

TECHNICAL NOTE

Job Name: Littleborough Residential-led Planning Application

Job No: 332010570

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Subject: Littleborough Residential-led Development: Scoping Report

1 Introduction and Purpose

- 1.1. This Environmental Impact Assessment ('EIA') Scoping Report has been prepared by Stantec UK Ltd ('Stantec') on behalf of Bloor Homes North West ('the Applicant'). The Applicant intends to submit a planning application to Rochdale Borough Council ('RBC') under the Town and Country Planning Act 1990 for the development of up to approximately 330 residential dwellings and a primary school (the 'Proposed Development') at land to the west of Hollingworth Road in Littleborough ('the Site').
- 1.2. An EIA Screening Request was submitted in July 2019 and subsequently an EIA Screening Opinion was issued by RBC in August 2019 (19/00910/SO) whereby the Council determined that the Proposed Development may lead to significant effects on the environment by reason of factors such as its nature, size or location (see **Section 10** below). As a result, an EIA is required to be undertaken and an Environmental Statement ('ES') will be submitted to support the planning application. The ES will be prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended), hereafter referred to as the '2017 EIA Regulations'.
- 1.3. This EIA Scoping Report has been prepared to document the proposed scope and approach of the EIA. The EIA will consider the likely significant effects resulting from the Proposed Development defined in the planning application, as well as the cumulative effects with other existing and/or approved developments in the local area. This approach is intended to provide comprehensive and robust environmental information on the likely significant effects of the Proposed Development on the environment.
- 1.4. The environmental topics that are proposed to be 'scoped out' of the EIA scope and those that are 'scoped in' are presented respectively in **Section 14** and **Section 15**. Accordingly, this report details how the environmental issues which have been included in the EIA scope are proposed to be examined and progressed as part of the EIA. The aim of the EIA is to protect the environment through minimising adverse environmental effects and to take advantage of opportunities for environmental enhancement. For those topics that are proposed to be 'scoped out' as significant effects are not likely, this Scoping Report identifies an evidence led-approach for so-doing.

TECHNICAL NOTE

2 The Site and Site Context

- 2.1. The Site comprises circa 19.2 hectares (ha) of land to the immediate west of Hollingworth Road, north-east of Smithy Bridge and south of Littleborough, in the north-eastern part of Rochdale, Greater Manchester. The site is centred approximately at National Grid Reference SD 93341 15448 and its boundary is outlined in red on the Location Plan within **Appendix A**.
- 2.2. The Site is bounded to the north by the Rochdale Canal and the former Akzo Nobel site. The latter is now controlled by Vistry Partnerships and is the subject of a live planning application for the development of up to 127 dwellings (ref: 21/01146/FUL). To the east is Hollingworth Road, with agricultural land beyond. To the south is Lake Bank (road) which borders Hollingworth Lake and a number of residential dwellings. The south-eastern part of the Site comprises a public car park for visitors to Hollingworth Lake. To the west are residential dwellings associated with the settlement of Smithy Bridge.
- 2.3. The Site predominantly comprises land used for grazing of horses and cattle with field boundaries enclosed by dry stone walls and hedgerows. There are eight parcels of land in total surrounding Lower Cleggswood Farm, central to the Site and accessed via Heald Lane which runs south to Lake Bank. Heald Lane is a Public Right of Way ('PRoW').
- 2.4. Several PRoW traverse the site, predominantly following boundary features, providing connectivity from the Rochdale Canal to the north and Hollingworth Lake to the south, and from Smithy Bridge to the west and Littleborough to the north.
- 2.5. The Site is variable in topography, with land falling away from a central ridge through the Site to the east and dropping steeply towards the Rochdale Canal to the north and rising to the west to a plateau. This variable topography is characteristic of the surrounding landscape.

3 Environmental Context

- 3.1. There are two internationally/nationally designated sites within 10km of the Site, namely the Rochdale Canal Special Area of Conservation ('SAC') and Site of Special Scientific Interest ('SSSI') situated to the immediate north of the Site, and the South Pennine Moors SAC/SSSI and South Pennine Moors Phase 2 Special Protection Area ('SPA'), located 1.4km east of the Site. There are no other statutorily designated sites within 2km of the site.
- 3.2. While the Rochdale Canal borders the north of the Site and Hollingworth Lake is directly south, the Site is located within Flood Zone 1 and is at very low risk of flooding from rivers or the sea. According to Environment Agency mapping, the Site is also predominantly at very low risk of surface water flooding. There is a flow path running along the eastern boundary of the Site linking an outfall from Hollingworth Lake to the pond on the north-eastern boundary and then through the former Akzo Nobel site linking to the Rochdale Canal. The eastern part of the Site is at potential risk from reservoir flooding, which would be in an extreme case i.e. should a failure of Hollingworth Lake reservoir occur. Upon initial enquiries with RBC and a review of the Preliminary Flood Risk Assessment / Strategic Flood Risk Assessment, no historic flooding of the Site related to reservoir flooding was identified. It is also worth noting

TECHNICAL NOTE

that reservoirs are regularly inspected and maintained by the asset owners and conform to the guidelines set out in the Reservoirs Act (1975).

- 3.3. There are no designated heritage assets within the Site boundary. The closest designated heritage assets are two Grade II* listed buildings and 16 Grade II listed buildings within 1km of the Site. The nearest conservation area, Hollingworth Fold, is located 600m south-east of the Site.

4 Draft Site Allocation

- 4.1. The Site was identified as proposed allocation ref: OA16 ('Land to the north east of Smithy Bridge') within the original draft version of what was then known as the Greater Manchester Spatial Framework ('GMSF') which was published for consultation by the Greater Manchester Combined Authority ('GMCA') in October 2016.
- 4.2. The Site was then carried forward as a proposed allocation in the revised draft version of the GMSF ('Policy GM Allocation 26: Land North of Smithy Bridge'), which was published by the GMCA in January 2019.
- 4.3. The publication version of Places for Everyone ('Pfe') – the new name for the GMSF – was published for consultation by the GMCA in August 2021. Bloor's site has been carried forward as a proposed residential allocation within Pfe ('Policy JP Allocation 22: Land North of Smithy Bridge').

5 Proposed Development

- 5.1. This Proposed EIA Approach Technical Note seeks to obtain comment from RBC in relation to the scope and approach to the ES, which will form part of a proposed planning application comprising residential development – including the construction of vehicular/pedestrian accesses, landscape measures, open space and associated works – alongside the development of a primary school.
- 5.2. It is anticipated that the Proposed Development will provide up to approximately 330 dwellings (Use Class C3) and a primary school (Use Class F1a).
- 5.3. It is envisaged that the majority of existing PRoW which traverse the Site can be retained and integrated into the layout of the Proposed Development with some minor diversions to ensure the Site delivers a high-quality design.
- 5.4. Residential properties will primarily be two storeys in height, although there could also be some two-and-a-half-storey properties to provide focal points and variation to the character of the street scene. The primary school will be a feature building, the height of which will be determined at detailed design stage.
- 5.5. Enabling works will be required to facilitate the Proposed Development comprising drainage, landscape measures and utility works.
- 5.6. Vehicular access to the Proposed Development will be from Hollingworth Road on the eastern site boundary, and the precise form of the access junction will be informed through consultation with the local highway authority. A secondary access can be accommodated on Hollingworth Road. In addition, there will be extensions to two of

the existing residential roads (Bridge Bank Road and Highlands) on the western site boundary to provide vehicular access through the adjacent existing development.

- 5.7. The Site benefits from existing landscape buffers on the south-eastern boundaries which provide mitigation of visual effects, and they will be further enhanced through the implementation of measures outlined in the Landscaping Proposal, which will be submitted with the planning application. Existing trees and planting will be retained where possible and enhanced by additional landscape treatment through street trees, attractive public realm and local green spaces.

6 Consideration of Planning Policy and Committed Development

- 6.1. The Proposed Development will be progressed taking account of policies and guidance at the national, sub-regional and local levels, as identified below.

7 National Planning Policy and Guidance

National Planning Policy Framework

- 7.1. The latest version of the National Planning Policy Framework ('NPPF') was published by the Department for Levelling Up, Housing and Communities ('DLUHC') on 20 July 2021¹.
- 7.2. The purpose of the NPPF is to provide a framework for plan-making and decision-taking in relation to planning applications. The NPPF therefore constitutes a framework which planning authorities and applicants must take account of and is a material consideration in planning decisions.

Planning Policy Guidance

- 7.3. DLUHC regularly updates Planning Practice Guidance ('PPG'); an online resource which is intended to be read alongside the NPPF and provides guidance on a range of planning issues.

8 Local Planning Policy and Guidance

- 8.1. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications be determined in accordance with the statutory development plan, unless material considerations indicate otherwise.
- 8.2. The current statutory development plan applicable to the application site comprises:
- Saved policies of the Rochdale Unitary Development Plan ('UDP') (June 2006)
 - Rochdale Core Strategy (October 2016)
 - Greater Manchester Joint Waste Development Plan Document ('DPD') (April 2012)

¹ Then known as the Ministry of Housing, Communities and Local Government ('MHCLG').

TECHNICAL NOTE

- Greater Manchester Joint Minerals DPD (April 2013).

8.3. The Greater Manchester Joint Waste DPD and the Joint Minerals DPD are not considered as relevant to the Proposed Development, and as such we do not consider them further.

Saved policies of the Rochdale Unitary Development Plan

8.4. A number of policies from the Rochdale UDP, along with the accompanying Proposals Map, have been 'saved'. The Proposals Map identifies that the majority of the site is within the presently defined Green Belt (Policy G/D/2), the exception being the north-western part of the site, which is covered by Protected Open Land (Policy D/10) and Greenspace Corridor (Policy G/8) designations.

8.5. Other 'saved' Rochdale UDP policies deemed of relevance to the proposals, include:

- Policy EM/7 - 'Development and Flood Risk'
- Policy EM/8 - 'Protection of Surface and Ground Water'

Rochdale Core Strategy

8.6. Rochdale Core Strategy policies deemed of relevance to the proposals, include:

- SO2 - 'Creating successful and healthy communities'
- SO3 - 'Improving design, image and quality of place'
- SO4 - 'Promoting a greener environment'
- SO5 - 'Improving accessibility and delivering sustainable transport'
- SP2 - 'The Spatial Strategy for the borough'
- SP3 - 'The Spatial Strategy for the townships'
- SD1 - 'Delivering sustainable development'
- DM1 - 'General development requirements'
- DM2 - 'Delivering planning contributions and infrastructure'
- E1/L – 'Establishing Littleborough as a thriving town centre'
- C1 - 'Delivering the right amount of housing in the right places'
- C3 - 'Delivering the right type of housing'
- C4 – 'Providing affordable homes'
- C8 - 'Improving community, sport, leisure and cultural facilities'
- P1 - 'Improving image'
- P2 - 'Protecting and enhancing character, landscape and heritage'

TECHNICAL NOTE

- P3 - 'Improving design of new development'
- G1 - 'Tackling and adapting climate change'
- G2 - 'Energy and new development'
- G3 - 'Renewable and low carbon energy developments'
- G5 - 'Managing Protected Open Land'
- G6 - 'Enhancing green infrastructure'
- G7 - 'Increasing the value of biodiversity and geodiversity'
- G8 - 'Managing water resources and flood risk'
- G9 - 'Reducing the impact of pollution, contamination and land instability'
- T1 - 'Delivering sustainable transport'
- T2 - 'Improving accessibility'

Supplementary Planning Documents and Guidance

8.7. In addition to the statutory development plan, RBC has published the following Supplementary Planning Documents ('SPDs') and Guidance, which are relevant material considerations:

- Guidelines and Standards for Residential Development SPD (adopted June 2016)
- Affordable Housing SPD (adopted March 2008)
- Biodiversity and Development SPD (adopted January 2008)
- Climate Change Adaptation SPD (adopted June 2012)
- Provision of Recreational Open Space in New Housing SPD (adopted March 2008)
- Urban Design Guide (Design Principles) SPD (adopted September 2007)
- Residential Design Guide SPD (adopted September 2007)
- Public Realm Design Guide SPD Policy (adopted September 2007)
- Design and Planning Process: A Guide to Good Practice Policy (adopted September 2007)

Emerging Sub-Regional Planning Policy

8.8. Nine Greater Manchester local authorities, including RBC, are collaborating to prepare Places for Everyone ('Pfe'), a joint development plan which extends across Greater Manchester, except for the area covered by Stockport Council.

TECHNICAL NOTE

- 8.9. The draft PfE, alongside associated supporting documents, was submitted to the Secretary of State for examination on 14 February 2022. Examination hearings commenced in November 2022.
- 8.10. As set out above, Bloor's site is identified as a proposed residential allocation within the draft PfE ('Policy JP Allocation 22: Land North of Smithy Bridge'). A site specific session to discuss the proposed allocation is scheduled to take place on 9 February 2023.

9 EIA Process

EIA Regulations

- 9.1. The process of EIA is governed by the 2017 EIA Regulations. The 2017 EIA Regulations implement EC Directive 2014/52/EU and the implications were enacted in the UK on 16th May 2017 to form the 2017 EIA Regulations.
- 9.2. The EIA Regulations set out the requirements for undertaking an EIA, and Regulation 18 and Schedule 4 detail the required information for inclusion in an ES. The 2017 EIA Regulations require that, before consent is granted for certain types / scales of development, an EIA must be undertaken.
- 9.3. The Proposed Development is considered to fall within Schedule 2 Part 10 (b) of the 2017 EIA Regulations:
- '(b) Urban development projects, including the construction of shopping centres and car parks, sports stadiums, leisure centres and multiplex cinemas'*
- 9.4. The applicable thresholds and criteria for 'urban development projects' in the second column of Schedule 2 of the EIA Regulations are:
- '(i) The development includes more than 1 hectare of urban development which is not dwellinghouse development; or*
- (ii) the development includes more than 150 dwellings; or*
- (iii) the overall area of the development exceeds 5 hectares.'*
- 9.5. The Proposed Development is for up to approximately 330 houses and the site is circa 19.2 hectares in size, exceeding two of the three thresholds outlined within the EIA Regulations. As a result, the Proposed Development was screened by RBC to determine whether an EIA needs to be undertaken.

10 EIA Screening and Scoping

- 10.1. An EIA Screening Request was submitted to RBC in July 2019. RBC's Screening Opinion (19/00910/SO) stated that the Proposed Development *'is likely to have significant effects on the environment by reason of factors such as its nature, size or location'* and, as a result, an EIA is required to support the planning application for the Proposed Development.
- 10.2. RBC's primary reason for the positive EIA Screening Opinion is reproduced below:

'The nature of the impact is considered to mainly relate to air quality, ecology and nature conservation, ground conditions and land stability, flood risk and drainage, landscape and visual impact, transport and accessibility, and noise. The majority of these are not considered to be unusual impacts and a suite of supporting technical information is required to be submitted with the planning application to demonstrate that any potential harm can be effectively reduced and mitigated. The probability of the majority of these impacts are therefore predictable, localised, would be for a relatively limited period of time and can be effectively reduced and mitigated.'

However, the significant impacts on ecology, biodiversity, landscape and archaeology on a site adjacent to a sensitive area, are considered to be probable'.

- 10.3. This Scoping Report seeks to obtain comment from RBC in relation to the scope and approach to the ES which will be submitted as part of the planning application.

11 Consultation

- 11.1. The Proposed Development is being progressed through an iterative process of design, assessment, and review. It is therefore the intention that the proposals submitted for planning permission will incorporate measures to mitigate potential adverse environmental effects, and to enhance environmental benefits, where possible through its design.
- 11.2. Consultation with statutory and non-statutory consultees, along with the local community, will continue to inform both the EIA and the design of the Proposed Development. Key statutory consultees include, but are not limited to:
- Rochdale Borough Council;
 - Historic England;
 - Greater Manchester Archaeological Advisory Service ('GMAAS');
 - Natural England; and
 - Greater Manchester Police.

12 Proposed Approach to the ES

Assessment

- 12.1. For those environmental topics where it is anticipated that the Proposed Development could potentially result in significant effects, an ES chapter will be prepared for the Proposed Development in accordance with the 2017 EIA Regulations.
- 12.2. Similarly, where it is anticipated that the Proposed Development is unlikely to result in significant effects, such environmental topics are intended to be scoped out of the EIA. Where this is the case, proportionate consideration will be given within the ES to demonstrate the lack of likely significant effects.

TECHNICAL NOTE

- 12.3. Some topics will be considered in stand-alone assessment reports and submitted as part of the planning application but will be excluded from the ES. Those topics include Human Health and Lighting. Further information is outlined in **Section 14** below.
- 12.4. In general terms, the main stages in the EIA are as follows:
- **Data Review** – draw together and review available data;
 - **Scoping** – identify significant issues, determine scope of EIA;
 - **Baseline Surveys** – undertake baseline surveys and monitoring;
 - **Assessment and iteration** – assess likely significant effects of development, evaluate alternatives, provide feedback to design team on adverse effects, incorporate any necessary mitigation, assess effects of mitigated development;
 - **Preparation of the ES** – preparation of technical chapters; and
 - **Consultation on the ES and decision making.**

Mitigation

- 12.5. One of the most important functions of the EIA process is to identify ways to mitigate adverse environmental effects and identify opportunities that the Proposed Development may have for environmental improvements. The EIA Regulations require an ES to contain: *'A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment'*.
- 12.6. A hierarchy of methods for mitigating significant adverse effects will be followed; these are, in order of preference:
- **Avoidance** – designing a Proposed Development in such a way that avoids effects on the environment;
 - **Reduction** – design the development or employ construction methodologies such that significant effects identified are reduced;
 - **Compensation** – providing on and off-Site enhancement in order to compensate for where onsite mitigation has not been possible;
 - **Enhancement** – opportunities that The Proposed Development may provide to enhance the local and wider environment;
- 12.7. The ES will identify mitigation measures for demolition, construction and operation the of the Proposed Development. Environmental effects remaining after mitigation measures have been incorporated are termed residual effects and these will be fully described in the ES.

Embedded Mitigation

- 12.8. There is a distinction between mitigation that is incorporated or 'embedded' into the design of the development (embedded mitigation) and mitigation that is subsequently identified in order to prevent, reduce or offset any remaining significant adverse effects (further mitigation). Embedded mitigation may include, for example, incorporation of drainage attenuation.

TECHNICAL NOTE

- 12.9. Embedded mitigation evolves through the iterative design process and early consideration of the likely significant impacts is essential to incorporating suitable embedded mitigation measures. Design principles of the development have been established and the ES will document the embedded mitigation measures that have been employed within the design in response to the identification of potentially significant effects. The ES, within each of the topic chapters as appropriate, will also document the subsequent/secondary mitigation that is required to complement the embedded mitigation.

Monitoring

- 12.10. The 2017 EIA Regulations introduce new requirements in relation to monitoring. The Regulations require *‘the monitoring of any significant adverse effects on the environment of Proposed Development’*. It is important to note that the Regulations only require the monitoring of significant adverse effects. The ES will therefore ensure that it is clear to the reader which, if any, effects are both adverse and significant and may therefore require monitoring.

- 12.11. It is important to note that Regulation 26 (3) of the 2017 EIA Regulations states that planning authorities should:

“(b) take steps to ensure that the type of parameters to be monitored and the duration of the monitoring are proportionate to the nature, location and size of the Proposed Development and the significance of its effects on the environment; and

(c) consider, in order to avoid duplication of monitoring, whether any existing monitoring arrangements carried out in accordance with an obligation under the law of any part of the United Kingdom, other than under the Directive, are more appropriate than imposing a monitoring measure.”

- 12.12. Schedule 4 of the 2017 Regulations identifies that an ES should identify *“any proposed monitoring arrangements”*. The ES will therefore provide a schedule of proposed monitoring to clearly identify the monitoring that is proposed in relation to any significant adverse effects that have been identified. Any such monitoring will be proportionate, as noted above.

Environmental Statement

- 12.13. The EIA process will be documented in an ES which will describe the Proposed Development and set out the policy context; give full detail of the EIA methodology and any technical methodologies and data used in support of the assessment; present the assessment of likely significant environmental effects; detail any mitigation and enhancement measures that have been employed; and provide a schedule of proposed monitoring arrangements. The ES will present the residual effects, and an assessment of the cumulative effects and impact interactions.
- 12.14. In accordance with requirement 9 of Schedule 4 of the 2017 EIA Regulations, a Non-Technical Summary (NTS) of the ES shall also be provided.

Consideration of Alternatives

- 12.15. The 2017 EIA Regulations require an ES to include *“A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and*

its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."

- 12.16. The legal requirement referred to above is expressed in very general and high-level terms, requiring only the inclusion of a "description" of "reasonable" alternatives and an "indication" of "main" reasons. Although a full description of alternatives and a full assessment of their likely environmental effects are not required, sufficient detail should be provided to allow for a meaningful comparison between the alternatives and the Proposed Development.
- 12.17. It is a matter for the developer to decide which alternatives it intends to consider. The 2017 EIA Regulations do not expressly require that an applicant considers alternatives.
- 12.18. The ES will fulfil the requirements of the 2017 EIA Regulations through identifying the reasonable alternatives considered by the developer and explain the main reasons for the choices made.

EIA Team

- 12.19. Regulation 18 of the 2017 EIA Regulations requires that, to ensure the completeness and quality of environmental statements, "the developer must ensure that the environmental statement is prepared by competent experts".
- 12.20. In accordance Regulation 18 the ES will be "accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts." At this scoping stage, **Table 5-1** identifies the organisations that will contribute to the EIA and provides an outline of their relevant expertise.

Table 5-1: EIA Team

Organisation	Discipline
Stantec	EIA Coordination; Socio-economics, Ground Conditions, Air Quality, Noise and Vibration, Climate Change, Historic Environment
Curtins	Traffic and Transport
Tyler Grange	Ecology and Biodiversity
Betts Associates (Hydro)	Water Environment
Barton Willmore now Stantec	Landscape and Visual

13 Scope of the EIA

- 13.1. Environmental topics that should be addressed by an EIA are outlined in Regulation 4(2) and 18 and Schedule 4 of the EIA Regulations. Schedule 4 sets out that the ES must include a description of the aspects of the environment, which are likely to be significantly affected by the Proposed Development.
- 13.2. This requirement and the broad categories set out in Schedule 4, along with others which are considered to have the potential to lead to significant environmental effects, have been interpreted and applied in the context of the Proposed Development. Topics proposed to be scoped out of the EIA are outlined in **Section 14**, while those scoped in are outlined in **Section 15**.

TECHNICAL NOTE

Duration of Effects

- 13.3. Environmental effects will be classified as either permanent or temporary, as appropriate. Permanent changes are those which are irreversible or will last for the foreseeable future.
- 13.4. The duration of temporary environmental effects will be defined as short, medium or long term based on the likely durations of the construction and operational phases of the development. These definitions will be considered within the assessment of the likely significant effects and will be set out in the ES. Given the timeframe of the Proposed Development, some construction effects are considered to be long-term, albeit temporary.
- 13.5. Where environmental effects will be infrequent or intermittent (such as effects related to activities that will not be continuous during construction) this will be noted in the ES; and the frequency of these activities will be considered in the assessment.

Phases of the Scheme

- 13.6. There are two distinct phases of the Proposed Development which will be considered in relation to the likely significant effects: the construction phase and the operation phase.

Construction

- 13.7. Certain environmental effects will only occur during the construction phase of the Proposed Development and will cease once construction activities have ceased. These will typically be the temporary effects of the scheme and will be described as “short-term” or “medium-term”, as appropriate, using the definitions determined to be appropriate and set out in the ES. Examples include but are not limited to:

- Creation of dust;
- Risk of pollution during construction; and
- Changes to views during construction.

Operation

- 13.8. Environmental effects that occur during the operation of the Proposed Development will typically be permanent or “long-term”. Examples of permanent effects which might occur during the operation of the scheme include but are not limited to:

- Changes to people’s key views;
- Loss of habitat;
- Introduction of new sensitive receptors.

Assessment of Effects

Types of Effects

- 13.9. In assessing the significance of effects identified during the EIA, account will be taken as appropriate as to whether effects are:

TECHNICAL NOTE

- Direct Effects – effects that are caused by activities which are an integral part of The Proposed Development (e.g. change in uses);
- Indirect Effects – effects arising indirectly from the demolition, construction or use of a development (e.g. supply chain effects in demolition or construction stage, regeneration benefits attributed to the scheme);
- Secondary Effects – are 'knock-on'/one-removed effects arising in consequence of indirect effects (e.g. the decision of firms to locate in a particular area following increased custom from new residents);
- Cumulative Effects – many effects that singly are not significant, but when assessed together may be significant and also the cumulative effects of The Proposed Development and other approved local developments;
- Short-Term and Medium-Term – Environmental effects that occur during the demolition and construction of a project will typically be Short or Medium Term;
- Long-Term – Environmental effects that occur during the operation of a project will typically be Long Term;
- Temporary Effects – Environmental effects that occur during the demolition and construction of a project will typically be temporary;
- Permanent Effects – Environmental effects that occur during the operation of a project will typically be permanent;
- Positive Effects – effects that have a positive influence on the environment; and
- Negative Effects – effects that have a negative influence on the environment.

Residual Effects

- 13.10. The incorporation of mitigation measures, primarily as part of the scheme design demolition phase and construction phase, will be reported where appropriate and likely significant residual effects that remain will be described and assessed according to the significance criteria set out in **Table 5-5** below.
- 13.11. As noted above, the EIA Regulations require that the ES describes likely significant effects of the Proposed Development. However, there is no applicable definition of significance and interpretations differ. In accordance with the European Commission's Guidance on Scoping (revised 2017), the EIA will study those effects that will influence decision-making or those where there is uncertainty about their magnitude. This approach is consistent with best practice for EIA in the UK.
- 13.12. The significance of an effect is typically the product of two factors – the sensitivity of the environmental resource affected and the magnitude of the impact – while consideration may also need to be given to the likelihood of an effect occurring.
- 13.13. The magnitude (scale) of change should be identified and predicted as a deviation from the established baseline conditions, for the construction and operational phases of the proposed development. The scale used is shown in **Table 5-2** below.

Table 5-2: Defining magnitude of effect

Level of Magnitude	Definition of Magnitude
High	- An acute and large, short-term change with the potential for long term secondary effects; Or a chronic but long-term or permanent change to the baseline conditions. - Any effects would likely be detectable over a large area, and it would mean the Proposed Development is not in accordance with standard policy/legislation.
Moderate	- A change to the baseline conditions that occurs over the short or long term but does not qualify as a high magnitude as described above. - The effects may be contrary to guidance or objectives set by statutory or non-statutory stakeholders.
Low	- A measurable but small scale, temporary impact to the water environment with no lasting effects. - Any effects are confined to the immediate surroundings of the Proposed Development and although a detectable change has occurred, it is still in line with the relevant policy and guidance.
Negligible	No measurable change against the baseline, where no feasible pathway can be established between the source and the receptor.

- 13.14. The sensitivity of the receptors / receiving environment to change should be determined using professional judgement, consideration of existing designations and quantifiable data, where possible. The scale used is shown in **Table 5-3** below.

Table 5-3: Defining sensitivity of receptor

Sensitivity	Definition of Sensitivity
High	- The receptor is of high value and/or protected by national or international legislation. - The receptor/resource has limited or no ability to absorb change without fundamentally altering its present status/quality. - Existing pressures on the receptor may be such that a small change in the baseline could tip the balance and lead to significant impact.
Medium	- The receptor/resource has moderate capacity to absorb change without significantly altering its present character. - Existing pressures on the receptor are such that small impacts will not tip the balance.
Low	The receptor/resource is of limited value and/or tolerant of change without detriment to its existing character.

- 13.15. This approach to assessing and assigning significance to an environmental effect will rely upon such factors as legislative requirements, guidelines, standards and codes of practice, consideration of the EIA Regulations, the advice and views of statutory consultees and other interested parties and expert judgement. The following questions are relevant in evaluating the significance of likely environmental effects:

- Which risk groups are affected and in what way?

TECHNICAL NOTE

- Is the effect reversible or irreversible?
- Does the effect occur over the short, medium or long term?
- Is the effect permanent or temporary?
- Does the effect increase or decrease with time?
- Is the effect of local, regional, national, or international importance?
- Is it a positive, neutral, or adverse effect?
- Are health standards or environmental objectives threatened?
- Are mitigating measures available and is it reasonable to require these?

13.16. Specific significance criteria will be prepared for each specialist topic as appropriate, based on the above and the generic criteria set out in **Table 5-4** and **Table 5-5** below and adapted to accord with topic-specific guidance.

Table 5-4: Matrix for determining the significance of effects

		Sensitivity of receptor / receiving environment to change / effect		
		High	Medium	Low
Magnitude of change / effect	High	Major	Major – Moderate	Moderate – Minor
	Medium	Major – Moderate	Moderate – Minor	Minor
	Low	Moderate – Minor	Minor	Minor - Negligible
	Negligible	Negligible	Negligible	Negligible

Table 5-5: Generic significance criteria

Level of Effect		Criteria
Significant	Major	These effects are likely to be important considerations at a local or district scale and may become key factors in the decision-making process.
	Moderate	These effects, while important at a local scale, are not anticipated to key decision-making issues.
Not Significant	Minor	These effects may be raised as local issues but are unlikely to be of importance in the decision-making process.
	Negligible	Either no effect or effect which is beneath the level of perception, within normal bounds of variation or within the margin of forecasting error. Such effects should not be considered by the decision-maker.

TECHNICAL NOTE

13.17. Effects that are described as Major or Moderate are determined to be **significant**; and effects that are described as Minor or Negligible are determined to be **not significant** in the context of the EIA Regulations.

Cumulative Effects and Impact Interactions

13.18. The EIA Regulations require the consideration of the potential impact of inter-relationships and cumulative effects of “existing and/or approved development” with the Proposed Development.

13.19. The EIA will consider as appropriate:

- The likely significant cumulative effects of the Proposed Development and other major local existing and/or approved developments; and
- The potential for impact interactions leading to an aggregated environmental effect on a receptor being greater than each of the individual effects that have been identified (e.g. local people being affected by noise, dust and increased traffic levels during the demolition and construction of the development, where those impacts are greater combined than individually).

13.20. The developments to be considered were agreed with RBC in September 2022 and are presented in **Table 5-6** below.

Table 5-6: Committed developments to be considered within the ES

LPA Ref:	Site Address	Description	Applicant	Number of Units	Status	Approx. Distance from the Site
21/01146/FUL	Former Akzo Nobel Site	Residential development - erection of up to 127 residential dwellings including new vehicular access points, footpaths, cycle paths, boundaries, landscaping, creation of open space, a pumping station and other associated works	Vistry Partnerships Ltd And Homes England	127	Valid 8 Sept 2021 - Awaiting Decision	0m (adjacent)

LPA Ref:	Site Address	Description	Applicant	Number of Units	Status	Approx. Distance from the Site
19/00262/FUL	Land Off New Road, Littleborough	Residential development of 96 dwellings together with associated services, drainage, access arrangements and car parking including the demolition of the existing building on site	Russell Homes	96	Approved 10 January 2020	200m (north)
20/00639/FUL	The Soccer Village (former Birchinley Manor Equestrian Centre), Wildhouse Lane, Milnrow, OL16 3TW	Demolition of the existing buildings, hardstanding areas and sports pitches, and the erection of 47 dwellinghouses including provision of associated roads, footways, public open space, parking areas, drainage, landscaping and boundary treatments along with ground levelling works, works to trees and ponds and other associated works	Lancet Homes	47	Approved 17 May 2021	1,550m (south)

14 Topics Excluded from the ES

Human Health

- 14.1. The established definition of health from the World Health Organisation is that *'health is a state of complete physical, social and mental wellbeing and not simply the absence of disease or infirmity'*.

TECHNICAL NOTE

- 14.2. The definition of health reflects the understanding that an individual's inherited traits interact with lifestyle, community, environmental, social and economic factors as well as a much wider range of issues to determine their health outcomes. Many of these 'determinants' can be influenced by the quality of people's living and working environments and are therefore relevant to the design and location of development, such as that proposed.
- 14.3. Therefore, it is considered that in establishing the effects of the scheme on human health, the wider determinants of health should also be considered. The NHS London Healthy Urban Development Unit, 'HUDU Planning for Health: Rapid Health Impact Assessment Tool' (2019), provides a useful framework of health determinants for assessment of urban development projects.
- 14.4. While it is not considered that significant human health effects are likely and so the topic of human health does not need to feature as a chapter within the ES, Rochdale Core Strategy Policy C6 (Improving Health and Well-being) states that a Health Impact Assessment ('HIA') will be sought for major planning applications, and Rochdale's Validation Checklist requires a HIA to be undertaken for residential applications comprising 150 dwellings or greater. As a result, a rapid HIA will be prepared and submitted as part of the planning application for the Proposed Development.
- 14.5. While the approach to and scope of the HIA will ultimately be agreed with the relevant Health Officer, it is anticipated that the rapid HIA will set out the following:
- Background to the proposals and the site;
 - Approach to HIA;
 - Brief overview of policy context;
 - Brief overview of local health priorities and health characteristics;
 - Completion of the matrix within the Healthy Urban Development Unit's Rapid Health Impact Assessment Tool (2019) – to consider construction and operation impacts on health of both planning applications and potential receptors / vulnerable groups;
 - Recommendations for mitigation (delivered through design, conditions or financial contributions);
 - Engagement with the technical team and client to feedback health issues that could affect design and to understand other technical disciplines impacts on health; and
 - Summary of the above.
- 14.6. Along with the scheme plans and proposals, the HIA will draw on the outputs from other assessments that are relevant to health and wellbeing, e.g. Air Quality, Noise, Traffic and Transport, Socioeconomics.

TECHNICAL NOTE

Lighting

- 14.7. In addition to national guidance on considering Light Pollution from new developments², RBCs' Adopted Core Strategy (2016) states in clause 10.65:
- 'Lighting schemes for new developments will need to have full regard to minimising negative impact on residential areas, the character of the area, biodiversity and the night sky'*
- 14.8. The potential impacts of lighting can be broadly split into three categories which correspond with and inform other disciplines within the ES process.
- Visual Impacts – informing Landscape and Heritage
 - Health and Wellbeing – informing Human Health
 - Ecological Impacts – informing Ecology and Biodiversity
- 14.9. The development will expand the illuminated boundary of Smithy Bridge eastwards; however, except for views eastwards from residential properties directly bordering the Site, the development is viewed in the context of other lit settlements. Existing street lighting on Hollingworth Road lies to the east of the Site and serves as a night-time lit visual boundary to the general built area, with the Proposed Development falling within this extent.
- 14.10. By reference to Institution of Lighting Professionals (ILP) Guidance Note 01, 2021, The Reduction of Obtrusive Light (ILP GN01), The site and its surrounds are anticipated to fall within an E2 Environmental Lighting Zone (Rural, sparsely inhabited rural areas, village or relatively dark outer suburban locations). This will be validated based on site surveys and agreed with RBC if differing from the above expectation.
- 14.11. The residential and educational nature of the Proposed Development can be compared to many similar developments in providing an initial assessment of likely effects. In reference to existing similar developments, including the residential plots in the surrounding area, and the emerging masterplan, whilst surrounding receptors may experience changes, these are not anticipated to be at a magnitude to generate significant effects.
- 14.12. Whilst therefore it is not proposed for lighting to be considered as part of the EIA process, a Lighting Assessment process will be progressed with a standalone Lighting report produced which serves to inform the respective parties ES Chapters (landscape and ecology) or stand-alone reports (health). This will be submitted with the planning application.
- 14.13. The Lighting Assessment process will have due regard for the Institution of Lighting Professionals (ILP), Professional Lighting Guidance 04, 2013, Guidance on Undertaking Environmental Lighting Impact Assessments (ILP PLG04). Thresholds for Obtrusive Light will reference ILP GN01 alongside any values determined by the project Ecologist for specific sensitive receptors.
- 14.14. The Lighting Assessment will comprise a baseline photometric and photographic survey (photography will be taken for reference and to support the assessment only,

² <https://www.gov.uk/guidance/light-pollution>

which will not form part of the Landscape and Visual Impact Assessment ['LVIA']). Following the baseline survey, a qualitative assessment will be undertaken with quantitative modelling undertaken only where potential for obtrusive light to exceed thresholds are identified.

- 14.15. Dialogue has been held with the project landscape architects undertaking the LVIA. As a result, the lighting survey will incorporate a number of night-time views from locations with greater population or night-time leisure value. Locations infrequently accessed by night, such as rural footpaths away from settlements, will be scoped out of consideration for visual reference. Commentary on LVIA viewpoints as part of scoping for lighting assessment is included within **Appendix B**. Survey locations and receptors are given unique lighting references with equivalent LVIA locations in parentheses where these align.
- 14.16. For Health and Wellbeing, residential road and leisure receptors in the immediate surrounds of the Proposed Development, have been identified. Thresholds of obtrusive light will be considered as those listed in ILP GN01 for the respective Environmental Lighting Zone. This also seeks to address the Clean Neighbourhoods and Environment Act 2005, which introduces light as a statutory nuisance where "artificial light [is] emitted from premises so as to be prejudicial to health or a nuisance".
- 14.17. Liaison with the project ecologists has been undertaken and, following this, a number of locations of interest for capturing baseline illuminance readings and consideration for potential changes in ecological conditions resulting from the development have been identified. These locations are identified within **Appendix B**.
- 14.18. The Lighting Assessment will report baseline conditions and anticipated changes in relation to landscape and visual receptors, health receptors and ecological receptors, with each respective discipline drawing conclusions on significance.
- 14.19. Planned areas of study and anticipated Receptors are also detailed within **Appendix B**.

Material Assets and Waste

- 14.20. The consumption of natural resources in the form of land and soil is inevitable for such a development; however, given the nature of the Proposed Development, materials required for the construction of the Proposed Development are unlikely to be particularly scarce or environmentally sensitive, nor is the Proposed Development likely to result in materials becoming scarce. Consideration will be given throughout the design process to the specification of suitable materials, including their sustainability and environmental implications, to support an environmentally sensitive and high-quality development.
- 14.21. The construction of the Proposed Development will use small quantities of energy intensive resources including fossil fuels to power mechanical excavators and other machinery. The construction phase will also utilise land and construction materials including bricks, tiles, cement, concrete, timber, asphalt, piping, cladding, etc. Soil (reused from on-site resources wherever practicable) and seeded grass or turf will also be used for landscape purposes.
- 14.22. Waste generation during the construction phase is likely to result from the construction of the new buildings. Waste management will be considered carefully

throughout the design and construction of the Proposed Development to ensure compliance with legislation and to minimise costs associated with waste disposal. The volume of waste likely to be generated by the development is relatively limited and will not significantly affect the capacity of local waste infrastructure. Construction waste expected to be generated by the Proposed Development primarily includes normal non-hazardous construction materials such as:

- Off-cuts of timber
- Bricks
- Wire
- Fibreglass
- Cleaning cloths
- Paper
- Materials packaging

- 14.23. During the operational phase, electricity, gas, and water resources will also be used as required to heat and power dwellings and the proposed primary school. During the operation of the development, waste (including recyclables) generated by the buildings will be managed by the local waste authority. The wastes generated by the Proposed Development, as a draft allocation in the Places for Everyone document, should not significantly affect the capacity of local waste infrastructure.
- 14.24. Where possible, any material generated by excavation of building/structural foundations will be expected to be re-used on site. Excavated material will (depending on type) be used to backfill excavations and for site re-profiling purposes where appropriate.
- 14.25. The Proposed Development would generate waste both during construction and operation. While it would be aimed to reduce the volumes of waste generated, arisings would be recycled where possible in accordance with the waste hierarchy.
- 14.26. Accordingly, it is anticipated that there will be no significant effects in relation to the use of natural resources and production of waste and so it is proposed to scope this topic out of the EIA.

Risk of Accidents and Disasters

- 14.27. Schedule 4 to the 2017 EIA Regulations requires an ES to include '*a description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned*'. Although only the resulting expected significant adverse environmental effects (together with any required prevention, preparedness, mitigation and response measures) need to be addressed within an ES, it is first necessary to identify a project's vulnerability (i.e. identification of relevant risks). The second stage is then to determine whether this would result in likely significant environmental effects.
- 14.28. The terms risk, vulnerabilities, major accidents and disasters are all undefined within the 2017 EIA Regulations. To remain proportionate, consideration of this topic should

TECHNICAL NOTE

focus on the risks of major accidents and/or disasters which have the potential to result in serious damage, which for this EIA is considered to be the loss of life or permanent injury and/or permanent or long-lasting damage to an environmental receptor which cannot be restored through minor clean up and restoration efforts.

14.29. Taking account of the location and characteristics of the Proposed Development, and the likelihood of significant environmental effects outlined in this Proposed EIA Approach Technical Note, the likely major risks identified related to:

- Potential accidents during the construction phase resulting in disturbance, injuries and/or fatalities to construction workers or members of the public;
- Road traffic accidents; and
- Pollution incidents to ground and watercourses during the construction phase, resulting in potential pollution migration and adverse effects on specific receptors including soils, habitats, and species.

14.30. Health and safety is a key consideration in the construction sector and will be managed in accordance with legal requirements and best practice.

14.31. The impacts of the Proposed Development on road traffic accidents will be assessed within the Transport Assessment and the Traffic and Transport chapter of the ES submitted as part of the planning application. This will include an analysis of personal injury collisions from the local area, which was used to identify potential significant adverse effects, if any. If required, mitigation measures would be suggested to reduce these effects to an acceptable level.

14.32. It is anticipated that both a Site Waste Management Plan and a Construction Environmental Management Plan will be conditioned should the planning application be approved. Those documents will outline methods to avoid, minimise and mitigate waste during the construction period and various construction effects on the environment, and they will be updated as the project progresses to enable the plan to be effective and account for any changes that occur during construction works.

14.33. Potential major risks related to the Proposed Development are therefore considered to be addressed. In EIA terms, the Proposed Development is not considered to be vulnerable to major accidents and/or disasters with the potential to lead to significant adverse environmental effects. It is proposed to scope this topic out of the EIA.

15 Topics scoped into the ES

Landscape and Visual Impact Assessment

Introduction

15.1. An assessment of the likely significant landscape and visual effects of the Proposed Development will be undertaken and included in the ES.

Baseline Conditions

15.2. The baseline conditions at the site comprise the following:

- **Landscape Character:** The Site lies within NCA Profile 36: “Southern Pennines” at a national level, “LCT: Pennine Foothills (West/South Pennines) and LCA 28: Rochdale and Oldham Pennine Foothills” in the Regional Greater Manchester Landscape Character Assessment. The landscape to the north-west, north, east and south, lies within “LCT: Open Moorlands and Enclosed Upland Fringes (west / south Pennines and LCA: Rough Hill and Brun Moor).
- **Land Use:** The Site comprises a series of unremarkable agricultural fields that are used for sheep grazing. The few remaining field boundaries are in poor condition and contain few trees.
- **Vegetation cover / Enclosure:** For the most part, vegetation is limited to the site boundaries, including a notable group of trees around the existing car park area within the south-eastern corner of the site, which provide a mature feature within the site and verdant street scene to Hollingworth Road and Lake Bank.
- **Scale:** Medium.
- **Landform:** There is a notable change in topography within the Site; the eastern part of the Site gently falls north to south from 170m above ordnance datum (‘AOD’) to 165m with the western part of the Site forming the highest point of Brown Brow Hill at 181m AOD.
- **Designations:** There are no designations for landscape quality of value within the Site or in its immediate vicinity.
- **Cultural / Recreational Associations:** There are no heritage assets within the Site; there are several within the local area to the north and west, including the Grade II listed ‘Rochdale Canal Lodge Bridge’ located approximately 165m to the south-west of the Site at the closest point, and ‘Stubley Old Hall’, approximately 505m to the north of the Site. However, it is considered that there is a degree of separation between these features and the Site as a result of intervening landform, mature vegetation and built form. There are a number of PRow within the Site that provide a good level of connectivity to with the immediate, local and wider settlement and countryside. Within the local area to the south-east there is an extensive PRow network, which includes a series of long-distance routes.
- **Scenic Beauty:** The location of the Site on the top and sides of the Brown Brow Hill results in open views out towards the north and east in particular, from the high ground within the east of the Site. The land drops away to the Rochdale Canal to the north and Hollingworth Road to the east, before rising up to the wider Pennine Hills. To the west, the land falls away before rising up to Owl Hill to the south-west. Views from the east, south and west, generally perceive the Site as set against the built edge of Littleborough and the existing development at Smithy Bridge. The higher ground within the western part of the Site is more visually sensitive to views. Overall, the scenic quality is moderate due to the open nature of the Site and associated agricultural use with limited boundary features, which are characteristic features of this landscape type.
- **Visual Influence:** Views over the Site are possible from the existing PRow within the Site and Hollingworth Road to the east. Views from the existing settlement edge that bounds the western edge of the Site are limited due to the orientation of built form, existing topography, and intervening vegetation. Views from the immediate south are heavily restricted by the combination of mature roadside

vegetation and the notable drop in the landform; this results in there being little appreciation of the Site. The nature of the topography in and around the Site plays a key role in varying visibility into and over the Site and the existing development at Smithy Bridge and Littleborough. As the landform rises within the wider landscape, the Site and wider settlements become more evident. Where there are views from this higher ground, the Site is seen in the context of the existing settlement edge, and although it extends development of Brown Brow Hill, the hill itself does not form a notable high point within the local area.

Approach

- 15.3. The assessment will be undertaken in accordance with the Guidelines for Landscape and Visual Impact Assessment ('GLVIA') and will provide a review of the existing landscape planning policy context, published sources of landscape character and visual appraisal of the area to be assessed with the assessment, known as the Study Area (see paragraph 7.1.10). The assessment will consider the likely significant landscape and visual effects of the Proposed Development, both during the construction and operational phases.
- 15.4. Baseline information for the Study Area will be collated, which will include settlement patterns and access, topography, vegetation, landscape designations, relevant planning policy and published landscape character information, as well as appraisals of the character of the Site and its visual relationship with the Study Area. Appraisals will be based on a baseline timeframe of winter 2021/2022.
- 15.5. Assessments will be carried out to identify the likely significant landscape and visual effects arising from the Proposed Development during construction, on completion ('Year 1') and 15 years thereafter, with the benefit of established planting mitigation. Mitigation planting will be assumed to grow approximately 1m in height every 3 years.
- 15.6. In accordance with the GLVIA, this assessment will address landscape and visual effects as separate issues. Landscape effects relate to both the effect on the physical features of the Site, and on the landscape character of the Site and surrounding area. Visual effects relate to the experience of views of the development by visual receptors from publicly accessible vantage points in the Study Area. Where appropriate, the effects of the development on residential receptors will also be assessed.
- 15.7. **Appendix C** includes the proposed methodology for undertaking the LVIA.

Viewpoint Selection

- 15.8. In order to assess the effects on visual receptors, a selection of publicly accessible viewpoints has been made against a computer-generated Zone of Theoretical Visibility ('ZTV'). The representative viewpoints include users of public rights of way, road users and residents. Views are categorised as either near distance, medium distance or long distance with the relevant distances.
- 15.9. The type of view is typically described as either transient (i.e. experienced when moving) or fixed (i.e. from a static location). Views are also described in terms of the degree of screening or openness (e.g. open or uninterrupted; filtered (including where partially screened) by vegetation or other structures; or curtailed by intervening land form, built form or vegetation) and the angle of view (e.g. frontal or oblique). The location and number of photographic viewpoints to be included within the LVIA will be

agreed with the LPA / Landscape officer. The locations of the proposed assessment viewpoints, overlain with ZTV mapping are illustrated on a plan within **Appendix B** alongside which are a series of panoramic images that correlate with the viewpoint numbers on the plan.

15.10. Visualisations prepared to support the LVIA would be in accordance with Type 1 Annotated Viewpoint Photography as detailed in TGN 06/19 Visual Representation of development proposals, which is considered appropriate to support EIA development and be proportionate to this development. The assessment will:

- Define the Study Area for the Site, based on ZTV mapping and a visual appraisal in the field, identifying key representative views to be used for the visual impact assessment;
- Provide an appraisal of the landscape and visual baseline;
- Assess the susceptibility to change of the landscape and visual receptors (the receiving environment), the value of landscape and views, and the resultant sensitivity of receptors;
- Assess the likely magnitude of landscape and visual effects arising from construction and operation of the proposed development (at 'Year 1');
- Assess the likely significance of landscape and visual effects arising from construction and operation of the proposed development (at 'Year 1');
- Identify requirements for any mitigation measures;
- Summarise any residual effects following the establishment of mitigation planting (at 'Year 15'); and
- Assess the likely significant cumulative effects of the development with Committed Developments in the area.

Summary

15.11. **Table 7-1** summarises the landscape and visual receptors identified for inclusion in the assessment.

Table 7-1: Environmental Topic Effects

Receptor	Effects	Scoped In?
Visual receptors in publicly accessible locations, including roads, footpaths and public open spaces, and residential receptors where appropriate	Visual effects on users	✓
Landscape features, including existing vegetation	Landscape effects on the landscape resource	✓
Landscape character	Effects on landscape character areas	✓

TECHNICAL NOTE

Noise and Vibration

Introduction

- 15.12. The **noise** and vibration ES chapter will consider likely significant noise and vibration impacts and effects caused by the construction and operation of the Proposed Development on noise sensitive receptors ('NSRs') located in the vicinity of the Site and access routes. The assessment will also consider the suitability of the Site for its proposed use with respect to environmental noise and vibration.

Baseline Conditions

- 15.13. Existing L_{eq} , L_{max} and L_{90} octave-band and A-weighted sound levels will be established, by means of a detailed daytime and night-time unattended environmental sound survey, the at secure and accessible location(s) at the Site. Measurements are expected to be taken over a duration of 24 hours.
- 15.14. The closest identified existing NSRs to the Site are residential dwellings located to the west on Brown Lodge Drive, Lincoln Drive, Bridge Bank Road, Highlands, Higher Bank Road and Bank Close.
- 15.15. Based on a desktop review of the Site, the dominant noise sources are likely to be associated with the road 'Lake Bank' to the south of the site, Hollingworth Road to the east and the railway tracks to the north.
- 15.16. Vibration measurements will be undertaken on the existing ground surface at the railway tracks to the north of the Site, at a location representative to the nearest proposed residential dwelling. The impact will be assessed using criteria outlined in BS 6472:2008 based on the measured vibration dose value '(VDV)' levels.
- 15.17. Proposed sound and vibration measurement locations are shown in **Excerpt 7-1** overleaf.

Excerpt 7-1: Proposed Sound and Vibration Locations



(Image contains data from Maxar, Microsoft, OS, Esri, HERE Garmin, iPC)

Potential Effects

Construction

- 15.18. The key considerations in relation to the noise and vibration assessment during construction are as follows:
- The effect of noise and vibration impact from fixed/mobile plant associated with the construction phase on nearby NSRs; and
 - Construction traffic effects on nearby NSRs.

Operation

- 15.19. The key considerations in relation to the noise and vibration assessment during operation are as follows:
- The effect from the operational phase including development traffic on the nearby NSRs, the proposed residential, and educational NSRs;
 - Noise and vibration from the railway line to the north of the site boundary, upon the proposed residential dwellings; and
 - Changes in traffic in and around the development.

TECHNICAL NOTE

Methodology

- 15.20. Assessment criteria will be determined in accordance with national and local planning policy and relevant industry standards such as, but not limited to, BS833:2014 and ProPG.
- 15.21. The construction noise and vibration assessment will be undertaken following guidance in BS5228-1:2009+A1:2014 Code of Practice for noise and vibration control on construction and open sites and 6472:2008 Guide to Evaluation of Human Exposure to Vibration in Buildings Part 1: Vibration Sources other than Blasting based on the measured VDV levels.
- 15.22. Agreement on the assessment criteria and methodology will be sought from the Environmental Health Officer ('EHO').
- 15.23. The exact construction methodologies are unlikely to be defined until the construction contractor is appointed, which is likely to be after the submission of the ES. However, in the absence of these data, an outline construction programme and identification of noise generating construction equipment will be developed based on knowledge and experience of other similar developments. The quantification of impacts will be undertaken by comparison with relevant guidance and standards such as BS5228, or local legislative requirements. The assessment will outline suitable measures for the mitigation of construction impacts.
- 15.24. The assessment of operational noise will incorporate a desk-based acoustic model, which will be used to determine the noise levels at the nearest NSRs for the operational stage. The noise emission data will be collected through both relevant suppliers and measurements undertaken at the site or other representative sites.
- 15.25. Operational road traffic noise will be assessed using noise prediction procedure, 'The Calculation of Road Traffic Noise'.
- 15.26. Noise levels will be predicted for both 'with' and 'without' development scenarios for an operational design year in line with the Transport Assessment ('TA'), to allow the determination of the changes in road traffic noise at existing receptors as a result of the proposals. The significance of these changes will be based on guidance criteria contained in Design Manual for Roads and Bridges LA 111 Noise and Vibration and guidance from IEMA: Noise Guidance 2014.
- 15.27. We will assess the suitability of the Site for both residential and educational use.

Climate Change

- 15.28. The climate change ES chapter will assess the likely significant effects associated with the Proposed Development. Schedule 4 to the 2017 EIA Regulations requires likely significant effects resulting from "*the impact of the project on climate...and the vulnerability of the project to climate change*" to be addressed within an ES. The climate change ES chapter will therefore comprise two assessments as follows:
- Greenhouse Gas ('GHG') Emissions Assessment (the impact of the Proposed Development on climate change); and
 - Climate Change Risk Assessment ('CCRA') (the impact of climate change on the Proposed Development i.e. vulnerability).

TECHNICAL NOTE

- 15.29. There is no nationally adopted method for assessing climate change within EIA and therefore the assessment approach draws upon IEMA guidance (IEMA, 2022 and IEMA, 2020).
- 15.30. A qualitative assessment of GHGs generated by the Proposed Development will be undertaken based on local and national policy, in the context of the UK 2050 Net Zero target and RBC's commitment to becoming a carbon neutral borough by 2038 after declaring a climate emergency in 2019. The methodology for this assessment will align with IEMA guidance, the Greenhouse Gas Protocol³ and PAS 2070/PAS 20804 methodology.
- 15.31. A high-level CCRA of sensitive receptors will be undertaken using the UK Climate Projections (UKCP18, produced by the Met Office). Representative Concentration Pathways (RCP) 8.5 will be used within the assessment, which represents the highest emissions scenario. This is considered the most appropriate scenario for assessing the impact of climate change on the Proposed Development, to provide a suitable conservative approach. The assessment will utilise the probabilistic projections up to the year 2099.
- 15.32. For both the GHG and CCRA assessments, embedded and further mitigation will be identified.

Air Quality

Introduction

- 15.33. Air quality has been scoped into the ES due to the potential for significant effects as a result of emissions to air primarily associated with emissions from traffic during the operational stage.

Baseline Conditions

- 15.34. RBC has investigated air quality within its administrative boundary as part of its responsibilities under the Local Air Quality Management ('LAQM') regime. An Air Quality Management Area ('AQMA') has been declared due to exceedances of the annual mean nitrogen dioxide ('NO₂') Air Quality Objective ('AQO') within Rochdale as part of the GMCA AQMA.
- 15.35. The Site is located approximately 1.5km east of the AQMA, which encompasses an area along the A58 and the central road network in Rochdale. At the closest GMCA monitoring location, Smithy Bridge Road (approximately 500m west of the Site), the annual mean NO₂ concentrations was less than 30 µg/m³ in 2019 (well below the UK AQO of 40 µg/m³). However, there were exceedances of the AQO at a number of monitoring locations within Rochdale in 2019, including those adjacent to roads along which development-related traffic may travel, such as the A58 Halifax Road.

³ <http://ghgprotocol.org/about-us>

⁴ PAS 2080:2016 Carbon management in infrastructure ([bsigroup.com](https://www.bsigroup.com))

Assessment Methodology

Construction

- 15.36. During demolition and construction, dust from on-site activities and off-site track-out by construction vehicles has the potential to impact on sensitive human and ecological receptors within the study area. Potential impacts include loss of amenity and harm to sensitive ecological features (as a result of dust soiling) and deterioration of human health (as a result of concentrations of PM₁₀). For the construction dust risk assessment, the Study Area is defined as comprising the area up to 350m from the site boundary (50m for ecological sites) and 50m from the route(s) used by demolition and construction vehicles (up to 500m from the Site entrance(s)).
- 15.37. The assessment of construction effects will be based on the Institute of Air Quality Management's (IAQM's) 'Guidance on Assessment of Dust from Demolition and Construction' (v.1.1, 2016). The assessment will determine the risk of impacts from demolition, earthworks, construction activities, and as a result of track-out, based on the magnitude of activities and the overall sensitivity of the surrounding area. A package of appropriate dust mitigation measures will be recommended based on the outcome of the assessment to ensure that effects of construction dust will not be significant.
- 15.38. There is also the potential for impacts on air quality at existing sensitive locations (i.e. residential properties) as a result of emissions of NO₂, PM₁₀ and PM_{2.5} from temporary construction traffic associated with the Proposed Development. If the traffic generation for the Proposed Development exceeds the criteria outlined in the Environmental Protection UK ('EPUK') and IAQM 'Guidance on Land-use Planning and Development Control: Planning for Air Quality' (v1.2, 2017), a detailed (quantitative) air quality assessment, utilising dispersion modelling, will be undertaken.

Operation

- 15.39. Given the location of the Proposed Development, there is the potential for impacts on the proposed sensitive receptors during occupation from the existing road network. There is also the potential for impacts on air quality from road traffic associated with the Proposed Development itself during occupation due to its size and location in proximity to the GMCA AQMA. These impacts have the potential to occur at sensitive receptors (e.g. designate ecological sites, existing residences, schools and any potential proposed onsite sensitive land uses) that are located near to roads along which the operational traffic generated by the Proposed Development will travel. Considering the size of the Proposed Development (and therefore likelihood that traffic flows will exceed relevant thresholds, and given the proximity of proposed sensitive receptor locations to Hollingworth Road), it is expected that a quantitative (dispersion modelling) assessment will be required.
- 15.40. Air quality will be assessed at a range of representative worst-case human receptor locations, the model will be used to predict concentrations within the Site to assess the suitability of the Site for the proposed end-uses and at off-site receptors to assess the impacts of additional traffic associated with the Proposed Development. For traffic-related impacts these will be existing residential properties that are closest to busy roads, in particular those close to junctions, where traffic emissions are greatest.

TECHNICAL NOTE

- 15.41. Relevant ecological receptor locations are designated sites that are sensitive to increases in concentrations of oxides of nitrogen (NO_x) and ammonia (NH₃) and to increases in nutrient and acid deposition of nitrogen. When identifying these receptors, particular attention will be paid to assessing impacts in proximity to routes along which substantial increases in traffic volumes are anticipated as a result of the Proposed Development.
- 15.42. Concentrations of NO₂, PM₁₀ and PM_{2.5} for assessment of impacts at human receptors, and NO_x, NH₃ and resultant nitrogen and acid deposition, will be predicted for the following scenarios:
- baseline year;
 - operational year without the Proposed Development; and
 - operational year with the Proposed Development (assuming full build-out of the Development).
- 15.43. The baseline year will be chosen to reflect the most recent year for which sufficient data are expected to be available with which to model the verification site and carry out model verification. 2019 is expected to be an appropriate assessment year as it is the most recent year for which suitable annual mean monitoring data will be available. Due to temporary changes in travel patterns in 2020 and 2021 (as a result of COVID-19), it is unlikely that data from these years will be suitable/ appropriate for use.
- 15.44. Concentrations of NO₂, PM₁₀ and PM_{2.5} at identified residential receptors will be modelled using the ADMS-Roads dispersion model (v5). To create a robust model, verification will be undertaken to compare the results of modelling against those from GMCA monitoring. Emissions associated with the traffic will be calculated using the most recent version of the Emissions Factor Toolkit (EFT), currently v11. Traffic data will be entered into the EFT to provide emissions rates for each of the road links modelled.
- 15.45. The assessment of traffic emissions will assess the future baseline which includes traffic associated with identified cumulative schemes and predicted concentrations will be compared to the relevant AQOs to identify any exceedances. Impacts will be determined using the criteria outlined in the EPUK / IAQM guidance.
- 15.46. In terms of the impact of road traffic emissions on ecological receptors, impacts will be compared to a threshold of 1% of the critical level or load which is accepted to be a pragmatic threshold for determining no likely significant effects. It should be noted that an impact of more than 1% is not, per se, an indication that a significant effect exists, only the possibility of one which would trigger the need for further, more detailed assessment of the ecological sensitivity and value of the habitat.
- 15.47. The energy strategy for the Proposed Development is yet to be determined. However, there is potential for on-site combustion-based sources of heat or power generation to be included. Should a combustion-based energy centre be proposed, the air quality effects of the energy centre will be assessed. Where emissions from combustion-based sources of heat or power cannot be screened out as insignificant, atmospheric dispersion modelling will be undertaken.

TECHNICAL NOTE

Hydrology and Drainage

Introduction

- 15.48. An assessment of the likely significant effects of the Proposed Development on the hydrological environment, including flood risk, surface water alterations and local drainage infrastructure during the construction and operational phases will be undertaken by Betts Hydro Ltd.

Proposed Method of Assessment

- 15.49. As the Site is over 1 hectare in size there is a requirement for the planning application to be supported by a full Flood Risk Assessment ('FRA') in accordance with national policy. In accordance with local policy, the potential drainage of the Proposed Development Site will also need to be considered and therefore a Drainage Management Strategy Report will also be produced and submitted with the planning application.

Overview

- 15.50. Both the construction and operational phases of the Proposed Development will be considered with regards to the potential impacts on flood risk and drainage that may occur as a result of the development. The potential changes that may occur as a result of the development include:
- Increase in flood risk due to an increase in impermeable areas as a result of the Proposed Development;
 - Increase in flood risk associated with the existing inadequate/under capacity downstream surface water infrastructure;
 - Potential detriment to water quality due to an increase in suspended sediment contaminants entering the drainage system during construction and operational phases; and
 - Increase in foul water flows and potential capacity constraints associated.

Legislation, Policy and Good Practice

- 15.51. The assessment will be undertaken in accordance with the following legislation, policy and good practice guidance.
- Water Resources Act (1991) and associated legislation (Water Industry Act and Land Drainage Act);
 - Environment Act (1995);
 - Flood and Water Management Act (2010);
 - Building Regulations Approved Document H (Drainage and Waste Disposal) (2015);
 - The Water Act (2014);
 - National Planning Policy Framework (2021);

TECHNICAL NOTE

- Planning Practice Guidance (PPG);
- Sustainable Drainage Statement (2014);
- Non-statutory technical standards for sustainable drainage systems (2015);
- Rochdale Core Strategy (2016);
- Rochdale Borough's Strategy for Flood Risk Management (2014);
- Strategic Flood Risk Assessment for Greater Manchester (2019); and
- Greater Manchester Surface Water Management Plan (2012)

Study Area

- 15.52. This assessment will predominantly focus on the application site although, where required, consideration will also be given to the potential risk from/to areas neighbouring the Site. In particular, where historic flooding or flooding susceptibility is identified which may impact the Site.
- 15.53. Baseline information will be compiled from a variety of sources including consultations, flood mapping, sewer records and other published flood risk/drainage sources of information; using multiple methods including desk-based study, research and fieldwork to identify and assess the significance of the known receptors.

Desk Based Studies

- 15.54. A desktop survey will be carried out to prepare the site-specific Flood Risk Assessment and Drainage Management Strategy report that will append the ES. The desk-based study will involve identifying the existing catchment characteristics and any associated pressures/constraints. The existing surface water hydrology onsite and near to site (where relevant) will be identified. Collation of historic information relating to flooding, susceptibility and drainage will be obtained for the immediate site area. Details on soil and ground characteristics will be obtained, along with details of the existing sewerage infrastructure within/adjacent to the Site.

Field Surveys

- 15.55. Field studies have been undertaken including drainage investigations and a site walkover in 2019 to assess the sensitivity of the receptors within the study area and the magnitude of effects on the Proposed Development.

Consultation

- 15.56. Consultations have been undertaken with the Environment Agency, United Utilities, RBC and the Canal and River Trust on multiple occasions between 2019 and 2021. These discussions have identified the scope of works required for the Flood Risk Assessment and Drainage Management Strategy required to support the ES chapter.

Assessing Significance of Effect

- 15.57. As noted above, impacts with a significance of moderate or above will be considered 'significant' and mitigation measures will be proposed to reduce (and where possible, remove) the impact. The assessment will assume that the downstream sewer and watercourse network has sufficient capacity to take the Proposed Development flows and that any offsite downstream flood risk outside of control of the Site is dealt with by the relevant asset owners.

Mitigation and Residual Effects

- 15.58. Mitigation measures will be identified where adverse effects have been identified, as part of the assessment, to minimise harm as far as is practicable. These will consider the magnitude of impact over the value of the receptor and will set out any residual effects following implementation of the mitigation measures.

Geology and Ground Conditions

- 15.59. Recent ground investigations across the Site (September 2019) have generally confirmed published geological mapping which identifies that the Site is underlain by bedrock strata of the Carboniferous Lower Coal Measures including the Milnrow Sandstone. The bedrock is faulted with two north-northwest to south-southeast trending faults controlling the outcrop of the sandstone unit. The bedrock on the eastern part of the site is overlain and masked by glacial till deposits (stony glacial clays) with a narrow elongated tract of Head deposits within the base of a valley feature on the eastern edge.
- 15.60. The Lower Coal Measures contain productive measures with the Coal Authority identifying a shaft adjacent the north-west corner of the site. The Coal Authority has zoned a 'Development High Risk Area' around the shaft, which extends marginally onto the Site. In terms of the general mining history, the Coal Authority advises that the shallowest recorded (coal) seam that has been worked is at 60m depth but it is possible there may also possibly be unrecorded shallow workings. Further mine shafts and an adit are recorded on the lands to the northeast of the Site – the mine adit is aligned on a bearing of 090 degrees (into Cleggswood Hill) - and thus away from the Site.
- 15.61. A small area of landslip is identified by the British Geological Survey on the northern part of the site, the causation of which is currently not known.
- 15.62. The 2019 ground investigation identified localised made ground deposits in a small area of historical quarrying activity on the western part of the site. A review of historical Ordnance Survey mapping identifying the Site in general to have only a past history of agricultural working but with small areas of historical quarrying activity (Browns Brow Hill Quarry one such small quarry recorded on historical maps).
- 15.63. Analytical testing carried out as part of the 2019 ground investigation measured no elevated levels of common contaminants in a sample set of 46 No samples, with the exception of single marginally elevated levels of lead and arsenic. Asbestos fibres were also identified in two samples from the north-east part of the site.
- 15.64. The proposed further work to support the planning application comprises:
- An updated Contaminated Land and Ground Stability Desk Study

TECHNICAL NOTE

- A Coal Mining Risk Assessment.
- 15.65. The Contaminated Land and Ground Stability desk study will include updated geoenvironmental data base searches and reassess as required the data from the September 2019 ground investigation. The study will follow current best practice UK Government guidelines detailed respectively Contaminated land: Overview - GOV.UK (www.gov.uk) and Land stability - GOV.UK (www.gov.uk)
- 15.66. The Coal Mining Risk Assessment will follow updated (July 2022) guidance from UK Government Planning applications and Coal Mining Risk Assessments - GOV.UK (www.gov.uk). The current situation regarding Coal Authority records for the site will be established through the acquisition of a (Coal Authority) Consultants Coal Mining Report and shaft data sheets/ abandoned mine working plans as available.
- 15.67. No further intrusive ground investigation to confirm near surface conditions or the coal geology of the site is proposed at the planning stage but is anticipated to be required as part of the post-planning development process.
- 15.68. The updated Contaminated Land and Ground Stability Desk Study and Coal Mining Risk Assessment will form baseline studies to the ES Chapter for 'Ground Conditions' and be included as technical appendices.

Ecology and Biodiversity

- 15.69. A suite of ecological surveys has been undertaken across the Site between 2018 and 2022, which have all been completed to the respective best-practice survey guidelines and comprise:
- Repeat habitat and invasives species surveys;
 - Repeat bat roost surveys on the central farm complex within the Site;
 - Repeat bat activity surveys across the Site;
 - Repeat breeding bird surveys;
 - Over-wintering bird surveys;
 - Badger surveys;
 - Water vole/otter survey; and
 - Surveys undertaken within adjacent land have also been utilised to inform the scope of the assessment.
- 15.70. The importance of these receptors will be assessed in accordance with CIEEM guidelines, and individual surveys will follow the methodologies set out in the relevant survey guidelines.
- 15.71. Further work is required to establish the potential presence of bats once tree loss is confirmed, but it is expected that any mitigation required can be accommodated within the Site. Similarly, the results of the completed surveys have demonstrated that adequate mitigation can be accommodated within the Site within green infrastructure design (i.e. meadow grassland, scrub planting, hedgerow planting and hard landscape features such as bird and bat boxes).

TECHNICAL NOTE

- 15.72. The key constraint regarding development at the Site from an ecological perspective is the presence of the adjacent Rochdale Canal SAC and proximity to the South Pennine Moors SPA. Impacts on these sites will be assessed through a 'Shadow' Habitat Regulations Assessment ('HRA') submitted as an appendix to the Ecology ES chapter. Subject to an appropriate drainage design, site layout and adoption of a Construction and Environmental Management Plan (to be conditioned following any granting of planning permission), it is expected that impacts on the Rochdale Canal SAC can be adequately mitigated for. Survey work relating to birds has also demonstrated that the site is not functionally linked to the South Pennine Moors SPA, and the shadow HRA will detail mitigation required for increased recreational pressure on the Moors. The HRA is then ultimately the responsibility of the competent authority, which is RBC in this instance.
- 15.73. As detailed in the Habitat Regulations Assessment for the emerging Places for Everyone ('Pfe') which identifies the Site as a proposed residential-led allocation, it is expected that this mitigation will comprise provision of high-quality green infrastructure on-site, provision of home-owner packs to educate on the sustainable use of the Moors, and contributions towards the upkeep and improvements to the local recreation network. The ecology chapter of the ES will be appended by individual protected/notable species appendices including badgers, bats, birds (both breeding and over-wintering), habitats and otter/water vole.
- 15.74. As noted below in **Section 16**, a British Standard (BS) 5837 Tree Quality Survey was undertaken in September 2021. Prior to planning submission, a walkover will be undertaken to update the baseline assessment, with an Arboricultural Impact Assessment ('AIA') being prepared following design freeze to address tree retention, removals and mitigation balance.

Historic Environment

- 15.75. Historic Environment has been scoped into the ES due to the potential for significant effects as a result of heritage assets being present potentially both within and within the vicinity of the Site.

Baseline Conditions

- 15.76. In accordance with the NPPF (2021), a planning submission is required to be supported by historic environment evidence where impacts upon known or potential receptors is likely. The NPPF states in paragraph 194 that "The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance".
- 15.77. As part of the assessment process therefore, liaison with the Greater Manchester Archaeological Advisory Service ('GMAAS'; the archaeological advisor to Rochdale Borough Council) and Historic England will be undertaken to agree the scope of work required to support the planning application.
- 15.78. In this context, the following baseline condition summary is therefore provisional and will be subject to discussion based on consultee responses.
- 15.79. The Site boundary is not noted as having non-designated buried archaeological assets within it, though it may have archaeological interest by virtue of its broadly undeveloped nature. It is unclear at this stage whether the extant structures at the centre of the Site (which may represent elements of Lower Cleggswood) have

TECHNICAL NOTE

intrinsic heritage interest. The Site may be within the setting sphere of a Grade II* Listed Building.

- 15.80. There is no indication from existing baseline information that direct impacts would occur to designated heritage assets.
- 15.81. Outside of this, as a largely greenfield site there is the potential for archaeological assets to be present which either are imperfectly understood or are currently unknown based on available evidence.

Assessment Methodology

- 15.82. The planning submission will include a Historic Environment Desk-Based Assessment ('HEDBA') to respond to the core NPPF requirements for desk-based research. This will be supplemented by a programme of archaeological fieldwork.
- 15.83. The HEDBA will seek to identify any heritage assets within and in proximity to the Site and will attempt to determine, where possible, based on the information available, the significance of such assets. Regional Research Frameworks and Historic England guidance will be utilised to inform this assessment, where appropriate. An assessment of the likely impact of the Proposed Development upon the known and potential buried archaeological resource will also be included. The assessment will be undertaken in the context of current legislation, national and local policy, and guidance documents.
- 15.84. The HEDBA will comprise the following tasks:
- Acquire and plot Historic Environment Record ('HER') data, the National Heritage List of England data and the National Mapping Project data within 0.5km study area and create associated figure/s. The precise study area would be subject to discussions with GMAAS.
 - Download LiDAR data, create visualisations, interpret data and create associated figure/s.
 - Review the result of existing ground investigation ('GI') works carried out within the site.
 - Site visit and Records Office visit (if open).
 - Visit to the Historic England Archives in Swindon to review historic aerial photographs (if open).
 - Preparation of the historic environment desk-based assessment (archaeology and palaeoenvironments, historic landscape and built heritage) including settings assessment, statement of significance, and statement of effects/ impacts of preliminary design and recommendation for further assessment/ work.
 - Preliminary consultation with the GMAAS and Historic England (as appropriate) to agree mitigation approach.
- 15.85. The archaeological fieldwork scope will be agreed with GMAAS in the form of a Written Scheme of Investigation (WSI) prior to any site work being completed and is likely to comprise a geophysical survey of those areas of the Site conducive to such survey. The WSI will set out the aims of the geophysical survey, and the methods and

standards that will be employed. It and the work to be completed will be guided by the Chartered Institute for Archaeologists' (CIfA) *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2020), the European Archaeological Council's (EAC) *Guidelines for the use of Geophysics in Archaeology* (2015) and the Institute for Archaeologists' (IFA) *The Use of Geophysical Techniques in Archaeological Evaluation* (2002). The WSI will be submitted to GMAAS for approval, prior to the start of the geophysical survey.

- 15.86. The HEDBA and geophysical survey, in line with the stated guidance, will result in summary reports suitable for GMAAS to determine the archaeological potential of the Site.

Construction

- 15.87. During demolition and construction, potential effects will be reviewed in terms of the heritage assets present.
- 15.88. The proposed works within the boundary of the Site are not anticipated to result in the physical loss of any designated built heritage assets, but it is not immediately apparent whether change within the Site will result in an appreciable change to the setting of nearby designated heritage assets. The Proposed Development may result in the loss (in part or entirety) of structures of local historic interest (Lower Cleggswood). Accordingly, in built heritage terms, an assessment will be needed to explore any temporary or permanent effects upon the heritage significance of the identified assets during the construction phase of the development.
- 15.89. The proposed works within the Site are not anticipated to result in the physical loss of any designated archaeological assets. The Proposed Development will result in disturbance to the existing ground level however, meaning, in the event of their being present, any archaeological assets will be subject to loss (in part or entirety). Accordingly, in archaeological terms, an assessment will be needed to explore any permanent effects upon the significance of the identified assets during the construction phase of the development.

Operation

- 15.90. During operation, potential effects will be reviewed in terms of the heritage assets present.
- 15.91. The completed development is not anticipated to result in the physical loss of any designated built heritage assets, but it is not immediately apparent whether the completed development will result in an appreciable change to the setting of nearby designated heritage assets. The anticipated final condition of structures of local historic interest (Lower Cleggswood) will also be assessed. Accordingly, in built heritage terms, an assessment will be needed to explore any permanent effects upon the heritage significance of the identified assets during the operational phase of the development.
- 15.92. The completed development will not have any impact upon archaeological assets.

TECHNICAL NOTE

Traffic and Transport

- 15.93. The Traffic and Transport chapter of the ES will identify and assess the likely significant effects on the local highway network as a result of the Proposed Development. The traffic and transport assessment will be carried out by Curtins.
- 15.94. The traffic and transport ES chapter will refer to a detailed Transport Assessment and Framework Travel Plan, which will be separate documents to the ES and would form appendices to the ES.

Summary of Baseline Information and Key Issues

- 15.95. The highway network in the vicinity of the Site consists of:

B6225 Hollingworth Road / Lake Bank / Smithy Bridge Road

- 15.96. The B6225 Hollingworth Road forms the eastern boundary of the Site. The southern section of the B6225 is bordered by residential properties on the eastern side and the Hollingworth Lake car park on the western side.
- 15.97. The B6225 Lake Bank forms the southern boundary of the Site. The road is bordered to the south by the lake, the activity centre, and The Beach public house. Further to the west, the road is bordered by a combination of residential properties and retail, food and beverage (F&B), and leisure uses.
- 15.98. The B6225 Smithy Bridge Road extends from its junction with Lake Bank in a northerly direction towards the A58. The road is largely bordered by residential properties on both sides, with some retail and commercial uses. Smithy Bridge railway station is located halfway between the A58 and Hollingworth Lake, and there is a level crossing across Smithy Bridge at this point. The crossing is controlled by automatic barriers.
- 15.99. All of the above roads have a speed limit of 30mph, and as such there is street lighting for its entire length. There are also 2m-wide footways on both sides of the carriageway. In some areas, there are grass verges between the highway and the footway, or the footway is partially segregated from the road at a different level.
- 15.100. On-site observations during the traditional peak periods demonstrated that the roads do not appear to suffer from congestion. However, some queuing and delay was observed where the roads meet the A58, and during off-peak periods and weekends when the lake and surrounding uses are busy.

B6225 Milnrow Road / Wildhouse Lane

- 15.101. Milnrow Road extends away from Smithy Bridge Road and Hollingworth Lake in a southerly direction towards Milnrow. Much of the B6225 in this area is bordered by agricultural land and as such the speed limit for part of the road (between Smithy Bridge and Milnrow) is 50mph, otherwise the speed limit within the village centres is 30mph. There is a continuous 2m-wide footway on the western side of the carriageway.
- 15.102. On site observations during the peak periods indicate some queuing and delay at the northernmost and southernmost junctions. The route can also become busy during

TECHNICAL NOTE

off-peak periods as it provides a primary route to Hollingworth Lake from the motorway.

A58

15.103. The A58 Halifax Road is located to the north of the site. It is a main distributor road of strategic importance which forms part of the national Primary Route Network and the Greater Manchester Key Route Network. Nonetheless, in the vicinity of the site, the A58 also plays a local role and accommodates multiple priority junctions to access residential roads.

15.104. On site observations during peak and off-peak periods have indicated queuing and delay at some junctions.

Likely Significant Effects to be addressed in the ES

15.105. The primary potential for transport and access impacts associated with the Proposed Development relate to the number of new trips on the transport network in the vicinity of the Site. The new trips include additional Heavy Goods Vehicles ('HGVs'), Light Goods Vehicles and cars on the highway network. The above requires consideration of possible effects upon the capacity and operation of the local road networks (links and junctions), severance, driver delay, pedestrian delay, pedestrian amenity, and accidents and safety.

15.106. The construction of the Proposed Development will also result in a temporary increase of HGVs and cars / vans carrying construction workers and materials on roads surrounding the Site. Notwithstanding, this level of traffic generation would be significantly less than the operational development, which is the focus of the assessment in the traffic and access section of the ES.

15.107. The operation of the existing highway network will be assessed in the TA at the following locations, as agreed with RBC Council Highways during earlier scoping discussions in September 2021:

- Site Access 1 – Southern site access off B6225 Hollingworth Road
- Site Access 2 – Northern site access off B6225 Hollingworth Road
- Junction 1 – A58 Halifax Road / Wardle Road roundabout
- Junction 2 – A58 Halifax Road / Birch Road / Old Road signalised junction
- Junction 3 – A58 Halifax Road / Birch Road / Smithy Bridge Road signalised junction
- Junction 4 – Smithy Bridge Road / B6225 Milnrow Road roundabout
- Junction 5 – B6225 Smithy Bridge Road / Lake Bank / The Beach Car Park / Smithy Bridge Road / Milbury Drive junction
- Junction 6 – B6225 Lake Bank / Rakewood Road / Hollingworth Road junction
- Junction 7 – A58 Halifax Road / A6033 Todmorden Road signalised junction
- Junction 8 – A58 Halifax Road / Canal Street junction

TECHNICAL NOTE

- Junction 9 – A640 Rochdale Road / B6225 Bridge Street / A640 Elizabethan Way / Wesley Street signalised junction
- Junction 10 – B6225 Kiln Lane / Dale Street / B6225 Bridge Street roundabout
- Junction 11 – B6225 Wildhouse Lane / Kiln Lane junction

Approach and Methodology

- 15.108. The aim of the assessment will be to identify, as far as reasonably possible, the nature of the transport changes within the area of the development, to assess significance, and to make appropriate recommendations.
- 15.109. The TA will include consideration of traffic impacts during the operation of the Proposed Development. The assessment will be informed by a comprehensive site audit, the aim of which will be to gather baseline information, observe traffic movements at critical local junctions, and verify modelling outputs.
- 15.110. Average development trip rates have been agreed with RBC Highways and these flows will be used to establish the peak hour traffic impact of the Proposed Development.
- 15.111. As noted above, the junctions required to be assessed within the TA have been agreed with RBC Highways during earlier scoping discussions. These junctions will be assessed for future operation and capacity and the results of these assessments will inform the need for any off-site highway mitigation measures.
- 15.112. The assessment will include an evaluation of the traffic generated by all pertinent consented developments in the vicinity of the Site, but not background growth derived by TEMPro. This will ensure that the EIA appropriately evaluates the cumulative impacts of the Proposed Development in conjunction with other potential developments.
- 15.113. For the purposes of the ES chapter, the Institute of Environmental Management and Assessment ('IEMA') guidelines recommend that the environmental effects listed in Table 2.1 of the guidance be considered important when considering traffic from an individual development. These effects include:
- Noise
 - Vibration
 - Visual Impact
 - Severance
 - Driver Delay
 - Pedestrian Delay
 - Pedestrian Amenity
 - Accidents and Safety
 - Hazardous Loads

TECHNICAL NOTE

- Air Pollution
- Dust and Dirt
- Heritage and Conservation.

15.114. Of these effects, several are considered in chapters elsewhere within the ES due to the specialist skills required, namely noise, vibration, air quality, dust and dirt, and historic environment (those not in bold).

15.115. An assessment of 'hazardous loads' is not proposed to be undertaken as it is not anticipated that the construction process would require carriage of material listed in 'The Carriage of Dangerous Goods in the UK'. If these materials become needed during construction, the legal requirements associated with their transit would be strictly enforced.

15.116. Regarding the remaining effects, the guidance states that the following rules should be used as a screening process to delimit the scale and extent of the assessment:

- Include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%); and
- Include any other specifically sensitive areas where traffic flows have increased by 10%, or more.

15.117. The IEMA guidelines go on to state that any increases in traffic flows of less than 10% are generally accepted as having no discernible environmental impact as daily variance in traffic flows can be of equal magnitude.

15.118. The 30% threshold relates to the level at which humans may perceive change and there may therefore be an effect. Impacts above this level therefore do not suggest that there is a significant impact, only that further consideration is required to assess the significance.

15.119. Once the assessment of potential effects has been made, appropriate measures to offset the effects will be proposed.

Significance Criteria

15.120. The significance of the transport and access effects, adverse or beneficial, will be determined based on their magnitude and the sensitivity of the receptor.

15.121. The receptor will be road users, i.e., pedestrians, cyclists, and motorists, of high sensitivity to provide a robust assessment.

15.122. The significance of change in traffic flow volume on road users for each of the environmental effects will be considered in relation to the significance matrix of Table 5-4 above

15.123. Within the assessment, the level of magnitude will be defined based on relevant guidance and the application of standard transport planning practice. As noted in above, moderate impacts and above will be considered significant.

TECHNICAL NOTE

15.124. The ES chapter will reflect the findings of the TA, whilst assigning levels of significance to the perceived effects. The chapter will set out the requisite mitigation measures and the residual effects once these are incorporated into the proposals.

15.125. The ES chapter will also assess the cumulative impacts of the Proposed Development in conjunction with any committed developments within the vicinity of the Site identified through the scoping process.

Socio-Economics

Introduction

15.126. The socio economics chapter will assess the impacts associated with the Proposed Development in relation to this topic. The socio-economic assessment has been scoped into the ES due to the scheme's anticipated effects (both beneficial and adverse) resulting from the construction and operational stages of the Proposed Development with respect to sensitive receptors including the local labour and housing markets, community infrastructure such as nurseries, schools and GP surgeries.

Study Areas

15.127. A desk-based study will be undertaken to identify and set out the baseline characteristics of the site and surroundings including the existing community, economic and social environment in the Littleborough Lakeside ward (within which the Site lies) and Rochdale as a whole.

15.128. Areas of interest identified for the purposes of assessing the effects of the Proposed Development on relevant receptors are set out below:

- **Population:** the area covered to consider matters such as demographics and deprivation will include LSOAs, which make up the Littleborough Lakeside ward.
- **Housing:** Greater Manchester North Eastern Housing Market Area⁵, comprising the boroughs of Tameside, Oldham and Rochdale, whilst taking cognisance of the wider Greater Manchester strategic housing market area.
- **Labour:** the area covered by the Greater Manchester Combined Authority area comprising the boroughs/districts of Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside and Trafford will be used to define the labour market study area. This area has been chosen as it takes into account the interaction of the site with the wider Greater Manchester transport network, housing market areas, and commercial property market to best represents the mobility of labour across administrative boundaries. It is proposed to examine economic activity rates at the lowest spatial geography possible within the context of the Littleborough Lakeside ward, and how this area interacts within the wider Greater Manchester economy.
- **Education:** defined as local primary schools within 3.2km (2 miles) and local secondary schools within 4.8km (3 miles) of the site, taking account of catchment areas which will be impacted by the operational phase of the Proposed

⁵ As established in the Greater Manchester Strategic Housing Market Assessment 2008

Development, including the Pennines North Primary planning area. This takes into account home to school travel guidance from UK Government⁶.

- **Healthcare:** defined in line with the former NHS Heywood, Middleton and Rochdale Clinical Commissioning Group ('CCG') area⁷. The health care study area will take into account LSOA health indices for the relevant local ward area.

15.129. A detailed socio-economic baseline of the Study Areas will be collated to establish the sensitivity of identified receptors. Key data sources will be reviewed including:

- Office for National Statistics ('ONS') datasets;
- Local and sub-regional planning and economic policy and strategy documents including Supplementary Planning Documents ('SPD');
- Greater Manchester Strategic Housing Market Assessment Update (2021);
- Places for Everyone: Housing Topic Paper (2021);
- RBC Annual Monitoring Reports.
- RBC school organisation plans and forecasts;
- Heywood, Middleton and Rochdale CCG reports, including: Rochdale Borough Locality Plan 2020 – 2024; and
- Rochdale Development Agency reports, including Rochdale Growth Plan 2020 - 2030.

15.130. There could be circumstances where information required to undertake the assessment as stated in this Proposed EIA Approach Technical Note is not available, is very dated or the quality of information is poor. In such circumstances, the latest publicly available information will be used in the assessment and any gaps in the data will be clearly identified and noted.

Significant Effects

15.131. All new developments have the potential to generate socio-economic impact at the local, regional and/or national level, principally in relation to changes in housing development, employment, community infrastructure provision and usage.

15.132. In line with standard EIA practice, a matrix-based approach has been adopted to consider the sensitivity of identified receptors in tandem with the likely magnitude of change from the Proposed Development. This method allows the level and significance in EIA terms of all predicted socio-economic effects to be determined. The EIA significance matrix adopted in this assessment is detailed in Table 5-4 above.

⁶ Department for Education (2014) Home to School Travel and Transport Guidance

⁷ The CCG ceased to exist at the end of June 2022 and its functions were taken over by NHS Greater Manchester Integrated Care.

TECHNICAL NOTE

15.133. Having regard to the Proposed Development and the characteristics of the site it is considered that the following socio-economic effects are likely to be significant and therefore require further consideration through EIA:

Construction

- Labour market impacts resulting from direct and indirect employment generated by temporary construction activity.

Operational

- Labour market impacts resulting from direct and indirect employment generated by the new and intensified employment space delivered by the Proposed Development;
- Housing market impacts resulting from the provision of up to 330 homes;
- Impacts on community infrastructure provision and use including school and nursery facilities and GP and dental surgeries (wider human health implications will be assessed in the HIA with findings relevant to socio-economics reported within Socio-economics chapter); and
- Impacts on recreational activities and access to open space.

Methodology

15.134. Relevant socio-economic data will be input into a bespoke economic model to estimate the gross and net socio-economic impacts of the scheme with respect to both temporary construction jobs as well as those that will persist post-completion. The employment and Gross Value Added impacts will be modelled and incorporate economic multipliers and additionality adjustments.

15.135. An assessment of the socio-economic impacts associated with the Proposed Development will be undertaken in accordance with the Green Book: Appraisal and Evaluation in Central Government (HM Treasury, 2020) as well as with other relevant legislation.

15.136. The following activities will be undertaken to complete the socio-economic assessment:

- Reviewing relevant legislation and planning policy;
- Establishing baseline conditions with the relevant Study Area to identify potential receptors and receptor groupings for consideration in the assessment;
- Defining receptor sensitivity to likely changes resulting from the Proposed Development;
- Examining likely economic changes from the Proposed Development on identified receptors and receptor groupings, with consideration given to phasing, magnitude, duration, and nature of the change;
- Determining the likely level of socio-economic effects, including temporary, operational and cumulative effects, from the Proposed Development, having regard to both receptor sensitivity and the characteristics of predicted change;

TECHNICAL NOTE

- Identifying the significance of likely socio-economic effects in the context of the assessment criteria;
- Identifying mitigation measures to address any likely significant adverse socio-economic effects; and
- Identifying likely residual socio-economic effects from the Proposed Development taking account of all mitigation measures.

15.137. There are no specific methodological guidelines or requirements for socio-economic assessments within the context of EIA. However, the proposed assessment methodology has been informed by the principles outlined in The Green Book (2020).

15.138. The level and significance of likely socio-economic effects from the Proposed Development will be judged with reference to the following factors:

- Sensitivity of affected receptor; and
- Predicted magnitude of change.

15.139. Definitions of receptor sensitivity will be confirmed in the methodology section of the socio-economics chapter of the ES. In overall terms, the sensitivity of the labour market will be defined in relation to:

- The availability of skilled labour relative to national averages;
- The proportion of employment in relevant sectors (e.g. construction);
- The availability of labour (including the unemployed); and,
- Relevant education and training provision.

15.140. Plentiful labour and/or skills capacity results in a low sensitivity, whilst limited labour and/or skills capacity results in a high sensitivity. Sensitivity criteria which will be applied to the labour market considered in this assessment are detailed in **Table 7-8** below.

Table 7-8: Labour Market sensitivity criteria

Sensitivity	Example
High	There is a shortfall of appropriate labour and skills. The Proposed Development would therefore lead to labour market pressure and distortions (i.e. skills and capacity shortages, import of labour, wage inflation).
Medium	There is a low/limited supply of appropriate labour and skills. The Proposed Development may therefore lead to labour market pressure or distortions.
Low	There is a readily available supply of appropriate labour and skills. The Proposed Development is therefore unlikely to lead to labour market pressure or distortions.

15.141. For wider socio-economic effects, including changes in expenditure, housing supply, community infrastructure and recreation, receptor sensitivity will be determined with reference to the importance and susceptibility of the relevant receptor, i.e. the extent to which any change could affect socio-economic performance. This will consider how

the receptor is likely to respond to external changes which could result in socio-economic effects.

- 15.142. Consistent definitions of magnitude of change across different types of socio-economic effects (employment, community infrastructure (education and health) are provided in **Table 7-9**.

Table 7-9: Magnitude of Change Criteria

Magnitude of Change	Type of Change	Criteria
High	Adverse	Employment changes: the number of jobs lost in the Study Area would be 250 or greater (based upon the EU definition of small and medium enterprises (European Commission, 2003)). Other socio-economic changes: adverse changes to identified receptors would be observed on an international, national or regional scale. Changes are likely to be experienced over the long term (i.e. 5+ years).
	Beneficial	Employment changes: the number of jobs created in the Study Area would be 250 or greater. Other socio-economic changes: beneficial changes to identified receptors would be observed on an international, national or regional scale. Changes are likely to be experienced over the long term (i.e. 5+ years).
Medium	Adverse	Employment changes: the number of jobs lost in the Study Area would be 50 or greater, but fewer than 250. Other socio-economic changes: Noticeable adverse changes, judged to be important at a local scale, to identified receptors. Changes are likely to be experienced over the medium term (i.e. 3-5 years).
	Beneficial	Employment changes: the number of jobs created in the Study Area would be 50 or greater, but fewer than 250. Other socio-economic changes: Noticeable beneficial changes, judged to be important at a local scale, to identified receptors. Changes are likely to be experienced over the medium term (i.e. 3-5 years).
Low	Adverse	Employment changes: the number of jobs lost in the Study Area would be greater than 10, but fewer than 50. Other socio-economic changes: Small scale adverse changes to identified receptors at the local level only. Changes are likely to be experienced over the short term (i.e. 1-2 years).
	Beneficial	Employment changes: the number of jobs created in the Study Area would be greater than 10, but fewer than 50. Other socio-economic changes: Small scale beneficial changes to identified receptors at the local level only. Changes are likely to be experienced over the short term (i.e. 1-2 years).
Negligible	Adverse	Employment changes: the number of jobs lost in the Study Area would be less than 10. Other socio-economic changes: very small scale adverse changes to identified receptors at the local level only.

Magnitude of Change	Type of Change	Criteria
		Changes are likely to be experienced over the short term (i.e. less than 6 months).
	Beneficial	Employment changes: the number of jobs gained in the Study Area would be less than 10. Other socio-economic changes: very small scale beneficial changes to identified receptors at the local level only. Changes are likely to be experienced over the short term (i.e. less than 6 months).

15.143. Where appropriate, magnitude of change levels have been fixed to relevant quantitative thresholds. In particular, net employment change which will be calculated based on the gross employment potential of the Proposed Development (construction and operation) and taking account of additional factors:

- Deadweight – what would happen in the absence of the Proposed Development;
- Leakage – the proportion of new employment opportunities accessed by people living outside the Study Area;
- Displacement – the proportion of the new employment created as a result of reduced employment elsewhere in the Study Area; and,
- Multipliers – indirect and induced employment generated by the effects of the direct employment on the supply chain and income.

15.144. Following the identification of likely socio-economic effects, the need for further mitigation measures to address the predicted adverse effects will be considered.

15.145. The assessment will conclude by reporting the level and significance of likely residual socio-economic effects from the Proposed Development, taking account of all proposed mitigation measures. If residual significant adverse effects are identified, the requirement for monitoring will be considered.

16 Validation Requirements

16.1.1 In correspondence from RBC in February 2020, a list of 'Validation Requirements' was noted. In addition, the Council published a document called 'Validation of Planning Applications: Local List', both of which state various documents and plans which are required to satisfy the Council's validation requirements when submitting a planning application.

16.1.2 While a number of these are proposed to be 'scoped in' to the ES, the topics outlined below will be 'scoped out' of the ES, due to the likely lack of potential significant impacts, but will be considered as stand-alone assessments submitted with the planning application.

Agricultural Land

16.1.3 A validation requirement of RBC is the production and submission of an Agricultural Land Classification and Soil Analysis Report.

TECHNICAL NOTE

16.1.4 The Agricultural Land Classification ('ALC') system grades land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. Land can be classified into one of five agricultural grades or certain non-agricultural grades. Grading depends on climate, site and soil factors.

16.1.5 Publicly available ALC maps, published by Natural England, demonstrate that the Proposed Development site comprises a mixture of Grade 4 ('poor') and Grade 5 ('very poor') agricultural land.

16.1.6 As a result of the land having very limited potential for agricultural use, no significant environmental effects relating to agricultural and soils are anticipated as a result of the Scheme, however an ALC survey and associated technical report will be completed and submitted with the planning application.

Tree Survey and Arboricultural Impact Assessment

16.1.7 RBC's 'Validation of Planning Applications – Local List' notes that a Tree Survey and an Arboricultural Impact Assessment ('AIA') are required for developments which 'involves works that may affect any trees on or adjacent to the site'.

16.1.8 While excluded from the ES, an initial Tree Quality Survey was undertaken in relation to the Site in September 2021. Prior to planning submission, a walkover will be undertaken to update the baseline assessment, with an AIA being prepared following scheme fix to address tree retention, removals and mitigation balance.

Minerals Assessment

16.1.9 The Greater Manchester Joint Minerals Plan (adopted 2013) identifies (on Map 7) that the site lies within a Minerals Safeguarding Area ('MSA') for Coal. However, coal reserves beneath the Site are known to have been historically worked (as identified by the Coal Authority).

16.1.10 The Minerals Plan also identifies that the site includes a zone where a Sandstone MSA is present. The site however is not identified as containing a 'specific Site' nor within a 'Preferred Area' of 'Area of Search' (for sandstone). Review of the published 1:50,000 series British Geological Survey map for the district (published 2008) identifies the Milnrow Sandstone to underlie the western part of the site, its eastern extent constrained by a north-south fault in the bedrock. Local extraction has already taken place at one location within the mapped outcrop of the Milnrow Sandstone with an old quarry recorded (at Brown Brow Hill) on the western part of the Site on the Ordnance Survey map record of circa 1888.

16.1.11 Review of the Interactive Local Development Framework Map identifies that the Site lies outside the MSA for Sand and Gravel.

16.1.12 Consequently, while further consideration of potential sterilisation of mineral resources has been scoped out of the EIA, a stand-alone Minerals Assessment will be produced by Wardell Armstrong and submitted with the planning application.

Crime Impact Statement

16.1.13 A Crime Impact Statement will be produced by Greater Manchester Police (Design for Security) to identify, predict, evaluate and mitigate the crime and disorder effects of a

TECHNICAL NOTE

development proposal early in the design process. This will be submitted with the planning application.

Utilities Assessment

- 16.1.14 Section 13 of the PfE Topic Paper (JPA22 Land North of Smithy Bridge Allocation⁸) states: *'The development can therefore be easily connected to key utilities. Any upgrades required to accommodate new homes can be made alongside the delivery of the development.'*
- 16.1.15 As a result of the above, it is considered unlikely that there will be any significant issues in connecting the Scheme to required utilities. However, due to this being an assessment asked for under the validation requirements of RBC, a utility assessment will be undertaken by TDS and submitted with the planning application. This will demonstrate how the Scheme will connect to utility systems and determine whether the Scheme will affect any service delivery.

17 Summary

- 17.1.1 This Technical Note provides an overview of the approach to be adopted for the ES. The following topics will be scoped into the ES to assess any impacts that may arise from the construction and operation of the Proposed Development:

- Landscape and Visual
- Noise and Vibration
- Climate Change
- Air Quality
- Hydrology and Drainage
- Ground Conditions
- Ecology and Biodiversity
- Historic Environment
- Traffic and Transport
- Socio-Economics

- 17.1.2 It is considered that the topics of Health, Lighting, Waste and Material Assets and Risks of Major Accidents and Disasters will not be scoped into the ES, due to the lack of potential for any significant adverse effects from the Proposed Development. Stand-alone assessment reports will be provided for Health and Lighting, and these will be submitted as part of the planning application.

- 17.1.3 On the basis of the above, RBC's advice in relation to the proposed approach and scope of the ES is sought within 5 weeks of the date of this letter.

⁸ [Land North of Smithy Bridge Allocation Topic Paper \(greatermanchester-ca.gov.uk\)](https://greatermanchester-ca.gov.uk/land-north-of-smithy-bridge-allocation-topic-paper)

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed	Approved (Project Director)
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TECHNICAL NOTE

Appendix A Site Location Plan

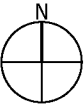


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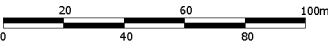
LEGEND

 Site Boundary 18.85ha



Project
**Land at Littleborough/Smithy Bridge
Rochdale**
Drawing Title
Site Location Plan

Date	Scale	Drawn by	Check by
09.08.22	1:2500@A3	KT	ML
Project No	Drawing No	Revision	
29855	BL-M-01	-	



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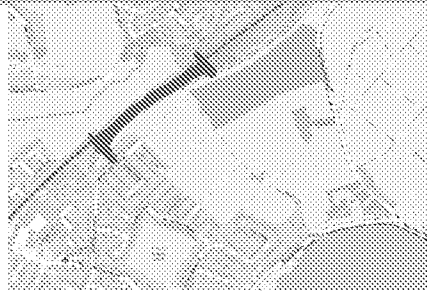
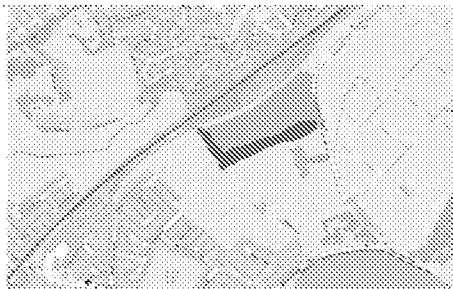
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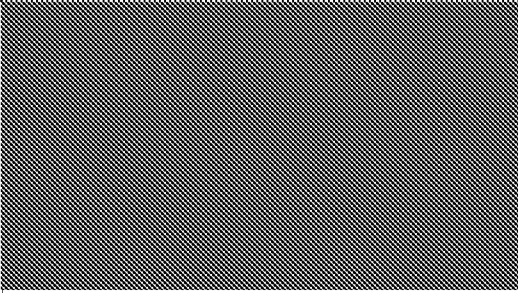
Appendix B Lighting Assessment

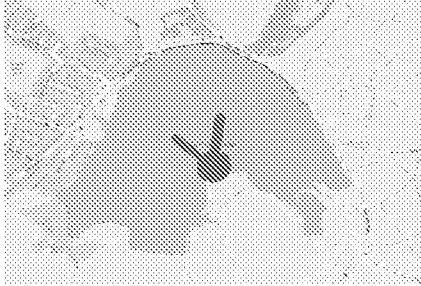
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Project Location:
Project #:
Planned Survey Date:

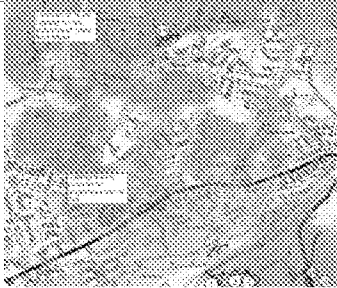
LAND AT HOLLINGWORTH ROAD, LITTLEBOROUGH
LITTLEBOROUGH, GREATER MANCHESTER
332010570
Provisional W/C 24th October

Revision P04
Prepared By
Date
GD

Receptor / Survey Point Ref	Description	Receptor Source	Scope In	Map View	Visual	Health & Wellbeing	Ecology	Scope In/Out Notes	Survey notes
LTG 01	Rochdale Canal	Stantec LTG / Tyler Grange	Scoped In		1	1	2	Ecology The Rochdale canal is a Site of Special Scientific Interest (SSSI), the site falling within the risk zone. Visual, Health and Wellbeing The canal towpath forms part of National Cycle Network route 66 and is valued leisure asset for walking, cycling and boating.	Spot Horizontal and Vertical illuminance readings along north bank (towpath) of canal. Vertical illuminance at 1.5m AGL and at ground level on towpath. No readings on or in the water will be taken. Whilst Access to the south bank appears possible, survey will use towpath as established waterside surface and to avoid the steep banks of south side. Non-Verified Reference Photography
LTG 02 (Overlap with LVIA 01)	Residential Properties backing on to Site from Lincoln Drive & Brown Lodge Drive	Stantec LTG	Scoped In		1	2		Included to assess residential amenity and potential for light intrusion to exceed guidance levels. Note: Forms part of general south west boundary receptor, may be merged into single receptor at future stages.	Horizontal (Ground Level) and Vertical illuminance readings (1.5m AGL) readings at boundary of site and last property on each side of the roads. Vertical illuminance to be taken facing Site and perpendicular to house front (facing existing street) Spot vertical illuminance (1.5m AGL) readings from within Site boundary as it backs to properties on Lincon Drive (Midway long and at souther corner) Non-Verified Reference Photography from end of Brown Lodge Drive
LTG 02 (Overlap with LVIA 04)	Residential properties adjacent to Site on Bridge Bank Road, Highlands, Higher Bank Road, Bank Close	Stantec LTG	Scoped In		1	2		Included to assess residential amenity and potential for light intrusion to exceed guidance levels. Note: Forms part of general south west boundary receptor, may be merged into single receptor at future stages.	Horizontal (Ground Level) and Vertical illuminance readings (1.5m AGL) at boundary of site and last property on each side of the roads. Vertical illuminance to be taken facing Site and perpendicular to house front (facing existing street) Non-Verified Reference Photography from end of Higher Bank Road
LTG 02	Residential Properties backing on to Site from Higher Cleggswood Ave	Stantec LTG	Scoped In		1	2		Included to assess residential amenity and potential for light intrusion to exceed guidance levels. Note: Forms part of general south west boundary receptor, may be merged into single receptor at future stages.	Spot Vertical illminance readings (1.5m AGL) from within Site at boundary to houses.
LTG 03	Future Residential properties on Vistry Site	Stantec LTG	Scoped In			2		Included to assess residential amenity and potential for light intrusion to exceed guidance levels.	Spot Vertical illuminance readings (1.5m AGL) from within Site at boundary to Vistry site LVIA 02 LVIA 03 overlook location

Receptor / Survey Point Ref	Description	Receptor Source	Scoped In	Map View	Visual	Health & Wellbeing	Ecology	Scoped In/Out Notes	Survey Notes
	Highest Accessible Location within site	Stantec LTG	Not a Receptor / Reference Only					Not a Receptor - Reference Survey point Included to determine reverse viewpoints and where possible record boundary conditions	Non-Verified Reference Photography (360 Panorama) if applicable.
LTG 04	General Residential properties North of the site, Dearnley and Littleborough. Junction of Featherstall Road and Dearnley Ave proposed for indicative view.	Stantec LTG	Scoped In		1	2		Included to allow for general commentary on visual change	Non-Verified Reference Photography. View from entrance to Stubley Gardens Horizontal (Ground Level) and Vertical illuminance readings (1.5m AGL) readings as applicable
	Stubley Mill Road / Mill Fold Gardens	Stantec LTG	Scoped Out		1	1		<u>Covered as part of LTG04</u> Location between Canal and Featherstall Road. Assessment from LTG 01 and LTG 04 survey locations will capture potential conditions at these locations. Distance from proposed development means very low risk of light intrusion.	LVIA 18 Applicable for reference as required
LTG 05	Residential Properties at south end of B6225 and junction with Rakewood Road and Lake Bank	Stantec LTG	Scoped In		1	2		Included to assess residential amenity and potential for light intrusion to exceed guidance levels.	Horizontal (Ground Level) and Vertical illuminance readings (1.5m AGL) readings at boundary of properties and pavement. Non-Verified Reference Photography
LTG 06 Overlaps with LVIA 07, 08, 11	Lake Bank - adjacent to Site	Stantec LTG	Scoped In		1	1		Considers amenity and setting of the lake. Proposed combined into general receptor with Rakewood Road	Non-Verified Reference Photography.

Receptor / Survey Point Ref	Description	Receptor Source	Scoped In	Map View	Visual	Health & Wellbeing	Ecology	Scoped In/Out Notes	Survey Notes
LTG 07 Overlaps with LVIA 05	Southern Viewpoint / Pavillion Hollingworth Lake	Stantec LTG / Barton Willmore LVIA	Scoped In		2	1		Considers amenity and setting of the lake	Non-Verified Reference Photography, panorama. Vertical and horizontal illuminance readings
	Views from M62	Stantec LTG	Scoped Out		1	1		Brief views at distance. Discussed with LVIA, and agreed as low sensitivity.	Access problematic.
	B6225 Alongside Site	Stantec LTG	Scoped Out			2		Already streetlit along length, no likely reason for standard residential development to result in disruption, e.g. Glare or excess contrast and change in illuminance.	Overlaps with LVIA 19 & 20
	Future Residential properties adjacent to B6225	Stantec LTG	Scoped Out			2		Residential amenity and potential for light intrusion to exceed guidance levels. Potential for impact can be determined by reference to Residential Properties at south end of B6225 and junction with Rakewood Road and Lake Bank	Vertical illuminance readings (1.5m AGL) on Pavement / Site Boundary Overlaps with LVIA 19 & 20
LTG 08	Badger Set	Tyler Grange	Scoped In				2	Noted by ecologist	Horizontal illuminance on footpath edge at nearest point to set. No photography

Receptor / Survey Point Ref	Description	Receptor Source	Scoped In	Map View	Visual	Health & Wellbeing	Biology	Scoped In/Out Notes	Survey Notes
LTG 09	Bat Roost	Tyler Grange	Scoped In				2	Noted by ecologist	Review location from field boundary of properties - No access to properties planned. Illuminance readings as appropriate at nearest boundary of property to roost. No Photography
LTG 10	Woodland Habitat / Perimeter	Tyler Grange	Scoped In				2	Noted by ecologist	Spot illuminance readings (vertically @ 1.5m AGL perpendicular to line of vegetation) along outer north & west perimeter.
LTG 11 Overlap with LVIA 16	Views from Shore, North of Site		Scoped In		1	1			Non-Verified Reference Photography. Horizontal (Ground Level) and Vertical illuminance readings (1.5m AGL) readings as applicable
									Refer to Annotated Map of ZTV and LVIA proposed viewpoints for scoping relative to LVIA proposals

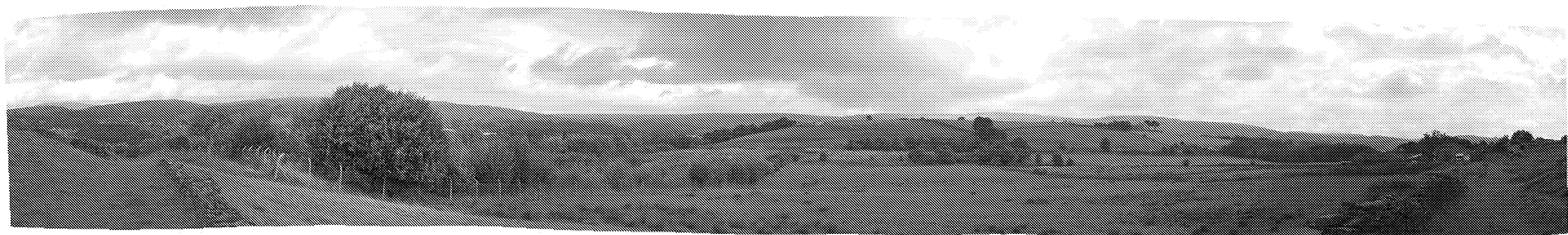
Map Thumbnails - © OpenStreetMap contributors <https://www.openstreetmap.org/copyright>



Pan 01.jpg



Pan 02.jpg



Pan 03.jpg



Pan 04.jpg



Pan 05.jpg



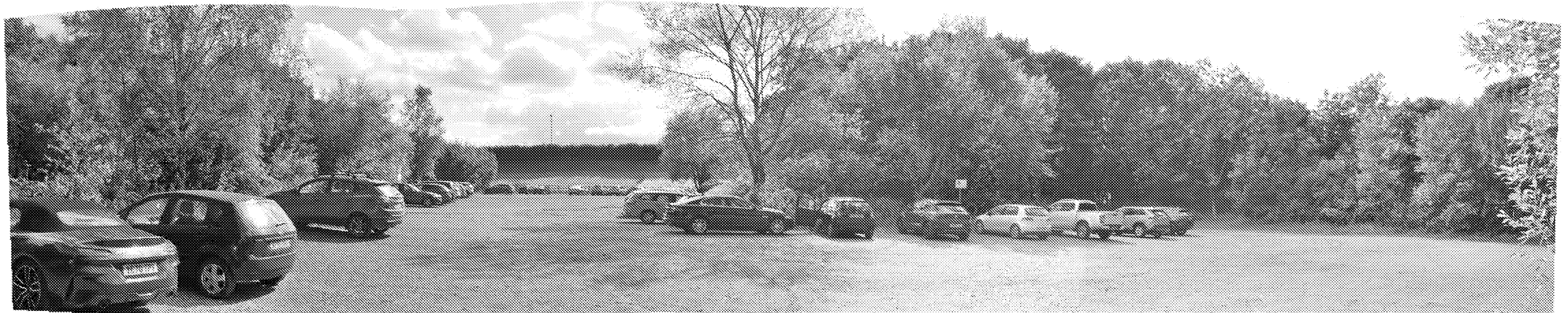
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Pan 21.jpg



Pan 22.jpg



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Revision Date Dm Ckd

LEGEND

- Site Boundary
- Distance Bands (at 2.5km Intervals)
- Contours/Spot Heights (Metres AOD) ^
- Public Rights of Way
- National Trails # / Long Distance Walks ^

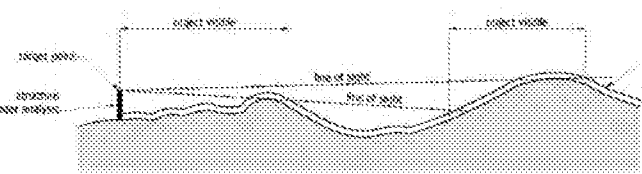
Countryside Rights of Way Access Areas #

Zone of Theoretical Visibility (ZTV)

Most Visible

Least Visible

Notes:
The Zone of Theoretical Visibility (ZTV) provides an approximate portrayal of the greatest possible extent of visibility of the Proposed Development, on the basis of a digital ground model (DTM). The extent and nature of specific views towards the Proposed Development is to be verified through fieldwork to take account of other visual barriers, such as existing buildings, woodland, trees and infrastructure.
• The ZTV is produced using the specialised software package Key-Terra
• The ZTV is an AutoCAD based application.
• The ZTV is produced by calculating the 'line of sight' from target points to analysis end.



- Parameters:
- The study area for the ZTV is 17.5 x 13.9 km; (1:25,000 @A1)
 - The ZTV accounts for ground topography on the basis of a model made from Ordnance Survey Terrain 50 data in the form of 3D points data on a 50m grid;
 - The ZTV does not account for existing features, other than woodland blocks and existing buildings, derived from OS Mapping, with the following assumptions:
Buildings: 8.5m high
Woodland Blocks: 12m;
 - The ZTV is based on 115 targets on a regular grid across the development parcels and following the boundary at 25m intervals, at the following heights above existing ground level:
Residential Development: 10.5m
School Buildings: 15m;
 - The ZTV portrays the extent of visibility of the Proposed Development on the basis of if a target point is visible within a given 50m grid square.

Project
Land at Littleborough,
Rochdale

Drawing Title
Zone of Theoretical Visibility (ZTV)
With Viewpoint Locations

Date 02.09.2022 Scale 1:10,000 @A1 1:20,000 @A3
Project No 29855 Drawing No LN-LP-01
Drawn by ML Check by MF
Revision A

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TECHNICAL NOTE

Appendix C LVIA Methodology

1

Appendix C: LVIA Methodology

1. Introduction

- 1.1. The Landscape Institute and the Institute of Environmental Management & Assessment's Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA 3), 2013, notes in Chapter 1 that Landscape and Visual Impact Assessment (LVIA) relates to:

"...the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity"

- 1.2. The methodology employed in carrying out the LVIA for the Proposed Development has been drawn from the guidance set out in the GLVIA 3.
- 1.3. LVIAs are undertaken by professionals who are also typically involved in the design of the landscape and the preparation of subsequent management proposals. This can allow the assessment to proceed as an integral part of the overall scheme design. Judgements are based on training and experience and supported by clear evidence and reasoned argument.
- 1.4. The purpose of LVIAs is to identify the potential for and assess the likely effects of change resulting from development. Landscape and visual assessments are separate, although linked, procedures. A distinction is made between:
- landscape - landscape character and the elements and features that contribute to it (landscape receptors); and
 - visual - people who experience views within the landscape (visual receptors).
- 1.5. There are typically four key stages to LVIA, as follows:
- Baseline Studies;
 - Design;
 - Assessment of Landscape and Visual Effects; and
 - Cumulative Assessment (should this be required).

2. Baseline Studies

- 2.1. The purpose of baseline studies is to record the existing landscape features, characteristics, the way the landscape is experienced and potential visual receptors. The following are typically undertaken as part of the baseline studies:
- Identification of the extents of the study area. The extent of this is based on professional judgement and may vary depending on the type of development proposed and its specific location;
 - A desktop study of patterns and scale of landform, land use and built development, relevant current planning policy (including landscape designations) and landscape character publications; and
 - Site/context landscape and visual appraisal visit.

3. Design and Mitigation

- 3.1. LVIA's are undertaken by professionals who are also often involved in the design of the landscape, site design, and the preparation of subsequent management proposals. The design and assessment stages are iterative, with stages overlapping in part.
- 3.2. Mitigation measures are embedded within the design of the Proposed Development as a result of the desk based study and field work. These measures, such as new planting (assumed 1m growth every 3 years) and the siting of specific built elements, are termed 'Primary Mitigation'. Effective Primary Mitigation strategies avoid or reduce adverse effects by ensuring the key principles of the design of the development, as noted above, are sympathetic with the existing baseline.
- 3.3. Additional recommended measures to reduce adverse effects are termed 'Secondary Mitigation.' These may be illustrated in material accompanying the proposal, including a Design and Access Statement.
- 3.4. Typical Secondary Mitigation strategies can include:
 - Additional design detail including building materials or landscape design approaches, including indicative species;
 - A Landscape and Biodiversity Management Strategy to secure ongoing enhancement of landscape features;
 - A Construction Environmental Management Plan to minimise effects arising during the construction process, typically including tree protection; and
 - A programme of appropriate monitoring, agreed with the regulatory authority, so that compliance and effectiveness can be readily monitored and evaluated.

4. Assessment of Landscape Effects

- 4.1. GLVIA 3 Paragraph 5.1 states that:

“An assessment of landscape effects deals with the effects of change and development on landscape as a resource.”

- 4.2. The significance of landscape effects is derived from a combination of assessments of the **sensitivity** of the landscape receptor and the **magnitude** of effect experienced as a result of the Proposed Development.

Sensitivity of Landscape Receptors

- 4.3. The sensitivity of a landscape receptor is a combination of the **value** of the landscape receptor and the **susceptibility** of the landscape receptor to the type of change proposed, using professional judgement.

Landscape Value

- 4.4. The assessment of value is based on a combination of the importance of landscape-related planning designations and the following attributes:
 - Landscape quality (condition): the measure of the physical state of the landscape. It may include the extent to which typical landscape character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
 - Scenic quality: the extent that the landscape receptor appeals to the visual senses;

- Perceptual aspects: the extent that the landscape receptor is recognised for its perceptual qualities (e.g. remoteness or tranquillity);
 - Rarity: the presence of unusual elements or features;
 - Representativeness: the presence of particularly characteristic features;
 - Recreation: the extent that recreational activities contribute to the landscape receptor; and
 - Association: the extent that cultural or historical associations contribute to the landscape receptor.
- 4.5. Landscapes, including their character and features, may be designated for their landscape and visual qualities at a range of levels (national, county and local level).
- 4.6. The overall value for each landscape receptor is categorised as either High, Medium or Low.

Table 1.1: Landscape Value

Level	Criteria
High	Landscape area of distinctive components and characteristics that may also be nationally designated for scenic beauty. A landscape feature that makes a strong positive contribution to landscape character e.g. a mature tree or woodland.
Medium	Landscape area of common components and characteristics that may be designated at county or borough level for its landscape and visual qualities. A landscape feature that makes some positive contribution to landscape character.
Low	Landscape area/feature of inconsequential components and characteristics, undesignated and with little or no wider recognition of value, although potentially of importance to the local community.

Landscape Susceptibility

- 4.7. The susceptibility of the landscape is a measure of its vulnerability to the type of development proposed, without undue consequences for the maintenance of the baseline situation. Landscape character/features of low susceptibility would have a high capacity to accommodate change, and landscape character/features of high susceptibility would have a low capacity to accommodate change. The following criteria are taken into consideration in the assessment of the susceptibility of landscape character, although not all criteria are equally applicable or important within a given landscape / type of development proposed:
- Landform;
 - Pattern/Complexity;
 - Composition;
 - Landcover;
 - Relationship of a given landscape area to existing settlements or developments; and
 - Potential for appropriate mitigation within the context of existing character and guidelines.

- 4.8. With regard to landscape features, susceptibility relates to the potential for loss/retention of the relevant features in relation to the type of development proposed; and the ease with which such elements may be replaced, where appropriate.
- 4.9. Susceptibility of landscape character/ features is categorised as High, Medium or Low, as set out in Table 1.2.

Table 1.2: Landscape Susceptibility

Susceptibility	Criteria
High	The receptor is likely to have little scope to accommodate the type of development proposed without undue consequences upon its overall integrity.
Medium	The receptor is likely to have some scope to accommodate the type of development proposed without undue consequences upon its overall integrity.
Low	The receptor is likely to be able to accommodate the type of development proposed with little or no consequences upon its overall integrity.

- 4.10. Based on the combination of value and susceptibility, an assessment of landscape sensitivity is reached, defined as High, Medium or Low. Typically, a high value and high susceptibility receptor would result in a receptor of high sensitivity; and a low value and low susceptibility receptor would result in a receptor of low sensitivity.

Landscape Magnitude of Effect

- 4.11. The landscape magnitude of effect is informed by judgements about the precise nature of the change brought about by the Proposed Development both in terms of the existing landscape character and landscape elements / features and the addition of new landscape elements / features, and its duration and reversibility, as set out in Table 1.3.

Table 1.3: Landscape Magnitude of Effect

Magnitude	Criteria
Large	Pronounced change to the existing landscape receptor that may affect an extensive area. The change may be long-term or may be irreversible.
Medium	Partial change to the existing landscape receptor that may affect a relatively extensive area. The change may be medium-term or may be irreversible.
Small	Limited change to the existing landscape receptor that may affect a relatively limited area. The change may be short-term or reversible.
Very Small	Very slight change to the existing landscape receptor that may affect a limited area. The alteration may be short-term or reversible.
None	No change to the existing landscape receptor.

Assessment of Visual Effects

4.12. GLVIA 3 Paragraph 6.1 states that:

“An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity.”

4.13. The significance of visual effects is derived from a combination of assessments of the **sensitivity** of the visual receptor and the **magnitude** of effect change) experienced as a result of the Proposed Development.

Viewpoint Selection

- 4.14. In order to assess the effects on visual receptors, a selection of publicly accessible viewpoints is made. This could include representative viewpoints (e.g. representing views of users of a road).
- 4.15. Views may be categorised as either near distance, medium distance or long distance with the relevant distances dependant on the size and nature of the development, based on professional judgement.
- 4.16. The type of view is typically described as transient (i.e. experienced when moving) or fixed (i.e. from a static location). It is also described in terms of the degree of screening or openness (e.g. open or uninterrupted; filtered (including where partially screened) by vegetation or other structures; or curtailed by intervening land form, built form or vegetation) and the angle of view (e.g. frontal or oblique).

Sensitivity of Visual Receptors

- 4.17. The sensitivity of a visual receptor is a consideration of the **value** of the view and the **susceptibility** of the visual receptor, the latter being primarily based on consideration of the extent to which a visual receptor is focused on appreciation of the landscape. Professional judgement is used to determine these factors, based on considerations set out in Table 1.4 and Table 1.5.

Table 1.1: Value of Views

Value	Criteria
High	View of/from a location that is likely to be of national importance, either designated or with national cultural associations.
Medium	View of/from a location that is likely to be of local importance, either designated or with local cultural associations.
Low	View of/from a location that is not designated, with minimal or no cultural associations.

Table 1.2: Susceptibility of Visual Receptor

Susceptibility	Criteria
High	• People at their place of residence; • People engaged in outdoor recreation, including users of Public Rights of Way (PRoW), whose attention is likely to be focused on the landscape; and • People travelling along recognised scenic routes or where their appreciation of the view contributes to the amenity experience of their journey.

Susceptibility	Criteria
Medium	- People engaged in outdoor sport and recreation, where their appreciation of their surroundings is incidental to their enjoyment; and - People travelling on secondary roads or country lanes, rail or other transport routes.
Low	- People travelling on major roads; and - People at their place of work.

- 4.18. The sensitivity of a visual receptor results from the combination of value and susceptibility and is rated as high, medium or low. Typically a high value and high susceptibility receptor would result in a receptor of high sensitivity; and a low value and low susceptibility receptor would result in a receptor of low sensitivity.

Visual Magnitude of Effect

- 4.19. In the evaluation of the effects on views and the visual amenity of the identified receptors, the magnitude of visual effect is typically described with reference to:
- The scale of change in the view with respect to the loss or addition of features in the view and changes in its composition. Factors contributing to this include:
 - The angle of view in relation to the main activity of the receptor;
 - The distance of the viewer from the Proposed Development; and
 - The extent of the area over which the changes would be visible.
 - Whether or not the view is experienced in fixed or transient views and, in the latter, whether it is intermittent/glimpsed or continuous; and
 - The duration of the change, whether temporary or permanent.
- 4.20. The criteria for the magnitude of visual effects is set out in Table 1.6.

Table 1.6: Visual Magnitude of Effect

Magnitude	Criteria
Large	The proposals will cause a pronounced change to the existing view, resulting in the loss or addition of features that will substantially alter the composition of the view. The change may be long-term or may be irreversible.
Medium	The proposals will cause a noticeable change in the view, resulting from the loss or addition of features in the view and will noticeably alter the composition of the view. The change may be medium-term or may be irreversible.
Small	The proposals will cause a limited change in the view, which would not materially alter the composition of the view. The change may be short-term or reversible.

Magnitude	Criteria
Very Small	The proposals will cause a barely perceptible change in the view. The change may be short-term or reversible.
None	No change discernible in the view.

5. Significance of Effects

- 5.1. In order to draw conclusions about the significance of landscape or visual effects, the combination of the sensitivity of the receptors and the magnitude of effect are considered for the Proposed Development at Year 1 of the operational phase (once the Proposed Development has been completed) and at Year 15.
- 5.2. The significance of effects are rated on a scale of Neutral to Major. The assessment of significance of effects is subject to professional judgement but in broad terms, where a receptor of High sensitivity experiences a Large magnitude of effect as a result of the Proposed Development, the significance of effect is likely to be Major. Conversely, where a receptor of Low sensitivity experiences a Very Small magnitude of effect as a result of the Proposed Development, the significance of effect is likely to be Negligible.

Figure 1.1: Significance of Effects

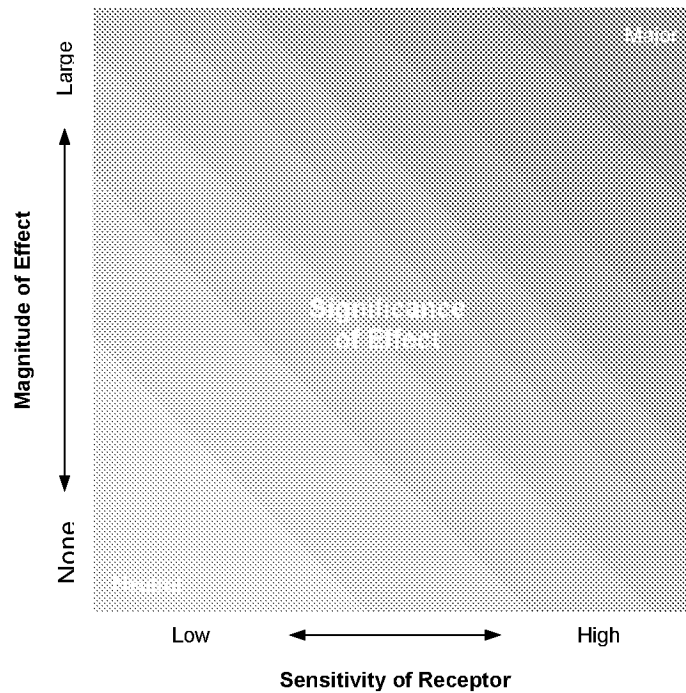


Table 1.7: Significance of Landscape Effects – Criteria

Significance of Landscape Effect	Criteria
Major Beneficial	Alterations that result in a pronounced improvement of the existing landscape resource. Valued characteristic features would be restored or reintroduced as part of the Proposed Development.
Moderate Beneficial	Alterations that result in a partial improvement of the existing landscape resource. Valued characteristic features would be partially restored or reintroduced.
Minor Beneficial	Alterations that result in a limited improvement of the existing landscape resource. Characteristic features would be restored to a limited degree.
Negligible Beneficial	Alterations that result in a very slight improvement to the existing landscape resource, not uncharacteristic within the receiving landscape.
Neutral	Neither beneficial nor adverse effects on the existing landscape resource.
Negligible Adverse	Alterations that result in a very slight deterioration to the existing landscape resource, not uncharacteristic within the receiving landscape.
Minor Adverse	Alterations that result in a limited deterioration of the existing landscape resource. Characteristic features would be lost to a limited degree.

Significance of Landscape Effect	Criteria
Moderate Adverse	Alterations that result in a partial deterioration of the existing landscape resource. Valued characteristic features would be partially lost.
Major Adverse	Alterations that result in a pronounced deterioration of the existing landscape resource. Valued characteristic features would be wholly lost.

Table 1.8: Significance of Visual Effects – Criteria

Significance of Visual Effect	Criteria
Major Beneficial	Alterations that typically result in a pronounced improvement in the existing view.
Moderate Beneficial	Alterations that typically result in a noticeable improvement in the existing view.
Minor Beneficial	Alterations that typically result in a limited improvement in the existing view.
Negligible Beneficial	Alterations that typically result in a barely perceptible improvement in the existing view.
Neutral	Neither beneficial nor adverse effects on the existing view.
Negligible Adverse	Alterations that typically result in a barely perceptible deterioration in the existing view.
Minor Adverse	Alterations that typically result in a limited deterioration in the existing view.
Moderate Adverse	Alterations that typically result in a noticeable deterioration in the existing view.
Major Adverse	Alterations that typically result in a pronounced deterioration in the existing view.

DOCUMENT ISSUE RECORD

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