STEPHENSON HALLIDAY

Planning, Landscape & Environment
an RSK company

FIELD RIGIFA BATTERY ENERGY STORAGE

Landscape and Visual Appraisal

Field Rigifa Ltd

September 2024

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1 SUMMARY

1.1.1 Stephenson Halliday was commissioned in July 2024 to prepare a Landscape and Visual Appraisal (LVA) for the proposed construction and operation of a 200 MW Battery Energy Storage System (BESS) and associated infrastructure, access and ancillary works (the Proposed Development) on behalf of Field Rigifa Ltd ('Field').

1.1.2 The Proposed Development comprises of battery compound, substation compound, and associated infrastructure including underground grid connection cable, interface substation, site access, parking, sustainable urban drainage (SUDS) and landscape and biodiversity proposals. The Proposed Development would have an operational life of 30 years, after which the site would be restored to its former use.

1.1.3 Effects on landscape character arising from the completed development would affect only the host landscape character area. Minor adverse effects on character of the Farmed Lowland Plain Landscape Character Type (LCT) would be restricted to the site and immediate surroundings with effects reducing to Negligible within the neighbouring LCT. During the 24 month construction period, effects would arise within the field where the Proposed Development would be situated.

1.1.4 Visual effects would occur within a short distance of the Proposed Development on a limited number of receptor groups. Visibility would be restricted by localised landform and a hedge and boundary wall to the northeast of the site. The Proposed Development would largely be screened by forestry to the northwest, west and south. Intervisibility from the wider area would be restricted by topography and vegetation with visual effects reducing markedly with increasing distance.

1.1.5 Cumulative landscape effects would be limited to the host LCT and would be Minor adverse. There are several energy generation and transmission projects which are consented or proposed within this LCT. The addition of the Proposed Development would increase the influence of such infrastructure within a very localised area at the edge of the Farmed Lowland Plain LCT.

1.1.6 Cumulative visual effects would be limited to the Rigifa visual receptor group. The Proposed Development would be perceptible but in combination with consented cumulative schemes the level of effect would be Minor adverse. In the cumulative scenario with schemes at the application stage, the addition of the Proposed Development would result in Minor/Negligible cumulative effects on this receptor group due to the increased influence of energy infrastructure.

1.1.7 A full summary of effects is provided in Table 6.3.

2 INTRODUCTION

2.1 Background

2.1.1 Stephenson Halliday was commissioned in July 2024 to prepare a Landscape and Visual Appraisal (LVA) of the proposed construction and operation of a 200 MW Battery Energy Storage System (BESS) and associated infrastructure, access and ancillary works (the Proposed Development) on behalf of Field Rigifa Ltd ('Field'). This assessment forms part of a suite of documents supporting the application for this development proposal.

2.1.2 This LVA defines the existing landscape and visual baseline environments; assesses their sensitivity to change; describes the key landscape and visual related aspects of the Proposed Development; describes the nature of the anticipated changes, and assesses the effects arising during construction, operation and decommissioning.

2.1.3 The LVA considers the potential effects upon:

- landscape fabric;
- landscape character;
- the special qualities of any landscape designations; and
- visual receptors including residential, transport and recreational receptors.

2.1.4 The LVA has been undertaken in accordance with published best practice; namely the Guidelines for Landscape and Visual Impact Assessment (Third Edition), Landscape Institute and IEMA 2013 (GLVIA3) and associated technical guidance notes published by the Landscape Institute (referenced as appropriate in Appendix 1).

2.1.5 Although linked, landscape and visual effects are considered separately. Landscape effects derive from changes in the landscape fabric, which may result in changes to the character, whereas visual effects are the effect of these changes as experienced by people (visual receptors). Effects on the setting of any heritage assets are dealt with as part of a separate heritage report submitted as part of the application.

2.2 The Site and Proposals

2.2.1 Figure 1 shows the Proposed Development within its local landscape context. The site comprises of an agricultural field which slopes gradually from (71m AOD) south-east to (53 m AOD) north-west. The Proposed Development principally comprises the construction and operation of a battery energy storage system (BESS) with a capacity of up to 200 megawatts (MW). The Proposed Development would have a total development footprint of approximately 6.4 ha across the 45.5 ha site.

2.3 Competence

2.3.1 This report along with the design and mitigation of the Proposed Development has been prepared by Chartered Landscape Architects at Stephenson Halliday.

2.3.2 The Practice is a Landscape Institute and IEMA registered practice and all work is prepared and reviewed internally by senior highly experienced landscape planners with Public Inquiry experience.

2.3.3 To inform the assessment, a site visit was made by the Stephenson Halliday assessment team during August 2024 to various locations within the study area including, but not restricted to, representative viewpoints.

2.4 Stakeholder Consultation

2.4.1 As summarised below, the Highland Council (THC) have been consulted in relation to: the scope of the assessment; the selection of viewpoints; the methodology; and the extent of the LVA study area at a pre-application meeting (including written advice issued by THC on 12th June 2024, Reference number: 24/00186/PREMAJ) and via email with the THC Landscape Officer (8 August 2024). The key responses are detailed below in Table 2.1.

Table 2.1 Summary of Stakeholder Consultation

Consultee	Issue	How this is addressed
The Highland Council (THC) Landscape Officer (email correspondence 8 August 2024)	Viewpoints: THC acknowledge that trees would screen views within the study area near the Castle of Mey. One additional viewpoint was suggested around Lochend where existing turbines would be in view in combination with the Proposed Development.	The proposed viewpoint near the Castle of Mey has been moved to the approach within the Screened ZTV coverage. An additional viewpoint has been included at the edge of Lochend.
The Highland Council (THC) Landscape Officer Pre-Application advice (24/00186/PREMAJ) 12 June 2024	Cumulative assessment: *"The Council is aware that there is a lot of BESS interest in the wider surrounding area and as such your landscape and visual impact assessment must include an up-to-date assessment of the cumulative effects of the proposal with other similar proposals in the wider area covering an appropriate study area"*	Relevant energy related cumulative developments within the study area have been included within the LVA: - ECU00003353 (Wind turbines and solar) - ECU00004838 (BESS) - 21/05536/FUL (132kV substation) - ECU00005075 (132kV electricity transmission wood pole line) - EC00005260(132kV overhead line)
	Planting along the eastern boundary: *"The 'planting/landscaping' strip shown between the fenceline and the red line boundary appears very narrow and more akin to hedging than the substantial screening*	Landscape mitigation comprises of mixed native shrubs and occasional native trees and native grassland to aid landscape integration whilst balancing the technical site constraints.

	planting which would be more appropriate for a *development of this scale in this kind of landscape. Hedging is not a prominent feature of the landscape* *character and not appropriate for this location, Tree planting will be more appropriate and require greater depth of planting."*	
	THC Visualisation Standards: ".. *the applicants should have regard to the Council's own Standard. While this was drawn up with specific reference to wind energy projects, aspects will still be relevant for other proposals… the visualisations should include the scheme at completion and following 10 years of landscaping establishment.* "	The visualisations presented in Appendix 5 take account of the Visualisation Standards for Wind Energy Developments (2016 Highland Council). Visualisations are presented at year 1 and at year 10.

2.5 Study Area

2.5.1 It is accepted practice in landscape and visual assessment that the extent of the study area for a development proposal is broadly defined by its visual envelope. In this case a study area of 3 km has been used (as shown by Figure 1). This study area is adequate to identify all non-negligible effects on landscape and visual receptors given the generally low elevation of the site, low height of the majority of the Proposed Development components and the presence of existing forestry within the immediate vicinity of the site.

2.6 Report Structure and Terminology

2.6.1 This report is structured as set out in the table of contents. Supporting appendices have been prepared that supplement the sections regarding methodology and baseline. The appendices are important to the assessment and should be read alongside this report.

2.6.2 Key terms used within the assessment are described in Section 3 and Appendix 1 which set out the methodology. A glossary is provided within Appendix 1.

3 METHODOLOGY

3.1.1 This section provides a summary of the methodology adopted for the LVA. Full details of the assessment methodology, including assessment criteria, are provided in Appendix 1.

3.1.2 In accordance with GLVIA3, the level of landscape and visual effects is determined by considering, in tandem, the sensitivity of landscape and visual receptors (landscape

elements, landscape character areas, landscape designations and groups of people who may be affected by changes in visual amenity) and the magnitude of effect arising from the Proposed Development.

3.2 Cumulative Assessment

3.2.1 Cumulative assessment relates to the assessment of the effects of more than one development. The approach to cumulative assessment is set out within Appendix 1.

3.3 Distances

3.3.1 Where distances are given in the assessment, these are approximate distances between the nearest part of the site and the nearest part of the receptor in question, unless explicitly stated otherwise.

3.4 Visual Aids

3.4.1 The method of visualisation selected has been informed by 'Visualisation Standards for Wind Energy Developments' (The Highland Council 2016). The Visuals method is set out in Appendix 2. Photographs of the existing views and photomontages showing the Proposed Development are in Appendix 5.

4 PLANNING POLICY

4.1 National Planning Policy

4.1.1 National Planning Framework (NPF) 4 (published February 2023) sets out land use policy guidance in relation to development in Scotland and plans for infrastructure investment. This requires inter alia effective protection of the environment and use of natural and cultural assets, including the importance of landscapes to Scotland's identity.

4.1.2 In developing new projects, Policy 11 recognises the distinctive landscapes and the need for project design and mitigation to demonstrate how significant impacts are addressed including:

4.2 "*significant landscape and visual impacts, recognising that such are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable*" (NPF4, Policy 11- Section e, ii)

4.3 Local Planning Policy

4.3.1 The Highland-wide Local Development Plan was adopted in 2012 and sets out the spatial planning policies relating to development and land-use within The Highland Council. The current local planning policies are relevant to the site and landscape and visual matters:

- Policy 61 Landscape: Outlines that landscape and scenic value are of very high importance within and out with designated areas. It states that:

"New developments should be designed to reflect the landscape characteristics and special qualities identified in the Landscape Character Assessment of the area in which they are proposed. This will include consideration of the appropriate scale, form, pattern and construction materials, as well as the potential cumulative effect of developments where this may be an issue. The Council would wish to encourage those undertaking development to include measures to enhance the landscape characteristics of the area. This will apply particularly where the condition of the landscape characteristics has deteriorated to such an extent that there has been a loss of landscape quality or distinctive sense of place. In the assessment of new developments, the Council will take account of Landscape Character Assessments, Landscape Capacity Studies and its supplementary guidance on Siting and Design and Sustainable Design, together with any other relevant design guidance."

4.4 Local Guidance

4.4.1 In addition to the policy documents identified above, the Caithness and Sutherland Local Development Plan (CaSPLan) was adopted in 2018. The Caithness and Sutherland are characterised by a unique landscape and coastal setting. The CaSPlan provides seeks to ensure key designated landscape features are not severed and distinct landscapes are preserved. The CaSPlan also includes details about the revision of boundaries to special landscape areas within Caithness and Sutherland. The site and the immediate context are not subject to landscape designation.

5 BASELINE

5.1 Introduction

5.1.1 An overview of the baseline study results is provided in this section with the full baseline description of the individual landscape and visual receptors being provided alongside the assessment in Section 7 for ease of reference.

5.1.2 This section provides a review of the key local baseline studies and guidance documents and identifies those landscape and visual receptors which merit detailed consideration in the assessment of effects, and those which are not taken forward for further assessment as effects "*have been judged unlikely to occur or so insignificant that it is not essential to consider them further*" (GLVIA3, para. 3.19).

5.1.3 Both this baseline section and the effects section describe landscape character and visual receptors before considering designated areas as it is common for designations to encompass both character and visual considerations within their special qualities or purposes of designation.

5.2 Local Guidance and Baseline Studies

5.2.1 The following guidance documents have been used to inform this appraisal:

- Scottish Natural Heritage (2019) Scottish Landscape Character Types Maps and Descriptions; and

- The Highland Council (2011) Assessment of Highland Special Landscape Areas. The "Assessment of Highland Special Landscape Areas" contains maps and citations for the Special Landscape Areas (SLAs) within the Highland Council area. The nearest SLA is 6.5km north of the site.

5.3 Zone of Theoretical Visibility Study

5.3.1 A Zone of Theoretical Visibility (ZTV) study was generated based on the proposed design. This is shown on Figure 2 and Figure 3 and indicates areas of potential visibility. The analysis was carried out using a topographic model and includes height estimates applied to forestry and buildings as visual barriers in order to provide a more realistic indication of potential visibility.

5.3.2 The ZTV study was used to aid the identification of those receptors that are likely to be most affected by the Proposed Development and those that do not require detailed consideration. It is noted that views from some areas shown as having potential visibility of the Proposed Development may be screened by taller forestry or localised landscape elements such as boundary walls and hedgerows.

5.3.3 The bare earth ZTV (Figure 2) illustrates that potential visibility is widespread within the study area with the exception of an area in the northeast coinciding with Gills and Upper Gills. The screening ZTV (Figure 3) illustrates the screening effects of large blocks of forestry immediately adjacent to the site. Taking this into account, visibility is limited to the more open fields between the site and north and northeast towards East Mey and the A836. An outer band of visibility extends between 2-3 km northeast to southwest. Given the pattern of visibility shown by the ZTV, a 3 km study area is sufficient to consider landscape and visual effects.

5.3.4 Effects on landscape or visual receptors outside the areas of visibility shown on the ZTV study would be Negligible and are not assessed in detail.

5.4 Landscape Character

5.4.1 Figure 4 indicates that the majority of the site coincides with LCT 143 Farmed Lowland Plain. Parts of the of the site boundary are within LCT 134 Sweeping Moorland and Flows-Caithness and Sutherland. Both of these LCTs are considered further in the appraisal of landscape effects. There would very limited theoretical visibility from LCT 144: Coastal Crofts and Small Farms which is therefore not considered further.

5.5 Visual Receptors

5.5.1 Visual receptors are "*the different groups of people who may experience views of the development*" (GLVIA, 3rd edition, para 6.3). In order to identify those groups who may be significantly affected the ZTV study, baseline desk study and site visits have been used.

5.5.2 The different types of groups assessed within this report include: local residents; people using key routes such as roads and cycle ways; people within accessible or recreational landscapes; people using core paths and Rights of Way; or people visiting key viewpoints. In dealing with areas of settlement, core paths, and Rights of Way and local roads receptors are grouped into areas where effects might be expected to be broadly similar or areas which

share particular factors in common. Representative viewpoints have been selected to aid the assessment of effects on visual receptors. Key routes are shown on Figure 5.

Baseline Visual Environment

5.5.3 As shown on Figure 1, the site is located approximately 1.5 km south-east of the A836 and the settlement of Mey. An existing hedgerow forms the field boundary that runs parallel to the northeastern site boundary. Blocks of forestry at various stages of rotation surround the site to the northwest, west, south, and east. This forestry is subject to a Long Term Forest Plan, reference: 17GS18237, approved by Scottish Forestry (SF) on 10 July 2019. The plan shows the areas of felling and thinning that the landowner intends to carry out over the first 10-year period and seeks approval with outline proposals for a further 10 years to provide a total 20-year period. Restocking proposals are also included across this expanse of forestry. There are also pockets of native broadleaves clustered between the site and the local road to the northeast. The presence of forestry, woodland and associated forestry operations tend to limit views towards the site. Uninterrupted views towards the site can be gained from the landscape within 1 km to the north-east of the site between Phillps Mains and Hill of Rigifa and the landscape around East Mey between 2-3 km.

Visual Receptor Groups

5.5.4 The following visual receptor groups are located within the study area and are likely to experience visibility of the Proposed Development, as shown on the ZTV study on Figure 2 and Figure 3 and are considered further in section 6:

- Rigifa Area (1-2 km northeast);
- East Mey Area (3 km northeast);
- Visitors to the Castle of Mey (3 km north);
- Barrock Area (2.8 km west); and
- Lochend Area (3 km southwest);

Key Routes

5.5.5 As shown on Figure 5, the following long-distance routes lie within the study area:

- National Cycle Route 1 (Inverness to John O' Groats) between Barrock and Canisbay. This route follows the local road; and
- A836/ North Coast 500 between Mey, East Mey and Gills.

5.6 Landscape Designations and Value

5.6.1 The site is not located within any landscape designations. Two SLAs (SLA 04 Dunnet Head and SLA 05 Duncansby Head) are located approximately 7 km northwest and 9 km northeast, beyond the study area. Considering the distance and immediate surrounding context to the site of commercial forestry, and the large scale of the landscape there would

be no change to the special qualities or key characteristics associated with these SLA and so they are not considered further.

5.6.2 The Castle of Mey (Barrogill Castle) Garden and Designed Landscape (GDL) is located 2 km north of the site. GDLs are not considered as landscape designations but indicate cultural associations with the landscape and inform judgments on landscape value for LCT 143 Farmed Lowland Plain.

6 THE PROPOSED DEVELOPMENT

6.1 The Proposal

6.1.1 The Proposed Development is described in detail in the Planning Statement submitted with this application. The main components comprise a battery compound, substation compound, and associated infrastructure including underground grid connection cable, interface substation, site access, parking, sustainable urban drainage (SUDS) and landscape and biodiversity proposals.

6.1.2 The Proposed Development would have an operational life of 30 years, after which the site would be restored to its former use.

6.2 Design Approach and Mitigation

6.2.1 The design approach is described in full within the submitted Planning Statement and drawings accompanying the application. This section of the appraisal considers how the Proposed Development aligns with guidance provided in respect of visual impact and landscape character; and measures specifically included within the design to mitigate landscape and visual effects.

6.2.2 The principal embedded design mitigation has been the manipulation of existing landform and the lowering of the finished floor level to be below the existing ground level in order to minimise the views of new infrastructure. A combination of an earth bund up to 1.5 m high and shrub and tree planting adjacent to the substation compound will reduce the visual prominence of the proposed infrastructure in views from visual receptors to the northeast. Where possible, the existing hedgerow along the access track will be bolstered with additional native species to increase the species richness of the hedgerow.

6.2.3 Landscape proposals illustrated on Figures 6A and 6B comprise of earthworks, seeding and planting. This has been developed to aid landscape integration within the surrounding context and minimise the appearance of the substation compound. Landscape proposals also contribute to biodiversity enhancements across the site.

6.3 Construction

6.3.1 The construction of the Proposed Development would take place over a period of approximately 24 months, the main construction activities within the site would be:

- Site preparation and establishment activities, including vegetation removal and the erection of temporary fencing;

- Earthworks and establishment of site compound;
- Construction of equipment platforms and foundations, including underground ducting and cabling;
- Delivery and arrangement of equipment;
- Cabling and connection works between battery equipment, ancillary equipment and substation compound;
- Installation of underground cabling between substation compound and Gills Bay substation;
- Testing and commissioning; and
- Landscape planting, earthworks and site restorations soon as practicable during construction to allow sufficient time to establish.

7 LANDSCAPE AND VISUAL EFFECTS

7.1 Introduction

7.1.1 This section sets out the effects that the Proposed Development would have on the landscape and visual receptors.

7.1.2 Construction effects would be short term over a period of approximately 24 months, involving the removal of pockets of hedgerow along the access track, movement of vehicles, localised excavations and the installation of the project components. Effects on landscape character and views during construction and decommissioning would be similar or Small in scale and Adverse.

7.1.3 Operational effects are assessed during Year 1 when construction is complete but before mitigation planting is fully established. In time, the scale of change would very gradually reduce as planting along site boundaries matures. During the early part of this period effects are likely to be at their greatest. Operational effects at Year 10 are also considered where relevant.

7.1.4 Construction and decommissioning effects are not separately identified except where likely to be notably different from effects during operation.

7.2 Effects on Site Fabric

7.2.1 Construction of the Proposed Development would result in the loss of agricultural land and limited sections of hedgerow field boundaries. No trees would be removed during the construction or operational phases. At the BESS compound and substation compound, the effects on the landscape fabric would primarily be as a result of the loss of agricultural fields. Construction and operational site traffic would require the upgrade of an existing access track and creation of passing places and would result in some limited loss of hedgerows along the main access track.

7.2.2 The proposed landscape scheme would comprise of native Highland grassland mix and a band of native shrubs (*Calluna vulgans, Juniperus commeunis,* and *Salix repens*) along the site boundary of the battery units. Adjacent to the substation compound, landscape proposals would comprise an earth mound, a cluster of the native shrubs and occasional native trees (*Sorbus aucuparia* and *Betula pubescens*) which would strengthen the landscape and visual integration of the site. SUDS and swales would be seeded with an appropriate wet meadow grassland mix. All temporary compounds and laydown areas would be restored to the existing condition. Where possible, the existing hedgerow would be to bolstered to increase the species richness of the hedgerow.

7.3 Viewpoint Analysis

7.3.1 Viewpoint analysis has been undertaken from a total of 6 viewpoints following consultation with the Highland Council. The viewpoint locations are illustrated on Figures 1 to 4. The visualisations are contained in Appendix 5 and comprise:

- Detailed Location Map;
- Photomontage panorama at 65.5 º at year 1 of operation;
- Photomontage panorama at 65.5 º at year 10 of operation (where relevant); and
- Baseline panoramas and wirelines.

7.3.2 The full viewpoint analysis is contained within Appendix 3: Viewpoint Analysis. The findings are summarised in Table 7.1.

7.3.3 Appendix 3 Viewpoint Analysis considers the nature and the scale of changes to character and views at each viewpoint location only. The sensitivity of receptors and wider extent of the effect (beyond the individual viewpoint location) and its duration are considered in the main body of the assessment text below, as part of the consideration of the magnitude and level of effects.

Table 7.1 Viewpoint analysis summary

No.	Name	Distance/ direction	Scale of visual effect	Scale of landscape effect
1	Rigifa	1.5 km, NE	Small	Small/Negligible
2	National Cycle Network (NCN) 1	1.7 km, NE	Small	Small/Negligible
3	East Mey	2.9 km, NE	Small/Negligible	Small/Negligible
4	Castle of Mey Approach	2.7 km, N	Negligible	Negligible
5	Barrock	3.0 km, W	Small/Negligible	Negligible
6	Lochend	2.9 km, SW	Small/Negligible	Negligible

7.4 Effects on Landscape Character

LCT 143 Farmed Lowland Plain

7.4.1 A description of LCT 143 is briefly summarised below, along with further observations from site based work. This LCT forms a broad low-lying plain bounded by the sea and the expansive Sweeping Moorland and Flows landscape (LCT 134).

7.4.2 Key characteristics:

- *"A generally open, low-lying plain, gently undulating to form shallow broad valleys, which are often filled with lochs and mosses, and subtle low ridges.*
- *Occasional smooth hills rise above the more low-lying plain forming local landmarks.*
- *The broad and shallow valley of the River Wick forming the largest of a series of valleys generally aligned south-east/north-west across the plain.*
- *Agriculture the predominant land cover.*
- *More intensively managed farmland near the coast around Thurso and Wick, and close to Loch Watten.*
- *Distinctive Caithness flagstone fences in some parts, creating low, sharp edges to fields.*
- *Sparse woodland, mainly comprising small angular coniferous plantations planted for shelter on farms.*
- *Larger conifer woodlands located at the transition with the Sweeping Moorland and Flows standing out where they are planted on poorer wetter ground on low ridges.*
- *Farm buildings and houses forming focal points within the landscape.*
- *Occasional loose clusters of croft houses located on more marginal upper slopes and near the coast.*
- *A number of historic environment features, including conspicuous castles, Baronial mansions and tall 'Lairds' houses, usually with broadleaf shelter woods planted around them.*
- *Roads reinforce the settlement pattern, often following the field and property boundaries, running straight and then swinging around sharp corners.*
- *A number of large settlements, including the towns of Thurso and Wick, situated on the coast, as well as several smaller settlements.*
- *Many historic features, including brochs and cairns, dotted across farmland and situated on hills within, or adjacent to, this area*.

- *Small groups of large wind turbines sited on some of the low ridges and hills and prominent visibility of larger wind farms in adjacent Landscape Character Types.*

- *Extensive views due to the openness of the landscape, and the clarity of northern air and light.*

- *Dramatic views from the northern part of this landscape to Dunnet Head and the distant Orkney islands, and views from the A9 on the western edge of this landscape of the Lone Mountains of Movern and Scaraben seen across the low-lying Sweeping Moorland and Flows"*

7.4.3 As set out in Appendix 4, LCT 143 is judged to be of Medium sensitivity. The Castle of Mey GDL is located within this LCT and indicates a localised area of higher value. The North Coast 500 and NCN 1 are well used key routes and form an important part in the way visitors experience the landscape. Landscape value is judged to be Regional.

7.4.4 The susceptibility of LCT 143 to change from the Proposed Development is assessed as Medium. A very small part of the LCT would be physically affected by the Proposed Development and would increase the influence of energy infrastructure within the northern part of the LCT. The combination of Regional value and Medium susceptibility gives LCT 143 a sensitivity of Medium.

7.4.5 During construction, activities including the movement of plant, earthworks within the site, vegetation clearance and the construction of site infrastructure would result in a noticeable increase in uncharacteristic activity within the immediate context of the site. Surrounding forestry and landform would limit the impression of change within the landscape. The scale of change would be Small across a Limited extent of this LCT. This Short-term change would result in Slight magnitude resulting in a **Minor Adverse** effect during the construction phase.

7.4.6 At year 1 of operation, the Proposed Development would result in direct effects on the landscape fabric of LCT 143. There would be some loss of agricultural land and small pockets of established hedgerow. The introduction of the proposed battery energy storage units, substation and associated infrastructure would result in a slight increase in the presence of energy infrastructure within a localised area at the boundary of this LCT. The degree of enclosure due to forestry in the neighbouring LCT 134, a field boundary hedgerow and a wall parallel to the north-eastern site boundary, combined with the proposed reduced ground level would result in a scale of change no greater than Small. There would be barely perceptible changes to the majority of the key characteristics. The geographical extent is assessed as Limited over the Medium-term. This would give rise to a Slight magnitude of effect resulting in a **Minor Adverse** effect at year 1 of operation.

7.4.7 At year 10 of operation, effects would be similar to those assessed at year 1 of operation. Mitigation planting would have established and aid landscape integration. This would reduce the initial impression of the site levelling works. The duration would be Long Term and the overall magnitude of effect would remain Slight resulting in a **Minor Adverse** effect.

LCT 134 Sweeping Moorland and Flows Caithness and Sutherland

7.4.8 This LCT forms a flat, gently undulating and generally smooth landform. LCT 134 forms the distinctive setting to LCT 143 Farmed Lowland Plain and much of the landscape within the study area to the east, south and west of the application site.

7.4.9 Key characteristics:

- *Gently sloping or undulating landform which lies generally below 350 metres.*
- *Occasional isolated hills of limited height form local landmark features.*
- *Lochs and mature, meandering rivers.*
- *Very distinct flora, dominated by sphagnum mosses, produced by the wetness and infertility of the flows.*
- *Areas of peat cuttings and hagging.*
- *Pockets of improved grazing, mainly within the outer fringes of sweeping moorland.*
- *Coniferous forest forming a dominant characteristic within some parts of this landscape character type.*
- *Ribbons of broadleaf woodland occasionally run along the water courses and loch edges.*
- *Very sparsely settled with dispersed crofts, farms and estate buildings largely found on the outer edges of this landscape or near a strath.*
- *Vehicular tracks within parts of the landscape.*
- *Wind farms, transmission lines, the A9 and a network of minor roads are key features within the more modified outer fringes within Caithness.*
- *Long, low and largely uninterrupted skylines offering extensive views across this landscape and result in a feeling of huge space.*
- *Consistent views to the distant Lone Mountains and Rugged Mountain Massif – Caithness & Sutherland.*
- *Great sense of exposure on areas of flat peatland on upland plateau.*
- *A strong sense of remoteness is associated within the largely uninhabited, inaccessible core flows and moorlands of this landscape.*

7.4.10 Landscape sensitivity is judged to be Medium/Low. This LCT is not subject to any landscape designations within the study area. The range of natural landscape features including the Loch of Mey, sweeping moorland and blanket bog contribute positively to the distinctiveness and natural heritage associated with this landscape. Sections of key routes including the

North Coast 500 and NCN1 pass through parts of this LCT. Landscape value is considered to be Regional.

7.4.11 The susceptibility of LCT 134 to change is assessed as Low. The scale of forestry that forms the boundary between this LCT and the neighbouring (host) LCT 143 affords a high degree of physical and visual containment and the capacity to accommodate the Proposed Development. Landscape susceptibility is assessed as Low.

7.4.12 During construction there would be no discernible change to the key characteristics of this LCT. Forestry would restrict intervisibility within most of this LCT. The movement of plant would be perceptible on the skyline in long range views but the overall impression of character would result in a Negligible scale over a Limited extent and Short-term duration. The magnitude of effect would be **Negligible** resulting in a **Negligible Adverse** effect at the construction phase.

7.4.13 At year 1 of operation, the Proposed Development would result in a very limited change to the setting and perceptual qualities within a limited area to the north-east of the site. Although the application boundary includes part of this LCT, there would be no change to the physical fabric of the landscape. Existing forestry would restrict visibility of the Proposed Development within this LCT to a very limited area at Rattar Moss. The introduction of the battery units in the adjacent LCT 143 Farmed Lowland Plain would result in a barely perceptible change to the sense of remoteness from the uninhabited areas of moss and core flows. All other key characteristics of the LCT remain unchanged. The scale of change is Negligible over a Limited extent. This Long Term change would result in a **Negligible** magnitude resulting in a **Negligible Adverse** effect at year 1 of operation.

7.4.14 Effects at year 10 of operation would be of the same level as those assessed at year 1. The Magnitude of effect would be **Negligible** and the level of effect at year 10 would remain **Negligible Adverse** for LCT 134 Sweeping Moorland and Flows Caithness and Sutherland.

7.5 Visual Effects

7.5.1 This appraisal focuses on effects on groups of visual receptors including local road users, cyclists and residents. Effects on private residential amenity are a separate matter, and as set out above do not merit detailed assessment in respect of this development.

7.5.2 Local road users, cyclists and residents are considered to be of High/Medium sensitivity as they will have a high susceptibility to changes in the local environment and the views are of community value unless otherwise stated.

Visual Receptor Groups

Rigifa Area (1-2 km north-east):

7.5.3 This receptor group includes residents and users of the local roads and informal recreational routes. Views range from more open views from slightly more elevated areas to areas enclosed by boundary vegetation. Gently rising landform and blocks of forestry extend across the background in views south. The Dunnet Head headland and cliffs is a distinctive feature in distant views northwest. Viewpoint 1 illustrates views from this receptor group.

7.5.4 During the construction phase, the main access track to the site would be via the existing track leading to several properties within this receptor group. The removal of pockets of

hedgerow, movement of vehicles, localised excavations and the installation of the project components would be visible at various intervals during construction. While there would be more open views of the interface substation site, most ground level earthworks within the main part of the BESS compound would not be perceptible. The erection of battery units and the 132 kV substation equipment would result in limited change to views over a short duration.

7.5.5 The scale of change would be Small across an Intermediate extent of this receptor group. This Short-term change would result in a Slight magnitude resulting in a **Moderate/Minor Adverse** effect.

7.5.6 At year 1 of operation, the Proposed Development would result in limited change in views from some locations within this receptor group. Viewpoint 1 illustrates that views of the proposed battery storage units and the 132 kV substation would be mostly screened by intervening landform, hedgerows and a stone wall that runs parallel to the site boundary. Only the upper parts of the southeastern extent of the battery units would be visible across a small part of the skyline in views south, from more open and elevated areas. The proposed interface substation would be visible across a small part of the view but against the backdrop of forestry and very small in scale. There would be no view from some locations within this group. The scale of change is judged to be Small across a Localised extent of the receptor group over a Medium-term duration. This would result in a Slight magnitude and **Minor Adverse** effect.

7.5.7 At year 10 of operation, landscape planting would partially filter views of the 132 kV substation however the scale of change would remain Small. Long-term change would result in a Slight magnitude and a **Minor Adverse** effect at year 10 of operation.

East Mey Area (3 km northeast):

7.5.8 This receptor group includes residents within the linear settlement of East Mey. This settlement is slightly more elevated relative to the surrounding landscape and offers long range and expansive views north. Views south extend across mixed open farmland to a gently rising landform and tend to be truncated by forestry. Agricultural activity and forestry operations are characteristic activities in views. Large fields and pockets of forestry extend across the background where wind turbines at Lochend are noticeable features on the skyline. The main focus of views is north along the coastline and out to sea. Viewpoint 3 illustrates views from this receptor group.

7.5.9 During construction, the majority of operations would be screened by intervening vegetation and localised landform. Some taller plant associated with the construction of the proposed battery units would be perceptible across a small horizontal extent of the view south and oblique to the main orientation of views. The scale of change would be Negligible over an Intermediate extent of this receptor group. This Short-term change would result in a Slight/Negligible magnitude and a **Minor/Negligible Adverse** effect during construction.

7.5.10 At year 1 of operation, the majority of the Proposed Development would be screened by localised landform, intervening vegetation and field boundary walls. The proposed interface substation would be perceptible across a very limited part of views below a block of forestry. Upper parts of the battery units and 132 kV substation would be barely perceptible across a small horizontal extent of the skyline adjacent to the operational wind turbines. There would be very limited change to the overall balance of features in views south, and oblique to the main focus of views from this group. The scale of change is judged to be Negligible across

an Intermediate extent of this receptor group over a Medium-term duration. This would result in a Negligible magnitude and a **Negligible Adverse** effect at year 1 of operation.

7.5.11 Effects at year 10 of operation would be the same as at year 1. The landscape mitigation proposals would further filter views of the substation and the level of effect at year 10 would remain **Negligible Adverse**.

Visitors to the Castle of Mey (3 km north)

7.5.12 The Proposed Development would not be visible from this receptor group. As illustrated by Viewpoint 4, intervening vegetation including within the Castle grounds would screen views from publicly accessible locations. There would be No Effect on this receptor group.

Barrock Area (2.8 km west)

7.5.13 This receptor group includes residential properties and local roads and access tracks in Barrock. In general, views are long-range and wide angle to panoramic. Views east towards the site extend across the sweeping moorlands to a backdrop of forestry and gently rising agricultural fields. Wind turbines at Lochend and Stroupster are notable features in contrast with the horizontal nature of views. Views north towards the sea are an important contribution to the composition of views from residential receptors. Viewpoint 5 illustrates views from this receptor group.

7.5.14 During construction there would be a barely perceptible change across a small horizontal extent of the wider views available from this receptor group. The movement of plant and some earthworks would be discernible in long-range views west between two bands of forestry. The scale of change is judged to be Negligible, across an Intermediate extent of this group and Short-term in duration. This would give rise to a Slight/Negligible magnitude resulting in **Minor/Negligible** effect at the construction phase.

7.5.15 At year 1 of operation, the Proposed Development would result in a barely perceptible change in views east. Viewpoint 5 illustrates that most of the Proposed Development would be screened by intervening vegetation however, the top part of the battery units may be discernible in the background. The scale of change would be Negligible across an Intermediate extent over a Medium-term duration. This would give rise to a Negligible magnitude resulting in **Negligible Adverse** effect at year 1 of operation.

7.5.16 Effects at year 10 of operation would be the same as at year 1. Established landscape proposals would further filter views of any infrastructure, the magnitude of effect remains Negligible and the level of effect is **Negligible Adverse**.

Lochend Area (3 km southwest)

7.5.17 This receptor group is comprised of residential properties, farmsteads, local roads and access tracks at Lochend. The four operational wind turbines of Lochen windfarm are notable features in views east and south east within an otherwise horizontal skyline and has a strong influence on views from some parts of this receptor group. The screening ZTV illustrates visibility is restricted to the western edge of this receptor group and there would be no change in views from some parts of this receptor group. Viewpoint 6 illustrates views from this receptor group.

7.5.18 Construction operations would be perceptible across a small horizontal extent of the skyline on agricultural land adjacent to established forestry. The movement of plant and construction

of battery units would result in a Negligible scale of change across a Localised extent over Short-term duration. This would give rise to a Negligible magnitude resulting in a **Minor/Negligible Adverse** level of effect at construction.

7.5.19 At year 1 of operation, the Proposed Development would result in a barely perceptible change across a small part of the skyline within wider outlooks available to this receptor group. Intervening landform and vegetation would screen most of the Proposed Development. As illustrated by Viewpoint 6, the introduction of the battery units would appear on the skyline and partly against the backdrop of commercial forestry contrasting to a small degree with the composition of forestry and agricultural land. The Proposed Development would have limited influence beyond the turbines of Lochend and set against the dark backdrop of forestry on a largescale horizon with few distinguishing features. On balance, the scale of change is judged to be Small/Negligible across a Localised extent over Medium-term duration. This would give rise to a Slight/Negligible magnitude resulting in a **Minor/Negligible Adverse** at year 1 of operation.

7.5.20 Effects at year 10 of operation would be the same as at year 1 and the level of effect remains **Minor/Negligible Adverse**.

Key Routes

National Cycle Route 1 (Inverness to John O' Groats) (0.8 km)

7.5.21 As shown on Figure 5, within the study area this National cycle route follows the local road running parallel to and south of the A836. Sequential views along this single-track road are partially channelled by linear bands of roadside gorse vegetation and pockets of forestry. Long range views beyond extend across sweeping moorland and agricultural fields. There are fleeting views of wind turbines and isolated residential buildings. Views are of Community value and are typical of the local landscape. Susceptibility for users of NCN 1 is High/Medium where views of the landscape are a contributing factor, but not integral to the experience. Overall Sensitivity is Medium for this receptor group.

7.5.22 Construction operations would result in a very slight change in fleeting views along a small section of the route illustrated by Viewpoint 2. The movement of plant, small sections of vegetation clearance along the access track and construction of the interface substation would be visible in gaps in roadside vegetation. The erection of some upper parts of battery units would be perceptible across part of the background view along a very small section of this route at the eastern extent of the study area as illustrated by Viewpoint 5. On balance the scale of change would be Small across a Limited extent of this route and Short-term duration. Together this would give rise to a Slight/Negligible magnitude resulting in a **Minor/Negligible Adverse** effect at construction.

7.5.23 At year 1 of operation, the majority of the Proposed Development would be screened in views. The upper most parts of the battery units and the interface substation would be perceptible. Considering the fleeting nature of views, the scale of change would be Negligible across a Limited extent. This Medium-term change would result in a Negligible magnitude and **Negligible Adverse** effect at year 1 of operation.

7.5.24 Effects at year 10 of operation would be the same as assed at year 1. Established landscape planting would further filter views along this route in the Long-term. The Negligible magnitude would result **Negligible Adverse** effect at year 10 of operation.

North Coast 500 (A836) (1.5 km north)

7.5.25 This route comprises a small part of the Caithness section of the North Coast 500 and follows the A836 through the northern part of the study area. Views for road users are of National value where more open views extend across sweeping moorland, farmland with seaward views north and distinctive headland cliffs. Some sections of this route are enclosed by linear belts of mature trees through Mey. Road users are typically more tolerant of change, however susceptibility is Medium as the local scenery is a contributing factor for users of the North Coast 500. Overall sensitivity is High/Medium.

7.5.26 As shown on Figure 3, theoretical visibility would be limited to two small sections along the northwestern and northeastern sections of the North Coast 500 within the study area. Construction activities would be barely perceptible across a small part of distant views and oblique to the direction of travel. The scale of change would be Small across a Localised/Limited extent of this route and Short-term duration leading to a Negligible magnitude. Taking this into account the level of effect would be **Minor/Negligible Adverse** at year 1 of operation.

7.5.27 Effects at year 10 of operation would be the same as at year 1. The landscape mitigation proposals would further filter views of the substation and the level of effect at year 10 would remain **Minor/Negligible Adverse**.

7.6 Cumulative Effects

Introduction

7.6.1 The approach to cumulative assessment is set out in Appendix 1. The cumulative assessment is based on the following schemes agreed in consultation with THC. The cumulative schemes are shown on Figure 7. The assessment is based on the following cumulative scenarios:

- **Scenario 1**: Existing, under construction and consented schemes.
- **Scenario 2**: Existing, under construction, consented, application and scoping schemes.

Table 6.2 Cumulative schemes

Name	Application Reference	Status	Scenario	Distance	Description
Hollandmey Renewable Energy Developme nt (RED)	ECU00003353	Consented	2	>1 km	Construction and operation of a renewable energy development. The proposed generating station has an installed capacity of up to 65 MW, comprising 10 wind turbines with a ground to blade tip height of 149.9 m with a generating capacity of around 50 MW, and around 15 MW of ground mounted solar arrays. The proposed development also includes

					approximately 15 MW of battery energy storage.
Mey BESS	ECU00004838	Application	2	>1 km	Construction and operation of a Battery Energy Storage System (BESS) with installed capacity of up to 300 MW, and associated/ancillary works and development
Gills Bay Substation	21/05536/FUL	Consented	1	>1 km	Construction and operation of a 132 kilovolt (kV) switching station and associated infrastructure
Slickly Wind Farm Connection	ECU00005075	Scoping	2	>1 km	Connection of the Slickly Wind Farm into the electricity transmission network via trident wood poles (approximately 8.5 km in length). This is a scoping report further to an EIA screening response
Gills Bay 132kV Overhead Transmission Line (OHL)	EC00005260	Consented (lapsed)	2 Given the status has lapsed, this is in scenario 2.	>1 km	132 kV alternate current overhead double-circuit transmission line carried on steel-lattice towers (approximately 52) between a proposed sealing end compound at Weydale, Caithness and a proposed sealing end compound at Reaster, Caithness; and for ancillary development including about 10 kilometres of underground cables, access works including new tracks and junctions, and temporary protection measures at roads and water crossings during construction

7.6.2 Receptors judged to receive Negligible or Slight/Negligible magnitude effect are not considered for cumulative effects on the basis that any significant effects arising would primarily be caused by the cumulative developments and the addition of the Proposed Development is unlikely to make a notable contribution.

Cumulative Landscape Effects

7.6.3 Cumulative landscape effects would be limited to LCT 143 Farmed Lowland Plain. All of the cumulative schemes would be located within this LCT and so presents a localised cluster of energy generation and transmission infrastructure at the boundary of the LCT contained by forestry.

7.6.4 In cumulative scenario 1, the addition of the Proposed Development would result in a limited increase in the influence of energy schemes within a small part of the LCT, and at the boundary of this LCT within agricultural fields. Although the Proposed Development is on more elevated ground, it would be largely concealed by forestry and has limited impression within the local landscape. The additional change would be Small in scale, Limited in extent and Long-term. The cumulative magnitude would be Slight/Negligible resulting in a **Minor Adverse** cumulative effect.

7.6.5 In cumulative scenario 2, the addition of the Proposed Development would fill part of the landscape between the Mey BESS, Gills Bay Substation and Hollandmey RED scheme. The Proposed Development would result in a limited increase in energy infrastructure at a locality in the modified agricultural landscape where energy infrastructure has become concentrated. The magnitude would be Slight resulting in a **Minor Adverse** cumulative effect.

Cumulative Visual Effects

7.6.6 The cumulative visual assessment is limited to the Rigifa Area receptor group. All other receptor groups would result in Minor/Negligible or Negligible effects at operation and would not give rise to notable cumulative effects.

7.6.7 In cumulative scenario 1, wind turbines within the Hollandmey RED scheme would be prominent features in views alongside other lower-level energy development at Gills Bay substation beyond existing hedgerows and where gaps in hedgerows are present. The interface substation of the Proposed Development would appear in combination with the Gills Bay substation. The Proposed Development would share similar characteristics as the cumulative schemes, however the addition of the proposed battery units and 132 kV substation would result in a slight extension to the appearance of energy infrastructure across part of the view against a backdrop of forestry. The scale of cumulative change would be Small over a Localised extent in the Long-term. This would give rise to a Slight magnitude resulting in a **Minor Adverse** cumulative effect.

7.6.8 In cumulative scenario 2,the Mey BESS scheme would be visible alongside Gills Bay substation, Hollandmey RED scheme and Gills Bay 132kV OHL . The addition of the Proposed Development would be barely perceptible within the same view as the cumulative schemes. The scale of cumulative change would be Negligible across a Localised extent in the Long-term. This would give rise to a Slight/Negligible magnitude resulting in a **Minor/Negligible Adverse** cumulative effect.

7.7 Summary of Landscape and Visual Effects

7.7.1 There would be no notable effects on landscape character. Potential effects would be confined to the site and its immediate surroundings, within around 1km. These would be limited to the host LCT 143 Farmed Lowland Plain.

7.7.2 Visual effects within close proximity to the Proposed Development would be Moderate/Minor Adverse at construction reducing to Minor Adverse at operation. Visual effects from other receptor groups and key routes would be Minor /Negligible Adverse or Negligible Adverse due to localised landform and vegetation.

7.7.3 The addition of the Proposed Development into the cumulative scenarios would lead to Minor Adverse effects on LCT 143, where there would be a slight intensification of energy infrastructure within a localised part of the landscape.

7.7.4 Cumulative visual effects would be Minor Adverse and Minor/Negligible Adverse and limited to parts of the Rigifa Area visual receptor group in closest proximity to the Proposed Development. The Proposed Development would appear in combination with cumulative schemes but recessive in comparison with them.

Table 6.3 Summary of Effects

Receptor	Sensitivity	Construction Magnitude	Construction Level of Effect	Operation Year 1 Magnitude	Operation Year 1 Level of Effect	Operation Year 10 Magnitude	Operation Year 10 Level of Effect	Cumulative Level of Effect
LCT 143 Farmed Lowland Plain	Medium	Slight	Minor Adverse	Slight	Minor Adverse	Slight	Minor Adverse	Scenario 1: Minor Adverse Scenario 2: Minor Adverse
LCT 134 Sweeping Moorland and Flows Caithness and Sutherland	Medium/ Low	Negligible	Negligible Adverse	Negligible	Negligible Adverse	Negligible	Negligible Adverse	NA
Rigifa Area	High/ Medium	Slight	Moderate/ Minor Adverse	Slight	Minor Adverse	Slight	Minor Adverse	Scenario 1: Minor Adverse Scenario 2: Minor/Negligible Adverse
East Mey Area	High/ Medium	Slight/ Negligible	Minor/ Negligible Adverse	Negligible	Negligible Adverse	Negligible	Negligible Adverse	NA

Receptor	Sensitivity	Construction Magnitude	Construction Level of Effect	Operation Year 1 Magnitude	Operation Year 1 Level of Effect	Operation Year 10 Magnitude	Operation Year 10 Level of Effect	Cumulative Level of Effect
Visitors to the Castle of Mey	High/ Medium	No change	No Effect	No change	No Effect	No change	No Effect	NA
Barrock Area	High/ Medium	Slight/Negligible	Minor/ Negligible Adverse	Negligible	Negligible Adverse	Negligible	Negligible Adverse	NA
Lochend Area	High/ Medium	Negligible	Minor/ Negligible Adverse	Slight/Negligible	Minor/ Negligible Adverse	Slight/Negligible	Minor/ Negligible Adverse	NA
National Cycle Route 1(Inverness to John O' Groats)	High/ Medium	Negligible	Minor/ Negligible Adverse	Negligible	Negligible Adverse	Negligible	Negligible Adverse	NA
North Coast 500 (A836)	Medium	Negligible	Minor/ Negligible Adverse	Negligible	Minor/ Negligible Adverse	Negligible	Minor/ Negligible Adverse	NA

8 REFERENCES

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