LANDSCAPE AND VISUAL IMPACT ASSESSMENT

Machaire Battery Energy Storage System

P&E-02940
Landscape & Visual Impact Assessment
Final
February 2025

rpsgroup.com

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RES

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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:

> *"Installation and operation of a Battery Energy Storage System (BESS) with associated infrastructure including fencing, pole-mounted security cameras, landscaping and site access." (The Proposed Development).*

The Proposed Development is to be located on lands to the east of the Finvoy Road, approx. 1.2km north of Rasharkin. The Proposed Development will have an anticipated capacity of 50 – 100 megawatts (MW) and will be located on lands outlined in red on Figure 1-1 below, comprising an overall area of approximately 6.2 hectares.

The lands are wholly located within the Causeway Coast & Glens Borough Council area.

Figure 1-1: Site Location

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 and operation 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 report 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 Error! Reference source not found. below.

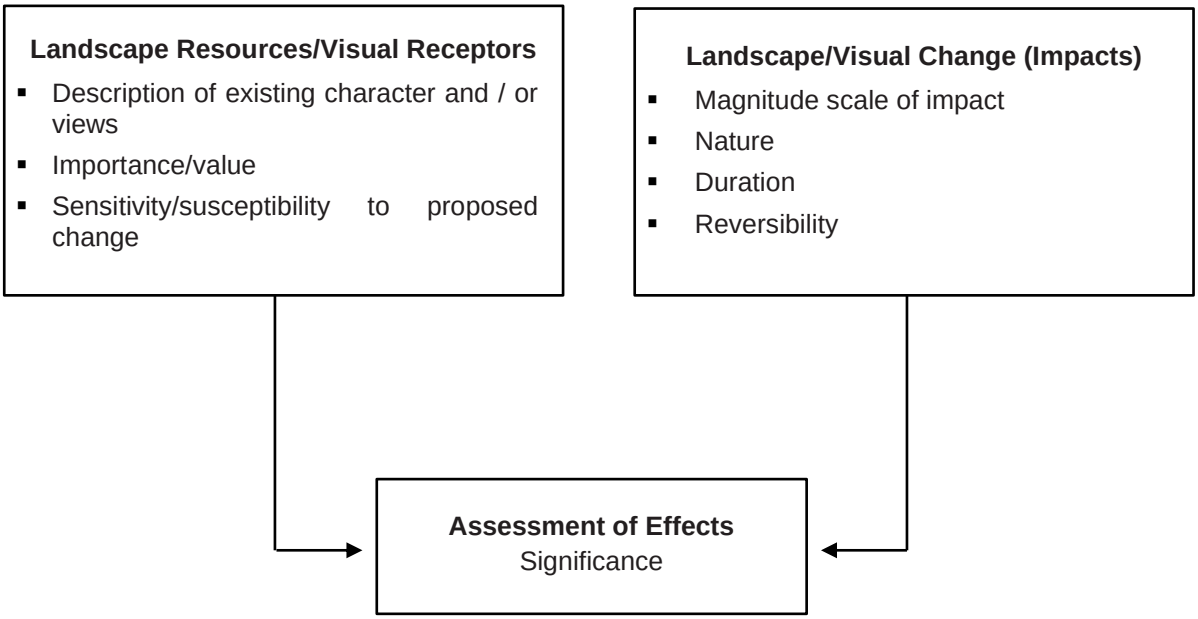

Figure 1-2: Assessment Methodology Summary

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);
- Northern Area Plan (2016) (NAP);
- Local Development Plan (2030) – Preferred Options Paper;
- 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 considered to be 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 considered to be reversible.

Where effects arise during the construction period, these are most likely to be because 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 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 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 woodland 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. woods, 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. 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/	Very High

Definition		Sensitivity
Landscape resource susceptibility	**Landscape resource value**	
Little or no tolerance to change	internationally designated landscapes. Little or no tolerance to change	
Strong/ distinctive landscape character; absence of landscape detractors. Low tolerance to change.	Regionally/ nationally designated/ valued countryside and landscape features. Low tolerance to change.	High
Some distinctive landscape characteristics; few landscape detractors. Medium tolerance to change.	Locally' regionally designated/ valued countryside and landscape features. Medium tolerance to change.	Medium
Absence of distinctive landscape characteristics; presence of landscape detractors. High tolerance to change	Undesignated countryside and landscape features. High tolerance to change	Low
Absence of positive landscape characteristics. Significant presence of landscape detractors. High tolerance to change	Undesignated countryside and landscape features. High tolerance to change	Negligible

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	Medium

Definition	Magnitude of Impact
introduction of elements that may be prominent but may not necessarily be substantially uncharacteristic with the attributes of the receiving landscape.	
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. Medium Tolerance to change.	Observers enjoying the countryside from vehicles on quiet/ promoted routes are moderately sensitive to visual change. Medium tolerance to change	Medium
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 dominant 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 exercise 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 Impact	Sensitivity				
	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

Magnitude of Impact	Sensitivity				
	Negligible	Low	Medium	High	Very High
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 is located on lands to the east of Finvoy Road and immediately south of Magheraboy Road. The Proposed Development is located approximately 1.16km north of the small village of Rasharkin and will be accessed via the Magheraboy Road to the north of the site. The existing Bann Road Solar Farm is located to the west of the Proposed Development site. A farm is located approximately 220m to the west of the Proposed Development.

In the wider context of the site, the proposed site is located to the west of a long ridge of land known as Long Mountain. Long Mountain stands isolated from the Antrim Plateau in a north-south alignment overlooking lowland floodplains to the east and west, namely River Main and River Bann. Rasharkin is located west of Long Mountain on slightly elevated drumlins above the lowlands. Overhead lines do cross the landscapes within the study area. Throughout the wider area, scattered residential development is prominent in the landscape.

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 wholly in one RLCA (15 – Lower Bann Valley) (refer to Appendix A; Figure 1.3).

Lower Bann Valley - RLCA 15

The Proposed Development is located entirely within this RLCA, and the key characteristics identified from the NIRLCA are as follows;

- *Wide, open valley of the Lower Bann River running northwards from Lough Neagh towards the Atlantic Ocean.*
- *Frequent glacial drumlins on gently undulating land used for farming, particularly to the east of the area.*
- *High amenity value of the river, used for water-based recreation including boating, canoeing, and fishing.*
- *The Lower Bann is a natural dividing line between the eastern and western parts of Northern Ireland.*

- *Varied field pattern, with large expansive fields separated by drainage ditches on the valley bottom, particularly near the floodplain. On slopes and the drumlins away from the river, the field pattern is smaller and enclosed by hedgerows with frequent trees and copses.*
- *Views changing throughout due to topography and tree cover, with more open and expansive views from the higher slopes and on the valley floor where there is less tree cover.*
- *Elevated views from the rising land towards the Sperrins in the west and Long Mountain Ridge in the east.*
- *Deeply rural and tranquil landscape away from the main road corridors.*
- *Semi-natural habitats include wet woodlands and bog, including the SAC Wolf Island Bog.*
- *Dispersed settlement pattern with nucleated villages.*
- *Several wooded demesnes, including the Registered Parks of Leslie Hill, Lizard Manor and Bovagh House, provide interest in the landscape.*

The RLCA 15 within the vicinity of the Proposed Development is described *"The Lower Bann Valley is the link between Lough Neagh and the north coast. It is a broad open valley running roughly north-south, overlain with glacial drumlins. The landform is low, with much of the valley lying below 100m AOD, although the flanks of Long Mountain Ridge to the east and the Sperrin and Binevenagh hills to the west rise higher. The landscape is of pastoral farmland, with hedges marking field boundaries that flow over the landform, with larger fields on the flood plain and smaller fields over the drumlins. The floodplain of the river is extensive, with semi-natural habitats including areas of peat and wet woodland including Wolf Island Bog SAC. There are relatively few crossing places over the Lower Bann River, and roads tend to run along the valley (with the closest roads to the river avoiding the floodplain), or across the valley, forming a network. Settlements are generally located near the bridging points over the river, including Portglenone and Kilrea, and along the tributary streams, such as Ballymoney and Garvagh."*

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); Long Mountain Ridge LCA (58) (refer to Appendix A; Figure 1.3).

Long Mountain Ridge LCA (58)

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

- *Distinct rounded ridge orientated north-south with undulating side slopes and a broad rounded crest.*
- *Pastoral farmland with strong hedgeline geometry and numerous trees; patches of moss on the exposed ridge top, especially towards the north.*
- *Wooded estates, with distinctive buildings, designed landscapes and avenues of beech on lower slopes overlooking the River Main valley.*
- *Settlements and houses frequent and regularly distributed, often on raised areas; more numerous on ridge sides, but rarely a dominant feature.*

- *Scale varies considerably; large at bottom in flat, open terrain, medium to small on intricate, undulating sides and vast at the top.*
- *Distant elevated views into lowlands and across to other ridges*

NIEA state; *"This landscape character area comprises a long ridge of land, known as the `Long Mountain', that runs from Ballymoney in the north to Randalstown in the south. It has been created by the relative lowering of softer bands of Lower Basalt on either side of it which are now occupied by the Lower Bann and River Main valleys to the west and east respectively. Despite variations in topography and character, the ridge reads as a single feature in the landscape and forms a distinctive skyline. In common with most of Ballymena and Antrim, this area is dominated by pasture, supported by the fertile Antrim lavas which underlie it. Field size and structure varies with landform; on the undulating side slopes fields are smaller and hedges more extensive, their curving lines emphasising the landform; the flatter terrain on the ridge top permits larger fields. Trees are prevalent in hedges and shelterbelts and as small, isolated stands, but woodland in the south is uncommon. To the north, on the higher slopes that cross into Ballymoney, pasture gives way to patches of moorland scrub which intermix with farmland to create a diverse landcover, including Craigs Wood, a large straight-edged conifer plantation. In this area there are craggy outcrops at the heads of stream valleys and a large number of interesting archaeological features on the slopes of Long Mountain above Finvoy. Settlement is widespread on the sheltered side slopes; it comprises small settlements, such as Rasharkin and Dunloy, and small groups of dwellings. Despite the predominance of farmland, this is a landscape of diverse scales and landforms. On its complex rolling sides, views constantly vary and the ridgeline commands some exceptional views into the valleys; for example, from Battery Hill on the B18 looking east and from Glenvale on the B64 looking north east.*

In relation to Landscape sensitivity NIEA state; "*This landscape is intensively used as an agricultural resource, for housing and for roads. Moderate increases in these will not substantially alter its character, although proliferation of housing could threaten landscape character. The moorland is quite fragmented and substantially undermanaged; its conservation is paramount to local landscape character on the upland ridge top. Peat cutting, windfarms, pylons and telecommunication masts are pressures for change in this moorland area. The estate woodlands on the eastern slopes of the ridge are particularly prominent in views from the River Main valley and are relatively sensitive to change. There are signs that some of the woodlands are undermanaged and that prominent stands of trees may be in the early stages of decline.*

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 (refer Appendix A, Figure 1.4) 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 HPG is Moore Lodge, which is approximately 3.6km northwest of the Proposed Development site (refer Appendix A, Figure 1.4). Despite the Proposed Development being in proximity to this HPG, site survey and assessment has established that due to mature tree planting, intervening topographical changes and heavy built form lying between the HPG and the Proposed Development site, 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 the 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 designated Ulster Way footpath.

Way Marked Trails

There is no way marked walking trail within the study area near the Proposed Development.

1.5 Proposed Development

The Proposed Development is comprised of the installation and operation of a Battery Energy Storage System (BESS) with associated infrastructure including fencing, pole-mounted security cameras, landscaping, and site access.

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 construction phase impacts and predicted operational phase impacts is included within the following landscape assessments.

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 15 – Lower Bann Valley

RLCA 15 – Lower Bann Valley	
Sensitivity	The Proposed Development Site is wholly located within RLCA 15, and therefore those portions of the RLCA which lie within the site boundary associated with the Proposed Development will be directly affected. Landscape features such as field boundary hedgerows, hedgerows with trees and other areas of vegetation marking external field boundaries are to be retained as part of the Proposed Development. A single internal hedgerow providing internal separation between fields is to be locally removed to facilitate the internal access track to the BESS. Predicted effects are limited to a change in land use for those portions of the site being utilised for the Proposed Development. Indirect effects are predicted to occur within proximity to the site boundary though the wider RLCA will remain unaltered. Key characteristics which, together with site survey works, have informed an understanding of the susceptibility of this landscape, particularly at a local level, to the Proposed Development include: • Undulating topography providing localised enclosure. • Varied field pattern scale with field boundaries well defined by hedgerows and hedgerows with trees. • Timber poles of varying size and scale carrying overhead lines present in the landscape. • Localised influence of built form, including large agricultural buildings, scattered residential development along local roads and residential development associated with Rasharkin. • Localised influence of solar farm development and associated electrical infrastructure to the west of Finvoy Road. • Local road networks generally absorbed within the RLCA through combination of screening by vegetation and localised topographical changes. Overall, the character of the RLCA within the study area associated with the Proposed Development is rural agricultural in nature, with partially enclosure provided through a combination of undulating topography, scattered woodland planting and field boundary hedgerows often with mature / maturing tree cover. Timber poles carrying overhead lines, solar farm development 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

RLCA 15 – Lower Bann Valley	
	construction of the new access and to facility internal access to the southern 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 visible 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 quickly absorbs such activities. Localised portions of the RLCA adjacent to, but beyond the site boundary of the Proposed Development are predicted to experience indirect effects only because of the formation of the new features, though the predicted effects are restricted in extent by a combination of the undulating topography and vegetation cover. 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 small during the construction phase, restricted to land contained within the site boundary.
Magnitude of Change – Operational Phase	During the operational phase, new built form will be perceived as a small localised change to the baseline landscape conditions, though generally not obvious within the wider landscape context due to screening 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 pre-change 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.
Significance of Landscape Effect during Construction Phase	**Minor**, localised, temporary, short-term assessed as not 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 the successful establishment of planting associated with the Proposed Development 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 Proposed Development and have been assessed as not significant. Remaining portions of the RLCA are predicted to experience no significant effects during the operational phase.

Table 8: LCA 58 – Long Mountain Ridge; Predicted Impacts

LCA 58 – Long Mountain Ridge	
Sensitivity	The Proposed Development Site is wholly located within LCA 58, and therefore those portions of the LCA which lie within the site boundary associated with the Proposed Development will be directly affected. Landscape features such as field boundary hedgerows, hedgerows with trees and other areas of vegetation marking external field boundaries are to be retained as part of the Proposed Development. A single internal hedgerow providing internal separation between fields is to be locally removed to facilitate the internal access track to the BESS. Predicted effects are

LCA 58 – Long Mountain Ridge

	limited to a change in land use for those portions of the site being utilised for the Proposed Development. Indirect effects are predicted to occur within proximity to the site boundary though the wider LCA will remain unaltered. Key characteristics which, together with site survey works, have informed an understanding of the susceptibility of this landscape, particularly at a local level, to the Proposed Development include: • Undulating topography providing localised enclosure. • Varied field pattern scale with field boundaries well defined by hedgerows and hedgerows with trees. • Timber poles of varying size and scale carrying overhead lines present in the landscape. • Localised influence of built form, including large agricultural buildings, scattered residential development along local roads and residential development associated with Rasharkin. • Localised influence of solar farm development and associated electrical infrastructure to the west of Finvoy Road. • Local road networks generally absorbed within the RLCA through combination of screening by vegetation and localised topographical changes. NIEA states within the NILCA 2000 assessment that this LCA, In common with most of Ballymena and Antrim, this area is dominated by pasture, supported by the fertile Antrim lavas which underlie it. Field size and structure varies with landform; on the undulating side slopes fields are smaller and hedges more extensive, their curving lines emphasising the landform; the flatter terrain on the ridge top permits larger fields. Trees are prevalent in hedges and shelterbelts and as small, isolated stands. The NIEA assessment goes on to state that the landscape is intensively used as an agricultural resource, for housing and for roads. Moderate increases in these will not substantially alter its character, although proliferation of housing could threaten landscape character and that the structure of the landscape may be strengthened by managing hedgerows, particularly on the prominent side slopes. Overall, the character of the LCA within the study area associated with the Proposed Development is predominantly rural in nature, with 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 LCA, the overall sensitivity of this LCA is judged to be **medium**.
Magnitude of Change – Construction Phase	Direct impacts on this LCA 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 new access and to facility internal access to the southern 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 visible 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 quickly absorbs such activities. Localised portions of the LCA adjacent to, but beyond the site boundary of the Proposed Development are predicted to experience indirect effects only because of the formation of the new features, though the predicted effects are restricted in extent by a combination of the undulating topography and vegetation cover.

LCA 58 – Long Mountain Ridge

	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 small during the construction phase, restricted to land contained within the site boundary.
Magnitude of Change – Operational Phase	During the operational phase, new built form will be perceived as a small localised change to the baseline landscape conditions, though generally not obvious within the wider landscape context due to screening 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 pre-change 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.
Significance of Landscape Effect during Construction Phase	**Minor**, localised, temporary, short-term assessed as not 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 the successful establishment of planting associated with the Proposed Development 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 Proposed 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 described in section 1.4 above when AONB, Historic Parks and Gardens and Walking Trails, were assessed it has been found that due to separation distances and screening provided by intervening topography and vegetation cover no significant effects are predicted for any of the identified landscape designations and it is not necessary to consider these in any more detail.

There will not be significant landscape or visual effects on any AONB and Historic Parks and Garden landscape designations or Walking Trails (Ulster Way).

Table 9: Summary of Predicted Landscape Character and Designation Effects

Landscape Character / Designation	Predicted Construction Phase Landscape Effects	Predicted Operational Phase Landscape Effects
Lower Bann Valley – RLCA 15	Minor, localised temporary adverse and not significant	**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 reduce to negligible to minor, localised, long-term and reversible following successful establishment of planting

Landscape Character / Designation	Predicted Construction Phase Landscape Effects	Predicted Operational Phase Landscape Effects
		proposed as part of the development and have been assessed as not significant.
Long Mountain Ridge LCA (58)	Minor, localised temporary adverse and not significant	**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 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.
AONB	None	None
Special Protected Area	None	None
Special Area of Conservation	None	None
Historic Parks & Gardens	None	None
The Ulster Way	None	None
Way Marked Trails	None	None

1.7 Visual Effects

A series of 5 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 of the viewpoints have been located on publicly accessible roads, footways and verges within the study area (refer Appendix A: Figure 1.6 Viewpoints Map) associated with the Proposed Development. Visual effects from the representative viewpoints considered in the LVIA are described in Table 10 to 14 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.

Further, there will be no important views from visitor amenity areas or tourist sites significantly affected by the Proposed Development due intervening topography, vegetation, and distance of potential views.

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: Magheraboy Road

Viewpoint 1 – Magheraboy Road			
Grid Ref	296981; 414845	**Existing Viewpoint Location**	Appendix B: VP01 – Magheraboy Road
Direction of View	South-west	**Approx Distance to Proposed Development**	80m from site access location

Description of existing view and potential receptors	This viewpoint is located on the northern side of Magheraboy Road, approximately 80m from the proposed site access associated with the Proposed Development. The existing

Viewpoint 1 – Magheraboy Road	
	view available from this location (refer to Appendix B; Vp 01 – Magheraboy Road; Existing View) is partially restricted in nature by existing roadside vegetation and field boundary hedgerow with trees, which extends across the central portion of the view and partially screen arable lands beyond. The foreground of the view is comprised of arable farmland, which lies beyond the roadside verge. Horizons formed by undulating landform are partially visible beyond the intervening vegetation cover and are perceived as being elevated by existing vegetation. Timber poles carrying overhead lines are visible at varying distances within the available view, forming a minor, distinct, element within the overall available view. The view is considered to be representative of views experienced primarily by road users traveling west on the Magheraboy 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 the Magheraboy 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 **medium**.
Magnitude of Change – Construction Phase	During the construction phase, operations and machinery movements associated with the formation of the access track and the site access associated with the Proposed Development will be visible at mid distance within a small central portion of the view. The proposed construction works associated with the access track, will be perceived beyond the intervening hedgerow which forms the northern boundary of the Proposed Development site. Machinery movements and activities will, where visible, be perceived below and against existing field boundary hedgerows and landform which lies beyond the intervening hedgerow. Construction phase activities and vehicular movements will be perceived as a very 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 **small**.
Magnitude of Change – Operational Phase	During the operational phase of the Proposed Development, the new site access and vehicle movements associated with management, maintenance and operational visits will be visible within a small central portion of the view, with vehicle movements between the site access point and the BESS facility screened by intervening vegetation. The new access point will be visible from this viewpoint, but will not create a new or unfamiliar feature within the landscape as there are multiple vehicle access / entrances along the Magheraboy Road in the vicinity. Overall, the magnitude of visual impact during the operational phase is judged to be **small**.
Significance of Visual Effect during Construction Phase	Localised **Minor**, temporary, short-term duration 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 **Minor**, long-term, reversible effects assessed as not significant during the operational phase of the Proposed Development.

Table 11: Viewpoint 2; Magheraboy Road Farm Entrance

Viewpoint 2 – Magheraboy Road Farm Entrance			
Grid Ref	296505; 414785	**Existing Viewpoint Location**	Appendix B: VP02 – Magheraboy Road Farm Entrance

Viewpoint 2 – Magheraboy Road Farm Entrance			
Direction of View	South-west	**Approx Distance to Proposed Development**	580m from north-eastern boundary

Description of existing view and potential receptors	This viewpoint is located at a gated field entrance on the southern side of the Magheraboy Road, approximately 580m north-east of the northern boundary of the Proposed Development site boundary. The existing view available from this location (refer to Appendix B; Vp 02 – Magheraboy Road Farm Entrance; Existing View) is generally panoramic in nature, though partially restricted at mid-distance by existing field boundary hedgerows, roadside vegetation and mature trees visible to the left and right of the representative view. The immediate foreground and mid-distance portions of the view are comprised of arable farmland, with field boundary hedgerows defining fields. Distant portions of the view comprise a varied agricultural landscape at a lower elevation adding texture and interest to the overall view. Scattered residential development is visible in the view, generally at distance, forming minor visual interest. Timber poles carrying overhead lines are visible to the right of the available view becoming screened by existing roadside vegetation and trees with visble portions of the timber poles, forming a minor element within the overall available view. The view is considered to be representative of glimpsed, peripheral views experienced primarily by road users traveling west on the Magheraboy 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 the Magheraboy 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. 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 partially visible at mid distance within a small, central portion of the available view, though such activities will be perceived against distant horizons and features within the view. Construction phase operations at ground level will be screened by intervening topographical changes, with intervening field boundary hedgerows and topographical changes screening machinery movements between the site access point and the main construction area. Overall the magnitude of visual impact during the construction phase is judged to be **negligible**.
Magnitude of Change – Operational Phase	During the operational phase, prior to the successful implementation of planting associated with the Proposed Development, upper portions of the Proposed Development will be visible at mid-distance within a small portion of the view available from this location. Visible elements of the Proposed Development will be perceived below distant horizons and viewed against a well vegetated backdrop. Existing elements of the view will retain visual prominance, with middle distance and longer distance views remaining largely unaffected. Overall, the magnitude of visual impact during the operational phase is judged to be **negligible.**
Significance of Visual Effect during Construction Phase	Localised **Negligible to minor**, temporary, short duration 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 **Negligible to minor**, medium term, reversible effects assessed as not significant, predicted to be experienced during the operational phase of the Proposed Development prior to the successful establishment of planting proposed along the northern and southern boundaries of the Proposed Development site. Following the successful establishment of planting the significance of visual effect is considered to reduce to negligible, long term, reversible, assessed as not significant.

Table 12: Viewpoint 3; Rockview Park

Viewpoint 3 – Rockview Park			
Grid Ref	296760; 414196	**Existing Viewpoint Location**	Appendix B: VP03 – Rockview Park
Direction of View	North-west	**Approx Distance to Proposed Development**	680m from southern boundary

Description of existing view and potential receptors	This viewpoint is located at a fenceline marking the interface between residential development at Rockview Park, Rasharkin and adjacent agricultural lands south of the Proposed Development site. The viewpoint is located approximately 680m south of the Proposed Development site and is considered to be representative of northern views available from residential receptors in the immediate vicinity. The existing view available from this location (refer to Appendix B; Vp 03 – Rockview Park; Existing View) is generally panoramic in nature, though partially restricted at mid-distance by a combination of rising topography and existing field boundary hedgerows with trees. Existing development, comprising farm house and associated outbuildings is visible at mid-distance to the right of the view. The immediate foreground and mid-distance portions of the view are comprised of arable farmland, with field boundary hedgerows defining fields and providing screening. Localised elevated lands, visible at mid-distance within the view provide visual interest, whilst lower elevation landscapes to the right of the view form distant visual interest. Timber poles carrying overhead lines are visible across the view at mid-distance and form localised visual draws. . Distant portions of the view comprise a varied agricultural landscape at a lower elevation adding texture and interest to the overall view. The view is considered to be representative of northern views experienced by residential receptors in the immediate vicinity.
Sensitivity	Residential receptors at this location are judged to be of a high susceptibility to change in their views. The viewpoint does not represent a recognised stopping place and does not form part of a recognised tourist route; therefore, the value of the view is judged to be medium. Overall the sensitivity of the view is judged to be **medium**.
Magnitude of Change – Construction Phase	During the construction phase, operations and machinery movements associated with the Proposed Development will not be easily perceived in the view due to screening provided by intervening topographical changes and vegetation cover associated with field boundaries. Were perceived within the central portion of the view, construction phase operations and machinery movements will be viewed against a well vegetated backdrop, which aids integration, and viewed as a slight change to the view. Overall, the magnitude of change during the construction phase of the Proposed Development is judged to be localised and **negligible**.
Magnitude of Change – Operational Phase	During the operational phase of the Proposed Development, infrastructure and fencing associated with the Proposed Development will be perceived as a slight change to the existing view, due to screening provided by intervening topographical changes and vegetation cover whcih screens visibility of the Proposed Development. Retained vegetation associated with the southern boundary of the Proposed Development will be locally strengthened and enhanced, reducing visible elements of the Proposed Development as the planting establishes. Overall, the magnitude of visual impact during the operational phase is judged to be **negligible**.
Significance of Visual Effect during Construction Phase	Localised **Negligible to minor**, temporary, short duration 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 **Negligible to minor**, medium term, reversible effects assessed as not significant, predicted to be experienced during the operational phase of the Proposed Development prior to the successful establishment of planting proposed along the northern and southern boundaries of the Proposed Development site. Following the successful establishment of planting the significance of visual effect is considered to reduce to negligible, long term, reversible, assessed as not significant.

Table 13: Viewpoint 4; Finvoy Road at Rasharkin Cemetery

Viewpoint 4 – Finvoy Road at Rasharkin Cemetery			
Grid Ref	297408; 414964	**Existing Viewpoint Location**	Appendix B: VP04 – Finvoy Road at Rasharkin Cemetery
Direction of View	North-east	**Approx Distance to Proposed Development**	270m from south-western boundary

Description of existing view and potential receptors	This viewpoint is located on the footpath forming the western edge of Finvoy Road, near to the entrance of Rasharkin Cemetery, approximately 270m south-west of the Proposed Development site and is considered to be representative of peripheral views available to transient receptors traveling north on the Finvoy Road. The existing view available from this location (refer to Appendix B; Vp 04 – Finvoy Road at Rasharkin Cemetery; Existing View) is generally open in nature, though constrained in extent by rising landform and field boundary hedgerow and roadside vegetation which restricts north-eastern views. The immediate foreground is comprised of the Finvoy Road, with mid-distance portions of the view are comprised of arable farmland, with field boundary hedgerows defining fields and forming the main horizon line across the central portion of the view. Localised elevated lands, to the left of the view, forms a visual draw, whilst mature trees to the right of the view are perceived to elevate the horizonline. The view is considered to be representative of northern views primarily experienced by transient receptors traveling north on the Finvoy Road, but is also considered to be representative of views available to recreational receptors on the local footpath network.
Sensitivity	Recreational receptors are judged to be of a high susceptibility to change in their views, whilst transient receptors on the Finvoy 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. 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, ground level operations and machinery movements associated with the Proposed Development will be screened by intervening landform, visible across the central portion of the view at mid-distance. Operations and machinery movements associated with the implementation of the fencing forming the south-western corner of the site, will be partially visible above existing topography and vegetation cover, forming a minor addition to the view. Overall, the magnitude of change during the construction phase of the Proposed Development is judged to be localised and **Small**.
Magnitude of Change – Operational Phase	During the operational phase of the Proposed Development, site boundary fencing (comprised of noise barrier) forming the south western corner of the Proposed Development will be visible above existing topography and vegetation, prior to the successful establishment of planting. Overall, the magnitude of change during the operational phase of the Proposed Development is judged to be localised and **Small**, prior to the establishment of planting.
Significance of Visual Effect during Construction Phase	Localised **Minor**, 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 **Minor**, medium term, reversible effects assessed as not significant, predicted to be experienced during the initial operational phase of the Proposed Development prior to the successful establishment of planting proposed along the boundary of the Proposed Development site. Following the successful establishment of planting the significance of visual effect is considered to reduce to Negligible to Minor, long term, reversible, assessed as not significant.

Table 14: Viewpoint 5; Finvoy Road at Farm Entrance

Viewpoint 5 – Finvoy Road at Farm Entrance			
Grid Ref	297351; 413796	**Existing Viewpoint Location**	Appendix B: VP05 – Finvoy Road at Farm Entrance
Direction of View	South-east	**Approx Distance to Proposed Development**	475m from north-western boundary

Description of existing view and potential receptors	This viewpoint is located on the grassed verge forming the western verge of Finvoy Road, located approximately 475m north-west of the Proposed Development site immediately north of the Finvoy Road / Magharaboy Road junction and is considered to be representative of peripheral views available to transient receptors traveling south on the Finvoy Road. The existing view available from this location (refer to Appendix B; Vp 05 – Finvoy Road at Farm Entrance; Existing View) is constrained by rising landform and field boundary hedgerow and roadside vegetation which restricts south-eastern views. The immediate foreground is comprised of the Finvoy Road, with mid-distance portions of the view comprised of arable farmland, with field boundary hedgerows defining fields and forming the main horizon line across the central portion of the view. Localised elevated lands, to the right of the view, forms a visual draw, whilst trees within existing hedgerows punctuate perceived horizons within the view. The view is considered to be representative of northern views primarily experienced by transient receptors traveling south on the Finvoy Road, but is also considered to be representative of views available to residential receptors in the immediate vicinity.
Sensitivity	Transient receptors traveling south on the Finvoy Road are judged to be of a low susceptibility to change in their views as their primary focus is along the direction of view. Residential receptors in the vicinity are of a high susceptibility to change in their views. The viewpoint does not represent a recognised stopping place and does not form part of a recognised tourist route. 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 ground level operations and machinery movements associated with the Proposed Development will not be visible at this viewpoint due to screening provided by intervening landform. Overall, the magnitude of change during the construction phase of the Proposed Development is judged to be **no change.**
Magnitude of Change – Operational Phase	No portion of the Proposed Development or its associated infrastructure will be visible in views available from this location due to screening provided by intervening landform and vegetation. Overall, the magnitude of visual impact during the operational phase is judged to be **no change.**
Significance of Visual Effect during Construction Phase	**No change**
Significance of Visual Effect during Operational Phase	**No change**

Table 15 below summarises the predicted significance of visual effect for each of the previously assessed viewpoints.

Table 15: Summary of Predicted Visual Effects for Viewpoints

Viewpoint		Predicted Construction Phase Visual Impacts	Predicted Operational Phase Visual Impacts
1	Magheraboy Road	Localised **Minor**, temporary, short-term duration assessed as not significant.	Localised **Minor**, long-term, reversible effects assessed as not significant.
2	Magheraboy Road farm Entrance	Localised **Negligible to minor**, temporary, short duration assessed as not significant.	Localised **Negligible to minor**, medium term, reversible effects assessed as not significant, predicted to be experienced during the initial operational phase of the Proposed Development Following the successful establishment of planting the significance of visual effect is considered to reduce to negligible, long term, reversible, assessed as not significant.
3	Rockview Park	Localised **Negligible to minor**, temporary, short duration assessed as not significant.	Localised **Negligible to minor**, medium term, reversible effects assessed as not significant, predicted to be experienced during the initial operational phase of the Proposed Development. Following the successful establishment of planting the significance of visual effect is considered to reduce to negligible, long term, reversible, assessed as not significant.
4	Finvoy Road at Rasharkin Cemetery	Localised **Minor**, short-term temporary, assessed as not significant.	Localised **Minor**, medium term, reversible effects assessed as not significant, predicted to be experienced during the initial operational phase of the Proposed Development Following the successful establishment of planting the significance of visual effect is considered to reduce to Negligible to Minor, long term, reversible, assessed as not significant.
5	Finvoy Road at Farm Entrance	No change	No change

1.7.1 Residential Properties

As part of the of visual effects assessment associated with the Proposed Development, an assessment of the predicted visual impacts on residential properties that occur within 500 m of the Proposed Development has also been undertaken. At distances beyond 500m, where properties have potential views towards the Proposed Development, potential visibility is reduced by intervening hedgerows, trees and topography that decrease the visibility of the Proposed Development and it is absorbed into the landscape and no significant visual effects are predicted for properties beyond 500m.

There are several residential properties in the area surrounding the Proposed Development site that have been identified and assessed as experiencing potential views of the Proposed Development. To the south-west of the Proposed Development site, seven residential properties that front onto Finvoy Road, have the potential to experience visibility of the Proposed Development that lies to the north-east. These properties are set at a lower elevation than the Proposed Development site, and rear gardens are often defined by tall vegetation marking the boundaries of the properties. Visibility of the Proposed Development is therefore considered to be limited in extent and screened by a combination of intervening topographical changes and vegetation, resulting in a minor and not significant effect on these high sensitivity receptors.

To the north-west of the Proposed Development along Finvoy Road and to the east, along Magheraboy Road, there are there a several scattered residential properties. With all these properties, there are strong hedgerows and mature vegetation which provide adequate screening along with topographical changes meaning that visibility will be limited. The predicted visual effect will be minor and not significant.

There are two, single dwellings to the south-east of the site which all also well screened by existing vegetation and topographical changes. The predicted visual effect will be negligible and not significant.

1.8 Mitigation

1.8.1 Landscaping Aims and Objectives

Whilst no significant landscape or visual effects are predicted to be experienced because of the Proposed Development, the following soft landscape interventions have been included within the overall proposals to aid the integration of the development into the surrounding landscape context. 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.

Please refer to Landscape Planting Plan that accompanies the planning application – Drawing nr 2702.5.01.

Landscaping Aims

- To retain and protect existing field boundary vegetation and landscape features to aid integration of the Proposed Development and associated infrastructure physically and visually into the surrounding landscape; and
- Provide suitable screening to reduce visible elements of the Proposed Development, particularly in views from close residential receptors to reduce visual effects arising because of the proposal and associated structures.

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.

1.8.2 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 15 – Lower Bann Valley. 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 and site access, with remaining vegetation associated with field boundaries remaining unaltered. The assessment has identified that the predicted significance of landscape effect for RLCA 15 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 52 – Lower Bann Valley. 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 associated with the formation of new access laneway and access, with remaining vegetation associated with field boundaries remaining unaltered. The assessment has identified that the predicted significance of landscape effect for LCA 52 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 5 viewpoints have been assessed, for both construction and operational phases of the Proposed Development. All of the viewpoints are located with 1km of the Proposed Development site, with none of the viewpoints selected for assessment predicted to experience significant visual effects during either the operational or construction phases associated with the Proposed Development. Visibility of the Proposed Development is restricted on all instances by a combination of topography and field boundary vegetation, such that a small portion of the proposed site fence (comprised noise barrier) is predicted to be visible in north-eastern views from Finvoy Road. Landscape planting associated with the Proposed Development further reduces these predicted visual impacts and aids screening and visual integration following successful establishment.

An assessment of effects on residential properties has taken place for properties lying within 500m of the Proposed Development. None of the properties assessed are predicted to experience significant visual effects during either the construction phase or the operational phase of the Proposed Development. 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.

The Proposed Development is located within one Landscape Character Area identified as Lower Bann Valley LCA 52 and predicted significance of landscape effect for LCA 52 and 58 during the operational phase is Minor and not significant as predicted effects are limited in extent by the generally flat low-lying nature of the proposed site within an extensive landscape, the topographical changes across each of the LCAs, extensive screening vegetation in the wider landscape, built form to the south-east of the existing site and will not be perceptible in the wider landscape of the LCAs apart from in close proximity. The Proposed Development is also not located in proximity to any of the sensitive key landscape features identified by NIEA within LCA 52 or 58.

The Proposed Development is located within Lower Bann Valley RLCA 15, and immediately adjacent to another Maine and Braid Valleys RLCA 17. The predicted significance of landscape effect for RLCA 15 and 17 during the operational phase is Minor and not significant as predicted effects are limited in extent by the low-lying flat nature of the proposed site and surrounding topography, surrounding trees, built form in the surrounding landscape and will be barely perceptible in the wider landscape and will be locally perceived with existing large, shed type developments that are common across this RLCA locally. The Proposed Development is also not located in proximity to any of the sensitive key landscape features identified by NIEA within RLCA 15 and 17.

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 5 viewpoints have been assessed, for both construction and operational phases of the Proposed Development. None of the have been assessment as having significant effects during the construction and operational phase as a combination of distance of view and the screening effects of vegetation and topography reduces the significant effects for the majority of views.

Assessment of effects on residential properties has taken place for properties on Finvoy Road, Magheraboy Road and local roads at locations where properties may have potential filtered views in relatively close proximity. With the majority of properties, existing vegetation and topographical changes provide adequate screening from the Proposed Development and visibility will be limited. 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.

Overall, the surrounding landscape and its visual resources has the ability to accommodate the changes associated with this type of development.

APPENDICES

Appendix A

LVIA Figures -
(Fig 1.3 LCA Map;
Fig 1.4 Designations Map;
Fig 1.5 ZTV Map
Fig 1.6 Viewpoints & ZTV Map)

Appendix B

Photomontages