



PROPOSED DEVELOPMENT OF A BATTERY ENERGY STORAGE SYSTEM, ASSOCIATED INFRASTRUCTURE AND ACCESS ON LAND OFF DIG GATE LANE, KINGSWAY BUSINESS PARK, MILNROW, ROCHDALE

Landscape and Visual Appraisal

Prepared for



Balance Power

December 2023
3471-01-LV01



Document Control

Revision	Date	Prepared By	Reviewed / Approved By
3471-01-LV01	December 2023	PHM	JM

© AXIS P.E.D. Ltd 2023. All rights reserved.

This document and its accompanying documents contain information which is confidential and is intended only for the use of the client. If you are not one of the intended recipients any disclosure, copying, distribution or action taken in reliance on the contents of the information is strictly prohibited.

Unless expressly agreed, any reproduction of material from this document must be requested and authorised in writing from AXIS P.E.D. Ltd. Authorised reproduction of material must include all copyright and proprietary notices in the same form and manner as the original and must not be modified in any way. Acknowledgement of the source of the material must also be included in all references.



Well House Barns, Chester Road, Bretton, Chester, CH4 0DH

Camelia House, 76 Water Lane, Wilmslow, Cheshire, SK9 5BB

T: 0344 8700 007
enquiries@axis.co.uk
www.axis.co.uk

CONTENTS

1.0	INTRODUCTION	1
1.2	Proposed Development	3
2.0	METHODOLOGY, LEGISLATIVE FRAMEWORK, POLICY AND GUIDANCE	4
2.1	Legislation, Policy and Guidance	4
2.2	National planning policy And Guidance.....	4
2.3	Local Planning Policy	5
2.4	Guidance	6
2.5	Scope of the Assessment	7
2.6	Study Area	7
2.7	Site observation	8
3.0	METHOD OF BASELINE DATA COLLECTION.....	8
3.1	Data Collection	8
3.2	Zone of Theoretical Visibility	8
3.3	Visualisations	9
3.4	Site Visit.....	9
4.0	METHODOLOGY	9
4.2	Assessment of Significance / Assessment Criteria.....	10
5.0	BASELINE.....	10
5.1	The Site and its surroundings	10
5.2	National Landscape character	11
5.3	Landscape Designations.....	11
5.4	Visual.....	13
6.0	DESIGN AND MITIGATION	18
7.0	ASSESSMENT OF EFFECTS	18
7.1	Construction Effects.....	18
7.2	Landscape Effects (Operational).....	19
7.3	Visual Effects	20
8.0	CONCLUSION AND SUMMARY	22



TABLES

Table 1.1 – Visual Receptors

FIGURES

Figure 1 – Landscape Context

Figure 2 – Visual Context

Figures 3.1 to 3.4 – Viewpoint Photosheets

APPENDICES

Appendix A – LVA Methodology

Appendix B – ZTV and Visualisation Methodology

Appendix C – Extracts from published Landscape Character Assessments



1.0 INTRODUCTION

- 1.1.1 This Landscape and Visual Appraisal (LVA) follows best practice guidance set out in *Guidelines for Landscape and Visual Impact Assessment*¹, hereafter referred to as the GLVIA. The LVA appraises the landscape and visual effects of the Proposed Development which comprises a battery storage facility located on a site off Dig Gate Lane, Kingsway Business Park, Rochdale, adjacent to the M62.
- 1.1.2 Landscape and visual effects are separate, although closely related and interlinked issues.
- 1.1.3 Landscape effects are caused by physical changes to the landscape (including the built environment, or 'townscape'), which may result in changes to the distinctive character of that landscape and how it is perceived.
- 1.1.4 Visual effects are changes to what can be seen by people as a result of what is proposed. A visual assessment assesses the change in visual amenity undergone by people (either individually or in groups) that would arise from any change in the nature of views experienced.
- 1.1.5 In accordance with the guidance set out in the GLVIA, the LVA adopts an approach proportionate to the likely significant effects of the Proposed Development. The conclusions of the LVA have been determined via use of professional judgement, set within a structured assessment framework, and supported by reasoned justification.
- 1.1.6 The LVA aims to establish the following:
- i) A clear understanding of the Site and its context, in respect of the physical and perceived landscape and in respect of views and visual amenity.
 - ii) An understanding of the Proposed Development facility in terms of how this would relate to the existing landscape and views.

¹ *Landscape Institute and Institute for Environmental Management and Assessment, 3rd edition 2013. Guidelines for Landscape and Visual Impact Assessment. Abingdon: Routledge.*



- iii) An identification of the likely significant effects of the Proposed Development upon the landscape and upon views, throughout the life cycle of the Proposed Development;
 - iv) Potential for mitigation to reduce / eliminate any potential adverse effect on the landscape or views arising as a result of the Proposed Development; and
 - v) A conclusion as to the residual likely significant landscape and visual effects of the Proposed Development.
- 1.1.7 The process follows a standard approach, namely:
- i) The establishment of the baseline conditions, against which the effects of the Proposed Development would be assessed.
 - ii) The determination of the nature of the receptor likely to be affected, i.e., its sensitivity.
 - iii) The prediction of the nature of the effect likely to occur, i.e., the magnitude of change.
 - iv) An assessment of whether a likely significant landscape and visual effect would be experienced by any receptor, by considering the predicted magnitude of change together with the sensitivity of the receptor, taking into account any proposed mitigation measures.
- 1.1.8 Further details regarding the specific methodologies of assessment and determination of significance are included in Appendix A. The LVA has been informed by both desk and field-based studies.
- 1.1.9 It should be noted that the landscape (including the context in which views are experienced) is dynamic, i.e., it is affected by social, economic, technological and climatic changes, all of which can influence patterns of land use, land cover and land management. As such, the baseline context for the LVA is not static.
- 1.1.10 For the avoidance of any doubt, the LVA does not consider effects upon the setting of heritage assets. Such effects, whilst in cases occurring upon receptors that may also be relevant to LVA (for example a listed building that is also a residential property), deal with different environmental effects, using different methodologies.
- 1.1.11 The LVA was undertaken by a Chartered Member of the Landscape Institute (CMLI) with over eight years' post qualification experience in the landscape and visual



assessment of major infrastructure projects. The LVA was directed and reviewed by a second CMLI with over twenty-five years' experience.

1.2 Proposed Development

1.2.1 The description of the Proposed Development is set out in the Planning, Design and Access Statement (PDAS), the key design features are summarised below as:

- i) 28 No. prefabricated / modular storage container units including batteries supported by 7 No. inverters and transformers;
- ii) Supporting infrastructure including a substation, auxiliary transformer, control room, Distribution Network Operator (DNO) room and storage buildings;
- iii) All the above infrastructure would be set in gravel surfaced compounds secured by fencing and matching gates with closed-circuit television (CCTV) and lighting set on monopoles; and
- iv) New gravel access tracks leading to a new junction off Dig Gate Lane.

1.2.2 As described in greater detail within the PDAS, due to the continuing rapid advancements in battery technology and given that the Applicant has not committed to a technology provider, there may be a requirement to amend the layout and dimensions of the equipment within the compound in the future. To this end, the planning application drawings include a height and micro-siting plans which illustrate the infrastructure could extend to a height of up to 4.5m across the compounds. Accordingly this assessment has followed the Rochdale Envelope principles where the worst-case parameters have been applied.

1.2.3 The landscape proposals are illustrated on drawing ref: 3471-01-L-001 Rev B Landscape Masterplan and supplemented by drawing ref: 3471-01-L-002 Ecology Implementation Plan. The landscape design would comprise proposed hedgerow along the southern boundary, with meadow planting to the northern and western extents of the Site. There would also be ecological mitigation in the northeastern part of the site to provide biodiversity net gain. It is anticipated that the detailed landscape masterplan would be controlled by a suitably worded planning condition.



2.0 METHODOLOGY, LEGISLATIVE FRAMEWORK, POLICY AND GUIDANCE

2.1 Legislation, Policy and Guidance

2.1.1 The applicable legislative framework relevant to the LVA is as follows:

i) European Landscape Convention² (ELC)

2.1.2 The ELC defines Landscape as: *“an area, as perceived by people, whose character is the result of the action and interaction of natural and/ or human factors.”* It is based on the premise that Landscape, whatever the quality and whether rural or urban, built or natural, should be recognised, understood and fully integrated into policy and decision-making.

2.2 National planning policy And Guidance

2.2.1 The National Planning Policy Framework³ (NPPF) sets out the Government’s planning policies for England and how these are expected to be applied at local level in local development plans. The Framework places emphasis on plans and developments which contribute to sustainable development.

2.2.2 The NPPF was published in March 2012 and last updated in December 2023.

2.2.3 Paragraph 174 of the NPPF states that: “Planning policies and decisions should contribute to and enhance the natural and local environment by: protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)”

² Available at <https://www.coe.int/en/web/landscape/home>

³ Available online at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf



2.3 Local Planning Policy

2.3.1 The Local planning Rochdale Metropolitan Borough Council. As such the relevant policies of the Local Plan are:

- i) Rochdale Adopted Core Strategy 2016⁴.
- ii) Rochdale Borough Unitary Development Plan, adopted 2006⁵

Rochdale Adopted Core Strategy

2.3.2 The following policies of relevance to the LVA are:

Policy P2 – Protecting and enhancing character, landscape and heritage

2.3.3 A high quality and comprehensive framework of interconnected green infrastructure that offers ease of movement and an appealing natural environment for people and wildlife will be achieved by:

- i) We will protect and enhance the borough's character, the distinctiveness of its town centres, housing areas and countryside, and the qualities of its landscapes, utilising the considerable potential of these assets in development and regeneration schemes. We will do this by:
 - a) Requiring new development to integrate successfully with the key natural features of the borough, e.g. river valleys and the Pennine landscape;
 - b) Requiring new development to take opportunities to protect and open up important views of hills and valleys which are part of the borough's unique character
 - c) Restoring the River Roch and other water bodies to their place as key and attractive features of the borough, including opening up waterways where they have been covered, and enhancing their setting, heritage assets and biodiversity potential
 - d) Protecting, enhancing and utilising outstanding cultural landscapes, such as the Cheesden Valley area and around Littleborough and Hollingworth Lake

⁴ Available online at <https://www.rochdale.gov.uk/downloads/file/405/core-strategy>

⁵ Available online at <https://www.rochdale.gov.uk/downloads/file/559/rochdale-borough-unitary-development-plan>



- e) Conserving and enhancing townscape character.
- ii) We will protect the borough's heritage by:
 - a) Conserving, enhancing and promoting key heritage assets, both statutory and non-statutory, including consideration of their wider settings. Key heritage assets of the borough include:
 - i. Four outstanding conservation areas: Central Rochdale, Middleton and Littleborough town centres and Rock Nook / Summit
 - ii. Other designated assets such as listed buildings, conservation areas, registered parks and scheduled ancient monuments.
 - iii. The heritage of the Co-operative movement, the Rochdale Pioneers and the Labour movement
 - iv. The Edgar Wood and J. H. Sellers cultural heritage
 - v. The heritage of the seventeenth and eighteenth century vernacular tradition
 - vi. The engineering heritage, including mills, canals and railways.
 - b) Conserving, enhancing and utilising other non-statutory heritage assets of local interest, be they buildings, parks, gardens or archaeological sites, including promoting their sensitive restoration.
 - c) Using heritage assets positively and intelligently to strengthen identity and image and support the visitor economy, particularly in development and regeneration schemes.
 - d) Prioritising the conservation of heritage assets at risk from decay, giving special attention to designated heritage assets in this regard

2.4 Guidance

- 2.4.1 The following guidance documents have been used during the preparation of this LVA:
- i) Guidelines for Landscape and Visual Impact Assessment (Third Edition) (GLIVA) (2013)
 - ii) An Approach to Landscape Character Assessment (2004)
 - iii) Landscape Institute Technical Guidance Note: (TGN 06/19) Visual Representation of development proposals (2019)



2.5 Scope of the Assessment

- 2.5.1 The scope of the LVA is to assess the potential effects on Landscape and Visual receptors.
- 2.5.2 The LVA will appraise the effects of the Project on landscape character and visual amenity through the combination of a desk study and a field visit to capture viewpoint photography and verify elements from the desk study.
- 2.5.3 The LVA will determine the following:
- i) The current landscape character baseline.
 - ii) The current visual amenity baseline.
 - iii) Effects upon landscape character during construction.
 - iv) Effects upon landscape character at completion.
 - v) Effects on visual receptors during construction.
 - vi) Effects on visual receptors at completion.
 - vii) Demonstrate the effectiveness of any proposed mitigation following its establishment and a reasonable period of growth.
 - viii) Report any residual effects following establishment of mitigation.

2.6 Study Area

- 2.6.1 The appropriate study area for any LVA will be the area from within which the Proposed Development has the potential to be visible and capable of having notable visual effects or influence upon landscape character. The extent of this area will vary according with the nature and scale of the proposed development and the nature of the terrain in the surrounding area. Large and contrasting elements for example have the potential to be more visible at a similar distance to smaller, less obtrusive elements. Location in the landscape can also be influential for example in relation to skylines or within valleys.
- 2.6.2 The study area is 3km and it is illustrated on Figure 2 and has been determined through a preliminary viewshed analysis of the Proposed Development, which illustrates the worst-case scenario. This has then been subsequently refined through field work taking account of localised features of built form, vegetation, landform



variation which may obstruction views from a visual receptor whereas the viewshed analysis has predicted a view would be possible. T

2.7 Site observation

- 2.7.1 Construction of an adjacent large-scale warehouse development directly to the north of the Site was well advanced during the site visit. The ZTV not reflective of the newly constructing warehouses which would further contain views.

3.0 METHOD OF BASELINE DATA COLLECTION

3.1 Data Collection

- 3.1.1 Baseline data for the LVA has been gathered by both desk and field-based surveys. These have included review of extant landscape character assessment studies (see below) and a single field visit in June 2023 to gain an understanding of the landscape and visual context of the Site.

3.2 Zone of Theoretical Visibility

- 3.2.1 Zone of Theoretical Visibility (ZTV) mapping has been used to help to identify the extent of expected visibility of the Proposed Development. The ZTV reflects the theoretical visibility of the Proposed Development, with points included in the model at a height of 3.5m Above Ground Level (AGL) for each of the battery storage containers and 4.5m for buildings.⁶
- 3.2.2 The full methodology for ZTV is set out in Appendix B and the ZTV is presented on Figure 2.

⁶ Note there is a vertical and horizontal root mean square error in the digital surface model data which means the ZTV actually illustrates a proposed development up to 5m in height.



3.3 Visualisations

- 3.3.1 The methodology for visualisations is presented in Appendix B. For the purposes of the assessment a series of Viewpoints Photo sheets annotated with approximate extents of the Proposed Development for each of the viewpoints being assessed.

3.4 Site Visit

- 3.4.1 A site visit was carried out in June 2023.
- 3.4.2 During the site visit viewpoint photography was captured and the assessor gained familiarity with the wider study area through travelling around and through the area to access the viewpoints, which largely involved walking along public footpaths.
- 3.4.3 Viewpoint locations were refined during the site visit avoiding localised screening and selecting camera positions to illustrate the worst-case view.

4.0 METHODOLOGY

- 4.1.1 This Landscape and Visual Appraisal (LVA) has been carried out in accordance with best practice guidance in relation to Landscape and Visual Impact Assessment (LVIA) specifically with reference to the Landscape Institute and IEMA Guidelines for Landscape and Visual Impact Assessment (GLVIA3).
- 4.1.2 It is important to note, however, that the proposed development is non-EIA and the scope of this LVA therefore reflects this and is proportionate to the nature and scale of the proposed development.
- 4.1.3 The appraisal considers distinct but closely related areas: landscape character (also including townscape) and visual amenity.
- 4.1.4 A full methodology is set out in Appendix A



4.2 Assessment of Significance / Assessment Criteria

- 4.2.1 Significance in this appraisal (noting that this is not EIA development) is used in its ordinary English meaning of 'of importance' or 'worthy of attention' to highlight any changes to landscape character or visual amenity of particular note and it is considered likely to be of assistance to the decision-maker if such a statement is included in the LVA.

5.0 BASELINE

5.1 The Site and its surroundings

- 5.1.1 The site is located off Dig Gate Lane within Kingsway Business Park. The Site itself comprises irregular shaped paddock fields. The eastern boundary comprises a fence with the M62 immediately beyond in cutting. The north/ west boundary is formed by a low fence and hedgerow with a shallow embankment down to Dig Gate Lane.
- 5.1.2 The west and southern boundary is formed by an adjacent building and mature trees.
- 5.1.3 In the wider area, to the north are large warehouses which limit views to the north, beyond is the residential housing areas of Rochdale and Milnrow.
- 5.1.4 To the east and south is the M62 in cutting, running to the north-east. Dig Gate Lane crosses the M62 via small overbridge to the east of the Site.
- 5.1.5 To the south of the M62, is open field and farmland, which rises up to the town of Shaw beyond.
- 5.1.6 To the west is residential housing and conurbation of Greater Manchester.



5.2 National Landscape character

5.2.1 At a national level, Natural England National Character Area 54: Manchester Pennine Fringe⁷ covers the entirety of the west of the Study Area and NCA 36: Southern Pennines⁸ covers part of the eastern extent of the study area. Details of each NCA are available via the Natural England Website.

5.2.2 These NCA's provide background and context to more detailed landscape character assessments produce at county and district levels. Their board geographic reach means that the key characteristics identified as typical of a particular NCA may not necessarily apply to a specific location within that NCA.

5.3 Landscape Designations

5.3.1 There are no landscape designations within the Site or study area.

5.3.2 Tandle Hill Country Park is located on the south-western edge of the Study Area, a recreational area popular with walkers, however this is located outside the ZTV show on Figure 2.

Greater Manchester Landscape Character and Sensitivity Assessment

5.3.3 *The Greater Manchester Landscape Character and Sensitivity Assessment*⁹ provides a finer grain assessment of the local authority area. A series of LCA's are identified. The Site is not located with the landscape character study as it is considered to be Urban, however the following LCAs are located in close proximity:

- LCA 27: Simister, Slattocks and Healds Green is located directly to the west of the Site.
- LCA 28: Rochdale and Oldham South Pennine Foothills is located to the south and north east of the Site.

⁷ Available online at <https://publications.naturalengland.org.uk/publication/4631438>

⁸ Available online at <https://publications.naturalengland.org.uk/publication/511867>

⁹ LUC, 2018. *Greater Manchester Landscape Character and Sensitivity Assessment*. [online] <https://www.greatermanchester-ca.gov.uk/media/1727/greater-manchester-landscape-character-and-sensitivity-report.pdf> [accessed 9 December 2022]



- LCA 29: Rough Hill to Brun Moor is located to the east of the Site.

5.3.4 Refer to Figure 1 for the location of the LCAs and relevant extracts are included as Appendix C.

LCA 27: Simister, Slattocks and Healds Green

5.3.5 This character area is located on the western boundary of the study area however, referring to the ZTV included in Figure 2, there would be no visibility of the proposed development therefore it is scoped out of this appraisal.

LCA28: Rochdale and Oldham South Pennine Foothills

5.3.6 This character area is located 50m to the south of the Site, and 1km to the north east of the Site. There is a small area of visibility shown in the northern part of this LCA. This is a transitional landscaping sloping up from the northern fringes of Greater Manchester. It is a strongly rolling and undulating topography. Land use is semi-improved grassland pastures enclosed by a mix of gritstone walls, hedgerows and post and rail fencing. Settlements mainly comprises scattered stone farmsteads. There are numerous footpaths and bridleways cross this landscape. It is assessed as a medium to high sensitivity to commercial developments within the Greater Manchester LCA and this will be used for the appraisal.

LCA29: Rough Hill to Brun Moor

5.3.7 This character area is located on the eastern boundary of the study area however, referring to the ZTV included in Figure 2, there would be a minimal small amount of visibility of the proposed development therefore it is scoped out of this appraisal.

Summary of Landscape Character

5.3.8 The Site is located directly adjacent to the M62 motorway and is on the southern extent of a large commercial business park. The Site, being used as horse paddock. The Site itself has been excluded from the published character assessment as it is located on the fringe of an urban area, which defines its character.



- 5.3.9 There will be direct change to the Site being urban fringe. The indirect landscape effects will be appraised on the nearby character area of LCA 28.

Future Landscape Change

5.3.10

In the absence of the Proposed Development, it is likely the Site would be retained in its present state, i.e. a horse paddock.

- 5.3.11 There is however clearly a development pressure associated with the development of the business park immediately to the north, and the M62 forming a clear boundary to the urban development with the countryside beyond to the south. The desirability of co-locating energy supply with adjacent high use supplies and suitable substations. As such, it is entirely likely that other energy development proposals may come forward at the Site, or in other nearby locations.

5.4 Visual

- 5.4.1 The LVA includes an assessment of visual effects from four Viewpoints. The locations of the viewpoints are shown on Figure 2.

- 5.4.2 Photography from each viewpoint is presented on Figures 3.1 to 3.4.

- 5.4.3 In relation to the visualisation categories set out in Landscape Institute Guidance Note 06-19, the images presented are Type 1 Photosheets.

- 5.4.4 Viewpoints can fall into three categories, as set out in the GLVIA:

- i) Representative viewpoints (which represent the experience of different types of receptors in the vicinity);
- ii) Specific viewpoints (a particular view, for example a well-known beauty spot);
- iii) Illustrative viewpoints (which illustrate a particular effect/ issue, which may include limited / lack of visibility).

- 5.4.5 For the purposes of this LVA, four representative viewpoints have been assessed.



5.4.6 It should be noted that the viewpoint itself is not the receptor; rather it is the people that would be experiencing the view from the viewpoint. Receptors in the vicinity of the Site that are likely to experience views of the Proposed Development include:

- i) Users of public rights of way.
- ii) People engaged in recreation including walking, riding and cycling.

5.4.7 The viewpoints are set out in **Table 1.1** below.

Table 1.1 – Visual Receptors

Viewpoint	British National Grid Coordinates	Receptors
1	E: 391682 N: 411330	Walkers and cyclists with Business Park
2	E: 391789 N: 410519	Walkers along a public right of way
3	E: 393830 N: 412006	Walkers along a public right of way
4	E: 392413 N: 410761	Walkers along Rochdale Way

Representative Viewpoint 1

- 5.4.8 This viewpoint is located on the footpath/cycleway within the business park, to the north of the Proposed Development. The view is looking south-east towards the Proposed Development site from a distance of 250m. This Viewpoint is representative of views experienced by walkers and cyclists within the Business Park.
- 5.4.9 This view looks along James Keane Avenue towards the Proposed Development. From this viewpoint, the Site is screened by mature trees and an embankment on the northern side of the Site. This screens long views further north, but are possible through gaps in the vegetation to the south-west.
- 5.4.10 In the foreground is the shared cycleway and footpath, with a grass verge and James Keane Avenue. Large warehouses bordered each side of the road behind security fencing and planting that is yet to fully establish. Lighting columns are located along the road and road signs can be seen in the distance.
- 5.4.11 This view looks over a landscape with no formal designations, and due to the business park occupying part of the view, the value is considered to be Low.
- 5.4.12 The susceptibility to change is considered to be Medium due to the primary occupation of walkers along this path is taking in the view.
- 5.4.13 The combination of Low value and Medium susceptibility, results in a Medium sensitivity for this viewpoint.



Representative Viewpoint 2

- 5.4.14 This viewpoint is located on a public right of way, to the south of the Proposed Development. The view is looking north towards the Proposed Development site from a distance of 750m. This Viewpoint is representative of views experienced by walkers on the public right of way.
- 5.4.15 This elevated view looks across an expansive landscape across the valley. In the distance the land rises up into moorland creating the horizon, which is punctuated by wind turbines.
- 5.4.16 In the valley bottom large warehouses are the main focal point of the view, with residential development beyond. In the foreground is rough grazing land, which slopes away to regular pasture fields divided by gappy hedgerow. The M62 is visible crossing the view.
- 5.4.17 Mature vegetation along the M62 provides some screening of the warehouses from this viewpoint.
- 5.4.18 This view looks over a landscape with no formal designations however it is considered to have some scenic quality and so the value is considered to be Medium.
- 5.4.19 The susceptibility to change is considered to be Medium as walkers along this path will place importance on their view, albeit for a short duration.
- 5.4.20 The combination of Medium value and High susceptibility, results in a Medium sensitivity for this viewpoint.

Representative Viewpoint 3

- 5.4.21 This viewpoint is located on a public right of way, north east of the Proposed Development. The view is looking south-west towards the Proposed Development site from a distance of 2.5km. This Viewpoint is representative of views experienced by walkers on the footpath.



- 5.4.22 This elevated view looks across the valley to the west. From this elevated vantage point there are expansive views across and through the valley. The lower valley is dominated by the M62 and warehouses to the north with residential development. In the foreground the landscape slopes away to grazing land, with dry stone walls, post and wire fences and mature isolated trees. In the middle distance is a belt of mature trees.
- 5.4.23 The landscape raises up to the south with pasture fields and forms the horizon. There are long distance views to the west. A tall brick chimney is a notable feature in the view.
- 5.4.24 This view looks over a landscape with no formal designations however it is considered to have some scenic quality so the value is considered to be Medium.
- 5.4.25 The susceptibility to change is considered to be Medium as walkers will place importance on their view, albeit for a short duration.
- 5.4.26 The combination of Medium value and Medium susceptibility, results in a Medium sensitivity for this viewpoint.

Representative Viewpoint 4

- 5.4.27 This viewpoint is located on the Rochdale Way, south-east of the Proposed Development. The view is looking south towards the Proposed Development site from a distance of 750m. This Viewpoint is representative of views of walkers along Rochdale Way.
- 5.4.28 This view looks across a valley towards Rochdale. From this elevated vantage point there are expansive views across and through the valley. The lower valley is dominated by warehouses, with residential development beyond.
- 5.4.29 In the foreground is a field, bounded by a post and wire fence, to the west is a horse paddock.
- 5.4.30 Mature trees part screen views of the warehouses and the M62.



- 5.4.31 This view looks over a landscape with no formal designations however it is considered to have some scenic quality and so the value is considered to be Medium.
- 5.4.32 The susceptibility to change is considered to be Medium as walkers on the Rochdale Way will place importance on their view, albeit for a short duration.
- 5.4.33 The combination of Medium value and Medium susceptibility, results in a Medium sensitivity for this viewpoint.

6.0 DESIGN AND MITIGATION

- 6.1.1 The landscape proposals, as described in Section 1.2, form an embedded component of the Proposed development. Proposals comprise wildflower grass within the compound and a native hedge, managed at 3m height, along the southern boundary bordering the M62.
- 6.1.2 As the effects of the Proposed Development would not be significant, no further mitigation measures are deemed necessary.

7.0 ASSESSMENT OF EFFECTS

7.1 Construction Effects

- 7.1.1 Refer to the Planning Design and Access Statement for a description of the construction stage of the Proposed Development. However, the key details are clearing and levelling of the main site area, erection of the development platform, creation of internal roads and positioning the battery containers.
- 7.1.2 Construction sites feature distinctive elements that are likely to draw attention, including temporary signage and fencing, and site operatives wearing high-visibility clothing. Construction also requires the use of suitable vehicles and other plant, some of which could be apparent by virtue of their colour, form and movement. A temporary contractor compound would be located within the footprint of the Proposed Development, which would also feature potentially visible built forms including site offices, welfare facilities, storage, etc.



- 7.1.3 There would be earthworks as part of the construction phase and levelling across the site which would result in some minor loss of existing small scrub trees within the Site and hedgerow removal to create the Site access.
- 7.1.4 Construction would chiefly involve elements that are relatively low in height and which would typically benefit from the level of screening provided by surrounding warehouses and vegetation to the north. Nevertheless, some visibility of construction activity would occur such as temporary cranes (if required) that would be visible above the localised screening. Particularly to the south where screening is limited and the land rises to the south offers views from some footpaths. There would inevitably be short-term landscape and visual effects during the construction phase, predominantly within 1km, with some more distant views possible. These would be temporary in duration, limited in extent, and would **not be significant**.

7.2 Landscape Effects (Operational)

- 7.2.1 There would be a small change of horse paddock to hardstanding with battery containers, however there would be no notable change to the character of the site, being urban. The Proposed Development comprises an urban type of development which would be located on the Site which is classed as Urban in the Greater Manchester LCA and is bordered by large warehouses to the north, and the M62 motorway to the south. There would therefore be a Negligible change to the character of the Site. However, there would be potential visibility from adjacent character areas which will be discussed in the following paragraphs.
- 7.2.2 From LCA 28: Rochdale and Oldham South Pennine Foothills, there would be visibility in the northern extent of the southern LCA, and some potential visibility from elevated areas in the northern LCA area. However, the Proposed Development would comprise a very small part of the view and would not alter the key characteristics of this LCA due to the context of the M62 motorway between, and the backdrop of the Business Park. Similarly, from LCA 29: Rough Hill to Brun Moor, there would be some potential visibility from the western part of this LCA, from elevated areas further east but at distance (3km or greater). Overall, the Proposed Development would comprise a Negligible part of the view and would not alter the key characteristics of this LCA.



- 7.2.3 In summary, the Proposed Development comprises the introduction of new urban built form into a piece of land which is heavily influenced by adjacent urban land use. The direct landscape change would be Negligible and no notable indirect landscape character effects have been identified on nearby LCA's as the change to the Site would be barely perceived from them.

7.3 Visual Effects

Representative Viewpoint 1

- 7.3.1 The Proposed Development would be visible in the view, the north compound would be predominately screened by existing vegetation, however the south compound would be visible on the raised land, partly screened by intervening vegetation.
- 7.3.2 The battery units would be noticeable and partially appear on the horizon, albeit forming a unified block across a small part of the view, interrupted by the lighting columns in the foreground which punctuate the horizon.
- 7.3.3 While the units would comprise a change, they would alter a small part of this view, and would complement the business park use in the foreground of the view, reducing their prominence still further.
- 7.3.4 In winter, there would be potential filtered views through vegetation, but would not form a noticeable change in the view.
- 7.3.5 This would result in a Small magnitude of change on this Medium sensitivity viewpoint. The effect would be Slight adverse.

Representative Viewpoint 2

- 7.3.6 The Proposed Development would be perceptible in the view, albeit with screening by intervening vegetation, which would break up and soften the appearance of it. Where visible the Proposed Development would blend into the existing background of existing vegetation, being green in colour. Where back clothed by existing large scale warehouse buildings, it would not appear as an out of place feature in the view.



- 7.3.7 The Proposed Development would be seen at distance and alter a small proportion of this very expansive view.
- 7.3.8 During winter, there would be filtered views of the Proposed Development through vegetation.
- 7.3.9 This would result in a Small magnitude of change on this High sensitivity receptor. This would result in a Slight adverse effect.

Representative Viewpoint 3

- 7.3.10 The Proposed Development is unlikely to comprise a perceptible change in the view due to the distance from the Site and due to screening by intervening vegetation in the foreground of the view.
- 7.3.11 In winter, there may be glimpsed views of the buildings, but there would not be a perceptible difference from summer views when trees are in leaf.
- 7.3.12 Therefore, there would be a Negligible magnitude of change on this Medium sensitivity receptor. This would result in a Negligible effect.

Representative Viewpoint 4

- 7.3.13 The Proposed Development would form a small part of this expansive view. The northern compound would mainly be screened by existing vegetation, south of the M62, the southern compound would partly be screened by existing vegetation, but the battery units would be visible above the vegetation, however their addition would be reduced due to the backcloth of the existing warehouse.
- 7.3.14 In winter, there may be glimpsed views through vegetation when foliage is less.
- 7.3.15 Therefore, there would be a Small magnitude of change on this Medium sensitivity receptor. This would result in a Slight Adverse effect.



8.0 CONCLUSION AND SUMMARY

- 8.1.1 In summary, during construction there would be short duration landscape and visual effects resulting from construction operations, notably the presence of plant during construction, however this would be viewed within the context of the surrounding business park. As such effects on landscape and visual during construction would **not be significant**.
- 8.1.2 The Site is located adjacent to a large-scale business park, and the established M62 Motorway to the south, therefore the Proposed Development would give rise to a limited change and have no identified adverse effects upon landscape character.
- 8.1.3 The most notable residual visual effects would be Slight Adverse upon Viewpoint 1, 2 and 4, however it is a small change, and following establishment of the proposed hedgerow along the southern boundary would effectively screen views of the Proposed Development from these viewpoints and likely reducing these effects to Negligible once established. Once the proposed hedgerow has established at 3m height, this would significantly reduce views of the Proposed Development from receptors to the south and blend it into the existing vegetation along the M62.

Appendix A – LVA Methodology



Appendix B – ZTV and Visualisation Methodology



Appendix C – Extracts from published Landscape Character Assessments





Rochdale BESS

Appendix A LVA Methodology

Prepared for



Balance Power

August 2023
3471-01-



CONTENTS

1.0	METHODOLOGY	1
2.0	LANDSCAPE ASSESSMENT	3
2.2	Sensitivity	3
2.3	Magnitude	7
3.0	VISUAL ASSESSMENT	9
3.2	Sensitivity	10
3.3	Magnitude	12
4.0	LEVEL AND SIGNIFICANCE OF EFFECT.....	13

IMAGES

Figure 2.1 Indicative Sensitivity Assessment	7
Figure 4.1: Level of Effect Matrix (indicative).....	15

TABLES

Table 2.1: Landscape Value Criteria	6
Table 2.2: Magnitude of Landscape Character Criteria (indicative).....	9
Table 3.1: Typical Visual Susceptibility to Change Criteria (indicative).....	10
Table 3.2: Magnitude of Visual Change Criteria (indicative)	13



1.0 METHODOLOGY

- 1.1.1 The Landscape and Visual Appraisal (LVA) is a tool used to systematically identify and assess the nature and significance of the effects of a proposed development upon the landscape and upon views and visual amenity. The purpose of the LVA is to identify the level and nature of effect arising from a proposed development and if necessary, through an iterative design process, to inform changes to the development and evolution of mitigation strategies which minimise significant effects wherever possible.
- 1.1.2 The methodology for this LVA is informed by guidance contained within the Guidelines for Landscape and Visual Impact Assessment (The Landscape Institute and Institute of Environmental Assessment, 3rd Edition, 2013), often referred to as 'the GLVIA'. The LVA aims to establish the following:
- i) A clear understanding of the development site and its context, in respect of the physical and perceived landscape and of views and visual amenity;
 - ii) An understanding of the proposed development in terms of how this would relate to the existing landscape and views;
 - iii) An identification of likely significant effects of the proposed development upon the landscape and upon views, throughout the life cycle of the development, including cumulative interactions with other developments;
 - iv) Those mitigation measures necessary to reduce or eliminate any potential adverse effect on the landscape or views arising as a result of the proposed development; and
 - v) A conclusion as to the residual likely significant effects of the proposed development.
- 1.1.3 Professional judgement is a very important part of the LVA process at every stage of the assessment. This judgement must be exercised within an assessment framework that transparently sets out the steps in the assessment process which have led to the overall conclusions. This is emphasised in Box 3.1 (page 37) of the GLVIA, which advocates a structured approach that considers the sensitivity of the receptor and magnitude of the effect when determining if an effect is significant or not.
- 1.1.4 To ensure the transparency of the assessment and professional judgements made, the LVA follows a standard approach, namely:



- i) The establishment of the baseline conditions, against which the effects of the proposed development will be assessed;
- ii) The determination of the nature of the receptor likely to be affected, i.e. its sensitivity;
- iii) The prediction of the nature of the effect likely to occur, i.e. the magnitude of change; and
- iv) An assessment of whether a likely significant effect would occur upon any receptor, by considering the predicted magnitude of change together with the sensitivity of the receptor, taking into account any proposed mitigation measure.

1.1.5 The GLVIA clarifies that the guidance concentrates on:

“...principles while also seeking to steer specific approaches where there is a general consensus on methods and techniques. It is not intended to be prescriptive, in that it does not provide a detailed ‘recipe’ that can be followed in every situation. It is always the primary responsibility of any landscape professional carrying out an assessment to ensure that the approach and methodology adopted are appropriate to the particular circumstance”.

1.1.6 As set out above, use of professional judgement within a structured assessment framework is a very important element of the assessment of landscape and visual effects. As discussed in the GLVIA:

[2.23] “...Whilst there is some scope for quantitative measurement of some relatively objective matters, ...much of the assessment must rely on qualitative judgement, for example about what effect the introduction of a new development or land use change may have on visual amenity, or about the significance of change in the character of the landscape and whether it is positive or negative.”

[2.24] “...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...”

[2.26] “...In carrying out an LVIA the landscape professional must always take an independent stance, and fully and transparently address both the negative and positive effects of a scheme in a way that is accessible and reliable for all parties concerned”.



- 1.1.7 Landscape and visual matters are separate issues, although closely related and interlinked, are dealt with as such throughout the LVA. The methodologies for assessing both are outlined separately below.

2.0 LANDSCAPE ASSESSMENT

- 2.1.1 The landscape assessment considers the potential effects of the proposed development on the components of the landscape as an environmental resource. Landscape receptors which could be affected by a proposed development may include:

- i) Individual constituent elements and features of the landscape (sometimes referred to as landscape fabric);
- ii) Specific aesthetic and perceptual qualities of the landscape;
- iii) The overall character and key characteristics of the landscape as experienced in different areas (e.g. landscape character areas or types).

2.2 Sensitivity

- 2.2.1 The nature of a landscape receptor likely to be affected, i.e. its sensitivity is determined by considering two factors, namely:

- a) Susceptibility to change; and
- b) Value.

Susceptibility to Change

- 2.2.2 Susceptibility to change is defined in the GLVIA as follows:

[5.40] “This means the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.”

[5.41] “The assessment may take place in situations where there are existing landscape sensitivity and capacity studies, which have become increasingly common. They may deal with the general type of development that is proposed, in which case they may provide useful preliminary background information for



assessment. But they cannot provide a substitute for the individual assessment of the susceptibility of the receptors in relation to change arising from the specific development proposal.”

2.2.3 To understand susceptibility to change, the various characteristics/factors that make up a particular landscape must be identified and consideration given as to how these will be affected by **the specific characteristics of the proposed development**. A landscape may have different levels of susceptibility to different scales and types of development (e.g. new houses; wind turbines; power lines). Consideration is given to physical and perceptual factors which are considered together to derive an overall susceptibility to the specific type of change. Factors influencing the susceptibility of a landscape to change are set out below, with specific reference made to Battery Storage Facilities where applicable:

- i) Scale: A larger scale landscape (relative to the development proposed) will typically be less susceptible than a smaller scale landscape;
- ii) Pattern/Complexity: The susceptibility of a receiving landscape to change will be influenced by the specific pattern of features and elements present and by the complexity of this pattern. A simpler landscape pattern will typically be more susceptible than a complex one. With specific reference to Battery Storage Facilities these tend to be discrete blocks of units assembled in a symmetrical pattern.
- iii) Development/Human Influence: A landscape that includes obvious alterations to natural ground levels, includes many contemporary development elements or structures, or that is clearly functional/utilitarian in its land use will typically be less susceptible to change that introduces contemporary structures than one where development is either absent or more traditional in style, or where natural influences and natural or long-established landforms are predominant;
- iv) Connections with adjacent areas: A landscape which has a clear relationship with other surrounding landscapes, for example in relation to views in and out, will typically be more susceptible than one that is more enclosed where such intervisibility not present;
- v) Visual Interruption: A landscape where views are frequently interrupted by screening features, for example vegetation cover or variations in landform, will typically be less susceptible than one where there are few / no screening features.



- vi) A particular landscape may have different characteristics that are more or less susceptible to change. As such, the overall susceptibility to change is allocated using professional judgement based upon consideration of the various factors outlined above and the relative weight attached to these (which will vary from landscape to landscape). The assessment of susceptibility is expressed using a three point verbal scale of high, medium or low. Where appropriate, intermediate levels such as medium/high or low/medium are used to refine the assessment. The rationale in support of the assessment of susceptibility is set out for each receptor in the assessment, so that it is clear how each judgement has been made.

Value

- 2.2.4 The value of the landscape receptor is independent of any development proposal. The absence of a formal landscape designation does not necessarily imply that a landscape is of lower value. Value is defined in the GLVIA as:

[5.19] "...the relative value that is attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a whole variety of reasons...Landscapes or their component parts may be valued at the community, local, national or international levels..."

- 2.2.5 Factors that can help in identifying valued landscapes include:

- a) Presence/absence of statutory landscape designations;
- b) Presence/absence of local landscape designations and associated policies;
- c) Landscape quality/condition;
- d) Scenic quality;
- e) Rarity of particular elements/features;
- f) Representativeness;
- g) Conservation interest;
- h) Recreation value;
- i) Perceptual aspects; and
- j) Cultural associations.



- 2.2.6 The assessment of value is expressed on a similar basis to that described for susceptibility of change above. Table 2.1 indicates how the above factors have been used to determine landscape value.

Table 2.1: Landscape Value Criteria

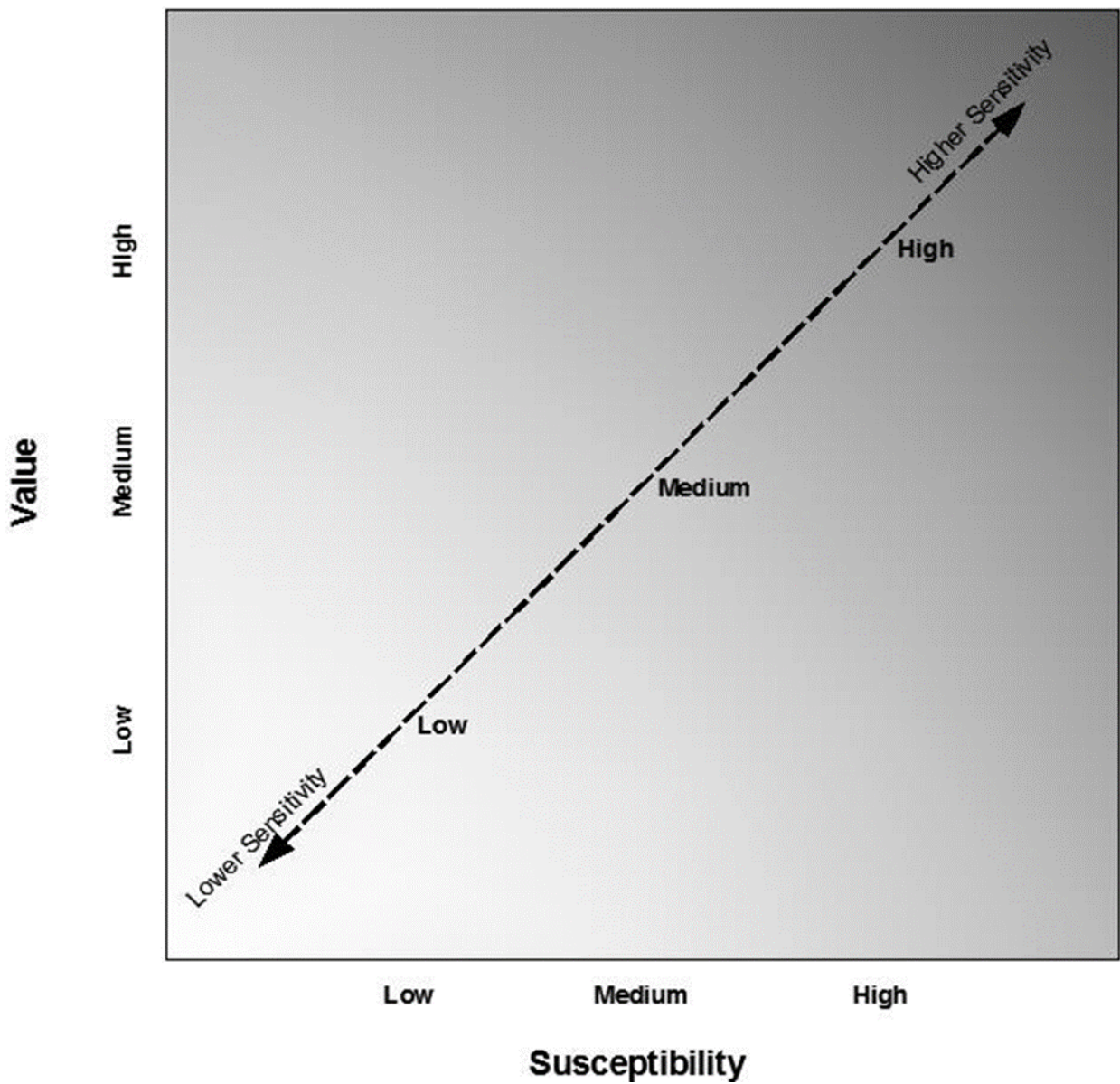
	Criteria tending towards higher or lower value	
	Higher	Lower
Value	Unique, and/or strongly positive landscape character, often with strong associations or (non-landscape) environmental designations. Nationally designated landscape (protected by statute).	Widespread or common landscape character. Negative character Lack of other environmental qualities Landscape without formal designation and with limited positive contribution to the locality.

Sensitivity

- 2.2.7 Susceptibility to change and value are considered together to determine the sensitivity of the receptor. It should be noted that the relationship between susceptibility to change and value can be complex and is not linear. For example, a highly valued landscape (such as a National Park or Area of Outstanding Natural Beauty) may have a low susceptibility to change, due both to the characteristics of the landscape and the nature of the change proposed. Figure 2.1 provides a guide as to how susceptibility and value can be combined to assess sensitivity (with the grey shading indicative of the increasing sensitivity of receptors with increasing susceptibility and / or value). However, it must be emphasised that this is only a guide and that the final assessment of sensitivity is one of professional judgement.
- 2.2.8 The design, layout and scale of proposals shall conserve and enhance landscape features that are worthy of retention and that contribute positively to landscape features which typify the traditional characteristics of the area and safeguard the positive experiential and visual amenity qualities of the landscape.
- 2.2.9 The restoration of landscapes will be sought where either natural or cultural heritage features of importance have been lost or degraded.



Figure 2:1 Indicative Sensitivity Assessment



2.3 Magnitude

2.3.1 The magnitude of change is determined by considering four separate factors, namely:

- i) Size/scale;
- ii) Geographical extent;
- iii) Duration; and
- iv) Reversibility.

- 2.3.2 The **size and scale** of an effect is determined by considering the amount of change experienced by a receptor, including:
- a) The extent of existing landscape elements that would be lost, the proportion of the total extent that this represents and the contribution of that element to the wider character
 - b) The degree to which aesthetic or perceptual aspects of the landscapes are altered by the removal, or introduction of new landscape components;
 - c) Whether change affects the key characteristics of a landscape.
- 2.3.3 The **geographical extent** of an effect is the area over which effects will be experienced. It is not the same as size / scale, as a small-scale change may be experienced over a wider area, or vice-versa.
- 2.3.4 The **duration** of an effect simply relates to the length of time for which it would be experienced. There is no fixed definition of how these are categorised, but the following are quoted as an example in GLVIA (para 5.51):
- i) Short term: zero to 5 years;
 - ii) Medium-term: 5-10 years;
 - iii) Long-term: 10-25 years.
- 2.3.5 Battery Storage Facilities will typically be long term (permanent) infrastructure that would be in place beyond 25 years unless technology change was to make it redundant.
- 2.3.6 The **reversibility** of an effect relates to whether or not when the Proposed Development reaches the end of its operational life and is demolished or removed, there will be a lasting effect on the landscape. If it can be taken away and the land restored, it is reversible. If removal is impractical or unlikely it isn't reversible. In some cases partial removal will mean that there is partial reversibility.
- 2.3.7 The four factors contributing to magnitude are considered together to derive an overall magnitude of change in relation to each receptor, determined by use of professional judgement. The assessment of the magnitude of change is expressed using a four point verbal scale of large, medium, small or negligible. Where appropriate, intermediate levels such as medium / large or small / medium are used to refine the assessment.



2.3.8 Table 2.2 provides some descriptors for each of the four points on the scale which indicate how the above factors can be used to inform magnitude of change. These are very much examples rather than definitive – in reality the factors combine in multiple different ways and every case will be different. As such the circumstances of each specific are reflected in a reasoned narrative within the LVA in order to explain the particular magnitude of change allocated to each receptor.

Table 2.2: Magnitude of Landscape Character Criteria (indicative)

Magnitude	Description
Large	A substantial change or loss in landscape characteristics and/or introduction of a very incongruous feature influencing an extensive geographical area and/or which may result in a permanent and perhaps irreversible landscape impact.
Medium	A moderate change or loss in landscape characteristics and/or introduction of an incongruous feature influencing a large geographical area, and/or which may be reversible in the long term.
Small	A small change or loss in landscape characteristics and/or introduction of a feature which would influence a relatively localised geographical area, and/or which may be reversible over a short duration of time.
Negligible	A barely perceptible change or loss in landscape characteristics and/or the perception of change would be focused on a small geographical area, and/or which is almost or completely reversible.

3.0 VISUAL ASSESSMENT

3.1.1 The visual assessment is concerned with the potential effects upon the population likely to be affected (i.e. the views experienced by people). As for landscape effects (Section 2.0), the sensitivity of the receptor affected is identified, as is the magnitude of the change that would occur. These are then considered together to determine the level and significance of effect.

3.1.2 A key part of the visual assessment is the assessment of effects from a number of predetermined viewpoints, which reflect views available to different groups of people. The viewpoint itself is not the receptor; rather it is the people that would be experiencing the view. These people will generally have different responses to a change in view depending upon their location, their activity and other factors, including the weather and time of day or year. Viewpoints fall into three categories (as set out in the GLVIA):

- i) Representative viewpoints (which represent the experience of different types of receptors in the vicinity);
- ii) Specific viewpoints (a particular view, for example a well-known beauty spot);
- iii) Illustrative viewpoints (which illustrate a particular effect or issue, which may include limited or lack of visibility).



- 3.1.3 Private viewpoints, such as from specific residential properties are not typically included in the LVA. It is often impractical to visit all affected properties and access to private land may not be granted. Representative or specific viewpoints from nearby publicly accessible locations can often give an impression of what effects from private land would be.

3.2 Sensitivity

- 3.2.1 The nature of a visual receptor likely to be affected, i.e. its sensitivity is determined by considering two factors, namely:

- i) Susceptibility to change;
- ii) Value.

Susceptibility to Change

- 3.2.2 Paragraph 6.32 of GLVIA identifies susceptibility to change in view/visual amenity as:

“...mainly a function of:

The occupation or activity of people experiencing the view at particular locations; and

The extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations.”

- 3.2.3 Susceptibility to change is, in part, classified based upon the indicative criteria, provided in GLVIA, as set out in Table 3.1.

Table 3.1: Typical Visual Susceptibility to Change Criteria (indicative)

Criteria Level	Description
Susceptibility to Change	
High	Residents at home; People engaged in outdoor recreation, whose attention/interest is likely to be focused on the landscape or particular views, including from public rights of way; Visitors to heritage assets or other attractions, where views of the surrounding are an important contributor to the experience; Communities where views contribute to the landscape setting enjoyed by residents; Travellers on scenic routes.
Medium	Travellers on road, rail, or other scenic routes.
Low	People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape;



Criteria Level	Description
	People at their place of work whose attention may be focused on their work / activity and not their surroundings.

3.2.4 It is important to note that the examples set out in GLVIA and Table 3.1 above only address the first bullet point and part of the second bullet point in paragraph 3.2.2 above (which are focussed on the occupation or activity of the people and the extent to which their attention is focussed on the view).

3.2.5 As such, the assessment of susceptibility in Table 3.1 and GLVIA (pages 113 & 114) needs to be adjusted to reflect the requirements of the final part of the second bullet point, namely the visual amenity that people currently experience. GLVIA identifies clearly that the division between categories of susceptibility to change:

[6.35] "...is not black and white and in reality, there will be a gradation in susceptibility to change. Each project needs to consider the nature of the groups of people who will be affected and the extent to which their attention is likely to be focused on views and visual amenity..."

3.2.6 For example, the presence of existing detracting features in any given view may reduce the visual amenity of those experiencing the view. This may therefore reduce their susceptibility to certain types of change and ultimately their sensitivity.

3.2.7 The assessment of susceptibility to change is made on the same basis as for landscape effects (Section 2.0 above). A three-point scale (with intermediate levels where appropriate) is used, supported by a reasoned narrative that explains the judgement made.

Value

3.2.8 In accordance with paragraph 6.37 of the GLVIA when considering the value of a view experienced, this should take account of:

- a) Recognition of the value attached to particular views, for example in relation to heritage assets or through planning designations; and
- b) Indicators of the value attached to views by visitors, for example through appearances in guidebooks or on tourist maps, provision of facilities for their enjoyment and references to them in literature or art.



- 3.2.9 For this reason, whilst not specifically referenced in the current edition of GLVIA, the number of people likely to be affected can influence the value assigned to a particular view.
- 3.2.10 The assessment of value is made on the same basis as the assessment of susceptibility to change.

Sensitivity

- 3.2.11 Susceptibility to change and value are considered together as discussed above for landscape sensitivity and illustrated above in Figure 2.1. Again, professional judgement determines the final judgement of sensitivity, due to the non-linear and complex relationship between susceptibility and value. A reasoned narrative is set out in the LVA in order to justify the particular sensitivity assessed for each receptor, so that it is clear how each judgement has been made.

3.3 Magnitude

- 3.3.1 The magnitude of change that is likely to occur is determined by considering four separate factors, namely:
- i) Size/scale;
 - ii) Geographical extent;
 - iii) Duration;
 - iv) Reversibility.
- 3.3.2 The **size and scale** of an effect is determined by considering a variety of factors including:
- a) the loss of or addition of features, and change in composition, and the proportion of the existing view that would be occupied by the change;
 - b) The degree of contrast or integration of new features or other changes with relation to the existing or remaining elements in the view (form, scale, mass, line, height, colour, texture etc.);
 - c) The nature of the view, namely the relative amount of time it would be experienced for and whether the views would be full, partial or glimpsed.
- 3.3.3 The **geographical extent** of an effect will vary from viewpoint to viewpoint and will reflect the following:



- a) The angle of view in relation to the main activity of the receptor;
- b) The distance from the proposed development;
- c) The extent over which change in view would be visible.

- 3.3.4 The **duration** of an effect simply relates to the length of time for which it would be experienced, i.e. short, medium or long term in a similar manner as was set out for landscape effects.
- 3.3.5 The **reversibility** of an effect relates to the prospects and practicality of an effect being able to be wholly or partially reversed, or whether the change cannot realistically be reversed, i.e. it is permanent.
- 3.3.6 These four factors are then considered together to derive an overall magnitude of change for each receptor, which is determined by use of professional judgement. The assessment of the magnitude of change is expressed using a four point verbal scale of large, medium, small or negligible. Where appropriate, intermediate levels such as medium/large or small/medium are used to refine the assessment.
- 3.3.7 Table 3.2 indicates with some descriptive text how the above factors could be used to inform magnitude of change. As the circumstances of each specific receptor will vary, a reasoned narrative is set out in the LVA for each view in order to explain the particular magnitude of change allocated to each receptor.

Table 3.2: Magnitude of Visual Change Criteria (indicative)

Magnitude	Description
Large	A change which introduces a prominent new feature, and/or something of a larger scale to existing elements in the view, which may be seen across an extensive area or experienced from a long section of a route, and/or a longer-term effect, and/or significant contrast with the existing view.
Medium	A change which introduces an obvious new feature, and/or something at a slightly bigger scale to existing elements in the view, which may be seen across a wider area or experienced from a section of a route, and/or a medium-term effect, and/or broadly compatible with the existing view.
Small	A change affecting a smaller proportion of a view, which may be seen from a limited area or experienced from a short section of a route, and/or a shorter-term effect, and/or compatible with the existing view.
Negligible	A change which is barely perceptible in the view, and/or which is only glimpsed from a route.

4.0 LEVEL AND SIGNIFICANCE OF EFFECT

- 4.1.1 The purpose of Environmental Impact Assessment (EIA) is to determine the likely significant effects of a development proposal. Not all landscape and visual effects arising as a result of a particular proposal will be significant. Furthermore, a



significant effect does not necessarily mean that such an effect is unacceptable to decision-makers. This is a matter to be weighed in the planning balance alongside other factors. What is important is that the likely effects of any proposal are transparently assessed and described in order that the relevant determining authority can bring a balanced and well-informed judgement to bear as part of the decision-making process.

4.1.2 The State of Environmental Impact Assessment Practice in the UK (Institute for Environmental Management and Assessment 2011) identifies a range of different factors that should be considered when evaluating the significance of an effect, including:

- i) Knowledge and experience of significance from previous assessments;
- ii) Details of the development proposal, such as construction and operational activities, and the nature of the effect associated with such activity;
- iii) Details about the environmental sensitivity of the area that will be affected;
- iv) Feedback from scoping and consultation;
- v) The wider legal and policy context, which offers protection to the environment and community.

4.1.3 The level of effect can only be defined in relation to each particular development and its specific location. It is for each LVA to determine how judgements about receptor sensitivity and the magnitude of change should be combined to derive the level of effect and to clearly explain how this assessment has been made, and if the level of effect is considered significant.

4.1.4 Figure 4.1 (below) provides a guide as to how sensitivity and magnitude can be combined to identify the level of effect upon a receptor (with the grey shading indicative of the increasing level of effect with increasing sensitivity and/or magnitude). However, the final assessment of the level of effect and whether this is significant for decision makers is one of professional judgement.

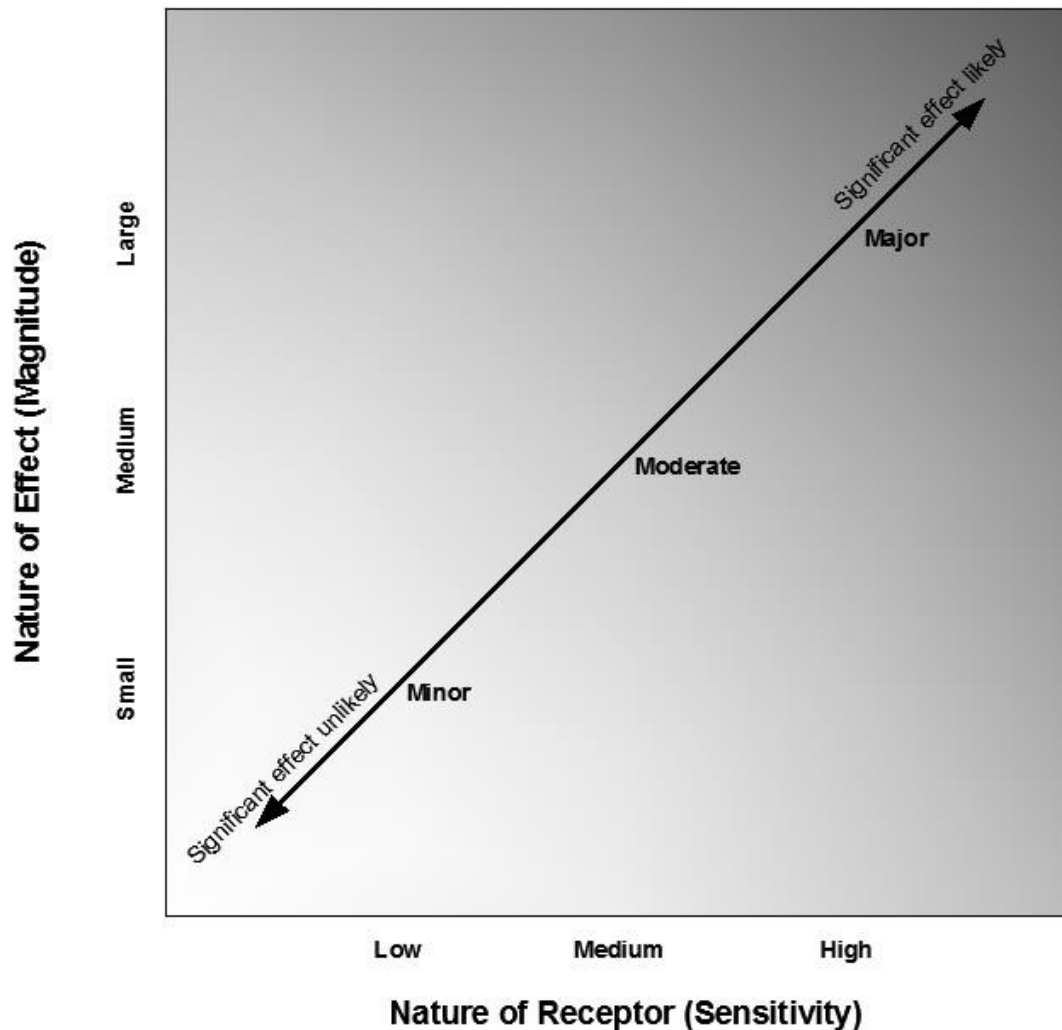
4.1.5 Where magnitude of change is identified as 'negligible,' then effects are automatically considered not to be significant due to the minimal level of change from baseline (which would not be perceptible).

4.1.6 Greater than 'moderate' effects are more likely to be identified as significant. This is because they would generally result from larger magnitudes of change on higher sensitivity receptors. This does not preclude a 'moderate' effect or lower being



significant or a greater than 'moderate' effect not being significant. This judgement will depend on the specific circumstances being considered.

Figure 4.1: Level of Effect Matrix (indicative)



4.1.7 The GLVIA identifies that:

[3.32] *"The Regulations require that a final judgement is made about whether or not each effect is likely to be significant. There are no hard and fast rules about what effects should be deemed 'significant' but LVIA's should always distinguish clearly between what are considered to be significant and non-significant effects..."*

[3.33] *"It is not essential to establish a series of thresholds for different levels of significance of landscape and visual effects, provided that it is made clear whether or not they are considered significant. The final overall judgement of the likely significance of the predicted landscape and visual effects is however, often summarised in a series of categories of significance reflecting combinations of sensitivity and magnitude. These tend to vary from project to project but they should*

be appropriate to the nature, size and location of the proposed development and should as far as possible be consistent across the different topic areas of the EIA.”

[5.56] & [6.44] “There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and [landscape]1 context and with the type of proposal.”

- 4.1.8 It should be noted that effects may be either adverse (negative) or beneficial (positive). An effect can be significant and adverse, or significant and beneficial. If change occurs, with no obvious deterioration or improvement resulting, this can be said to be neutral.



Appendix B – ZTV and Visualisation Methodology





Rochdale BESS

Appendix B

ZTV and Visualisation Methodology

Prepared for



Balance Power

August 2023
3471-01



CONTENTS

1.0	ZONE OF THEORETICAL VISIBILITY	1
1.2	Data Source	1
1.3	ZTV creation	1
1.4	<i>Limitations</i>	1
2.0	VIEWPOINT VISUALISATIONS	2
2.1	Photography	2
2.2	Presentation & Viewing	3



1.0 ZONE OF THEORETICAL VISIBILITY

- 1.1.1 Zone of Theoretical Visibility (ZTV) maps have been generated in order to better understand the likely extent of the surrounding landscape across which the Proposed Development would be visible.

1.2 Data Source

- 1.2.1 The ZTV was produced using a commercial 2m Photogrammetric Digital Surface Model (DSM) available free from DEFRA. This is derived from aerial photography captured in 2008 and in 2018, and takes account of screening features such as buildings and vegetation.
- 1.2.2 The DSM is based upon a 2m grid spacing. The horizontal Root Mean Square Error (RMSE) of the data is 1m, and the vertical RMSE is 1.5m.

1.3 ZTV creation

- 1.3.1 The ZTV was calculated and created using QGIS open source software. The ZTV calculation process takes account of the curvature of the earth's surface and light refraction. The eye height of the receptor in the computer model was set at 1.6m above ground level in accordance with guidance set out in GLVIA.
- 1.3.2 The ZTV illustrates the theoretical visibility of the BESS, at a height of 3.5m above ground level. Noting the vertical RMSE of 1.5m which results in a height of 5m.
- 1.3.3 The ZTV is displayed on Figure 2 of the LVIA.

1.4 Limitations

- 1.4.1 A ZTV, as use of the term theoretical implies, is not an absolute indication of the extent of visibility but rather a computer-generated aid that utilises available relative data to indicate areas of inter-visibility and screening in relation to a specific modelled object. ZTVs are tools to assist the LVIA. The technique aims to give a better understanding of the areas where visibility is likely and unlikely but imperfections in data are such that it must only be seen as an aid to understanding. This limitation needs to be recognised when interpreting the ZTVs.
- 1.4.2 An additional caveat is that the ZTVs simply illustrates that part of a structure would be theoretically visible. As such, it makes no distinction between a clear view of all or most of a proposed feature and a view of a very small proportion of a feature (for



example one corner of a building roof, or the top of a stack). This is especially relevant in the case of the Proposed Development, where views from the surrounding area are often limited by vegetation cover.

- 1.4.3 The ZTV produced using the DSM does reflect the presence of screening features in the landscape. However, it should be recognised that the DSM reflects a single moment in time (i.e. when the underlying aerial photography was taken). In reality, the extent and / or height of vegetation cover is dynamic and changes as vegetation inevitably increases in stature over time and / or is planted, trimmed or removed. Similarly, there is potential for buildings to have been erected, demolished or modified, subsequent to the data being captured.
- 1.4.4 Additionally, the DSM tends to assume that vegetation captured forms a solid visual barrier, when in reality views can sometimes be available through leaves and branches, especially in winter when deciduous foliage is absent. As such, the real-world visibility of the Proposed Development could potentially be underestimated in places. Field work undertaken as part of the LVIA included ground truthing the DSM ZTV, and confirmed that it is a relatively accurate depiction of visibility, whilst recognising that glimpsed views through bare vegetation may not be modelled (for example at Viewpoint 2).
- 1.4.5 Finally, the DSM does not distinguish between the ground surface and the surface of structures and vegetation. As a consequence, the ZTV output may indicate visibility from areas known to be occupied by woodland and buildings. Whilst in theory it may be possible for people to experience the views from such locations (by climbing onto roofs, or into the tops of trees), this is not representative of typical day to day visibility, and as such there is the potential to overstate the actual visibility of the Proposed Development. viewpoint visualisations

2.0 VIEWPOINT VISUALISATIONS

2.1 Photography

- 2.1.1 All photography for this assessment was taken using a Canon EOS 6D Mark II digital single lens reflex (DSLR) camera with a full-frame sensor, using a 50mm lens. The camera was mounted on a tripod to ensure a stable support and minimise camera shake. The camera was mounted on a panoramic tripod head with built-in spirit level (Manfrotto Panoramic Row), which allows for the rotation of the camera at fixed intervals around a fixed point in vertical alignment with the camera lens, thereby



eliminating parallax error. The camera is levelled using an auto-leveller device (Manfrotto Levelling Base). Camera height was 1.6m above the ground.

- 2.1.2 Photographs were typically taken over a full 360 degree sweep from each viewpoint location. The precise location of each photograph was recorded using a GPS, and on mapping (which has an accuracy of approximately less than 0.5m). Following the Site visit, the GPS data was loaded into the GIS software to record the viewpoint location. A spreadsheet was completed recording information about the viewpoint.

Limitations

- 2.1.3 It should be understood that photography can never provide an exact match to what is experienced in reality. Visualisations are tools in the assessment process but independent from it. They illustrate the view in the context of a specific date, time and weather conditions, that would be seen within a photograph and not as seen by the human eye. As such, visualisations need to be used in conjunction with site visits and should be considered in the context of the totality of views experienced from the viewpoint and not just focussed on the Proposed Development.
- 2.1.4 Refer to the main chapter for limitations on seasonal changes and time of year for photography.

2.2 Presentation & Viewing

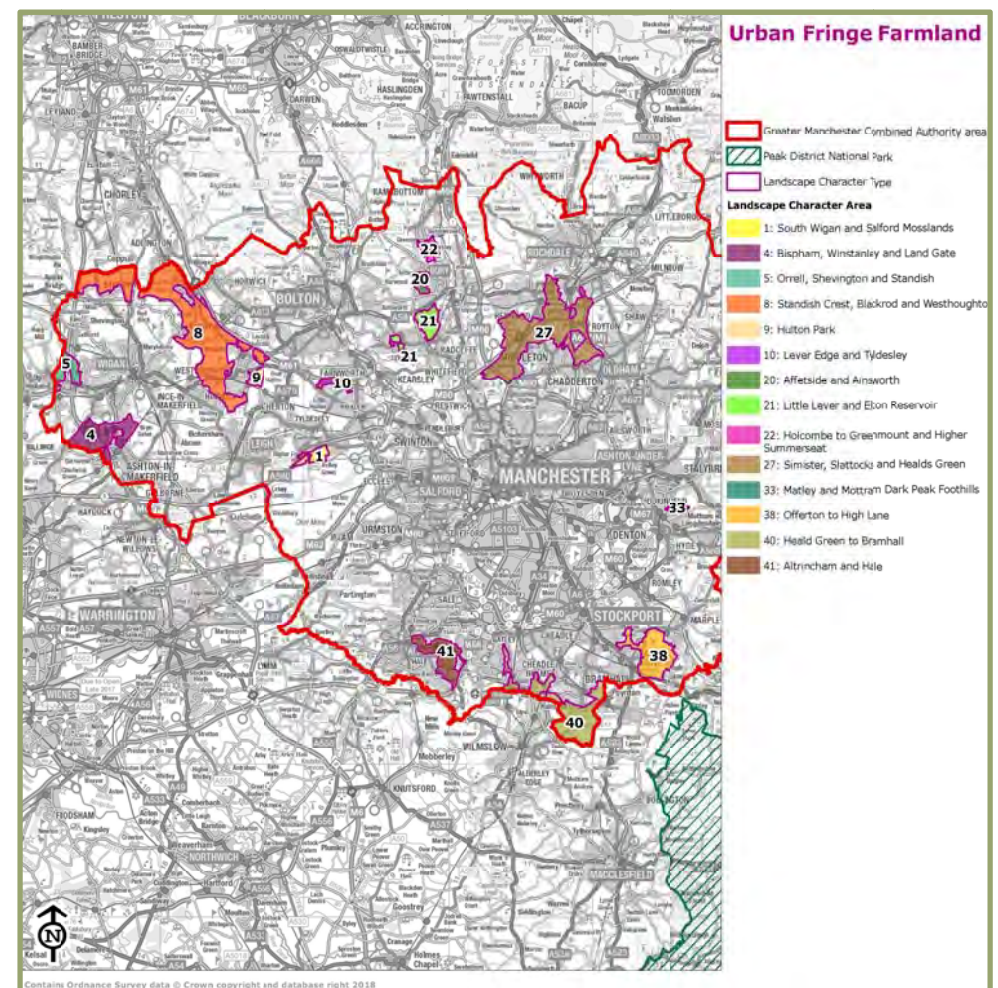
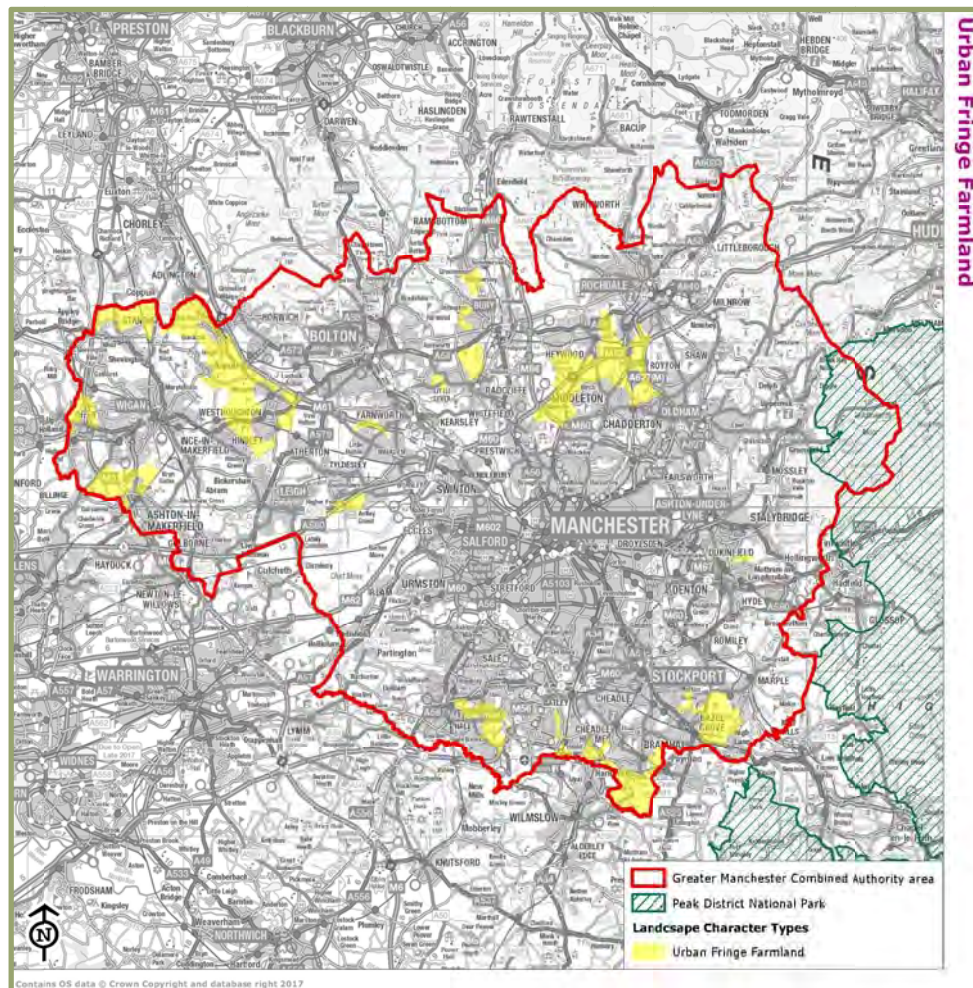
- 2.2.1 The viewpoint photography is inserted into a Figure template, which also includes information about the viewpoint, including the date and time of photography, and details of the camera used.
- 2.2.2 These are presented in Figure 3.
- 2.2.3 Each sheet should be printed at the size stated on it. In some instances, this may require unconventional paper sizes (e.g. A1 width and A3 height). All printed sheets should be viewed held flat at a comfortable arm's length.



Appendix C – Extracts from published Landscape Character Assessments



LCT: Urban Fringe Farmland



This Landscape Character Type (LCT) is found in Wigan, Bolton, Bury, Salford, Trafford, Rochdale, Oldham, Manchester, Tameside and Stockport Districts (all Greater Manchester authorities).

Representative photographs



Arable fields with gappy hedgerows and views of the settlement edge and Pennine Hills, Wigan



Pastoral field with hedgerow replaced by post and wire fencing, Wigan



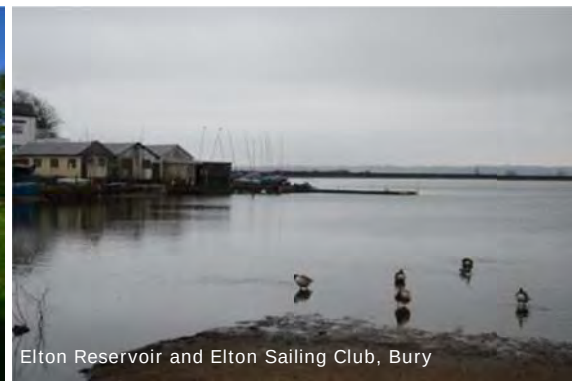
Degraded landscape with removal of boundary features, Wigan



Motorways with large embankments passing through undulating farmland, Rochdale



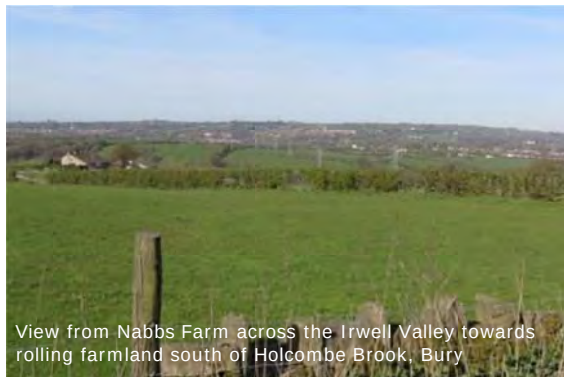
Smaller field of pasture with robust boundaries in the flatter Mersey Basin, Trafford



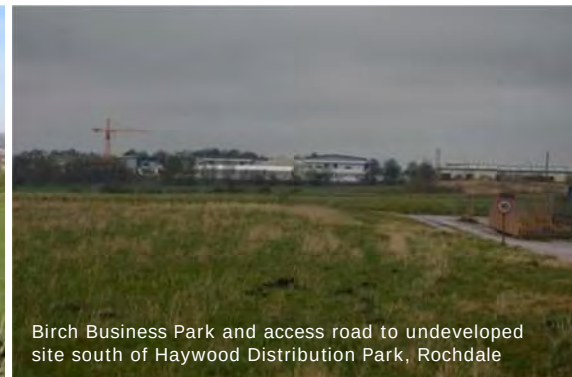
Elton Reservoir and Elton Sailing Club, Bury



Unused Brackley Municipal Golf Course, south of Farnworth, Salford



View from Nabbs Farm across the Irwell Valley towards rolling farmland south of Holcombe Brook, Bury



Birch Business Park and access road to undeveloped site south of Haywood Distribution Park, Rochdale

Landscape character description

Key characteristics

Topography, geology and drainage

- Rolling landscape with elevation ranging between 30 and 250m AOD. The landform becomes gentler as it falls towards the floodplains of the rivers Mersey and Bollin (from 10 to 60m AOD).
- Elevated farmland to the north and east, close to the Pennine and Dark Peak foothills, mainly comprising undulating hills and valleys.
- Landform dissected by narrow, often steep sided wooded cloughs, and drained by a network of streams and ponds (of local ecological value) throughout.
- Underlying bedrock geology at higher elevations dominated by Pennine Coal Measures mudstones, siltstones and sandstones. The Mersey and Bollin floodplains comprise sandstones of the Wilmslow and Chester formations, as well as deposits from the Sidmouth Mudstone Formation.
- Glacial till and fluvial deposits overlay the bedrock, creating the rolling landform.

Land use and field patterns

- Variable land use, with the more elevated land in the north and east typified by lower grade agricultural land used for dairy farming, horse grazing and sheep rearing. Pockets of dry heath, acid grassland and moorland fringe are also present.
- Pastoral land characterised by small and medium sized fields, forming various patterns from rectilinear to distinctive web shaped originating from Parliamentary enclosure.
- Flatter, more fertile floodplain areas give rise to a mix of pasture and arable cultivation. Fields tend to be larger with subtle boundary features, with occasional small pasture fields to the east of Altrincham.
- Field boundaries comprise often gappy, species-poor hedgerows with occasional established clumps of hedgerow trees. Post and wire fencing replaces hedges in many locations, whilst occasional stone walls provide definition at higher elevations, but many are in a degraded condition.
- Frequent recreational land uses with sports fields and golf courses located close to the urban edge. The manicured lush greens of the courses contrast sharply with areas of semi-improved grazing land.
- The open farmland contrasts strongly with adjoining residential and industrial urban areas, often forming a rural buffer to the Pennine and Dark Peak foothills.

Semi-natural habitats and woodland cover

- Open landscape with sparse woodland cover generally limited to isolated plantation woodland, hedgerows and the steep cloughs that bisect the rolling farmland.
- A small number of Ancient Woodlands (e.g. Oaken Bank Wood and Glade Wood within Hopwood Woodlands Local Nature Reserve (LNR), Rochdale) provide important habitats and wildlife corridors.
- Established clumps of hawthorn and dog rose line some of the field boundaries and highways, with some incorporating mature broadleaved trees.
- Other SBI-designated habitats include areas of dry heath, acid and of species rich grassland. Elton Reservoir, south-east of Bury, remains a legacy of the area's industrial past and is an important site for water fowl. Flashes also form locally important wetland habitats of industrial origin.

Archaeology and cultural heritage

- The Trans-Pennine railway, dismantled railway routes and canals serve as a reminder of the area's industrial past; the importance of the Macclesfield Canal is reflected in its Conservation Area status.
- Scheduled Monuments limited to moated sites north-west of Broadoak Farm (near Marple), another at Arley Hall east of Standish, and Astley Green Colliery engine house and headgear.
- Birch village (Rochdale) and part of Summerseat (Bury) are Conservation Areas. The landscape also forms part of the setting to a number of other Conservation Areas on its doorstep.
- Grade II Listed Buildings sparsely scattered throughout. The LCT includes the Grade II* Listed Brandlesholme Old Hall (Bury), Hopwood Hall (Rochdale) and Old Manor Farm (Stockport).

Settlement, road pattern and rights of way

- Generally a dispersed pattern of scattered farmsteads and individual dwellings constructed of locally sourced gritstone. Occasional small settlements are linked by local roads and winding country lanes.
- In some areas settlement takes the form of 20th century ribbon development strung along roads. Some industrial development and distribution parks are also located close to major roads.
- A network of major road and rail routes, including the M62, M61 and A627(M) motorways, form

dominant features with extensive cuttings, embankments, bridges and junctions.

- Numerous rights of way and cycle routes permeate the landscape, linking to the surrounding urban areas. The Rotary Way and Rochdale Way are long distance footpaths connecting to the local network.
- Disused railway lines provide recreation and nature conservation corridors, including in Wigan and the Midshires Way in Stockport.

Views and perceptual qualities

- In general the more elevated, rolling farmland has an exposed and open character with little sense of enclosure and strong visual connections with surrounding landscapes.
- Views within the floodplains are typically restricted by hedgerows, hedgerow trees and development, creating a more enclosed landscape with pockets of seclusion and relative tranquillity.
- Wide panoramic views from high points over the Greater Manchester conurbation contained within a bowl dramatically flanked by the South/West Pennines and the Peak District National Park.
- Long views towards the coastal plain to the west stretch as far as Fiddler's Ferry Power Station near Widnes.
- Historic mills with tall chimneys and warehouses also form landmarks on the skyline.
- Transport corridors and pylon lines are very apparent, with the lack of tree cover within the rolling open farmland leaving the large roads and motorway visually exposed and audible.

Intactness and condition

This is a predominantly rural landscape of typically low grade pasture land and semi-improved grassland associated with stock rearing and rough grazing. The elevated farmland in the north and east is a generally open and exposed containing few settlements, however some areas are strongly influenced by the visual presence of the adjoining urban edge and by numerous tall pylon lines and major road and rail routes which bisect the landscape. Other areas are quieter and host a smaller network of winding country lanes connecting dispersed and isolated dwellings. Woodland is generally sparse, though the lower-lying and flatter south contains tree belts and tall hedgerows which provide pockets of seclusion. The influence of adjoining urban areas has eroded and fragmented some of traditional land uses, with industrial buildings, distribution centres and golf courses detracting from rural qualities. The noise of traffic and activity along the motorways and fast moving traffic along A and B roads weaken the sense of rural tranquillity, as does the fairly regular noise of planes overhead, particularly closer to Manchester Airport in the south. Field boundaries comprise predominately species poor hedgerows that are often gappy and in some have been replaced by post and wire fencing. Other signs of physical deterioration include derelict sections of dry stone wall gapped up or completely replaced by fencing; a prevalence of horse keeping on urban fringe (with associated over-grazed paddocks); and evidence of anti-social behaviour such as fly tipping and littering.

Landscape sensitivity assessment

Criteria	Description	Sensitivity Rating
Physical character (including topography and scale)	- The landform close to the Pennine and Dark Peak foothills is often strongly undulating, rising to a height of 250m AOD. - Within the lower lying floodplain areas the landform is flatter and gently sloping between 10 – 60m AOD. - The rolling elevated farmland is generally very open and windswept with a simple pattern of pastoral fields defined by subtle boundary features. - The elevated farmland is generally large in scale but with pockets of smaller scale within incised valleys. - Lower lying farmland areas are more irregular and overlain by a medium scale field pattern separated by gappy hedgerows that add a degree of complexity.	M
Natural character	- Land use is largely semi-improved pastoral farmland with occasional arable fields in lowland and floodplain areas. - The rolling landscape is sparsely wooded and dominated by grazing land with relatively poor levels of biodiversity. - Some isolated pockets of ancient and riparian woodland of ecological value (e.g. Hopwood Woodlands LNR). - Semi-natural areas of dry heath and acid grassland and some fields of species rich grassland are present and form important SBI-designated habitats for local wildlife. - Established clumps of hawthorn line some of the field boundaries, with some incorporating mature stands of broadleaf trees to offer a naturalistic character to the farmland.	M
Historic landscape character	18th and 19th century parliamentary enclosure create a semi-regular field patterns across the rolling farmland. - Dry stone walls delineate small pastures at higher elevations and provide a more traditional field pattern. Many are in poor repair. - Few Scheduled Monuments within the LCT – those that are present are two moated sites and Astley Green Colliery engine house and headgear. - A scattering of Grade II and II* listed buildings, mainly comprising manor houses and historic farmsteads. - Birch Village, part of Summerseat and the Macclesfield Canal Conservation Areas are located within the LCT; it also forms part of the setting to others. - Other industrial relicts are important evidence of past activities and land use.	L-M
Form, density and setting of existing settlement / development	- Relatively sparsely populated rural area with a scattered pattern of farms and small settlements linked by lanes and some larger roads. - Some areas are strongly influenced by adjoining urban areas with ribbon development along roads, utility infrastructure and large electricity overhead lines intruding into the rural landscape. - An extensive transport network with rail, large roads and motorways has a dominating influence in some areas. - Away from major transport networks there are quieter areas with local roads connecting dispersed settlements and isolated dwellings. - Industrial developments are located near to major roads and the large Birch Service Station is located along the M62. - The landscape forms a rural backdrop and important separation function between discrete urban areas, preventing coalescence.	M-H
Views and visual character including skylines	- A predominantly elevated, rolling farmland with open and expansive views over the Greater Manchester conurbation. - Views in lower lying areas are generally more contained by hedgerows and buildings. - The tower blocks of central Manchester are visible on the horizon. - Historic mills with tall chimneys and warehouses also form landmarks. - The rural character is often interrupted by a network of large electricity pylons extending high above the skyline as they rise up and over Pennine and Dark Peak foothills.	M
Access and recreation	- Network of public rights of way, long distance footpaths and cycle routes and, closer to the urban edge, informal desire lines. - Many areas close to the urban edge are used for recreation with amenity grassland associated with golf courses and large areas of playing fields.	M-H
Perceptual and	Some areas retain strongly rural characteristics with historic field patterns and traditional stone farmsteads and dwellings.	M

experiential qualities	- The rolling elevated farmland has an exposed open character. - Pockets of seclusion and rural tranquillity are present within the lower lying areas, although these are largely open. - Major transport corridors severely detract from these qualities in places, introducing visual and aural impacts. - The rural character is further weakened by a network of large electricity pylons which extend urban influences. - The urban edge is almost always evident although in places a lack of development and relative inaccessibility provide a feeling of remoteness. - Anti-social behaviour, including fly-tipping, evokes a sense of neglect and urban fringe character in locations close to the urban edge.	
-------------------------------	---	--

Overall assessment of landscape sensitivity

Landscape Character Type level					
Development scenario	Sensitivity				
2-3 storey residential housing developments			M		
Commercial/industrial developments				M-H	
Steeper slopes and land at higher elevation along the Pennine and Peak fringes would have moderate-high sensitivity to residential housing developments and high sensitivity to commercial/industrial developments) due to visual prominence of this rural landscape from surrounding areas. Such areas include elevated land near Thronfields Farm and Chadderton Heights to the immediate west of the A627(M), the site of Dukinfield Golf Club in Tameside (LCA 33), land along the western edge of Hawk Green and High Lane in Stockport (LCA 38), and the western and southern slopes of Pennington Hill (LCA 8, Wigan) upon which Blackrod sits. Areas on the immediate urban edge and adjacent to main roads and motorways typically have a lower sensitivity to both scenarios, due to the strong influence development already has on the rural qualities of the landscape. Areas in Wigan particularly affected include land between the urban edge of Westhoughton and the M61, land adjacent to Astley and the A580 (both LCA 8), and land set between the urban edge of Farnworth and the M61 (LCA 10).					
Notes on any variations in landscape sensitivity, by Landscape Character Area					
LCA 22: Holcombe to Greenmount and Higher Summerseat					
2-3 storey residential housing developments				H-M	
Commercial/industrial developments					H
Explanation for variance in sensitivity from overall LCT scores: This LCA lies between Brandlesholme and Holcombe Brook, to the north of Bury. The undeveloped farmland within the LCA comprises elevated land on the Pennine fringe and forms the edges of the incised Irwell Valley to the east and Kirklees Valley to the west. The LCA is highly sensitive to any scale or type of development due to its visual prominence in long distance views and function as the undeveloped skyline of the Irwell Valley (with associated Summerseat and Brooksbottom Conservation Areas) and the Kirklees Valley. It is therefore assessed as of moderate-high sensitivity to housing and high sensitivity to commercial/industrial developments. Because of the sensitivity of this LCA, it is of paramount importance that the guidance below is closely followed when development proposals are considered within the landscape.					

LCA 27: Simister, Slattocks and Healds Green (Oldham)

2-3 storey residential housing developments

M

Commercial/industrial developments

M

Explanation for variance in sensitivity from overall LCT scores: The urban farmland between Heywood and Middleton is judged to have a **moderate** sensitivity to commercial/ industrial development (in addition to the housing scenario) as it lies adjacent to and contains existing large industrial development (Birch Business Park and Stakehill Industrial & Distribution Park) and is crossed by large road infrastructure such as the M62 and A627(M) which have a strong influence, detracting from the rural qualities of the landscape. However, the more elevated land in the east of this LCA (around Thornfields Farm) would be more sensitive to development due to its visual prominence from areas to the west.

LCA 40: Heald Green (Stockport) to Bramhall

2-3 storey residential housing developments

L-M

Commercial/industrial developments

L-M

Explanation for variance in sensitivity from overall LCT scores: This LCA is already strongly influenced by urban land uses, housing and industrial developments (including new developments on brownfield land), major transport infrastructure and the sounds/movements of air traffic associated with Manchester Airport. It is therefore of **low-moderate** sensitivity to both development scenarios, providing the guidance below is followed. Please also refer to the Stockport Landscape Character Assessment (2018).

Special landscape qualities and key sensitivities

The following provides a summary of the special landscape qualities and key features/attributes that would be sensitive to change (e.g. as a result of development):

- Locations of elevated, open character with some prominent rural skylines forming a backdrop to views from adjacent urban areas.
- Areas of complex, undulating landform cut by distinctive steep wooded cloughs.
- Locally important semi-natural habitats and networks, including pockets of ancient and riparian woodland (e.g. Hopwood Woodlands LNR), patches of dry heath and acid grassland, remnant semi-natural grasslands, ponds and flashes.
- Intact lengths of gritstone walls, hedgerows and tree clumps along field boundaries forming ecological networks and bringing definition to the 18th and 19th century and post-medieval field patterns.
- Unifying vernacular of stone-built traditional farms and cottages, with some listed buildings including the Grade II* Brandlesholme Old Hall (Bury), Hopwood Hall (Rochdale) and Old Manor Farm (Stockport).
- Conservation Areas at Birch Village, Summerseat and the Macclesfield Canal, and the role the landscape plays as a rural setting to adjacent Conservation Areas.
- Industrial relicts, including disused railway lines, canals, mill buildings and the nationally designated Astley Green Colliery engine house and headgear.
- Two medieval moated sites near Marple and Standish which are nationally designated as Scheduled Monuments.
- Large areas defined by a sparse pattern of scattered stone-built farmsteads, individual properties and small settlements, linked by winding country lanes.
- Opportunities to access and enjoy the rural landscape, including the long distance footpaths (Rochdale Way, Rotary Way, Middlewich Way), cycle routes and a strong public rights of way network crossing the farmland and emanating from adjacent urban areas.

- The LCT's strong visual connections with foothills and uplands of the West/South Pennines and Peak District National Park, which lie to the north and east of Greater Manchester.
- Pockets of relative remoteness and tranquillity, including in the lower-lying south where robust hedgerows and lines of trees provide enclosure; elevated points in the north and east creating a sense of exposure.
- The LCT's role as an immediate rural backdrop to development and its important function in separating discrete urban areas, preventing coalescence.

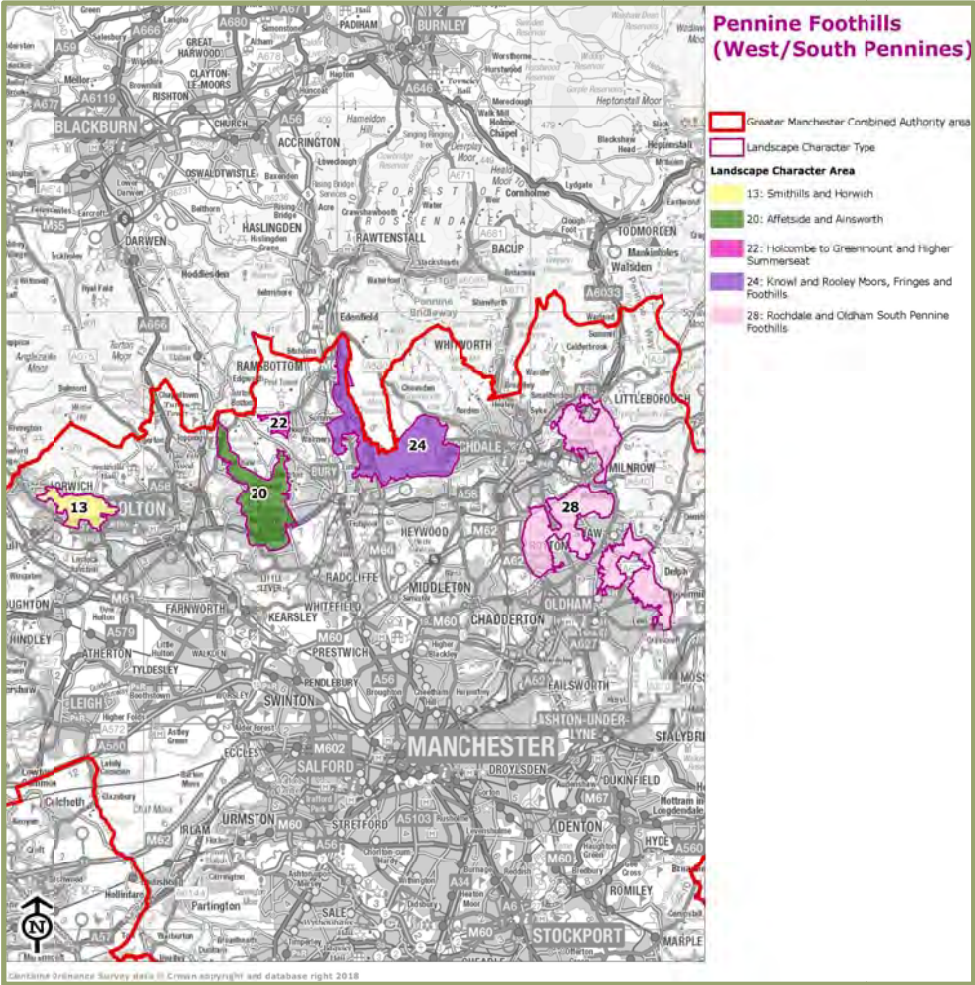
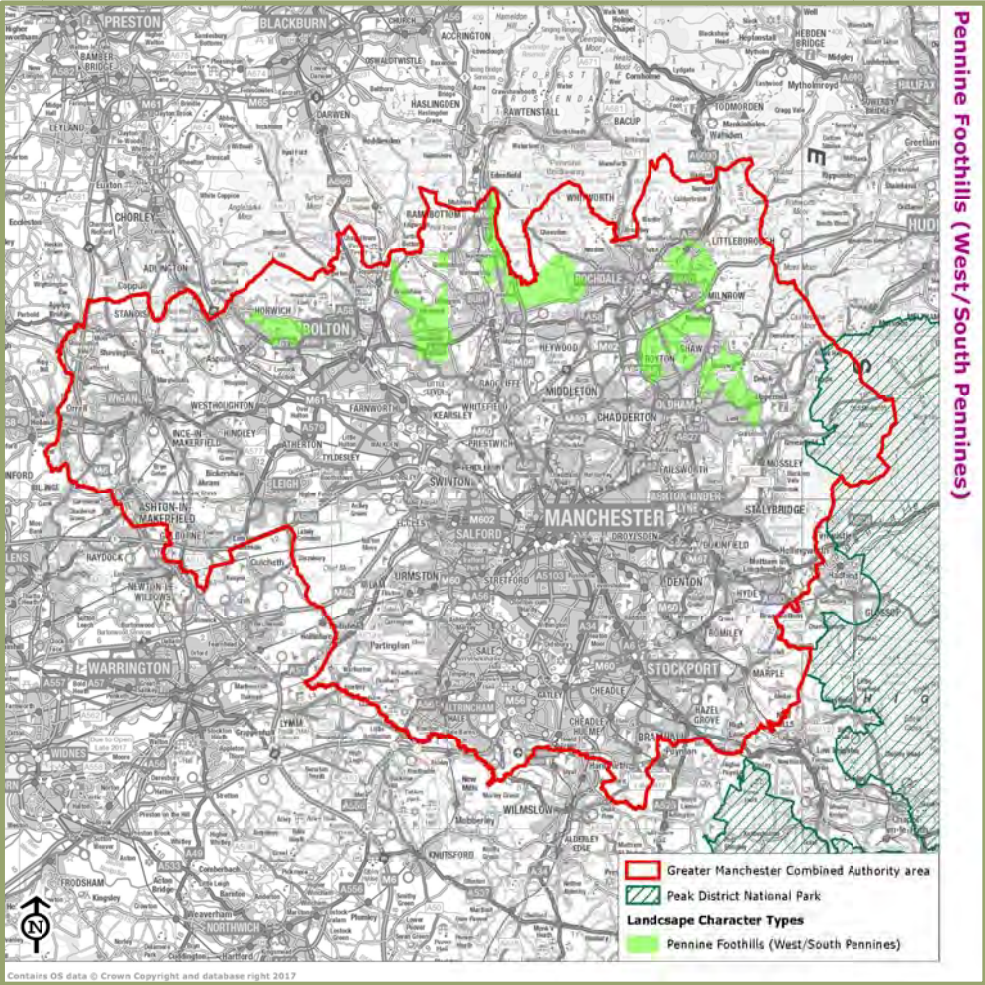
Guidance and opportunities for future development and landscape management/enhancement

Guidance and opportunities to consider within this Landscape Character Type include:

- Avoid siting any development on the highly prominent, elevated and very sparsely settled land in the elevated north and east. Conserve open, undeveloped skylines.
- Utilise dips in the landform, including valley slopes, and existing tree/woodland cover to integrate new development into the landscape.
- Protect and where possible enhance semi-natural habitats and networks, including pockets of ancient and riparian woodland (e.g. Hopwood Woodlands LNR), patches of dry heath and acid grassland, remnant semi-natural grasslands, ponds and flashes.
- Strengthen and restore the dry stone wall and hedgerow network in association with any new development, reflecting local characteristics (choice of stone and building style; hedgerow species and management regimes). Encourage the restoration of traditional boundaries where fencing is present.
- Ensure any new development does not dilute the strong field patterns associated with the landscape.
- Respect local building styles and materials in new housing developments, seeking to reflect these in their design and build (particularly the use of local gritstone).
- Conserve the character and setting of the Conservation Areas at Birch Village, Summerseat and the Macclesfield Canal, as well as the role the landscape plays as a rural setting to adjacent Conservation Areas.
- Conserve remaining industrial relicts, including disused railway lines, canals, mill buildings and the nationally designated Astley Green Colliery engine house and headgear.
- Protect the setting and integrity of the two moated sites within the LCT which are Scheduled Monuments.
- Explore opportunities to develop unused Brackley Municipal Golf Course, south of Farnworth, for habitat creation with possible links with The Northern Forest initiative¹.
- Explore opportunities to re-route the Rotary Way long distance footpath through Brackley Municipal Golf Course and thus avoid crossing over the M61.
- Design-in the introduction of SuDS to any new development, addressing any changes in hydrology (and subsequent knock-on effects such as increased diffuse pollution from agricultural run-off). This landscape is part of the wider catchment of a number of Greater Manchester's main river valleys.
- Encourage woodland creation schemes on areas of low grade agricultural land, including through the Northern Forest initiative. Woodland planting along motorways and staggered blocks of planting should be used to help screen views of traffic and reduce noise.
- Conserve the rural road network, ensuring any new highway design minimises unnecessary signage and lighting and reflects local characteristics (e.g. road verges/boundaries).
- Protect the pockets of tranquillity and relative remoteness associated with the landscape, and the role the LCT plays as a rural backdrop and buffer between discrete urban areas.
- Conserve key views and intervisibility with the South/West Pennines and Dark Peak foothills, upland fringes and open moorlands.

¹ See the Government's news announcement for the initiative at <https://www.gov.uk/government/news/new-northern-forest-gets-government-backing>

LCT: Pennine Foothills (West/South Pennines)



This Landscape Character Type (LCT) is found in Bolton, Bury, Rochdale and Oldham Districts.

Representative photographs



View to chimney stacks on the edge of Brightmet



The hilltop War Memorial in Tandle Hill Country Park



View across Hollingworth Lake to the uplands beyond



Pylons and overhead lines cross the farmland south of Scouthead, with the Pennines visible beyond



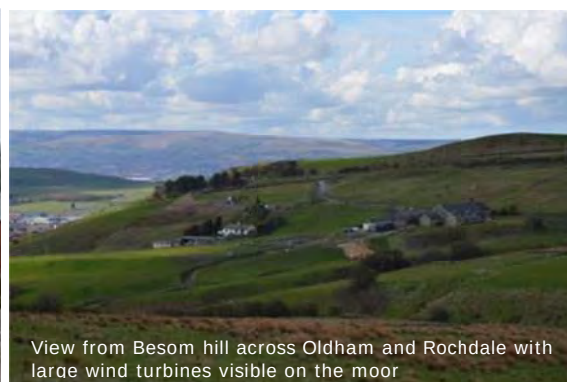
Wet grassland and broadleaved woodland habitats, with a mast dominating the skyline



Modern housing at Smithy Bridge, locally prominent on the skyline



Birtle brook Retirement Village, a converted mill



View from Besom hill across Oldham and Rochdale with large wind turbines visible on the moor



View from Grotton Hall across the Oldham to the uplands beyond. A pylon breaks the skyline.

Landscape character description

Key characteristics

Topography, geology and drainage

- Transitional landscape sloping up from the northern fringes of Greater Manchester towards the uplands of the South and West Pennines.
- Strongly rolling and undulating topography punctuated by locally distinctive hills and carved by intricate stream valleys. Elevation ranges from 100 to over 350 metres AOD at Besom Hill.
- Primary underlying geology of Pennine Coal Measures, with areas of Millstone Grit overlain with glacial till deposits. Soil fertility is generally poor, with much of the LCT defined as Grade 4 agricultural land, with some pockets defined as Grade 3.
- Streams drain through cloughs to a number of reservoirs, although these are generally smaller than those on higher ground within the Unenclosed Uplands and Fringes LCT.

Land use and field patterns

- Land use is dominated by lush semi-improved grassland pastures enclosed by a mix of gritstone walls, hedgerow boundaries and post and rail fencing. Horse paddocks are often found adjacent to settlement.
- Varied small-medium scale enclosures, divided by a mixture of field boundaries including gritstone walls, hedgerows and post and rail fencing. Field are predominantly piecemeal post-medieval enclosures, with some modern agglomeration.
- Various other land uses, including quarries and reservoirs and frequent recreational facilities such as golf clubs. Country Parks are located at Tandle Hill (Oldham District) and Hollingworth (Rochdale District).

Semi-natural habitats and woodland cover

- Numerous semi-natural habitats scattered throughout the farmland including woodland, grassland, heathland and streams/brooks, some of which are locally designated as Sites of Biological Importance.
- Well wooded landscape with extensive tree and woodland cover with trees in stream valleys, along field boundaries and avenues of trees along roads. Tracts of dense broadleaved woodland also define cloughs, including large areas of ancient woodland.
- Reservoirs including Hollingworth Lake (designated as a Site of Biological Importance) enhance the nature conservation interest and are important for wintering waterfowl.

Archaeology and cultural heritage

- Numerous Conservation Areas reflecting the historic character of settlements, including Ainsworth, Nangreaves, Stone Breaks, Clegg Village and Riding Gate which contain clusters of Listed Buildings.
- A number of historic buildings are scattered throughout the landscape including Grade II* Listed Buildings including Clegg Hall, Grotton Hall and Birchinley Manor Farmhouse.
- Evidence of the area's industrial heritage in the form of old mill buildings, chimneys, disused quarries and mines and the Rochdale Canal.

Settlement, road pattern and rights of way

- Settlement mainly comprises scattered traditional stone farmsteads and halls, with some small groups of dwellings including Victorian terraces. The largest settlement is Ainsworth, located between Bury and Bolton. The foothills provide an important separation function between distinct urban areas.
- Numerous footpaths and bridleways cross and provide access to the landscape from nearby urban areas and also link to the moorlands. These include the Rotary Way, Oldham Way and Rochdale Way.
- Road pattern mainly comprises minor winding lanes and tracks connecting farms. Occasionally, more major routes cross through the LCT, including the M62 and several A-roads.

Views and perceptual qualities

- Variable visual character depending on topography and vegetation cover; there are long views across the urban conurbation to the West and South Pennine uplands beyond where vegetation allows. Areas within the Peak District National Park are visible from some vantage points. Other areas are visually enclosed due to valleys or vegetation which creates wooded skylines.
- Occasionally, masts and pylons/overhead lines intrude on the wooded skylines. Other intrusive modern influences include the M62 motorway and prominent views of urban development, including tower blocks breaking horizons.
- Other skyline features including chimneys, the war memorial in Tandle Hill Country Park and views to monuments on higher ground within the uplands including Peel Tower and Bishop Park Monument.
- Windswept and exposed on higher ground as the landscape transitions to the upland fringe. This contrasts with the sheltered, enclosed feel of the valleys which have limited views in and out.
- Areas with relatively high levels of tranquillity despite the close proximity of urban development and major infrastructure e.g. Tandle Hill Country Park.

Intactness and condition

Despite the close proximity of urban development, this is a strongly rural and traditional working landscape characterised by pasture fields, reservoirs and wooded stream cloughs with a transitional, upland fringe feel. Trees are frequent and provide a naturalistic quality to the landscape and characterise skylines. Locally designated habitats actively managed for the benefit of wildlife are found throughout the foothills landscape. Some former industrial and agricultural buildings have been converted to new uses, often retaining traditional features.

The deterioration of stone walls is visible in many places, with supplementation by post and wire fencing frequently occurring. Adjacent to settlements, there are often urban fringe influences including areas of horsiculture with associated structures and pony tape and numerous golf courses. Within the wooded stream valleys, invasive species are present including large areas of rhododendron which outcompete native vegetation. Anti-social behaviour including fly tipping and litter has an adverse effect on the landscape in some localities. Pylon lines and masts form intrusive modern features on the skyline, while noise and movement introduced by transport infrastructure can detract from the rural qualities and sense of tranquillity in the landscape.

Landscape sensitivity assessment

Criteria	Description	Sensitivity Rating
Physical character (including topography and scale)	- Strongly rolling and undulating landscape, rising towards the South and West Pennine Uplands. - Punctuated by locally distinctive hills (reaching a maximum elevation of 356 metres AOD) and carved by intricate stream valleys. - The overlying field pattern is small-medium in scale. - Frequent small-scale features occur throughout the landscape, including trees, stone walls, hedgerows and buildings. These contrast with larger-scale features including pylons and masts.	M-H
Natural character	- Land use is largely semi-improved pastures used for traditional sheep grazing. - Well wooded character with extensive tree and woodland cover with trees in stream valleys (including tracts of ancient woodland) and along field boundaries. - Semi-natural habitats include woodland, grassland, heathland and streams/brooks. A number of these are locally designated as Sites of Biological Importance, including Hollingworth Lake. - Areas of wet grassland often occur on lower ground.	M
Historic landscape character	- Conservation Areas including Ainsworth, Nangreaves (Mount Pleasant), Stone Breaks, Clegg Village and Riding Gate which contain clusters of Listed Buildings. - Other historic buildings are scattered throughout the foothills, including a number of Grade II* listed halls and farm houses. - Evidence of industrial heritage including frequent mill buildings, chimneys and the remnants of mines and quarries. - Fields are mostly of post-medieval origin, with some 20th century boundary loss and field agglomeration.	M
Form, density and setting of existing settlement / development	- A sparsely settled landscape. Settlement mainly comprises scattered traditional farmsteads and halls, small groups of dwellings and the larger village of Ainsworth. Mix of traditional vernacular and modern houses. - Immediate undeveloped backdrop and upland fringe setting to adjacent large urban areas, as well as small villages/scattered dwellings within the LCT. - In a number of places, this LCT provides an important sense of separation between distinct settlements and urban areas.	M-H
Views and visual character including skylines	- There are long views across the urban conurbation to the dramatic uplands beyond where the topography and vegetation cover allows. These views include the uplands of the Peak District National Park from some vantage points. - The frequent trees create wooded skylines, while mill chimneys and church towers/spires form landmark built features on the skyline. - Occasional overhead pylon lines and telecommunications masts are intrusive features on skylines. - Some elevated locations are marked by monuments e.g. Tandle Hill. There are also views to features on the adjacent uplands including Peel Tower (Grade II Listed). - Prominent views to nearby residential and industrial development in Greater Manchester, including tower blocks and large-scale warehouses.	M-H
Access and recreation	Dense network of footpaths and bridleways provide access between urban communities and the adjacent uplands. The LCT contains parts of the Oldham Way, Rotary Way and Rochdale Way.	M-H

	- The road network is relatively sparse and mostly limited to minor roads and tracks. Occasional A-roads and the M62 cross through the landscape. - Golf courses are a frequent feature within the landscape. - Reservoirs form popular recreation destinations, including Hollingworth Lake. - Pockets of Open Access Land are located on higher ground and within some valleys. Country Parks are located at Tandle Hill and Hollingworth.	
Perceptual and experiential qualities	- Highly varied perceptual qualities which are dependent on the elevation of the landscape, vegetation cover and the proximity of urban development. - Strong rural and upland fringe qualities despite the close proximity of urban development. These qualities are broken locally by pylon lines/overhead wires and masts which form occasional features. - The foothills have a strong visual and perceptual connection within the surrounding uplands.	M

Overall assessment of landscape sensitivity

Landscape Character Type level					
Development scenario	Sensitivity				
2-3 storey residential housing developments			M		
Commercial/industrial developments				M-H	
Areas of steep and/or complex landform, distinct hills, and prominent ridgelines would be of high sensitivity to any type or scale of development. These include (but are not limited to) Besom Hill, Tandle Hill, the ridgeline south of Bentgate, Strine Dale, Wood Brook (all within LCA 28), north of Harwood (LCA 20) and Green Hill (LCA 30). These areas are highly prominent, widely visible from existing urban areas and the surrounding uplands and provide an undeveloped setting to development. It is therefore of paramount importance that the guidance below is closely followed when development proposals are considered within these parts of the landscape.					

Special landscape qualities and key sensitivities

The following provides a summary of the special landscape qualities and key features/attributes that would be sensitive to change (e.g. as a result of development): - The strongly undulating landform punctuated by distinctive hills and carved by intricate stream valleys. - The undeveloped skylines, including both wooded and open skylines. Some hill summits are punctuated by monuments which form landmarks in the wider landscape (e.g. Tandle Hill). The views to landmarks in adjacent landscapes (e.g. Peel Tower on the adjacent uplands) are also distinct. - The distinct field pattern of enclosures demarked by a mixture of gritstone walls and hedgerows. - The sparsely settled traditional rural character of the landscape, with scattered farms and houses and occasional settlements constructed of a local stone vernacular, a number of which are designated as Conservation Areas. - Pockets of upland habitats amongst the pasture fields. Locally designated habitats including broadleaved woodland, wet grassland and wetlands (including Hollingworth Lake SBI). - Areas of woodland including tracts of ancient woodland along stream corridors. Creating wooded skylines and a sense of visual enclosure. - The undeveloped backdrop and the sense of separation that the landscape provides between distinct settlements. - Views to and from the Peak District National Park and the surrounding South and West Pennines which overlook the landscape. - Important recreational value of the landscape with important networks of public rights of way including Rotary Way, Oldham Way and Rochdale Way and destinations including Tandle Country Park and

Hollingworth Country Park.

- Features relating to the industrial heritage of the area including chimneys and mill buildings. Chimneys form distinct skyline features.
- Long views afforded from higher ground which reach across Greater Manchester and to the surrounding uplands.
- Pockets of tranquillity and remoteness despite the close proximity of urban development.

Guidance and opportunities for future development and landscape management / enhancement

Guidance and opportunities to consider within this Landscape Character Type include:

- Avoid areas of the landscape with distinct or complex landforms, including the locally prominent hills and intricate stream valleys, including Besom Hill, Tandle Hill, the ridgeline south of Bentgate, Strine Dale and Wood Brook.
- Ensure that the sense of separation the landscape provides between distinct settlements is retained.
- Retain the role of the landscape as an undeveloped backdrop to existing development.
- Strengthen the stone wall and hedgerow network, using local gritstone for walls and locally prevalent and climate resilient species for hedges. Any new boundaries should reflect local characteristics, including the planting of a new generation of hedgerow trees.
- Utilise areas of undulating landform and woodland cover to integrate new development into the landscape, avoiding sites designated for their nature conservation importance.
- Protect areas of semi-natural habitat including woodland, grassland and heathland which are locally designated as Sites of Biological Importance. Seek to enhance these where possible and provide linkages to form robust habitat networks.
- Protect areas of broadleaved woodland (particularly ancient woodland) which provide important semi-natural habitat and create wooded skylines. Utilise the screening effects of existing woodland to integrate development into the landscape where possible.
- Encourage the natural regeneration of woodland and wetland habitats within valleys (as well as new planting/habitat restoration) to improve their function in flood prevention and preventing diffuse pollution.
- Ensure that any development is in keeping with the form, density and vernacular of existing buildings. Avoid any large scale development to retain the sparsely settled character of the landscape.
- Protect the setting of important heritage assets within the landscape, including Conservation Areas/Listed Buildings.
- Retain the important recreational function of the landscape. Seek to improve public rights to way to encourage sustainable travel. Join up and promote multi-use routes to major destinations within the landscape including Hollingworth Country Park and Tandle Hill Country Park.
- Retain the distinct visual character of the landscape, including views to monuments on skylines which form local landmarks (including Tandle Hill War Memorial and Peel Tower), church spires and chimneys.
- Ensure any new development does not adversely affect the special qualities of the Peak District National Park, including its beautiful views, sense of tranquillity and dark night skies, and the vital benefits that flow beyond its boundary¹.
- Reinforce the structure of the landscape, through strengthening the stone wall and hedgerow network, using local gritstone for walls and locally prevalent and climate resilient species for hedges. Any new boundaries should reflect local characteristics, including the planting of a new generation of hedgerow trees.
- Design-in the introduction of SuDS to any new development, addressing any changes in hydrology (and subsequent knock-on effects such as increased diffuse pollution from agricultural run-off).

¹ Taken from the Peak District National Park Management Plan 2018-23 (Final consultation draft, March 2018)

Open Moorlands and Enclosed Upland Fringes (Dark Peak)

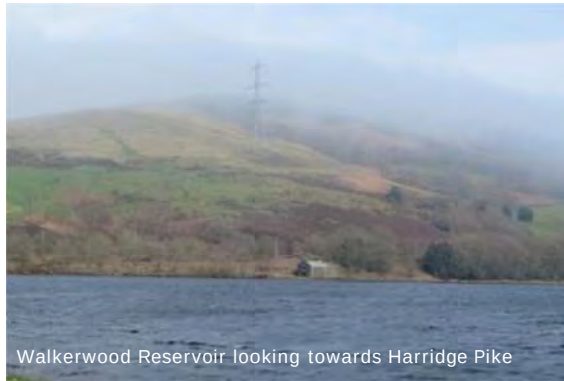


This Landscape Character Type (LCT) is found in Oldham, Tameside and Stockport Districts.

Representative photographs



Mellor Moor, Stockport



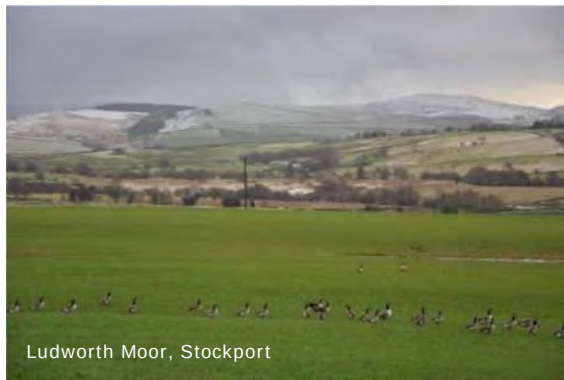
Walkerwood Reservoir looking towards Harridge Pike



Minor watercourse draining into the Tame below, Oldham



Traditional gritstone farm buildings, Tameside



Ludworth Moor, Stockport



Pony keeping near Mudd, Tameside



Upland fringe pastures below Harridge Pike, Tameside



Recreational users at Dove Stone Reservoir, Oldham



Looking west into the upland fringes of Stockport

Landscape character description

Key characteristics

Topography, geology and drainage

- An elevated upland landscape comprising large expanses of open moorland fringed by strongly undulating upland pastures rising up from the adjacent river valleys to the west.
- Elevation generally rises to the east of the LCT to meet the Peak District National Park, reaching 497m AOD at Hoarstone Edge (Tameside).
- Landscape drained by multiple springs and minor water courses originating from the uplands, flowing into a number of reservoirs and river valleys at lower elevations (including the Tame and Etherow).
- Majority underlain by Millstone Grit sandstones, siltstones and mudstones, with rocks from the Pennine Coal Measures Formation defining the geology of Stockport (supplemented by bands of Millstone Grit).
- Peat associated with the high moorland, with glacial till found at lower elevations – both deposited in the Quaternary period.
- Away from the areas of peat on the high moor, soils are generally silty loams often subject to seasonal waterlogging. Agricultural land is classed as Grade 4 or 5 (poor productivity).

Land use and field patterns

- Open moorland used for rough grazing (predominantly by sheep) with areas remaining under traditional management for grouse.
- Enclosed land comprising sheep-grazed semi-improved pastures and hay meadows. Fragments of heathland and grass moor are rough grazed. Pony paddocks occur nearer to the settled valleys.
- A strong, intricate pattern of moorland intakes, ranging from regular Parliamentary enclosures to more irregular post-medieval piecemeal enclosures and former open medieval systems on lower slopes.
- A network of gritstone walls creates a distinctive pattern and provides unity with rugged vernacular buildings. Lines of trees, lengths of fencing and hedgerows also form boundaries.
- Other land uses include reservoirs (including Brushes and Walkerwood Reservoirs at Stalybridge Country Park and part of Dove Stone Reservoir) and the quarry at Buckton Vale.

Semi-natural habitats and woodland cover

- Landscape supports a rich mosaic of upland habitats, including heather moorland, wet and dry heathland, blanket bog, acid grassland, rush pasture/purple moor grass, scrub and wooded cloughs.
- Boar Flat (Tameside) falls within the wider Peak District Moors SPA, South Pennine Moors SAC and Dark Peak SSSI in recognition of important heathland, blanket bog and sessile oak woodland habitats.
- Off the moor, traditionally managed species-rich hay meadows, disused quarries and wetlands (e.g. ponds, reservoirs and wet meadows) provide further wildlife interest and habitats for birds.
- Significant coverage of Sites of Biological Importance (SBIs), with Local Nature Reserves at Brushes Valley and Stalybridge Country Park. Dove Stones Reservoir is managed as a RSPB reserve.
- Small bands of broadleaved and mixed woodland trace watercourses, with lines of trees often found along stone walls. Shelterbelts and woodland planting screen farm buildings and settlements.

Archaeology and cultural heritage

- Cairns situated in elevated skyline positions on the open moorland, including a Scheduled Monument at Ludworth Intakes (Stockport). The moorland peat deposits are also likely to contain a rich record of preserved prehistoric archaeology.
- Buckton Castle Scheduled Monument lies on the edge of Buckton Moor – a ringwork and site of a 17th century beacon. Brown Low prehistoric bowl barrow and Robin Hood's Picking Rods (thought to be the remains of a Mercian cross) are also scheduled (Stockport).
- Disused quarries provide evidence for a rich industrial heritage, with coal mining relics in Stockport. A group of 17th century cottages and loom workshops at Higher Kinders (Stockport) are Grade II* Listed.
- Landmark historic buildings include the Grade II* church of St Chad and the 17th century Mellor Hall in Stockport.
- Conservation Areas at Moorend, Carrbrook, St Chad's Church (Saddleworth), Holly Grove and Diglea include clusters of Grade II Listed buildings displaying a strong gritstone vernacular. Listed farmhouses, barns and cottages are found throughout the upland fringe landscape.

Settlement, road pattern and rights of way

- Only occasional isolated dwellings or abandoned farmsteads are found across the open moor.
- A dispersed settlement pattern of scattered farmsteads, occasional short terraces of cottages and clustered hamlets / villages in sheltered locations defines the upland fringe landscape.
- A network of narrow lanes enclosed by stone walls connects farms and the settlements. The A635, A57 and A627 link the Peak District to the east with Greater Manchester to the west.
- Open Access Land covers the moorland. Multiple rights of way and former packhorse routes cross the fringe areas, including the Pennine Bridleway, Standedge Trail, Tameside Trail and Cown Edge Way.

Views and perceptual qualities

- The landscape evokes a strongly rural, remote and 'Dark Peak' feel with gritstone walls, rugged traditional farms, sheep grazed pastures and bleak, exposed moorland.
- Close visual relationships between the lower fringe landscapes and the mill heritage in the valleys below, with the large mills and prominent chimneys characterising many views.
- Elevation affords expansive views west over Greater Manchester, with tall tower blocks often featuring. To the east, the moorlands blend into those of the adjacent National Park, emphasising contrasting wild and remote qualities.

Intactness and condition

This is a remote, highly rural landscape with few modern influences. Character and perceptions are strongly influenced by the elevated open moorlands rising up to the Peak District National Park beyond. These open and often desolate moorlands contrast with the intricate patterns of moorland intakes and pastures featuring strong visual relationships with the settled areas below.

Issues impacting on landscape condition include frequent derelict sections of gritstone wall gapped up or completely replaced by fencing; a prevalence of horse keeping in the upland fringe landscapes (with associated over-grazed paddocks sub-divided by white pony tape or wooden fencing); and the creeping influence of nearby urban areas at lower elevations, with a gradual erosion of traditional land use practices and views/noise of traffic and activity detracting from otherwise remote, upland qualities. SAC/SSSI-designated rough grassland and heath habitats at Boar Flat are currently assessed as in unfavourable recovering condition, with species-poor heathland but signs of regeneration and continued importance of the mosaic of habitats for snipe and curlew.

Landscape sensitivity assessment

Criteria	Description	Sensitivity Rating
Physical character (including topography and scale)	- An elevated upland landscape. - Large expanses of open moorland fringed by strongly undulating upland pastures rising up from the adjacent river valleys to the west. - Stone walls, trees and gritstone buildings create small scale elements in the fringe landscapes, whilst the open moorland has few small-scale landscape elements.	H
Natural character	- A rich mosaic of upland habitats, including heather moorland, wet and dry heathland, blanket bog, acid grassland, rush pasture/purple moor grass, scrub and wooded cloughs. - Boar Flat (Tameside) falls within the wider Peak District Moors SPA, South Pennine Moors SAC and Dark Peak SSSI. - Traditionally managed species-rich hay meadows, disused quarries and wetlands (e.g. ponds, reservoirs and wet meadows) interspersed with semi-improved pastures. - Significant SBI coverage, with LNRs at Brushes Valley and Stalybridge Country Park. Dove Stone Reservoir is managed as a RSPB reserve. - Other land uses include reservoirs and the abandoned quarry at Buckton Vale.	M-H
Historic landscape character	- A strong, intricate pattern of moorland intakes, ranging from regular Parliamentary enclosures to more irregular post-medieval piecemeal enclosures and former open medieval systems on lower slopes. - High archaeological potential of the peat deposits on the open moor. - Cairns situated in elevated skyline positions on the open moorland, including a Scheduled Monument at Ludworth Intakes (Stockport). - Scheduled Monuments at Buckton Castle, Brown Low prehistoric bowl barrow and Robin Hood's Picking Rods - Strong industrial heritage reflected in disused quarries, coal mining relics, weavers' cottages and views to mills in adjacent valleys. - Distinctive millstone grit vernacular reflected in buildings and stone walls, with a number of Listed Buildings throughout. - Main Conservation Areas at Moorend, Carrbrook, St Chad's Church (Saddleworth), Holly Grove and Diglea.	M-H
Form, density and setting of existing settlement / development	- Only occasional isolated dwellings or abandoned farmsteads are found across the open moor. - Dispersed pattern of scattered farmsteads, occasional short terraces of cottages and clustered hamlets / villages in the upland fringe. - The landscape forms a dramatic upland backdrop to large parts of urban Greater Manchester, transitioning to the Peak District National Park beyond.	H
Views and visual character including skylines	- Strong visual relationships between the moorland intakes and unenclosed open moorlands. - Frequent long views out over the urban settlements that nestle within the valley bottoms, often featuring industrial heritage features such as prominent mill buildings and chimneys. Tower blocks also break the horizon. - Open moorlands form a dramatic eastern edge to Greater Manchester, in combination with the Dark Peak behind. - Historic features marking skylines, including the St Chad's church tower, cairn at Ludworth Intakes, Buckton Castle and Brown Low bowl barrow.	H
Access and recreation	- The moorlands are Open Access Land, linking across to the adjacent open moors of the Peak District National Park. - A strong network of rights of way and paved former packhorse routes defines the enclosed landscapes, including the Pennine Bridleway, Standedge Trail, Tameside Trail and Cown Edge Way. - Stalybridge Country Park is a popular destination for nearby urban communities, as is the nature reserve and reservoir at Dove Stone (which extends into the National Park).	H
Perceptual and experiential qualities	- A strongly rural, remote and 'Peak District' feel with gritstone walls, rugged traditional farms, sheep grazed pastures and bleak, exposed moorland. - Urban fringe influences and visual associations with adjacent urban areas dilute these qualities at lower elevations.	M-H

Overall assessment of landscape sensitivity

Landscape Character Type level					
Development scenario	Sensitivity				
2-3 storey residential housing developments				M-H	
Commercial/industrial developments					H

The open, unenclosed moorlands and areas immediately adjacent to the Peak District National Park are also judged as of **high** sensitivity to housing developments. **It is therefore of paramount importance that the guidance below is closely followed when residential development proposals are considered within these parts of the landscape (and for all parts when considering commercial/industrial developments).**

Special landscape qualities and key sensitivities

The following provides a summary of the special landscape qualities and key features/attributes that would be sensitive to change (e.g. as a result of development):

- Its elevated, open character with prominent (largely undeveloped) skylines forming a backdrop to views from valley settlements and the wider Greater Manchester conurbation.
- The landscape's visual and character connections with the Peak District National Park, which lies immediately adjacent to the east.
- The mosaic of internationally, nationally and local designated habitats, including heather moorland, blanket bog, acid grassland, rush pasture/purple moor grass, hay meadows, scrub and wooded cloughs.
- Open, sweeping skylines sometimes punctuated by wind-blown trees and historic features including the tower of the Grade II* church of St Chad, cairn at Ludworth Intakes, Buckton Castle and Brown Low bowl barrow (all Scheduled Monuments).
- Strong pattern of 18th/19th century intakes, post-medieval piecemeal enclosures and medieval field systems marked by traditional gritstone walls.
- Industrial heritage reflected in disused quarries, coal mining relics, weavers' cottages and views to mills in adjacent valleys.
- Unifying vernacular of traditional millstone grit farms and cottages, with small villages and clusters of buildings situated in sheltered locations often fringed by trees (with Conservation Areas at Moorend, Carrbrook, St Chad's Church (Saddleworth), Holly Grove and Diglea).
- Important opportunities to access and enjoy the landscape, including large areas of Open Access Land, lengths of the Pennine Bridleway, Standedge Trail, Tameside Trail and Cown Edge Way, and popular reservoirs at Stalybridge Country Park and Dove Stone.
- Strong rural qualities and an overriding sense of isolation and remoteness.

Guidance and opportunities for future development and landscape management/enhancement

Guidance and opportunities to consider within this Landscape Character Type include:

- Avoid siting any development within the open moorland and areas on the immediate edge of the Peak District National Park.
- In keeping with current settlement pattern – utilise dips in the landform and existing or new tree/woodland cover to integrate limited new development into the landscape.
- New housing development should replicate traditional vernacular styles and materials (Millstone Grit).
- Ensure any new development respects the character and historic qualities of the Conservation Areas at Moorend, Carrbrook, St Chad's Church (Saddleworth), Holly Grove and Diglea.
- Strengthen and restore the dry stone wall network, using locally-sourced Millstone Grit and reflecting characteristic building styles.
- Protect and where possible enhance semi-natural habitats and networks, including heather moorland,

blanket bog, acid grassland, rush pasture/purple moor grass and traditionally managed hay meadows.

- Encourage the natural regeneration of woodland and restoration of wetland habitats fringing the stream valleys, slowing water flow before it enters the Tame and Etherow valleys below.
- Design-in the introduction of SuDS to any new development, addressing any changes in hydrology and subsequent knock-on effects, such as increased diffuse pollution from agricultural run-off.
- Ensure any new development does not dilute the strong field patterns associated with the upland fringe landscape and its characteristic moorland intakes.
- Conserve open, sweeping skylines which form a backdrop to views from valley settlements and Greater Manchester more widely.
- Conserve and protect the setting of important heritage assets, including the Grade II* church of St Chad, cairn at Ludworth Intakes, Buckton Castle and Brown Low bowl barrow.
- Ensure any new development does not adversely affect the special qualities of the Peak District National Park, including its beautiful views, sense of tranquillity and dark night skies, and the vital benefits that flow beyond its boundary¹.
- Protect long, uninterrupted views from higher ground over the mill settlements in the valleys below, and Greater Manchester communities beyond.
- Protect the overriding rural, remote and often bleak 'Dark Peak' characteristics of the landscape.

¹ Taken from the Peak District National Park Management Plan 2018-23 (Final consultation draft, March 2018)