SPENNYMOOR GREENER GRID PARK

LANDSCAPE AND VISUAL APPRAISAL

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1 Introduction

- This Landscape and Visual Appraisal (LVA) of the Proposed Development has been prepared by TGP Landscape Architects Ltd, a firm of independent consultants. The Site is located to east of Spennymoor within the planning authority area of Durham County Council. The LVA report has been prepared with the aim of identifying the predicted landscape and visual effects of the Proposed Development, consisting of a Battery Storage Facility and its associated infrastructure.

- The LVA is augmented by supporting graphics within the appendices. This includes the following figures within **Appendix C**:

- Figure 1 – ZTV and Viewpoints;
- Figure 2 – Landscape Character;
- Figure 3 – Landscape Designations and Recreational Routes;
- Figure 4 – Hard / Soft Landscape Plan; and
- Figure 5 -Hard / Soft Landscape Plan and Habitat Areas

1.1 Visualisations

- As part of this process, visualisations have been prepared to illustrate the Proposed Development and presented in **Appendix D.** This LVA should be read in conjunction with these viewpoint visualisations and 3D model which have been produced by ArcMedia (see **Appendix D**)

- The Proposed Development includes integrated landscape mitigation proposals in the form of native hedgerow, scrub and tree planting around the Site boundary in combination with areas of species rich grassland. These embedded mitigation measures are illustrated on Figures 4 & 5. The visualisations also take cognisance of the potential colour of the Battery Storage Facility, a green colour has been used. To clarify the potential screening influence of such planting, the photomontages accompanying this LVA illustrate the gradual establishment of this proposed planting over time. To this end, the visualisations show the existing view (the 'Baseline View'), Proposed Development upon completion with no planting ('View at Year 0'), after an initial period of establishment ('View at Year 5'), and at a point that hedgerow / scrub planting has reached a level of maturity ('View at Year 15').

1.2 Scope of the LVA

- The LVA seeks to identify the potential landscape and visual effects that would occur as a result of the Proposed Development and is organised in the following sections:

- Guidance and Methodology – outlines the general methodology, with reference to established guidance (full version in **Appendix A**);

- Planning Policy Context;

- Baseline Description – including the fabric, character and quality of the local landscape which could be affected by the Proposed Development. This includes landscape planning designations, as well as a description of the main visual receptors within the Study Area;
- Proposed Development and Mitigation – describes the aspects of the Proposed Development which have the potential to result in landscape or visual effects, and the measures incorporated into the project design to mitigate these potential effects;
- ZTV and Viewpoint Analysis – analysis of the geographic extents of visibility and the potential magnitude of change at a selection of viewpoints;
- Landscape Effects – assesses the effects arising from the Proposed Development on the landscape fabric, landscape character and quality of the landscape designations within the Study Area;
- Visual Effects – assesses the effects arising from the Proposed Development on the visual amenity of the receptors within the Study Area.
- Cumulative Effects - considers the combined effects of the Proposed Development in combination with the existing substation and associated transmission infrastructure;
- Conclusions – a summary of the LVA results.

1.3 Study Area

- This LVA considers the potential landscape and visual effects which might arise as a result of the introduction of the Proposed Development. Based on the scale of the Proposed Development and the surrounding topography and land cover, a proportionate approach has been taken. As such a 2km radius Study Area has been adopted from the Proposed Development for the assessment of landscape and visual effects. This Study Area distance is contiguous with the landscape advice contained within the project pre-application consultation *(The study area should principally focus on 2km around the site)*[1].

1.4 Guidance and Methodology

- The methodology presented here is based on the following best practice guidance:
  - *Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3);* Institute of Environmental Management and Appraisal and the Landscape Institute, 2013;
  - *An Approach to Landscape Character Assessment,* Natural England, October 2014; and
  - *Visual Representation of Development Proposals;* Landscape Institute Technical Guidance Note 06/2019 (2019).
- In addition, reference has been made to other published guidance and the appraisal work has drawn on the following relevant baseline information:
  - National Character Area Profiles, Natural England, 2014;
  - Ordnance Survey Land ranger (1:50 000) and Explorer (1:25 000) maps;

[1] PRE42/22/01700.

- The County Durham Plan (Adopted 2020);
- The County Durham Landscape Value Assessment (2019);
- The County Durham Landscape Strategy (2008);
- Field surveys; and
- Aerial photography.

1.5 **Methodology**

- The LVA aims to identify and evaluate the potential landscape and visual effects arising from the Proposed Development. Wherever possible, identified effects are quantified, albeit the nature of landscape and visual appraisal requires interpretation by professional judgement. In order to provide a level of consistency to the appraisal, the prediction of magnitude and appraisal of the residual landscape and visual effects have been based on pre-defined criteria.

- GLVIA3 states that: "Professional judgement is a very important part of the LVIA." (para 2.23) "In all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others" (para 2.24).

- Landscape and Visual Appraisals are distinct, though linked procedures. The appraisal of the landscape effects takes cognisance of the potential changes in the physical components of the landscape and associated changes in its character and how it is experienced, which may in turn affect the perceived value ascribed to the landscape.

- Visual effects relate to changes in the composition of existing views as a result of changes to the landscape, to people's responses to the changes and to the overall effects with respect to visual amenity.

<u>Level of Effect</u>

- The level of any identified landscape or visual effect has been assessed in terms of being Major, Moderate, Minor or Negligible. Intermediate correlations are also possible and depend upon professional judgement, e.g., Major/Moderate. These categories are based on the juxtaposition of visual or landscape sensitivity with the predicted magnitude of change. This juxtaposition is not used as a prescriptive tool, rather it allows for the exercise of professional judgement. Thus, in some instances a particular parameter may be considered as having a determining effect on the analysis.

- Where the landscape or visual effect has been classified as Major or Major/Moderate this is considered to be notable. Where Moderate effects are predicted, professional judgement is applied to ensure that the potential for notable effects arising has been thoroughly considered.

- The complete appraisal methodology is set out in **Appendix A**.

2 Assumptions

The following assumptions have been made in respect to the LVA:

- The Site – refers to the land located within the red line boundary. The LVA excludes assessment of the of the off-site proposals to the east as part of the BNG matrix;
- The Proposed Development – comprises the battery storage units with associated infrastructure as illustrated on Figure 4. The main components likely to contribute to landscape and visual impacts are described in greater detail in Section 6.
- For the purposes of the LVA, the Proposed Development is regarded as being permanent. The construction stage would be temporary, approximately 12–18 month period.
- The landscape proposals within the Site (including tree and hedge planting and other areas of habitat creation) form an integral component of the Proposed Development.
- Visual effects are assessed on the basis of good visibility. Visual effects can be expected to vary e.g., poor visibility at times of low cloud, rainfall and dusk. At these times a reduction in visual clarity, colour and contrast would be experienced. Reduced visibility would limit the extent of view, particularly from mid to long distance views. Consequently, the assessment of effects is based on the worst-case scenario, where the Proposed Development would be most visible.

3 Consultation

3.0 The LVA process has been informed by consultation feedback from the Council, including;

- **Pre-app response** (dated 24/07/2022) – A composite written pre-app- response was received from Durham County Council which included guidance on relevant landscape matters, including policy, landscape character, design considerations and predicted impacts.
- **Feedback from Landscape Advisor on Viewpoints** (23.06.22) – TGP liaised with landscape adviser on LVA viewpoint to be included in the assessment.
- **Virtual Presentation to Council** (25th July 22)

The site layout has developed since pre-app to allow detailed analysis of site constraints, landscape mitigation and biodiversity net gain. In addition, the landscape architects collaborated with the ecologist to compile the appropriate landscape mitigation measures that complement the characteristics of the local landscape.

4 Planning Policy Context

- The following section identifies the planning policy and other planning guidance material specifically relevant to the LVA. This includes consideration of the following:

- National Planning Policy Framework (July 2021);
- The County Durham Plan (Adopted 2020).

4.0 National Planning Policy Framework (NPPF)

- Paragraph 8 of the National Planning Policy Framework sets out three overarching objectives in achieving sustainable development, an economic objective, a social objective and an environmental objective that contributes to *"protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy"*.
- Under paragraph 126 it states that *"good design is a key aspect of sustainable development"* and under paragraph 130 describes how planning decisions should aim to ensure that developments *"function well and add to the overall quality of the area...establish or maintain a strong sense of place...are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change…are visually attractive as a result of good architecture, layout and appropriate and effective landscaping"*.
- Under paragraph 174 it refers to "protecting and enhancing valued landscapes..." with paragraph 176 emphasising the "Great weight to be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues".
- In relation to National Planning Policy Framework, it is considered that the development incorporates good design into its siting and landscape treatment. There would be no national landscape designations affected by the development.

4.1 The County Durham Plan (2020)

- The County Durham Plan sets out planning policy to guide development across areas within County Durham. Relevant landscape-related policy from the Plan is summarised as follows:
- Table 1 Planning Policy – Durham County Council

Policy Ref	Policy Description
10	**Development in the Countryside**
	Development in the countryside will not be permitted unless allowed for by specific policies in the Plan ***(54)****, relevant policies within an adopted neighbourhood plan relating to the application site or where the proposal relates to one or more of the following exceptions:* ***Economic Development*** *Development necessary to support:* *a. an existing agricultural or other existing rural land-based enterprise or associated farm diversification scheme, including the provision of new or the*

Policy Ref	Policy Description
	extension of existing building(s), structures or hard standings required for the functioning of the enterprise; *b. the expansion of an existing business falling beyond the scope of a rural land-based enterprise, where it can be clearly demonstrated that it is, or has the prospect of being, financially sound and will remain so;* *c. the establishment of a new agricultural or other rural land based enterprise which clearly demonstrates an essential and functional need for that specific location and where it can be clearly demonstrated that it has the prospect of being financially sound and will remain so; or* *d. the undertaking of non-commercial agricultural activity which is located within or directly adjoining the applicant's existing residential curtilage which is of a scale commensurate to the incidental enjoyment of that existing dwelling.* *In all instances the resulting development must be of a design, construction and scale which is suitable for and commensurate to the intended use. In respect to (a), (b) and (c) any resulting building(s), other structure(s) and hard standing(s) must be well related to the associated farmstead or business premises unless a clear need to ensure the effective functioning of the business for an alternative location can be demonstrated by the applicant.* ***Infrastructure Development*** *Development necessary to support:* *e. essential infrastructure where the need can be demonstrated for that location;* *f. the provision of new, or the enhancement of, existing community facilities; or* *g. development of a new, or the enhancement of, an existing countryside-based recreation or leisure activity which will improve access to the countryside for all in terms of walking, cycling, horse riding and sailing without giving rise to adverse environmental impacts.* **Development of Existing Buildings** *Development necessary to support:* *h. the change of use of an existing building or structure which:* *1. already makes a positive contribution to the character and appearance of the area and is capable of conversion without complete or substantial rebuilding, disproportionate extension or unsympathetic alterations;* *2. results in an enhancement of the building's immediate setting;* *3. does not result in the unjustified loss of a community service or facility; and* *4. in the case of a heritage asset, represents the optimal viable use of that asset consistent with their conservation.* *i. the intensification of a use through subdivision;* *j. the replacement of an existing dwelling in the same location with one of a comparable footprint and mass where this is clearly justified; or* *k. an extension of an existing dwelling or other householder development within the existing curtilage which is incidental to the enjoyment of the dwelling, including proposals to facilitate home working.* ***General Design Principles for all Development in the Countryside***

Policy Ref	Policy Description
	New development in the countryside must accord with all other relevant development plan policies and by virtue of their siting, scale, design and operation must not: *l. give rise to unacceptable harm to the heritage, biodiversity, geodiversity, intrinsic character, beauty or tranquillity of the countryside either individually or cumulatively, which cannot be adequately mitigated or compensated for;* *m. result in the merging or coalescence of neighbouring settlements;* *n. contribute to ribbon development;* *o. impact adversely upon the setting, townscape qualities, including important vistas, or form of a settlement which cannot be adequately mitigated or compensated for;* *p. be solely reliant upon, or in the case of an existing use, significantly intensify accessibility by unsustainable modes of transport. New development in countryside locations that is not well served by public transport must exploit any opportunities to make a location more sustainable including improving the scope for access on foot, by cycle or by public transport;* *q. be prejudicial to highway, water or railway safety; and* *r. impact adversely upon residential or general amenity.* *New development in the countryside must also:* *s. minimise vulnerability and provide resilience to impacts arising from climate change, including but not limited to, flooding; and* *t. where applicable, maximise the effective use of previously developed (brownfield) land providing it is not of high environmental value.*
26	***Green Infrastructure***
	Development will be expected to maintain and protect, and where appropriate improve, the county's green infrastructure network. This will in turn help to protect and enhance the county's natural capital and ecosystem services. Development proposals should incorporate appropriate Green Infrastructure (GI) that is integrated into the wider network, which maintains and improves biodiversity, landscape character, increases opportunities for healthy living and contributes to healthy ecosystems and climate change objectives. ***Loss of provision*** *Development proposals will not be permitted that would result in the loss of open space or harm to green infrastructure assets unless the benefits of the development clearly outweigh that loss or harm and an assessment has been undertaken which has clearly shown the open space or land to be surplus to requirements. Where valued open spaces or assets are affected, proposals must incorporate suitable mitigation and make appropriate provision of equivalent or greater value in a suitable location. Where appropriate there will be engagement with the local community.* ***New provision***

Policy Ref	Policy Description
	Development proposals should provide for new green infrastructure both within and, where appropriate, off-site, having regard to priorities identified in the Strategic GI Framework. Proposals should take opportunities to contribute to existing green infrastructure projects in the locality including those identified in the Infrastructure Delivery Plan. *New Green Infrastructure will be required to be appropriate to its context and of robust and practical design, with provision for its long term management and maintenance secured. The council expects the delivery of new green space to make a contribution towards achieving the net gains in biodiversity and coherent ecological networks as required by the National Planning Policy Framework (NPPF).* *Proposals for new residential development will be required to make provision for open space to meet the needs of future residents having regard to the standards of open space provision set out in the Open Space Needs Assessment (OSNA). Where it is determined that on-site provision is not appropriate, the council will require financial contributions secured through planning obligations towards the provision of new open space, or the improvement of existing open space elsewhere in the locality.* ***Public Rights of Way*** *Development will be expected to maintain or improve the permeability of the built environment and access to the countryside for pedestrians, cyclists and horse riders. Proposals that would result in the loss of, or deterioration in the quality of, existing Public Rights of Way (PROWs) will not be permitted unless equivalent alternative provision of a suitable standard is made. Where diversions are required, new routes should be direct, convenient and attractive, and must not have a detrimental impact on environmental or heritage assets.*
39	***Landscape***
	Proposals for new development will be permitted where they would not cause unacceptable harm to the character, quality or distinctiveness of the landscape, or to important features or views. *Proposals will be expected to incorporate appropriate measures to mitigate adverse landscape and visual effects.* *Development affecting Areas of Higher Landscape Value defined on Map H, will only be permitted where it conserves, and where appropriate enhances, the special qualities of the landscape, unless the benefits of development in that location clearly outweigh the harm.* *Development proposals should have regard to the County Durham Landscape Character Assessment and County Durham Landscape Strategy and contribute, where possible, to the conservation or enhancement of the local landscape.*
40	**Trees, Woodlands and Hedges**
	Trees

Policy Ref	Policy Description
	Proposals for new development will not be permitted that would result in the loss of, or damage to, trees of high landscape, amenity or biodiversity value unless the benefits of the proposal clearly outweigh the harm. Where development would involve the loss of ancient or veteran trees it will be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists. *Proposals for new development will be expected to retain existing trees where they can make a positive contribution to the locality or to the development, maintain adequate stand-off distances between them and new land-uses, including root protection areas where necessary, to avoid future conflicts, and integrate them fully into the design having regard to their future management requirements and growth potential.* *Where trees are lost, suitable replacement planting, including appropriate provision for maintenance and management, will be required within the site or the locality.* *Where applications are made to carry out works to trees in Conservation Areas or that are covered by a Tree Preservation Order, they will be determined in accordance with the council's Tree Management Policy Document (or any subsequent revisions)* ***Woodlands*** *Proposals for new development will not be permitted that would result in the loss of, or damage to, woodland unless the benefits of the proposal clearly outweigh the impact and suitable replacement woodland planting, either within or beyond the site boundary, can be undertaken.* *Proposals for new development resulting in the loss or deterioration of ancient woodlands as shown on the policies map, will be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists. Proposals affecting ancient woodland (including planted ancient woodland sites) not previously identified as such, will be subject to the same consideration.* *Proposals for new development will be expected to maintain adequate stand-off distances between woodland and new land-uses to avoid future conflicts, and integrate them fully into the design having regard to their future management requirements and growth potential.* ***Hedges*** *Proposals for new development will not be permitted that would result in the loss of hedges of high landscape, heritage, amenity or biodiversity value unless the benefits of the proposal clearly outweigh the harm.* *Proposals for new development will be expected to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements.*

Policy Ref	Policy Description
	Where any hedges are lost, suitable replacement planting or restoration of existing hedges, will be required within the site or the locality, including appropriate provision for maintenance and management.
41	***Biodiversity and Geodiversity***
	Proposals for new development will not be permitted if significant harm to biodiversity or geodiversity resulting from the development cannot be avoided, or appropriately mitigated, or, as a last resort, compensated for. *Proposals for new development will be expected to minimise impacts on biodiversity by retaining and enhancing existing biodiversity assets and features and providing net gains for biodiversity including by establishing coherent ecological networks. Measures should be appropriate, consistent with the biodiversity of the site and contribute to the resilience and coherence of local ecological networks.* *Proposals for new development will be expected to protect geological features and have regard to Geodiversity Action Plans, the Durham Geodiversity Audit and where appropriate promote public access, appreciation and interpretation of geodiversity.* *Development proposals where the primary objective is to conserve or enhance biodiversity or geodiversity will be permitted, where they accord with other relevant policies in the Plan.* *Development proposals which are likely to result in the loss or deterioration of irreplaceable habitat(s) (such as peatlands or lowland fen) will not be permitted unless there are wholly exceptional reasons and a suitable compensation strategy exists.*

Supporting Guidance & Documents:

- The County Durham Landscape Value Assessment (2019);
- The County Durham Landscape Strategy (2008).

5 Baseline Description

5.0 Local Landscape Context

The Site is located adjacent to the A688 Thinford Lane, approx. 1000m to the east of the town of Spennymoor. The Site is made up of open, relatively flat arable farmland bounded by an existing mature hedgerow to the north, mature vegetation surrounding the adjacent Spennymoor Substation to the west, a low clipped thorn hedge to the south, with a fence to the east.

- The local landscape comprises of undulating farmland, predominantly arable use with some areas of pasture. The field pattern is made of small to medium sized fields, with field boundaries made up of mature hedgerows. Although the local landscape contains a number of strategic overhead powerlines and electricity substations which, together with the busy

A688, give it a slight urban fringe quality, it is still essentially rural in character.

- Tree cover is sparse in the immediate vicinity of the site, although beyond 1000m there is a combination of scrub woodland, tree belts and scattered trees, with a number of larger woodland block, such as at Croxdale Hall, Whitworth Country Park and Ferryhill Carrs Nature Reserve.
- Local topography is generally flat with some undulations with The Site itself is located at approximately 117m AOD towards its western boundary and 107m AOD towards its eastern boundary, with the Spennymoor Substation located directly to the west situated at 117m AOD. A distinctive feature of the surrounding context, particularly to the east of the study area is the presence of quarries, with Thrislington Quarry and Cornforth Stone Quarry being the closest in proximity to the Site (2300m and 2600m away respectively). There are also quarries at Kelloe (4600m to the east) and Quarrington (4900m to the north east).
- The closest settlement to The Site is Thinford t approx. 880m to the west and Metal Bridge at 560m to the east, with a number of individual farmsteads and a Traveler site at East Howle. There are a number of man-made elements within the local landscape including an existing electrical substation which is located directly to the west of The Site and associated overhead transmission lines, A1(M) road corridor approx. 2500m to the east, the East Coast Main Line approx. 1000m to the east and new commercial development at Enterprise City approx. 1200m to the north west and Thinford Services approx. 900m to the west.

5.1 **Landscape Character**

- Figure 2 illustrates the National Character Areas (NCAs) and Landscape Character Types (LCTs) within the 5km, as defined by Natural England and the County Durham landscape Character Assessment, 2008. The boundaries of the NCAs and LCTs are illustrated on Figure 2; the site is located within the Tyne and Wear Lowlands NCA and the Lowland Valley Terraces LCT.

National Character Areas – Tyne and Wear Lowlands

The proposed development sits within this NCA and the key characteristics of the Tyne and Wear Lowlands relevant to the proposed development are as follows:

- *Undulating landform incised by the river valleys of the Tyne and the Wear and their tributaries.*
- *Widespread urban and industrial development with a dense network of major road and rail links and the spreading conurbations of Tyneside in the north. Dispersed towns and villages further south.*
- *Between settlements, wide stretches of agricultural land with large, regular, arable fields bordered by hedgerows with few hedgerow trees, often with large farmsteads and urban fringe pasture land with pony and cattle grazing.*
- *Strong legacy of mining, much restored to agriculture, forestry, industry, housing and amenity uses such as country parks, linking urban areas with countryside and coast by transforming waggon ways to cycle routes and footpaths.*

- *Mixed woodland estates and plantations on restored spoil heaps provide woodland cover in some areas, although sparse elsewhere.*
- *Long history of settlement, mining and industry evidenced through historic buildings and settlement patterns which form a core part of today's landscape.*

National Character Areas – Durham Magnesian Limestone Plateau

The key characteristics of this NCA relevant to the proposed development are as follows:

- *Open, large-scale landscapes with big fields, low hedges and few trees on the plateau tops, incised with stream valleys along limestone escarpment to the west and denes running down to the coast to the east.*
- *Dramatic coastline with exposed cliffs of limestone and boulder clay, undulating series of small, sheltered bays and headlands, flower rich magnesian limestone grassland, steep sided wooded coastal denes, and sand dunes and beaches that support large populations of waders and seabirds.*
- *Striking west facing limestone escarpment forming a series of spurs and vales, heavily quarried but still supporting a mosaic of limestone grassland, scrub and woodland.*
- *Strong influence of historic mining industry on both local culture and the landscape, in the form of ex-coal mining towns and villages with distinctive surrounding areas of allotments and pony paddocks, reclaimed colliery sites, disused and existing railways, and industrial archaeology.*
- *A productive farmed landscape with a high proportion of large arable fields and some pasture for sheep and cattle grazing.*
- *Small, fragmented patches of limestone grassland supporting unique combinations of rare plant and invertebrate species.*
- *Historic villages subject to a high degree of 20th Century expansion.*
- *Widespread urban and industrial development in the north and major transport corridors throughout.*

Landscape Character Types

- The site falls within the Landscape Character Type (LCT) defined as 'Lowland Valley Terraces', this is bounded to the north by the Incised Lowland Valley LCT with the Limestone Escarpment LCT to the south, the Lowland Carrs and Lowland Plain LCTs are located beyond 4km.

Lowland Valley Terrace LCT

Durham County Council describes this landscape as follows;

"The landscape is typically open in character and broad in scale. The limestone escarpment forms a middle-distance horizon to the east, as do the spurs of the West Durham Coalfield to the west. Urban areas are often prominent and Durham Cathedral in its wooded setting is an important component in many views. The landscape has been heavily influenced by urban and industrial development – its scattered mining towns and villages and busy roads give it a semi-rural or urban fringe character in places".

The key features of the Lowland Valley Terrace LCT are:

- *Broad lowland valley floor.*
- *Carboniferous Coal Measures are masked by thick layers of glacial drift.*

- *Gently rolling topography of boulder clay with areas of more undulating terrain of glacial sands and gravels.*
- *Heavy, seasonally waterlogged clay soils and lighter brown earths and brown sands.*
- *Mixed farmland of improved pastures and arable cropping.*
- *Semi-regular patterns of medium and large-scale fields bounded by low hawthorn hedges.*
- *Few trees - thinly scattered hedgerow ash, oak and sycamore.*
- *Isolated fragments of lowland heath and mire.*
- *Sparsely wooded but with some heavily wooded areas of old parkland and estate farmland. Scattered mining towns and villages connected by busy modern roads. Occasional older 'green' villages*
- *Opencast coal sites, clay workings and waste disposal sites locally prominent.*
- *Tracts of immature and relatively featureless reclaimed land. An important communications corridor with motorways, trunk roads, railway lines and overhead transmission lines.*
- *An open landscape, broad in scale, defined by the Limestone Escarpment to the east and the spurs of the*
- *West Durham Coalfield to the west.*
- *A settled landscape with a semi-rural or urban fringe quality in places.*

The sensitivity of the Lowland Valley terrace is described in **Appendix B**.

Adjacent landscape character types

- The descriptions of the adjacent LCT are described below. The Proposed Development would not impact upon the physical character of these LCTs.

Incised Lowland Valley LCT

The key features of the Incised Lowland Valley relevant to the proposed development are as follows:

- *Incised valley landscape of gorges, denes, river floodplains and steep bluffs.*
- *Carboniferous rocks are masked by thick deposits of glacial drift.*
- *Sandstones, shales and thin coal seams outcrop very occasionally in gorges.*
- *Meandering rivers with alternating riffles and pools.*
- *Varied soils – alluvial soils, brown sands, and heavy clays.*
- *Mixed farmland – pasture on steeper ground and arable cropping on floodplains.*
- *Semi-regular patterns of old enclosures bounded by hawthorn hedges.*
- *Abundant hedgerow oak, ash, sycamore and beech.*
- *Heavily wooded – ancient oak woods in river gorges, denes and bluffs.*
- *Numerous ornamental parklands and areas of wooded estate farmland.*
- *Occasional older 'green villages' of stone and clay pantile.*
- *Landmark buildings including Durham Cathedral and Castle.*
- *Numerous bridges and viaducts from the ancient to the modern.*
- *An enclosed landscape, intimate in scale, with occasional dramatic vistas.*
- *A settled but tranquil rural landscape of great scenic quality and a rich cultural heritage.*

Limestone Escarpment LCT

The key features of the Limestone Escarpment relevant to the proposed development are as follows:

- *Steep, west-facing slopes, often prominently visible from the lowland to the west, rising to high points of between 100m and 163m;*
- *The escarpment follows an irregular, indented line comprising distinct individual hills and spurs, divided by valleys and narrow denes;*
- *Underlying Magnesian Limestone expressed as a series of hilltop outcrops, and within quarried areas;*
- *A dry landscape with few water bodies due to the permeability of the Magnesian Limestone Generally open landcover of large arable fields, with low hedges and occasional field boundary trees;*
- *Frequent deciduous woodlands including some ancient woodland, on steeper slopes and in the occasional narrow denes which dissect the scarp;*
- *Magnesian Limestone grassland habitat occurs on limestone outcrops, supporting nationally rare flora and fauna; the flowery nature of limestone grassland is characteristic;*
- *Settlement is generally found at the foot of the escarpment, though some of the mining villages have expanded onto more gentle slopes;*
- *A large number of limestone quarries, both active and historic, have been excavated into the scarp, and there are traces of the former deep-coal mines within the area;*
- *Long open views from the top of the scarp, across County Durham towards the Pennines to the west and north west.*

Lowland Carrs LCT

The key features of the Lowland Carrs relevant to the proposed development are as follows:

- *Flat, low lying and poorly drained carrs.*
- *Deep glacial clays overlain in places by alluvium and shallow peat.*
- *Seasonally waterlogged alluvial and brown clay soils with tracts of earthy peats.*
- *Arable and mixed farmland on higher lying ground. Improved and wet rushy pasture on poorly drained flats.*
- *Straight watercourses flanked by levees.*
- *Occasional pumping stations.*
- *Regular grids of water-filled ditches and wire fences on lower ground.*
- *Semi-regular field patterns of gappy thorn hedges on drier ground.*
- *Few trees – occasional willow along watercourses.*
- *Few woodlands – thinly scattered small broadleaved plantations.*
- *Occasional farms in the fringes of the carrs and on pockets of higher ground.*
- *Few roads or footpaths.*
- *The carrs are crossed by the A1 (M) and the East Coast railway line on raised embankments.*
- *A visually open landscape defined by the slightly higher ground of the surrounding lowland plain.*
- *A sparsely settled rural landscape with a strong sense of place.*

Lowland Plain LCT

The key features of the Lowland Plain relevant to the proposed development are as follows:

- *Open lowland plain.*

- *Permian rocks are masked by a thick mantle of glacial clays, sands and gravels.*
- *Gently rolling or undulating topography with areas of flat or hummocky terrain.*
- *Seasonally waterlogged brown and reddish-brown clay soils with pockets of brown earths and brown sands.*
- *Mixed but largely arable farmland of cereals and oil-seed rape.*
- *Semi-regular patterns of old enclosures, often fragmented by amalgamation into large arable fields.*
- *Low clipped hawthorn hedges.*
- *Relics of rigg and furrow in older pastures.*
- *Few trees – thinly scattered hedgerow ash, oak and sycamore.*
- *Sparsely wooded but with some heavily wooded areas of old parkland and estate farmland.*
- *Nucleated pattern of small green villages connected by winding lands. Many shrunken or deserted medieval villages. Scattered farms.*
- *Busy trunk roads and overhead transmission lines in places.*
- *A visually open and broad scale landscape with long distance views to the Cleveland Hills to the south.*
- *Heavily wooded areas create a greater degree of enclosure and a more intimate scale.*
- *A sparsely settled rural landscape.*

Landscape Value

The *County Durham Landscape Value Assessment (2019)* assessed the larger units the site forms part of (*13a xxviii Thinford and Metal Bridge*) as being of low-medium or medium value across the majority of attributes assessed.

Landscape Strategy

The site lies within an area identified in the County Durham Landscape Strategy (2008) as a *Landscape Improvement Priority Area* with a strategy of *enhance*.

5.2 Green Belt

- The Site is not located within the Green Belt which sits approx. 2500m to the north of the Proposed Development extending from Durham City in the north to the East Coast Main Line.

5.3 Landscape Designations

- Landscape planning designations and policies are considered in the determination of the sensitivity of landscape and visual receptors as they provide an indication of value ascribed to the landscape or visual resource. The Landscape Designations are illustrated on **Figure 3**, including Area of Higher Landscape Value, the closest is the Ferryhill AHLV, which is situated approx. 1150m to the south east and to the north is the Croxdale and Hett AHLV approx. 1300m away from the Proposed Development. The Coxhoe AHLV is located out with the 2km Study Area (approx. 3500m) to the north east. Further landscape designations within the 5km include;

- *Croxdale Hall Grade II* Listed Historic Park and Garden of National Importance (3500m distance);*

- *Burn Hall Grade II Listed Historic Park and Garden of National Importance (4900m); and*
- *Whitworth Country Park (4200m).*

5.4 Heritage Designations

- Heritage Designations are illustrated on **Figure 3**, the closest heritage designated area is Hett Conservation Area, which is situated to the north approx. 1500m away from the Proposed Development. Further heritage designations at longer distances include;

- *Conservation Areas at Sunderland Bridge; Burn Hall; Holywell; Brancepeth; Tudhoe; Hett; Bowburn; Cornforth; Mainsforth; Bishop Middleham and Kirkmerrington;*
- *Scheduled Monuments; and*
- *Listed Buildings.*

5.5 Ecology Designations

- Ferryhill Carrs Nature Reserve, which is located 1500m to the south east of the Site, is designated as a SSSI and LNR. To the east of it and the East Coast Main Line lies an area of Ancient Woodland. Other ecological designation is illustrated on **Figure 3.**

5.6 Visual Baseline and receptors

The following section describes the visual receptors within the 5km Study Area.

Local Residents

- With reference to Figure 1, settlements within the Study Area from which there may be views of the Proposed Development include Metal Bridge (approx. 562m), Thinford (approx. 880), Ferryhill (approx. 1500m) to the south of the Site, Cornforth (approx.) 1600m to the east and Hett (approx. 1900m) to the north. The urban edge of Spennymoor is located approx. 1200m, the settlement is located out with the ZTV.

- Those residential properties within 1km of the Site comprise:

- Hett Moor Farm (approx. 650m),
- Pine Road (approx. 540m),
- Cookson's Green Farm (approx. 490m),
- East Howle Traveller Site (approx. 810m),
- East Howle Farm (approx. 735m),

- All other potential residential receptors are located at greater distance and/or out side the ZTV and are not considered further.

Recreational Receptors

- The key recreational routes within the ZTV are listed below:

- Ferryhill number 3 approx. 10m to the west of the site,
- Ferryhill number 2 approx. 525m away from the Proposed Development at its closest point.
- Ferryhill number 4 approx. 600m away at its closest point.

- Ferryhill number 1 approx. 1680m away from the Proposed Development at its closest point.
- Ferryhill number 5 approx. 1000m away from the Proposed Development.
- Croxdale and Hett 31 approx. 425m away from the Proposed Development at its closest point.
- Croxdale and Hett Bridleway 28 approx. 830m away from the Proposed Development at its closest point.
- Croxdale and Hett 29 approx. 850m away from the Proposed Development at its closest point.
- All other potential recreational receptors are located at greater distance and/or outside the ZTV and are not considered further.

Vehicular Receptors

- Potential vehicular receptors within the Study Area are road users on the network of major and local minor roads. There would be potential views from A688, which runs along the northern boundary of the Site. There would also be potential views from A167, unclassified road between A688 and Hett and the unclassified road between Ferryhill and the A688 Thinford Lane.

Other receptors include:

- The East Coast Main Line;
- Enterprise City Industrial Estate; and
- Thinford Services, which is located 1000m away.

6 Proposed Development and Mitigation

- This section describes the aspects of the Proposed Development with the potential to cause landscape and visual effects within in the Study Area.

6.0 **Proposed Development Description**

- The Proposed Development would involve localised areas of ground clearance to facilitate construction within the Site, and the introduction of the following key elements:
    - 3.40m high weldmesh fencing
    - battery storage (14m x 4.5m x 2.6m)
    - inverter (9m x 3.1m x 3.7m)
    - telco rack (2m x 2m x 3.75m)
    - aux distribution panel (1m x 0.5m x 2m)
    - transformer
    - comms house (7m x 13m x 3.5m)
    - energy management building (12.9m x 9.6m x 5.7m)
    - cooler (9.6m x 2.4m x 2.5m)
    - e house (10m x 3.1m x 4.5m)
    - proposed track areas
    - control room (12.2m x 2.5m x 2.6m)

- aux transformer (2.6m x 1.6m x 3.6m)
- offices (3.1m x 9.8m x 3.5m)
- storage (2.4m x 6.1m x 2.59m)
- light (6m high)
- Landscape planting, bunding and mitigation features.

- The transmission compound and array of Battery Storage units are the main elements of the Proposed Development with the potential to affect the landscape and visual amenity of the Study Area. This is based on their height and spread across the Site. However, the LVA also takes cognisance of the other elements listed above, and makes reference to them within the appraisal where relevant.

6.1 Landscape Design and Mitigation

- By its nature, the proposed facility would result in visual effects which it would not be feasible to fully mitigate. However, the location of the Proposed Development was chosen to avoid higher visibility. The undulating landform in combination with scattered field trees / scrub, and mature field boundaries would notably restrict views of the Proposed Development across wider parts of the Study Area. Furthermore, the Site is located in close proximity to existing electricity infrastructure, comprising existing substation and associated overhead lines to the northwest. As such, the Proposed Development exerts its primary influence over a local landscape already substantially characterised by existing development, and avoids the spread of infrastructure into wider parts of the surrounding landscape.

- In terms of design, the proposals seek to incorporate a comprehensive mitigation strategy to effectively integrate the Proposed Development into the surrounding landscape. This involves consideration of the scale and height of the Proposed Development, and the most appropriate methods of lessening their potential influence on landscape and visual amenity. To this end, the Proposed Development has been designed to achieve the following landscape objectives:

- Land clearance and occupation would be limited to necessary areas only to minimise the geographic spread of the infrastructure and limit the potential impact on the local landscape fabric.
- In terms of colour and materials, the Battery Storage units would be painted with a recessive colour (dark green, or similar approved) to assist blending in with the surrounding landscape;
- Proposed native planting would incorporate the creation of new parcels of woodland edge around peripheral parts of the Site. With reference to **Figure 4**, this includes planting of native broadleaved trees / scrub specimens. This would provide a natural context to the proposed buildings (reflective of the existing nature of tree cover with local provenance), whilst also providing additional habitat type and further visual screening. The species selected would be native, such as Alder, Birch, Oak, Rowan, and or similar.
- New areas of hedging would provide further containment and partial screening of proposed built form within the Site. The species selected would be native, such as Hawthorn, Blackthorn and Blackberry.

- In addition, the creation of species-rich grassland / meadow (comprising meadow mix in accordance with the Site context) would further soften the appearance of the Proposed Development and provide enhancement to local biodiversity.

The landscape mitigation proposals have informed and integrated with the biodiversity aspirations as set in the Biodiversity Management Plan[2].

7 ZTV and Viewpoint Analysis

- The potential landscape and visual effects arising from the Proposed Development have been analysed in two ways:

- Zone of Theoretical Visibility (ZTV) map analysis, to provide a general overview of the geographical extent of visibility of the Proposed Development within the Study Area; and
- Analysis of the potential effects at key viewpoints.

7.0 Zone of Theoretical Visibility Analysis

- Theoretical visibility mapping of the Proposed Development is illustrated in **Figure 1**. The ZTV illustrates the maximum overall visibility based on a battery storage height of 2.6m and transmission comms house height of 7m. The ZTV has been prepared on the basis of 'bare ground' and does not take into account the potential screening effects of surrounding vegetation / forestry.

- With reference to the ZTV, visibility will be afforded to a number of areas within the immediate context of the Site. Areas to the south, north and east have the most continuous coverage, there would be limited ZTV coverage in the east including Spennymoor.

7.1 Viewpoint Analysis

- Viewpoint analysis has been carried out on a selection of key viewpoint locations to assess the likely level of effects arising as a result of the Proposed Development. With reference to the geographical extent of visibility illustrated within the ZTV, a total of 10 viewpoints have been selected as being representative of the main views from publically accessible locations within the Study Area (see Viewpoint Location Map and Visualisations 1-10). The viewpoint analysis takes cognisance of the landscape mitigation measures; including recessive colour of battery storage units (dark green) and peripheral native planting proposals.

<u>Viewpoint 1: View looking south east from A688 (Thinford Lane)</u>

Existing View

- This viewpoint is located on the footpath at A688 (Thinford Lane), at approx. 50m from the Proposed Development. The existing view consists of the route corridor, roadside vegetation, fences and agricultural fields. The higher ground of the Limestone Escapements LCT forms the landform horizon in the east and south east. An existing overhead transmission line is

[2] *Outline 30-Year Biodiversity Management & Monitoring Plan, Barrett Environmental Feb 2023.*

visible in the foreground which links to existing substation.

Predicted View

- The Proposed Development would be visible in construction at close range, on the flat landform and would occupy a large proportion of the view. As the proposed hedgerow and tree planting within the Site establishes over time, views of the proposed infrastructure would be all but screened.

Effects on Visual Amenity

- The sensitivity of walkers is high with road users being Medium at this location. The magnitude of change would be Moderate based on the close proximity and open nature of the view to the south east, The resultant level of effect would be Major/Moderate for walkers, notable and Moderate for car users.
- After approximately fifteen years post-completion the establishment of the native hedgerow and tree planting along the Site boundary would result in the near-complete screening of the proposed infrastructure beyond. As a result, the level of effect would reduce to Moderate, not notable.

Landscape Effects

- The Lowland Valley Terraces is assessed as being of Medium sensitivity to the Proposed Development (**Appendix B**). The Proposed Development would introduce additional elements of built form to the local agricultural landscape, albeit in the context of existing elements of infrastructure including substation and transmission lines, roads etc. At this proximity, the Proposed Development would represent a recognisable feature within open views. The magnitude of change would be Substantial-Moderate and the effect on landscape character would be Major/Moderate, notable.

<u>Viewpoint 2 – View looking north east from footpath 3</u>

Existing View

- This viewpoint is located on a footpath which connects Thinford Lane with East Howle Farm at approx. 142m from the Proposed Development. The existing view consists of predominantly agricultural fields and hedgerows. The skyline is punctuated in the foreground by overhead transmission line and associate pylon towers.

Predicted View

- The Proposed Development would be partially visible in the centre of the view on the intermediate horizon. The proposed battery storage units would be predominately screened by the intervening land form.

Effects on Visual Amenity

- The sensitivity of walkers is high and the magnitude of change would be Moderate based on the proportion of view affected. The resultant level of effect would be Moderate.

Landscape Effects

- The Lowland Valley Terraces is assessed as being of Medium sensitivity to the Proposed Development. The Proposed Development would introduce additional elements of built form to the local landscape, which is already characterised by elements of infrastructure. The Proposed Development would augment the presence of existing built form within the view without increasing the overall spread across the wider landscape. On balance, the magnitude of change to local landscape character would be Moderate.

Viewpoint 3: View looking west from A688 (Thinford Lane)

Existing View

- This viewpoint is located on the footpath adjacent to A688 (at approx. 180m) from the Proposed Development. The existing view consists of the agricultural fields, hedgerow vegetation and scattered trees. Ferryhill is visible in the distance (on the left of the view) with the A688 corridor vegetation visible on the right. An existing overhead transmission line is visible in the foreground which links to existing substation.

Predicted View

- The Proposed Development would be visible in the centre of the view against the background landscape and tree cover. Views would be in the context of existing overhead transmission lines and associated pylon towers. As the proposed woodland planting within the Site and establish over time, views of the proposed infrastructure would be progressively filtered.

Effects on Visual Amenity

- The sensitivity of walkers is high and the magnitude of change would be Moderate based on the proportion of view affected. The resultant level of effect would be Moderate.

Landscape Effects

- The Lowland Valley Terraces is assessed as being of Medium sensitivity to the Proposed Development. The Proposed Development would introduce additional elements of built form to the local agricultural landscape, albeit in the context of existing elements of infrastructure and human activity. At this proximity, the Proposed Development would represent a recognizable feature within open views. The magnitude of change would be Moderate and the effect on landscape character would be Moderate, not notable.

Viewpoint 4: View looking north west from footpath 2a near Cookson's Green

Existing View

- This viewpoint is located from a footpath near Cookson's Green residential property at 486m distance. The existing view consists of undulating farmland with trees and hedgerows The skyline is punctuated by overhead transmission lines and associate pylon towers,
- Predicted View
- Views of the Proposed Development would be predominately screened by landform, the

layout infrastructure heavily filtered by vegetation on the immediate horizon.

Effects on Visual Amenity

- The sensitivity of walkers is assessed as being High at this location. The magnitude would be Negligible based on the limited extent of view affected. The resultant level of effect would be Minor, not notable.

Viewpoint 5: View looking south east from Minor Road, Hett Mill

Existing View

- This viewpoint is located on a minor road near Hett Mill at approx. 554m to the north west of the Proposed Development, and representative of views experienced by residents and road users. The existing view looks south east and the foreground consists of undulating farmland with mature hedgerows and scattered trees. The skyline is punctuated by overhead transmission lines and associate pylon towers which connect the existing substation.

Predicted View

- Views of the Proposed Development would be limited due to a combination of intervening landform and tree/hedgerow cover. Views would be in the context of other man modified elements including transmission lines and associate pylon towers.

Effects on Visual Amenity

- The sensitivity of residents is High and road users is Medium. The magnitude would be Slight based on the extent of intervening land form and the tree cover. The resultant level of effect would be Moderate for residents and Moderate/Minor for road users, not notable. By Year 5, the native tree planting within the Site would further soften the appearance of the Proposed Development. The resultant level of effect would reduce to Moderate/minor for residents and Minor for road users.

Landscape Effects

- The Lowland Valley Terraces LCT is assessed as being of Medium sensitivity to the Proposed Development. The Proposed Development would represent a relatively distant feature, partially screened beyond intervening elements in infrastructure. On balance, the magnitude of change on landscape character would be Negligible and the effect on landscape character would be Minor/negligible, not notable.

Viewpoint 6: View looking south east from Leemans Lane, Hett

Existing View

- This viewpoint is located on a minor road near Hett Mill at approx. 1913m to the north west of the Proposed Development, and representative of views experienced by residents and road users. The existing view looks south east and the foreground consists of undulating farmland with mature hedgerows and scattered trees. The skyline is punctuated by overhead transmission lines and associate pylon towers which connect the existing substation.

Predicted View

- Views of the Proposed Development would be predominantly screened by landform against the background landscape with layout components occupying a limited proportion of the view and in the context of other man modified elements including transmission lines and associated pylon towers.

Effects on Visual Amenity

- The sensitivity of walkers and residents is high with road users being Medium at this location. The magnitude would be Negligible based on the limited extent of view affected. The resultant level of effect would be Minor, not notable.

- After approximately fifteen years post-completion the establishment of the native hedgerow and tree planting along the Site boundary would result in the near-complete screening of the proposed infrastructure beyond. As a result, the level of effect would reduce to Moderate, not notable. By Year 5, the native tree planting within the Site would further soften the appearance of the Proposed Development.

<u>Viewpoint 7a: View looking north east from Ferryhill (footpath 3)</u>

Existing View

- This viewpoint is located on a footpath at the edge of Ferryhill at approx. 1646m to the south west of the Proposed Development, and representative of views experienced by walkers. The existing view looks north east and the foreground consists of undulating farmland with mature hedgerows and scattered trees. The existing overhead transmission lines, pylon towers and associated substations are prominent features in the foreground.

Predicted View

- Views of the Proposed Development would be against the background landscape with layout components occupying a limited proportion of the view and in the context of other man modified elements including transmission lines and associated pylon towers.

- As the proposed woodland planting within the Site trees establish over time, views of the proposed infrastructure would be progressively filtered.

Effects on Visual Amenity

- The sensitivity of walkers this location is assessed as being High. The magnitude would be Slight based on distance and open nature of the view. The resultant level of effect would be Moderate for walkers. By Year 5, the native tree planting within the Site would further soften the appearance of the Proposed Development.

<u>Viewpoint 8: View looking north west from Ferryhill (minor road)</u>

Existing View

- This viewpoint is located from a minor road at 1321m distance. The existing view looking north west is open and expansive, the foreground consists of undulating farmland with

hedgerows and scattered trees with background hills forming a distant horizon.

Predicted View

- Views of the Proposed Development would be against the background landscape and in the context of other man modified elements including the substation, transmission lines and associated pylon towers. The proposed infrastructure would be experienced well below the horizon, and would be back-clothed by a mix of farmland and shelterbelt, reducing its visual influence.
- As the proposed woodland planting within the Site trees establish over time, views of the proposed infrastructure would be progressively filtered.

Effects on Visual Amenity

- The sensitivity of road users at this location is assessed as being Medium. The magnitude would be Slight due to the limited proportion of the view occupied. The resultant effect experienced by road users would be Moderate/Minor, not notable in this instance based on open nature of the views and limited extents. By Year 5, the native tree planting within the Site would further soften the appearance of the Proposed Development. The resultant level of effect would reduce to Minor for road users.

Viewpoint 9: View looking north west from Footpath to Ferryhill Carrs Nature Reserve

Existing View

- This viewpoint is located on a footpath leading Ferryhill Carrs Nature Reserve at 1506m distance. The existing view looking north west is relatively open, the foreground consists of undulating farmland with hedgerows and scattered trees. The existing overhead transmission lines and pylon towers are prominent features above the horizon in views to the north west.

Predicted View

- Views of the Proposed Development would be against the background landscape and occupy a small proportion of the view and in the context of other man modified elements including transmission lines and associated pylon towers.
- As the proposed woodland planting within the Site trees establish over time, views of the proposed infrastructure would be progressively filtered.

Effects on Visual Amenity

- The sensitivity of walkers this location is assessed as being High. The magnitude of change would be Slight at most based on the proportion of the view occupied and nature of views against the background landscape. The resultant effect experienced by walkers would be Moderate, not notable.
- By Year 5, the native tree planting within the Site would further soften the appearance of the Proposed Development. The resultant level of effect would reduce to Moderate/minor.

Viewpoint 10: View looking west from Footpath at Cornforth

Existing View

- This viewpoint is located on a footpath near Cornforth at 1993m distance. The existing view looking west consist of undulating farmland with nature hedgerows and scattered trees. The existing overhead transmission lines and pylon towers are prominent features above the horizon in views to the west.

Predicted View

- Views of the Proposed Development would be limited due to a combination of intervening landform and tree/hedgerow cover. Views would be in the context of other man modified elements including transmission lines and associate pylon towers.

Effects on Visual Amenity

- The sensitivity of walkers is High. The magnitude would be Negligible based on the extent of intervening land form and the tree cover. The resultant level of effect would be Moderate/Minor for road users, not notable. By Year 5, the native tree planting within the Site would further soften the appearance of the Proposed Development. The resultant level of effect would reduce to Minor.

8 Construction Stage Effects

- Whilst it is the operational stage of the Proposed Development that would give rise to prolonged landscape and visual effects, temporary effects at the construction stage (12 – 18 months) would also occur based on the following operations:
    - Erection of temporary perimeter fencing;
    - Installation of temporary construction compound (including storage and welfare facilities);
    - Creation of temporary laydown areas;
    - Site clearance and excavation works for foundations;
    - Increased vehicular movement within the Site;
    - Gradual introduction of proposed building; and
    - Reinstatement works, including the removal of the temporary accommodation.
- The works detailed above would give rise to some landscape and visual effects. The detailed construction programme is not known at this stage. These effects would however be temporary and would mainly arise through the gradual introduction of proposed buildings within the Site. The effects arising from other operations, including the vehicle movement, construction of the fencing and excavation works would be localised, and whilst potentially visible, would not appear prominently in views from the surrounding areas. As such, the construction phase effects would be limited in extent and duration.

8.0 **Construction Stage Landscape Effects**

- During the construction stage, some pasture land and grassland within the Site would be removed. There would be localised areas of excavation required for the access road, and foundations of the building resulting in a change to the current landscape fabric within the Site. However, there would be loss of 4 trees as a result of the new access and no loss of other landscape features of value within the Site. The magnitude of change on landscape fabric (which is considered to be of Medium sensitivity would be Moderate, resulting in a Moderate effect, not notable.

- In terms of landscape character; the construction stage effects would be limited to a very localised part of the Lowland Valley Terraces LCT, which is considered to be of Medium sensitivity to the Proposed Development with reference to **Appendix B.** The magnitude of change associated with the disturbance of the existing ground cover and additional presence of vehicles within the Site would be tempered by the working nature of the agricultural landscape which predominates throughout the locality, and the close geographical location of the Site in relation to the existing substation. Within such landscapes, vehicle movements and variations in field-pattern colour and texture (including the turnover of topsoil) is considered to be a standard occurrence. On balance, the magnitude of change during the construction stage would be Slight, resulting in a Moderate/minor effect.

8.1 **Construction Phase Effects on Visual Amenity**

- The visual effects of the activities during the construction phase would be temporary, intermittent and limited to localised areas.

- In more open views, the construction activities would be experienced within a local context comprising large scale pylons, electricity substation and existing roads. Views would be predominantly limited to residents in isolated dwellings and walkers in closest proximity to the Site (of High sensitivity) and road users of Medium sensitivity.

- Along with the site clearance, excavation activities, material storage and an increase in traffic movement at the Site, the visual effects would occur primarily from the gradual appearance of the buildings within the landscape (which are considered in Section 10). The influence of construction activities on existing views would be tempered by the introduction of new areas of planting within the Site. The effects would be further reduced through good site management and the temporary nature of the construction activities. On balance, the visual magnitude of change during the construction phase would be Slight, resulting in a Moderate effect at most on nearby receptors.

9 Landscape Effects

- This section examines the effects arising as a result of the Proposed Development with reference to landscape fabric within the Site, landscape character and landscape designations.

9.0 Effects on Landscape Fabric

- The landscape within the Site comprises working agriculture, which is void of any notable features of landscape value, and accordingly is assessed as being of Medium sensitivity to the Proposed Development.
- The Proposed Development would result in the permanent loss of a small area of farmland within the Site (approximately 4.1Ha) and its replacement with the proposed Battery Storage units, and associated infrastructure. This would be located within an expansive area of open farmland. Upon completion of the works, any areas of disturbed ground within the Site would be reinstated to species-rich grassland / meadow at the first available season, and would establish rapidly thereafter (Refer to Figure 4 and 5). The Proposed Development would also incorporate new areas of native tree and hedgerow planting, which would represent the addition of beneficial landscape features to the locality that would exert increasing influence over time as they become more established.
- The magnitude of change upon the fabric within the Site would be Substantial, giving rise to a Major effect, which is considered to be notable in this instance based on the overall footprint of development. Whilst the loss of pasture land and its replacement with hard-standing and built form is regarded as adverse, the introduction of new areas of meadow habitat and native trees / hedgerow represents a beneficial change.

9.1 Effects on Landscape Character

- The effect of the Proposed Development on landscape character largely depends on the key characteristics of the receiving environment; the degree to which the development may be considered to be consistent with or at odds with it; and how the proposal would be perceived within its setting.

Effects on Lowland Valley Terraces LCT

- The Proposed Development would be located within the Lowland Valley Terraces LCT. With reference to sensitivity analysis within **Appendix B**, the Lowland Valley Terraces LCT LCT is assessed as being of Medium sensitivity to the Proposed Development. The effects on this LCT would be direct (predominantly affecting the Site itself) and indirect (affecting the visual and perceptual characteristics of the wider landscape). Based on field analysis it is assessed that the local context surrounding the Proposed Development is substantially influenced by existing electricity infrastructure. This includes the existing substation and associated pylons and overhead power lines extending outwards to north west and east.
- In terms of direct effects, existing ground cover in the locality of the Site comprises of pasture or working agriculture. As such, there would be no notable loss of valued natural features to facilitate introduction of the proposed buildings or associated infrastructure. The existing field pattern in the surrounding vicinity of the Site would be retained. The proposed access route would make use of an existing road and follow the existing field boundaries, hence would be

assimilated with the existing pattern of development and would not result in any notable loss of landscape elements. With reference to Figure 4 and 5, the Proposed Development would incorporate the planting of native trees and hedgerows within the Site, which would represent beneficial elements within the local landscape, whose influence on landscape character would steadily increase over time in accordance with their establishment.

- In terms of indirect effects, ZTV coverage is relatively continuous across local parts of the LCT within 1km, beyond which ZTV coverage is predominantly limited to more elevated geographic areas to the north / northeast. There would be no views of the Proposed Development from expansive parts of the LCT to the north west. As such, indirect effects resulting from the introduction of the Proposed Development would be limited to relatively localised geographic areas.
- Within more open views the Proposed Development would represent a new element of built form within the landscape, however as illustrated in Viewpoints 1,2 and 5, the local landscape is strongly influenced by existing hedgerows which would result in heavily filtered views. As such, the introduction of the Proposed Development would exert limited influence on local landscape character. Instead, it would augment the existing built form in the vicinity and further reinforce the presence of electrical infrastructure as a characteristic within the immediate locality.
- With reference to the characteristic *'An open landscape, broad in scale,'* the Proposed Development would exert limited influence. The undulating nature of the landform in combination with the relatively low height of the Proposed Development would ensure that the proposed built form would typically be experienced below the horizon, hence exert extremely limited influence upon the landscape.
- In summary, at a localised level within approximately 200m of the Site, the magnitude of change would typically be Moderate and the level of effect would be Moderate (notable in this instance). These effects would diminish abruptly at greater distances due to the containing influence of the existing landform and tree cover, and due to the presence of existing large-scale electricity infrastructure. Accordingly, across wider parts of the LCT the magnitude of change would typically be Negligible, and the resultant effect would be Minor, not notable.

<u>Limestone Escarpment LCT</u>

- The Limestone Escarpment LCT is located 250m to the southeast of the Proposed Development and is considered to be of Medium sensitivity to the Proposed Development.
- ZTV coverage is intermittent due the undulating nature of the landscape with the main concentration of visibility located between The Site and Ferryhill in the south and Carnforth in the south east. The effects of intervening topography at local level are illustrated in Viewpoint 5 and at longer distances, the Proposed Development would represent a relatively

distant element in the farmed landscape to the north (Viewpoint 7,8 and 9). It would be experienced in close proximity to existing substation and overhead power lines.

- On balance, the magnitude of change would be Slight and the effect on landscape character would be Minor, not notable. The vast majority of the Limestone Escarpment LCT would be completely unaffected.

9.2 **Effects on Landscape Designations**

Effects on AHLV (Ferryhill)

- The Area of Higher Landscape Value is located at approx. 1150m to the south east of the Proposed Development and extends further south east beyond 5km. ZTV coverage within the designation would be intermittent, from closest locations (between 1150m and 1500m) views of the Proposed Development would be relatively open from areas of high ground, with the infrastructure viewed against the background landscape and tree cover (refer to Viewpoint 9). Views of the Proposed Development from other locations within 2000m would be partially screened by intervening landform and filtered by interbeing hedgerow and tree over.

- On balance, the magnitude of change would be Slight and the effect on landscape character would be Minor, not notable. The vast majority of the Area of Higher Landscape Value would be completely unaffected.

Effects on AHLV (Croxdale and Hett)

- The Croxdale and Hett Area of Higher Landscape Value is located at approx. 1300m to the north of the Proposed Development and extends beyond 5km to the north west. ZTV coverage within the designation would be intermittent, partially screened by intervening landform (refer to Viewpoint 6). In addition, a combination of intervening hedgerows and tree cover would filter views.

- On balance, the magnitude of change would be Slight and the effect on landscape character would be Minor, not notable. The vast majority of the AHLV designator would be unaffected. By Year 5, the establishing native hedgerow and tree planting within the Site would contribute to further filtering of views and the resultant level of effect would reduce to Negligible, notable in this instance based on proximity of view.

10 Visual Effects

- This section examines the visual effects based on changes to the existing view as experienced by people within the surrounding landscape (as described in Section 10). This process draws on the results of the ZTV and viewpoint analysis.

10.0 Visual Effects Experienced by Local Residents

- The Appraisal below considers the effects experienced by local residents in settlements, as well as those in isolated residential dwellings / steadings in closest proximity to the Site. In all cases, sensitivity is deemed to be High.

Metal Bridge

- The hamlet of Metal Bridge is located approx. 562m to the north west which consist of a row of properties centred on Bridge Street. With reference to the ZTV, views of the Proposed Development would be limited and confined to dwellings in the west of the settlement. Views towards the Proposed Development would be limited due to the concentration of tree cover.

East Howle Traveller Site

- East Howle is located at approx. 810m to the south of the Proposed Development. Views are generally open to the north of the dwellings with intervening landform and hedgerows resulting partially screened and filtered views and the magnitude of change would be Slight, and the level of effect would be Moderate, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting along the southern Site boundary.

Thinford

- Thinford is a small hamlet centered on the A167 Road at 880m to the west of the Proposed Development. Views would be partially screened by the existing substation and heavily filtered by intervening tree cover and hedgerows around the settlement. The magnitude of change would be Negligible based on intervening screening

Carnforth

- Carnforth is located at approx. 1500m to the south east of the Proposed Development. With reference to the ZTV, views of the Proposed Development would be relatively widespread, although a combination of intervening topography and tree cover/ hedgerows would result in limited visual impacts. The Proposed Development would be viewed against the background landscape, in the context of open views to the north east. The magnitude of change would be Slight, and the level of effect would be Moderate, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting along the southern Site boundary.

Ferryhill

- Ferryhill is located at approx. 1500m to the south of the Proposed Development. With reference to the ZTV, views of the Proposed Development would be limited to the northern edge of the settlement (Refer to Viewpoints 7 & 8). The Proposed Development would be viewed against the background landscape, in the context of open and expansive views. The magnitude of change would be Slight, and the level of effect would be Moderate, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment

of native tree planting along the southern Site boundary.

Coxhoe

- Coxhoe is located approx. 2800m to the east, ZTV coverage would be widespread but views would be limited as result of existing tree cover both around the settlement and within the intervening grassland/farmland. The magnitude of change would be Negligible and the resultant effect would be Minor.

Isolated Residential Dwellings / Steadings

Cookson's Green Farm

- Cookson's Green Farm is located at approx. 490m from the Proposed Development to the south east. The front of the house faces south and there would be partially screened views towards the Proposed Development to the north, due to intervening farm buildings (Refer to Viewpoint 4). There would be more open views from the access track, although a combination of intervening landform and hedgerows would contribute to partially screened and filtered views of the Proposed Development. The magnitude of change based on views from wider parts of the curtilage would be Slight, and the level of effect would be Moderate, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting along the southern Site boundary.

School House

- The school house (two dwellings) is located at approx. 510m from the Proposed Development to the south east on a minor road which connects A688 to Ferryhill. The front of the properties faces south east and there would be filtered and partially screened views from the rear towards the Proposed Development to the north west. Existing curtilage vegetation combined with intervening landform and hedgerows will limit visibility and the magnitude of change would be Slight, and the level of effect would be Moderate, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting along the southern Site boundary.

Pine Road

- Pine Road consist of a row of 13 dwellings located on a minor road which connects A688 to Ferryhill at approx. 540m to the south east of the Proposed Development. The front of the dwellings faces south east and although there are open views to the north west, the intervening landform would partially screen views. The magnitude of change would be Slight, and the level of effect would be Moderate, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting along the southern Site boundary.

- Hett Farm

- Hett Farm is located at approx. 650m from the Proposed Development and consist of a farmhouse with associated farm buildings and mature curtilage vegetation (south). The front

of the house faces south and views would be heavily filtered by curtilage vegetation, in addition intervening hedgerows and tree cover would contribute to the filtered views. The magnitude of change would be Slight, and the level of effect would be Moderate, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting within The Site (refer to viewpoint 5)

- East Howle Farm
- Hett Farm is located at approx. 700m from the Proposed Development and consist of a farmhouse with associated farm buildings. The ZTV coverage would be intermittent due to intervening landform with visibility confined predominately to the access track. The magnitude of change would be Negligible based on the limited proportion of the view occupied and the nature of views against the background landscape.

10.1 **Visual effects experienced by Recreational Receptors**

- Recreational receptors are considered to be of High sensitivity in all cases.

Ferryhill (Path Ref number 3)

- Ferryhill Path 3 connects the A688 (Thinford Lane) with Ferryhill in the south (1800m) and the route abuts the western site boundary. There would be views of the Proposed Development at close range and up to 200m, the battery storage units and other layout components would be viewed against the background landscape (See Viewpoint 1). The magnitude change for this localised section of the route would range between Major and Moderate resulting Moderate/Substantial and Substantial visual effects, which would be notable and subject to tree cover at the eastern boundary. The visual effects would reduce at greater distance (beyond 200m) due the level of intervening landform and tree cover as illustrated in Viewpoint 2. The magnitude of change would be Slight and the level of effect would be Moderate. In accordance with the gradual establishment of planting within the Site, these effects would diminish further over time.
- Although the ZTV indicates visibility coverage on sections of the path at longer distance, views of the Proposed Development would be against the background landscape with layout components occupying a limited proportion of the view and in the context of other man modified elements including transmission lines and associated pylon towers. The magnitude of change would be Negligible based on the limited proportion of the view occupied and the nature of views against the background landscape. The resultant effect experienced by walkers would be Minor, not notable, refer to Viewpoint 7.

Croxdale & Hett (Path Ref number 31)

- Croxdale & Hett Path 31 is routed through farmland connects the A688 (Thinford Lane) with minor road at Hett Lane to the north of the Proposed Development. ZTV coverage would be intermittent and views would be experienced at distance of between 300 and 600m with layout infrastructure being viewed against the background landscape. Views would be

partially screened by landform from some sections of the path and filtered by intervening hedgerows and tree cover. (Refer to Viewpoint 5). The magnitude of change would be Slight and the level of effect would be Moderate. In accordance with the gradual establishment of planting within the Site, these effects would diminish further over time.

Ferryhill (Path Ref number 4)

- Ferryhill Path 4 is routed through farmland and connects the A688 (Thinford Lane) with Ferryhill to the south and at its closest point is 490m to the west of the Proposed Development. Views would be limited from closest sections of the route due to the intervening substation and there would partially screened views up to distances of 1km due to intervening landform. There would be more open views to the north west towards the Site beyond 1km and towards Ferryhill due to the increased elevation. In more open views the Proposed Development would represent a very minor feature in the background landscape, part-screened and experienced beyond existing overhead lines. The magnitude of change would be Negligible and the level of effect would be Minor. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.

Ferryhill (Path Ref number 2 & 2a)

- Ferryhill Path 2 & 2a is routed between residential properties at Pine Road and Ferryhill to the south and south east of the Proposed Development. There would be relatively open views towards The Site between Pine Road and Cookson's Green farm at distances of between 460m and 560m, the Proposed Development would be viewed against the background tree cover and filtered by intervening hedgerows. The magnitude of change would be Slight and the level of effect would be Moderate. By Year 5, the native tree planting within the Site would further soften the appearance of the Proposed Development. The resultant level of effect would reduce to Moderate/Minor for walkers.

- Views from sections of the route near Cookson's Green farm up to 1000m would be limited due to intervening landform (refer to Viewpoint 4). The magnitude of change would be Negligible and the level of effect would be Minor. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.

- The footpath increases in elevation beyond 1000m towards Ferryhill, where views would be more open, the Proposed Development would represent a very minor feature against the background landscape. The magnitude of change would be Negligible and the level of effect would be Minor. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.

Croxdale & Hett (Path Ref number 28)

- Croxdale & Hett Path 28 is routed through farmland and connects the A688 (Thinford Lane) with a minor road near A167 and at its closest point the footpath is 690m to the north west of the Proposed Development. Views of the Proposed Development from the closest sections of the route would be limited due to existing substation infrastructure and tree cover. Views would be more open from sections of path at longer distance up to 1200m, the Proposed Development visible against the background landscape and heavily filtered by intervening tree cover and hedgerows. The magnitude of change would be Negligible and the level of effect would be Minor. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.

Croxdale & Hett (Path Ref number 29)

- Croxdale & Hett Path 29 is routed through farmland and connects path 28 with a minor road at Hett Moor, and at its closest point the footpath is 820m to the north west of the Proposed Development. Views of the Proposed Development would be heavily filtered by intervening tree cover and hedgerows and occupy a limited proportion the view. The magnitude of change would be Negligible and the level of effect would be Minor. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.
- Ferryhill (Path Ref number 15)
- Ferryhill Path 15 is a short section pf path located at Metal Bridged to the north east of the Proposed Development (at 900m distance). Views would be limited due to the concentration of mature hedgerows located at the at the adjacent minor road. The magnitude of change would be Negligible and the level of effect would be Minor. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.

10.2 **Visual effects experienced by Vehicular Receptors**

- The sensitivity of road users is considered to be Medium in all cases unless otherwise stated.

A688

- This road connects Spennymoor in the west with the M1 in the north east and abuts The Site boundary. There would be views of the Proposed Development at close range and up to 200m, although visibility would be heavily filtered by mature hedgerow vegetation along the road corridor, resulting in heavily filtered and intermittent views (See Viewpoints 1 and 3). The layout components would be predominantly viewed against the background landscape and tree cover, and in the context of existing overhead power lines and substation. The magnitude of change from locations at close range would be Moderate based on the close proximity, and subject to hedgerow cover along the route, the resultant level of effect would

be Moderate for car users. After 5 years post-completion the establishment of the native hedgerow and tree planting along the Site boundary would result in the near-complete screening of the proposed infrastructure beyond. As a result, the level of effect would reduce to Moderate, not notable.

- Views from wider section of the route would be more limited, due to effects of screening offered by existing substation, landform and tree/hedgerow cover. The magnitude of change from sections at longer distance would be Slight at most and the level of effect would be Moderate/minor at most. These effects would diminish further over time in accordance with the establishment of planting within the Site, and would be Minor along these localised sections by Year 5. For the majority of the route there would be no views and no effect.

Unclassified Road (A688 to Ferryhill)

- This road connects the A688 with Ferryhill in the south, and at its closest point is 520m from the Proposed Development. ZTV coverage would be intermittent with the layout infrastructure viewed against the background landscape and often filtered by roadside hedgerow vegetation. From closest sections of the route the magnitude of change would be Slight, and the level of effect would be Moderate/Minor, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting along the southern Site boundary.
- Views from more elevated route sections near Ferryhill (see Viewpoint 8) where there are clear views would result in Slight magnitude of change and the level of effect would be Moderate/Minor, not notable. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting along the southern Site boundary.

Unclassified Road (A688 to Hett)

- This road connects the A688 with the settlement of Hett to the north west, and at its closest point is 600m from the Proposed Development. ZTV coverage would be intermittent with the layout infrastructure viewed against the background landscape and often filtered by roadside hedgerow and vegetation within intervening farmland. From closest sections of the route near the A688, there would be heavily filtered views of the layout infrastructure which would be viewed against the background landscape. At longer distances up to 600m, views would be partially screened due to intervening landform (refer to Viewpoint 5) and overall, from these sections of the route the magnitude would be Slight based on the extent of intervening land form and the tree cover. The resultant level of effect would be Moderate/Minor for road users, not notable. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.
- Views from sections of the route at longer distance towards the settlement of Hett would be intermittent due to intervening landform and often in the context of wide and expansive views. The magnitude of change would be Negligible and the level of effect would be Minor.

These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.

- A167
- This road connects the Croxdale with Ferryhill in the south, within the 2km Study Area and at its closest point is 1010m from the Proposed Development. ZTV coverage would be intermittent, and views from the closest sections of the route would be partially screened by built features within the settlement and existing substation.
- Views from sections of the route at longer distance towards the settlement of Ferryhill would be intermittent due to intervening landform, road corridor vegetation and in the context of wide and expansive views. The magnitude of change would be Negligible and the level of effect would be Minor. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established. By Year 5, the Proposed Development would be barely discernible.

The East Coast Main Line

- This rail route is located at 1050m at the closest point from the Proposed Development, ZTV coverage would be limited, and views from the closest sections of the route would be partially screened by corridor cutting/embankments and filtered by intervening vegetation. to intervening landform, road corridor vegetation and in the context of wide and expansive views. The magnitude of change would be Negligible and the level of effect would be Minor. These effects would diminish further over time as the tree and hedgerow planting within the Site becomes more established.

11 Cumulative Effects

- This section examines the potential cumulative effects of the Proposed Development in combination with other large-scale elements of infrastructure and power developments within the Study Area. In this instance, the assessment includes consideration of the following sites:

- Existing overhead power lines extending broadly north-west and east from the substations;
- Existing substations (A688) located between 60m and 300m from the Proposed Development;
- Consented Battery Storage Facility (DM/22/00120/FPA) located 200m to the south west from the Proposed Development
- Landscape and visual receptors described within the main LVA as undergoing / experiencing a Negligible or Slight/Negligible magnitude of change (or less) are excluded from consideration in the cumulative assessment on the basis that the Proposed Development would exert such a limited effect in its own right that it would not meaningfully contribute to potential cumulative effects, and as such would not tip the balance from a minor cumulative effect to a

notable cumulative effect.

- The following assessment describes the combined cumulative effects of the Proposed Development with other infrastructure development. The effects in association with existing developments can be considered certain, and those with consented developments are considered very likely. The potential cumulative effect in combination with other planning proposals are inherently less certain, based on the final outcomes of such applications. As such, the cumulative assessment is subdivided into those with existing development, existing and consented development, and those with existing, consented and proposed schemes.

11.1 Cumulative Landscape Effects

- Cumulative Effects on the Lowland Valley Terraces LCT
- Cumulative Effects with Existing Development
- In addition to the Proposed Development; the existing substation and associated sections of overhead power lines, are all located within the Lowland Valley Terraces LCT, thus exerting direct effects upon local landscape character in their own right. With reference to the preceding assessment of effects on landscape character (described in Section 10.1), the primary effects of the Proposed Development on the Lowland Valley Terraces LCT would be focused within approximately 200m (where the magnitude of change would typically be Moderate and the level of effect would be Moderate).
- There would be some coalescence of these effects with the characterising influence currently exerted by the adjacent sub stations and associated sections of overhead power lines. The influence of these existing elements of infrastructure is restricted to some extent by surrounding undulating landform and vegetation. The Proposed Development would augment the presence of the existing infrastructure / activity in the local landscape, and extend its influence slightly further to the east of the existing substation. However, the combined cumulative effects would remain relatively localised due to surrounding tree cover and landform.
- In summary, the Proposed Development would contribute to cumulative effects in combination with the existing Substations and sections of overhead power lines. However, the net result would be to slightly extend the characterising influence of existing power-related infrastructure in an easterly direction. The close geographical proximity of the Proposed Development to the existing infrastructure is such that the characteristics of the wider Lowland Valley Terraces LCT would remain predominantly unchanged. The cumulative magnitude of change across the LCT as a whole would be Slight based primarily on the presence of substations, and the associated spread of overhead power lines. The Proposed Development would exert very limited incremental cumulative influence. The cumulative level of effect across the Lowland Valley Terraces LCT would be Moderate/minor, not notable.

- Cumulative Effects with Existing, Consented and Proposed Development
- The consented Battery Storage development is located approx. at 230m from the Proposed Development to the south west within the Lowland Valley Terraces LCT. The cumulative influence of this development would be extremely limited due to their limited scale and close proximity to the existing substation. Instead, these developments would be assimilated with existing large scale spread of infrastructure in the locality and exert minimal incremental cumulative influence. Based on the addition of the Proposed Development to a scenario comprising existing, consented and other proposed schemes, there would be no notable change to the level of effect described above.

11.2 **Cumulative Visual Effects**

Residents - Cookson's, Pine Road & Schoolhouse properties.

- Cumulative Effects with Existing Development
- There are views of the substation and associated pylons/overhead lines from residents at Cooksons, Pine Road & Schoolhouse properties. The scale of these existing features contributes to the pre-existing effects, which are Slight resulting in Moderate cumulative effects, which are not notable. The addition of the Proposed Development would incrementally add (as an additional feature) to the cumulative effects. Based on the combined views of the Proposed Development and the existing overhead transmission lines and pylons, there would be no change to the level of effect described in Section 10.
- Cumulative Effects with Existing Development and Consented Development
- There would be views of the consented development to east, which would be partially screened by intervening landform and filtered by hedgerow vegetation. Based on the addition of the Proposed Development to a scenario comprising existing and consented development, there would be no notable change to the level of effect described above.

Residents Hett Farm

- Cumulative Effects with Existing Development
- There are heavily filtered views of the substation and associated pylons / overhead lines from residents at Hett Farm. Views of the substation are limited due both curtilage vegetation and mature tree cover at A688 corridor. The scale of these existing features contributes to the pre-existing effects, which are Slight resulting in Moderate cumulative effects, which are not notable. The addition of the Proposed Development would incrementally add (as an additional feature) to the cumulative effects. Based on the combined views of the Proposed Development and the existing overhead transmission lines and pylons, there would be no change to the level of effect described in Section 10. These effects would gradually reduce overtime in accordance with the gradual establishment of native tree planting within The Site.
- Cumulative Effects with Existing Development and Consented Development

- There would be limited views of the consented development, due intervening bult elements at existing substation and mature tree cover. Based on the addition of the Proposed Development to a scenario comprising existing and consented development, there would be no notable change to the level of effect described above.

Recreational Receptors Ferryhill (Path Ref number 3)

- Cumulative Effects with Existing Development
- There are views of the substation and associated pylons/overhead lines at close range at distances up 200m, with views being filtered by mature hedgerows at the eastern edge of the substation. The scale of these existing features contributes to the pre-existing effects, which are Moderate resulting in Major/Moderate cumulative effects, which are notable. The addition of the Proposed Development would incrementally add (as an additional feature) to the cumulative effects. Based on the combined views of the Proposed Development and the existing overhead transmission lines and pylons, there would be no change to the level of effect described in Section 10 for the closest sections of the route (up to 200m). These effects would gradually reduce overtime in accordance with the establishment of native tree planting within The Site. The combined effects would reduce from sections of the path beyond 200m, due to intervening landform and tree cover, with the Proposed Development occupy a limited proportion of the view.
- Cumulative Effects with Existing Development and Consented Development
- There would be views of the consented development at close range between East Howle Farm in combination with existing substation, which is heavily filtered by existing vegetation. There would be limited combined visibility with the Proposed Development from this section of the route due to intervening landform. Views of the consented development from the closest sections of route (from the Proposed Development) near A688 would be more limited due the screening effect of the existing substation.
- Based on the addition of the Proposed Development to a scenario comprising existing and consented development, there would be no notable change to the level of effect described above. The addition of the Proposed Development would add to the pre-existing notable cumulative effects from parts of the route, although viewed to the opposite direction from closest route sections.

Recreational Receptors Ferryhill (Path Ref number 31)

- Cumulative Effects with Existing Development
- There are views of the substation and associated pylons/overhead lines at distances of between 300m and 600m. Views would be partially screened by landform from some sections of the path and filtered by intervening hedgerows and tree cover contributes to the pre-existing effects, which would result in Moderate cumulative effects, which are not notable. The addition of the Proposed Development would incrementally add (as an

additional feature) to the cumulative effects. Based on the combined views of the Proposed Development and the existing overhead transmission lines and pylons, there would be no change to the level of effect described in Section 11.1.

- Cumulative Effects with Existing Development and Consented Development
- There would be limited views of the consented development due to intervening landform, substation features and tree cover. Based on the addition of the Proposed Development to a scenario comprising existing and consented development, there would be no notable change to the level of effect described above

Cumulative effects experienced by Vehicular Receptors A688

- Cumulative Effects with Existing Development
- There are views of the existing substation at close range, although mature tree cover heavily filters views. Similarly, there are clear views of overhead power lines, which extend across the carriageway.
- With reference to the main assessment, views of the Proposed Development would be restricted to the same localised sections, resulting in Moderate effects. On balance, the cumulative magnitude of change across the route as a whole would be Slight at most and the level of effect would be Moderate/minor at most be Moderate/minor, not notable. The Proposed Development would exert very limited incremental influence upon the overall route.
- Cumulative Effects with Existing Development and Consented Development
- There would be limited views of the consented development due to intervening landform, substation features and tree cover. Based on the addition of the Proposed Development to a scenario comprising existing and consented development, there would be no notable change to the level of effect described above.

12 Conclusions

- In summary, the Proposed Development would be located in an area of pasture farmland, with the localised landscape being characterised by its undulating landform with a predominant agricultural land usage that also incorporates large elements of power infrastructure. The Proposed Development would result in the permanent loss of pasture (approximately 4.1 hectares of infrastructure) and account for a small parcel of land within the Lowland Valley Terraces LCT.
- The local landscape comprises of undulating farmland predominantly under pastoral agricultural use combined with scrub/grassland. Tree cover is a combination of mature hedgerow and scattered trees, with a number of areas of local woodland. As a result, landscape effects would be primarily focused within a 200m radius of the site. There would

be no notable effects on wider landscape character or designations.

- Visual effects would also be extremely restricted based on the Site location, which is spatially remote from the majority of visual receptors within the Study Area, and which exhibits a relatively high degree of visual enclosure based on the surrounding landform and tree cover. Notable visual effects would be focused on a small number of receptors located in closest proximity to the Site. These comprise of walkers on the footpath route (Ferryhill footpath 3 within 200m*)* receptors at close proximity, east of the Site. The effects would be further tempered over time in accordance within the gradual establishment of native tree and hedgerow planting within the Site.
- The potential views that would be experienced by residents, recreational receptors and road users would be limited by intervening landform, buildings, tree cover/hedgerows and/or distance of view, hence would not be notable.
- The primary cumulative effects of the Proposed Development (within the Lowland Valley Terraces) would be focused within approximately 200m of the Site where the magnitude of change would be Moderate and the level of effect would be Moderate. There would be some coalescence of these effects with the characterising influence currently exerted by the existing substation and transmission line and pylon infrastructure. However, these effects would diminish at greater distances due to the screening influence of landform and tree cover surrounding both sites. As such, the cumulative effects across the wider parts of the Lowland Valley Terraces would not be notable
- The assessment acknowledges the presence of pre-existing notable cumulative effects on the views experienced by walkers on Ferryhill footpath 3 at close range. This is based primarily on views of existing overhead power lines and the operational substation. However, the Proposed Development would exert limited incremental cumulative influence on these views.
- In conclusion, it is assessed that the Proposed Development could be accommodated at the Site with limited and localised effects on landscape character and visual amenity.
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References

Publications

- *Guidelines for Landscape and Visual Impact Assessment 3rd Edition* (GLVIA3); Institute of Environmental Management and Appraisal and the Landscape Institute, 2013.
- An Approach to Landscape Character Assessment, Natural England, October 2014.
- *Visual Representation of Development Proposals;* Landscape Institute Technical Guidance Note 06/2019 (2019).
- National Character Area Profiles, Natural England, 2014.
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Appendix A: LVA methodology

Landscape Effects

- The starting point for the assessment of landscape effects was a desk-based review of published landscape assessments.
- The sensitivity of the landscape to change resulting from a Proposed Development is not absolute and varies according to the existing landscape, the nature of the Proposed Development and the type of change being proposed. Good practice guidance differentiates between baseline sensitivity of the landscape and the sensitivity of a landscape to a specific development proposal (*Landscape Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity*, 2004, Nature Scot & Countryside Agency). Accordingly, the concept of 'sensitivity to change' to new development, as described within the baseline published landscape character assessments, is distinct from the consideration of landscape sensitivity to the specific development proposal.
- The baseline for consideration of landscape effects is the established landscape character. The landscape effects of a Proposed Development are considered against the key characteristics of the receiving landscape. The degree to which the Proposed Development may change 'the distinct and recognisable pattern that makes one landscape different from another, rather than better or worse' (Countryside Agency and Nature Scot, 2002), enables a judgement to be made as to the significance of the effect in landscape character terms. This involves consideration of where the Proposed Development may give rise to a different landscape character type or sub-type.
- In general terms, a distinctive landscape of acknowledged value (e.g., covered by a designation) and in good condition is likely to be more sensitive to change than a landscape in poor condition and with no designations or acknowledged value. General guidance on the evaluation of sensitivity is provided below; however, the actual sensitivity would depend on the attributes of the landscape receiving the proposals and the nature of those proposals.
- In order to reach an understanding of the effects of development upon the landscape it is necessary to consider different aspects of the landscape as follows:

- Landscape Fabric / Elements: The individual features of the landscape, such as hills, valleys, woods, hedges, tree cover, vegetation, buildings and roads for example which can usually be described and quantified;
- Landscape Quality: The state of repair or condition of elements of a particular landscape, its integrity and intactness and the extent to which its distinctive character is apparent;
- Landscape Value: The importance attached to a landscape, often used as a basis for designation or recognition which expresses national or regional consensus, because of its special qualities/attributes including aesthetic or perceptual aspects such as scenic beauty, tranquillity or wildness, cultural associations or nature conservation interest; and

- Landscape Key Characteristics: The particularly notable elements or combinations of elements which makes a particular contribution to defining or describing the character of an area, which may include experiential characteristics such as wildness and tranquillity.
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- The sensitivity of the landscape to a particular development considers the susceptibility of the landscape and its value. The overall sensitivity is described as high, medium or low. This is assessed by taking into account the existing landscape quality, landscape value, and landscape capacity or susceptibility to change, which often vary depending on the type of development proposed and the particular site location, such that sensitivity needs to be considered on a case-by-case basis. This should not be confused with 'inherent sensitivity' where areas of the landscape may be referred to as inherently of 'high' or 'low sensitivity.
- For example, a National Park may be described as inherently of high sensitivity on account of its designation, but it may prove to be less sensitive to particular development and/or the design of that development.
- Alternatively, an undesignated landscape may be of high sensitivity to a particular development and/or the design of that development regardless of the lack of local or national designation. The main factors to consider are discussed as follows:
- Landscape susceptibility according to GLVIA3 means "the ability of the landscape to accommodate the Proposed Development without undue consequences for maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies". Judgements on landscape susceptibility include references to both the physical and aesthetic characteristics and the potential scope for mitigation that would be in character with the landscape.
- The judgements regarding susceptibility and value of the landscape character are identified within the sensitivity table included within **Appendix B**. These relationships can be complex and value alone does not automatically or by definition have high susceptibility to all types of change. Examples and on the evaluation of landscape sensitivity are provided below:

Table A.1: Landscape sensitivity criteria

• High Sensitivity	• Landscape character, characteristics and elements which would generally be of lower landscape capacity or scope for landscape change, and of notable landscape value and quality. These are landscapes that may be considered to be of particular importance to conserve and which may be particularly sensitive to change if inappropriately dealt with.
• Medium Sen	• Landscape character, characteristics and elements where there would be a moderate landscape capacity or some scope for landscape change. Often include landscapes of moderate landscape value and quality which may be

siti vity	locally designated.
• Lo w Sen siti vity	• Landscape Character, characteristics and elements where there would be higher landscape capacity or scope for landscape change to accommodate the proposed type of development. Usually applies to landscapes with of lesser landscape susceptibility or higher landscape capacity for the Proposed Development.

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- The level of landscape effects is not absolute and can only be defined in relation to each development and its location. It is for each assessment to determine the assessment criteria and thresholds using well informed and reasoned judgements.
- The magnitude of landscape effect arising from the Proposed Development at any particular location is described as substantial, moderate, slight or negligible based on the interpretation of a combination of largely quantifiable parameters, as follows:

- degree of loss or alteration to key landscape features/elements or characteristics;
- distance from the development;
- duration of effect;
- landscape backdrop to the development;
- landscape context of other built development, particularly vertical elements.

- In order to differentiate between different levels of magnitude the following definitions are provided:

Table A.2: Landscape magnitude of change definitions

• Substantial	• Total loss or extensive alteration to key landscape elements/features/ characteristics of the baseline, or introduction of uncharacteristic elements which would give rise to a fresh characterising effect.
• Moderate	• Partial loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or introduction of elements that may be prominent, but not necessarily substantially uncharacteristic with the attributes of the receiving landscape (which could co-characterise parts of the landscape).
• Slight	• Minor loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or introduction of elements that may not be uncharacteristic with

	the surrounding landscape or may not lead to a characterising or co-characterising effect.
• Negligible	• Very minor loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or the introduction of elements that are not uncharacteristic of the surrounding landscape. Change would be barely distinguishable approximating to no change.

- Having established where the observation of varying levels of change to the landscape baseline may occur, the geographical extent of the change can be identified and a judgement made as to the level of effect in landscape character terms at varying scales.
- The importance of the effect on the landscape resource may be determined by correlating the magnitude of the landscape effect (substantial, moderate, low or negligible) with the sensitivity of the landscape resource (high, medium or low). The following table sets out the main correlations between magnitude and sensitivity.

Table A.3: Landscape effects matrix

Landscape sensitivity	Magnitude of Change				
	•	• Substantial	• Moderate	• Slight	• Negligible
	• High	• Major	• Major/ Moderate	• Moderate	• Minor
	• Medium	• Major/ Moderate	• Moderate	• Moderate/Minor	• Minor/ Negligible
	• Low	• Moderate	• Moderate/Minor	• Minor	• Negligible

Visual Effects

- The sensitivity of potential visual receptors will vary depending on the location and context of the viewpoint, the activity of the receptor and importance of the view. Visual receptor sensitivity is defined as high, medium, or low in accordance with the criteria in Table A.4.

Table A.4: Visual sensitivity criteria

• High Sensitivity	• Residents within the curtilage of their homes; users of outdoor recreational facilities including footpaths, cycle ways and recreational road users; people experiencing views from important landscape features of physical, cultural or historic interest, beauty spots and picnic areas.
• Medium Sensitivity	• Road users and travelers on trains experiencing views from transport routes. People engaged in outdoor sport other than appreciation of the landscape, e.g., nature conservation, golf and water-based recreation.
• Low Sensitivity	• Workers, users of facilities and commercial buildings (indoors) experiencing views from buildings.

- The magnitude of landscape effect arising from the Proposed Development at any particular location is described as substantial, moderate, slight or negligible based on the interpretation of a combination of largely quantifiable parameters, as follows:

- distance of the viewpoint/receptor from the development;
- duration of effect;
- extent of the development in the view;
- angle of view in relation to main receptor activity;
- proportion of the field of view occupied by the development;
- background to the development;
- extent of other built development visible, particularly vertical elements.

- It is assumed that the change would be seen in clear visibility and the assessment is carried out on that basis. Where appropriate, comment may be made on lighting and weather conditions. In order to differentiate between levels of magnitude the following definitions are provided in Table A.5:

Table A.5: Visual magnitude of change definitions

• Substantial	• Where the proposals would have a defining influence on the view. Change very prominent leading to substantial obstruction or

	complete change in character and composition of the baseline existing view.
• Moderate	• Where the proposals would be clearly noticeable and an important new element in the view. It may involve partial obstruction of existing view or partial change in character and composition of the baseline existing view
• Slight	• The proposals would be partially visible or visible at sufficient distance to be perceptible and result in limited or minor changes to the view. The character and composition, although altered will be similar to the baseline existing situation
• Negligible	• Change would be barely perceptible. The composition and character of the view would be substantially unaltered, approximating to little or no change.

- The threshold for different levels of visual effects relies to a great extent on professional judgement. Criteria and local circumstances require close study and careful judgement.
- Beneficial effects upon receptors may result from a change to a view by the removal of eyesores or through the addition of well-designed elements which add to the sense of place in a beneficial manner.
- The following Table A.6 sets out the main correlations between magnitude and sensitivity.

Table A.6: Visual effects matrix

Visual sensitivity	Magnitude of Change				
		Substantial	Moderate	Slight	
	High	Major	Major/Moderate	Moderate	
	Medium	Major/Moderate	Moderate	Moderate/Minor	
	Low	Moderate	Moderate/Minor	Minor	

Level of Effect

- As per the matrices in Table A.3 and Table A.6; the level of any identified landscape or visual effect has been assessed in terms of major, moderate, minor, negligible or none. These categories are based on the juxtaposition of viewer or landscape sensitivity with the

predicted magnitude of change. This matrix should not be used as a prescriptive tool but must allow for the exercise of professional judgement. Effects which area judged to be Major/moderate or Major are considered to be notable. Where Moderate effects are predicted, professional judgement is applied to ensure that the potential for notable effects arising has been thoroughly considered.

Type of Effect

- Landscape and visual effects are described with reference to type (direct, indirect, secondary or cumulative), timeframe (short, medium, long term, permanent, and temporary) and whether they are beneficial or adverse (beneficial or adverse). The various types of effect are described as follows:

Temporary / Residual Effects

- If a proposal would result in an alteration to an environment whose attributes can be quickly recovered, then judgements concerning the significance of effects should be tempered in that light. Commercial development applications typically include permanent, long-term elements as well as minor alternations to landform resulting in residual landscape and visual effects.

Direct/Indirect

- Direct and indirect landscape and visual effects are defined in Guidelines for Landscape and Visual Impact Assessment (GLVIA3). Direct effects may be defined "*result directly from the development itself*" (para 3.22). An indirect (or secondary) effect is one that results "*from consequential change resulting from the development*" (para 3.22) and is often produced away from the site of the Proposed Development or as a result of a complex pathway or secondary association. The direct or physical landscape effects of the Proposed Development would generally be limited to an area around the development itself. Any indirect landscape effects are concerned with the view of the changes from outside the local landscape.

Beneficial/Adverse

- Landscape and visual effects can be beneficial or adverse and, in some instances, may be considered neutral. Beneficial effects upon landscape receptors may result from changes to the landscape involving beneficial enhancement measures or through the addition of well-designed elements, which add to the landscape experience or sense of place in a complementary manner.

- The landscape impacts of the Proposed Development have been considered against the landscape baseline, taking account of the landscape characteristics. Taking a precautionary approach, changes to rural landscapes involving construction of man-made objects of a large scale are generally considered to be adverse, as they are not usually actively promoted as part of a district wide landscape strategy and therefore in the assessment of landscape effects, they are assumed to be adverse, unless specified otherwise in the text.

- It is important to recognise that for the same development, some may consider the visual effects for a development of this nature as adverse or beneficial. This depends to some extent on the viewer's predisposition towards landscape change but also the principle of commercial building features in the landscape. Taking a precautionary approach in making an assessment of the 'worst case scenario', the assessment considers that all effects on views which would result from the construction and operation of the Proposed Development (in particular the transmission equipment and associated buildings) to be adverse, unless specified otherwise in the text. It is noted, however, that not all people would consider the effects to be adverse.

ZTV Methodology

Zone of Theoretical Visibility Maps

- Computer generated Zone of Theoretical Visibility (ZTV) Maps have been prepared to assist in viewpoint selection and to indicate the potential influence of the Proposed Development in the wider landscape.
- The Theoretical Visibility Map has been prepared at 1:30,000 scale to indicate the extent of potential visibility on the basis of bare ground, and does not include the screening effects of intervening established tree cover. The Theoretical Visibility Map indicates areas from which it might be possible to secure views of part, or parts, of the Proposed Development (in particular switchgear). However, use of the Visibility Maps needs to be qualified on the following basis:
  - There are a number of areas within the Visibility Maps from which there is potential to view parts of the proposal, but which comprise wetland or farmland, or other land where the general public do not appear to exercise regular access;
  - The large-scale Visibility Map does not account for the screening effects and filtering of views as a result of intervening features, such as trees and forestry;
  - The Visibility Maps do not account for the likely orientation of a viewer – for example when travelling in a vehicle.
- In addition, the accuracy of the Visibility Maps has to be considered. In particular, the Visibility Map will be generated from Ordnance Survey (OS) Landform Panorama digital data based on a gridded terrain model with 5m cell sizes. The resolution of this model cannot accurately represent small-scale terrain features, which can therefore give rise to inaccuracy in the predicted visibility. This can lead to underestimation of visibility – e.g., a raised area of ground permitting views over an intervening obstruction, or can lead to overestimation of visibility – such as where a roadside embankment obscures a view.
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Appendix B: Landscape Character Sensitivity

- The sensitivity of Lowland Valley Terraces LCT is assessed in detail below. Landscape sensitivity is not absolute and can only be defined in relation to each development and its location taking account of susceptibility as described in the methodology. To understand the sensitivity of a particular landscape and its location it is good practice to consider a range of criteria as set out in the table below. The table below highlights the inherent sensitivities of this landscape to the development proposed, with reference to relevant characteristics as described within The County Durham Landscape Character Assessment[3].
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[3] The County Durham Landscape Character Assessment, 2008

Table B.1: Sensitivity of Lowland Valley Terraces

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape Quotes in italics are from Lowland Valley Terraces (The County Durham Landscape Character Assessment):	Sensitivity Rating
Physical				
Scale	Large scale featureless landscapes	Small to medium scale landscapes with some scaling features	*The landscape is typically open in character and broad in scale.*	Medium/Low
Openness	Enclosed and sheltered landscapes	Open and exposed landscapes	*An open landscape, broad in scale, defined by the Limestone Escarpment to the east and the spurs of the West Durham Coalfield to the west.*	High-Medium
Landform	Smooth regular flowing, flat or uniform landscapes	Dramatic, rugged and complex landscapes	*Gently rolling topography of boulder clay with areas of more undulating terrain of glacial sands and gravels.*	Medium
Land cover	Extensive areas of simple regular land cover (including farming and forestry)	Complex, intimate or mosaic cover	*Mixed farmland of improved pastures and arable cropping.* *Tree cover is low, with thinly scattered hedgerow ash, oak and sycamore. The landscape is generally sparsely wooded although there are some heavily wooded areas of old parkland and estate farmland*	Medium
Complexity and patterns	Simple and sweeping lines, linear features and patterns	Complex or irregular patterns	*Semi-regular patterns of medium and large-scale fields bounded by low hawthorn hedges*	Medium
Built Environment	Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements	Established, traditional or historic built character	*The landscape has been heavily influenced by urban and industrial development – its scattered mining towns and villages and busy roads give it a semi-rural or urban fringe character in places.*	Medium/Low

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape Quotes in italics are from Lowland Valley Terraces (The County Durham Landscape Character Assessment):	Sensitivity Rating
Overall physical sensitivity				Medium
Perceptual				
Wildness / Sense of Remoteness	Busy evidence of human activity	Remote, peaceful or sense and tranquillity, solitude and emptiness	*A settled landscape with a semi-rural or urban fringe quality in places*	Medium/Low
Perception of Change	Dynamic or modern landscapes	Ancient landscapes, designed landscapes or with obvious historical continuity	*Tracts of immature and relatively featureless reclaimed land. An important communications corridor with motorways, trunk roads, railway lines and overhead transmission lines.*	Medium/Low
Overall Perceptual Sensitivity				Medium/Low
Visual				
Landscapes that form settings, skylines, backdrops, focal points	Generally low-lying landscapes without distinctive landform or horizon	Areas with strong features, focal points that define the setting or skyline	Lack of distinctive landform within the LCT	Medium/Low
Views intervisibility	Visually contained and have limited inward or outward views	Extensive views within or of the area with distant horizons.	Views can be long range with the adjacent Limestone Escarpment LCT forming a backdrop	Medium
Overall Visual Sensitivity				Medium
Value				
Rarity	Commonplace	Rare	The LCT encompasses a notable geographic area.	Medium-Low

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape Quotes in italics are from Lowland Valley Terraces (The County Durham Landscape Character Assessment)*:*	Sensitivity Rating
Designated scenic quality	No specific designation	National or regional designation	Pockets of designated landscapes (AHLV) located beyond 1km from The Site.	Medium/High
Cultural associations	No specific cultural associations	Strong cultural association	Limited cultural associations within 1km	Medium
Amenity and recreation	Limited amenity function	Well used for amenity/recreation, especially for National trails or other long-distance routes	Network of core paths and rights of way	Medium
Overall Value				**Medium**
Overall Sensitivity				**Medium**

Appendix C: LVA Figures

Appendix D: Visualisations