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AtkinsRéalis



MANCHESTER DIGITAL CAMPUS

Environmental Statement
Volume 2 - Chapter 22: Cumulative Effects

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Executive Summary

Assessing the cumulative effects for a project is vital as it evaluates the combined impacts of the Proposed Development alongside other existing or planned developments. This holistic approach helps identify potential environmental challenges and opportunities that may not be evident when considering a single project, ensuring additive impacts are appropriately considered.

The cumulative effects assessment (CEA) methodology has been informed by the Design Manuals for Roads and Bridges (DMRB) LA104 guidance, Planning Inspectorate (PINS) guidance and the principles to be applied to CEA as expressed within the National Planning Policy Framework (NPPF); and developed on the basis of professional judgement and experience. The methodology used for the CEA for the Proposed Development is a hybrid of these approaches.

The consideration of cumulative impacts focuses on sensitive neighbours, receptors and/or biophysical features deemed likely to be affected cumulative impacts, whether intra-project or inter-project or, potentially, both.

- Intra-project effects result from the different environmental impacts of the Proposed Development that may affect the same receptor or resource.
- Inter-project effects may arise from the combined effects of several different projects, in combination with the Proposed Development being assessed. A shortlist of eight ‘other development’ (termed Reasonably Foreseeable Future Projects (RFFPs)) has been created to assess inter-project impacts.

The significance of cumulative effects is determined by the sensitivity of the receptors and the magnitude of the impacts, and it considers the duration, geographical area, type, frequency of the effect, as well as the ‘value’ and resilience of the receptor affected, and the likely success of mitigation.

During the construction phase, no significant residual intra-project cumulative beneficial effects have been identified. Three receptors are noted to experience moderate adverse effects: the Co-op Academy in New Islington, typically surrounding disruptions from noisy works; Royal Mill at Redhill Street, impacted by townscape and heritage considerations; and the Ancoats Conservation Area, affected by similar considerations.

Once the Proposed Development becomes operational, the Ancoats Conservation Area is expected to see moderate beneficial and significant residual intra-project cumulative effects, primarily due to improvements in the townscape that enhance human health and socio-economic conditions. Notably, no significant residual intra-project cumulative adverse effects have been identified during the operation phase.

Four RFFPs (planning application reference numbers 128191/FO/2020, 135662/FO/2022, 135675/FO/2022, and 137346/FO/2023) have been identified as contributing to potentially significant residual inter-project cumulative beneficial effects during the construction phase. These include two commercial-led and two mixed-use developments, all of which are expected to combine with the Proposed Development and each other to create moderate beneficial impacts, primarily related to labour market opportunities.

Three RFFPs are associated with moderate adverse effects in the construction phase, primarily due to noise and disturbance impacts and negative impacts on the townscape and heritage assets (planning application reference numbers 128191/FO/2020, 135675/FO/2022, and 122598/FO/2019 – two of which are also associated with the benefits listed above).

In the operational phase, moderate beneficial and significant residual inter-project cumulative effects are anticipated for both the labour and local housing markets, with no significant adverse effects identified. This positive outlook is attributed to the overall volume and nature of the developments in the study area.

22. Cumulative Effects Assessment

22.1. Introduction

22.1.1. This chapter of the ES presents the cumulative effects assessment (CEA) for the Proposed Development, which assesses the likely cumulative effects of the Proposed Development during construction and operation. The chapter also describes the assessment methodology, the existing baseline conditions, potential impacts, assessment of effects; the mitigation measures required to prevent, reduce or offset any significant adverse effects, culminating in the overall assessment of residual cumulative effects.

22.1.2. This chapter should be read in conjunction with Chapter 5: Scope of the EIA and overall methodology and the reporting of cumulative effects set out in the following chapters:

- ES (Volume 2) Chapter 7 – Air Quality
- ES (Volume 2) Chapter 8 - Biodiversity
- ES (Volume 2) Chapter 9 - Climate Vulnerability
- ES (Volume 2) Chapter 10 - Effects on Climate
- ES (Volume 2) Chapter 11 - Daylight, Sunlight, Overshadowing and Solar Glare
- ES (Volume 2) Chapter 12 - Ground Conditions and Contamination
- ES (Volume 2) Chapter 13 - Historic Environment
- ES (Volume 2) Chapter 14 - Human Health
- ES (Volume 2) Chapter 15 - Materials and Waste
- ES (Volume 2) Chapter 16 - Noise and Vibration
- ES (Volume 2) Chapter 17 - Socio-economics
- ES (Volume 2) Chapter 18 - Traffic and Transport
- ES (Volume 2) Chapter 19 - Water Resources and Flood Risk
- ES (Volume 2) Chapter 20 - Wind and Microclimate
- ES (Volume 2) Chapter 21 - Major Accidents and Disasters
- ES (Volume 2) Chapter 23 - Residual effects and conclusions
- ES (Volume 3) Townscape and Visual Impact Assessment

22.1.3. This chapter is supported by a technical appendix contained within ES Volume 4 and also by figures contained within ES Volume 5, which includes the following:

- ES (Volume 4) Appendix 4.1 – Scoping Report
- ES (Volume 5) Figure 22.1 Reasonably Foreseeable Future Projects

22.2. Competent expert evidence

22.2.1. This Cumulative Effects Assessment has been undertaken and reported by a team of competent cumulative effects assessment practitioners. The competent expert responsible for the assessment is an Associate Director, chartered member of the Royal Town Planning Institute (RTPI) who has an MA in Town and Country Planning, over 19 years of relevant experience in cumulative effects assessment and over 24 years of environmental planning experience. This includes undertaking strategic environmental assessment (SEA), sustainability appraisal (EA), integrated impact assessment (IIA) and EIA work for

strategic plan making and major infrastructure and linear projects, including highways, for which the processes of EIA or SA/SEA have been required, including consideration of cumulative effects.

22.3. Relevant legislation, policy and guidance

22.3.1. This assessment has been undertaken with consideration of the requirements of key legislative, policy and guidance documents, which is summarised in Table 22-1.

Table 22-1 – Legislation and policy for Cumulative Effects Assessment

Legislation / policy	Summary of requirements
National Planning Policy Framework[1] December 2023	Paragraph 185 states: *"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development."* Paragraph 196 states: *"Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas."*
European Directive 2011/92/EU[2]	European Directive 2011/92/EU, as amended by European Directive 2014/52/EU, requires Environmental Statement to include, inter alia, an assessment of the potential cumulative effects of the development.
Town and Country Planning (Environmental Impact Assessment) Regulations (2017)[3]	Schedule 4 of the EIA Regulations requires an ES to identify and assess the likely significant cumulative effects of a development, either cumulatively with other developments or the in-combination environmental effects of a development on identified receptors. Schedule 4 part 5 (e) of the EIA Regulations requires the ES to include a description of the likely significant effects of development on the environment resulting from the cumulation of effects with other existing and/or approved projects. In doing so, there is a requirement for the EIA process undertaken to take into account any existing environmental problems relating to areas of particular importance likely to be affected, or the use of natural resources. The requirement to assess the cumulation of effects of development is also set out in Regulation 4(2) (e) of the EIA Regulations. This states that the EIA must identify, describe and assess, in an appropriate manner, the direct and indirect significant effects of the proposed development arising from the interaction between the following factors: - Population and human health

[1] Ministry of Housing, Communities & Local Government (2019). Revised National Planning Policy Framework [online]. Available at: Revised National Planning Policy Framework - GOV.UK (www.gov.uk) [Accessed 14 April 2023].

[2] European Union, 2011: European Directive 2011/92/EU, as amended by European Directive 2014/52/EU, on the assessment of the effects of certain public and private projects on the environment [online]. Available at: EUR-Lex - 32011L0092 - EN - EUR-Lex (europa.eu)

[3] Ministry for Housing, Communities and Local Government, 2017: Town and Country Planning (Environmental Impact Assessment) Regulations 2017, Statutory Instrument No. 571

Legislation / policy	Summary of requirements
	- Biodiversity - Land and soil - Water - Air - Climate - Material assets - Cultural heritage - Landscape.

22.3.2. The technical standards and guidance applicable to cumulative effects are set out in Table 22-2 below.

Table 22-2 - Technical standards and guidance for Cumulative Effects Assessment

Technical standards / guidance	Summary of requirements
Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment. Planning Inspectorate (PINS)[4].	This advice provides an overview of the cumulative effects assessment process that applicants can adopt, and guidance regarding a staged approach to cumulative effects assessment of Nationally Significant Infrastructure Projects (NSIPs). Whilst the Proposed Development is not an NSIP, the approach set out in this advice is considered transferable.
Design Manual for Roads and Bridges (DMRB) LA 104[5]	This document sets the standard for EIA in respect of road schemes. It suggests criteria for determining the significance of cumulative effects in terms of their impact on project decision making and is considered to be transferable in concept.
Planning Practice Guidance: Environmental Impact Assessment[6]	Paragraph 024 states: "*The local planning authorities always have regard to possible cumulative effects from existing or approved development.*"

22.4. Assessment methodology

22.4.1. Schedule 4 of the Environmental Impact Assessment Regulations 2017 (EIA Regulations) requires an Environmental Statement (ES) to identify and assess the likely significant cumulative effects of a development, either acting with other developments (inter-project effects) or the in-combination and synergistic effects of the Proposed Development itself on receptors and resources (intra-project effects). The reporting in this CEA chapter is therefore divided into two parts:

[4] Guidance: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment. Available at: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK. Accessed 06.11.2024. Published on 20 September 2024, this restructures the advice previously set out in Planning Inspectorate Advice Note 17: Cumulative effects assessment relevant to nationally significant infrastructure projects[online]. Available at: Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects | National Infrastructure Planning (planninginspectorate.gov.uk)

[5] Standard for Highways. 2020. LA 104 Environmental assessment and monitoring. Available at: LA 104 - Environmental assessment and monitoring (standardsforhighways.co.uk). Accessed 08.08.2023.

[6] Department for Levelling Up, Housing and Communities (May 2020) Planning Practice Guidance: Environmental Impact Assessment [Online]. Available at: Environmental Impact Assessment - GOV.UK (www.gov.uk)

- Intra-project CEA, cross-topic – the way in which the effects of the Proposed Development may be experienced in their totality by individual receptors. The intra-project CEA considers effects of the Proposed Development reported across individual topics, bringing findings together to comment on in-combination and synergistic effects that may arise for certain receptors. This is informed by the cumulative effects assessment reported in each of the separate topic chapters.
- Inter-project CEA, cross-topic – the in-combination, additive and/or synergistic effects that may arise due to receptors experiencing impacts from both the Proposed Development and one or more other Reasonably Foreseeable Future Projects (RFFPs). The inter-project CEA explores the interaction of the Proposed Development with eight RFFPs that have been shortlisted as relevant for the assessment.

22.4.2. In order to undertake the inter-project effects assessment, a list of RFFPs that are in the planning process needs to be established. The list of developments with the potential to have significant cumulative effects with the Proposed Development is identified in the first two stages of a four-stage process – this is described within this methodology section. For each of the environmental topics, a screening process has been undertaken, culminating in the identification of the potential for cumulative effects to arise between the Proposed Development and named RFFPs, which are then identified and assessed across topics.

Study area

22.4.3. The CEA considers two distinct types of cumulative effects – intra-project and inter-project. The study area differs between these two typologies, as summarised below.

Intra-project effects

22.4.4. The study area for the assessment of intra-project effects of the Proposed Development reflects the study areas, termed the Spatial Zones of Influence (ZoI), which have been identified within the relevant topic chapters of this ES (Chapters 7-21, inclusive). These thresholds and ZoI are based upon a combination of guidance and professional judgement and take into account the nature and location of the Proposed Development – they differ by topic.

22.4.5. The intra-project cumulative effects study area is therefore based on the geographical extent at which significant residual cumulative intra-project effects have been identified within the contributing specialist topic assessments.

Inter-project effects

22.4.6. The study area for the identification of ‘other development’ for inclusion in the assessment of inter-project effects in based upon thresholds and spatial areas. These have been set out in the Scoping Report and are reproduced in the methodology of this chapter, with the distance from the Site boundary defined depending on the development type. The maximum extent of the cumulative inter-projects effects study area is 5 km from the edge of the Site.

Methodology

22.4.7. The CEA methodology has been informed by the DMRB LA104 guidance, PINS guidance and the principles to be applied to CEA as expressed within the NPPF; and developed on the basis of professional judgement and experience with a focus on generating tangible and practical outcomes from the assessment. DMRB LA 104 (paras. 3.19-3.22) was published in August 2020. It is focused on highways projects but contains core principles that are considered transferable. This includes the need

to assess both 'single project' impacts acting together, as well as 'different projects' acting together with the project being assessed.

22.4.8. PINS Advice Note 17[7] was most recently published as version 2 (August 2019)8. PINS has since restructured the material, which is now titled 'Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment'[9]. The guidance itself is largely unchanged and continues to advocate a four-stage approach that moves from the establishment of a long list of 'other existing development and/or approved development', through to a short list of the most likely of these to interact with a project's 'Zones of Influence' in order to give rise to potentially significant cumulative effects. Stages 3 and 4 then relate to information gathering and assessment, respectively. The focus is on proportionate and focused assessment of the principal interactions only, allied to correct apportionment of impacts between projects and, if appropriate and feasible, the identification of co-ordinated mitigation strategies.

22.4.9. The methodology used for the CEA for the Proposed Development is a hybrid of these two approaches. The consideration of cumulative impacts is drawn together on the basis of receptors and/or biophysical features deemed likely to experience effects as a consequence of cumulative impacts, whether intra-project or inter-project or, potentially, both. The sensitivity of a receptor or biophysical features to changes and the magnitude of impacts (combining to become cumulative impacts) themselves determine the significance of the resultant cumulative effect or effects, with reference to the 'significance of effects descriptors' published in DMRB LA10410. The PINS advice sets out criteria that need to be considered when determining the significance of cumulative effects, which are used in this CEA:

- The duration of the effect
- The geographical area of the effect
- The type of effect
- The frequency of the effect
- The 'value' and resilience of the receptor affected; and
- The likely success of mitigation.

22.4.10. The CEA approach as a whole addresses intra-project cumulative effects both within topics and across topics, during both construction and operation. It also addresses inter-project cumulative effects both within topic and across topics with reference to the eight projects on the final RFFP shortlist. The level of detail within the inter-project assessment has been determined by the publicly available data relating to RFFPs and the focus is on a proportionate assessment that duly reflects the contribution of the Proposed Development to the inter-project cumulative effects that are reported.

22.4.11. Where potential for cumulative effects is identified, consideration is given to approaches to avoid or lessen these effects. Where appropriate, any additional mitigation has been discussed with the relevant stakeholders, which may include third parties in the case of inter-project effects. Commentary is provided on the significance of residual effects, assuming effective implementation of proposed additional mitigation. This commentary adopts a precautionary approach, meaning that where there is uncertainty about outcomes, the source of this uncertainty is described and a worst-case position is

[7] National Infrastructure Planning. 2019. Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects. Version 2. Available at: Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects | National Infrastructure Planning (planninginspectorate.gov.uk). Accessed 08.08.2023.

[9] Guidance: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (September 2024). Available at: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK. Accessed 06.11.2024

[10] Standard for Highways. 2020. LA 104 Environmental assessment and monitoring. Available at: LA 104 - Environmental assessment and monitoring (standardsforhighways.co.uk). Accessed 08.08.2023.

assumed. The conclusions are supported by information about ways in which cumulative effects associated with the worst-case position may be lessened.

Intra-project effects – approach to assessment

22.4.12. Intra-project effects result from the different environmental impacts of the Proposed Development that may affect the same receptor or resource, potentially producing a greater magnitude of impact and therefore potential for a more significant effect when considered together than when considered in isolation. For example, a local resident might only experience minor effects from construction noise and construction dust when considered separately; however, the combination of the two together may be considered to give rise to a significant effect.

22.4.13. In line with PINS advice, intra-project effects are reported in the topic-specific chapters where possible e.g. the impact of noise, changes in air quality and changes in water quality on ecological receptors.

22.4.14. The assessment methodology for intra-project effects requires the identification of impact interactions associated with the Proposed Development on key environmental receptors/resources. This ensures that the ES is not a series of separate assessments collated into one document, but rather a comprehensive assessment drawing together all the environmental effects of the proposals.

22.4.15. The value/sensitivity of receptors/resources and magnitude of impact is determined by the criteria set within the individual topic chapters of the ES. More generally, the assessment of intra-project effects considers the following factors:

- The likely timing and duration of the effect (temporary or permanent).
- The extent of the effect (geographical area of an effect).
- The type of the effect (additive or synergistic).
- The frequency of the effect.
- The value and resilience of receptors/resources.
- The likely success of proposed mitigation.

22.4.16. The assessment considers residual effects, after mitigation has been taken into account, with receptors/resources affected by two or more residual effects included (significant and non-significant).

22.4.17. The residual effects identified within the technical topic chapters of the ES have been assessed to identify potential intra-project cumulative effects across the different topics using professional judgement and a qualitative assessment approach.

Inter-project effects – approach to assessment

22.4.18. Inter-project effects may arise from the combined effects of several different projects, in combination with the Proposed Development being assessed. This can include multiple impacts of the same or similar type from a number of different projects leading to additive, in-combination or synergistic effects upon that same receptor or resource.

22.4.19. The EIA Regulations do not specifically state which types of development should be included in the cumulative effects assessment or at what stage in the planning process the other schemes need to be.

22.4.20. The assessment of cumulative effects arising from the Proposed Development, in combination with other development, primarily constitutes a desk-top study of planning documents covering the location of projects considered relevant to the assessment. This broadly focuses on the collection of information

relating to the background of RFFPs, their expected timelines and likely environmental impacts. Online aerial mapping was used to confirm if any of the identified projects have already been built out or are under construction and can therefore be excluded from the cumulative effects assessment in the ES, as they form part of the baseline or future baseline. A site visit has been undertaken to enable the confirmation of the RFFP shortlist and assumptions made for the purposes of the CEA.

22.4.21. The principle of the inter-project cumulative assessment is based on the four-stage assessment approach to cumulative assessment for NSIPs, as outlined by PINS:

- Stage 1: Establish the Proposed Development's ZoI and long list of 'Other Development' (termed RFFPs in this chapter).
- Stage 2: Identify shortlist of 'other development' (RFFPs) – apply threshold criteria based on temporal scope, the scale and nature of other development and any other relevant factors to assist in deciding whether to include or exclude 'other development'.
- Stage 3: Information gathering – compile detailed information on the 'other development' shortlisted, including proposed design and location, programme of construction, operation and decommissioning and environmental assessment information.
- Stage 4: Assessment – assess the cumulative effects of the Proposed Development with the 'other development' (RFFPs) based on factors including duration of effect, extent of effect, type of effect, frequency of the effect, value and resilience of receptors and likely success of mitigation.

22.4.22. Further details of each stage are given in the following paragraphs.

Stage 1

22.4.23. Larger, more substantial, developments will have wider ranging environmental effects than smaller and more local developments. In recognition of this, and to facilitate a proportionate assessment, the search criteria used to identify the longlist of committed developments is as follows:

- Major planning applications within 250 m of the Proposed Development boundary. This encompasses planning applications for 10 or more residential properties, planning applications incorporating commercial/recreational floorspace over 1,000 sqm, or a site exceeding 1 ha.
- Planning applications within the Site boundary that have been granted planning permission or are pending determination within a time frame that reflects the typical 3-year period within which granted developments must commence works (at the point at which the RFFP long list is first produced; and updated at each subsequent review of the RFFP long list).
- Planning applications or consented development that are accompanied by an ES or non-statutory environmental report, situated within 1 km of the Site boundary; typically, likely to produce an uplift of more than 10,000 sqm of mixed use floorspace or over 150 residential units.
- Development Plan projects scheduled for development within the local development plan that are within 500 m of the Site boundary (with the flexibility to consider additional projects if consultation with technical stakeholders identifies a need).

22.4.24. The inclusion of such projects is subject to desk-based validation of sufficient evidence available relating to the projects to allow a meaningful cumulative effects assessment. In all cases, only planning permissions that are less than 5 years old have been captured, as any unimplemented permissions older than this are highly unlikely to be extant.

22.4.25. Major development and minor development have been defined in accordance with Article 2 of the Town and Country Planning Development Management Procedure (England) Order 2015. Thresholds for a major development includes more than 10 new houses, a site area of 0.5 ha, the provision of a building or buildings where the floor space to be created by the development is 1,000 square metres or more;

and all mineral and waste developments. Development falling below these thresholds is classed as minor development.

22.4.26. A long list of committed developments, which, in conjunction with the Proposed Development, could have significant cumulative effects, was established following a desk-based review of the adopted/emerging local plans and planning history in the Manchester City Council administrative areas. In order to identify relevant NSIPs, the PINS website was consulted. The long list of committed developments was provided in the Scoping Report and consulted upon through the process of requesting a Scoping Opinion.

Stage 2

22.4.27. The long list of other development established in Stage 1 is converted into a shorter more relevant and manageable list by discounting on the following basis:

- Are known to have already been implemented (and are then identified for inclusion in the pre-construction baseline as receptors)
- By virtue of their scale, nature, location, or programme, are considered unlikely to give rise to significant cumulative effects.

22.4.28. A Site visit was undertaken, which enabled verification of the progression of selected RFFPs within the study area. Subsequently, as part of Stage 2 and where appropriate, the list of RFFPs for each topic to assess has been further refined taking into account the ZOI specific to each topic.

Stage 3

22.4.29. Some cumulative construction effects may occur as a result of the construction programme for the Proposed Development overlapping with that of other developments. Therefore, the construction information for the Proposed Development and anything that is publicly available for other developments (RFFPs) have been used to help identify significant cumulative effects that could occur from concurrent construction activities. The construction information for the Proposed Development is presented in Chapter 6 Site and Proposed Development description.

Stage 4

22.4.30. Where significant cumulative effects, beyond those identified as residual effects from the Proposed Development in isolation, are identified, additional mitigation measures will be set out if applicable.

Significance of cumulative effects

22.4.31. There is no agreed industry standard for determining the type, magnitude and significance of cumulative effects - it is a matter for professional judgement.

22.4.32. On this basis, a narrative approach has been used to describe the factors that have contributed to conclusions about an overall combined significance of the cumulative intra-project effects that may arise from the impacts of all identified single-topic residual effects, working together. This reflects a characterisation of the impact that considers the duration, extent, type and frequency of the effect (as expressed earlier within the methodology), cross-referenced to the value and resilience of the affected receptors and the nature and likely success of embedded and essential mitigation already noted within topic chapters. Conclusions are then drawn about the magnitude of impact and significance of cumulative effects, drawing on the guidance in DMRB LA104 at Table 3.4N (Magnitude of impact and typical descriptors), Table 3.7 (Significance categories and typical descriptors) and Table 3.8.1 (Significance matrix).

22.4.33. The assessment of inter-project effects draws on the topic-specific assessments to comment on the effects of the Proposed Development on relevant receptors. This is then combined with relevant publicly available information relating to the RFFPs. As with the intra-project assessment, the significance of cumulative effects reported is based on professional judgement and a narrative is included reflecting on the characteristics of the effect, potential efficacy of mitigation proposed and typical descriptors of significance, as set out in the DMRB LA104 standard.

22.4.34. It is the residual effects assessment that forms the overall conclusions of the cumulative effects assessment.

22.4.35. Table 22-3 signposts where the cumulative impacts and potential effects are reported within the ES as a whole.

Table 22-3 - Types of cumulative impacts and location of reporting within ES

Types of cumulative impact	Location of reporting within ES
Intra-project cumulative impacts (single project impacts)	
Intra-project in-combination cumulative impacts, identified within specialist topic chapters	**If relevant, reported within specialist topic chapters** Reporting is provided under cumulative effects sub-heading in instances where a receptor/receptors has/have been assessed as experiencing a number of different environmental factors relating to that topic.
Intra-project in-combination cumulative impacts across topics	**Reported within this CEA chapter** Reporting is provided within this CEA chapter in instances where a receptor/receptors has/have been assessed as experiencing different environmental factors relating to two or more specialist topic assessments.
Inter-project cumulative impacts (different project impacts)	
Inter-project additive cumulative impacts identified within specialist topic chapters	**If relevant, reported within specialist topic chapters** Reporting is provided under cumulative effects sub-heading in instances where a receptor/receptors has/have been assessed as experiencing a Proposed Development impact that combines with the same type of impact from one or more RFFPs, to generate a greater magnitude of impact.
Inter-project additive cumulative impacts across topics	**Reported within this CEA chapter** Reporting is provided within this CEA chapter in instances where a receptor/receptors has/have been identified as experiencing additive cumulative impacts within at least two specialist topic chapters.
Inter-project in-combination cumulative impacts identified within specialist topic chapters	**If relevant, reported within specialist topic chapters** Reporting is provided under the cumulative effects sub-heading in instances where a receptor/receptors has/have been assessed as experiencing a Proposed Development impact that combines with one or more different types of impact relevant to the topic, from one or more RFFPs, to generate a third type of impact.
Inter-project in-combination cumulative impacts across topics	**Reported within this CEA chapter** Reporting is provided within this CEA chapter in instances where a receptor/receptors has/have been assessed as experiencing a

Types of cumulative impact	Location of reporting within ES
	Proposed Development impact and different type of RFFP impact that combine to generate a third type of impact.

Assumptions and limitations

22.4.36. Assumptions have been made together with the identification of limitations that apply generally to the EIA, which are set out in ES (Volume 2) Chapter 4: EIA Approach and Methodology and overall methodology, and within the Scoping Report.

22.4.37. The principal assumptions that underpin the CEA relate to the RFFP shortlist. Table 22-4 sets out the assumptions that have been made regarding the progression of each RFFP relative to the Proposed Development construction and operational phases. This governs the way in which each RFFP has been considered in the assessment of inter-project effects throughout the ES.

22.4.38. In developing assumptions relating to the RFFPs, a Site visit was undertaken (May 2024) and relevant MCC officers have been consulted. However, the data is necessarily a snapshot in time and is limited by this factor. Additional developments may be accepted into the planning system at any time and those that are eligible but post-date the shortlisting process will not be captured within the inter-project assessment.

Consultation

22.4.39. As stated above, in developing assumptions relating to the RFFPs, relevant MCC officers have been consulted. In addition, as the CEA draws on information provided within the other specialist topic assessments within the ES, consultation undertaken to inform their production is reflected in the overall findings. The CEA team has also been cognisant of community feedback received through consultation activities in formulating overall conclusions regarding receptor sensitivity and ability to adapt to change.

Desk study

22.4.40. The study area for the inter-project CEA lies within the administrative boundary of MCC. The following data sources have been interrogated in the process of generating the long and short lists of RFFPs for inclusion in the CEA for the Proposed Development:

- The Planning Inspectorate list of NSIPs
- MCC Local Plan (adopted June 2019)
- MCC planning application register

22.4.41. The baseline for the intra-project CEA is outlined in the topic specific chapters so no further desk study and/ or data gathering has been undertaken specifically for this element of the CEA.

22.5. Baseline conditions

22.5.1. The first stage of the assessment was to establish the nature of the existing baseline.

22.5.2. The CEA is undertaken in relation to three separate baselines, which form the basis for the identification and description of the CEA at different stages of the progression of the Proposed Development. This is set out in this section.

Baseline Conditions

Current baseline

22.5.3. The CEA relies on the inputs from the specialist topic chapters in order to consider the level of change (impact) and resultant effects that may arise due to the Proposed Development in its totality (intra-project effects) and the Proposed Development in conjunction with one or more RFFPs (inter-project effects). On that basis, the current baseline conditions of the study area are as set out in the preceding topic chapters and are not repeated here.

Pre-construction baseline

22.5.4. The pre-construction baseline is a projection of the environmental conditions that are anticipated to exist immediately prior to the start of Proposed Development construction. The desk-study work undertaken to develop the RFFP for the CEA is key to informing this baseline, supported by consultation with MCC officers (through the Scoping stage) on-Site verification of the progression of shortlisted RFFPs in relation to the planned progression of the Proposed Development.

22.5.5. The pre-construction baseline for all preceding topic assessment work has assumed that the following development, which is currently under-construction, will be operational prior to Proposed Development construction starting:

- Lomax Apartments (120149/FO/2018)

22.5.6. The CEA is also undertaken on the assumption that any impacts arising from the above development will already have been experienced by relevant receptors in the study area, representing a permanent change that happens prior to Proposed Development construction. This development is therefore considered to form part of the pre-construction baseline conditions and is excluded from the CEA on this basis.

Construction

22.5.7. The inter-project CEA is based on consideration of the evolution of the shortlisted RFFPs relative to the Proposed Development, during the Proposed Development construction phase. Assumptions have been made for each RFFP about when it is likely to become operational. These assumptions are based on the published information available for the RFFPs and professional judgement regarding typical timescales for delivery for projects of different types. They are provided in the RFFP shortlist, which is at Table 22-4 and place each RFFP into the most appropriate of the following categories:

- ‘Under construction’ – in general terms, these RFFPs will be under construction in the same timeframe as the Proposed Development and the CEA will explore combined construction impacts. It is noted that a number of the RFFPs are anticipated to follow on from the delivery of the Proposed Development and will have construction periods that extend into the Proposed Development operational phase. Such RFFPs will be placed within the ‘under construction’ category.
- ‘Construction/receptor’ – these RFFPs are anticipated to come into full operation within the Proposed Development construction phase. The CEA will explore combined construction impacts, as well as the presence of new receptors at the RFFP, together with the physical presence of the development itself and consider the interaction with impacts from the Proposed Development.
- ‘Receptor’ – these RFFPs are predicted to enter full operation early within the Proposed Development construction phase. The CEA will focus on the presence of new receptors at the RFFP, together with the physical presence of the development itself while the Proposed Development is in construction. This will form the basis of the interaction of impacts from the Proposed Development assessed in the CEA.

22.5.8. These assumptions underpin the qualitative inter-project CEA for the construction phase.

Operational Future baseline

22.5.9. The future baseline is a projection of the environmental conditions that are anticipated to exist, at the point in time when the Proposed Development is expected to start operating. Due to the temporal criteria applied to the identification of RFFPs, it is anticipated that the majority of the RFFPs will be in full operation at the point at which the Proposed Development enters its operational phase.

Table 22-4 - RFFP shortlist and relevant CEA assumptions for inter-project assessment

No.	Reference	Location	Development Description	Planning Status	CEA Assumptions	Distance from Proposed Development
1	**128191/FO/2020**	Land Bounded By Ashton Canal, Great Ancoats Street, Munday Street And Pollard Street Manchester M4 7DS	Erection of five office buildings and new public realm comprising: 3 no. 8 storey mixed use buildings (Buildings A, D and E) comprising workspaces (Use Class E) together with flexible uses at ground floor (Use Class E) and/or theatre/bar (Sui Generis) together with a multi-use rooftop amenity area to Building A; and 2 no. 5 storey mixed use buildings (Buildings B and C) comprising workspaces (Use Class E) together with flexible uses at ground floor (Use Class E) and/or theatre/bar (Sui Generis); together with cycle parking, creation of pedestrian and cycle routes, external amenity spaces, new public realm and other associated engineering and infrastructure works	Approved Dec 2022	**Proposed Development construction phase:** Under construction **Proposed Development operational phase:** Receptor	250 m
2	**132574/FO/2021**	Land South Of Stables Car Park Paradise Wharf Ducie Street Manchester M1 2JN	Erection of 4 no. part 4, part 5 storey, three bedroom townhouses (Use Class C3) with associated car / cycle parking, recessed balconies and rooftop terraces.	Approved July 2022	**Proposed Development construction phase**: Under construction **Proposed Development operational phase:** Receptor	215 m
3	**126608/FO/2020**	Land To The South Of Store Street Manchester M1 2NE	Erection of part 4, part 11 storey residential (Class C3) development (with roof top plant room) comprising 66 (Class C3) residential units (3 x 2 bed town houses, 46 x two bed apartments and 17 x one bed apartments) together with associated car parking (10 spaces including 5 EVC spaces), cycle parking (66 spaces) communal roof terrace (level 6), landscaping and ancillary infrastructure including rooftop PV panels, alterations to access onto Store Street	Approved April 2020	**Proposed Development construction phase:** Under construction **Proposed Development operational phase:** Receptor	200 m
4	**135662/FO/2022**	Laystall Street / Great Ancoats Street Manchester M4 6DE	Erection of a 20storey building to create a 154 bedroom hotel (Class C1) above 2 basement levels with ancillary café / bar / restaurant and gym and other associated works including highway improvements, cycle parking and creation of accessible parking bay following removal of on-site structures.	Approved June 2023	**Proposed Development construction phase:** Under construction **Proposed Development operational phase:** Receptor	26 m
5	**135675/FO/2022**	Tariff Street Manchester	Erection of two residential apartment buildings (Use Class C3) comprising Block 1 -part 9, part 10 (plus roof level amenity block) and Block 2 - 12 storey building (comprising of 261 dwellings in total) above basement levels with ground floor commercial units (Use Class E (excluding E (b)), associated residents amenity space, cycle parking, landscaping, access, street loading and other associated works following demolition of the existing building and structures on site.	Approved - Jun 2023	**Proposed Development construction phase:** Under construction **Proposed Development operational phase:** Receptor	120 m
6	**137346/FO/2023**	Land Bounded By Naval Street To The North, Poland Street To The East, Jersey Street To The South And Radium Street To The West Manchester	Erection of a part 5, part 10 storey building comprising residential apartments and townhouses, residents' amenity space (Use Class C3a) (265 new dwellings), ground floor commercial (Use Class E), cycle and car parking, landscaping, access and servicing, and other associated works following demolition of existing structures	Approved 12 December 2023	**Proposed Development construction phase:** Under construction **Proposed Development operational phase:** Receptor	210 m
7	**122598/FO/2019**	Land Between Coppersmith Road, Lockyard Lane And New	Proposed erection of a residential development comprising 34 no. 3 storey dwellinghouses, 2 no. 6 storey apartment blocks comprising 60 no. apartments with commercial space at the	Approved March 2020	**Proposed Development pre-construction (i.e. in baseline):** 34 no. 3-storey townhouses	125 m

No.	Reference	Location	Development Description	Planning Status	CEA Assumptions	Distance from Proposed Development
		Islington Marina Manchester	ground floor (Use Classes A1, A2, A3, A4, B1 and D1) with outdoor seating, all with associated car parking, landscaping, public realm works and boundary treatments		**Proposed Development construction phase:** 6-storey apartment blocks under construction **Proposed Development operational phase:** Receptor	
8	128911/FO/2020	Laystall Street, Manchester	Erection of 9 storey residential building (Use Class C3) comprising 89 residential units (28 x 1 bed and 61 x 2 bed) and conversion of and 3 storey extension to 32-34 Laystall Street for use as offices (Class E) with associated external works following demolition of outrigger and associated structures along with other associated works including access, servicing, landscaping and secure cycle parking	Approved February 2022	**Proposed Development construction phase:** Under construction **Proposed Development operational phase:** Receptor	106 m

22.6. Potential cumulative effects

Construction

22.6.1. During the Proposed Development construction phase, there are four main project interactions that offer the greatest likelihood of significant cumulative effects arising:

- Additive impacts on a receptor from two or more construction sites operating concurrently.
- Additive impacts on a receptor from construction traffic associated with two or more construction programmes.
- Changes in traffic flow and composition from development coming into operation (and therefore introducing new receptors and operational trip generators) combining with construction traffic.
- Additive and/or synergistic impacts on a receptor from two or more projects changing land use, landform, planting, vegetation and the introduction of new built development.

22.6.2. Cumulative inter-project effects may arise from the following impact types in the context of the above, during the Proposed Development construction phase:

- Additive impacts from dust generation associated with construction activities, including construction vehicles, principally affecting ecological and human health receptors.
- Additive impacts from vehicle emissions and increased construction vehicle movements associated with construction activities and also additional operational traffic on the network from RFFPs that are completed within the Proposed Development construction phase, principally affecting ecological and human health receptors.
- Additive impacts from noise created by construction activities, including construction plant and vehicles, principally affecting ecological and human health receptors.
- Additive impacts from increased light by construction activities, affecting ecological and human health receptors.
- Additive impacts from loss or severance of habitat and/or loss or severance of habitat connectivity across the study area, principally affecting ecological receptors and landscape character.
- Additive and in-combination disturbance impacts from changes in activity levels and associated noise, vibration and lighting, potentially experienced by ecological and human receptors.
- Additive and in-combination impacts on water quality (surface and groundwater) due to mobilisation of contaminants and/or introduction/ release of pollutants.
- Additive and/or synergistic impacts on flood risk due to changes in flow paths, runoff, ground compaction, blockage of sewers by construction debris, localised damage to channel and riparian features, and availability of attenuation.
- Additive impacts on hydromorphology, principally affecting the water environment and ecological receptors.
- Visual change and intrusion impacts associated with demolition, construction activities, including construction vehicles and the evolving changes from the introduction of new built features within the landscape from two or more developments, principally affecting human health receptors.
- Additive impacts on soil erosion from construction activities, principally affecting geology and ecological receptors.
- Additive and/or in-combination impacts on ground stability where developments are located in proximity to each other.
- Additive and/or in-combination impacts to the setting of heritage assets due to the presence of construction activities and emerging permanent development.

- Additive and/or synergistic impacts on the availability of and accessibility to opportunities for leisure and recreation including open space and indoor facilities.
- Additive and/or synergistic impacts on the availability of and accessibility to opportunities for work and training.

Operation

22.6.3. Once the Proposed Development is operational, there are three main project interactions that offer the greatest likelihood of significant cumulative effects arising:

- Changes in the location of key trip generators, traffic flow and composition of traffic, relative to receptors.
- Permanent changes in land use and overall increase in built development experienced by receptors, introducing new sources of noise and changing the urban form.
- Townscape character change from a brownfield plot to a large-scale development with public realm.

22.6.4. Cumulative inter-project effects in the operational phase may arise from the following impact types:

- Additive impacts from vehicle emissions associated with traffic along new routes and generated by new developments.
- Additive noise impacts associated with traffic using new routes and generated by and within new developments.
- In-combination and synergistic noise impacts associated with changes in the source and composition of noise due to new routes and new development within the study area, including plant.
- Additive and in-combination disturbance impacts from changes in activity levels and types, lighting, presence of new reflective surfaces and alterations to traffic, potentially experienced by ecological and human receptors.
- Additive and/or synergistic impacts on flood risk due to changes in flow paths, runoff and availability of attenuation.
- Additive impacts on hydromorphology.
- Additive impacts of morphological changes at any watercourse crossing points could result in a reduction in flow dynamics, loss of sediment continuity, fine sediment deposition, habitat severance, a potential barrier to fish movement and loss of habitat for macrophytes through shading.
- Additive and/ or in-combination impacts on water quality (surface and groundwater) due to mobilisation of contaminants and/or introduction/ release of pollutants from traffic.
- Additive impacts of fragmented vegetation and areas of new planting and seeding as part of Proposed Development design.
- Visual impacts associated with permanent changes to landscape character and the presence of built development from two or more developments, principally affecting human receptors and the setting of heritage assets.
- Additive and/or synergistic impacts on the availability of and accessibility to opportunities for leisure and recreation including open space and indoor facilities, principally affecting human health and socio-economic factors.
- Additive and/or synergistic impacts on the availability of and accessibility to opportunities for work and training, principally affecting human health and socio-economic factors.

22.7. Assessment of effects

22.7.1. This section presents the findings of the CEA for the construction and operation of the Proposed Development.

22.7.2. This section identifies the likely significant effects that are predicted to occur, during both construction and operation, and highlights the additional mitigation measures that are proposed to reduce the magnitude of impacts that could lead to significant effects.

Construction phase

Embedded mitigation

22.7.3. The following section outlines the embedded mitigation measures that influence the identification of potential cumulative impacts and the resulting assessment of effects.

22.7.4. The CEA draws on the findings of the topic assessments, both in respect of intra-project effects and the contribution of the Proposed Development to potential inter-project effects. As a consequence of this, the embedded mitigation set out in the preceding topic chapters is all of relevance and is not repeated here.

22.7.5. Embedded mitigation measures include a number of means of meeting legal requirements or standard practices. These will be implemented as part of the Proposed Development, regardless of the assessment outcomes, for example, as a result of legislative requirements and/or standard best practice. For the purposes of the inter-project CEA, the same assumption regarding a minimum level of embedded mitigation is applied to proposals being brought forward by other developers in respect of developments that appear on the RFFP shortlist.

22.7.6. The Outline Construction Environmental Management Plan (OCEMP) in ES (Volume 4) Appendix 6.1 forms part of the embedded mitigation for the Proposed Development. In response to emerging best practice regarding community liaison and advance notice of works to directly affected persons (e.g. residents, businesses, and users of community facilities), the work of the Community Liaison Officer (CLO) is particularly influential in reducing the magnitude of Proposed Development cumulative impacts. The OCEMP presents a framework for the work of the CLO, which includes the preparation and implementation of a Community Engagement Plan (CEP), with enhanced requirements for engaging with the most sensitive receptors such as the Co-op Islington Academy. The OCEMP also establishes the requirement for the Principal Contractor to prepare and implement a Noise Monitoring and Management Plan, ideally to incorporate agreed working hours and thresholds for noise derived from the Section 61 consent process, subject to MCC's agreement.

22.7.7. The assessment of likely significant effects of the Proposed Development assumes that embedded mitigation measures are in place.

Construction intra-project effects

22.7.8. Impacts identified by different environmental topic assessments with potential to work in combination to affect a particular receptor group were identified via a matrix-based approach. A review of residual effects identified within each topic chapter was then undertaken to identify receptors experiencing more than one effect classified as at least minor adverse or equivalent. Receptors potentially experiencing minor or greater adverse effects were included in the assessment. Any negligible or neutral effects were discounted from the assessment.

Table 22-5 - Construction phase intra-project impact assessment on receptors across topics

Receptor	Air Quality and Dust	Biodiversity	Townscape and Visual Impact (TVIA)	Daylight, Sunlight, Overshadowing and Solar Glare (DSO &SG)	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind Microclimate	Human Health	Ground Conditions and Pollution
Co-op Academy New Islington, 10 Hugh Oldham Wy, Manchester M4 6EY	Identifies a medium dust risk to human health receptors including Co-op Academy New Islington. However, with the mitigation set out in the chapter in place, there is not likely to be any significant residual effects. Given the scale of the development, it is considered that any effect on air quality from construction traffic would be temporary and therefore not significant.	Not identified as a relevant or specific receptor	Townscape Character Area (TCA) 3 comprises a small area of townscape directly to the north of the Site comprising the New Islington Marina, Cotton Field Park, and the New Islington Academy. During construction, temporary impacts such as dust, noise, vibration, increase in construction traffic and changes to access routes around the Site. In particular, TCA 3 has the potential to be adversely affected. The TVIA assesses the effect on TCA 3 to be minor-moderate adverse.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor	Reports potentially significant increases in noise effects during all stages of the construction phase. Additionally, there is a 33% chance of just perceptible vibration (> 0.3 mm/s) at Co-op Academy. However, it is considered unlikely that the temporal threshold for a significant noise effect would be exceeded and the significant threshold for vibration is also not exceeded.	The chapter assesses indirect impacts of the injection of employment into the area as result of the construction jobs that the Proposed Development will create, exploring housing market and consequential impacts. The assumptions of the assessment indicate no substantial increases to the local population. As such, negligible and insignificant impact on the demand for education facility receptors is anticipated to occur.	Heavy Goods Vehicle traffic would be prohibited from use of minor routes in the transport network with the A465 Great Ancoats Street to carry the majority. The number of HGV is anticipated to below IEMA effect thresholds, it is anticipated that construction traffic will have a negligible impact on the transport network. The effect from construction traffic will be temporary / adverse and the significance of effect is considered to be Negligible and therefore not significant.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor	During construction, the co-op academy is expected to experience minor adverse human health effects from/for; ▪ Ambient air quality ▪ Ambient noise ▪ Sources of pollution and environmental exposures ▪ Townscape amenity ▪ Risk of injuries and death ▪ Characteristics of the transport network ▪ Access to work and training ▪ Community assets supporting health ▪ Walking and cycling routes supporting human health	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedures. ▪ Local and regional level recruitment. ▪ Management of the construction workforce. ▪ Adherence to all air quality, noise and other control measures within the OCEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan. ▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.											

Receptor	Air Quality and Dust	Biodiversity	Townscape and Visual Impact (TVIA)	Daylight, Sunlight, Overshadowing and Solar Glare (DSO &SG)	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind Microclimate	Human Health	Ground Conditions and Pollution
	Additional Mitigation	Additional mitigation proposed to specify actions that must be undertaken by the Contractor's appointed CLO, including the form of regular engagement with directly affected sensitive receptors, which would include specific commitments regarding engagement with staff and pupils of the Co-Op Academy. Meaningful engagement to be had would include a range of regular communication activities to inform the receptor of the progress of the construction phase as well as to liaise with the school to allow it to adapt teaching activities in response to advance notice of particular activities at the Site, such as proximate noisy works. The CLO once appointed should detail the methodology for meaningful engagement within a Community Engagement Plan (CEP). These requirements form part of the OCEMP, for further development by the Principal Contractor, once appointed. The contractor should also adhere to the requirements set out within a Considerate Contractors accreditation/ affiliation/ certification. Additionally, the method of piling, a particularly noisy construction activity, should be selected on the basis of noise minimisation. As far as possible, the least impactful construction techniques should be used. Continuous flight piling should be avoided. The works should be planned to accord with noise thresholds, which should ideally be agreed with the LPA through a Section 61 consent. These will be set out in a Noise Monitoring and Management Plan to be followed by the Principal Contractor – the production and implementation of this is required by the OCEMP. There is a commitment to use the temporary site hoardings to include artwork and information, which will be agreed with the LPA and local interest groups, as well as the school.										
	Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Townscape and Visual Impact, Noise and Vibration, Socio-economic, Transport, and Human Health. Resulting effects range from negligible to minor-moderate adverse. The townscape effect is cited as in-combination construction noise and dust, plus visual intrusion, which is also acknowledged in the human health assessment. The OCEMP establishes the framework for additional mitigation measures to be developed by the Principal Contractor, to include the appointment and work of the CLO, the preparation and implementation of the CEP, establishment of a complaints procedure and activities set out within the Noise Monitoring and Management Plan. There is a degree of uncertainty about how these additional mitigation measures may be developed, as they will be in the control of the Principal Contractor. Due to this uncertainty, a precautionary approach is adopted in reaching the conclusions of the assessment. However, the Principal Contractor will be appointed following an appropriate procurement process and will adhere to and adopt best practice for construction. Overall, acknowledging the commitment to additional mitigation measures, the cumulative impacts on the Co-op Academy New Islington are judged to have the potential to result in **minor adverse residual intra-project cumulative effects, which may increase to moderate adverse at limited times within the construction programme. Moderate adverse effects, should they arise, would be significant.**										

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Rochdale Canal	Identifies a low dust risk to ecological receptors. However, with the mitigation set out in the chapter in place, there is not likely to be any significant residual effects. Given the scale of the development, it is considered that any effect on air quality from construction traffic would be temporary and therefore not significant.	Rochdale Canal Stott's Lane – Ducie Street Basin SBI and Rochdale Canal could be affected by the Proposed Development as a result of dust and/or water pollution during construction. This could arise from accidental pollution (such as from machinery during construction) events or from surface run off into the SBI/canal. However, following mitigation, no significant effects are anticipated during construction.	The Rochdale Canal is encompassed within Townscape Character Area (TCA) 2 of the Townscape and Visual Impact assessment. During construction, temporary impacts such as dust, noise, vibration, increase in construction traffic and changes to access routes around the Site. In particular, TCA 2 has the potential to be adversely affected. The TVIA assesses the effect on TCA 2 to be minor adverse.	Not identified as a relevant or specific receptor.	Rochdale Canal Lock No.82 (medium value, 1247485) would be temporarily impacted by the construction of the Proposed Development. Construction works would be highly visible from these assets and would form a prominent and intrusive element in their settings. The magnitude of impact upon these assets of medium value has therefore been assessed to be high adverse, resulting in a major adverse significance of effect. There are multiple impacts linked to the construction phase of the Proposed Development and Rochdale Canal. These include; a minor adverse effect on setting for the Towpath footbridge and associated ramps opposite Union Street Bridge; a minor adverse effect on Rochdale Canal Road Bridge (Great Ancoats Street) (6456.1.0)	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor	Construction activities may pose a risk to water quality. This has been identified as a minor adverse impact to Rochdale Canal (western section). However, with mitigation in place, the residual significance of effect has been identified as Slight adverse. Additionally, construction activities may cause a risk of surface water ponding due to earthwork and soil compaction. This could result in the displacement of surface water and increase flood risk to the Rochdale Canal. The risk of flood risk due to construction activities has been identified as negligible to the Rochdale Canal; with mitigation in place, the residual significance of the effect has been identified as neutral/slight.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Reports that there is a non-significant impact on Rochdale Canal from land contamination after the Proposed Development's embedded mitigation has been implemented. The chapter considers the risk of land contamination resulting from construction activities to be very low with the effect on the receptor being negligible.

Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. ES Chapter mitigations most relevant to this receptor are set out within the OCEMP and relate to controls on pollutants from a range of possible sources, supported by procedures to manage accidental releases to ensure impact magnitudes are kept within acceptable thresholds.
Additional Mitigation	No additional mitigation required.

Residual CEA	Additive and in-combination impacts have been identified relating to Air Quality and Dust, Biodiversity, Townscape and Visual Impact, Historic Environment, Socio-economic, Water Resources and Flood Risk, and Ground Conditions and Pollution. The design of the Proposed Development and the environmental control measures set out within the OCEMP are influential in managing the magnitude of cumulative impacts. Overall, the cumulative impacts on receptors associated with the Rochdale Canal are judged to have the potential to result in **negligible to minor adverse residual intra-project cumulative effects. This is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Old Mill Street	Identifies a medium dust risk to human health receptors such as residents of apartment buildings on Old Mill Street. However, with the mitigation set out in the chapter in place, there is not likely to be any significant residual effects. Given the scale of the development, it is considered that any effect on air quality from construction traffic would be temporary and therefore not significant.	Not identified as a relevant or specific receptor.	View Point 13 encompasses Old Mill Street. Construction activities that are likely to affect viewpoints include the visibility of construction activities at street level in local views, such as hoarding, construction traffic and taller equipment. In mid-distant and distant views, there is potential for cranes to be visible on the skyline. The effect of construction on View Point 13 will be Minor-Moderate Adverse.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Heavy Goods Vehicle traffic would be prohibited from use of minor routes in the transport network with the A465 Great Ancoats Street to carry the majority The number of HGV is anticipated to below IEMA effect thresholds, it is anticipated that construction traffic will have a negligible impact on the transport network. The effect from construction traffic will be temporary / adverse and the significance of effect is considered to be Negligible and therefore not significant.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	During construction, residents of properties south of Old Mill Street are expected to experience minor adverse human health effects from/for; ▪ Ambient air quality ▪ Ambient noise ▪ Sources of pollution and environmental exposures ▪ Townscape amenity ▪ Risk of injuries and death ▪ Access to work and training	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedures. ▪ Local and regional level recruitment. ▪ Management of the construction workforce. ▪ Adherence to all air quality, noise and other control measures within the CEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan. ▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.											
Additional Mitigation	No additional mitigation required.											

Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Townscape and Visual Impact, Noise and Vibration, Transport, and Human Health. Resulting effects range from negligible to minor-moderate adverse. The townscape effect is cited as in-combination construction noise and dust, plus visual intrusion, which is also acknowledged in the human health assessment. Overall, the cumulative impacts on the receptor are judged to have the potential to result in **minor adverse residual intra-project cumulative effects. This is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Redhill Street	Identifies a medium dust risk to human health receptors such as apartments on Redhill Street Islington. However, with the mitigation set out in the chapter in place, there is not likely to be any significant residual effects. Given the scale of the development, it is considered that any effect on air quality from construction traffic would be temporary and therefore **not significant**.	Not identified as a relevant or specific receptor.	Redhill Street is encompassed in TCA 2. During construction, temporary impacts such as dust, noise, vibration, increase in construction traffic and changes to access routes around the Site. In particular, TCA 2 has the potential to be adversely affected. The TVIA assesses the effect on TCA 2 to be minor adverse. Redhill Street is also present within the context of viewpoints 2 and 3. Construction activities that are likely to affect viewpoints include the visibility of construction activities at street level in local views, such as hoarding, construction traffic and taller equipment. In mid-distant and distant views, there is potential for cranes to be visible on the skyline. The effect of construction on Viewpoint 2 will be minor-moderate adverse. Similarly, the effect of construction of viewpoint 3 will be moderate adverse.	Not identified as a relevant or specific receptor.	This topic makes reference to Store Street Aqueduct, which is a designated heritage asset. Impacts to this asset would result from temporary noise and visual intrusion to their settings from construction activities and the presence of the construction site. In consideration of the limited visibility of the Proposed Development Site from this asset, the magnitude of this impact has been assessed to be negligible adverse. The effect has been assessed to be minor adverse.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor.	Heavy Goods Vehicle traffic would be prohibited from use if minor routes in the transport network with the A465 Great Ancoats Street to carry the majority The number of HGV is anticipated to below IEMA effect thresholds, it is anticipated that construction traffic will have a negligible impact on the transport network. The effect from construction traffic will be temporary / adverse and the significance of effect is considered to be Negligible and therefore not significant.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	During construction, residents of properties between Redhill Street and Jersey Street; and businesses on Redhill Street (two separate receptor types) are expected to experience minor adverse human health effects from/for; ▪ Ambient air quality ▪ Ambient noise ▪ Sources of pollution and environmental exposures ▪ Townscape amenity ▪ Risk of injuries and death ▪ Access to work and training	Not identified as a relevant or specific receptor
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedures. ▪ Local and regional level recruitment. ▪ Management of the construction workforce											

	▪ Adherence to all air quality, noise and other control measures within the OCEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan ▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.
Additional Mitigation	No additional mitigation required.
Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Townscape and Visual Impact, Noise and Vibration, Transport, and Human Health. Resulting effects range from negligible to minor-moderate adverse. The townscape effect is cited as in-combination construction noise and dust, plus visual intrusion, which is also acknowledged in the human health assessment; however, it is also acknowledged as principally a transient effect experienced at street level. Overall, the cumulative impacts on the receptor are judged to have the potential to result in **negligible to minor adverse residual intra-project cumulative effects. This is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Great Ancoats Street	Identifies a medium dust risk to human health receptors such as apartments on Great Ancoats Street. However, with the mitigation set out in the chapter in place, there is not likely to be any significant residual effects. Given the scale of the development, it is considered that any effect on air quality from construction traffic would be temporary and therefore not significant.	Not identified as a relevant or specific receptor.	TCA 1 encompasses Great Ancoats Street. During construction, temporary impacts such as dust, noise, vibration, increase in construction traffic and changes to access routes around the Site. In particular, TCA 1 has the potential to be adversely affected. The TVIA assesses the effect on TCA 1 to be Minor-Moderate. Great Ancoats Street is also present within the context of viewpoints 7, 9 and 12. Construction activities that are likely to affect viewpoints include the visibility of construction activities at street level in local views, such as hoarding, construction traffic and taller equipment. In mid-distant and distant views, there is potential for cranes to be visible on the skyline. The effect of construction on Viewpoint 7 will be minor adverse. Similarly, the effect of construction of viewpoint 12 will be moderate adverse. Finally, the effect on viewpoint 9 will be negligible.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Heavy Goods Vehicle traffic would be prohibited from use of minor routes in the transport network with the A465 Great Ancoats Street to carry the majority The number of HGV is anticipated to below IEMA effect thresholds, it is anticipated that construction traffic will have a negligible impact on the transport network. The effect from construction traffic will be temporary / adverse and the significance of effect is considered to be Negligible and therefore not significant.	There may be surface water runoff from the Proposed Development to Great Ancoats Street due to increased impermeable surface and diversion of overland runoff. The risk of flood risk due to construction activities has been identified as negligible to Great Ancoats Street; with mitigation in place, the residual significance of the effect has been identified as slight.	Not identified as a relevant or specific receptor.	During construction, residents of properties on Great Ancoats Street; and businesses location on Great Ancoats Street (two receptor clusters) are expected to experience minor adverse human health effects from/for; ▪ Ambient air quality ▪ Ambient noise ▪ Sources of pollution and environmental exposures ▪ Townscape amenity ▪ Risk of injuries and death ▪ Access to work and training	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedure. ▪ Local and regional level recruitment. ▪ Management of the construction workforce. ▪ Adherence to all air quality, noise and other control measures within the CEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan. ▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.											

Additional Mitigation	Additional mitigation proposed to specify actions that must be undertaken by the Contractor's appointed CLO, including the form of regular engagement with directly affected sensitive receptors, which would include businesses and residents fronting Great Ancoats Street. Meaningful engagement to be had would include a range of regular communication activities to inform the receptors of the progress of the construction phase to provide as much advance notice of disruptions (e.g. traffic management, particularly noisy works and abnormal working hours) to enable forward planning by the affected receptor(s). The CLO once appointed should detail the methodology for meaningful engagement within a CEP. These requirements form part of the OCEMP, for further development by the Principal Contractor, once appointed. The contractor should also adhere to the requirements set out within a Considerate Contractors accreditation/ affiliation/ certification. Additionally, the method of piling, a particularly noisy construction activity, should be selected on the basis of noise minimisation. As far as possible, the least impactful construction techniques should be used. Continuous flight piling should be avoided. The works should be planned to accord with noise thresholds, which should ideally be agreed with the LPA through a Section 61 consent. These will be set out in a Noise Monitoring and Management Plan to be followed by the Principal Contractor – the production and implementation of this is required by the OCEMP.
Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Townscape and Visual Impact, Noise and Vibration, Transport, Water Resources and Flood Risk and Human Health. Resulting effects range from negligible to minor-moderate adverse. The townscape effect is cited as in-combination construction noise and dust, plus visual intrusion, which is also acknowledged in the human health assessment. The OCEMP establishes the framework for additional mitigation measures to be developed by the Principal Contractor, to include the appointment and work of the CLO, the preparation and implementation of the CEP, establishment of a complaints procedure and activities set out within the Noise Monitoring and Management Plan. There is a degree of uncertainty about how these additional mitigation measures may be developed, as they will be in the control of the Principal Contractor. Due to this uncertainty, a precautionary approach is adopted in reaching the conclusions of the assessment. However, the Principal Contractor will be appointed following an appropriate procurement process and will adhere to and adopt best practice for construction. Overall, acknowledging the commitment to additional mitigation measures, the cumulative impacts on the receptors at Great Ancoats Street are judged to have the potential to result in **minor adverse residual intra-project cumulative effects. This is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Residence Inn	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor	During construction, it possible that the Residence Inn will experience potentially significant increases in noise effects during all stages of the construction phase. Additionally, there is a 33% chance of just perceptible vibration (> 0.3 mm/s) at the Residence Inn. However, it is considered unlikely that the temporal threshold for a significant noise effect would be exceeded and the significant threshold for vibration is also not exceeded.	The Socio-economics chapter assigns local businesses as being of a high sensitivity. The construction phase will likely cause disruption to local businesses across three factors; access, noise and traffic. Development is likely to only have a minor / moderate adverse impact on businesses, implying that disruption will have an insignificant effect.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor
	Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedure. ▪ Local and regional level recruitment. ▪ Management of the construction workforce ▪ Adherence to all air quality, noise and other control measures within the OCEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan. ▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.											
	Additional Mitigation	Additional mitigation proposed to specify actions that must be undertaken by the Contractor's appointed CLO, including the form of regular engagement with directly affected sensitive receptors, which would include this more sensitive hotel use. Meaningful engagement to be had would include a range of regular communication activities to inform the receptors of the progress of the construction phase to provide as much advance notice of disruptions (e.g. traffic management, particularly noisy works and abnormal working hours) to enable forward planning by the affected receptor(s). The CLO once appointed should detail the methodology for meaningful engagement within a CEP. These requirements form part of the OCEMP, for further development by the Principal Contractor, once appointed. The contractor should also adhere to the requirements set out within a Considerate Contractors accreditation/ affiliation/ certification. Additionally, the method of piling, a particularly noisy construction activity, should be selected on the basis of noise minimisation. As far as possible, the least impactful construction techniques should be used. Continuous flight piling should be avoided. The works should be planned to accord with noise thresholds, which should ideally be agreed with the LPA through a Section 61 consent. These will be set out in a Noise Monitoring and Management Plan to be followed by the Principal Contractor – the production and implementation of this is required by the OCEMP.											
	Residual CEA	Additive and in-combination impacts from Noise and Vibration (direct) and in respect of Socio-economics (indirect). Resulting effects range from negligible to minor adverse. Assuming the effective implementation of the additional mitigation proposed, overall, the cumulative impacts on the receptor are judged to have the potential to result in **negligible to minor adverse residual intra-project cumulative effects. This is not significant.**											

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Royal Mills, Redhill Street	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	The Royal Mills are encompassed within TCA 2. During construction, temporary impacts such as dust, noise, vibration, increase in construction traffic and changes to access routes around the Site. In particular, TCA 2 has the potential to be adversely affected. The TVIA assesses the effect on TCA 2 to be minor adverse.	Not identified as a relevant or specific receptor.	Temporary effects on Royal Mill and the other surrounding mills has been assessed to be major adverse. These impacts would result from noise and visual intrusion on their settings resulting from construction activities and the prominence of the construction site within their settings. These impacts would be most marked for Royal Mill.	During construction, it possible that the Royal Mills will experience potentially significant increases in noise effects during all stages of the construction phase. Additionally, there is a 33% chance of just perceptible vibration (> 0.3 mm/s) at Royal Mills. However, it is considered unlikely that the temporal threshold for a significant noise effect would be exceeded and the significant threshold for vibration is also not exceeded.	Not identified as a relevant or specific receptor	Heavy Goods Vehicle traffic would be prohibited from use of minor routes in the transport network with the A465 Great Ancoats Street to carry the majority The number of HGV is anticipated to below IEMA effect thresholds, it is anticipated that construction traffic will have a negligible impact on the transport network. The effect from construction traffic will be temporary / adverse and the significance of effect is considered to be Negligible and therefore not significant.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ A phased programme of archaeological mitigation which would include monitoring during phase 1, Staged archaeological investigation in phase 2 and Post Excavation Analysis during phase 3. ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedures. ▪ Management of the construction workforce. ▪ Adherence to all air quality, noise and other control measures within the OCEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan.											

	▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.
Additional Mitigation	The contractor should adhere to the requirements set out within a Considerate Contractors accreditation/ affiliation/ certification. Additionally, the method of piling, a particularly noisy construction activity, should be selected on the basis of noise minimisation. As far as possible, the least impactful construction techniques should be used. Continuous flight piling should be avoided. The works should be planned to accord with noise thresholds, which should ideally be agreed with the LPA through a Section 61 consent. These will be set out in a Noise Monitoring and Management Plan to be followed by the Principal Contractor – the production and implementation of this is required by the OCEMP. There is a commitment to use the temporary site hoardings to include artwork and information, which will be agreed with the LPA and local interest groups.
Residual CEA	Additive and in-combination impacts on Townscape Setting and the Historic Environment due to noise, visual intrusion and general disturbance, including from Traffic. Resulting effects are temporary, for the duration of the construction activities in proximity and range from minor to major adverse. The OCEMP establishes the framework for additional mitigation measures to be developed by the Principal Contractor, to include the appointment and work of the CLO, the preparation and implementation of the CEP and liaison with suitable local interest groups and the LPA to develop artwork and information for inclusion on the temporary site hoardings. There is a degree of uncertainty about how these additional mitigation measures may be developed, as they will be in the control of the Principal Contractor. Due to this uncertainty, a precautionary approach is adopted in reaching the conclusions of the assessment. However, the Principal Contractor will be appointed following an appropriate procurement process and will adhere to and adopt best practice for construction. Overall, acknowledging the commitment to additional mitigation measures, the cumulative impacts on the receptor may lessen in magnitude but are noted to have the potential to result in **moderate adverse residual intra-project cumulative effects. This scale of effect is considered significant in EIA terms.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
New Islington Medical Practice, and Urban Village Medical Practice (UVMP), Pharmacy (K's Chemist), and Ancoats Dental Practice	Identifies a medium dust risk to this receptor within the topic. However, with the mitigation set out in the chapter in place, there is not likely to be any significant residual Given the scale of the development, it is considered that any effect on air quality from construction traffic would be temporary and therefore not significant	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Referred to as Ancoats Primary Care Centre within the Noise and vibration Chapter, it is anticipated that noise effects during the construction phase to this receptor will not be significant. However, in the 6 phases of construction s identified within the Chapter, all phases apart from Phase 3 are anticipated to see an increase in ambient noise levels. Increases in the other phases see an increase of between 1-5 decibels.	The chapter assesses indirect impacts of the injection of employment into the area as result of the construction jobs that the Proposed Development will create, exploring housing market and consequential impacts. The assumptions of the assessment indicate no substantial increases to the local population. As such, negligible and insignificant impact on the demand for health facility receptors is anticipated to occur.	Heavy Goods Vehicle traffic would be prohibited from use of minor routes in the transport network with the A465 Great Ancoats Street to carry the majority The number of HGV is anticipated to below IEMA effect thresholds, it is anticipated that construction traffic will have a negligible impact on the transport network. The effect from construction traffic will be temporary / adverse and the significance of effect is considered to be Negligible and therefore not significant.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	During construction, employers, employees and users of New Islington Medical Practice, UVMP, Pharmacy and Ancoats Dental Practice are expected to experience minor adverse human health effects from/for; ▪ Ambient air quality ▪ Ambient noise ▪ Sources of pollution and environmental exposures ▪ Townscape amenity ▪ Risk of injuries and death ▪ Characteristics of the transport network ▪ Access to work and training ▪ Community assets supporting health ▪ Community assets supporting health	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedure. ▪ Local and regional level recruitment.											

		▪ Management of the construction workforce. ▪ Adherence to all air quality, noise and other control measures within the OCEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan. ▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.
	Additional Mitigation	No additional mitigation required.
	Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Noise and Vibration, Socio-economic, Transport and Human Health. Resulting effects range from negligible to minor adverse. Assuming the effective implementation of the mitigation proposed, overall, the cumulative impacts on the receptor are judged to have the potential to result in **negligible to minor adverse residual intra-project cumulative effects. This is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
New Islington Marina	Identifies a low dust risk to ecological receptors. However, with the mitigation set out in the chapter in place, there is not likely to be any significant residual effects. Given the scale of the development, it is considered that any effect on air quality from construction traffic would be temporary and therefore not significant	The Biodiversity Chapter refers to Cotton Field Park adjacent to the New Islington Marina as 'Urban managed greenspace'. This receptor could be affected by the Proposed Development as a result of ground pollution during construction. This could arise from accidental pollution from machinery during construction. However, following mitigation, no significant effects are anticipated during construction.	TCA 3 comprises a small area of townscape directly to the north of the Site comprising the New Islington Marina, Cotton Field Park, and the New Islington Academy. During construction, temporary impacts such as dust, noise, vibration, increase in construction traffic and changes to access routes around the Site. In particular, TCA 3 has the potential to be adversely affected. The TVIA assesses the effect on TCA 3 to be minor-moderate adverse. VIEWPOINT 5 and 6 New Islington Marina is also present within the context of viewpoints 5 and 6. Construction activities that are likely to affect viewpoints include the visibility of construction activities at street level in local	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	It is anticipated that noise effects during the construction phase to this receptor will not be significant. However, in the 6 phases of construction s identified within the Chapter, all phases apart from Phase 3 are anticipated to see an increase in ambient noise levels. Increases in the other phases see an increase of between 1-5 decibels.	Not identified as a relevant or specific receptor.	Heavy Goods Vehicle traffic would be prohibited from use of minor routes in the transport network with the A465 Great Ancoats Street to carry the majority The number of HGV is anticipated to below IEMA effect thresholds, it is anticipated that construction traffic will have a negligible impact on the transport network. The effect from construction traffic will be temporary / adverse and the significance of effect is considered to be Negligible and therefore not significant.	Risk of surface water ponding due to earthwork and soil compaction could result in the displacement of surface water, increasing flood risk to the New Islington Marina. In addition, the construction activities will extend below ground due to the Proposed Development of a basement carpark. The New Islington Marina may be in hydraulic conductivity to the groundwater of the Proposed Development area due to proximity. The below-ground construction activities may increase the risk of flooding to the New Islington Marina and groundwater flooding at the Proposed Development. The flood risk due to construction activities has been identified as negligible to the Rochdale Canal; with mitigation in place, the residual significance of the effect has been identified as neutral/slight.	Not identified as a relevant or specific receptor.	During construction, users of Cotton Field Park and New Islington Marina, visitors and residents of moorings and businesses (three receptor clusters) are expected to experience minor adverse human health effects from/for; ▪ Ambient air quality ▪ Ambient noise ▪ Sources of pollution and environmental exposures ▪ Townscape amenity ▪ Risk of injuries and death ▪ Access to work and training ▪ Community assets supporting health ▪ Green space, open space, recreation, and leisure-time activities	The Ground and Soils chapter reports that there is a non-significant impact on Islington Wharf Marina from land contamination after the Proposed Development's embedded mitigation has been implemented. The chapter considers the risk of land contamination resulting from construction activities to be very low with the effect on the receptor being negligible.

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
			views, such as hoarding, construction traffic and taller equipment. In mid-distant and distant views, there is potential for cranes to be visible on the skyline. The effect of construction on viewpoint 5 and 6 will be minor-moderate adverse..									
	Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedure. ▪ Local and regional level recruitment. ▪ Management of the construction workforce ▪ Adherence to all air quality, noise and other control measures within the OCEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan. ▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.										
	Additional Mitigation	The contractor should adhere to the requirements set out within a Considerate Contractors accreditation/ affiliation/ certification. Additionally, the method of piling, a particularly noisy construction activity, should be selected on the basis of noise minimisation. As far as possible, the least impactful construction techniques should be used. Continuous flight piling should be avoided. The works should be planned to accord with noise thresholds, which should ideally be agreed with the LPA through a Section 61 consent. These will be set out in a Noise Monitoring and Management Plan to be followed by the Principal Contractor – the production and implementation of this is required by the OCEMP.										
	Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Biodiversity, Townscape and Visual Impact, Noise and Vibration, Transport, Water Resources and Flood Risk and Human Health. Resulting effects range from negligible to minor adverse. The OCEMP establishes the framework for additional mitigation measures to be developed by the Principal Contractor, to include the appointment and work of the CLO, the preparation and implementation of the CEP, establishment of a complaints procedure and activities set out within the Noise Monitoring and Management Plan. There is a degree of uncertainty about how these additional mitigation measures may be developed, as they will be in the control of the Principal Contractor. Due to this uncertainty, a precautionary approach is adopted in reaching the conclusions of the assessment. However, the Principal Contractor will be appointed following an appropriate procurement process and will adhere to and adopt best practice for construction. Overall, acknowledging the commitment to additional mitigation measures, the cumulative impacts on the receptor are judged to have the potential to result in **negligible to minor adverse residual intra-project cumulative effects. This is not significant.**										

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Construction Workers	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	The main identified effect during the construction phase will be the jobs created for the local labour market receptor during the four-year construction period. This is a significant effect with a beneficial impact.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	During construction, wind might blow across open and exposed areas, potentially disrupting pedestrians. However, construction sites, with hoardings and restricted access, are less sensitive to wind compared to the completed development. Construction workers and other related Site personnel will find conditions acceptable. The wind effects during construction are considered negligible and not significant.	During construction, construction workers are expected to experience minor adverse human health effects from/for; ▪ Sources of pollution and environmental exposures	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Provision of a reactive process to implement additional mitigation measures, through the Contractor's CLO and complaints procedures. ▪ Local and regional level recruitment. ▪ Management of the construction workforce. ▪ Adherence to all air quality, noise and other control measures within the OCEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan; and the site specific traffic controls, for further development in the Construction Traffic Management Plan.											
Additional Mitigation	No additional mitigation required.											
Residual CEA	Additive and in-combination impacts from Socio-economic, Wind Microclimate and Human Health. The human health chapter states a possible risk of exposure to sources of pollution. However, with best practice in place and effective construction site management (through the OCEMP and Construction Traffic Management Plan) the possibility of this risk is unlikely. Additionally, construction workers would be trained to recognise risk and work in such a way as to avoid it. As such, the positive socio-economic impacts outweigh the possible exposure to pollution which results in a **negligible to minor beneficial cumulative effect**. **This is not significant.**											

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind Microclimate	Human Health	Ground Conditions and Pollution
Ancoats Conservation area	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	TCA 2 encompasses the Ancoats Conservation Area. During construction, temporary impacts such as dust, noise, vibration, increase in construction traffic and changes to access routes around the Site. In particular, TCA 2 has the potential to be adversely affected. The TVIA assesses the effect on TCA 2 to be minor adverse.	Not identified as a relevant or specific receptor.	The Historic Environment Chapter reports that temporary impacts on the setting of Ancoats Conservation Area would occur during the construction phase. Impacts would result from noise and visual intrusion from construction activities, the presence and operation of construction machinery and vehicles, site hoardings, the erection of new buildings and landscape works. Whilst these impacts would be prominent along the conservation area boundary to the Rochdale Canal, to the north of Redhill Street the conservation area would be largely unaffected due to its tight urban grain and the presence of medium-rise buildings, restricting visibility of the Proposed Development Site. The chapter assesses the magnitude as low adverse and the significance of this temporary effect has been assessed to be moderate adverse.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ A phased programme of archaeological mitigation which would include monitoring during phase 1, Staged archaeological investigation in phase 2 and Post Excavation Analysis during phase 3. ▪ Adherence to all air quality, noise and other control measures within the OCEMP, including ongoing monitoring that will be set out in the Noise Monitoring and Management Plan. ▪ A programme of community liaison will be carried out, including notification of works and details of the complaints process.											
Additional Mitigation	The contractor should adhere to the requirements set out within a Considerate Contractors accreditation/ affiliation/ certification. Additionally, the method of piling, a particularly noisy construction activity, should be selected on the basis of noise minimisation. As far as possible, the least impactful construction techniques should be used. Continuous flight piling should be avoided. The works should be planned to accord with noise thresholds, which should ideally be agreed with the LPA through a Section 61 consent. These will be set out in a Noise Monitoring and Management Plan to be followed by the Principal Contractor – the production and implementation of this is required by the OCEMP. There is a commitment to use the temporary site hoardings to include artwork and information, which will be agreed with the LPA and local interest groups.											

Residual CEA	Additive and in-combination impacts on Townscape Setting and the Historic Environment due to noise, visual intrusion and general disturbance. Resulting effects are temporary, for the duration of the construction activities in proximity and range from minor to moderate adverse. The OCEMP establishes the framework for additional mitigation measures to be developed by the Principal Contractor, to include the appointment and work of the CLO, the preparation and implementation of the CEP and liaison with suitable local interest groups and the LPA to develop artwork and information for inclusion on the temporary site hoardings. There is a degree of uncertainty about how these additional mitigation measures may be developed, as they will be in the control of the Principal Contractor. Due to this uncertainty, a precautionary approach is adopted in reaching the conclusions of the assessment. However, the Principal Contractor will be appointed following an appropriate procurement process and will adhere to and adopt best practice for construction. Overall, acknowledging the commitment to additional mitigation measures, the cumulative impacts on the receptor may lessen in magnitude but are noted to have the potential to result in **minor to major adverse residual intra-project cumulative effects. Moderate and major adverse effects are considered significant in EIA terms.**

Construction inter-project effects

22.7.9. Stage 2 of the inter-project cumulative effects assessment methodology involves converting the long list of RFFPs (as set out in the Scoping Report) into a shorter, more relevant, and manageable list by discounting developments in accordance with the criteria set out previously in the methodology.

22.7.10. The above process has resulted in a shortlist of eight projects, as displayed in Figure 22-1 in Volume 5. These eight RFFPs are presented in Table 22-4 together with the assumptions made in this CEA regarding their progression relative to the Proposed Development.

22.7.11. The inter-project CEA is presented in Table 22 -6 for the Proposed Development construction phase. This draws from the impact assessments undertaken in the contributing topic chapters. Taking each RFFP in turn, it identifies instances where individual topics have undertaken further assessment of potential impact interactions between the RFFPs and Proposed Development, during construction. Professional judgement is then used to determine the resultant cumulative effects.

22.7.12. As stated previously, the inter-project CEA assumes that all Proposed Development mitigation is fully implemented. It also assumes that the developers of RFFP will adhere to environmental legislative requirements and follow BPM in delivery of their projects, as set out in their constituent environmental management plans, which have been sourced for the purposes of this assessment.

22.7.13. The following topic chapters have scoped out all RFFPs:

- Climate topic – The assessment notes that the effects of GHG emissions are essentially cumulative, with their concentration in the atmosphere rather than actual emissions levels being what determines the warming effect.
- Biodiversity topic – The assessment notes that there is limited ecological values of the Site, and the proposed mitigation measures, it is considered unlikely there would be any inter-project cumulative effects due to the lack of significant residual effects.

22.7.14. No inter-project cumulative effects were identified in climate vulnerability and Major Accidents and Disasters chapter, therefore these are not included within the matrix at Table 22-6.

Table 22 -6 - Inter-project (different project) cumulative effects for each shortlisted RFFP during construction of the Proposed Development

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
128191/FO/2020 - Development comprising of five office buildings with flexible ground floor use at land between Ashton Canal and Pollard Street.	Potential for additive construction dust impacts. Potential for additive traffic emissions and pollutants from construction vehicles. RFFP OCMP considered to provide suitable controls. No significant cumulative effects identified. Note Proposed Development CTMP to be developed further to reflect detailed construction traffic activities and apply controls, once further information is available.	Potential for additive construction impacts to affect ground conditions and cause contamination. RFFP OCMP and requirement to adhere to NPPF considered to provide suitable controls. No significant cumulative effects identified.	N/A	Potential for additive impacts of dust, emissions, traffic disruptions and noise from construction activities and vehicles. RFFP OCMP considered to provide controls on magnitude of impacts. Negative cumulative effects on residents in the study area identified, but not significant. Additive opportunities to join the construction workforce noted.	Potential for additive cumulative impacts on material and waste. Assessed as negligible and not significant.	Possibility that additive construction noise may exceed temporal thresholds for a temporary period, either 10 or more days or nights in any 15 consecutive days or nights or a total number of days exceeding 40 in any 6 consecutive months due to the mobile and temporary nature of the works**. If this occurs, this will result in a significant adverse effect** for noise sensitive receptors proximate to the RFFP and Proposed Development.	Additive construction impacts may occur as a result of changes in traffic flows across separate projects. However, any cumulative effect on traffic flows vehicle trips will be temporary. As such, cumulative construction vehicle trip impacts are expected to be negligible and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	Temporary beneficial medium additive impact, which is significant, on the local labour market due to an increase in demand of construction workers. The combined impact of construction activities on travel and access disruptions for local businesses and residents will result in a temporary low adverse effect which is not significant.	N/A	N/A

Residual effects assessment
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. The potential for significant adverse additive cumulative effects has been noted in relation to noise and vibration effects only. This is on a precautionary basis and reflects the potential for construction overlap to give rise to an overall breach of temporary thresholds for noise effects to become significant for sensitive receptors. The OCEMP includes a commitment to the preparation and implementation of a Noise Monitoring and Management Plan, together with an expectation that the CLO will manage responses to any complaints, which may trigger noise monitoring. Additional mitigation measures will be set out in the Noise Monitoring and Management Plan, ideally linked to pre-agreed noise thresholds linked to a Section 61 consent , depending on the agreement of MCC officers to this approach. These additional mitigation measures would relate to the contribution of the Proposed Development to any additive inter-project noise effects only. As the effectiveness of the additional mitigation would rely also on the activities of third parties, which are beyond the control of the Principal Contractor for the Proposed Development, a precautionary approach to the assessment must recognise that its overall efficacy cannot be assured at this time. Consequently, there is the potential for a **minor to moderate adverse cumulative inter-project residual effect. A moderate adverse effect, should it arise, would be significant.** Additive impacts on the labour market are assessed in relation to Socio-economics and also reflected in the Human Health assessment. **Significant (moderate beneficial) cumulative inter-project residual beneficial effects on the labour market are noted**.

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
132574/FO/2021- Development comprising 4 townhouses at Paradise Wharf.	Potential for additive construction dust impacts. Potential for additive traffic emissions and pollutants from construction vehicles. RFFP CMP considered to provide suitable controls. No significant cumulative effects identified. Note Proposed Development CTMP to be developed further to reflect detailed construction traffic activities and apply controls, once further information is available.	Potential for additive construction impacts to affect ground conditions and cause contamination. RFFP CMP and requirement to adhere to NPPF considered to provide suitable controls. No significant cumulative effects identified.	N/A	Potential for additive impacts of dust, emissions, traffic disruptions and noise from construction activities and vehicles. RFFP construction duration is 12 months. RFFP CMP considered to provide controls on magnitude of impacts. Negative cumulative effects on residents in the study area identified, but not significant.	Potential for additive cumulative impacts on material and waste. Assessed as negligible and not significant.	N/A	Additive construction impacts may occur as a result of changes in traffic flows across separate projects. However, any cumulative effect on traffic flows vehicle trips will be temporary. As such, cumulative construction vehicle trip impacts are expected to be negligible and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	Temporary beneficial low additive impact on the local labour market, which is not significant.	N/A	N/A

Residual effects assessment
The effects anticipated by the RFFP are lesser than the effect anticipated from the Proposed Development. No potential for significant adverse additive cumulative effects has been noted. As such, no additional mitigation measures have been identified as required. Consequently there is the potential for a **negligible to minor adverse cumulative inter-project residual effect, which is not significant.**

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
126608/FO/2020- Development of 66 residential units between Store Street and Ashton Canal.	Potential for additive construction dust impacts. Potential for additive traffic emissions and pollutants from construction vehicles. RFFP OCMP considered to provide suitable controls. No significant cumulative effects identified. Note Proposed Development CTMP to be developed further to reflect detailed construction traffic activities and apply controls, once further information is available.	Potential for additive construction impacts to affect ground conditions and cause contamination. RFFP OCEMP and requirement to adhere to NPPF considered to provide suitable controls. No significant cumulative effects identified.	N/A	Potential for additive impacts of dust, emissions, traffic disruptions and noise from construction activities and vehicles. RFFP OCEMP considered to provide controls on magnitude of impacts. Negative cumulative effects on residents in the study area identified, but not significant.	Potential for additive cumulative impacts on material and waste. Assessed as negligible and not significant.	N/A	Additive construction impacts may occur as a result of changes in traffic flows across separate projects. However, any cumulative effect on traffic flows vehicle trips will be temporary. As such, cumulative construction vehicle trip impacts are expected to be negligible and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	Temporary beneficial low additive impact on the local labour market, which is not significant.	N/A	N/A

Residual effects assessment
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant adverse cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. Consequently, there is the potential for a **negligible to minor adverse cumulative inter-project residual effect. This is not significant.**

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
135662/FO/2022- Development of 154 Bedroom Hotel with ancillary café / bar / restaurant and gym adjacent to Great Ancoats Street and south of Laystall Street.	Potential for additive construction dust impacts. Potential for additive traffic emissions and pollutants from construction vehicles. RFFP CMP considered to provide suitable controls. No significant cumulative effects identified. Note Proposed Development CTMP to be developed further to reflect detailed construction traffic activities and apply controls, once further information is available.	Potential for additive construction impacts to affect ground conditions and cause contamination. RFFP CMP and requirement to adhere to NPPF considered to provide suitable controls. No significant cumulative effects identified.	N/A	Potential for additive impacts of dust, emissions, traffic disruptions and noise from construction activities and vehicles. RFFP CMP considered to provide controls on magnitude of impacts. Negative cumulative effects on residents in the study area identified, but not significant. Additive opportunities to join the construction workforce noted.	Potential for additive cumulative impacts on material and waste. Assessed as negligible and not significant.	N/A	Additive construction impacts may occur as a result of changes in traffic flows across separate projects. However, any cumulative effect on traffic flows vehicle trips will be temporary. As such, cumulative construction vehicle trip impacts are expected to be negligible and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	Temporary beneficial medium additive impact, which is significant, on the local labour market due to an increase in demand of construction workers. The combined impact of construction activities on travel and access disruptions for local businesses and residents will result in a temporary low adverse effect which is not significant.	N/A	N/A

Residual effects assessment
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant adverse cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. Consequently, there is the potential for a **negligible to minor adverse cumulative inter-project residual effect related to disturbance impacts. This is not significant.** Additive impacts on the labour market are assessed in relation to Socio-economics and also reflected in the Human Health assessment. **Significant (moderate beneficial) cumulative inter-project residual beneficial effects on the labour market are noted**.

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
135675/FO/2022 - Development of two apartment buildings comprising 267 dwellings at Tariff Street.	Potential for additive construction dust impacts. Potential for additive traffic emissions and pollutants from construction vehicles. RFFP CMP considered to provide suitable controls. No significant cumulative effects identified. Note Proposed Development CTMP to be developed further to reflect detailed construction traffic activities and apply controls, once further information is available.	Potential for additive construction impacts to affect ground conditions and cause contamination. RFFP CMP and requirement to adhere to NPPF considered to provide suitable controls. No significant cumulative effects identified.	Potential for additive noise and visual intrusion on the setting of Brownsfield Mill (1207994) due to the presence of construction sites to the west and east of the mill building. This would result in a large magnitude of impact and major adverse effect on Brownsfield Mill.	Potential for additive impacts of dust, emissions, traffic disruptions and noise from construction activities and vehicles. RFFP CMP considered to provide controls on magnitude of impacts. Negative cumulative effects on residents in the study area identified, but not significant. Additive opportunities to join the construction workforce noted.	Potential for additive cumulative impacts on material and waste. Assessed as negligible and not significant.	N/A	Additive construction impacts may occur as a result of changes in traffic flows across separate projects. However, any cumulative effect on traffic flows vehicle trips will be temporary. As such, cumulative construction vehicle trip impacts are expected to be negligible and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	Temporary beneficial medium additive impact, which is significant, on the local labour market due to an increase in demand of construction workers. The combined impact of construction activities on travel and access disruptions for local businesses and residents will result in a temporary low adverse effect which is not significant.	N/A	N/A

Residual effects assessment
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. The potential for significant adverse additive cumulative effects has been noted in relation to the historic environment. This is on a temporary basis for the duration of construction activities at the two sites (RFFP and Proposed Development). There is a commitment to use the temporary site hoardings to include artwork and information, which will be agreed with the LPA and local interest groups. There is a degree of uncertainty about how these additional mitigation measures may be developed, as they will be in the control of the Principal Contractor for the Proposed Development; and there is no certainty about any equivalent measures that may be taken in respect of the RFFP. Due to this uncertainty, a precautionary approach is adopted in reaching the conclusions of the assessment. Overall, acknowledging the commitment by the Proposed Development to additional mitigation measures, the contribution of the Proposed Development to the cumulative impact may be offset to some degree, there is the potential for a **minor to moderate adverse cumulative inter-project residual effect. A moderate adverse effect is considered significant in EIA terms.** Additive impacts on the labour market are assessed in relation to Socio-economics and also reflected in the Human Health assessment. **Significant (moderate beneficial) cumulative inter-project residual beneficial effects on the labour market are noted**.

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
137346/FO/2023- Mixed use development comprising commercial floorspace and 256 residential units adjacent to Poland Street and between Naval Street and Jersey Street.	Potential for additive construction dust impacts. Potential for additive traffic emissions and pollutants from construction vehicles. RFFP CMP considered to provide suitable controls. No significant cumulative effects identified. Noted Proposed Development CTMP to be developed further to reflect detailed construction traffic activities and apply controls, once further information is available.	Potential for additive construction impacts to affect ground conditions and cause contamination. RFFP CMP and requirement to adhere to NPPF considered to provide suitable controls. No significant cumulative effects identified.	N/A	Potential for additive impacts of dust, emissions, traffic disruptions and noise from construction activities and vehicles. RFFP CMP considered to provide controls on magnitude of impacts. Negative cumulative effects on residents in the study area identified, but not significant.	Potential for additive cumulative impacts on material and waste. Assessed as negligible and not significant.	N/A	Additive construction impacts may occur as a result of changes in traffic flows across separate projects. However, any cumulative effect on traffic flows vehicle trips will be temporary. As such, cumulative construction vehicle trip impacts are expected to be negligible and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	Temporary beneficial medium additive impact, which is significant, on the local labour market due to an increase in demand of construction workers. The combined impact of construction activities on travel and access disruptions for local businesses and residents will result in a temporary low adverse effect which is not significant.	N/A	N/A

Residual effects assessment
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant adverse cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. Consequently, there is the potential for a **negligible adverse cumulative inter-project residual effect. This is not significant.** Additive impacts on the labour market are assessed in relation to Socio-economics and also reflected in the Human Health assessment. **Significant (moderate beneficial) cumulative inter-project residual beneficial effects on the labour market are noted**.

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
122598/FO/2019- Mixed use development comprising 94 residential units consisting of townhouses and apartments as well as commercial floorspace at New Islington Marina.	Potential for additive construction dust impacts. Potential for additive traffic emissions and pollutants from construction vehicles. RFFP CMP considered to provide suitable controls. No significant cumulative effects identified. Noted Proposed Development CTMP to be developed further to reflect detailed construction traffic activities and apply controls, once further information is available.	Potential for additive construction impacts to affect ground conditions and cause contamination. RFFP CMP and requirement to adhere to NPPF considered to provide suitable controls. No significant cumulative effects identified.	N/A	Potential for additive impacts of dust, emissions, traffic disruptions and noise from construction activities and vehicles. RFFP CMP considered to provide controls on magnitude of impacts. Negative cumulative effects on residents in the study area identified, but not significant.	Potential for additive cumulative impacts on material and waste. Assessed as negligible and not significant.	Possibility that additive construction noise may exceed temporal thresholds for a temporary period, either 10 or more days or nights in any 15 consecutive days or nights or a total number of days exceeding 40 in any 6 consecutive months due to the mobile and temporary nature of the works. If this occurs, this will result in a significant adverse effect for noise sensitive receptors proximate to the RFFP and Proposed Development .	Additive construction impacts may occur as a result of changes in traffic flows across separate projects. However, any cumulative effect on traffic flows vehicle trips will be temporary. As such, cumulative construction vehicle trip impacts are expected to be negligible and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	Temporary beneficial low impact on the local labour market, which is not significant.	N/A	N/A

Residual effects assessment

The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. The potential for significant adverse additive cumulative effects has been noted in relation to noise and vibration effects only. This is on a precautionary basis and reflects the potential for construction overlap to give rise to an overall breach of temporary thresholds for noise effects to become significant for sensitive receptors.

The OCEMP includes a commitment to the preparation and implementation of a Noise Monitoring and Management Plan, together with an expectation that the CLO will manage responses to any complaints, which may trigger noise monitoring. Additional mitigation measures will be set out in the Noise Monitoring and Management Plan, ideally linked to pre-agreed noise thresholds linked to a Section 61 consent , depending on the agreement of MCC officers to this approach. These additional mitigation measures would relate to the contribution of the Proposed Development to any additive inter-project noise effects only.

As the effectiveness of the additional mitigation would rely also on the activities of third parties, which are beyond the control of the Principal Contractor for the Proposed Development, a precautionary approach to the assessment must recognise that its overall efficacy cannot be assured at this time. Consequently, there is the potential for a **minor to moderate adverse cumulative inter-project residual effect. A moderate adverse effect, should it arise, would be significant.**

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
128911/FO/2020 - Mixed use development consisting of office space and 89 residential units at Laystall Street.	Potential for additive construction dust impacts. Potential for additive traffic emissions and pollutants from construction vehicles. RFFP CMP considered to provide suitable controls. No significant cumulative effects identified. Noted Proposed Development CTMP to be developed further to reflect detailed construction traffic activities and apply controls, once further information is available.	Potential for additive construction impacts to affect ground conditions and cause contamination. RFFP CMP and requirement to adhere to NPPF considered to provide suitable controls. No significant cumulative effects identified.	N/A	Potential for additive impacts of dust, emissions, traffic disruptions and noise from construction activities and vehicles. RFFP CMP considered to provide controls on magnitude of impacts. Negative cumulative effects on residents in the study area identified, but not significant.	N/A	N/A	Additive construction impacts may occur as a result of changes in traffic flows across separate projects. However, any cumulative effect on traffic flows vehicle trips will be temporary. As such, cumulative construction vehicle trip impacts are expected to be negligible and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	Temporary beneficial low impact on the local labour market, which is not significant.	N/A	N/A
	Residual effects assessment										
	The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant adverse cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. Consequently, there is the potential for a **negligible adverse cumulative inter-project residual effect. This is not significant.**										

Operation phase

Embedded mitigation

22.7.15. The following section outlines the embedded mitigation measures that influence the identification of potential cumulative impacts and the resulting assessment of effects.

22.7.16. The CEA draws on the findings of the topic assessments, both in respect of intra-project cumulative effects and the contribution of the Proposed Development to potential inter-project cumulative effects. As a consequence of this, the embedded mitigation set out in the preceding topic chapters is all of relevance and is not repeated here.

22.7.17. Embedded mitigation measures include a number of means of meeting legal requirements or standard practices, supported by monitoring processes as appropriate. It also includes delivering the best and most sustainable high quality design for the Proposed Development, in accordance with the details set out in the description within ES (Volume 2) Chapter 4: Description of the Site and Proposed Development. These will be implemented as part of the Proposed Development, regardless of the assessment outcomes, for example, as a result of legislative requirements and/or standard best practice. For the purposes of the inter-project CEA, the same assumption regarding a minimum level of embedded mitigation and design quality (i.e. sufficient to secure consents) is applied to proposals being brought forward by other developers in respect of developments that appear on the RFFP shortlist.

22.7.18. As part of the planning application there is a commitment to provide artwork on the permanent boundary wall in a number of locations i.e. on the boulevard, to the area earmarked for future development of a park, to the school and to the canal facing the mill buildings. Engagement with the Co-op Academy, New Islington is already underway over the artwork to the school boundary and there is an agreement that the design of the artwork will be developed to achieve the support of the school. Similarly, there is an in principle commitment to engage with local heritage groups and the Canals and Rivers Trust around the artwork to the canal boundary, which will be used to highlight the history.

22.7.19. There are a number of other aspects of the Proposed Development that will be finalised through the detailed design stage. There is a commitment to undertake more detailed technical analysis to determine the final design of the enclosures to the rooftop plant to achieve suitable acoustic enclosure for the intended specification and anticipated operating requirements. Similarly, the work undertaken to support the assessment of potential solar glare from the building façades has been completed on a worst case basis, assuming that all surfaces are fully reflective. The potential for solar glare will be reviewed as the detailed design progresses, to more accurately incorporate the reflective properties of the proposed fenestration and other façade features and address any adverse impacts that might be identified at that stage.

22.7.20. The assessment of likely significant residual cumulative effects of the Proposed Development assumes that all embedded mitigation measures are in place, including the in principle commitments to technical work that will then inform additional mitigation measures as part of the final detailed design.

Operation intra-project effects

22.7.21. Impacts identified by different environmental topic assessments with potential to work in combination to affect a particular receptor group were identified via a matrix-based approach. A review of residual effects identified within each topic chapter was then undertaken to identify receptors experiencing more than one effect classified as at least minor adverse or equivalent. Receptors potentially experiencing minor or greater residual effects have been included in the cross-topic assessment. Any negligible or neutral effects have been discounted from the assessment.

22.7.22. Table 22-7 describes the predicted significant residual effects of the impacts during operation on receptors that feature in more than one specialist topic assessment, and the relevant mitigation.

Operation – Inter-project effects

22.7.23. The predicted effects of the impacts of the Proposed Development during operation on the receptors identified as potentially receiving residual inter-project cumulative effects across-topics, and the relevant mitigation proposed is set out in Table 22-8. It is organised by RFFP.

Table 22-7 - Operational phase intra-project impact assessment on receptors across topics

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Co-op Academy New Islington, 10 Hugh Oldham Wy, Manchester M4 6EY	No specific reference to this receptor. Potential for air quality impacts from changes in traffic flows due to the Proposed Development. Changes in NO_2, PM_{10} and $PM_{2.5}$ are negligible across all receptors assessed. No significant effects identified.	Not identified as a relevant or specific receptor.	TCA 3 comprises a small area of townscape directly to the north of the Site comprising the New Islington Marina, Cotton Field Park, and the New Islington Academy. The Proposed Development will be a conspicuous addition to the local townscape as experienced from TCA 3, introducing a new level of enclosure and scale to the south of New Islington Marina and Cotton Field Park. It will also encourage pedestrian movement, creating a more direct connection between Cotton Field Park and New Islington Marina and the key thoroughfare, which is Great Ancoats Street. The effect will be minor-moderate beneficial.	Impacts due to changes in exposure to daylight and sunlight. Currently, the school building enjoys unusually high levels of daylight over the existing cleared site, except to windows whose view of sky is restricted by ground-floor rain canopies and first-floor recessed balcony. The Proposed Development would result in large magnitude daylight impacts to windows restricted by canopies/balconies and medium magnitude impacts to unfettered windows. The significance of the daylight effects would be permanent moderate adverse. The impacts on sunlight result in effects that are within acceptable guidelines for the assessed rooms. The overall effects are assessed as negligible and not significant. The significance of the sun-on-ground effects to the school playgrounds and amenity spaces would be negligible and not significant.	Not identified as a relevant or specific receptor.	Assessment assumes that all plant on both buildings shall be operational throughout the night. Due to the presence of the plant, moderate adverse noise and vibration impacts have been identified. However, it is considered unlikely that the school would be occupied during the night-time period, thus effects are not deemed significant.	The injection of long-term employment into the local economy will likely attract individuals to living in the area which may cause a potential increase in the local population. The increase in residents in the local area will cause an increase in demand for education facilities. The impact will be a minor adverse effect on schools across the study area in general terms; however, it is noted that for the Co-op academy, additional demand will be a minor benefit.	No specific impact.	Not identified as a relevant or specific receptor.	This receptor will see a slight increase in wind speeds, but levels will remain within comfortable limits for typical activities at the school. Overall, this is a minor adverse effect.	During operation, the co-op academy is expected to experience minor adverse human health effects from/for; ▪ Air quality changes ▪ Ambient noise changes. ▪ Sources of pollution and environmental exposure ▪ Access to community assets supporting health ▪ Townscape amenity It is also expected to experience minor beneficial health impacts from/for; ▪ Access to work and training ▪ Access to Green space, open space, recreation, and leisure-time activities	Not identified as a relevant or specific receptor.

	Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ A commitment to provide artwork on the permanent boundary wall in a number of locations including to the school. Engagement with the Co-op Academy, New Islington is already underway over the artwork to the school boundary and there is an agreement that the design of the artwork will be developed to achieve the support of the school. ▪ A commitment to undertake more detailed technical analysis to determine the final design of the enclosures to the rooftop plant to achieve suitable acoustic enclosure for the intended specification and anticipated operating requirements.
	Additional Mitigation	The embedded mitigation includes commitments to undertake collaborative development of artwork for the permanent boundary between the Site and the school; funding for the replacement of the school's two existing rain canopies above the Reception classroom windows with glazed rain canopies to admit more light, and technical analysis of specific aspects of the Proposed Development. These will result in detailed design proposals that will form additional mitigation.
	Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Townscape and Visual Impact, Daylight, Sunlight and Overshadowing and Solar Glare, Noise and Vibration, Socio-economic, Wind Microclimate and Human Health. The Co-Op Academy is set to experience a range of effects once the Proposed Development is operational. The effects are due to the proximity of the receptor to the Proposed Development. The noise assessment highlights a moderate effect on the school at night and the DSO&SG topic identifying that the school will receive less daylight and sunlight than it currently enjoys. However, the school will not operate at night and the IT suite, which is the classroom most affected by changes to daylight and sunlight, does not typically require high levels of exposure; therefore, the effects arising from these impacts are considered minor in terms of the overall cumulative assessment of the effects on the receptor. Other effects include a minor adverse effect from wind microclimate and impacts to human health. The increase in wind speed will be most acutely felt by users of the receptor when using the outdoor space of the school during break times, but is within acceptable levels for typical activities. The socio-economic assessment highlights the potential for the Proposed Development to attract new residents to the study area and indirectly increase demand for school places, cited as a minor adverse effect on schools in the study area as a whole, but minor benefit for Co-op Academy. The Proposed Development will deliver high quality buildings and public realm that will repair a gap in existing townscape and activate street frontages. This contributes to the minor-moderate beneficial townscape and visual impact effects. The additional mitigation will also introduce collaborative artwork to the streetscene adjacent to the school. Considering these effects in their totality, **the cumulative inter-project operation effect on this receptor is deemed to be negligible, which is not significant**.

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources	Wind	Human Health	Ground Conditions
Rochdale Canal	Not identified as a relevant or specific receptor.	No impacts identified.	The Rochdale Canal is encompassed within Townscape Character Area (TCA) 2 of the Townscape and Visual Impact assessment. The creation of new public realm along the western edge of the Site will directly contribute to the improvement of the outlook from, and general environment of, this nearest part of TCA 2. The activation of this space with pedestrian footfall will enliven the local townscape and provide opportunity to look back towards TCA 2 and appreciate its distinctive historical architectural character. Planting within the new area of public realm with also filter the ground-level interface of the building, whilst active frontages comprising retail, food and beverage outlets will contribute to the local vitality and activity levels. The overall effect is moderate-major beneficial.	Not identified as a relevant or specific receptor.	Non-significant beneficial effects are predicted on the Rochdale Canal Lock No.82 and Rochdale Canal Road Bridge, which are designated heritage assets. Positives of the Proposed Development include the Canal Plaza, which would create new vantage points from which the canal could be appreciated. Additionally, the set back of the proposed buildings will enable better visual appreciation of the listed historic canal structures with the landscaping of the Canal Plaza, which would be sympathetic to the local historic character and the function of the canal as an industrial transport corridor.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor	During operation, the drainage design and SuDS will ensure that water quality risks to the Rochdale Canal are expected to be negligible.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Land contamination impacts are less likely during the operation phase of the Proposed Development. The effect on Rochdale Canal is anticipated to be negligible.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Drainage design and SuDS proposals. ▪ Opportunities for the dissemination of information about the history of Ancoats and the Proposed Development Site through measures such as public interpretation would be explored by GPA in consultation with Manchester City Council (MCC) and Greater Manchester Archaeological Advisory Service (GMAAS). ▪ A commitment to provide artwork on the permanent boundary wall in a number of locations including adjacent to the canal. Engagement with local heritage groups and the Canals and Rivers Trust will be sought over the artwork to the canal boundary.											
Additional Mitigation	The embedded mitigation includes commitments to undertake collaborative development of artwork for the permanent boundary between the Site and the canal. This will result in detailed design proposals that will form additional mitigation.											
Residual CEA	Additive and in-combination impacts from Biodiversity, Townscape and Visual Impact, Historic Environment, Water Resources and Flood Risk and Ground Conditions and Pollution. Considering the positive effects on the townscape reported in the Townscape and visual impact assessment as well as the historic environment assessment, plus the additional mitigation **the cumulative inter-project operation effect on this receptor is deemed to be minor beneficial, which is not significant.**											

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Old Mill Street	Potential for air quality impacts from changes in traffic flows due to the Proposed Development. Changes in NO_2, PM_{10} and $PM_{2.5}$ are negligible across all receptors assessed. No significant effects identified.	Not identified as a relevant or specific receptor.	View Point 13 encompasses Old Mill Street. At viewpoint 13, the Proposed Development blocks the majority of the Redhill Street streetscape in the background of the view, removing the ability to appreciate the historic townscape and in particular, the landmark quality of the Grade II* Decker Old Mill. This limits an appreciation of these heritage assets in their wider setting and also detracts from the visual amenity value of the view. For this reason, the Proposed Development is judged to have a minor adverse impact on the visual amenity of the view.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor	No specific impact.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	During operation, residents of properties south of Old Mill Street are expected to experience minor adverse human health effects from/for; ▪ Sources of pollution and environmental exposure ▪ Access to community assets supporting health They also expected to experience minor beneficial health impacts from/for; ▪ Access to work and training	Not identified as a relevant or specific receptor
	Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES.										
	Additional Mitigation	No additional mitigation required.										
	Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Townscape and Visual Impact and Human Health. Minor adverse effects are expected for this receptor across the TVIA and some aspects of the Human Health Assessment. In considering the nature of the impacts, which are unrelated to each other; together with their magnitude resulting in effects not considered significant within the topic assessments, **the cumulative inter-project operation effect on this receptor is deemed to be minor adverse, which is not significant.**										

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources	Wind	Human Health	Ground Conditions
Redhill Street	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Redhill Street is in TCA 2 of the Townscape and Visual Impact assessment. The creation of new public realm along the western edge of the Site will directly contribute to the improvement of the outlook from and general environment of this nearest part of TCA 2. The activation of this space with pedestrian footfall will enliven the local townscape and provide opportunity to look back towards TCA 2 and appreciate its distinctive historical architectural character. Planting within the new area of public realm with also filter the ground-level interface of the building, whilst active frontages comprising retail, food and beverage outlets will contribute to the local vitality and activity levels. The overall effect is moderate-major beneficial. Redhill Street is also present within the context of viewpoints 2 and 3. The overall effect on viewpoints 2 and 3 are minor beneficial and minor-moderate beneficial respectively.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor.	No specific impact.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	During operation, residents of properties between Redhill Street and Jersey Street are expected to experience minor adverse human health effects from/for; Sources of pollution and environmental exposure ▪ Access to community assets supporting health They are also expected to experience minor beneficial health impacts from/for; ▪ Access to work and training Additionally, businesses at Redhill Street are expected to experience minor adverse human health effects from/for; ▪ Sources of pollution and environmental exposure ▪ Access to community assets supporting health They are also expected to experience minor beneficial health impacts from/for; ▪ Access to work and training	Not identified as a relevant or specific receptor
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES.											
Additional Mitigation	No additional mitigation required.											
Residual CEA	Additive and in-combination impacts from Townscape and Visual Impact and Human Health. TCA 2 is anticipated to experience a moderate-major beneficial effect with viewpoints 2 and 3 experiencing a minor beneficial and minor-moderate beneficial effect respectively. The human health assessment anticipates a range of effects that are minor beneficial or minor adverse. As such, the overall , **the cumulative inter-project operation effect on this receptor is deemed to be minor beneficial, which is not significant.**											

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Great Ancoats Street	Potential for air quality impacts from changes in traffic flows due to the Proposed Development. Changes in NO_2, PM_{10} and $PM_{2.5}$ are negligible across all receptors assessed. No significant effects identified.	Not identified as a relevant or specific receptor.	TCA 1 encompasses Great Ancoats Street. The Proposed Development will have a transformative effect on the character, appearance and function of the Site, bringing an unutilised and low-quality plot on a key thoroughfare back into active use and aiding the repair of a substantial gap in the local townscape. The overall effect on TCA 1 will be moderate-major beneficial. Great Ancoats Street is also present within the context of viewpoints 7, 9 and 12. At Viewpoint 7, the changes will impact the overall amenity value of the view to a Minor Adverse degree. At viewpoint 9, the overall effect is neutral. At viewpoint 12, the Proposed Development is judged to have a minor-moderate beneficial effect.	During operation, it is possible that reflected solar glare from the Proposed Development may impact motorists. The levels of potential reflected solar glare were assessed at six receptor locations on the public highway. 3 of these points were on Great Ancoats Street and are labelled within the DSO&SG chapter as; ▪ GLR_003 – Great Ancoats Street ▪ GLR_005 – Great Ancoats Street ▪ GLR_006 – Great Ancoats Street GLR_003 – Great Ancoats Street would experience negligible effects. GLR_005 – Great Ancoats Street would experience negligible to minor adverse effects. GLR_006 – Great Ancoats Street would experience minor to moderate adverse effects, linked to a probable exceedance of solar glare.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor (refer to specific sensitive receptors on Great Ancoats Street addressed separately).	Not identified as a relevant or specific receptor	No specific impact.	During operation, the drainage design and SuDS will ensure that flood risk to Great Ancoats Street is expected to be slight to negligible and not significant.	This receptor will see a slight increase in wind speeds, but levels will remain within comfortable limits for typical activities along Great Ancoats Street. Overall, this is a minor adverse effect.	During operation, residents of properties on Great Ancoats Street are expected to experience minor adverse human health effects from/for; ▪ Sources of pollution and environmental exposure ▪ Access to community assets supporting health They are also expected to experience minor beneficial health impacts from/for; ▪ Access to work and training Additionally, businesses located on the Great Ancoats Street are expected to experience minor adverse human health effects from/for; ▪ Sources of pollution and environmental exposure ▪ Access to community assets supporting health They are also expected to experience minor beneficial health impacts from/for; ▪ Access to work and training	Not identified as a relevant or specific receptor

	Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ A commitment to undertake more detailed technical analysis to determine the final design of the enclosures to the rooftop plant to achieve suitable acoustic enclosure for the intended specification and anticipated operating requirements. ▪ A commitment to undertake more detailed technical analysis of the potential solar glare from the building façades to understand intensity of the solar glare. Depending on the outcome of this analysis, suitable mitigation will be incorporated at the detailed design stage (as additional mitigation). ▪ Drainage design and SuDS proposals.
	Additional Mitigation	The embedded mitigation includes commitments to undertake technical analysis of specific aspects of the Proposed Development, including the enclosure of rooftop plant and final material selection and the solar glare intensity assessment to inform design detailing for the building façades and any other further requirements for mitigation. These will result in detailed design proposals that will form additional mitigation.
	Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Townscape and Visual Impact, Daylight, Sunlight and Overshadowing and Solar Glare, Water Resources and Flood Risk, Wind Microclimate and Human Health. The TVIA identifies an overall positive effect on the area surrounding Great Ancoats Street with the Human Health assessment determining that the Proposed Development would have positive effects on access to work and training in the area. However, the potential for adverse effects has been identified due to the possible impact of solar glare on drivers using a specific part of Great Ancoats street, which is a highly trafficked road in the centre of Manchester, as well as adverse effects in terms of access to community facilities. Depending on the intensity of the solar glare, the solar glare may temporarily distract motorists, leading to the potential that this effect may have safety implications. Additional mitigation in the form of further assessment of the intensity of solar glare has been specified to address this, if necessary, at the detailed design stage. Assuming that the additional mitigation is effective in avoiding significant adverse solar glare effects, the overall **cumulative inter-project residual operation effect on this receptor is deemed to be minor adverse, which is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources	Wind	Human Health	Ground Conditions
Residence Inn (hotel)	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor	Assessment assumes that all plant on both buildings shall be operational throughout the night. Due to the presence of the plant and nature and sensitivity of the receptor, major adverse noise and vibration impacts have been identified. Additionally, during the day, there is potential for the local noise climate to be affected due to the introduction of new mechanical plant and potential increase in traffic flow, speed and composition. A moderate noise impact is expected for Residence Inn. However, assuming a suitably designed noise barrier is in place around the rooftop plant compound, residual effects are considered to be minor" or less during both the day and night-time periods.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	During operation, the Residence Inn is expected to experience minor adverse human health effects from/for; ▪ Ambient noise changes.	Not identified as a relevant or specific receptor

Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ A commitment to undertake more detailed technical analysis to determine the final design of the enclosures to the rooftop plant to achieve suitable acoustic enclosure for the intended specification and anticipated operating requirements.
Additional Mitigation	The embedded mitigation includes commitments to undertake technical analysis of specific aspects of the Proposed Development, including requirements for acoustic enclosure of rooftop plant. These will result in detailed design proposals that will form additional mitigation.
Residual CEA	Additive and in-combination impacts from Noise and Vibration and Human Health. Effects from these topics both relate to the impact that noise will have on the customers of the Hotel. Hotels rely on positive reviews to ensure repeat businesses as well as attract new customers, thus a persistent adverse effects could also have a synergistic impact on socio-economics. Such receptors are therefore particularly sensitive to noise disturbances, especially at night. The embedded mitigation commits to further technical analysis that will support detailed design of acoustic enclosure to rooftop plant, also taking into account plant specification and expecting operational schedules. It is therefore assumed that the additional mitigation will be effective in managing the magnitude of noise impacts, such that they are no longer significant. The overall **cumulative inter-project residual operation effect on this receptor is deemed to be minor adverse, which is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Ashton Canal	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Ashton Canal is encompassed in TCA 5. The Proposed Development will generally be peripheral to an experience of TCA 5, seen in glimpsed views across interposing buildings and through townscape gaps. Where perceived, the activated frontage and consistent streetscape delivered by the Proposed Development will be clearly legible and appreciated and will signal the regeneration of this street and the improving character of Great Ancoats Street. The proposals will signal the presence of a new Site identity with uses which contribute to the diversity and richness of the local townscape. The overall effect will be minor beneficial.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor.	During operation, the drainage design and SuDS will ensure that water quality risk and flood risk to Ashton Canal is expected to be slight to negligible and not significant.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Land contamination impacts are less likely during the operation phase of the Proposed Development. The effect on Ashton Canal is anticipated to be negligible.

Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ A commitment to undertake more detailed technical analysis to determine the final design of the enclosures to the rooftop plant to achieve suitable acoustic enclosure for the intended specification and anticipated operating requirements. ▪ Drainage design and SuDS proposals
Additional Mitigation	The embedded mitigation includes commitments to undertake technical analysis of specific aspects of the Proposed Development, including requirements for acoustic enclosure of rooftop plant. These will result in detailed design proposals that will form additional mitigation.
Residual CEA	Additive and in-combination impacts from Townscape and Visual Impact, Water Resources and Flood Risk and Ground Conditions and Pollution. With the implementation of SuDS, the impacts related to water, flood risk and pollution become negligible and highly unlikely to occur. As such, **the cumulative inter-project operation effect is driven by the townscape impacts and deemed to be minor beneficial. This is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Royal Mills, Redhill Street	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	The Royal Mills are encompassed within TCA 2. The creation of new public realm along the western edge of the Site will directly contribute to the improvement of the outlook from and general environment of this nearest part of TCA 2. The activation of this space with pedestrian footfall will naturally enliven the local townscape and provide opportunity to look back towards TCA 2 and appreciate its distinctive historical architectural character. Planting within the new area of public realm with also filter the ground-level interface of the building, whilst active frontages comprising retail, food and beverage outlets will contribute to the local vitality and activity levels. The overall effect is moderate-major beneficial.	61 rooms within the converted mill building would be outside guidelines for daylight. The magnitude would be low for 21 rooms, medium for 16 rooms and high for 24 rooms. However, the rooms are considered to be deep. Such deep rooms (up to 11m deep) only enjoy deep light penetration currently due to the Site being clear of massing. The DSO&SG chapter assigns the significance of the daylight effects as permanent minor adverse.	The Historic Environment Chapter reports that there will be both adverse and beneficial effects to the Royal Mill during operation. Adverse effects are derived from the difference in height between the Proposed Development and the mill with the latter diminishing the presence of the mill. This impact has, however, been reduced as far as possible through design measures. Beneficial impacts on the settings of the mills would result from the re-establishment of an urban grain across the Site and the re-establishment of a developed frontage to the south of the canal. Additionally, the creation of a new public realm within the Canal Plaza to the south of the Rochdale Canal would provide new vantage points from which to appreciate the mill along Union Redhill Street, increasing opportunities for public appreciation and enlivening the canalscape.	The north building of the Proposed Development is to require limited 24hr working. Due to the 24hr working, the Noise assessment has assumed that plant required for the building will be operational 24hr. As such, minor adverse night time noise effects have been identified for the Royal Mill.	Not identified as a relevant or specific receptor	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
					Considering both adverse and beneficial aspects of the Proposed Development, the magnitude of this impact is assessed to be low adverse, resulting in a moderate adverse significance of effect on Royal Mill.							
	Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ Drainage design and SuDS proposals. ▪ A commitment to undertake more detailed technical analysis to determine the final design of the enclosures to the rooftop plant to achieve suitable acoustic enclosure for the intended specification and anticipated operating requirements. ▪ Opportunities for the dissemination of information about the history of Ancoats and the Proposed Development Site through measures such as public interpretation would be explored by GPA in consultation with Manchester City Council (MCC) and Greater Manchester Archaeological Advisory Service (GMAAS). ▪ A commitment to provide artwork on the permanent boundary wall in a number of locations including adjacent to the canal. Engagement with local heritage groups and the Canals and Rivers Trust will be sought over the artwork to the canal boundary.										
	Additional Mitigation	The embedded mitigation includes commitments to undertake technical analysis of specific aspects of the Proposed Development, including requirements for acoustic enclosure of rooftop plant; and commitments to undertake collaborative development of artwork for the permanent boundary between the Site and the canal. These will result in detailed design proposals that will form additional mitigation.										
	Residual CEA	Additive and in-combination impacts from Townscape and Visual Impact, Daylight, Sunlight and Overshadowing and Solar Glare, Historic Environment and Noise and Vibration. There are overall positive impacts reported on the townscape character area surrounding the Royal Mill, albeit that the mill itself may be reduced in prominence once the Proposed Development is complete and the existing gap in the townscape is filled. Some residential receptors within the Mill building are anticipated to experience night time noise impacts, a loss of daylight and a diminishment of the receptor's prominence in the area. It is also noted that daylight and prominence effects are more pronounced due to the current undeveloped state of the Site which is unusual within the context of the highly developed city-centre location of the receptor. Overall, the **cumulative inter-project residual operation effect on this receptor is deemed to be minor adverse, which is not significant.**										

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind Microclimate	Human Health	Ground Conditions and Pollution
New Islington Medical Practice, and Urban Village Medical Practice (UVMP), Pharmacy (K's Chemist), and Ancoats Dental Practice	Potential for air quality impacts from changes in traffic flows due to the Proposed Development. Changes in NO_2, PM_{10} and $PM_{2.5}$ are negligible across all receptors assessed. No significant effects identified.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor	Assessment assumes that all plant on both buildings shall be operational throughout the night. Due to the presence of the plant, moderate adverse noise and vibration impacts have been identified. However, it is considered unlikely that the premises would be occupied during the night-time period, thus effects are not deemed significant.	The injection of long-term employment into the local economy will likely attract individuals to living in the area which may cause a potential increase in the local population. The increase in residents in the local area will cause an increase in demand for local healthcare facilities. The impact will be a minor adverse effect.	No specific impact.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	During operation, employers, employees and users of New Islington Medical Practice, UVMP, Pharmacy and Ancoats Dental Practice are expected to experience minor adverse human health effects from/for; ▪ Air quality changes ▪ Sources of pollution and environmental exposure ▪ Access to community assets supporting health They are also expected to experience minor beneficial health impacts from/for; ▪ Access to work and training ▪ Access to Green space, open space, recreation, and leisure-time activities	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ A commitment to undertake more detailed technical analysis to determine the final design of the enclosures to the rooftop plant to achieve suitable acoustic enclosure for the intended specification and anticipated operating requirements.											
Additional Mitigation	The embedded mitigation includes commitments to undertake technical analysis of specific aspects of the Proposed Development, including requirements for acoustic enclosure of rooftop plant. These will result in detailed design proposals that will form additional mitigation.											
Residual CEA	Additive and in-combination impacts from Air Quality and Dust, Noise and Vibration, Socio-economic, and Human Health. Adverse effects related to plant noise, potential for increased demand on health services, air quality changes, exposure to sources of pollution and environmental exposure as well as access to community assets supporting health are anticipated during operation. Overall, the **cumulative inter-project residual operation effect on this receptor is deemed to be minor adverse, which is not significant.**											

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
New Islington Marina	Not identified as a relevant or specific receptor.	No impacts are anticipated from a Biodiversity standpoint on this receptor during the operational phase of the Proposed Development. No significant or non-significant residual effects are anticipated as a result of the operation of the Proposed Development after mitigation measures have been implemented.	TCA 3 comprises a small area of townscape directly to the north of the Site comprising the New Islington Marina, Cotton Field Park, and the New Islington Academy. The Proposed Development will be a conspicuous addition to the local townscape as experienced from TCA 3, introducing a new level of enclosure and scale to the south of New Islington Marina and Cotton Field Park. It will also encourage pedestrian movement, creating a more direct connection between Cotton Field Park and New Islington Marina and the key thoroughfare, which is Great Ancoats Street. The effect will be minor-moderate beneficial. New Islington Marina is also present within the context of viewpoints 5 and 6. The effect of operation on viewpoints 5 and 6 will be minor adverse and neutral respectively.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	It is anticipated that noise effects during the night time will be minor adverse for New Islington Marina. This effect is due to the plant required 24h for the operation of the Proposed Development.	Not identified as a relevant or specific receptor.	.No specific impact.	The drainage network will not be draining into New Islington Marina; instead, into the Shooters Brook culvert, which discharges into the River Medlock downstream of the Proposed Development; hence, there is no increased flood risk to New Islington Marina during operation. The flood risk due to the operation has been identified as negligible to New Islington Marina and the residual significance of the effect has been identified as neutral/slight.	The buildings and the café area next to New Islington Marina will experience wind speeds of 2 m/s or less for less than 5 % of the time. This suggests that the surroundings of the building are suitable for outdoor dining, with low wind speeds making it a comfortable area for pedestrians to sit and dine. The predicted wind conditions in the café area are appropriate for its proposed use. The Proposed Development will increase wind levels and therefore reduce comfort levels within Cotton Field Park but not significantly. Wind levels in Cotton Field Park would therefore still be suitable for outdoor recreation by users. Overall, this is a minor adverse effect	During operation, Businesses at New Islington Marina (Pollen Bakery, Cask Bar and Flawd Wine Bar) as well as users of Cotton Field Park and New Islington Marina are expected to experience minor adverse human health effects from/for; ▪ Air quality changes ▪ Ambient noise changes. ▪ Sources of pollution and environmental exposure ▪ Access to community assets supporting health It is also expected that both will experience minor beneficial health impacts from/for; ▪ Access to work and training ▪ With users of Cotton Field Park and New Islington Marina also experiencing a minor beneficial effect for/from; ▪ Access to Green space, open space, recreation, and leisure-time activities	Land contamination impacts are less likely during the operation phase of the Proposed Development. The effect on New Islington is anticipated to be negligible.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES.											

	Additional Mitigation	No additional mitigation is required.
	Residual CEA	Additive and in-combination impacts from Biodiversity, Townscape and Visual Impact, Noise and Vibration, Water Resources and Flood Risk, Wind Microclimate, Human Health and Ground Conditions and Pollution. Minor adverse effects are anticipated for noise and wind microclimate as well as a minor adverse effect on viewpoint 5 and human health considerations. However, the TVIA reports a minor-moderate beneficial impact on TCA 3 with a particular emphasis on the development encouraging pedestrian movement, creating a more direct connection between Cotton Field Park and New Islington Marina. The cumulative effects are considered in the context of the typical usage profile for the receptor, which will already be influenced by daylight hours and weather conditions due to the outdoor recreational elements of its appeal. As such, the overall **cumulative inter-project residual operation effect on this receptor is deemed to be minor adverse, which is not significant.**

Receptor	Air Quality and Dust	Biodiversity	TVIA	DSO & SG	Historic Environment	Noise and Vibration	Socio-economic	Transport	Water Resources and Flood Risk	Wind	Human Health	Ground Conditions and Pollution
Ancoats Conservation area	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	TCA 2 encompasses the Ancoats Conservation Area. The creation of new public realm along the western edge of the Site will directly contribute to the improvement of the outlook from and general environment of this nearest part of TCA 2. The activation of this space with pedestrian footfall will naturally enliven the local townscape and provide opportunity to look back towards TCA 2 and appreciate its distinctive historical architectural character. Planting within the new area of public realm with also filter the ground-level interface of the building, whilst active frontages comprising retail, food and beverage outlets will contribute to the local vitality and activity levels. The overall effect is moderate-major beneficial.	Not identified as a relevant or specific receptor.	The Proposed Development would reestablish a coherent urban grain to the south of the conservation area, resolving its currently imbalanced setting resulting from the vacant and undeveloped condition of the Site, and improve links between the conservation area and the surrounding townscape to the south. The provision of new public realm space to the south of the canal would enable the relationship between the historic mills and canal to be better appreciated, whilst the use of hard landscaping and street furniture reflective of the existing high-quality materials found within the conservation area would be sympathetic to its industrial character. The Proposed Development has been assessed to result in a low beneficial impact upon the conservation area, and a minor beneficial effect.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor. Potential synergistic benefits due to environmental enhancement, encouraging increased vitality and dwell time, potentially resulting in increased local spending.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor.	Not identified as a relevant or specific receptor. Potential synergistic benefits due to environmental enhancement, with positive impacts to amenity in particular.	Not identified as a relevant or specific receptor.
Embedded Mitigation	Embedded mitigation measures comprise legal requirements, high quality sustainable design as well as best or standard practices. Embedded mitigation here also includes mitigation included in other chapters of the ES. Relevant ES Chapter mitigations include; ▪ A commitment to undertake more detailed technical analysis to determine the final design of the enclosures to the rooftop plant to achieve suitable acoustic enclosure for the intended specification and anticipated operating requirements.											

	▪ Opportunities for the dissemination of information about the history of Ancoats and the Proposed Development Site through measures such as public interpretation would be explored by GPA in consultation with Manchester City Council (MCC) and Greater Manchester Archaeological Advisory Service (GMAAS). ▪ A commitment to provide artwork on the permanent boundary wall in a number of locations including adjacent to the canal. Engagement with local heritage groups and the Canals and Rivers Trust will be sought over the artwork to the canal boundary.
Additional Mitigation	The embedded mitigation includes commitments to undertake technical analysis of specific aspects of the Proposed Development, including requirements for acoustic enclosure of rooftop plant; and commitments to undertake collaborative development of artwork for the permanent boundary between the Site and the canal. These will result in detailed design proposals that will form additional mitigation.
Residual CEA	Additive and in-combination impacts from Townscape and Visual Impact and Historic Environment. Both of these topics anticipate positive effects on the conservation area with the historic environment topic anticipating a minor beneficial effect and the TVIA anticipating a moderate-major beneficial effect. In addition to this, there are likely to be synergistic beneficial effects in terms of Human Health (on amenity) and socio-economics (on vitality and potential local spending), from the enhanced townscape and overall environmental uplift to be delivered through the Proposed Development. The **cumulative inter-project operation effect has been judged to be minor to moderate beneficial. Moderate beneficial effects are significant.**

Table 22-8 - Operational phase inter-project impact assessment

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
128191/FO/2020 - Development comprising of five office buildings with flexible ground floor use at land between Ashton Canal and Pollard Street.	N/A	During operation, additive cumulative impacts on ground conditions and contamination are less likely to occur. However, additive effects as a result of maintenance activities are still possible due to the proximity of the RFFP to the Proposed Development. As this development will be required to adhere to the NPPF and other relevant legislation, negligible additive cumulative effects on ground conditions and contamination are anticipated.	N/A	The RFFP will create employment that will introduce new receptors to the study area. In accordance with the submitted TA, it is considered that the development may generate a negligible adverse additive cumulative effect on transport, which is not significant. .	During operation, cumulative impacts may be experienced related to the difficulty of sourcing materials for repairs or maintenance or finding waste management facilities or landfill with capacity to manage the disposal of waste. This will result in a negligible adverse additive cumulative effect which is not significant.	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has not identified any likely significant cumulative effects. The RFFP may form a receptor for operational plant noise from the Proposed Development. However, this is relatively greater at night when the offices would not typically be occupied; and is not deemed significant with additional mitigation in place. No significant cumulative effects are reported.	Cumulative effects on traffic and transport could occur where changes in traffic flows during operation from separate projects occur at the same time. However, cumulative operational vehicle trip impacts are expected to be negligible during operation and not significant. .	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	During operation, there will be a cumulative additive beneficial permanent and insignificant effect on the local labour market due to an increase in office and retail floorspace.	N/A	N/A
Residual effects											
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. The balance of impacts is towards benefits, principally associated with additive employment opportunities, reflected in the Human Health and Socio-Economics assessments. The **residual cumulative operation inter-project effects assessment is minor beneficial, which is not significant.**											

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
132574/FO/2021- Development comprising 4 townhouses at Paradise Wharf.	N/A	During operation, additive cumulative impacts on ground conditions and contamination are less likely to occur. However, additive effects as a result of maintenance activities are still possible due to the proximity of the RFFPs to the Proposed Development. As this development will be required to adhere to the NPPF and other relevant legislation, negligible additive cumulative effects on ground conditions and contamination are anticipated.	N/A	The RFFP will introduce up to four new households to the study area. No potential for notable inter-project effects with this RFFP has been identified.	N/A	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has not identified any likely significant cumulative effects. The RFFP may form a receptor for operational plant noise from the Proposed Development. However, the RFFP is sited beyond the Zone of Influence for noise impacts. No significant cumulative effects are reported.	Cumulative effects on traffic and transport could occur where changes in traffic flows during operation from separate projects occur at the same time. However, cumulative operational vehicle trip impacts are expected to be negligible during operation and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	During operation, there will be a cumulative beneficial permanent and insignificant effect on the demand on housing (low impact).	N/A	N/A
	Residual effects										
	The effects anticipated by the RFFP are comparable in type and lower in magnitude than the effect anticipated from the Proposed Development due to the small scale of the RFFP. No significant cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. The **residual cumulative operation inter-project effects assessment is negligible, which is not significant** .										

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
126608/FO/2020 Erection of part 4, part 11 storey residential (Class C3) development (with roof top plant room) comprising 66 (Class C3) residential units (3 x 2 bed town houses, 46 x two bed apartments and 17 x one bed apartments) together with associated car parking (10 spaces including 5 EVC spaces), cycle parking (66 spaces) communal roof terrace (level 6), landscaping and ancillary infrastructure including rooftop PV panels, alterations to access onto Store Street	N/A	During operation, additive cumulative impacts on ground conditions and contamination are less likely to occur. However, additive effects as a result of maintenance activities are still possible due to the proximity of the RFFPs to the Proposed Development. As this development will be required to adhere to the NPPF and other relevant legislation, negligible additive cumulative effects on ground conditions and contamination are anticipated.	During operation, the RFFP and the Proposed Development would increase the prominence of tall modern development in views from the Store Street Aqueduct (grade II* listed building). These views, however, take in a predominantly modern townscape and make limited contribution to the value of the listed building. The cumulative impact of these developments would therefore not materially increase the impact on the aqueduct and result in a negligible effect.	The RFFP will create 66 new homes that will introduce new residential receptors to the study area. During operation, there is the potential for impacts to occur from traffic and new demand for local services such as health or education facilities; but this is not an impact shared directly with the Proposed Development. In accordance with the submitted TA, it is considered that the development may generate a minor adverse additive cumulative effect on transport, which is not significant.	During operation, cumulative impacts may be experienced related to the difficulty of sourcing materials for repairs or maintenance or finding waste management facilities or landfill with capacity to manage the disposal of waste. This will result in a negligible adverse additive cumulative effect which is not significant.	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has not identified any likely significant cumulative effects. The RFFP may form a receptor for operational plant noise from the Proposed Development. However, the effect of this impact is not deemed significant with additional mitigation in place. No significant cumulative effects are reported.	Cumulative effects on traffic and transport could occur where changes in traffic flows during operation from separate projects occur at the same time However, cumulative operational vehicle trip impacts are expected to be negligible during operation and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	During operation, there will be a cumulative beneficial permanent and insignificant effect on the demand on housing (low – medium impact).	N/A	N/A
Residual effects											
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. The balance of cumulative impacts is towards benefits, principally associated with direct (RFFP) and indirect (the Proposed Development) opportunities for growth in the local housing market, reflected in the Human Health and Socio-Economics assessments. The **residual cumulative operation inter-project effects assessment is minor beneficial, which is not significant.**											

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
135662/FO/2022 Erection of a 20 storey building to create a 154 bedroom hotel (Class C1) above 2 basement levels with ancillary café / bar / restaurant and gym and other associated works including highway improvements, cycle parking and creation of accessible parking bay following removal of on-site structures.	N/A	During operation, additive cumulative impacts on ground conditions and contamination are less likely to occur. However, additive effects as a result of maintenance activities are still possible due to the proximity of the RFFPs to the Proposed Development. As this development will be required to adhere to the NPPF and other relevant legislation, negligible additive cumulative effects on ground conditions and contamination are anticipated.	N/A	During operation, impacts are likely to occur from traffic impacts. In accordance with the submitted TA, which indicates that no parking is to be provided for hotel customers, it is considered that the development may generate a negligible adverse additive cumulative effect on transport across a very limited portion of the network, which is not significant.	During operation, cumulative impacts may be experienced related to the difficulty of sourcing materials for repairs or maintenance or finding waste management facilities or landfill with capacity to manage the disposal of waste. This will result in a negligible adverse additive cumulative effect which is not significant.	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has been identified for Residence Inn. The RFFP is adjacent to Residence Inn and would form the more dominant noise source. The contribution from the Proposed Development would be secondary and expected to be below thresholds for significance eith additional mitigation in place. The RFFP may form a receptor for operational plant noise from the Proposed Development. This is relatively greater at night when the intended use may be especially sensitive. However, with additional mitigation in place, the effects that may be experienced by the RFFP as a receptor would be comparable to those predicted for Residence Inn and would not be significant.	Cumulative effects on traffic and transport could occur where changes in traffic flows during operation from separate projects occur at the same time. However, cumulative operational vehicle trip impacts are expected to be negligible during operation and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	N/A	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has been identified for Residence Inn. The cumulative daylight effects on Residence Inn (40 Laystall Street) from the RFFP and Proposed Development acting together would be a permanent minor to moderate additive adverse effect, compared with the minor adverse in the Proposed Development only scenario. It is the RFFP that would generate the greater impact as it is directly adjacent to Residence Inn. No cumulative sunlight effects or cumulative effects to solar panels or overshadowing to playground and amenity spaces or solar glare effects will occur.	N/A
Residual effect											
The effects anticipated by the RFFP are comparable to or greater than the effect anticipated from the Proposed Development. Additive cumulative adverse effects have been noted in relation to daylight within the DSO&SG assessment and the noise and vibration assessment, potentially affecting Residence Inn. The RFFP is adjacent to Residence Inn and would be the dominant source of both of these additive impacts – the contribution of the Proposed Development is not considered to be significant in isolation; and the RFFP makes the dominant contribution to the potentially significant cumulative daylight effects that have been identified. No additional mitigation for the Proposed Development is therefore identified. The RFFP as a receptor is anticipated to experience noise impacts from the Proposed Development in its operation phase – these are not additive; but rather reflect that the RFFP introduces a new sensitive receptor into the Zone of Influence for the noise impacts of the Proposed Development. The magnitude of the impacts is considered comparable to those reported for intra-project residual cumulative operational effects on Residence Inn and would not be significant, allowing for the additional mitigation proposed for acoustic enclosure to the rooftop plant. The **residual cumulative operation inter-project effects assessment is minor adverse, which is not significant** .											

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
135675/FO/2022 Erection of two residential apartment buildings (Use Class C3) comprising Block 1 -part 9, part 10 (plus roof level amenity block) and Block 2- 12 storey building (comprising of 261 dwellings in total) above basement levels with ground floor commercial units (Use Class E (excluding E (b)), associated residents amenity space, cycle parking, landscaping, access, street loading and other associated works following demolition of the existing building and structures on site.	N/A	During operation, additive cumulative impacts on ground conditions and contamination are less likely to occur. However, additive effects as a result of maintenance activities are still possible due to the proximity of the RFFPs to the Proposed Development. As this development will be required to adhere to the NPPF and other relevant legislation, negligible additive cumulative effects on ground conditions and contamination are anticipated.	During operation, the combined presence of the RFFP and the Proposed Development would slightly diminish the prominence of Brownfield Mill within the townscape due to their greater height. Whilst the developments are in keeping with the townscape. The cumulative effect will have a moderate adverse and significant effect on Brownfield Mill. During operation, the presence of RFFP would substantially screen the Proposed Development in views of the Rochdale Canal Warehouse from Tariff Street due to its proximity and height, negating any impact from the Proposed Development upon this asset and resulting in a neutral effect on Rochdale Canal Warehouse.	The RFFP will create 267 new homes that will introduce new residential receptors to the study area; plus ground floor commercial uses that will also bring new receptors to the study area. During operation, there is the potential for impacts to occur from traffic and new demand for local services such as health or education facilities; but this is not an impact shared directly with the Proposed Development. The TA does not anticipate any significant transport impacts associated with the development. The development may generate a negligible adverse additive cumulative effect on transport, which is not significant. .	During operation, cumulative impacts may be experienced related to the difficulty of sourcing materials for repairs or maintenance or finding waste management facilities or landfill with capacity to manage the disposal of waste. This will result in a negligible adverse additive cumulative effect which is not significant.	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has not identified any likely significant cumulative effects. The RFFP may form a receptor for operational plant noise from the Proposed Development. However, the effect of this impact is not deemed significant with additional mitigation in place. No significant cumulative effects are reported.	Cumulative effects on traffic and transport could occur where changes in traffic flows during operation from separate projects occur at the same time However, cumulative operational vehicle trip impacts are expected to be negligible during operation and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	During operation, there will be a cumulative beneficial permanent and insignificant effect on the demand on housing (medium impact).	N/A	N/A

Residual effects
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development, with the RFFP itself forming an intervening feature between the Proposed Development and some of the more sensitive historic environment assets cited in the contributing topic assessments. Brownfield Mill is cited within the Historic Environment assessment as adversely affected; however, this is not reflected in the other assessments. Consequently, no significant cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. The balance of other cumulative impacts is towards benefits, principally associated with direct (RFFP) and indirect (the Proposed Development) opportunities for growth in the local housing market, reflected in the Human Health and Socio-Economics assessments. The overall **residual cumulative operation inter-project effects assessment is minor beneficial, which is not significant.**

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
137346/FO/2023 Erection of a part 5, part 10 storey building comprising residential apartments and townhouses, residents' amenity space (Use Class C3a) (265 new dwellings), ground floor commercial (Use Class E), cycle and car parking, landscaping, access and servicing, and other associated works following demolition of existing structures	N/A	During operation, additive cumulative impacts on ground conditions and contamination are less likely to occur. However, additive effects as a result of maintenance activities are still possible due to the proximity of the RFFPs to the Proposed Development. As this development will be required to adhere to the NPPF and other relevant legislation, negligible additive cumulative effects on ground conditions and contamination are anticipated.	N/A	The RFFP will create 256 new homes that will introduce new residential receptors to the study area; plus ground floor commercial uses that will also bring new receptors to the study area; but this is not an impact shared directly with the Proposed Development. During operation, there is the potential for impacts to occur from traffic and new demand for local services such as health or education facilities.	During operation, cumulative impacts may be experienced related to the difficulty of sourcing materials for repairs or maintenance or finding waste management facilities or landfill with capacity to manage the disposal of waste. This will result in a negligible adverse additive cumulative effect which is not significant.	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has not identified any likely significant cumulative effects. The RFFP may form a receptor for operational plant noise from the Proposed Development. However, the effect of this impact is not deemed significant with additional mitigation in place. No significant cumulative effects are reported.	Cumulative effects on traffic and transport could occur where changes in traffic flows during operation from separate projects occur at the same time However, cumulative operational vehicle trip impacts are expected to be negligible during operation and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	During operation, there will be a cumulative beneficial permanent and insignificant effect on the demand on housing (medium impact). There will also be a cumulative beneficial permanent and insignificant effect on the local labour market due to an increase in office and retail floorspace.	N/A	N/A
Residual effects											
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. The balance of cumulative impacts is towards benefits, principally associated with direct (RFFP) and indirect (the Proposed Development) opportunities for growth in the local housing market and labour market, reflected in the Human Health and Socio-Economics assessments. The **residual cumulative operation inter-project effects assessment is minor beneficial, which is not significant.**											

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
122598/FO/2019 Proposed erection of a residential development comprising 34 no. 3 storey dwellinghouses, 2 no. 6 storey apartment blocks comprising 60 no. apartments with commercial space at the ground floor (Use Classes A1, A2, A3, A4, B1 and D1) with outdoor seating, all with associated car parking, landscaping, public realm works and boundary treatments	N/A	During operation, additive cumulative impacts on ground conditions and contamination are less likely to occur. However, additive effects as a result of maintenance activities are still possible due to the proximity of the RFFPs to the Proposed Development. As this development will be required to adhere to the NPPF and other relevant legislation, negligible additive cumulative effects on ground conditions and contamination are anticipated.	N/A	The RFFP will create 94 new homes that will introduce new residential receptors to the study area; plus ground floor commercial uses that will also bring new receptors to the study area; but this is not an impact shared directly with the Proposed Development. During operation, there is the potential for impacts to occur from traffic and new demand for local services such as health or education facilities.	During operation, cumulative impacts may be experienced related to the difficulty of sourcing materials for repairs or maintenance or finding waste management facilities or landfill with capacity to manage the disposal of waste. This will result in a negligible adverse additive cumulative effect which is not significant.	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has not identified any likely significant cumulative effects. The RFFP may form a receptor for operational plant noise from the Proposed Development. However, the effect of this impact is not deemed significant with additional mitigation in place. No significant cumulative effects are reported.	Cumulative effects on traffic and transport could occur where changes in traffic flows during operation from separate projects occur at the same time. However, cumulative operational vehicle trip impacts are expected to be negligible during operation and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	During operation, there will be a cumulative beneficial permanent and insignificant effect on the demand on housing (low - medium impact). There will also be a cumulative beneficial permanent and insignificant effect on the local labour market due to an increase in office and retail floorspace.	N/A	This RFFP is situated just north of the marina. The cumulative modelled scenario, which includes the presence of the Proposed Development and the RFFP as a fully built out receptor, indicates that anticipated wind speeds may experience some acceleration in the surrounding area around the RFFP, particularly impacting corners of the Proposed Development. The wind speeds will remain within the wind comfort safety criteria and therefore the cumulative effect will not adversely impact the usability and safety of the space. It is therefore not assessed as significant.

Residual effects
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. The RFFP as a receptor is anticipated to experience wind acceleration impacts (not significant) from the Proposed Development in its operation phase – these are not additive; but rather reflect that the RFFP introduces a new sensitive receptor into the Zone of Influence for the wind and microclimate impacts of the Proposed Development, as well as making a contribution itself due to its own siting and massing. There is no requirement for additional mitigation of this impact. The balance of cumulative impacts is towards benefits, principally associated with direct (RFFP) and indirect (the Proposed Development) opportunities for growth in the local housing market and labour market, reflected in the Human Health and Socio-Economics assessments. The **residual cumulative operation inter-project effects assessment is minor beneficial, which is not significant.**

Development	Air Quality	Ground Conditions and Contamination	Historic Environment	Human Health	Materials and Waste	Noise and Vibration	Transport	Water Resources and Flood Risk	Socio-Economic	DSO & SG	Wind
128911/FO/2020 Erection of 9 storey residential building (Use Class C3) comprising 89 residential units (28 x 1 bed and 61 x 2 bed) and conversion of and 3 storey extension to 32-34 Laystall Street for use as offices (Class E) with associated external works following demolition of outrigger and associated structures along with other associated works including access, servicing, landscaping and secure cycle parking	N/A	During operation, additive cumulative impacts on ground conditions and contamination are less likely to occur. However, additive effects as a result of maintenance activities are still possible due to the proximity of the RFFPs to the Proposed Development. As this development will be required to adhere to the NPPF and other relevant legislation, negligible additive cumulative effects on ground conditions and contamination are anticipated.	N/A	The RFFP will create 89 new homes that will introduce new residential receptors to the study area; plus ground floor commercial uses that will also bring new receptors to the study area; but this is not an impact shared directly with the Proposed Development. During operation, there is the potential for impacts to occur from traffic and new demand for local services such as health or education facilities.	During operation, cumulative impacts may be experienced related to the difficulty of sourcing materials for repairs or maintenance or finding waste management facilities or landfill with capacity to manage the disposal of waste. This will result in a negligible adverse additive cumulative effect which is not significant.	During operation, the potential for additive impacts to be experienced by receptors close to the Proposed Development and the RFFP has not identified any likely significant cumulative effects. The RFFP may form a receptor for operational plant noise from the Proposed Development. However, the effect of this impact is not deemed significant with additional mitigation in place. No significant cumulative effects are reported.	Cumulative effects on traffic and transport could occur where changes in traffic flows during operation from separate projects occur at the same time However, cumulative operational vehicle trip impacts are expected to be negligible during operation and not significant.	No additive impacts affecting surface water quality, groundwater or flood risk are expected.	During operation, there will be a cumulative beneficial permanent and insignificant effect on the demand on housing (low - medium impact). There will also be a cumulative beneficial permanent and insignificant effect on the local labour market due to an increase in office floorspace.	N/A	N/A
Residual effect											
The effects anticipated by the RFFP are comparable or greater than the effect anticipated from the Proposed Development. No significant cumulative effects have been identified across topics. As such no additional mitigation measures have been identified. The balance of cumulative impacts is towards benefits, principally associated with direct (RFFP) and indirect (the Proposed Development) opportunities for growth in the local housing market and labour market, reflected in the Human Health and Socio-Economics assessments. The **residual cumulative operation inter-project effects assessment is minor beneficial, which is not significant.**											

22.8. Additional mitigation and enhancement measures

22.8.1. Embedded mitigation measures, which have been accounted for as part of the impact assessment, are summarised above. Where potential significant effects remain once embedded mitigation has been considered, additional mitigation measures are required.

Construction

22.8.2. The intra-project construction CEA identified the potential for cumulative adverse in-combination and synergistic impacts to arise due to the general disturbance anticipated to be experienced by the closest receptors to the construction works. Generally, the disturbance manifests from a combination of noise, visual intrusion and changes in activity levels due to the presence of the construction works, including transport movements associated with the construction workers and activities at the Site. In turn, the potential for adverse human health effects to arise has also been identified, which could be significant for some receptors, notably:

- Staff and pupils at the Co-op Islington Academy
- Users, visitors and residents of houseboats at New Islington Marina
- Staff and customers of Residence Inn, on the corner of Great Ancoats Street and Laystall Street
- Heritage assets at Royal Mills, Redhill Street – the experience of visitors and residents
- Heritage assets and Ancoats Conservation Area – the experience of visitors and residents

22.8.3. The inter-project construction CEA identified the potential for additive adverse impacts to arise, also due to the general disturbance from concurrent construction activities of the Proposed Development and shortlisted RFFPs. Generally, the disturbance manifests from a combination of noise, visual intrusion and changes in activity levels due to the presence of the construction works, including transport movements associated with the construction workers and activities at the Site, exacerbated by some of the RFFPs that are proximate to the Site. The RFFPs where the additive impacts have been identified as potentially contributing to a significant cumulative effect are as follows:

- 128191/FO/2020 – office led development, proximate to the Site
- 122598/FO/2019 – mixed use development comprising 94 residential units as well as commercial floorspace at New Islington Marina.
- 135675/FO/2022 – residential led development, proximate to the Site and intervisible with Brownsfield Mill

22.8.4. The embedded mitigation includes the OCEMP, within which there are a number of commitments to further control measures for the Principal Contractor to ensure are produced and implemented. Of particular relevance to managing the magnitude of cumulative impacts are the appointment of the CLO prior to construction commencing; the preparation and implementation of the CEP by the CLO, with dedicated measures for particularly sensitive receptors (as listed above); the establishment of complaints procedures to be managed by the CLO; the development of the CTMP with detailed control measures and routing for construction vehicles; and the preparation and implementation of a Noise Monitoring and Management Plan, ideally informed by thresholds that will be agreed with MCC through a Section 61 application. These activities will form additional mitigation for the Proposed Development.

22.8.5. There is a commitment to use the temporary Site hoardings to include artworks and information. This will be agreed with the LPA and local interest groups, as well as the school. The final design will emerge in the detailed design stage and will form additional mitigation.

Operation

22.8.6. The intra-project operational CEA identified the potential for cumulative adverse synergistic impacts to arise on two types of receptors in the vicinity of Great Ancoats Street:

- Solar glare at GR-006 could, depending on the intensity, adversely affect drivers and in turn, create a risk to the safety of drivers and people using different transport modes in the vicinity.
- Operational plant noise could adversely affect staff and customers of the Residence Inn, on the corner of Great Ancoats Street and Laystall Street and, in turn, create disturbance that could have negative effects on human health, particularly for more sensitive individuals within the wider population. In addition, persistent disturbance could manifest through reviews of user experience and in turn, adversely affect the business operation of the hotel.

22.8.7. There is one RFFP – 135662/FO/2022 – that would introduce a new sensitive receptor group and the inter-project cumulative assessment indicates the potential for adverse impacts. The RFFP relates to a 154 bed hotel and the assessment cites the potential similar noise impacts and synergistic human health and socio-economic intra-project cumulative effects as for the Residence Inn.

22.8.8. There are certain worst case assumptions that have been made in order to undertake the assessment. This is a precautionary approach that assists in isolating aspects of the Proposed Development that will require further technical assessment as the detailed design is progressed. From the perspective of the cumulative assessment, there is a need for operational plant noise and the intensity of solar glare to Great Ancoats Street to be determined through specialist technical input. There is a commitment to undertake this further assessment and this approach will ensure that the final design for the acoustic enclosure for rooftop plant, as well as any requirement for changes to fenestration and other façade materials, form additional mitigation for potential cumulative operational impacts.

22.8.9. As part of the planning applications there is a commitment to collaborate with various parties to provide artwork on the permanent boundary walls of the Site. Work is already underway to engage with the Co-op Academy to ensure their agreement to artworks for the boundary that will be visible from the school; and there is a commitment to work with the LPA and suitable local interest groups, as well as the Canals and Rivers Trust, in respect of the other Site boundaries. The intention is that the resulting artwork will celebrate local heritage and character. The final design will emerge in the detailed design stage and will form additional mitigation. There is also commitment to Co-op Academy to fund the replacement of two existing rain canopies outside the Reception classroom with glazed rain canopies to admit more daytime light.

22.8.10. The inter-project operational CEA has identified the potential for cumulative impacts (additive, synergistic and in-combination) to arise due principally to the transformational change to the townscape within the study area, particularly affecting the immediate Site environs including the Ancoats Conservation Area and associated historic environment features. In addition, the volume of additional office, commercial, retail and residential accommodation that will be delivered in the study area from the combination of the shortlisted RFFPs and the Proposed Development is considered to offer benefits to the labour market and local housing market, leading to synergistic impacts on Socio-economics and Human Health. Both of these types of cumulative inter-project operational effects are considered beneficial and no additional mitigation is proposed.

22.9. Summary of significant residual cumulative effects

Intra-project effects

22.9.1. No significant residual intra-project cumulative beneficial effects have been identified in the construction phase.

22.9.2. Three receptors have been identified as experiencing potentially significant residual intra-project cumulative adverse effects in the construction phase:

- The Co-op Academy, New Islington – some instances of moderate adverse effects within the construction phase, typically associated with noisy works and other disruption.
- Royal Mills, Redhill Street – moderate adverse effects within the construction phase, typically associated with townscape and heritage impacts.
- Ancoats Conservation Area – moderate adverse effects within the construction phase, typically associated with townscape and heritage impacts.

22.9.3. Moderate beneficial and significant residual intra-project cumulative effects have been identified for the Ancoats Conservation Area once the Proposed Development becomes operational. This is due to direct beneficial impacts on the townscape, leading indirectly to human health amenity benefits coupled with increased vitality and dwell time, likely to enhance socio-economic conditions.

22.9.4. No significant residual intra-project cumulative adverse effects have been identified in the operation phase.

Inter-project effects

22.9.5. Four RFFPs have been identified as contributing to potentially significant residual inter-project cumulative beneficial effects in the construction phase:

- 128191/FO/2020 – commercial led development acting in combination with the Proposed Development to result in moderate beneficial effects in the construction phase, typically associated with opportunities for the labour market
- 135662/FO/2022 – mixed use development acting in combination with the Proposed Development to result in moderate beneficial effects in the construction phase, typically associated with opportunities for the labour market
- 135675/FO/2022 – mixed use development acting in combination with the Proposed Development to result in moderate beneficial effects in the construction phase, typically associated with opportunities for the labour market
- 137346/FO/2023 – mixed use development acting in combination with the Proposed Development to result in moderate beneficial effects in the construction phase, typically associated with opportunities for the labour market

22.9.6. Three RFFPs have been identified as contributing to potentially significant residual inter-project cumulative adverse effects in the construction phase (noting two of these three also appear in the list above, and thus contributed to a mix of beneficial and adverse residual effects):

- 128191/FO/2020 – commercial led development acting in combination with the Proposed Development to result in moderate adverse effects in the construction phase, typically associated with additive noise and disturbance impacts

- 135675/FO/2022 – mixed use development acting in combination with the Proposed Development to result in moderate adverse effects in the construction phase, typically associated with intrusion and disturbance in the townscape and affecting heritage assets
- 122598/FO/2019 – mixed use development acting in combination with the Proposed Development to result in moderate adverse effects in the construction phase, typically associated with additive noise and disturbance impacts

22.9.7. Moderate beneficial and significant residual inter-project cumulative effects have been identified for the labour market and local housing market overall in the operational phase. This is due to the volume and nature of the totality of the development that is anticipated to be delivered by the combination of the Proposed Development and the shortlisted RFFPs within the study area.

22.9.8. No significant residual inter-project cumulative adverse effects have been identified in the operation phase.

22.10. Glossary and Acronyms

Table 22-9 – Glossary and acronyms

Term	Definition
CEA	Cumulative Effects Assessment
CEP	Community Engagement Plan
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
DMRB	Design Manual for Roads and Bridges
DSO&SG	Daylight, Sunlight, Overshadowing and Solar Glare
EIA Regulations	Environmental Impact Assessment Regulations 2017
ES	Environmental Statement
GMAAS	Greater Manchester Archaeological Advisory Service
IIA	Integrated Impact Assessment
MCC	Manchester City Council
NPPF	National Planning Policy Framework
NSIP	Nationally Significant Infrastructure Project
OCEMP	Outline Construction Environmental Management Plan
PINS	Planning Inspectorate
PLO	Public Liaison Officer
RFFP	Reasonably Foreseeable Future Project
RTPI	Royal Town Planning Institute
SEA	Strategic Environmental Assessment
TCA	Townscape Character Area
UVMP	Urban Village Medical Practice
ZoI	Spatial Zones of Influence
PINS	Planning Inspectorate

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