward for further assessment.

#### The Ulster Way

The Ulster Way is a nationally recognised long-distance footpath that was designated under the Access to the Countryside (NI) Order 1983. The Ulster Way is protected and maintained by the relevant District Councils through which it passes and is promoted as a national walking route by the Northern Ireland Tourist Board.

The Proposed Development is not located near any sections of The Ulster Way and therefore has not been carried forward for assessment.

#### Way Marked Trails

There is no other marked walking trail within the study area that lies within proximity to the Proposed Development.

# 1.5 Proposed Development

The Proposed Development comprises the construction and operation of a BESS facility with an installed maximum capacity of approximately 120MW.

The scheme comprises:

- Battery Energy Storage Units and associated Power Conversion System Units;
- Internal access roads opening onto Ballvallagh Road and secondary access via existing agricultural laneway;
- 3 x No. spares container units;
- Primary 110kV Substation Compound and DNO Substation Compound;
- Auxiliary Transformer;
- Attenuation Pond/s:
- CCTV Cameras:
- · Temporary construction compound;
- Fire water tank;
- · Fencing around the facility perimeter; and
- Associated landscape planting.

# 1.6 Landscape Effects

The assessment of landscape effects follows the methodology previously described in Section 1.2 and considers those effects which are predicted to occur during the construction and operational phases of the Proposed Development.

To avoid repetition, an assessment of the construction phase impacts and predicted operational phase impacts is included within the landscape assessments contained in **Table 7** and **Table 8**.

# 1.6.1 Description of the Sources of Impact

The assessment of landscape effects follows the methodology previously described in Section 1.2 and considers those effects which are predicted to occur during the construction and operational phases of the Proposed Development.

The assessment of construction phase effects relates to the following identified activities:

- Construction works associated with the formation of the solar farm, substation, inverters and associated infrastructure development;
- Delivery of materials to working areas; and
- Localised site clearance and reinstatement.

The construction phase of the Proposed Development will result in additional built elements being introduced into the landscape. The operational phase of the Proposed Development will result in new built form being visible within the surrounding landscape.

An assessment of the predicted landscape impacts during both construction and operation is provided in **Table 7** and **Table 8** below, which has been based upon the susceptibility and sensitivity of the landscape character as described within the RLCA and the NILCA 2000 assessments.

#### Table 7: RLCA 19 - South Antrim Hills and Six Mile Water; Predicted Impacts

#### RLCA 19 - South Antrim Hills and Six Mile Water

#### Sensitivity

The character of the RLCA within the study area associated with the Proposed Development is rural agricultural in nature, with partial enclosure provided through a combination of undulating topography, scattered woodland planting and field boundary hedgerows of varying quality and often with mature tree cover. Timber poles carrying overhead lines and scattered instances of larger agricultural buildings provide localised visual draws.

Taking account of the above characteristics and the influence of existing manmade features within the study area, the susceptibility of the RLCA to the type of development proposed is judged to be medium.

Given the localised influences of existing built form along the local road corridors the overall value of the RLCA contained within the study area is judged to be medium.

Based on the susceptibility and value attached to this RLCA, the overall sensitivity of this RLCA is judged to be **medium**.

# Magnitude of Change – Construction Phase

Direct impacts on this RLCA will arise from the physical construction of the Proposed Development, resulting in the introduction of new manmade elements into the existing landscape. The existing vegetation within the Proposed Development site boundary will be largely retained which aids in integrating the Proposed Development within the surrounding landscape context. Small sections of hedgerow, proposed to be removed to facilitate the construction of the accesses from Ballyvallagh Road to facility access on the northern boundary of the site will be perceived as a localised temporary alteration to the vegetation cover.

The construction of new built form and associated ancillary features with the presence of construction materials, heavy plant, compounds and lighting will be locally noticeable during the construction phase of the Proposed Development. It is considered that construction activities will have a localised, temporary, short-term effect as the surrounding undulating landscape.

The predicted magnitude of change associated with the construction stage of the Proposed Development, including construction of ancillary infrastructure and fencing is localised with some alteration to the baseline and therfore considered **medium** during the construction phase, restricted to land contained within the site boundary.

# Magnitude of Change – Operational Phase

During the operational phase, new built form including the substation facility, auxiliary transformers, battery storage units and access roads will be perceived as a small localised change to the baseline landscape conditions. This combined with the geographic extent that this RLCA covers the Proposed Development is anticipated to be a minor alteration to the base line.

The predicted magnitude of change in the landscape resource, during the operational phase of the Proposed Development is localised and **small** during the operational phase, prior to the establishment of planting associated with the Proposed Development.

#### Significance of Landscape Effect during Construction Phase

**Moderate**, temporary, short-term, reversable effects are predicted to be experienced during the construction phase of the Proposed Development.

Remaining portions of the LCA outside of the Proposed Development boundary are predicted to experience no significant indirect effects.

#### Significance of Landscape Effect during Operational Phase.

**Minor** localised, medium-term, reversible effects assessed as not significant, prior to the successful establishment of planting are predicted to be experienced during the initial operational phase. Predicted effects are limited in extent by surrounding topographical changes, with existing vegetation cover providing additional screening.

Predicted effects reduce to negligible to minor, localised, long-term and reversible following successful establishment of planting proposed as part of the development and have been assessed as not significant.

#### RLCA 19 - South Antrim Hills and Six Mile Water

Remaining portions of the RLCA are predicted to experience no significant effects during the operational phase.

### Table 8: LCA 89 - Carrickfergus Upland Pastures; Predicted Impacts

#### LCA 89 - Carrickfergus Upland Pastures

#### Sensitivity

The character of the LCA within the study area associated with the Proposed Development is predominantly rural in nature, with partial enclosure provided through a combination of undulating topography, scattered woodland planting and field boundary hedgerows of varying quality and often with mature / maturing tree cover. Timber poles carrying overhead lines and scattered instances of larger agricultural buildings provide localised visual draws.

Taking account of the above characteristics and the influence of existing manmade features within the study area, the susceptibility of the LCA to the type of development proposed is judged to be medium. Given the localised influences of existing built form along the local road corridors the overall value of the LCA contained within the study area is judged to be medium.

Based on the susceptibility and value attached to this RLCA, the overall sensitivity of this LCA is judged to be **medium**.

# Magnitude of Change – Construction Phase

Direct impacts on this RLCA will arise from the physical construction of the Proposed Development, resulting in the introduction of new manmade elements into the existing landscape. The existing vegetation within the Proposed Development site boundary will be retained where practicable aiding integrating of Proposed Development within the surrounding landscape context. Small sections of hedgerow, proposed to be removed to facilitate the construction of the accesses from Ballyvallagh Road to facilitate access on the eastern boundary of the site will be perceived as a localised temporary alteration to the vegetation cover.

New built form and associated ancillary features will require construction equipment and activities that will be locally noticeable during the construction phase of the Proposed Development. It is considered that construction activities will have a localised, temporary, short-term effect as the surrounding undulating landscape and vegetation cover will quickly absorb such activities.

The predicted magnitude of change associated with the construction stage of the Proposed Development, including the construction of ancillary infrastructure and fencing is localised and considered **medium** during the construction phase, restricted to land contained within the site boundary.

# Magnitude of Change – Operational Phase

During the operational phase, new hedgerow planting associated with the new site access and reenforcement of existing boundaries will be perceived as a minor alteration locally, as these are not uncommon features within the surrounding landscape. New built form, where visible beyond existing screening / retained vegetation will be viewed as a small localised change to the baseline landscape conditions, though generally not obvious within the wider landscape context due to its low development form which is readily absorbed and screened by a combination of topographical changes and vegetation cover. Whilst the Proposed Development would be distinguishable from the surrounding landscape, the composition and character of the landscape would be like the prechange circumstance.

The predicted magnitude of change in the landscape resource, during the operational phase of the Proposed Development is localised and **small** during the operational phase, prior to the establishment of planting associated with the Proposed Development.

### LCA 89 - Carrickfergus Upland Pastures

Significance of Landscape Effect during Construction Phase	Moderate, temporary, short-term assessed as locally significant effects are predicted to be experienced during the construction phase of the Proposed Development.  Remaining portions of the LCA outside of the Proposed Development boundary are predicted to
	experience no significant indirect effects.
Significance of Landscape Effect during Operational Phase.  Minor localised, medium-term, reversible effects assessed as not significant, prior to establishment of planting are predicted to be experienced during the initial operational predicted effects are limited in extent by surrounding topographical changes vegetation cover providing additional screening.	
	Predicted effects reduce to negligible to minor, localised, long-term and reversible following successful establishment of planting proposed as part of the development and have been assessed as not significant.
	Remaining portions of the RLCA are predicted to experience no significant effects during the operational phase.

# 1.6.2 Landscape Designation Impacts

As previously identified in Section 1.4 above when AONB, Historic Parks and Gardens and Walking Trails, were assessed it has been found that due to separation distance, screening provided by intervening topography, built form and vegetation cover, no significant effects are predicted for any of the identified landscape designations.

The following table provides a summary of the predicted construction phase and operational phase landscape effects.

**Table 9: Summary of Predicted Landscape Character and Designation Effects** 

Landscape Character / Designation	Predicted Significance of Effect Construction Phase Landscape Effects	Predicted Significance of Effect Operational Phase Landscape Effects
South Antrim Hills and Six Mile Water – RLCA 19	Moderate	Minor
Carrickfergus Upland Pastures LCA (89)	Moderate	Minor
AONB	None	None
Historic Parks & Gardens	None	None
The Ulster Way	None	None
Way Marked Trails	None	None

### 1.7 Visual Effects

A series of six representative viewpoints have been selected to illustrate the existing visual context of the Proposed Development and as an aid to the visual impact assessment. All viewpoints have been located on publicly accessible roads, footways and verges within the study area (refer Appendix A: Figure 1.6) associated with the Proposed Development. Visual effects from the representative viewpoints considered in the LVIA are described in **Table 10** to

#### Table 13 below.

The assessment of the existing environment and the impact of the Proposed Development on visual receptors has established that there will be no protected views or scenic views significantly affected by the Proposed Development.

To avoid repetition, an assessment of construction phase impacts and predicted operational phase impacts are included within each of the following viewpoint assessments.

Table 10: Viewpoint 1: View from laneway

Viewpoint 1 – View from laneway			
Grid Ref	337385; 393938	Existing Viewpoint Location	Appendix B: VP01 – View from laneway
Direction of View	North-east	Approx Distance to Proposed Development	1000m from south-western boundary
Description of existing view and potential receptors	This viewpoint is located on Watch Hill Road, approximately 1000m from the south to south-western boundary of the Proposed Development. The existing view available from this location (refer to Appendix B, VP01 – View from laneway; Existing View) is quite open with distant views of silhouetted hill tops and Larne Lough just discernible. In the foreground to the right of the view is a residential property and an electrial pole surrounded with a timber post and wire fence and native vegetation. From this view there is a regular patchwork of fields lined with either vegetation or fencing, scattered dwellings and electricity pylons.  The view is considered to be representative of peripheral views experienced primarily by road users traveling east / west on this laneway towards Watch Hill Road and Loughmoune Road, though the view is also considered to be experienced by recreational receptors using the road network and residential receptors in the immediate vicinity.		
Sensitivity	Residential and recreational receptors are judged to be of a high susceptibility to change in their views, whilst transient receptors on this laneway are judged to be of a low susceptibility to change as their focus is on the direction of travel.  The viewpoint does not represent a recognised stopping place and does not form part of a recognised tourist route. However, the view experienced at this location is also considered to be available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium.  Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be <b>Medium</b> .		
Magnitude of Change – Construction Phase	During the construction phase, operations and machinery movements associated with the Proposed Development will be visible at long distance across the central portion of the view, though perceived against a well vegetated backdrop which will aid integration. Overall, during construction there will be a partial change in the view which will give a magnitude of change as <b>Medium</b> .		

Viewpoint 1 – View from	Viewpoint 1 – View from laneway			
Magnitude of Change – Operational Phase	During the operational phase, elements of the Proposed Development will be visible, at long distance within a portion of the overall view. Existing elements of the view will retain visual prominance, with middle distance and short distance views remaining largely unaffected. Overall, the magnitude of visual impact during the operational phase is judged to be <b>Small</b> .			
Significance of Visual Effect during Construction Phase	Localised <b>Moderate</b> , short-term temporary, assessed as significant, effects predicted to be experienced during the construction phase of the Proposed Development.			
Significance of Visual Effect during Operational Phase	Localised <b>Minor</b> , long-term effects assessed as not significant, predicted to be experienced during the operational phase of the Proposed Development. Existing vegetation surrounding the site and in the middle distance provides some screening and aides in integration into the landscape.			

Table 11: Viewpoint 2; Ballyrickard Road

Viewpoint 2 – Ballyrickard Road			
Grid Ref	337001; 395781	Existing Viewpoint Location	Appendix B: VP02 – Ballyrickard Road
Direction of View	South-east	Approx Distance to Proposed Development	1500m from north-western boundary
Description of existing view and potential receptors	This viewpoint is located at a gated field entrance on Ballyrickard Road approximately 1500m from the north-western boundary of the Proposed Development site. The existing view available from this location (refer to Appendix B, VP02 – Ballyrickard Road; Existing View) offers an elevated position compared to surrounding fields.  The foreground comprises low lying arable fields divided with a timber post and rail fence or overgrown vegetation partially screening landscape beyond. The landscape rises with low hills of fields lined with hedges and trees that break the skyline.  Scattered residential development is visible in the view, forming minor visual interest, though is generally viewed against a well vegetated backdrop which aids integration. Timber poles carrying overhead lines are visible within the available view at varying distances, forming a minor element within the overall available view. Electricity pylons are visible across the veiwpoint along the horizon.  The view is considered to be representative of views experienced primarily by road users traveling north / south on Ballyrickard Road, though the view is also considered to be experienced by recreational receptors using the local road network.		
Sensitivity	Recreational receptors are judged to be of a high susceptibility to change in their views, whilst transient receptors on Ballyrickard Road are judged to be of a low susceptibility to change as their focus is on the direction of travel.  The viewpoint does not represent a recognised stopping place and does not form part of a recognised tourist route. However, the view experienced at this location is also considered to be available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium.  Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be <b>Medium</b> .		
Magnitude of Change – Construction Phase	During the construction phase, ground level operations and machinery movements associated with the Proposed Development will just be discernible in the view. Overall, the magnitude of change during the construction phase of the Proposed Development is judged to be <b>Small.</b>		
Magnitude of Change – Operational Phase	At opening year there will be a small change to the visual receptor that will diminish with time as mitigation planting matures.  Overall, the magnitude of visual impact during the operational phase is judged to be equivalent to <b>Negligible</b> .		

Viewpoint 2 – Ballyrickard Road		
Significance of Visual Effect during Construction Phase	Negligible	
Significance of Visual Effect during Operational Phase	No Change	

### Table 12: Viewpoint 3; Tureagh Road

Viewpoint 3 – Tureagh Road			
Grid Ref	338033; 396186	Existing Viewpoint Location	Appendix B: VP03 – Tureagh Road
Direction of View	South	Approx Distance to Proposed Development	1200m from northern boundary
Description of existing view and potential receptors	This viewpoint is located at a residential laneway entrance on Tureagh Road, approximately 1200m north of the Proposed Development site. The existing view available from this location (refer to Appendix B, VP03 – Tureagh Road; Existing View) is partially restricted in nature to the left of the viewpoint by a large, mature tree. The agricultural landscape is comprised in the main of fields bound by strong lines of hedgerows falling towards a valley at Raloo Water and which rise in the distance to Drummonds Hills that can be seen on the skyline.		
	The undulating landform is reinforced by tree planiting on more elevated portions. Scattered residential development is visible in the view, forming minor visual interest, though is generally viewed against a well vegetated backdrop which aids integration. The Proposed Development site is barely perceptible from this location. Timber poles carrying overhead lines are visible within the available view at varying distances, forming a minor element within the overall available view. Electricity pylons are visible across the veiwpoint along the horizon.  The view is considered to be representative of glimpsed views experienced primarily by road users traveling north / south on Tureagh Road, and views available to recreational receptors on the local road network and residential receptors in the vicinity.		
Sensitivity	Recreational and residential receptors are judged to be of a high susceptibility to change in their views, whilst transient receptors on the Tureagh Road are judged to be of a low susceptibility to change as their focus is on the direction of travel.  The viewpoint does not represent a recognised stopping place and does not form part of a recognised tourist route. However, the view experienced at this location is also considered to be available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium.  Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be <b>Medium</b> .		
Magnitude of Change – Construction Phase	During the construction phase, ground level operations and machinery movements associated with the Proposed Development will not be visible within the view available from this location due to screening effects of intervening topography and vegetation. Overall, the magnitude of change during the construction phase of the Proposed Development is judged to be equivalent to <b>No Change.</b>		
Magnitude of Change – Operational Phase	The Proposed Development will not be visible within the view due to screening effects of intervening topography and vegetation cover. Existing elements of the view will retain visual prominance, with, middle distance and longer distance views remaining unaffected. Overall, the magnitude of visual impact during the operational phase is judged to be equivalent to <b>No Change</b> scenario.		
Significance of Visual Effect during Construction Phase	No Change		
Significance of Visual Effect during Operational Phase	No Change		

Table 13: Viewpoint 4; Ballyvallagh Road

Viewpoint 4 – Ballyvallagh Road			
Grid Ref	337296; 394797	Existing Viewpoint Location	Appendix B: VP04 – Ballyvallagh Road
Direction of View	East	Approx Distance to Proposed Development	1000m from western boundary
Description of existing view and potential receptors	This viewpoint is located on the roadside on Ballyvallagh Road, approximately 1000m from the western boundary of the Proposed Development site. The existing view available from this location (refer to Appendix B, VP04 – Ballyvallagh Road; Existing View) allows views over a well-defined hedgerow lining the road to low undulating agricultural fields bound by hedgerows and trees.  Scattered residential development is visible in the view, forming minor visual interest, though is generally viewed against a well vegetated backdrop which aids integration. Timber poles carrying overhead lines are visible within the available view at varying distances, forming a minor element within the overall available view. Electricity pylons are visible across the veiwpoint along the horizon.  The view is considered to be representative of glimpsed views experienced primarily by road users traveling east / west on Ballyvallagh Road, and views available to recreational		
Sensitivity	receptors on the local road network and residential receptors in the vicinity.  Recreational and residential receptors are judged to be of a high susceptibility to change in their views, whilst transient receptors on the local road adjacent are judged to be of a medium susceptibility to change as their focus is on the direction of travel.  The viewpoint does not represent a recognised stopping place and does not form part of a recognised tourist route. However, the view experienced at this location is also considered to be available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium.  Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be Medium.		
Magnitude of Change – Construction Phase	During the construction phase, operations and machinery movements associated with the Proposed Development will be visible at long distance across the central portion of the view, though perceived against a well vegetated backdrop which will aid integration. Construction phase activities and vehicular movements will be viewed as a minor change to the overall view. Overall, the magnitude of change during the construction phase of the Proposed Development is judged to be localised and therfore <b>Small</b> .		
Magnitude of Change – Operational Phase	During the operational phase, elements of the Proposed Development will be just discernable, at long distance within a portion of the overall view. Some elements will be viewed beyond intervening vegetation cover, and viewed as a minor addition to the view, with the character of the view remaining largely unaltered. Existing elements of the view will retain visual prominance, with middle distance and short distance views remaining largely unaffected. Overall, the magnitude of visual impact during the operational phase is judged to be <b>Small to negligible</b> .		
Significance of Visual Effect during Construction Phase	Localised <b>Minor</b> , short-term temporary, assessed as not significant, effects predicted to be experienced during the construction phase of the Proposed Development.		
Significance of Visual Effect during Operational Phase	Localised <b>Minor to Negligible</b> , long-term effects assessed as not significant, predicted to be experienced during the operational phase of the Proposed Development. Existing vegetation surrounding the site and in the middle distance provides screening and aides in integration into the landscape.		

Table 14: Viewpoint 5; Ballyvallagh Road

Viewpoint 5 – Ballyvallagh Road			
Grid Ref	338427; 395051	Existing Viewpoint Location	Appendix B: VP05 – Ballyvallagh Road
Direction of View	South-west	Approx Distance to Proposed Development	10m from site entrance on Ballyvallagh Road
Description of existing view and potential receptors	This viewpoint is located at the entrance to a residential laneway off Ballyvallagh Road, approximately 10m from the site entrance of the Proposed Development site. The existing view available from this location (refer to Appendix B, VP05 – Ballyvallagh Road; Existing View) is restricted in nature by intervening topography rising and obscuring views beyond. The left side of the view is an access to a residential property that sits on the skyline with mature trees to its side. The right side of the view is a large grass field with hederows and trees to the side and at the crest of the hill.  The view is considered to be representative of glimpsed views experienced primarily by road users traveling west on Ballyvallagh Road, and views available to recreational receptors on the local road network and residential receptors in the vicinity.		
Sensitivity	Recreational and residential receptors are judged to be of a high susceptibility to change in their views, whilst transient receptors on the Ballyvallagh Road are judged to be of a low susceptibility to change as their focus is on the direction of travel.  The viewpoint does not represent a recognised stopping place and does not form part of a recognised tourist route. However, the view experienced at this location is also considered to be available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium.  Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be <b>Medium</b> .		
Magnitude of Change – Construction Phase	During the construction phase, operations and machinery movements associated with the Proposed Development will be visible at short and middle distance across the central portion of the view. Construction phase activities and vehicular movements will be viewed as a medium change to the overall view. Overall, the magnitude of change during the construction phase of the Proposed Development is judged to be localised and <b>Medium</b> .		
Magnitude of Change – Operational Phase	During the operational phase, elements of the Proposed Development will be visible, at short and middle distance within a portion of the overall view available from this location. Visible elements will be viewed below and beyond intervening vegetation cover, and viewed as a minor addition to the view, with the character of the view remaining largely unaltered. Existing elements of the view will retain visual prominance, with middle distance and short distance views remaining largely unaffected. Overall, the magnitude of visual impact during the operational phase is judged to be <b>Small</b> .		
Significance of Visual Effect during Construction Phase	Localised <b>Moderate</b> , short-term temporary, assessed as significant, effects predicted to be experienced during the construction phase of the Proposed Development.		
Significance of Visual Effect during Operational Phase	Localised <b>Minor</b> , long-term effects assessed as not significant, predicted to be experienced during the operational phase of the Proposed Development. Existing vegetation surrounding the site and in the middle distance provides screening and aides in integration into the landscape.		

Table 15: Viewpoint 6; Uppertown Road

Viewpoint 6 – Uppertown Road			
Grid Ref	338306; 398253	Existing Viewpoint Location	Appendix B: VP06 – Uppertown Road
Direction of View	South	Approx Distance to Proposed Development	3200m from northern boundary
Description of existing view and potential receptors	This viewpoint is located on the roadside on Uppertown Road, approximately 3200m north of the Proposed Development site. The existing view available from this location (refer to Appendix B, VP06 – Uppertown Road; Existing View) is relatively open. Existing tree cover throughout the view along with field boundary hedgerows partially screen and from an enclosing framework of vegetation to agricultural fields.		
	The foreground of the viewpoint consists of hedgerows lining the single track road which extends along the road into the distance. Undulating landform is reinforced by tree planting on more elevated portions. Scattered residential development is visible in the view, forming minor visual interest, though is generally viewed against a well vegetated backdrop which aids integration. Electricity pylons are visible across the viewpoint along the horizon.		
	The view is considered to be representative of glimpsed views experienced primarily by road users traveling north / south on Uppertown Road, and views available to recreational receptors on the local road network and residential receptors in the vicinity.		
Sensitivity	Recreational and residential receptors are judged to be of a high susceptibility to cl in their views, whilst transient receptors on the Uppertown Road are judged to be of susceptibility to change as their focus is on the direction of travel.		Road are judged to be of a low
	The viewpoint does not represent a recognised stopping place and does not form part of a recognised tourist route. However, the view experienced at this location is also considered to be available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium.		
	Overall, taking into account the receptor susceptibility and the value of the view sensitivity is judged to be <b>Medium</b> .		nd the value of the view the
Magnitude of Change – Construction Phase	During the construction phase, ground level operations and machinery movements associated with the Proposed Development will not be visible within the view available from this location due to screening effects of intervening topography, vegetation and distance separation to the Proposed Development site. Overall, the magnitude of change during the construction phase of the Proposed Development is judged to be equivalent to <b>No Change.</b>		
Magnitude of Change – Operational Phase	The Proposed Development will not be visible within the view due to screening effects of intervening topography and vegetation cover. Existing elements of the view will retain visual prominance with middle distance and longer distance views remaining unaffected. Overall, the magnitude of visual impact during the operational phase is judged to be equivalent to <b>No Change</b> scenario.		
Significance of Visual Effect during Construction Phase	No Change		
Significance of Visual Effect during Operational Phase	No Change		

Table 16 below summarises the predicted significance of visual effect for each of the previously assessed viewpoints.

**Table 16: Summary of Predicted Visual Effects for Viewpoints** 

Vie	wpoint	Predicted Construction Phase Visual Impacts	Predicted Operational Phase Visual Impacts
1	View from laneway	Moderate	Minor
2	Ballyrickard Road	Negligible	No Change
3	Tureagh Road	No Change	No Change
4	Ballyvallagh Road	Minor	Minor to negligible
5	Ballyvallagh Road	Moderate	Minor
6	Uppertown Road	No change	No change

### 1.7.1 Residential Properties

As part of the visual assessment associated with the Proposed Development, an assessment of the predicted visual impact on residential receptors that occur within 500m of the Proposed Development has been undertaken. At distances beyond 500m, where properties may have potential views towards the proposed development, intervening vegetation and topographical changes decreases visibility of and / or visually screens the Proposed Development in views and the Proposed Development is absorbed into the landscape and as such no significant visual effects are predicted for residential receptors beyond 500m. As described previously in Section 1.2.10; Table 3 residential receptors are high sensitivity receptors.

Following a detailed review of the available information and the ZTV associated with the Proposed Development it has been established that residential receptors identified as Nr 13, 12, 4, 5, 6, 7, 36, 35, 17, 23, 25, 26, 27, 28, 29, 30, 31, 32 and 33 (refer Figure 1.7) are predicted to experience no visibility of the Proposed Development and are therefore not considered further in the assessment.

Views from properties identified as 11, 10, 9, 8 are anticipated to have similar views as demonstrated in Appendix B, VP04 – Ballyvallagh Road. Residential properties will experience minor long term effects during the operational phase of the Proposed Development. Existing vegetation surrounding the site and in the middle distance combined with intervening topography will provide some screening and aiding integration into the landscape. These properties are predicted to have a minor significance of effect.

Residential properties identified as 18, 19, 20, 21, 22, 24 due to their location within this low undulating landscape combined with intervening built form have limited glimpse views that are barely perceptible. Appendix B, VP06 – Uppertown Road can be considered representative of views towards the Proposed Development site. The significance of effect for these properties is considered as no change.

Views from residential properties identified as 1, 2, 3, 14, 15, 16 can be considered similar to Appendix B, VP05 – Ballyvallagh Road where there is anticipated to be moderate significance of effect during the construction effect, that will diminish over time as the Proposed Development settles into the receiving landscape and mitigation planting establishes to a minor effect.

### 1.8 Mitigation

Whilst no significant landscape or visual effects are predicted to be experienced during the operational phase of the Proposed Development, the following soft landscape interventions have been included within the overall proposals to aid the integration of the Proposed Development into the surrounding landscape context. Please refer to the Landscape Mitigation Plan that accompanies the planning application:

Drawing nr 028964.5.01.

The below text sets out the aims of proposed landscape interventions but the role of the landscape architect in design evolution must also be noted.

#### Landscaping Aims

- To protect the existing landscape features to integrate the Proposed Development and associated infrastructure physically and visually into the surrounding landscape; and
- Provide suitable screening to minimise visual intrusion, particularly in views from close residential
  receptors to reduce significant effects regarding the visual impact of the proposal and associated
  structures on sensitive receptors.

### General Objectives

- Retention of existing hedgerows, trees, shelterbelt planting and roadside vegetation on peripheral and internal boundaries in accordance with BS5837:2012 Trees in relation to design, demolition, and construction - Recommendations.
- Mitigation should be in keeping with the existing landscape.
- Selection of locally appropriate deciduous trees and hedge species will be made to ensure successful plant establishment and to maintain and increase biodiversity whilst providing visual screening of the proposed development year-round.

In particular mitigation planting has been included to the western and northern boundary of the working area of the Proposed Development site to reduce the visual effects at Operational year for residential properties with partial views within the closest proximity of the Proposed Development. Existing boundaries of either timber post and wire fence with some gappy planting is proposed to be strengthened with native hedgerow, woodland and specimen tree planting.

### 1.8.1 Monitoring and Maintenance

Maintenance of the landscape works will be an integral part of the on-going site management. This will include a defects liability period during which any defective plant material (as stated above) is to be replaced. Litter picking and weed control shall be carefully monitored during the early growing seasons of the landscape maintenance contract. Contractors will comply with all health and safety standards, in particular regard to maintenance works during the operational phase of the Proposed Development.

### 1.9 Conclusion

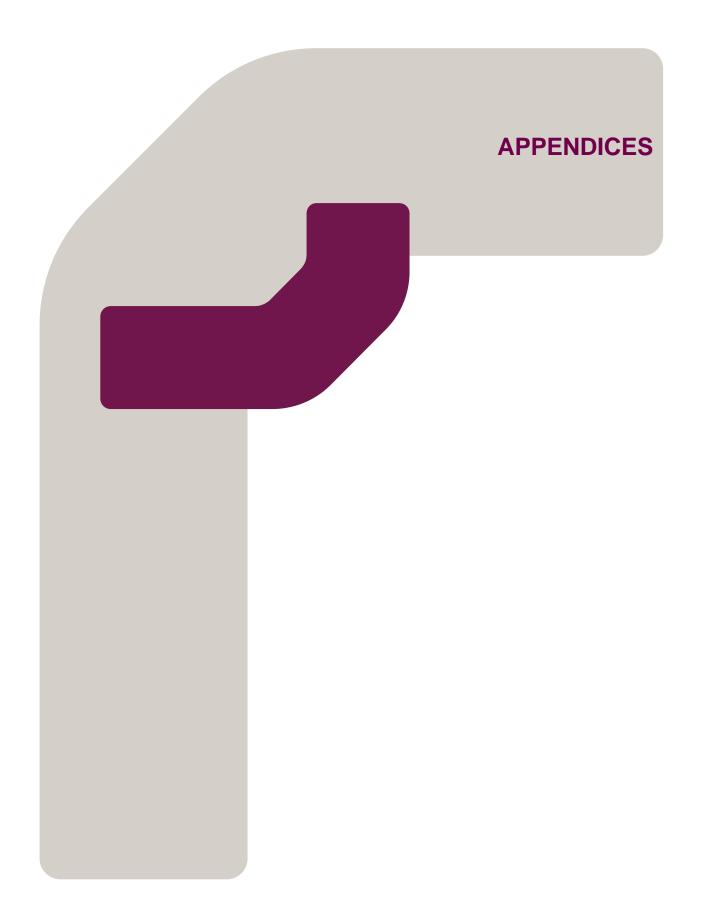
A review of the Northern Ireland Regional Landscape Character Assessment (NIRLCA) has identified that the Proposed Development is wholly located within a single landscape character area identified as RLCA 19 - South Antrim Hills and Six Mile Water. An assessment of the predicted impacts of the Proposed Development upon this RLCA has been undertaken for both construction phase and operational phase. The assessment has identified that during the construction phase the RLCA is predicted to experience localised direct impacts because of hedgerow removal associated with the formation of new access laneway, with remaining vegetation associated with field boundaries remaining unaltered. The assessment has identified that the predicted significance of landscape effect for RLCA 19 during the operational phase is localised, minor and assessed as not significant as predicted effects are limited in extent by the enclosing nature of the surrounding landscape, with topography, field boundary hedgerows and scattered mature trees restricting the identified impacts to those area of the RLCA contained within the site boundary. Remaining portions of the RLCA beyond the development site boundary are predicted to experience no significant indirect effects.

A review of the Northern Ireland Landscape Character Assessment 2000 (NILCA) has identified that the Proposed Development is wholly located within a single landscape character area identified as LCA 89 – Carrickfergus Upland Pastures LCA. An assessment of the predicted impacts of the Proposed Development upon this LCA has been undertaken for both construction phase and operational phase. The assessment has identified that during the construction phase the LCA is predicted to experience localised direct impacts because of hedgerow removal due to the formation of new access laneway, with remaining vegetation associated with field boundaries remaining unaltered. The assessment has identified that the predicted significance of landscape effect for LCA 89 during the operational phase is localised, minor and assessed as not significant as predicted effects are limited in extent by the enclosing nature of the surrounding landscape, with topography, field boundary hedgerows and scattered mature trees restricting the identified impacts to those area of the LCA contained within the site boundary. Remaining portions of the LCA beyond the development site boundary are predicted to experience no significant indirect effects.

The Proposed Development has been established to not have any significant effect on any landscape designations including; AONB's; Historic Parks & Gardens; Ulster Way; or Way Marked Trails; due to distance from these features and/or intervening topography and vegetation.

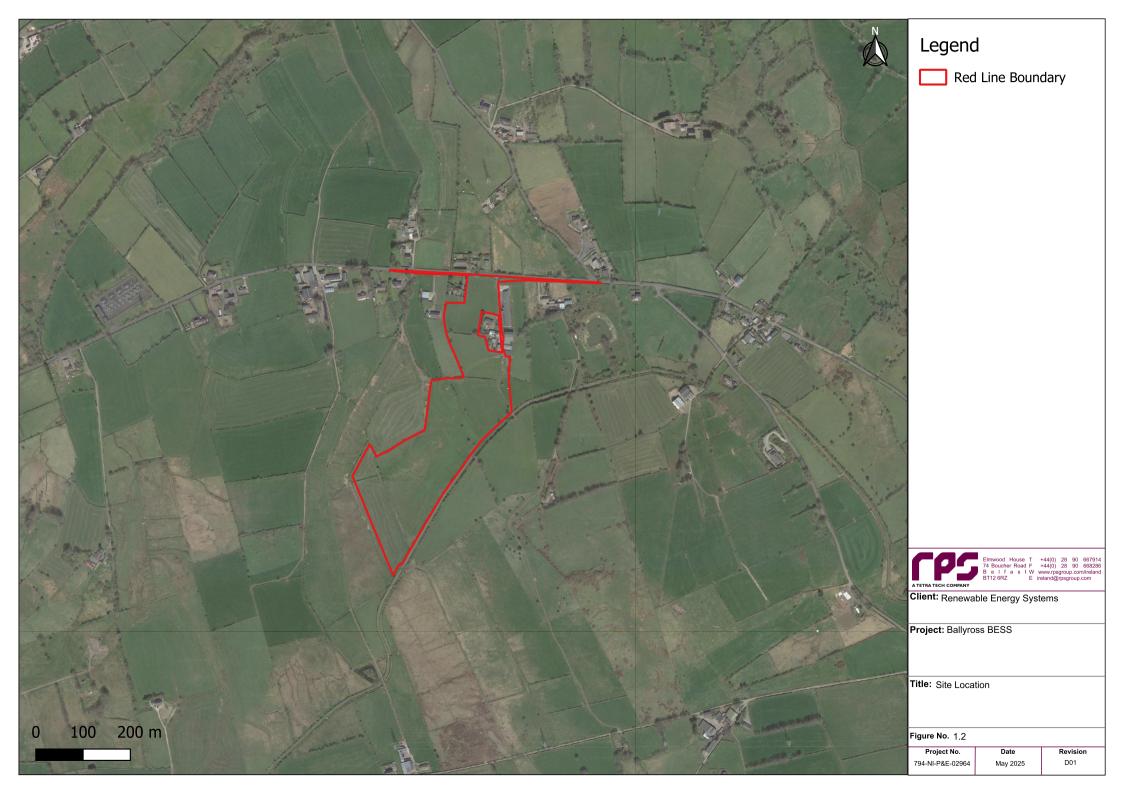
A total of six viewpoints have been assessed, for both construction and operational phases of the Proposed Development. Two viewpoints that are located within proximity to the Proposed Development (VP01 and VP05) have been assessment as experiencing localised moderate visual impacts during the construction phase, which have been assessed as significant locally. During the operational phase, these two viewpoints are predicted to experience no significant effects because of the Proposed Development. One viewpoint, VP04, is predicted to have minor effects during construction that will decrease over time with the aid of mitigation planting into operational years with the significance of effect being considered minor to negligible. Three viewpoints (VP02, VP03 and VP06) are predicted to experience no change during the construction or operation of the Proposed Development. This is due to the existing topography and mature vegetation in the surrounding landscape providing screening and allowing for integration.

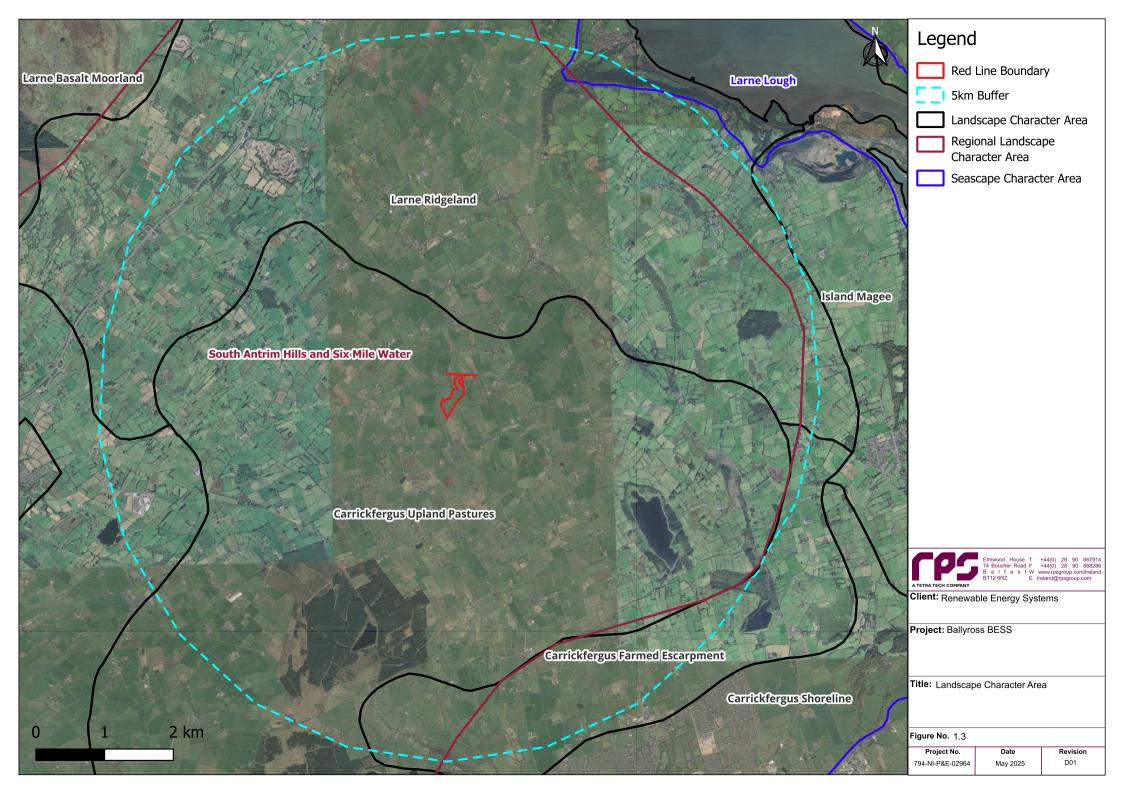
An assessment of effects on residential properties has taken place for properties lying within 500m of the Proposed Development. Where properties lie adjacent to the northern and western boundaries of the Proposed Development site, integrated landscape mitigation has been proposed and overall, no significant visual effects are predicted following the successful establishment of the new planting. At distances greater than 500m the Proposed Development is well screened in views and at such longer distances no significant effects are predicted for views from residential properties.



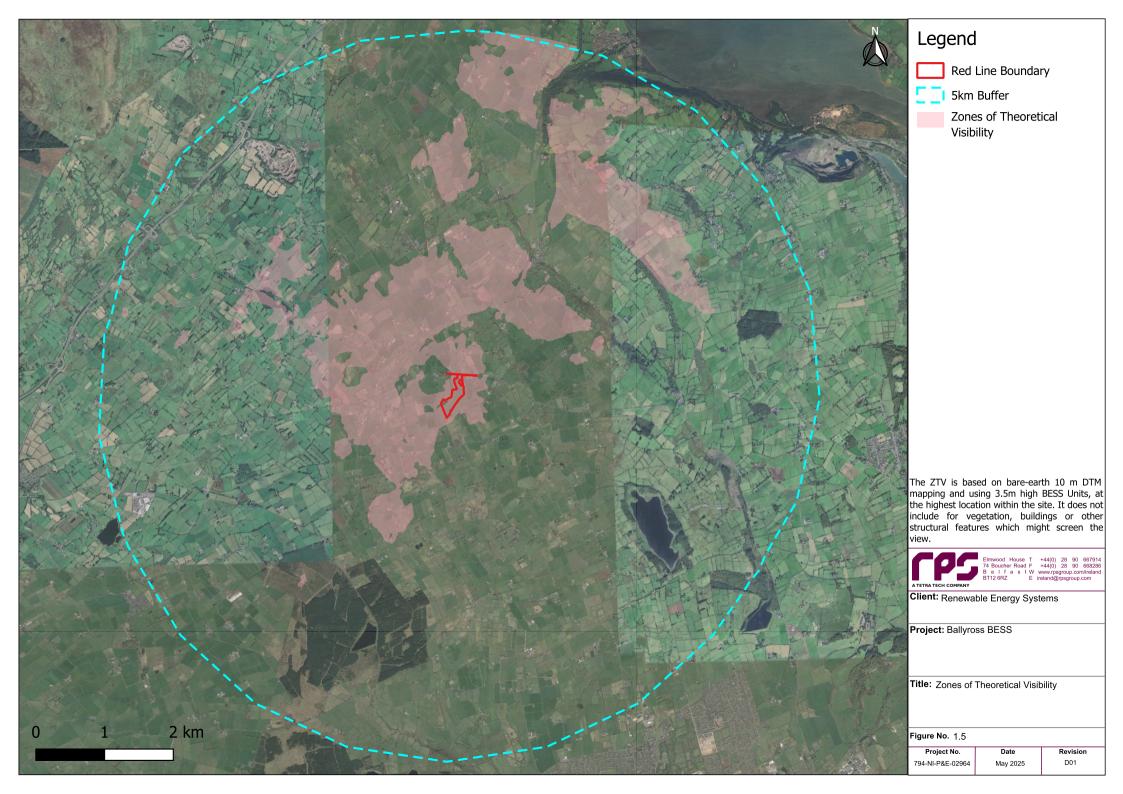
# Appendix A

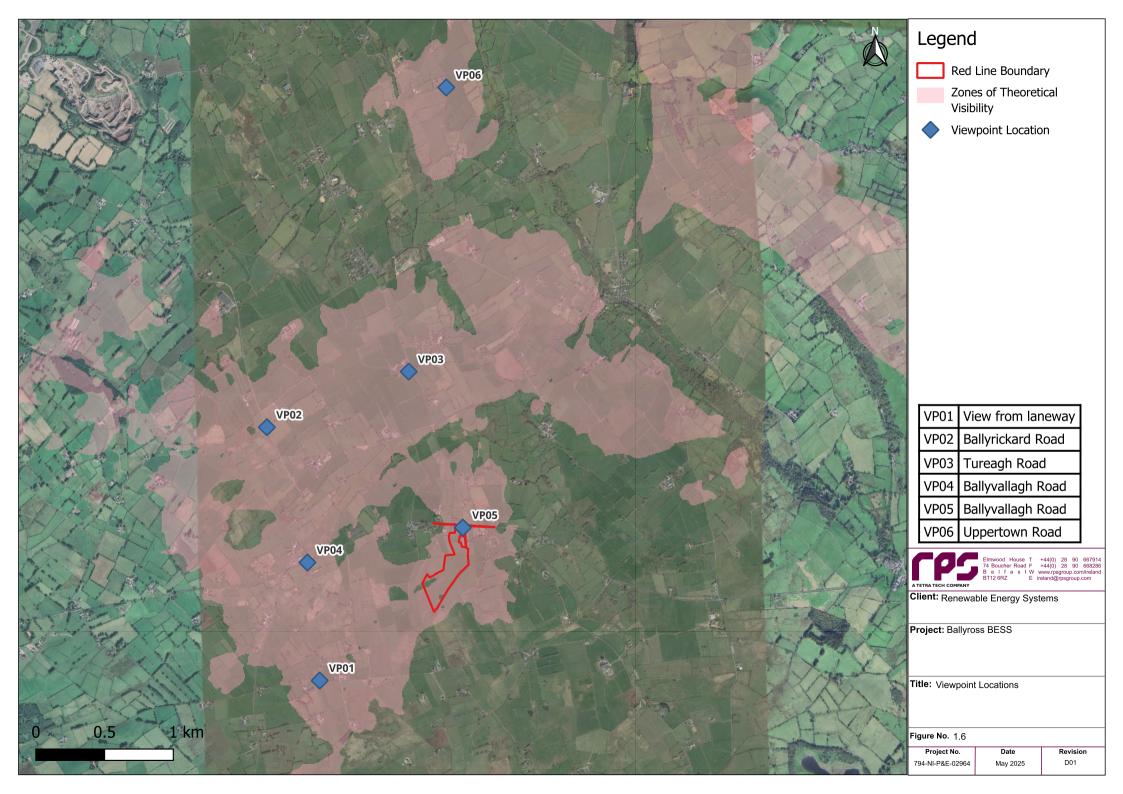
**LVIA Figures** 

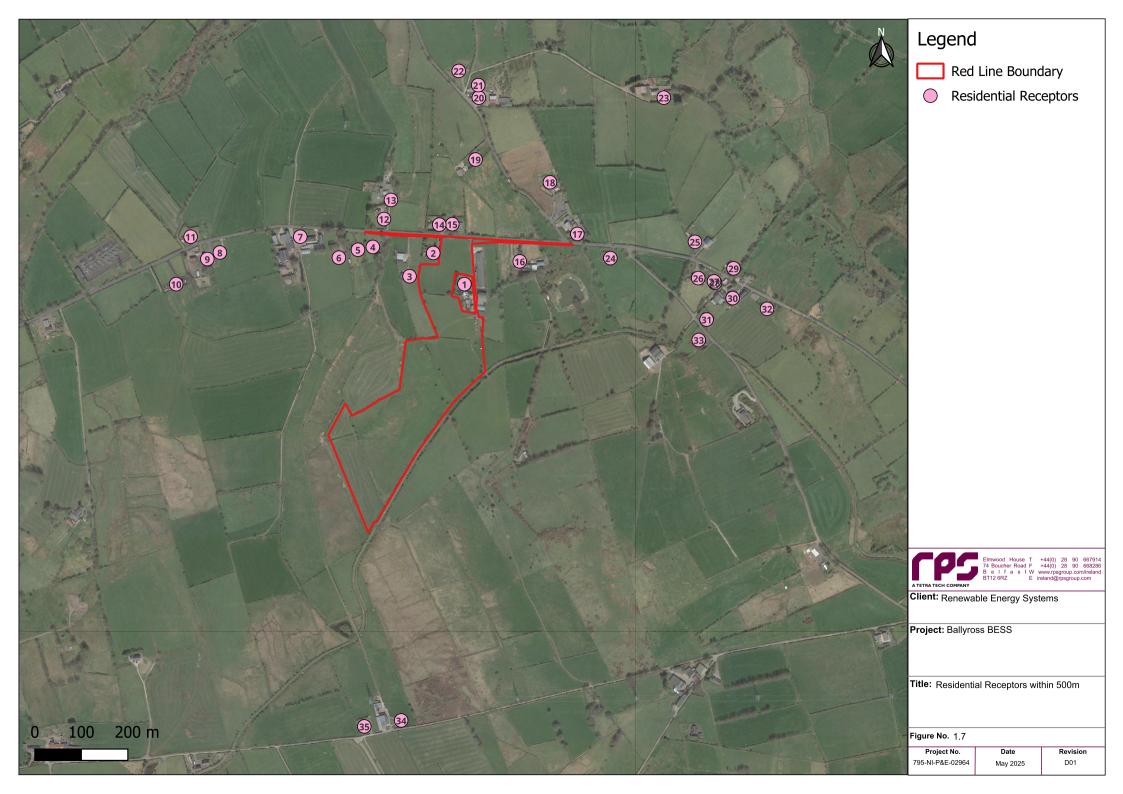












## **Appendix B**

**Photomontages** 

## PHOTOMONTAGES

## **Ballyross BESS**

Renewable Energy Systems



Project: 02964 March 2025









Camera	Nikon D600	Easting	337385
Date	21.01.25-14:10	Northing	393938
View height	1.65 m AGL	Direction	50°
Field of View	65°	Distance	1000 m

**VP01 - View from laneway** Existing View

Details		Drawn by:	GMG
Projection:	Irish Grid	Checked:	SA
Data Source:	RPS 2024	Job Ref:	02964
Status:	Issued	Date:	March 2025

Project:

**Ballyross BESS** 

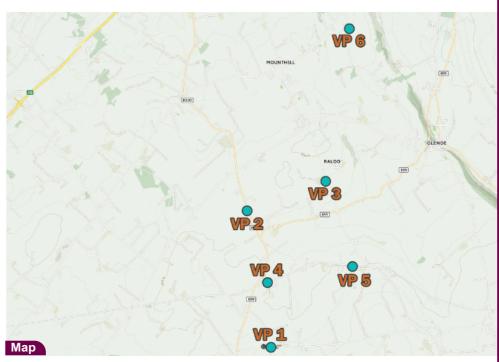












Camera	Nikon D600	Easting	337385
Date	21.01.25-14:10	Northing	393938
View height	1.65 m AGL	Direction	50°
Field of View	65°	Distance	1000 m

**VP01 - View from laneway** Model View

Details		Drawn by:	GMG
Projection:	Irish Grid	Checked:	SA
Data Source:	RPS 2024	Job Ref:	02964
Status:	Issued	Date:	March 2025

Ballyross BESS

Project:

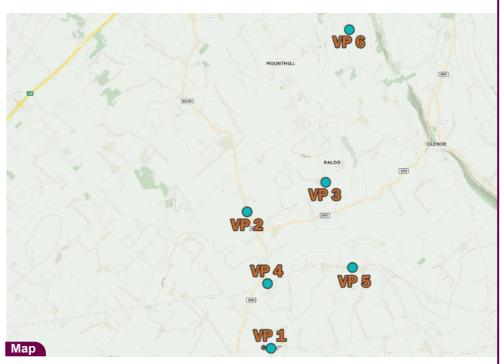
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Camera	Nikon D600	Easting	337385
Date	21.01.25-14:10	Northing	393938
View height	1.65 m AGL	Direction	50°
Field of View	65°	Distance	1000 m

**VP01 - View from laneway** Photomontage View

Details		Drawn by:	GMG
Projection:	Irish Grid	Checked:	SA
Data Source:	RPS 2024	Job Ref:	02964
Status:	Issued	Date:	March 2025

Project:

**Ballyross BESS** 













Camera	Nikon D600	Easting	337001
Date	21.01.25-14:52	Northing	395781
View height	1.65 m AGL	Direction	125°
Field of View	65°	Distance	1500 m

**VP02 - Ballyrickard Road**Existing View

Title:

DetailsDrawn by:GMGProjection:Irish GridChecked:SAData Source:RPS 2024Job Ref:02964Status:IssuedDate:March 2025

**Ballyross BESS** 

Client:

Project:

res











Camera	Nikon D600	Easting	337001
Date	21.01.25-14:52	Northing	395781
View height	1.65 m AGL	Direction	125°
Field of View	65°	Distance	1500 m

**VP02 - Ballyrickard Road** Model View

Details		Drawn by:	GMG
Projection:	Irish Grid	Checked:	SA
Data Source:	RPS 2024	Job Ref:	02964
Status:	Issued	Date:	March 2025

Project:

Ballyross BESS

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Camera	Nikon D600	Easting	337001
Date	21.01.25-14:52	Northing	395781
View height	1.65 m AGL	Direction	125°
Field of View	65°	Distance	1500 m

Title: VP02 - Ballvricka

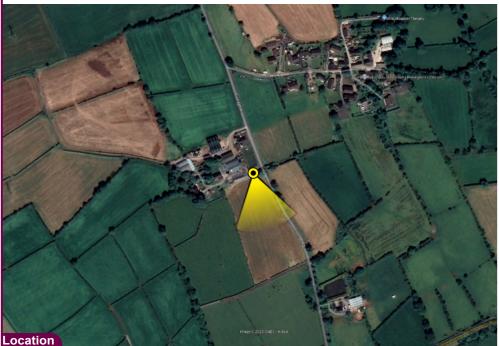
**VP02 - Ballyrickard Road** Photomontage View

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Data Source:	RPS 2024	Job Ref:	02964
Status:	Issued	Date:	March 2025

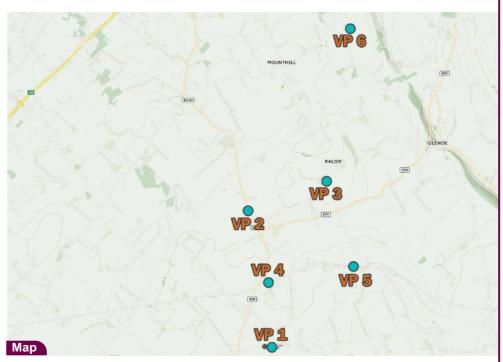
Project: Ballyross BESS











Camera	Nikon D600	Easting	337168	Title:
Date	21.01.25-15:30	Northing	395433	
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Field of View	65°	Distance	1200 m	

VP03 - Tureagh Road Existing View

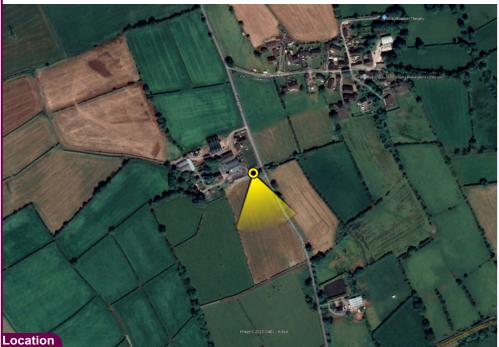
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Status:	Issued	Date:	March 2025

Ballyross BESS

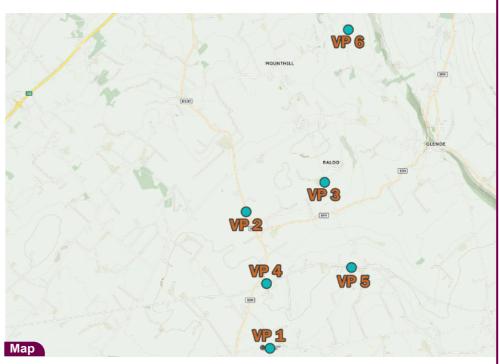












Camera	Nikon D600	Easting	337168	Title:
Date	21.01.25-15:30	Northing	395433	
View height	1.65 m AGL	Direction	160°	
Field of View	65°	Distance	1200 m	

**VP03 - Tureagh Road** Model View

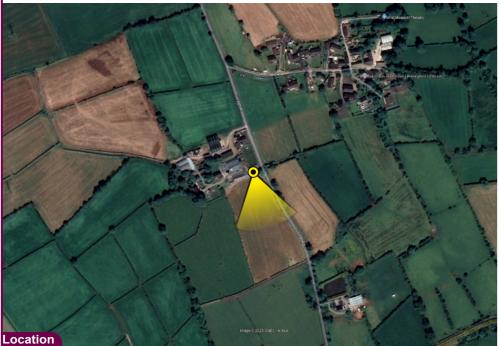
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			Checked:	SA
			Job Ref:	02964
	Status:	Issued	Date:	March 2025

**Ballyross BESS** 













Camera	Nikon D600	Easting	337168	Title:
Date	21.01.25-15:30	Northing	395433	
View height	1.65 m AGL	Direction	160°	
Field of View	65°	Distance	1200 m	

**VP03 - Tureagh Road** Photomontage View

Deta	ails	Drawn by:	GMG
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Data Source:	RPS 2024	Job Ref:	02964
Status:	Issued	Date:	March 2025

**Ballyross BESS** 

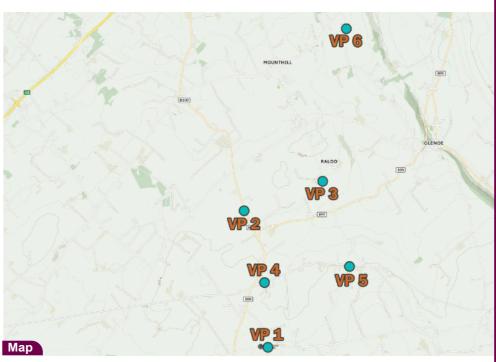












ı					
	Camera	Nikon D600	Easting	338049	Title:
	Date	21.01.25-15:41	Northing	396204	
	View height	1.65 m AGL	Direction	90°	
	Field of View	65°	Distance	950 m	

VP04 - Ballyvallagh Road Existing View

	Details  Projection: Irish Grid		Drawn by:	GMG
			Checked:	SA
	Data Source: RPS 2024	Job Ref:	02964	
	Status:	Issued	Date:	March 2025

**Ballyross BESS** 

Client:

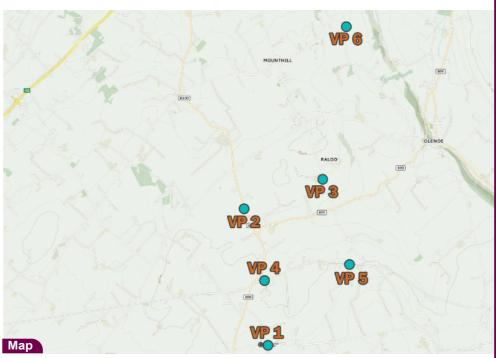












Camera	Nikon D600	Easting	338049
Date	21.01.25-15:41	Northing	396204
View height	1.65 m AGL	Direction	90°
Field of View	65°	Distance	950 m

**VP04 - Ballyvallagh Road** Model View

Details		Drawn by:	GMG	
Projection:	Irish Grid	Checked:	SA	
Data Source:	RPS 2024	Job Ref:	02964	
Status:	Issued	Date:	March 2025	

Project:

**Ballyross BESS** 

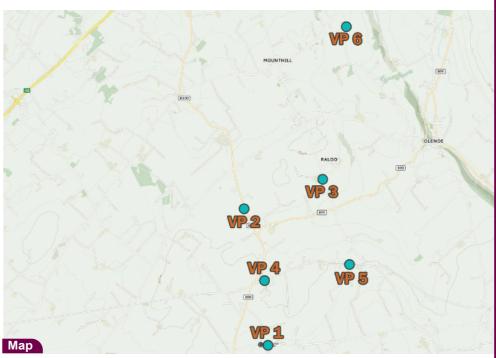












Camera	Nikon D600	Easting	338049
Date	21.01.25-15:41	Northing	396204
View height	1.65 m AGL	Direction	90°
Field of View	65°	Distance	950 m

**VP04 - Ballyvallagh Road** Photomontage View

Details		Drawn by:	GMG	
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Status:	Issued	Date:	March 2025	

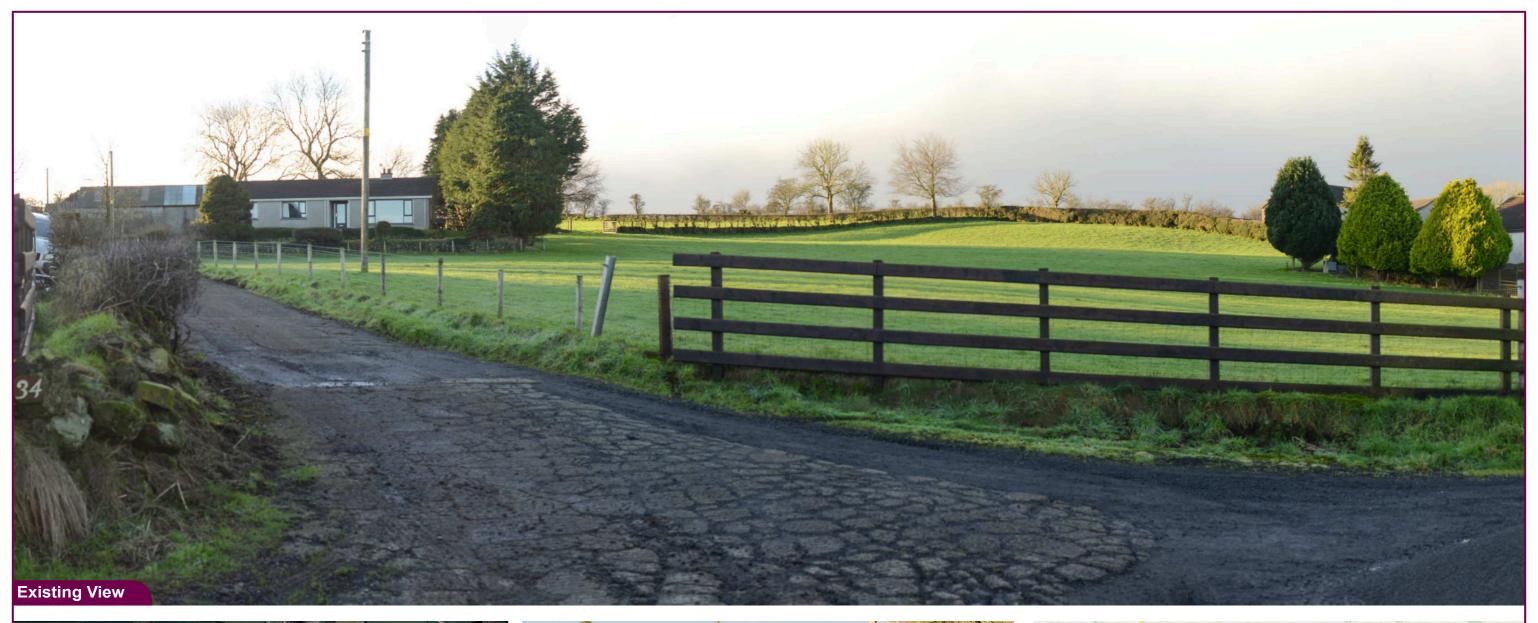
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Client:

Project:

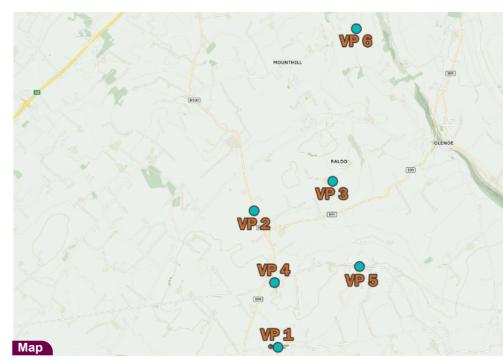
res











Camera	Nikon D600	Easting	337312
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View height	1.65 m AGL	Direction	200°
Field of View	65°	Distance	10 m

**VP05 - Ballyvallagh Road** Existing View

Details		Drawn by:	GMG
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Data Source:	RPS 2024	Job Ref:	02964
Status:	Issued	Date:	March 2025

Project: Ballyross BESS

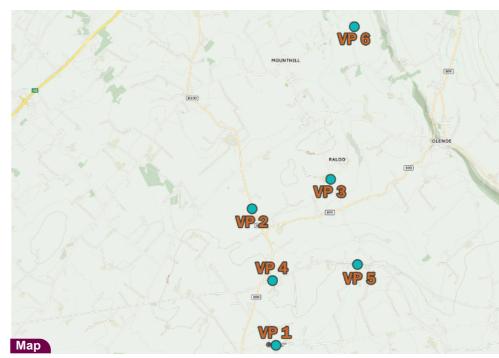
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Camera	Nikon D600	Easting	337312
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View height	1.65 m AGL	Direction	200°
Field of View	65°	Distance	10 m

**VP05 - Ballyvallagh Road** Model View

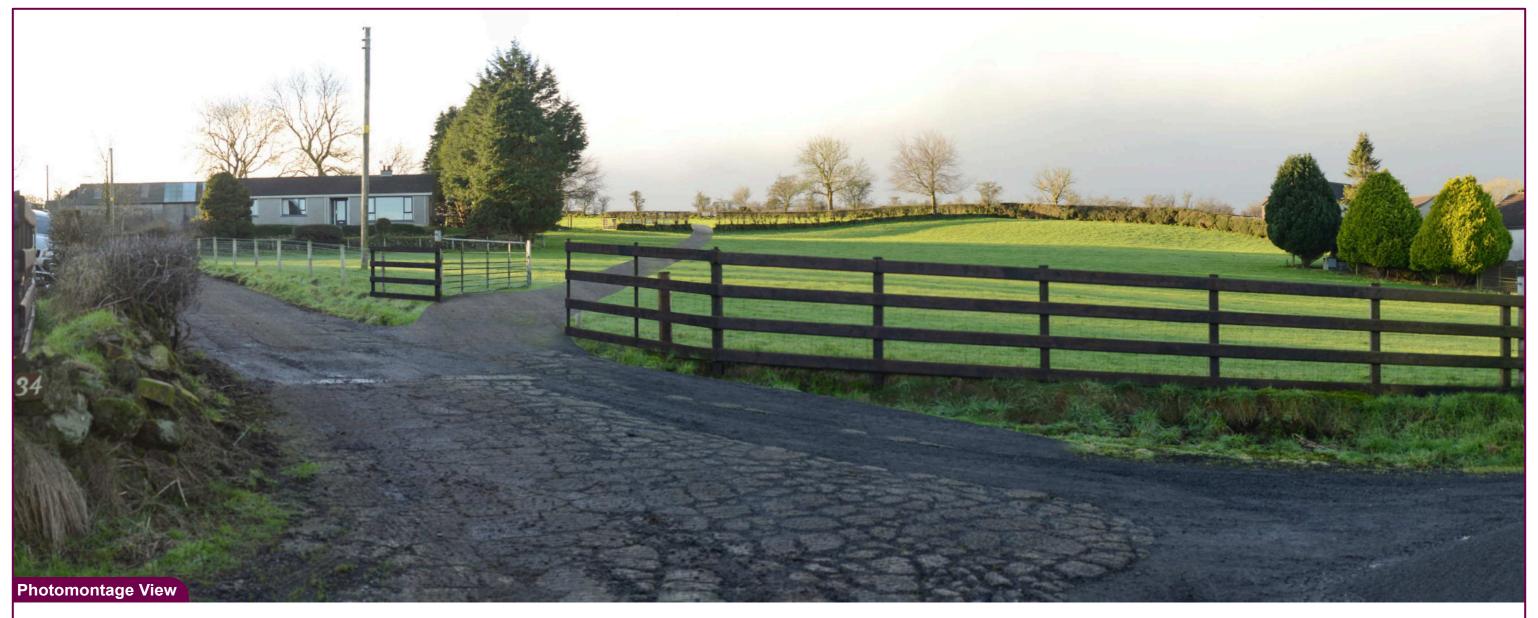
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Project:

**Ballyross BESS** 

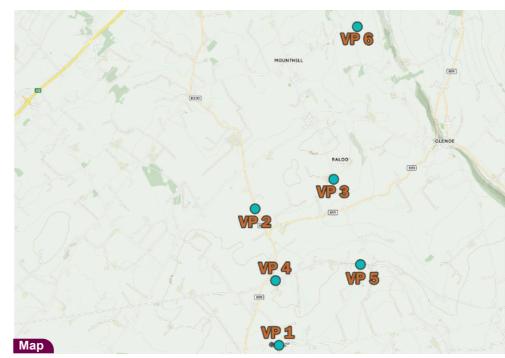












Camera	Nikon D600	Easting	337312
Date	21.01.25-15:55	Northing	394811
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Field of View	65°	Distance	10 m

**VP05 - Ballyvallagh Road** Photomontage View

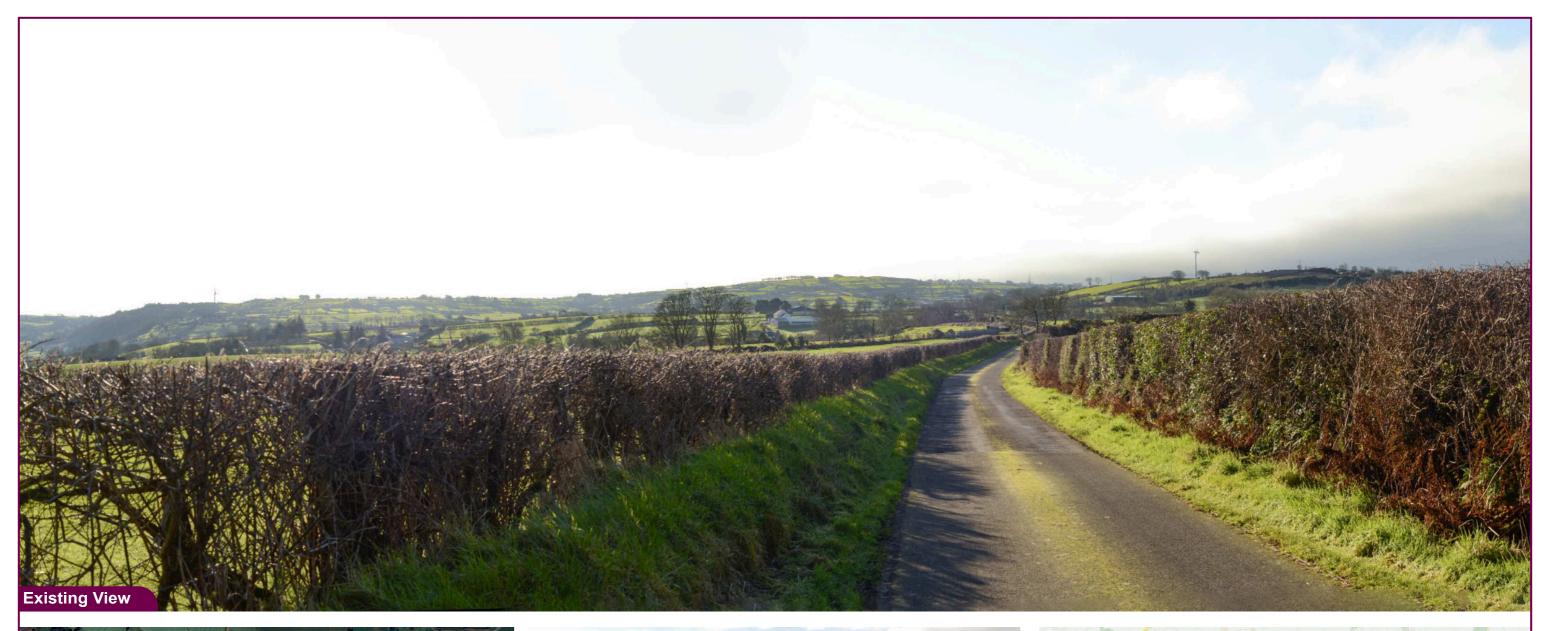
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Project:

**Ballyross BESS** 

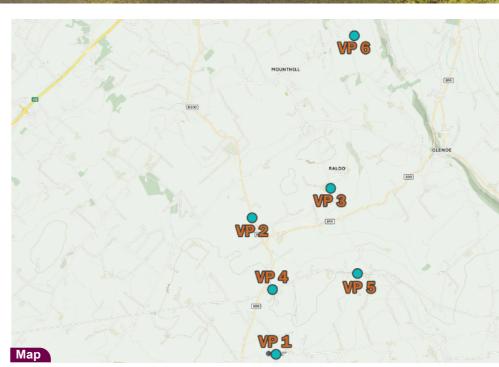












Camera	Nikon D600	Easting	338306	Title:
Date	22.01.25-10:42	Northing	398253	
View height	1.65 m AGL	Direction	180°	
Field of View	65°	Distance	3200 m	

**VP06 - Uppertown Road** Existing View DetailsDrawn by:GMGProjection:Irish GridChecked:SAData Source:RPS 2024Job Ref:02964Status:IssuedDate:March 2025

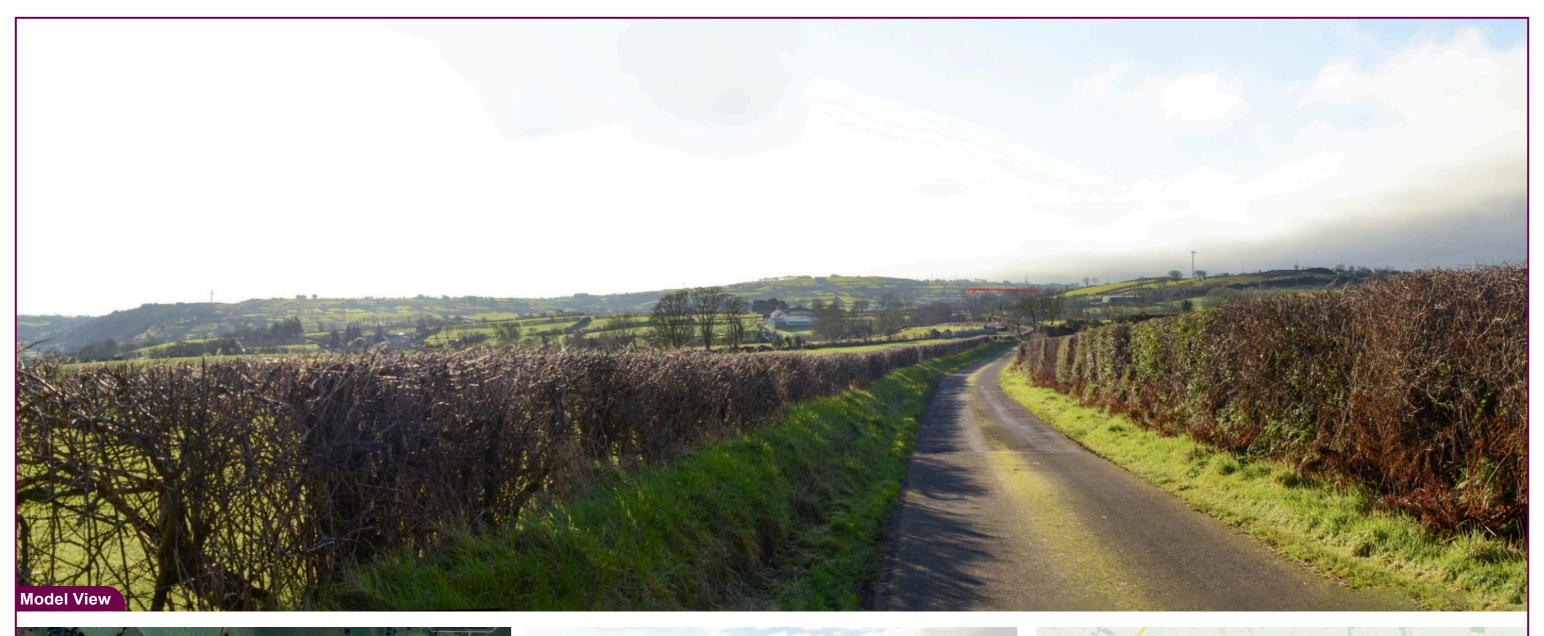
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Project:

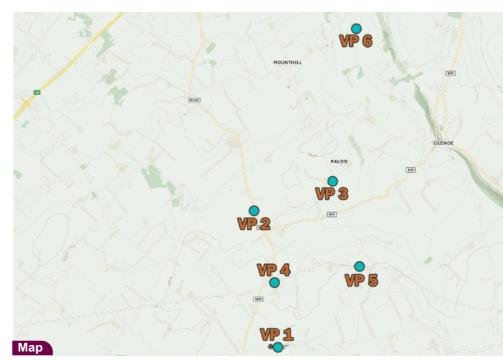
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Camera	Nikon D600	Easting	338306	Title:
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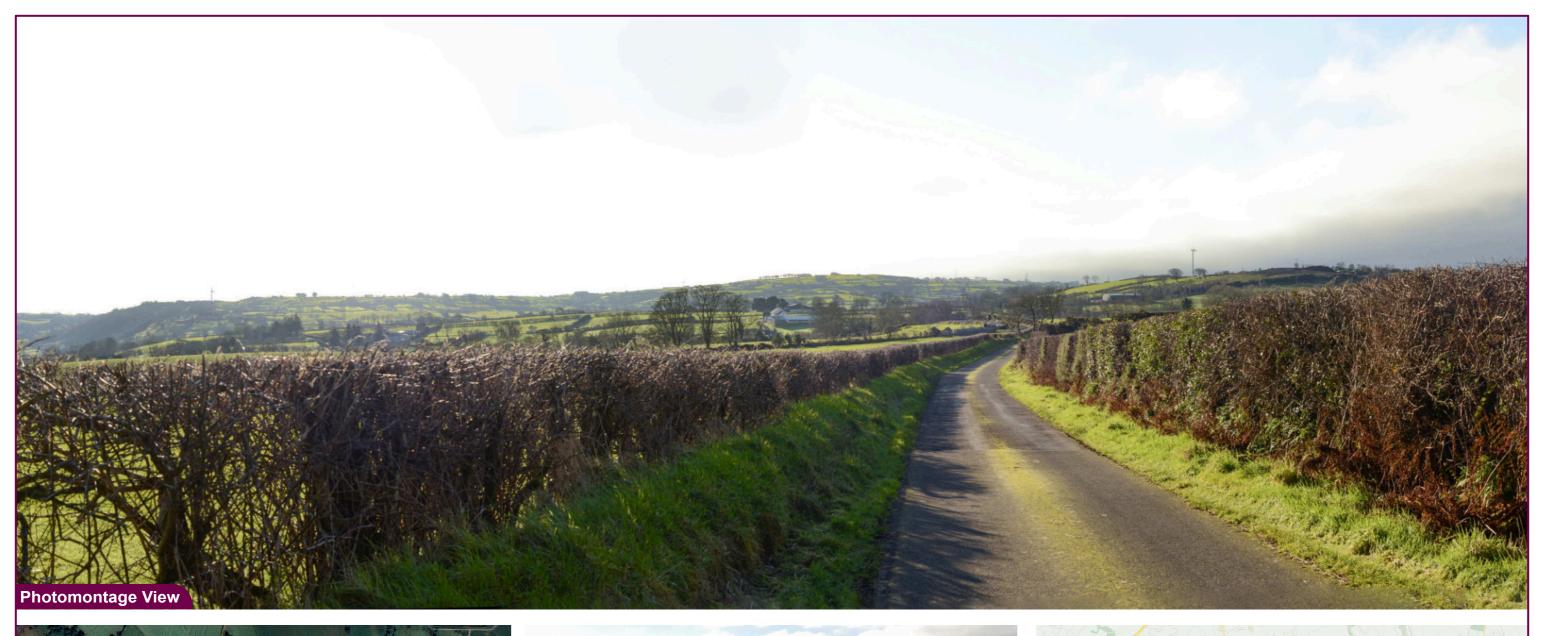
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Project:

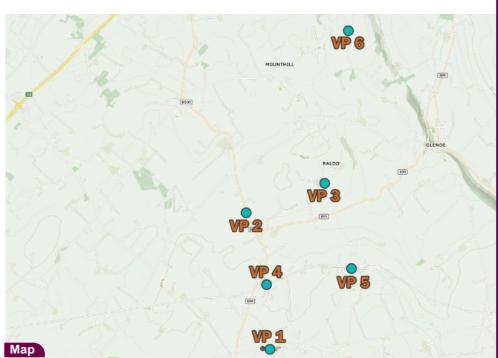
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Camera	Nikon D600	Easting	338306	Title:
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View height	1.65 m AGL	Direction	180°	
Field of View	65°	Distance	3200 m	

**VP06 - Uppertown Road** Photomontage View

Deta	ails	Drawn by:	GMG
Projection:	Irish Grid	Checked:	SA
Data Source:	RPS 2024	Job Ref:	02964
Status:	Issued	Date:	March 2025

**Ballyross BESS** 

Client:



