



Public

The Milne Trust

LAND NORTH AND EAST OF STAKEHILL INDUSTRIAL ESTATE

Environmental Statement Volume 1 Chapter 13 –
Cumulative Effects

March 2025

Project Number 62262051





The Milne Trust

LAND NORTH AND EAST OF STAKEHILL INDUSTRIAL ESTATE

Environmental Statement Volume I Chapter 13: Cumulative
Effects

WSP

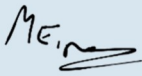
8 First Street
Manchester
M15 4RP

Phone: +44 161 200 5000

WSP.com



QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Date	February 2025			
Prepared by	Mateo Espinosa			
Signature				
Checked by	James Warrington			
Signature				
Authorised by	Nick Fillingham			
Signature				
Project number	62262051			

CONTENTS

13	CUMULATIVE EFFECTS	1
13.1	INTRODUCTION	1
13.2	SCOPE AND METHODOLOGY FOR ASSESSMENT	1
13.3	DETERMINING SIGNIFICANT EFFECTS	5
13.4	ASSESSMENT OF EFFECTS INTERACTION	5
	ECOLOGY	12
13.5	DIFFICULTIES AND UNCERTAINTIES	16
13.6	REFERENCES	16

TABLES

Table 15-1 – Summary of Committed Developments	3
Table 15-2 – Common Receptors	5
Table 15-3 – Construction Phase Effect Interactions Assessment	7
Table 15-4 – Operational Phase Effect Interactions Assessment	9
Table 15-5 - Assessment of Potential Cumulative Landscape Effects	13

13 CUMULATIVE EFFECTS

13.1 INTRODUCTION

- 13.1.1 This chapter reports the likely significant cumulative environmental effects (both effect interactions and in-combination effects) associated with the Proposed Development. Cumulative effects comprise the combined effects of reasonably foreseeable human induced changes within a specific geographical area over a certain period of time, which can be both direct and indirect.
- 13.1.2 For the purposes of this Environmental Statement (ES), the following types of cumulative effects have been considered in accordance with the EIA Regulations 2017 and best practice guidance:
- **Intra-project combined effects (effect interactions)** – the interaction and combination of different environmental effects from within the Proposed Development affecting a receptor; and
 - **Inter-project cumulative effects (in-combination effects)** – the combined effects of the Proposed Development and other projects on a receptor.

13.2 SCOPE AND METHODOLOGY FOR ASSESSMENT

- 13.2.1 This section should be read in conjunction with the cumulative effects section of **Chapter 5: Approach to EIA**.
- 13.2.2 At present, there is no widely accepted methodology or best practice for the assessment of cumulative effects although there are a number of guidance documents available. The following approach is based on previous experience and professional judgement, the types of receptors being assessed, the nature of the Proposed Development and the environmental information available to inform the assessment.
- 13.2.3 Part 1, Paragraph 2 (e) of the EIA Regulations 2017 (**Ref 15.1**) refers to the need to assess ‘*the interaction between factors referred to in sub-paragraphs (a) to (d)*’ which includes: population and human health, biodiversity, land, soil, water, air and climate, material assets, cultural heritage and the landscape.
- 13.2.4 Schedule 4, Paragraph 5(e) of the EIA Regulations 2017 (**Ref 15.1**) states that an ES should include a description of the likely significant effects of the Proposed Development on the environment resulting from ‘*the cumulation of effects on with other existing and / or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources*’.

EFFECT INTERACTIONS

- 13.2.5 The approach to the assessment of interactions of environmental effect (effect interactions) considers the changes in baseline conditions at common sensitive receptors (i.e. those receptors that have been identified as experiencing likely residual effects by more than one technical topic) due to the Proposed Development. The assessment is based upon residual effects only (considered to be effects of minor adverse or greater significance i.e. excluding negligible effects). The study area for the assessment is informed by the study areas for the individual topic assessments as set out in technical chapters 6 to 12.
- 13.2.6 The assessment of effect interactions has been undertaken in following steps:

- **Step A:** Identification of receptors or resources considered in more than one technical chapter, and therefore having the potential to be affected by more than one environmental factor; and
- **Step B:** For receptors or resources identified in Step A, the significance of the residual effect from each relevant technical chapter was identified. Consideration was then given to whether there would be a cumulative effect between the individual effects and if so whether the cumulative effect would be of the same or greater significance of the component effects.

IN-COMBINATION EFFECTS

- 13.2.7 The approach to the assessment of in-combination effects considers the deviation from the baseline conditions at common sensitive receptors as a result of changes brought about as a result of the Proposed Development in combination with one or more other committed developments.
- 13.2.8 A search of committed developments (as defined by the criteria below) was performed through a review of the Rochdale Borough Council Planning Register (**Ref. 15.2**) and other sources, with consultation from RBC on these committed developments. As part of this search, the committed developments identified were reviewed against the following criteria. The criteria is based on professional judgement relating to whether they are likely to cause significant effects due to their location or other characteristics (such as size or operational activities). Where a committed development met all of the following criteria, it was taken forward for further consideration.
- 13.2.9 For the purposes of this assessment, committed development is defined as those developments meeting one or more of the following criteria:
- Is subject to a planning application;
 - Is subject to an Environmental Impact Assessment;
 - Has been, or is currently being consulted upon;
 - Has planning permission;
 - Has a concurrent construction and/or operational phase; and
 - The committed development is within a relevant geographical boundary (2km from the site boundary) with common sensitive receptors;
 - Is a residential development that comprises 50+ dwellings; and
 - Is an employment, industrial and/or commercial development that comprise a minimum of 1000m² of commercial space.
- 13.2.10 The identified committed developments that have been considered within the in-combination assessment are shown below within **Table 13-1**.
- 13.2.11 The consideration of in-combination effects has been approached on a topic by topic basis, dependent upon the availability of relevant information. Where environmental information is not presented within the available documents relating to the committed development, a high-level appraisal using publicly available sources has been undertaken to supplement the available information to enable a qualitative assessment of in-combination effects. If insufficient information is available in the public domain, this is clearly outlined.

Table 13-1 – Summary of Committed Developments

Reference	Local Planning Authority Reference	Description of Development	Site address	EIA? (Y/N)	Status	Number of units	Distance from Site Boundary (m)
1	23/00650/HYBR	Hybrid planning application (EIA development) seeking: 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.	Land At Stakehill, Off Rochdale Road, Middleton	Y	Awaiting decision	1370 units	40m north
2	20/01439/FUL	Demolition of the existing industrial unit (Use Class B2/B8) and replacement with a new B2/B8 use facility, with ancillary office accommodation, service yards, vehicle parking and landscaping.	Stakehill Industrial Estate, Unit 61 Touchet Hall Road Middleton M24 2RW	N	Granted	17,000 sq m commercial	490m south

Reference	Local Planning Authority Reference	Description of Development	Site address	EIA? (Y/N)	Status	Number of units	Distance from Site Boundary (m)
3	22/01190/FUL	Residential development of up to 445 dwellings with associated access, car parking, landscaping and infrastructure	Land South Of Cowm Top Lane Castleton Rochdale	N	Granted	445 units	1.5km north
4	24/01007/FUL	Erection of 162 affordable dwellings with associated access, car parking, private gardens, open space, play facilities, and landscaping, together with new pedestrian to Rochdale Canal towpath	Trub Farm Manchester Road Rochdale OL11 2XG	N	Awaiting Decision	162	1.5km north
5	23/00431/HYBR	Full application for residential development for 191 dwellings including access, landscaping, open space together with erection of sub-station and foul water pump station	Castleton Sidings Heywood Road Rochdale	N	Granted	191	1.7km north
6	21/00744/FUL	Residential development of 311 dwellings (Use Class C3) with associated infrastructure, landscaping and access	Land Off Don Street, Middleton	N	Granted	311	1.7km south

13.3 DETERMINING SIGNIFICANT EFFECTS

- 13.3.1 There is no formal guidance on the criteria for determining significance of cumulative effects. The following principles have been considered when assessing the significance of cumulative effects in relation to both effect interactions and in-combination effects:
- The nature of the receptors/resources affected;
 - How the impacts identified combine to affect the condition of the receptor/resource;
 - The probabilities of the impacts occurring in relation to each other in such a way so as to produce a cumulative effect; and
 - The ability of the receptor/resource to absorb further effects.
- 13.3.2 The determination of significance for the purposes of this assessment is therefore made on a receptor basis, taking account of the assessments in technical chapters 6 to 12, available environmental information, industry best practice, professional judgement and experience. Levels of significance were made in accordance with the definitions set out in **Chapter 5: Approach to EIA**. It is noted that for a cumulative effect to be significant (moderate or large) the effect must be determined to increase the magnitude of overall effect beyond that of the Proposed Development in isolation or environmental topic receptor with the largest residual effect.

13.4 ASSESSMENT OF EFFECTS INTERACTION

STEP A

- 13.4.1 The Step A assessment identified receptors and resources which could be affected by more than one environmental topic, and therefore more than one residual effect. These receptors are referred to as 'Common Receptors'.
- 13.4.2 The review of technical chapters identified a set of common receptors. These common receptors are listed below in **Table 13-2**. **Tables 15-3** and **15-4** identify the residual effects on each common receptor identified in the technical chapters. Receptors that are adversely affected by two or more residual effects (minor adverse and above), have been identified with the potential for a residual effect interaction as a result of the construction and/or operation of the Proposed Development.

Table 13-2 – Common Receptors

Common Receptor	Environmental Factors
Local Population, including demolition and construction workers, existing and future residential properties and future Site users	▪ Noise and Vibration (construction and operation) ▪ Landscape and Visual (construction and operation)
Ecological receptors, including the Hedgerows, Ponds, Mature Trees, Bats, Badgers, Birds, Amphibians, Water Voles, Reptiles, Owls and Otters, Rochdale Canal SAC/SSSI and A627M by Tandle Hill SBI	▪ Ecology (construction and operation) ▪ Landscape and Visual (construction and operation)
Controlled water receptors, including on-site and off-site surface water features and groundwater.	▪ Landscape and Visual (construction and operation) ▪ Water Resources, Flood Risk and Drainage (construction)

STEP B

- 13.4.3 **Table 13-3** and **Table 13-4** comprise of summary matrices for the construction and operational phases of the Proposed Development showing the significance of residual effects (of minor, moderate and major adverse only) on common receptors for environmental topics, following the implementation of the required mitigation measures set out in technical chapters 6 to 12. This enables a qualitative assessment of the interactions of residual effects outlining the overall significance to the identified common sensitive receptors. The results of the assessment of effect interactions are subsequently shown in **Table 13-3** and **Table 13-4**.
- 13.4.4 For the purpose of this assessment, residual effects that have been identified in technical chapters 6 to 12 that do not affect the common sensitive receptors identified have not been presented below, as no effects interactions are anticipated.

Table 13-3 – Construction Phase Effect Interactions Assessment

Topic	Local Population	Ecological Receptors	Controlled Waters
Ecology	N/A	A627 by Tandle Hill SBI and Rochdale Canal (Scowcroft to Warland) SBI (county importance/medium sensitivity).- Moderate Adverse (significant) considered Neutral (not significant) following adoption of relevant mitigation. Dust deposition during construction damaging plant communities Rochdale Canal SAC/SSSI - Major Adverse (significant) considered Neutral (not significant) following adoption of relevant mitigation.	N/A
Noise and Vibration	Minor Adverse residual effect on Noise receptors 1-8 (' not significant ') following the implementation of mitigation measures.	N/A	N/A
Water Resources, Flood Risk and Drainage	Potential increase in fluvial and pluvial flood risk on and off Site - Major Adverse (significant) reduced to Negligible (not significant) residual effect following implementation of mitigation measures.	N/A	N/A

Topic	Local Population	Ecological Receptors	Controlled Waters
Landscape and Visual	View Points 1-13 – Minor Adverse (Not Significant) . View Point 17- Moderate Adverse . View Points 18-23 – Minor Adverse (Not Significant) .	N/A	N/A
Effect Interaction	Adverse effects are anticipated on the local population from different environmental topics. These effects are derived from noise and vibration, water resources, flood risk and drainage and landscape and visual. The effects from noise and vibration will be temporary in nature. Additionally, where adverse effects have been identified, the nature of the effects varies depending on the receptor location. The mitigation measures and SuDS that will be implemented to mitigate effects on water quality are considered Minor Beneficial. The effects are anticipated to impact upon the various local population receptors in different capacities. As such, a Negligible (Not Significant) effect interaction is anticipated on the local population.	Minor adverse effects are anticipated on ecological receptors from different environmental topics. Mitigation will be implemented associated with effects regarding habitats. The effects are anticipated upon different ecological receptors. As a result, a Negligible (Not significant) effect interaction is anticipated.	N/A

Table 13-4 – Operational Phase Effect Interactions Assessment

Topic	Local Population	Ecological Receptors	Controlled Waters
Ecology	N/A	Non-statutory designated sites within the study area (county importance/medium sensitivity). Moderate Adverse (Significant) reduced to Neutral (Not Significant) following adequate mitigation.	N/A
Human Population	Major to moderate beneficial cumulative effect on housing in the RBC area during the operational phase, which is considered to be moderate beneficial. There is potential for cumulative adverse effects relating to impact on primary healthcare and secondary education provision which is considered to be Minor Adverse (Not Significant).	N/A	N/A
Noise and Vibration	HGV activities, loading/unloading, and fixed plant operations may significantly impact internal and external environments, including gardens Daytime traffic from proposed employment uses on existing residents - Minor Adverse to Negligible (not significant) following implementation of mitigation. Noise from the A627(M) and surrounding roads on proposed future	N/A	N/A

Topic	Local Population	Ecological Receptors	Controlled Waters
	residents - Minor Adverse to negligible (not significant) following mitigation.		
Landscape and Visual	View Points 1-9, 12-13, 17, 20-21 – Minor Adverse (Not Significant) .	N/A	N/A
Effect Interaction	Beneficial and adverse effects area anticipated on the local population from different environmental topics. The effects as a result of noise and vibration, landscape and visual on the local population have the potential to be magnified. The noise and vibration effects are Minor Adverse to Negligible, whilst the landscape and visual effects range from negligible adverse to minor adverse.	Beneficial effects are anticipated on ecology related to landscape creation. There is a Minor Adverse (Not Significant) effect interaction anticipated on the ecological receptors.	N/A.

SUMMARY

Construction

- 13.4.7 Of the assessed common receptors, the local population, ecological receptors and controlled waters are anticipated to experience a residual effect interaction. This effect interaction is anticipated to be **Negligible (not significant)** and no further mitigation measures are required.

Operation

- 13.4.8 Of the assessed common receptors, the local population, ecological receptors and controlled waters are anticipated to experience a residual effect interaction. This effect interaction is anticipated to be **Negligible (not significant)** and no further mitigation measures are required.

13.4.9 ASSESSMENT OF IN-COMBINATION EFFECTS

AIR QUALITY

Construction Phase

- 13.4.10 Should permission be granted for other committed developments within 500m of the Site, it is possible that cumulative dust effects may occur during construction. However, fugitive dust emissions associated with the Proposed Development will be minimised through the outlined mitigation measures. A similar level of control would also be expected for any other scheme. Therefore, cumulative effects are predicted to be **not significant**.

Operational Phase

- 13.4.11 Cumulative vehicle exhaust emission effects may occur during operation as a result of additional traffic movements associated with committed developments in the vicinity of the Site. However, the traffic data utilised for the assessment included predicted changes in flows as a result of relevant committed developments. As outlined previously, effects were predicted to be **not significant**. As such, cumulative effects are also predicted to be **not significant**.

ECOLOGY

- 13.4.12 All of the cumulative schemes shown within **Table 15-1** have either embedded mitigation such as a Construction Environmental Management Plan (CEMP) and/or has been assessed for ecological impacts and consideration of ecological features would be mitigated for as needed.

Construction Phase

- 13.4.13 Construction stage of these approved schemes within 1km of the Proposed Development are not expected to combine adversely with the construction stage of the Proposed Development. The implementation of embedded mitigation (the CEMP) will ensure the Proposed Development, in itself, or in-combination with these other schemes, at this time or in the future, does not cause the Project to contribute to an adverse effect on ecological features in-combination with these developments. In addition, significant cumulative effects are unlikely to occur as each scheme is anticipated to employ similar mitigation techniques (CEMPs), including licensing for protected species as required and to carry out a HRA where required, such that any individual construction stage effects are not significant, alone or in combination.
- 13.4.14 In addition, loss of habitat on Site is considered negligible compared to the amount of similar habitat in the local and wider area, including the higher quality habitat retained as part of the Proposed Development. Overall, no significant in-combination effects on ecological features are anticipated as a result of the construction of the Proposed Development.

Operational Phase

- 13.4.15 Again, for operational effects it is considered unlikely that the Proposed Development would have any significant in-combination effect on ecological receptors due to required mitigation such as a SuDS design for run-off due to the Proposed Development.
- 13.4.16 The Air Quality assessment (Chapter 6: Air Quality) included cumulative impacts arising from the identified approved schemes. The assessment concluded that no significant effects on air quality are anticipated as a result of the operation of the Proposed Development in-combination with other approved proposals.

LANDSCAPE AND VISUAL

- 13.4.17 The following cumulative assessment only considers those developments which have some potential to cause additive landscape and visual effects. Other sites included in the scoping with the Local Authority have no visual or perceptual relationship with the Site or, are in keeping with the established landscape character identified in the baseline assessment and are therefore not relevant for inclusion in the assessment of landscape and visual cumulative effects.
- 13.4.18 For the purposes of this cumulative assessment one site has been identified, Reference 1 in **Table 13-1**.

Cumulative Landscape Effects

- 13.4.19 This cumulative site informs the baseline from which to assess the cumulative landscape effects of the Proposed Development. The cumulative landscape assessment also takes into account the potential change in landscape sensitivity: the presence of the cumulative site to the character area may change the sensitivity of the landscape setting and is assessed accordingly. Cumulative landscape effects are provided in **Table 13-5**.

Table 13-5 - Assessment of Potential Cumulative Landscape Effects

Landscape Receptor	Sensitivity	Description of cumulative landscape character and magnitude of change	Predicted cumulative landscape effect (residual)
Topography	Low	Change from open field/rough grazing land to a re-wilded habitat/informal open space recreation resource to foreground and midground	Beneficial
Watercourse	N/A	N/A	N/A
Significant Vegetation	Low	As above-land in poor condition currently, and the creation of new landscape infrastructure will be a positive change	Beneficial
Settlement Pattern	N/A	N/A	N/A
Land use	Low	Change from open field/rough grazing land to a re-wilded habitat/informal open space recreation resource to foreground and midground	Beneficial
National Character Area (NCA)	Low	No change	No change
Regional Character Area (RCA)	Low	No change	No change
Local Character Area (LCA)	Low	Retained and enhanced green belt portion. Positive Change	Beneficial

- 13.4.20 Cumulative impacts derived from site reference 1 are generally positive/beneficial impact to views to the site from Thornham Lane/Neutral and slight positive change in views from St John Thornham Church. (VP14) although views to the site from here are fairly limited.
- 13.4.21 The retention of the portion of Green Belt between this development and the site is generally positive as it offers wider community/biodiversity benefits and offers additional screening/buffer to views. (VP15).
- 13.4.22 The strategy is to 're-wild' this area so over time, establishment of woodland and scrub planting over existing open low grade grazing land will have a positive impact on biodiversity and buffering.

Construction Noise Effects

- 13.4.23 Noise and vibration associated with on site construction activities will usually only cause significant adverse effects at receptors immediately surrounding a site. Significant cumulative effects would not be expected outside the 300 m Study Area for on site noise and vibration activities.

13.4.24 The cumulative impact of construction noise levels predicted from the Redrow development (detailed in **Table 13-1**) together with highest construction noise levels predicted from the Proposed Development could be as a worst-case daytime free-field level during substructure works of Stakehill. These levels would be less than the threshold and result in a **Minor Adverse (Not Significant)** effect.

13.4.25 Therefore, no additional construction noise cumulative effects are anticipated.

Development Generated Road Traffic Noise

13.4.26 the traffic data received for the do minimum scenario indicates significant increases in road traffic volumes (compared to the 2025 baseline scenario). These increases are likely attributable to the influence of other developments in the area, which suggests that cumulative effects have been inherently captured within the baseline noise environment therefore result in **Negligible Adverse Impacts (not significant)**.

POPULATION AND HUMAN HEALTH

13.4.27 This section considers the likely cumulative effects that could arise from the Proposed Development when considered alongside other committed development schemes in proximity to the Site. It identifies whether effects from several developments which individually may be insignificant could, when considered together, cause significant cumulative effects requiring mitigation. A number of committed developments have been identified as being relevant to this assessment.

Construction

13.4.28 Construction of the cumulative developments will generate employment across all construction disciplines from ground workers to construction management. It is not possible to quantify the cumulative effect of employment generation because details of the number jobs during the construction phase is not available in the publicly accessible planning application material. Furthermore, it is not known whether the construction phases of the cumulative developments overlap.

13.4.29 To provide a 'worst case' assessment for construction employment, it is assumed that they do not overlap and therefore the same construction workforce could work on the Development and each of the cumulative developments. On this basis, it is considered that the cumulative developments and the Development combined will provide a temporary, **minor beneficial** cumulative effect on employment during the construction phase.

Operational

13.4.30 Five of the cumulative developments will provide additional homes and therefore have the potential to provide a significant cumulative effect when combined with the Development. The five cumulative developments will collectively deliver 2,479 additional homes. The Development will deliver up to a further 314 homes. The Development and the cumulative developments combined will deliver 2,793 homes.

13.4.31 The sensitivity of the housing market within the RBC area has been identified as medium. The magnitude of change is considered to be medium in the context of the Development and cumulative developments combined. On this basis, there is likely to be a permanent, major to moderate beneficial cumulative effect on housing in the RBC area during the operational phase, which is considered to be **moderate beneficial**.

- 13.4.32 Based on an average household size of 2.3 persons, the cumulative schemes could collectively be home to a residential population of approximately 6,425 people, inclusive of the Proposed Development at approximately 725 people.
- 13.4.33 This additional residential population will create demand for social infrastructure such as primary healthcare provision and school places. Committed Developments 2,3 and 5 have been granted therefore it should be assumed that any potential adverse impact has been accounted for and mitigated as part of the planning process. Committed Development 1 and 4 have not been granted planning permission, therefore there are potential for cumulative impacts on social infrastructure as a result of the new residential population. Committed Development 1 proposes a new primary school on-site therefore mitigating its impact on primary school provision. There is potential for cumulative adverse effects relating to impact on primary healthcare and secondary education provision which is considered to be **Minor Adverse (Not Significant)**.

TRAFFIC AND TRANSPORT

- 13.4.34 The environmental assessment of the development with regards to traffic and transport has inherently considered the traffic effects of committed development within the study. Therefore, the cumulative effects of increased traffic flows from both the Proposed Development and from the identified committed developments, plus background traffic growth has been considered within the main assessment.

WATER RESOURCES, FLOOD RISK AND DRAINAGE

- 13.4.35 Typically, only schemes located within Flood Zones 2 or 3 would be considered to have a potential for cumulative effect in terms of flood risk. However, the requirements of the NPPF are such that no development would be consented if it were to increase off-site flood risks. Therefore, there are not anticipated to be any potential cumulative effects with regard to fluvial or tidal flood risk during demolition and construction works, or for the completed development.
- 13.4.36 With regard to surface water flood risk, the LLFA would similarly not consent to any surface water discharge from a Proposed Development were it to increase downstream flood risk. Any discharge to sewer or to a fluvial watercourse would need to be restricted so as to provide betterment in terms of downstream capacity. Any new surface water drainage network would also be required to ensure that allowances are made for increases in rainfall depths due to climate change. As the potential effects are not likely to be accommodated within pre-development drainage assets, the Proposed Development would be likely to have a minor beneficial effect on sewer capacity. It would be reasonable to assume that any other development would similarly need to decrease flood risk and reduce pressures on downstream waterbodies such that any cumulative impact during the completed development stage would be beneficial. The management of surface water during demolition and construction works would not be expected to lead to any inter-project cumulative effects as other scheme are not in close hydraulic connectivity and unlikely to be affected by surface water management.
- 13.4.37 In accordance with national and local policy, it is reasonable to assume that other schemes would similarly be required to demonstrate suitable surface water runoff management measures during construction and that discharges of surface water would be subject to suitable treatment such that there would be no cumulative significant effect on downstream water quality during demolition and construction works, or for the completed development. Furthermore, each cumulative would be

expected to deliver improvements in respect of contamination, ground water disruption, water demand and sewer capacity.

- 13.4.38 Accordingly, the overall scale of water resources and flood risk cumulative effects would be no greater than that of the Proposed Development in isolation. Therefore, there are **No Significant** cumulative effects on flood risk or surface water quality.

SUMMARY

- 13.4.39 Significant in-combination effects have been identified on wider human health receptors (**Moderate Beneficial**). No significant in-combination effects have been identified for the other disciplines.

13.5 DIFFICULTIES AND UNCERTAINTIES

- 13.5.1 The assessment of effect interactions and in-combination effects resulting from the Proposed Development have focused on the residual effects from the construction and operational phase following the implementation of mitigation measures.
- 13.5.2 There is an assumption that mitigation measures identified in the respective technical chapters 6 to 12 have been incorporated or adopted to mitigate any adverse effects resulting from the Proposed Development.
- 13.5.3 An assessment of in-combination effects has been limited to publicly available information obtained from the Rochdale Borough Council planning portal. Any assumptions due to missing information have been made using professional judgement. This document contains committed developments on the planning portal at the time of writing.

13.6 REFERENCES

- **Reference 5.1:** Town and Country Planning (Environmental Impact Assessment) Regulation 2017.
- **Reference 5.2:** Rochdale Borough Council, Planning Portal. Online, available at: <https://publicaccess.rochdale.gov.uk/online-applications/search.do?action=simple&searchType=Application>

wsp



wsp.com