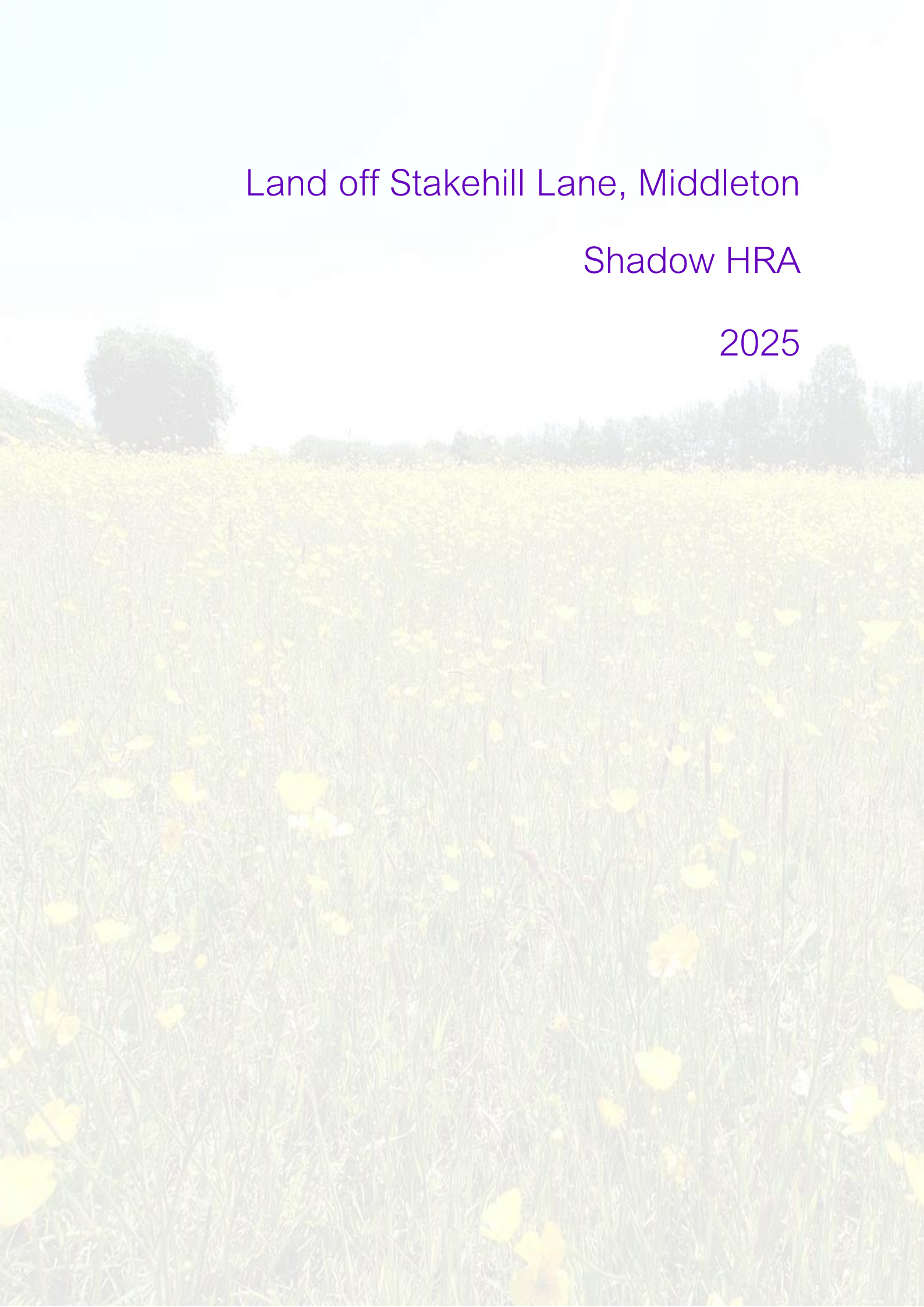




Land off Stakehill Lane, Middleton

Shadow HRA

2025

Client Trustees of J. P. Milne Will Trust

Project Title Land off Stakehill Lane, Middleton

Project Reference RHE.4098.02

Project Leader Ben Crossthwaite

Contact Details ben@rachelhackingecology.co.uk

	Name	Position	Date
Author	Ben Crossthwaite	Senior Ecologist	13/03/2025
Reviewer	Simon Holden	Associate	14/03/2025
Revision	Simon Holden	Associate	24/09/2025



RACHEL
HACKING
ECOLOGY

The Stables, Paradise Wharf, Ducie Street, Manchester, M1 2JN

0161 465 8971

www.rachelhackingecology.co.uk

mail@rachelhackingecology.co.uk



RACHEL
HACKING
ECOLOGY

Report Contents

1. Introduction.....3

2. Assessment of Likely Significant Effects3

3. Conclusion9



1. Introduction

1.1 Background

- 1.1.1 Rachel Hacking Ecology Ltd was commissioned in 2024 by Trustees of J. P. Milne Will Trust to provide ecology consultancy services in connection with a proposed development at land off Stakehill Lane, Middleton (hereafter referred to as the 'project'). The project is located at O.S. grid reference: SD 89280 08402 (see Figure 1).



Figure 1. Map showing the location of the project courtesy of Open Street Maps ©

1.2 Description of Project

- 1.2.1 The project comprises a mixed-use development of up to 350 houses and 250,000sq ft of employment floorspace.
- 1.2.2 The project will involve the following activities:
- Clearance of the majority of habitats on site.
 - Earthworks to construct foundations, slabs, new access roads and services.
 - Construction of access roads, new builds, services and landscaping.
- 1.2.3 The proposed site layout is shown in Figure 2.

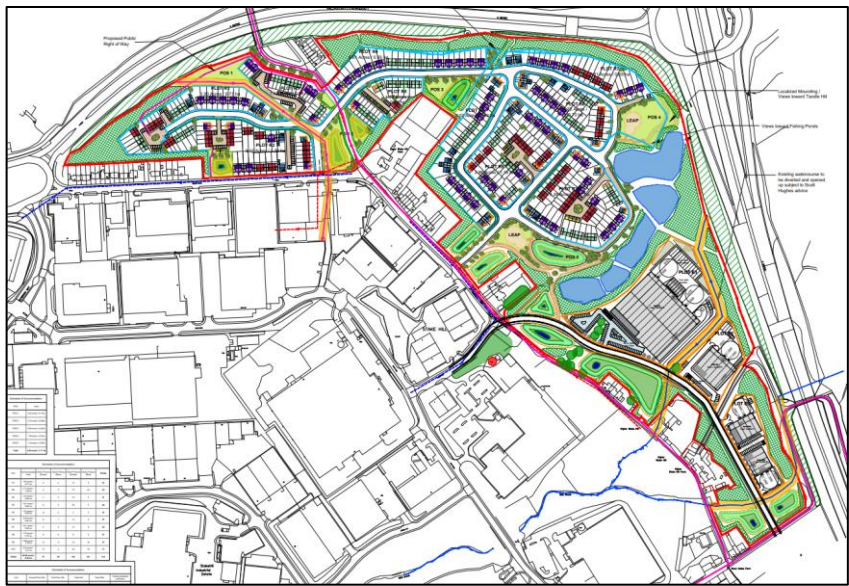


Figure 2 Showing the proposed site layout

1.3 European Sites Considered in this Assessment

- 1.3.1 Initial assessment¹ identified that the project is near European designated sites for nature conservation. These are summarised in Table 1.

¹ Rachel Hacking Ecology (2025), Ecological Impact Assessment: Land off Stakehill Lane, Middleton

Table 1. Protected sites		
Name	Location/distance	Interest
Rochdale Canal Special Area of Conservation (SAC)	143m west	The citation ² for Rochdale Canal SAC describes the site as the following: The Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce Floating Water-plantain <i>Luronium natans</i> . The site also supports a diverse assemblage of aquatic flora, in particular nine species of Pondweed <i>Potamogeton</i> spp. The plant communities found in the Rochdale Canal are characteristic of mesotrophic water bodies, i.e. those which are moderately nutrient rich.
Manchester Mosses SAC, inc Holcroft Moss SSSI	21.3km west	The citation ³ for Manchester Mosses SAC is described as follows: Mossland formerly covered a very large part of Greater Manchester, Merseyside, south Lancashire and north Cheshire, and provided a severe obstacle to industrial and agricultural expansion. While most has been converted to agriculture or lost to development, several examples have survived as degraded raised bog, such as Risley Moss, Astley and Bedford Mosses, and Holcroft Moss on the Mersey floodplain. Their surfaces are now elevated above adjacent land due to shrinkage of the surrounding tilled land, and all except Holcroft Moss have been cut for peat at some time in the past. While past drainage has produced dominant Purple Moor-grass <i>Molinia caerulea</i> , Bracken <i>Pteridium aquilinum</i> and Birch <i>Betula</i> spp. scrub or woodland, wetter pockets have enabled peat-forming species to survive.

² Department for Environment, Food and Rural Affairs (2005), Citation for Special Area of Conservation: Rochdale Canal. Available online at: <https://publications.naturalengland.org.uk/file/4884283202207744>

³ Department for Environment, Food and Rural Affairs (2005), Citation for Special Area of Conservation: Manchester Mosses. Available online at: <https://publications.naturalengland.org.uk/file/4802857651929088>



1.3.2 The location of these protected sites in relation to the project is shown in Figure 3.



Figure 3 showing the proximity of the site to the protected sites (www.magic.defra.gov.uk). Site location shown by red arrow.

1.3.3 Rochdale Canal Site of Special Scientific Interest (SSSI) shares the same boundaries as the SAC site. Rochdale Canal SSSI designation includes the following description:

- The Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce SAC species Floating Water-plantain *Luronium natans*. The site also supports a diverse assemblage of aquatic flora, notably its assemblage of Pondweeds, *Potamogeton* spp; the nine species of which found in the canal represent a balanced community which reflects the quality of water.

1.3.4 Although the SSSI is not a European designated site, it is a component of the SAC site. Potential impacts on the SSSI are considered alongside those relating to the SAC site.

1.4 Conservation Objectives

Rochdale Canal SAC

- 1.4.1 The conservation objectives for the SAC⁴ are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:
- The extent and distribution of the habitats of qualifying species
 - The structure and function of the habitats of qualifying species
 - The supporting processes on which the habitats of qualifying species rely
 - The populations of the qualifying species, and,
 - The distribution of the qualifying species within the site.
- 1.4.2 The supplementary guidance for Rochdale Canal SAC identifies attributes and threats to the qualifying features; these are considered in the sHRA.

Manchester Mosses SAC (including Holcroft Moss SSSI)

- 1.4.3 The conservation objectives for the SAC⁵ are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:
- The extent and distribution of qualifying natural habitats
 - The structure and function (including typical species) of qualifying natural habitats, and
 - The supporting processes on which qualifying natural habitats rely.
- 1.4.4 The supplementary guidance for Manchester Mosses SAC identifies attributes and threats to the qualifying features; these are considered in the sHRA.
- 1.4.5 A draft consultation document, Holcroft Moss Planning Obligations Joint Supplementary Planning Document⁶ documents Manchester Mosses SAC, and particularly Holcroft Moss SSSI, has been identified as being at risk of harm from increased air pollution caused by traffic. The document goes in further to say *“To mitigate against this harm, there is a need for the delivery of long-term ecological resilience works, involving hydrological restoration measures to benefit Holcroft Moss. Contributions will be sought on commencement of development to ensure the mitigation measures can be provided*

⁴ Natural England (2018) European Site Conservation Objectives for Rochdale SAC. Site Code: UK0030266

⁵ Natural England (2018) European Site Conservation Objectives for Manchester Mosses. Site Code: UK0030200

⁶ Greater Manchester Combined Authority (GMCA), 2024 - Holcroft Moss Planning Obligations Joint Supplementary Planning Document -

in a timely manner to offset the impacts. Individual legal agreements will specify timeframes for financial contributions to be spent”.

- 1.4.6 *“Applicants, as part of the Transport Assessment, will be required to identify the number of trips passing Holcroft Moss on the M62 (residential and / or employment). Where it is determined, in accordance with Policy JP-C8, that the proposed development will impact on Holcroft Moss, this information will be used to calculate a per dwelling contribution for residential development and/or a per sq.m. contribution for employment development. In calculating the required contribution, account will be taken of land supply flexibility, with the application of a contingency of 20%”.*
- 1.4.7 *“The necessary contribution will be sought on commencement of development to ensure the works can be carried out in sufficient time to enable Holcroft Moss to build resilience to mitigate the air pollution impacts of additional traffic”.*

1.5 Statutory Requirement for HRA

- 1.5.1 The requirement for a Habitats Regulations Assessment (HRA) derives from the EU Habitats Directive and, notwithstanding the UK’s withdrawal from the EU, UK law and policy remain currently largely unchanged. The legislation transposing the EU Directives has been changed so that they continue to operate effectively from 1st January 2021. The changes have been made by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
- 1.5.2 As a public body, the Local Planning Authority is identified as a ‘competent authority’ within the Habitats Regulations, and the requirement to assess the implications for European sites is applicable in situations where the competent authority is undertaking or implementing a plan or project, or authorising others to do so. A Habitats Regulations Assessment (HRA) considers the implications of a plan or project for European protected sites. It assesses any possible harm to the habitats and species that form an interest feature of the European sites, which could occur as a result of the plan or project being put in place, or as a result of the plan or project in-combination with other plans or projects. In-combination effects include those cumulative effects that might arise from multiple plans or projects together.

1.6 Scope

- 1.6.1 The scope of this report is to identify impact pathways and assess whether the project is likely to result in any likely significant effects on the features for which the protected sites are designated. Where likely significant effects cannot be ruled out, mitigation measures are described to ensure adverse effects do not affect the integrity of the sites. This report aims to *inform* HRA. The LPA is the competent authority, and it is their responsibility to undertake the HRA.

2. Assessment of Likely Significant Effects

- 2.1.1 The first stage of HRA is a screening exercise to address the question: *“Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant (adverse) effect on the conservation objectives and integrity of the European site?”*

2.2 Impact Pathways

- 2.2.1 The following impact pathways are assessed for the project:

Construction Phase

- Direct habitat loss.
- Changes in water quality or levels.
- Changes in air quality.

Operational Phase

- Changes in water quality or levels.
- Changes in air quality.

- 2.2.2 The assessment of likely significant effects (LSE) is presented in Tables 2 and 3.

Table 2. Assessment of likely significant effects to Rochdale Canal SAC

Impact Pathway	Rationale	LSE?
Construction Phase		
Direct habitat loss	The project is located outside the boundaries of the protected site (see Figure 2). There will be no direct habitat loss and therefore no Likely Significant Effect (LSE) alone or in-combination.	No LSE
Loss or Degradation of Functionally Linked Land	Habitats on site comprise grasslands, tall ruderal, water bodies, hedgerows, individual trees and hardstanding. The site does not support the habitats for which the protected sites are designated or provides functionally linked habitat. Therefore, there will be no LSE alone or in-combination.	No LSE
Changes in water quality or levels	Without mitigation, the construction phase has the potential to indirectly pollute the SAC through runoff and increased outfall into linked waterways. The Water Environment, Environmental Statement ⁷ (WSP, 2025) outlines pollution prevention measures will be included within a Construction Environmental Management Plan (CEMP). This will avoid pollution entering surface water or groundwater sources. There is no hydrological connectivity between the project and Rochdale Canal SAC. Therefore, there will be no LSE alone or in-combination. The CEMP is required to ensure compliance with policy and legislation and is therefore considered to be embedded mitigation.	No LSE
Changes in air quality	The project is over 130m from the protected sites at the nearest point, and there is a negligible likelihood of dust reaching them as any dust is expected to fall-out within 50m of the source ⁸ . Dust during construction will be controlled by measures detailed within a CEMP. Standard best practice measures will be followed, therefore this is embedded mitigation. Without mitigation, the increase in vehicular pollution during the construction phase may have an impact on the SAC. Construction will not result in a significant change to annual average daily traffic and will be mitigated via a CEMP. Therefore, there will be no LSE alone or in combination.	No LSE
Operation Phase		

⁷ WSP, 2025. Stakehill Development, Environmental Statement, Water Environment - 62262051

⁸ Holman et al (2014). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf.

Changes in water quality or levels	Without mitigation, the operational phase has the potential to indirectly pollute the SAC through increased surface runoff due to a significant reduction in permeable surface and increased outfall into linked waterways. The Water Environment, Environmental Statement⁹ (WSP, 2025) outlines pollution prevention measures will be included within a drainage strategy. It also identifies that the project will result in a significant reduction in agricultural runoff (eutrophic) into associated waterways in the vicinity, which would result in a beneficial effect. Therefore, there will be no LSE alone or in-combination. These measures are considered to be embedded mitigation as they are required to comply with industry best practice.	No LSE
Changes in air quality	The operational phase of the project has the potential to result in an increase in air pollution due to the increase of vehicular traffic associated with the proposals. Therefore, there is a risk of increased pollutants (NO_x) entering the SAC. However, the site is located 130m east of the SAC at the nearest point, with the majority of the site located over 500m eastward. Taking this into consideration there is a negligible risk of significant effects.	No LSE
Recreation	Designated public open spaces have been included within the site layout and additional areas used recreationally are located in the Rochdale area, the Rochdale Canal SSSI/SAC is still likely to experience increased visitor numbers. However, the increase is likely to be pedestrians and cyclists using the canal towpath. There is a negligible risk of any effects to qualifying features alone, or in-combination.	No LSE

⁹ WSP, 2025. Stakehill Development, Environmental Statement, Water Environment - 62262051

Table 3. Assessment of likely significant effects to Manchester Mosses SAC, including Holcroft Moss SSSI		
Impact Pathway	Rationale	LSE?
Construction Phase		
Direct habitat loss	The project is located outside the boundaries of the protected sites, located over 21km west of the site boundary (see Figure 2). There will be no direct habitat loss and therefore no Likely Significant Effect (LSE) alone or in-combination.	No LSE
Loss or Degradation of Functionally Linked Land	Habitats on site comprise grasslands, tall ruderal, water bodies, hedgerows, individual trees and hardstanding. The site does not support the habitats for which the protected sites are designated or provides functionally linked habitat. Therefore, there will be no LSE alone or in-combination.	No LSE
Changes in water quality or levels	There is no known hydrological connectivity between the project and Rochdale Canal (neither the drainage strategy nor the geo-environmental desk study identified any). The geo-environmental report states that the site is likely to be underlain by impermeable glacial till deposits. The Sustainable Drainage Statement states that existing surface water is likely to have limited infiltration followed by rapid runoff to the watercourses to the southwest. The construction phase is unlikely to result in any direct or indirect impacts to the SAC via water related impact pathways. Therefore, there will be no LSE alone or in-combination.	No LSE
Changes in air quality	The project is over 21km from the protected sites at the nearest point, and there is a negligible likelihood of dust reaching them as any dust is expected to fall-out within 50m of the source¹⁰. Without mitigation, the increase in construction related vehicular pollution during the construction phase, alone or in-combination, could potentially have an impact on the SAC/SSSI. Due to the outline nature of the proposal, it is not possible to estimate the likely number of car and HGV movements that will pass Holcroft Moss. Holcroft Moss is west of Birchwood, with travel routes primarily distributed along the M62 between Manchester and Liverpool. Based on the trip distribution in the transport assessment, it appears that traffic impact may be minimal since both residential and industrial trips are not likely to be directed towards Liverpool. It is reasonable to expect that the traffic impacts on roads adjacent to Manchester Mosses SAC would be minimal. However, actual numbers may not become available even with future updates to the transport assessment.	Not possible to determine
Operation Phase		

¹⁰ Holman et al (2014). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf.

Changes in water quality or levels	There is no known hydrological connectivity between the project and Rochdale Canal (neither the drainage strategy nor the geo-environmental desk study identified any). The geo-environmental report states that the site is likely to be underlain by impermeable glacial till deposits. The Sustainable Drainage Statement states that surface water should be discharged to existing watercourses or to the existing public surface water network, in line with existing conditions. Foul water is proposed to be discharged to the existing sewer network. The operational phase is unlikely to result in direct or indirectly impacts to the SAC/SSSI due to the distance between the project and the protected sites and absence of impact pathways. Therefore, there will be no LSE alone or in-combination.	No LSE
Changes in air quality	Without mitigation, the increase in construction related vehicular pollution during the operation phase, alone or in-combination, may have an impact on the SAC/SSSI. Due to the outline nature of the proposal, it is not possible to accurately estimate the likely number of car and HGV movements that will pass Holcroft Moss. Holcroft Moss is west of Birchwood, with travel routes primarily distributed along the M62 between Manchester and Liverpool. Based on the trip distribution in the transport assessment, it appears that traffic impact may be minimal since both residential and industrial trips are not likely to be directed towards Liverpool. It is reasonable to expect that the traffic impacts on roads adjacent to Manchester Mosses SAC would be minimal. However, actual numbers may not become available even with future updates to the transport assessment. The draft supplementary planning document (GMCA, 2024) identifies the parameters in which measures and mitigation contributions are required to reduce reliance on cars, reduce trip generation and promote ultra-low emission vehicles. These measures will be included at the detailed design stage.	Not possible to determine
Recreation	The operational phase is unlikely to result in direct or indirectly impacts to the SAC/SSSI due to the distance between the project and the protected sites, and the extensive presence of alternative sites closer to the project that are more likely to be used, in the balance of probability. Therefore, there will be no LSE alone or in-combination.	No LSE

2.3 In-combination Effects

- 2.3.1 Other projects considered in the assessment of in-combination effects are presented at Appendix 1.
- 2.3.2 A neighbouring planning application for “Full Planning permission for the erection of residential development of 233 dwellings (Use Class C3) with associated landscaping, means of access, drainage, and other necessary supporting infrastructure. Outline planning permission with access (all other matters reserved) for residential development of up to 1147 dwellings (Use Class C3), mixed-use development, land for primary school extension, local centre and MUGA, landscaping, and supporting infrastructure”, includes an HRA¹¹.
- 2.3.3 The HRA (Ascerta, 2023) did not result in a definitive assessment of likely significant effects of potential impacts due to the lack of data from various disciplines to provide an informed assessment.

2.4 Summary

- 2.4.1 The assessment has determined that the project will not result in any LSE to Rochdale Canal SSSI/SAC. However, it is not possible to determine the likelihood of LSE affecting Manchester Mosses SAC and Holcroft Moss SSSI in relation to air quality, due to a potential increase in heavy goods traffic during the construction phase or operation phase. This may result in mitigation measures and contributions, as per the GMCA, 2024 document.

¹¹ Ascerta, 2023. Habitat Regulations Assessment, Land at Stakehill – P.1172.19

3. Conclusion

3.1 Screening Assessment (Stage 1 HRA)

- 3.1.1 Information to inform a screening assessment has concluded that the project will not result in any LSE to Rochdale SAC during the construction or operation phase.
- 3.1.2 It is not possible to fully assess potential impacts on air quality, in relation to Manchester Mosses SAC and Holcroft SSSI, during the construction and operation phases of the project.
- 3.1.3 However, the draft guidance suggests that, should an LSE be identified, a financial contribution towards the management of Holcroft Moss could provide a suitable mitigation strategy.

3.2 Appropriate Assessment (Stage 2 HRA)

- 3.2.1 As it is not possible to rule out potential LSE to Holcroft Moss either alone or in-combination, the assessment must proceed to Stage 2. This describes the mitigation measures required to avoid LSE.
- 3.2.2 As noted above, the principle of an appropriate mitigation strategy in the form of a financial contribution towards the management of Holcroft Moss is established. The SPD states:

"In some cases where outline planning permission is applied for, it may not be clear whether the threshold(s) in relation to traffic flows will be exceeded, when detailed proposals are forthcoming. In these cases, obligations will be negotiated on the presumption that the site exceeds the relevant threshold(s). However, conditions and legal agreements will be worded to allow an alternative approach if it later turns out that threshold(s) have not been exceeded.

The exact scale of contributions for an individual site will depend upon the particular development proposed, and its impact upon Holcroft Moss, the proposed level of contributions is set out in the statement of estimated project costs and required contributions, which is available alongside this SPD. Developers will not be required to rectify or resolve existing problems, obligations will be sought relative to the scale of impact of the proposed development".

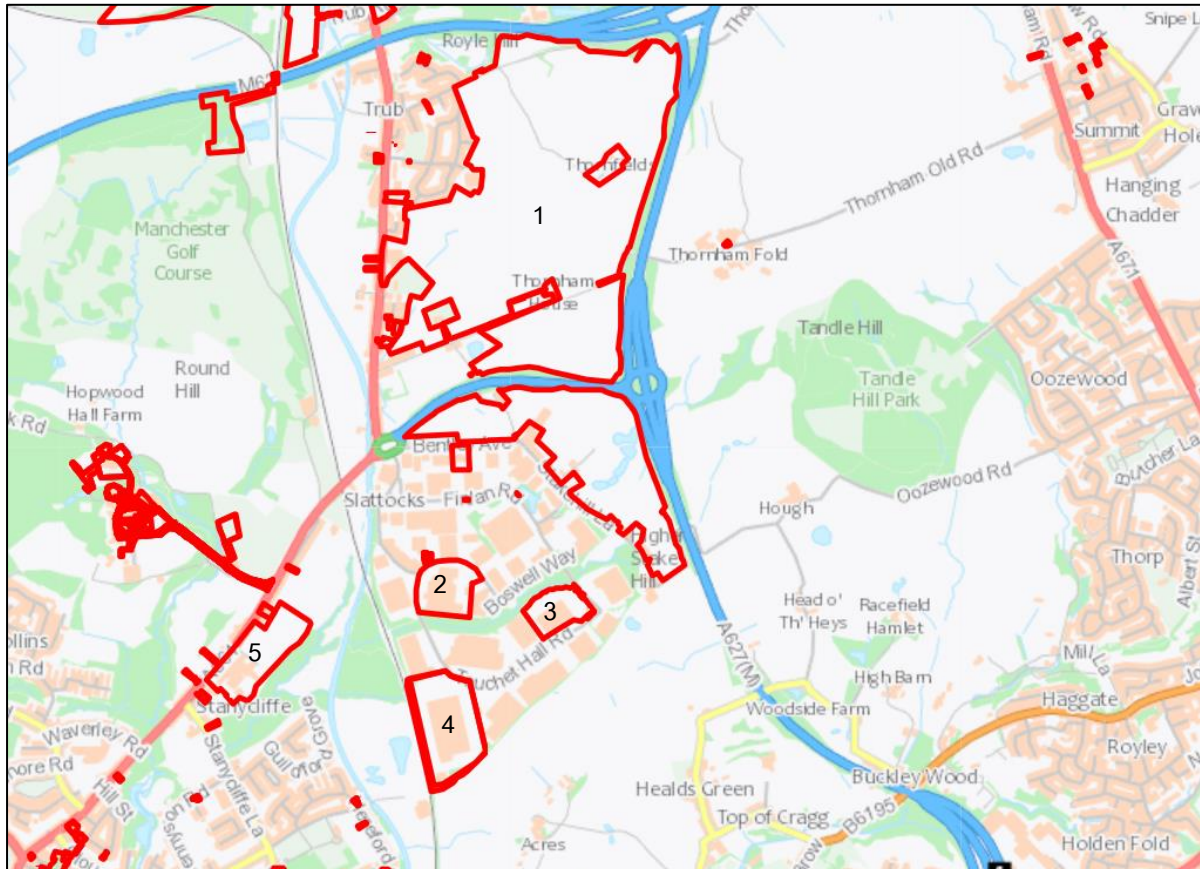
3.3 The Integrity Test

- 3.3.1 The integrity of a site is defined in England and Wales as 'the coherence of its ecological structure and function across its whole area, that enables it to sustain the habitat, complex of habitats and / or the levels of populations of the species for which the site is designated'.

- 3.3.2 This assessment has shown that the project will not adversely affect the Conservation Objectives of Rochdale SAC or their component attributes and targets, alone or in combination with other plans and projects.
- 3.3.3 The Stage 1 assessment was not able to rule out the possibility of LSE alone or in-combination to Holcroft Moss. However, a mechanism to secure appropriate mitigation is identified and, if deemed necessary, assuming this is implemented, there will be no adverse effects to the Conservation Objectives of Holcroft Moss/Manchester Mosses SAC.

Appendix 1: Planning Applications

Considered for In Combination Effects



Reference Number	Application Ref	Decision	Use	Distance From Site
1	23/00650/HYBR	Awaiting decision	Residential (1370 units)	40m north
2	23/00277/ADV	Granted	Commercial (fascia signage)	460m southwest
3	24/00240/FUL	Awaiting decision	Commercial	280m south
4	24/00124/PRA56	Approval not required	Commercial (solar panels)	800m south
5	23/00496/FUL	Granted	Commercial	800m south