Robert Street, Manchester

Environmental Statement Volume I: Main Report

April 2026

BURO HAPPOLD

Environmental Statement Volume I: Main Report - Contents

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1 INTRODUCTION

1.1 PURPOSE OF THIS DOCUMENT

1.1.0 Rani Developments Limited ('the applicant') is seeking full planning permission for the following description of development (hereafter referred to as the 'proposed development'):

"Demolition of existing structures and erection of a part 10, part 11, part 14 and part 20 storey residential building comprising 189 units with associated residents' amenity space, servicing and public realm."

1.1.1 This Environmental Statement (ES) reports on the findings of the Environmental Impact Assessment (EIA) process and has been prepared by Buro Happold on behalf of the applicant to accompany the planning application for the proposed development.

1.1.2 The location of the application site (hereafter referred to as the 'site') is shown in Figure 1-1.

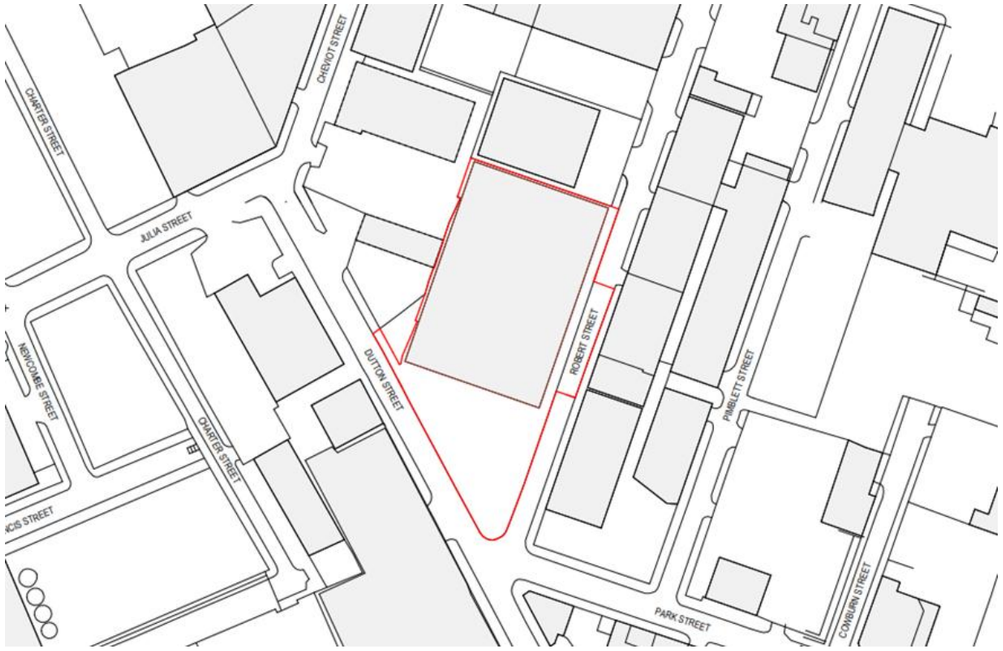


Figure 1-1 Site location plan

1.2 REQUIREMENT FOR ENVIRONMENTAL IMPACT ASSESSMENT

1.2.1 The European Union (EU) Environmental Impact Assessment Directive 2014/52/EU ('2014 EIA Directive') came into force on 15th May 2014. England transposed this on 16th May 2017 through The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended). These are referred to as 'the EIA Regulations' herein.

1.2.2 Projects that require or may require EIA, an 'EIA development', are set out in Schedule 1 and 2 of the EIA Regulations. For Schedule 1 projects, EIA is mandatory in all cases, whereas for Schedule 2 projects, the need for EIA will depend upon whether the proposed development is likely to have significant effects on the environment by a virtue of factors such as its nature, size and location.

1.2.3 The proposed development does not fall under any of the types of development set out in Schedule 1 of EIA Regulations.

1.2.4 Schedule 2 of the EIA Regulations relates to development, other than exempt development, of a description mentioned in column 1 of the table in Schedule 2, where:

a) *"Any part of that development is to be carried out in a sensitive area"* (such as a Site of Special Scientific Interest, Habitats Directive designated site, within a National Park or World Heritage Site); *or*

b) *"any applicable threshold or criterion in the corresponding part of column 2 of that table is respectively exceeded or met in relation to that development."*

1.2.5 Schedule 2 covers urban development projects (category 10(b) in column 1 of the table in Schedule 2); the proposed development falls under this classification.

1.2.6 The site is not within or near to any sensitive areas. A further description of the site and its surrounding context is set out in Chapter 2 Development Description.

1.2.7 In relation to the definition of Schedule 2 development, the EIA Regulations include 'applicable thresholds' above which an EIA is required if significant environmental effects are considered likely. As the proposed development falls under urban development projects, the following criteria set out in Column 2 of Schedule 2 apply:

- The development includes more than 1 hectare of urban development which is not dwelling house development; or
- The development includes more than 150 dwellings; or
- The overall area of the development exceeds 5 hectares.

1.2.8 Whilst the site is only circa 0.3ha in area, the proposed development will deliver 189 homes over a mixture of 1 and 2 bed apartments and 2 bed townhouses. To achieve this, the proposed development will see the substantial redevelopment of the site, from an industrial warehouse building housing six indoor padel courts under temporary planning consent, into a residential tower of up to 20 storeys and approximately 16,500m^2 GIA.

1.2.9 On the basis of the above context and features, the proposed development is considered to be EIA development, with the potential for likely significant environmental effects to occur. Subsequently, an EIA has been undertaken for the proposed development and accompanies the detailed planning application.

1.3 STRUCTURE OF THE ENVIRONMENTAL STATEMENT

1.3.1 This ES has been prepared to meet the requirements of Regulation 4 and Schedule 4, Part 1 of the EIA Regulations. It is recognised within the EIA Regulations that the ES should report on the likely significant effects of a proposed development, and the cumulative effects of the proposed development potentially arising from an accumulation of effects from adjacent or nearby schemes. The structure of the ES and supporting documentation is outlined in Table 1-1.

Table 1-1 Structure of the Environmental Statement

Volume	Description
Non-Technical Summary	This provides a summary of the main ES in a non-technical language. The Non-Technical Summary (NTS) is available as a separate document.

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Volume	Description
Volume I - Main Report	This report introduces the proposed development description, alternatives considered, the methodology which has been followed in undertaking the EIA, the assessment of significant environmental effects (both beneficial and adverse) and consideration of cumulative effects including effects arising as a result of other developments in proximity to the proposed development. Table 1-2 provides further description.
Volume II - Technical Appendices	These technical appendices provide the detailed assessment of the proposed development in the context of each environmental topic included within the ES. Specific supporting documents such as site surveys are also contained within the technical appendices.

1.3.2 Volume I of the ES, the main report, is structured as outlined in Table 1-2.

Table 1-2 Structure of the ES Volume I – Main Report

Chapter	Description
1	**Introduction**: Comprises an introduction to the proposed development, an account of the environmental assessment requirements and an overview of the ES structure.
2	**Development Description:** Describes the site location and surrounding area in terms of the existing physical and social characteristics and land uses. This chapter also provides an account of the proposed development in terms of the demolition, construction and operational phases.
3	**Alternatives and Design Evolution:** Presents information on the alternatives that have previously been considered, any environmental effects not assessed in the ES and reasons for their exclusion.
4	**Methodology:** Provides an overview of the assessment approach undertaken. It indicates how key issues have been identified and addressed within the ES and the approach that has been taken for the EIA process.
5 - 10	**Technical assessments:** • Socioeconomics; • Climate Change and Greenhouse Gas Emissions; • Wind Microclimate; • Daylight and Sunlight; • Built Heritage; • Townscape and Visual Impact. In general, these chapters present the assessment of effects during demolition, construction and operation of the proposed development for each topic area. The format of each section is generally as follows: • Introduction; • Baseline; • Prediction of impacts and assessment of effects; • Mitigation; and • Significant residual effects.
11	**Cumulative and Interactive Effects:** Presents effects resulting from the accumulation of effects generated by the proposed development on the same receptors and potential effects arising from adjacent or nearby schemes together with those predicted for the proposed development.
12	**Residual Effects and Conclusions:** Identifies potential mitigation measures and summarises residual effects of the proposed development.

1.3.3 A number of appendices support the technical assessments included in Volume I of the ES. These are included in Volume II of the ES, as broken down in Table 1-3.

Table 1-3 List of technical assessment appendices included with ES Volume II

Appendix Number	Topic	Description
6.1	Climate Change and Greenhouse Gas Emissions	Climate change resilience risk assessment
6.2		Greenhouse gas calculations
6.3		Scope 3 emissions considerations
6.4		Legislation, policy and guidance
7.1	Wind Microclimate	Detailed wind microclimate methodology
8.1	Daylight and Sunlight	Drawings
8.2		Results
9.1	Built Heritage	Heritage Statement
10.1	Townscape and Visual Impact	Planning policy
10.2		Viewpoints
10.3		Verified views

1.3.4 The planning application will be supported by a number of stand-alone documents that are not part of the ES, but which will be referred to where relevant in the ES. These documents include:

- Requisite Forms (Planning) inc. Certificates and Notices;
- Planning Application Drawings;
- Design and Access Statement;
- Air Quality Assessment;
- Affordable Housing Statement;
- Archaeological Desk Based Assessment;
- Broadband Assessment;
- Circular Economy Statement;
- Crime Impact Statement;
- Drainage Strategy and Flood Risk Assessment;
- Ecology Survey and Assessment;;
- Energy Statement;
- Environmental Standards Statement;
- Fire Statement;
- Landscape Strategy, including Blue and Green Infrastructure Statement;
- Noise Assessment;
- Phase 1 Geotechnical Report;
- Statement of Consultation;
- Planning and Tall Buildings Statement;
- Transport Assessment and Travel Plan;

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- TV and Radio Reception Survey; and
- Viability Statement and Cost Plan.

1.4 EIA TECHNICAL TEAM

1.4.1 This ES has been prepared and coordinated by a team of experienced and qualified environmental consultants. All technical chapters have been reviewed and signed off by appropriately qualified consultants. The technical EIA co-ordination team and chapter contributors, and their relevant qualifications and experience, are listed in Tables 1-4 and 1-5.

Table 1-4 EIA coordinators

Buro Happold Consultant	Qualifications, experience and memberships
Helen Lund	Helen is a Technical Director EIA Consultant and Practitioner member of ISEP, with over 20 years' experience in the delivery of EIA in the UK. Helen specialises in the coordination and management of all stages of the EIA process and has directed, managed or contributed to over 50 EIAs for large scale regeneration and infrastructure projects to date.
Anna Whiter	Anna is an Associate EIA Consultant and Full Member of IES. She has 8+ years' experience as an ES and environmental coordination specialist across numerous UK planning applications for residential and commercial developments.

Table 1-5 Technical Specialists

Chapter	Consultant	Qualifications, experience and memberships
Socioeconomics	Jue Wang Buro Happold	Jue brings over eight years of experience across more than 20 mixed-use projects. She has extensive experience in socioeconomics impact assessment, economic development and regeneration for large scale mixed use, commercial and infrastructure schemes. She combines robust analytical skills and policy review to deliver evidence based, planning compliant assessments.
	Ellen Newman Buro Happold	Ellen is a Consultant specialising in economic development, with four years' experience delivering socioeconomics impact assessment across the UK. She brings particular strength in EIA socioeconomics and health impact assessment for mixed use developments, underpinned by robust data analysis and policy aligned evidence.
Greenhouse gas emissions and climate change	Patrick Little Buro Happold	Patrick Little is a Technical Director specialising in EIA, environmental planning, and climate change impact assessment. Patrick has over 15 years of EIA delivery experience and over 8 years of experience leading the preparation of EIA climate change assessments for urban development projects in the UK.
	Rachael Harrison Buro Happold	Rachael is a senior consultant and Full Member of the IES. She has 7+ years of experience across EIA developments including climate change and air quality for a variety of sectors across the UK planning including residential and commercial developments.
Wind Microclimate	Jon Winchester GIA	Jon is a Director of GIA, and holds a BSc, MSc and PhD. He has 14 years' experience of undertaking wind assessments for the built environment and has written wind microclimate ES chapters for over 30 projects.
	Chris Harley GIA	Chris is a Director of GIA, and holds an MEng and PhD. He has 12 years' experience of undertaking wind assessments for the built environment and has written wind microclimate ES chapters for over 20 projects.
Daylight and Sunlight	Nicola Hensey GIA	Nicola is a director with 18+ years of experience in the daylight and sunlight industry and has drafted 40+ daylight, sunlight and overshadowing ES chapters in support of applications for commercial, residential and masterplan developments.
	Katie Price GIA	Katie is a surveyor with 5 years of experience in the daylight and sunlight industry and has co-drafted 5 daylight, sunlight and overshadowing ES chapters in support of applications for commercial, residential and masterplan developments.
Built Heritage	Kirsten McKnight Heritage Architecture	Kirsten is an Associate Director with 20+ years of technical experience, and is a full member of the Institute of Historic Building Conservation. She has delivered over 30 ES Chapters assessing the potential impacts of development upon the historic built environment.
	Holly Gerrard Heritage Architecture	Holly is a Heritage Consultant with 2 years of technical experience in assessing the potential impacts of development upon the historic built environment. She is an affiliate member of the Institute of Historic Building Conservation.
Townscape and Visual Impact	Richard Bennett RBMP	Richard Bennett is a Chartered Landscape Architect (CMLI). He has over 18 years' experience in townscape and visual impact assessment for residential, mixed-use and commercial developments, with particular expertise in Accurate Visual Representation (AVR) production including surveying, 3D modelling and rendering to Landscape Institute TGN 06/19 standards.

1.5 REFERENCES

- European Union (2014). Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment;
- Stationery Office (2017). The Town and Country Planning (Environmental Impact Assessment) Regulations 2017;
- Ministry of Housing, Communities & Local Government (MHCLG) (2014[1]). National Planning Practice Guidance (NPPG): Environmental Impact Assessment.

[1] First published 2014, last updated 2020

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2 DEVELOPMENT DESCRIPTION

2.1 INTRODUCTION

2.1.1 This chapter describes the site and its surroundings and summarises the proposed development for which full planning permission is being sought, as relevant to the Environmental Statement (ES). Further information can be found in the Design and Access Statement (DAS), plans, and drawings which form part of the suite of planning application documents.

2.2 THE SITE AND SETTING

Location and site description

2.2.1 The site occupies approximately 0.3 hectares of land within the Manchester City Council (MCC) administrative area, in an area of north Manchester known as Strangeways.

2.2.2 The site is bound by Robert Street to the east and Dutton Street to the south, Figure 2-1.

2.2.3 The site is not within and does not contain any nationally designated statutory or non-statutory heritage or archaeological sites, such as Scheduled Monuments, Registered Parks or Gardens or Listed Buildings.

2.2.4 The site is not within and does not contain any land-based ecological or nature designations such as Areas of Outstanding Natural Beauty (AONB), Sites of Special Scientific Interest (SSSI) or Special Areas of Conservation (SAC).

2.2.5 At present, the site is occupied by Pure Padel Manchester, an indoor sports venue, approved under temporary planning consent 139686/FO/2024. The site consists of an industrial warehouse building, housing six indoor padel courts and associated amenities, and car parking spaces for approximately 18 vehicles.

Surrounding uses and context

2.2.6 The surrounding land uses comprise predominantly light-industrial/warehouse and commercial use. New residential development is coming forward in the area, notably to the south west of the site at Old Brewery Gardens. HM Prison Manchester is also located nearby, 150m north west of the site, Figure 2-2.

2.2.7 Multiple listed buildings can be found within a 1km radius of the site, although none are immediately adjacent. This includes two grade I listed sites approximately 550m south of the site: “Chethams Hospital and attached wall”, and “Cathedral Church of Saint Mary”, which is the main Anglican cathedral in Manchester.

2.2.8 Manchester Victoria train station is the closest transport hub, approximately 350m south east of the site, with access to National Rail, Manchester’s tram network and bus services.

2.2.9 The banks of the River Irwell provide the closest publicly accessible green space, located circa 350m to the west of the site.

2.2.10 There are a number of schemes in close proximity to the site either under construction or with planning permission that will be assessed as part of the cumulative effects assessment in Chapter 11 Cumulative and Interactive Effects.

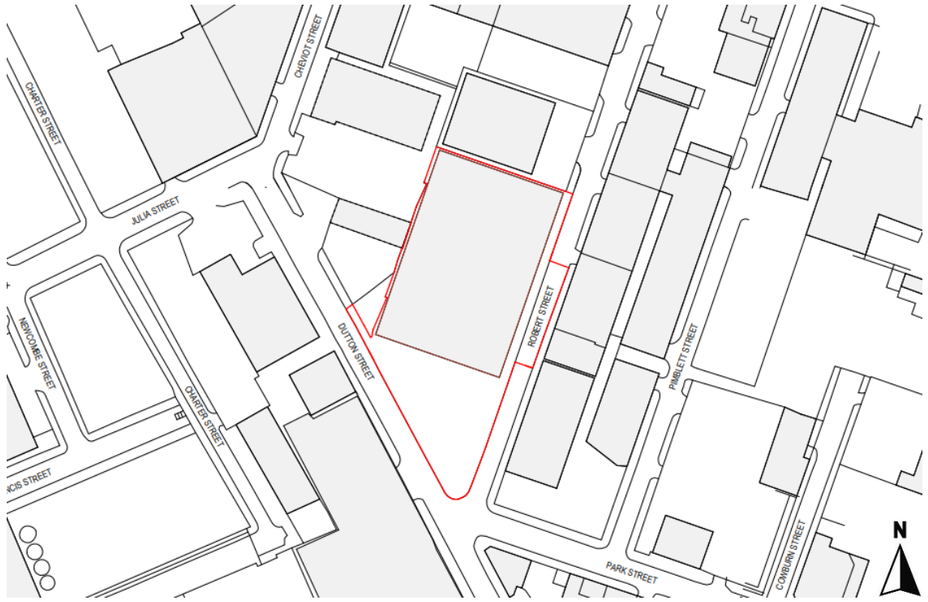


Figure 2-1 Site location plan

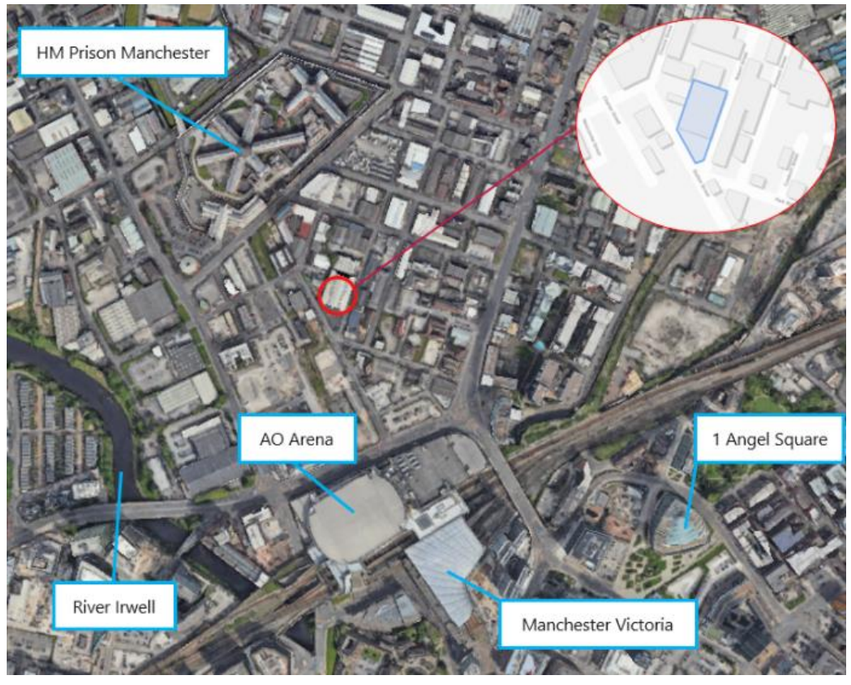


Figure 2-2 Surrounding context in Manchester

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2.3 THE PROPOSED DEVELOPMENT

Overview

2.3.1 The proposed development delivers the opportunity to improve the built form and appearance of the area by redeveloping a commercial/warehouse space that has temporary planning permission for a padel facility into an attractive residential development. It creates a sense of place with improvements to the visual amenity of the area and an enhanced landscape realm which will improve existing activity, interest and variety at street level.

2.3.2 In summary, the applicant is seeking full planning permission for the following:

- *"Demolition of existing structures and erection of a part 10, part 11, part 14 and part 20 storey residential building comprising 189 units with associated residents' amenity space, servicing and public realm."*

Quantum

2.3.3 The proposed development is defined through the general arrangement plans and accommodation schedule, which set the detail of the development and are included with the application.

2.3.4 Table 2-1 shows the breakdown of the proposed area by land use and unit type. The overall floorspace proposed for the building is 16,579m^2 GIA (gross internal area).

Table 2-1 Maximum quantum for the proposed development

Land use	Unit type/detail	Number of units	Total area (GIA m^2)
Residential	1 bed apartment	64	3,178.60
	2 bed apartment	121	8,454.40
	2 bed townhouse	4	359.00
Ancillary uses	Bin storage, amenity spaces (balconies, terraces, cycle storage), circulation and plant	N/A	4,587.00
Total		**189**	**16,579.00**

Layout, massing and height

2.3.5 As indicated in the Design and Access Statement (DAS) accompanying this application, the layout, massing and height of development have been informed by six design principles:

- *"Façade rhythm: the building façade composition will be split into base, middle and top. This will be expressed by double height spaces, window configuration and materiality;*
- *Green space and amenity: the building massing has been stepped to create green space and amenity;*
- *New public realm: the building is set back from the street edge and new public realm will be created on a key junction;*
- *Tall building proportions: the proportions of the tall building will be designed (in both plan and elevation) to achieve a slender appearance;*
- *Windows and openings: windows will be arranged in a regular rhythm and reinforce the appearance of the base, middle and top. Windows will not be arranged randomly; and,*
- *Complementary materials strengthen composition: the placement of building materials will reinforce the façade composition, and add depth through the addition of secondary elements. Materials will be robust and resistant to damage."*

The scale of the proposed development ranges from 10 to 20 storeys in height, with roof terraces at levels 10 and 11, see Figure 2-3. The proposed maximum height of development (including roof plant) is 106.40mAOD. This is aligned with nearby approved and under construction developments which range from 12 to 27 storeys in height, see Figure 2-4.



Figure 2-3 Proposed development scale and layout (Tim Groom Architects, 2026)

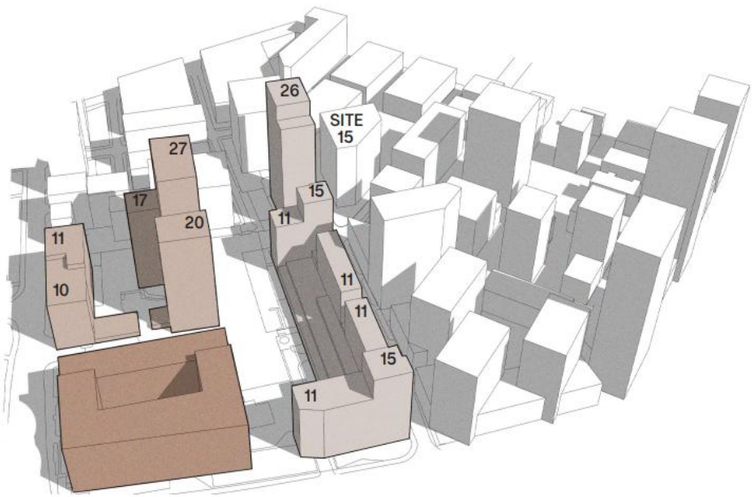


Figure 2-4 Nearby approved scheme maximum building heights. Proposed development located at "Site 15". (Tim Groom Architects, 2026)

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2.3.6 The material palette reflects the architectural character, materials and tones of the neighbouring buildings. Red bricks are proposed for the proposed building's primary material and main façade, see Figure 2-5. Secondary elements of aluminium, metalwork, ceramic and recessed brickwork are also proposed.



Figure 2-5 Proposed brick work material palette and surrounding architectural context (Tim Groom Architects, 2026)

2.3.7 Further details of the massing and design evolution can be found in Chapter 4 Alternatives and Design Evolution, and the DAS accompanying the planning application.

Landscape and public realm

2.3.8 The landscape masterplan for the proposed development, see Figure 2-6, incorporates public space and gardens at the ground floor (areas 1 and 2). The "neighbourhood forest garden" at the entrance to the proposed building improves accessibility and pedestrian permeability across the site, in connection to the wider area, and fosters a sense of community and interaction. The "woodland garden" in the rear courtyard provides a private amenity space for residents, using attractive planting and lighting to support wildlife conservation.

2.3.9 Two roof terraces for residents at levels 10 and 11 (areas 3 and 4) provide amenity space, with ecological and sense-of-place enhancements incorporated into the design through planting and communal seating areas.



Figure 2-6 Proposed landscape masterplan (Land Studio and Tim Groom Architects, 2026)

Access, circulation and parking

2.3.10 The proposed development promotes active and sustainable travel. Pedestrian access to the proposed development will be available from multiple access points around the building, and on-site cycle parking facilities will provide storage for up to 198 bikes.

2.3.11 The proposed development is designed as 'car free' and therefore no car parking is available, with the exception of two disabled bays. Servicing will be provided via by loading bays accessed from Robert Street.

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Energy Strategy

2.3.12 An Energy Strategy Report has been prepared for the application and is submitted as a standalone document in support of the planning application. The energy strategy has been developed in accordance with the NPPF, MCC's Core Strategy, and the Greater Manchester Places for Everyone Joint Development Plan.

2.3.13 The proposed development adopts a low carbon design strategy utilising initiatives in line with the energy hierarchy, see Figure 2-7, to reduce the operational energy demand of the building.

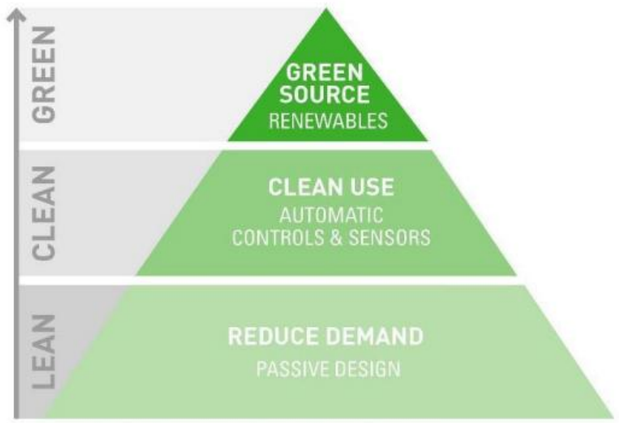


Figure 2-7 The energy hierarchy. (Ridge and Partners LLP, 2026)

2.3.14 "Lean" measures are passive design features which reduce the building energy demand. The proposed development will use natural sources of cooling and ventilation whilst building materials, orientation and form will provide solar control and maximise access to natural daylight.

2.3.15 "Clean" measures will meet the reduced energy demand in the most efficient way, such as energy efficient LED lighting and energy monitoring. It is proposed mechanical ventilation heat recovery will be used to minimise heat loss and prevent overheating for both the residential units and communal areas of the building.

2.3.16 "Green" measures utilise low or zero carbon technology to further reduce CO2 emissions. The proposed development will use air source heat pumps for heating, cooling and hot water.

2.4 DEMOLITION AND CONSTRUCTION

Programme and work hours

2.4.1 The main construction works are planned to start in July 2027 with building complete by May 2028. The indicative construction programme is outlined in Table 2-2.

Table 2-2 Indicative Construction Programme

Construction activity	Estimated date
Site setup (mobilisation, demolition and clearance)	April 2027 – June 2027
Construction period, up to completion of fit out	July 2027 – May 2028
Building Safety Regulation Gateway 3 checks	June 2028
Residents start moving in	July - August 2028

2.4.2 It is anticipated the core site working hours for the demolition and construction works will be as follows:

- 07:30 to 18:00 weekdays and 08:30 to 14:00 Saturday; and
- No working on Sunday or Bank Holidays.

2.4.3 Any essential work outside these hours will be subject to prior agreement and/or reasonable notice to MCC, who may impose certain restrictions.

Construction Management Plan

2.4.4 Further details of the construction programme will be provided in a Construction Management Plan (CMP), which will be secured via planning condition following submission of this planning application. The CMP will include sections specific to logistics (Construction Logistics Plan (CLP)) and environment (Construction Environmental Management Plan (CEMP)).

CLP

2.4.5 A CLP will be produced to manage the traffic related to the construction phase. The document will outline details of construction traffic management measures including the construction vehicle routing strategy, which will identify principal and secondary routes to the site, along with a logistics plan for managing site access.

2.4.6 An enforcement strategy will also be designed to ensure construction routing and best practices are kept and adhered to.

CEMP

2.4.7 The CEMP will cover both the demolition and construction stages of the project relating to environmental issues. The document will describe roles and responsibilities, control measures and activities to be undertaken to manage environmental effects. The document will be prepared prior to the commencement of site works, following discussion and agreement with MCC.

2.4.8 The environmental management commitments made within the ES by the technical specialists, will be incorporated into the CEMP. A summary of all recommended measures is provided in Chapter 12 Residual Effects and Conclusions.

Waste and materials

2.4.9 Construction waste arising from the site will be managed by the Principal Contractor. Typically, this is set out in a Site Waste Management Plan (SWMP) framework or the CEMP.

2.4.10 The contractor will aim to ensure that demolition and construction waste produced from the proposed development is minimised and handled in an environmentally sustainable manner in line with policy and industry best practice.

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3 ALTERNATIVES AND DESIGN EVOLUTION

3.1 INTRODUCTION

3.1.1 Schedule 4 of the Environmental Impact Assessment (EIA) Regulations requires Environmental Statements to include *'a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects'*.

3.1.2 It is widely regarded as good practice to consider alternatives as it results in a more robust application for planning permission and it facilitates the decision-making process. It is also recognised that options may be limited, but the nature and location of some developments may make consideration of alternative sites a material consideration.

3.1.3 When considering at what level of detail to consider alternatives, the recommendations are for only those alternatives which are practical i.e. those which fulfil the criteria of need and purpose.

3.1.4 This chapter describes how the design of the proposed development has evolved and the alternatives that have been considered as part of that process, and is informed directly by the architects, Tim Groom Architects and the Design and Access Statement (DAS) which they have produced.

3.2 APPROACH TO CONSIDERING ALTERNATIVES

3.2.1 The approach to the consideration of alternatives for the proposed development is firstly to consider the 'do nothing' option, which identifies the environmental implications for the site and the surrounding area, should the applicant not proceed with the current proposals. In effect, this enables consideration of whether the benefits of the scheme outweigh the costs of the scheme.

3.2.2 Following this, as no alternative sites were considered for this development, the approach taken is to consider alternative masterplan options.

The 'do nothing' alternative

3.2.3 The 'no development alternative' refers to the potential scenario by which no redevelopment would occur on the site, and it would remain in its existing condition.

3.2.4 At present, the site is occupied by Pure Padel Manchester, an indoor sports venue. This use was granted under a temporary planning permission extending to June 2027. The site consists of an industrial warehouse building, housing six indoor padel courts and associated amenities, and car parking spaces for approximately 18 vehicles.

3.2.5 In the absence of redevelopment, it is likely Pure Padel Manchester would continue to operate from the site in this capacity until 2027. Beyond June 2027, Pure Padel Manchester may reapply for the continued use of the site, or alternatively vacate the premises, at which point the building would assumedly be empty and unused, available for other tenants to apply for planning permission to use, or applicants to redevelop.

3.2.6 Should the site remain as it currently is, the environmental effects identified in this ES as a result of the proposed development would not occur.

Alternative sites

3.2.7 No other development sites have been considered by the applicant, as the site has been acquired by the applicant for development purposes. As such, no alternative sites were considered for the proposed development.

3.3 MASTERPLAN ALTERNATIVES AND DESIGN EVOLUTION

Engagement

3.3.1 A detailed pre-application process has enabled the project team to engage with statutory and non-statutory consultees (e.g. MCC, Environment Agency, United Utilities and Greater Manchester Archaeological Advisory Service etc). Consultation feedback has provided a greater understanding of relevant constraints and has helped the consideration of alternatives in the evolution of the design and the production of supporting planning documents. The consultation process is detailed in the Planning Statement and DAS, with the engagement methods summarised here.

Preapplication meetings

3.3.2 Preapplication meetings with MCC planning officers have been held throughout the planning process. Advice and discussion on built form and massing was integral to design development and the creation of a scheme that responds to the objectives of the Great Ducie Street Strategic Regeneration Framework (SRF).

Website

3.3.3 A dedicated website was launched (www.duttonpoint.co.uk[1]), for easy access to information relating to the proposed development. The website includes pages describing the site, the proposed design, landscaping, and transport and access. A form on the website allows people to provide their feedback. The results from respondents show:

- 80% of respondents were local residents, with the remaining 20% visiting the local area regularly;
- All respondents either strongly supported (60%) or supported (40%) the plans for high-quality residential development on the site;
- All respondents strongly supported the plans to create a publicly accessible garden; and,
- Comments approved of the architectural design detail and the integration of the site within the local community and "grassroots culture".

Postcard

3.3.4 A postcard explaining the proposed development was distributed to 114 addresses in the immediate vicinity of the site.

Press release

3.3.5 A media release was issued to local news and business press organisations, to help ensure the consultation period for local residents, business and stakeholders received adequate promotion.

[1]For the purpose of public consultation, the proposed development is called "Dutton Point"

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Design Evolution

3.3.6 The design evolution of the proposed development incorporated stakeholder feedback to realise the development potential of the site in line with planning policy at both local and national level. This section describes the main design stages and decisions taken during production of the initial and finalised development.

3.3.7 Discussions with MCC on building massing focussed on how the proposed development would relate to the Great Ducie Street SRF. The indicative massing in the SRF does not account for existing plots and their land ownership. Thus, the site's footprint differs from the parcels indicated in the SRF. Figure 3-1 shows suggested building heights and plots in the SRF. The site is located over plots 42 and 43.



Figure 3-1 Proposed building heights in the Great Ducie Street SRF. Indicative site boundary overlain in red. (Extract from Appendix B, Great Ducie Street SRF. Deloitte LLP, on behalf of MCC, 2018)

3.3.8 Tim Groom Architects undertook an exercise to calculate the building volume proposed on site by the SRF plots, and what that could look like when the site was fully maximised to the SRF heights. From this, the first iteration of the proposed development massing was created, with a building footprint that extended up to Dutton Street, Figure 3-2.

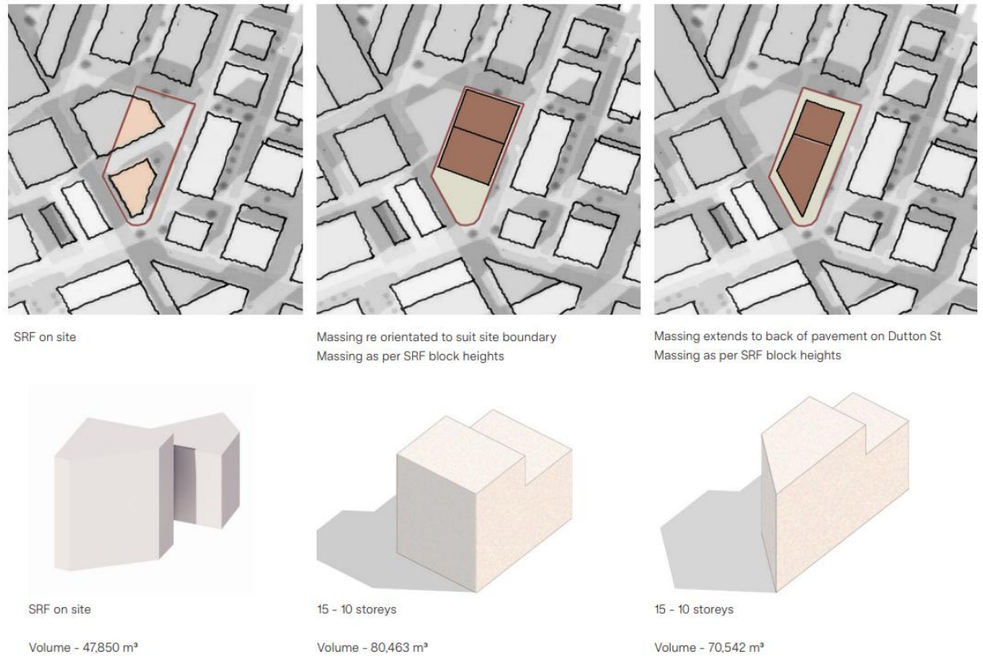


Figure 3-2 SRF building volumes applied to the proposed development (Tim Groom Architects, 2026)

3.3.9 In response to preapplication feedback, the built form was moved back from Dutton Street to create a new area of public realm. The open space offers a clear landmark and sense of place, connecting the proposed development to the surrounding area.

3.3.10 Building heights were refined and massing redistributed and stepped to reduce bulk and visual impact. This helped the proposed development compliment neighbouring development and provided an opportunity for the creation of roof terrace spaces. The addition of a chamfered corner in the tallest part of the building also softened the overall mass of development and enhanced townscape interest, see Figure 3-3.

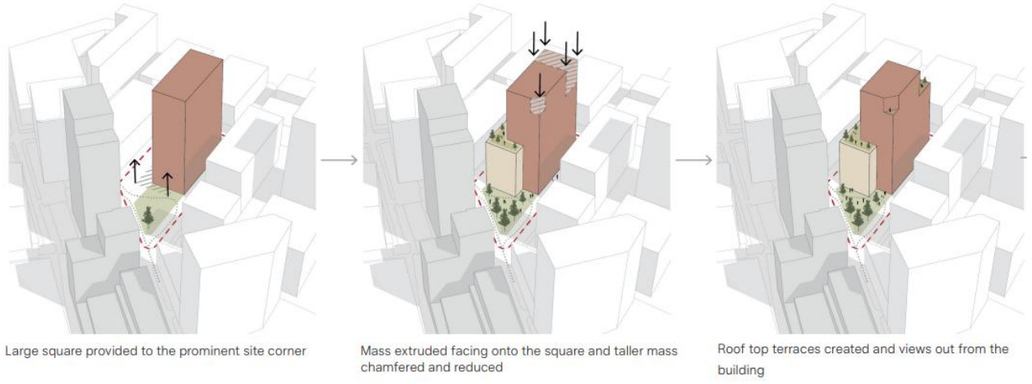


Figure 3-3 Massing adjustments (Tim Groom Architects, 2026)

3.3.11 A comparison of intermediate building massing design with the final proposed design is presented in Figure 3-4.

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Figure 3-4 Massing evolution, from 2024 (left) to proposed design (right) (Tim Groom Architects, 2024 and 2026)

3.3.12 Materiality options have been considered in the development of the façade and definition of building elevations. The resulting brickwork palette reflects the architectural character of neighbouring buildings, which features red and dark tones, brickwork detailing and façade depth. Figure 3-5 shows some of the options considered, with varied window proportions, materials, colours and detailing.



Figure 3-5 Different options considered for building façade and windows (Tim Groom Architects, 2026)

3.4 REFERENCES

3.4.1 Great Ducie Street Strategic Regeneration Framework (Deloitte LLP, on behalf of MCC, 2018) available at: https://www.manchester.gov.uk/__data/assets/file/0016/123631/great_ducie_street_srf_november_2018.pdf

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4 METHODOLOGY

4.1 INTRODUCTION

4.1.1 This chapter provides an overview of the Environmental Impact Assessment (EIA) process. It outlines the EIA assessment methodology that has been undertaken to assess the environmental effects of the proposed development.

4.2 APPROACH TO THE ENVIRONMENTAL IMPACT ASSESSMENT

4.2.1 This Environmental Statement (ES) includes an assessment of the likely environmental effects of the proposed development. The ES will allow Manchester City Council (MCC) and other statutory consultees and members of the public to understand the likely significant effects of the proposed development, ahead of the planning application being determined.

4.2.2 The ES has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, as amended (the EIA Regulations) and with due regard to the following good practice guidance:

- Ministry of Housing, Communities and Local Government Planning Practice Guidance: Environmental Impact Assessment (MHCLG, 2014 (and as most recently amended in 2020));
- Department of the Environment Planning Research Programme – Preparation of Environmental Statements for Planning Projects that Require Environmental Assessment – A Good Practice Guide. (DEPR, 1995);
- Institute of Environmental Management and Assessment, Environmental Impact Assessment Guide to Shaping Quality Development, (IEMA[1], 2015); and
- Institute of Environmental Management and Assessment, Guidelines for Environmental Impact Assessment, (IEMA, 2004 (amended 2006)).

4.3 SCOPE OF THE ENVIRONMENTAL IMPACT ASSESSMENT

2017 EIA Regulations

4.3.1 An ES must meet the requirements specified in Regulation 18 of the EIA Regulations and contain the information specified in Schedule 4 that is relevant to the specific characteristics of the particular development and to the environmental features likely to be significantly affected.

4.3.2 Table 4-1 lists the information specified in Schedule 4, along with the section of the ES where this information is provided (where applicable). Further information on the ES scope is provided in the subsequent sections of this chapter.

Table 4-1 Information specified in Schedule 4 of the EIA Regulations for inclusion in an ES

Item	Information specified in Schedule 4	Section of this Environmental Statement
1	A description of the development, including in particular: a) a description of the location of the development; b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases; c) a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; d) (d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.	ES Volume I: Chapter 2 Development Description
2	A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	ES Volume I: Chapter 3 Alternatives and Design Evolution
3	A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	ES Volume I: Chapters 5-10 (technical assessments, baseline sections)
4	A description of the factors specified in Regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.	ES Volume I: Chapter 5-10 (technical assessments)

[1] Since the publication of this guidance, IEMA rebranded to ISEP 'Institute of Sustainability and Environmental Professions', in July 2025. Guidance published under the IEMA name prior to July 2025 will continue to be referenced as an IEMA publication in this ES. For any materials published by the organization since the rebrand, the reference will be to ISEP.

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Item	Information specified in Schedule 4	Section of this Environmental Statement
5	A description of the likely significant effects of the development on the environment resulting from, inter alia: a) the construction and existence of the development, including, where relevant, demolition works; b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources; c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste; d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters); e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources; f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; g) the technologies and the substances used. h) The description of the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level which is relevant to the project, including in particular those established under Council Directive 92/43/EEC(a) and Directive 2009/147/EC(b).	ES Volume I: Chapter 2 Development Description ES Volume I: Chapters 5-10 (technical assessments) Chapter 11 Cumulative and Interactive Effects
6	A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	ES Volume I Chapter 5-10 (technical assessments) Technical appendices in ES Volume II
7	A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.	ES Volume I Chapter 5-10 (technical assessments) ES Volume I: Chapter 11 Cumulative and Interactive Effects; and Chapter 12 Residual Effects and Conclusions
8	A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU(c) of the European Parliament and of the Council or Council Directive 2009/71/Euratom(d) or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	Not included. The development is unlikely to produce a significantly elevated risk of accidents or natural disasters. A flood risk assessment (FRA) has been submitted as a separate standalone planning document.
9	A non-technical summary of the information provided under paragraphs 1 to 8.	ES Non-Technical Summary
10	A reference list detailing the sources used for the descriptions and assessments included in the environmental statement.	ES Volume I: Chapter 5-10 (technical assessments)

Stages of development assessed

4.3.3 The EIA has addressed effects arising from the demolition, construction and operation of the proposed development as follows:

- Demolition and construction effects may arise directly from demolition and construction activities (e.g. employment of site workers) and from the temporary use of land and surroundings as the building progresses toward completion; and
- Operational effects may arise from the use of the new or modified infrastructure, landscape and buildings (e.g. the provision of new housing stock by the development or effects of development operations upon utilities services).

4.3.4 The significance of the effects that will arise in each of these phases is based on the magnitude of any changes compared to the baseline (i.e. those conditions which either exist or would exist if the scheme did not go ahead) and the importance or sensitivity of the resource or receptor affected by the changes.

Consultation and agreement of technical scope

EIA scoping

4.3.5 Regulation 15 of the EIA Regulations indicates that an applicant may ask the relevant planning authority, in this case Manchester City Council, to state in writing their opinion as to the information to be provided in the ES (a "scoping opinion"). However, carrying out EIA Scoping is not a mandatory requirement under the EIA Regulations.

4.3.6 Due to programme constraints, a formal scoping exercise to obtain a scoping opinion was not undertaken. However, during preapplication discussions with Manchester City Council it was agreed the proposed development was an EIA development and the council provided an informal view on the scope of the ES. The project team considered the likely significant environmental issues relating to the site and the proposed development and concluded an ES containing the following topics was appropriate:

- Socio-economics;
- Greenhouse gas emissions;
- Wind microclimate;
- Daylight and sunlight;
- Built heritage; and,
- Townscape, heritage and visual impact.

4.3.7 As part of the informal scoping process, other environmental topics (Air Quality, Noise and Vibration, Traffic and Transport, Water Resources and Flood Risk, Ground Conditions, Ecology, Archaeology, Waste Management, and, Major Accidents and Natural Disasters) were scoped out of the ES, as the proposed development would not give rise to significant environmental effects in relation to these topics.

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Temporal scope

Overview

4.3.8 The temporal scope for the assessment of the proposed development is considered to include the preparation works, demolition of the existing building / structures on site, construction works and the operation of the proposed development.

Baseline year

4.3.9 Environmental impacts will be described in terms of the extent of change to the baseline environment. The baseline used in the assessment of effects, in this ES, is the year 2026.

Demolition period, construction period and operational year

4.3.10 The main construction works are planned to start in July 2027 with building complete by May 2028. The indicative construction programme is outlined in Table 4-2 Indicative Construction Programme.

Table 4-2 Indicative Construction Programme

Construction activity	Estimated date
Site setup (mobilisation, demolition and clearance)	April 2027 – June 2027
Construction period, up to completion of fit out	July 2027 – May 2028
BSR Gateway 3 checks	June 2028
Residents start moving in	July - August 2028

Spatial scope

4.3.11 The spatial extent of the EIA is defined by the geographical area potentially affected by the proposed development. The definition of the spatial scope has taken account of:

- The footprint of the proposed development defined by the red line (site) boundary;
- The nature of the existing baseline environment;
- The manner in which effects are likely to be propagated;
- The wider area affected by, for example, views toward the site from a distance; and
- The geographical boundaries of the political and administrative authorities which provide the planning and policy context for the scheme.

4.3.12 For the proposed development, the geographical extent of the assessment will include the site and its neighbours, as well as sensitive receptors in the wider area. The spatial scope for each assessment has been defined based on a combination of desk study, existing survey data, consultation and professional experience, as appropriate.

4.4 PLANNING CONTEXT

4.4.1 Planning permission is being sought for the proposed development in full detail. This includes details of layout, scale, appearance and access, which have been provided for approval. Reference should be made to ES Chapter 2 Development Description, the Design and Access Statement and architectural drawings for further details.

4.4.2 The ES includes an assessment of the effects from the proposed development as proposed in detail.

4.5 ASSESSMENT OF EFFECTS

Types of effect

4.5.1 The identification of effects within the EIA process has been completed with reference to the EIA Regulations (2017) and good practice guidance. The following types of effects have been considered in undertaking the EIA:

- Direct effects – effects that arise from activities that form an integral part of the project (e.g. land take);
- Indirect or secondary effects – effects that arise from activities not explicitly forming part of the project (e.g. noise changes due to an increase or decrease in road traffic flows on existing off-site roads resulting from the construction works);
- Cumulative effects – these arise from the combination of the scheme in conjunction with other development projects, or the interaction of a number of effects. These include effects of a different nature at a particular location; at different locations but affecting the same resource; of the same nature at different locations; reoccurring over a period of time. The cumulative effect of two or more effects, which may be non-significant by themselves, can be significant on the one receptor;
- Short-term, medium-term and long-term effects, as defined below:
    - Short-term effects are those that would be of short duration and would occur for up to 2 years;
    - Medium-term effects are those that occur for a period of between 2-10 years;
    - Long-term effects are those that occur for 10 years or more and include permanent effects.
- Permanent effects – effects that result from an irreversible change to the baseline environment or which persist for the foreseeable future;
- Temporary effects – effects that persist for a limited period only and possibly reverts to an original or identified baseline state; and
- Beneficial and adverse effects – having a beneficial or adverse influence on receptors and resources.

4.5.2 The above types of effects have been assessed for the demolition, construction and operational phases of the proposed development.

Determining significance

4.5.3 The EU Directive 2014/52/EU and EIA Regulations (2017) require that the ES reports the likely significant effects of the proposed development on the environment. Although there is no statutory definition of what constitutes a significant effect, it is clear that the principal purpose of identifying the significant effect of a project is to inform the decision maker such that the effects can be taken into account when considering whether or not permission should be granted.

4.5.4 For the purposes of this ES, an 'impact' is the change to the baseline attributable to the proposed development, while an 'effect' is the result of that impact on the resource or the receptor (of a given sensitivity). The way in which the significance of an effect is determined will vary for each environmental topic area, but in broad terms it may be described as the magnitude of the change to the baseline conditions that can be attributed to the proposed development and the value or sensitivity of the resource or the receptor affected.

4.5.5 A consistent approach between topic areas has generally been applied to assessments, supplemented in some instances by the specialists' experience and professional opinion. The chapters have adopted consistent terminology in defining the significance of the effect. An explanation of relevant and specific discipline terminology will be clearly described if different to the more consistent terminology.

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4.5.6 In general, significance of effect has been defined as being major, moderate, minor or negligible, whereby major and moderate are considered to be 'significant' and minor or negligible considered 'not significant'. This is shown in a matrix in Table 4-3.

Table 4-3 Matrix for determining effect significance

		Magnitude of change / impact			
		Large	**Medium**	**Small**	**Negligible**
Receptor sensitivity	**High**	Major	Major	Moderate/Minor	Negligible
	Moderate	Major	Moderate	Minor	Negligible
	Low	Moderate/Minor	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

4.6 MITIGATION AND RESIDUAL EFFECTS

4.6.1 Where possible, a development will achieve environmental enhancement; however, where adverse effects exist, the reduction of effect significance through mitigation will take into consideration the following hierarchy:

- Avoidance of the significant effect;
- Reduction of the impact and effects;
- Finding a way to reverse or repair the effect; and, as a last resort,
- Compensation (or off-setting).

4.6.2 Residual effects (assuming mitigation options are applied) will then be classified by significance, as appropriate.

4.7 DEVELOPMENT ALTERNATIVES

4.7.1 A number of alternatives have been considered for the proposed development. These are discussed in Chapter 3 of this ES and include:

- The 'do nothing' option; and
- Alternative masterplan options.

4.8 CUMULATIVE EFFECTS

4.8.1 Whilst effects that occur in isolation may be insignificant, it is possible that significant effects could occur when a number of potential effects are combined. In light of this, the EIA process has taken into account the following potential cumulative effect scenarios:

- Inter-project cumulative effects – from the proposed development interacting with other existing and/or approved projects in the local area; and
- Intra-project cumulative effects – generated as a result of the interaction of two or more predicted effects on a receptor/resource.

4.8.2 The schemes to be addressed as part of the inter-project cumulative effects assessment are discussed in detail in Chapter 11 Cumulative and Interactive Effects. This includes "reasonably-foreseeable future developments", i.e. those that are subject to a live planning application, have resolution to grant and have commenced on site but have yet to be completed.

4.9 CLIMATE CHANGE

4.9.1 In line with the EIA Regulations (2017) the potential implications of climate change, both on the development itself and on the assessments undertaken, have been acknowledged in the relevant technical chapters.

4.9.2 Chapter 6: Climate Change and Greenhouse Gas Emissions, considers the effects of the proposed development with respect to climate change mitigation and carbon dioxide equivalent emissions.

4.9.3 Additionally, in line with IEMA guidance 'EIA Guide to Climate Change Resilience and Adaptation' (2020), a section considering climate change effects during construction and operation in the context of the assessed technical topics has been included in each of the technical chapters, as completed by each technical specialist.

4.10 REFERENCES

- Ministry of Housing, Communities and Local Government Planning Practice Guidance: Environmental Impact Assessment (MHCLG, 2014 (and as most recently amended in 2020));
- Department of the Environment Planning Research Programme – Preparation of Environmental Statements for Planning Projects that Require Environmental Assessment – A Good Practice Guide. (DEPR, 1995);
- Institute of Environmental Management and Assessment, Environmental Impact Assessment Guide to Shaping Quality Development, (IEMA, 2015);
- Institute of Environmental Management and Assessment, Guidelines for Environmental Impact Assessment, (IEMA, 2004 (amended 2006)); and
- Institute of Environmental Management and Assessment, EIA Guide to Climate Change Resilience and Adaptation (IEMA, 2020).

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5 SOCIOECONOMICS

5.1 INTRODUCTION

5.1.1 This chapter of the ES assesses the likely environmental effects of the proposed development with respect to socioeconomics. This chapter also describes the methods used to assess the effects; the baseline conditions currently existing at the site and surrounding area; the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been adopted.

5.1.2 Cumulative effects associated with socioeconomics have additionally been considered within the ES and can be found in Chapter 11 Cumulative and Interactive Effects.

5.2 METHODOLOGY AND ASSESSMENT CRITERIA

5.2.1 This section of the ES outlines the methodology used to establish the potential economic and social effects of the proposed development against baseline conditions, assessed at varying spatial levels according to the nature of the effect considered. This approach follows the Homes and Communities Agency (HCA, 2014) Additionality Guide 4th Edition. While this was withdrawn and superseded by the Ministry of Housing, Communities and Local Government (MHCLG) Appraisal Guide (2025), the MHCLG guide does not provide detailed assumptions relating specifically to additionality. As a result, the HCA Additionality Guide continues to offer the most comprehensive and practically applicable framework for assessing additionality, and its use is therefore considered appropriate and robust for the purposes of this assessment.

Consultation

EIA scoping

5.2.2 As explained in Chapter 4, Methodology, no formal EIA scoping process was undertaken and a scoping report was not produced. However, the applicant's proposal to include a socioeconomics assessment within the ES was agreed by MCC planning officers, and has been produced in line with best practice.

Pre-application consultation

5.2.3 No pre-application consultation with statutory or non-statutory stakeholders was undertaken with respect to socioeconomics.

Baseline study methodology

5.2.4 The data used in this chapter was obtained through a desktop study completed in February 2026 at the site, Lower Super Output Area (LSOA) level, local authority level, regional level, and national level, where appropriate. The data used is the latest available for the geography in question in all instances. Data sources used include:

- Office for National Statistics (ONS); Population Projections, Census data, Business Register and Employment Survey, Annual Population Survey;
- NHS England: General Practice Workforce;
- Ministry of Housing, Communities and Local Government (MHCLG): Index of Multiple Deprivation; and
- Department for Education (DfE): Get Information about Schools.

Assessment approach

5.2.5 Socioeconomic appraisal entails an assessment of whether an intervention (in this case, the proposed development) will provide additional benefits in comparison to a scenario without the intervention, that is, Business as Usual (BAU). The baseline study provides a 'counterfactual' against which the potential impacts of the proposed development are compared, in line with the Green Book guidance (HM Treasury, 2026).

5.2.6 The additional impact of an intervention is measured as the difference between the reference case position, that is, the baseline conditions, and the expected position if the intervention was implemented. This may relate to the scale of outcomes, timing, quality, and the extent to which target beneficiaries benefit from the intervention (HCA, 2014).

5.2.7 The measurement of additionality requires an intervention option, a reference (baseline) case, estimation of gross direct effects, leakage, displacement, and multiplier effects. This in particular applies to this assessment's estimate of employment generated by the proposed development.

5.2.8 Gross direct effects are the total effect of an intervention in terms of a specific output, such as employment. This considers both direct and wider induced effects.

5.2.9 Leakage effects are outputs that benefit those outside of the intervention's target area, and are deducted from the gross direct effects. With regard to employment generated, this can be interpreted as those employed at the proposed development who reside outside of Manchester. According to the 2021 Census data from the ONS, 37% of those working in Manchester live outside this area, which corresponds to a medium to high leakage rate as per the HCA additionality guidance (ONS, 2021; HCA, 2014). The proportion of those living and working in Manchester includes residents who work from home, as well as residents who commute to a place of work within Manchester.

5.2.10 Displacement is the number of intervention outputs (e.g., jobs) that are accounted for by reduced outputs elsewhere in the target area. The additional employment generated at the proposed development would be net of employment lost from the existing uses on the site.

5.2.11 Indirect and induced multiplier effects in commercial development pertain to employment, investment and income associated with both the construction phase and occupation of the premises. The presence of multiplier effects implies that the proposed development will have proportionately greater effects than the direct effect of investment alone. For example, employment generated further along the supply chain represents an indirect multiplier effect, while those jobs created through extra spending from workers in the area represent an induced multiplier. For the purposes of this assessment, a multiplier of 1.5 has been applied, which corresponds to a medium regional level multiplier and applies to most interventions, as per the HCA additionality guidance (HCA, 2014).

5.2.12 Effects of the proposed development on social and community infrastructure have been assessed across various geographical areas according to the most up-to-date information available. These are presented in Table 5-1.

Table 5-1 Geographical areas of effect

Effect	Geographical areas of effect	Rationale/evidence base for effect area
Employment generation during construction phase	Manchester, north-west	Since construction employment is relatively mobile, it is not generally considered appropriate to assess the potential employment effects of the construction phase at just the local level.
Additional local spending	Manchester, north-west	Additional local spending may have an impact at local and regional scales.

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Effect	Geographical areas of effect	Rationale/evidence base for effect area
Primary healthcare provision	Within 1.5km of the site	This is generally considered to be a reasonable walking distance to healthcare services.
Education provision	Within 2 miles of the site for primary schools and 3 miles of the site for secondary schools	Considered a reasonable walking distance to primary and secondary schools (DfE, 2024)
Open & play space	15 minute walk (720 metres) for natural and semi-natural areas 15 minute walk (710 metres) for parks and gardens 100m – 1km for different play space categories.	Considered a reasonable walking distance to open space (MCC, 2025)

5.2.13 The assessment of likely socioeconomic effects is considered on the basis of:

- Magnitude of change – this entails consideration of the absolute number of residents or employees affected and the size of the geographic area in which these effects would be experienced;
- Scale of impact – this concerns the relative magnitude of each impact within its relevant market context; and
- Duration of impact – more weight is given to long-term, permanent effects than to short-term, temporary effects.

Assessment of effects

5.2.14 The following criteria have been used to describe the sensitivity of the receptors, the magnitude of the impacts and the significance of the effects. There is no statutory definition of what constitutes a significant socioeconomic effect and guidance is of a generic nature. The assessment of effects in this chapter has been based on the general EIA methodology presented in Chapter 4 Methodology and expert judgement. This is an objective process which quantifies effects where possible. Where this has not been possible, a qualitative assessment has been made and justified.

Receptor sensitivity

5.2.15 The criteria used to assess receptor sensitivity is described in Table 5-2.

Table 5-2 Criteria for determining receptor sensitivity

Sensitivity	Criteria
High	Receptors that will be most directly affected by any effects of the proposed development and receptors with a significance economic or social stake in the area (e.g., local housing market)
Moderate	Receptors that are sensitive to effects by virtue of proximity, accessibility or the specific facilities or uses provided by the site (e.g., existing local residents)
Low	Receptors that are likely to experience some effect from the proposed development but at a low level (e.g., local businesses)
Negligible	Receptors with minimal connection to the site and little likelihood of being affected by any development effects (e.g., regional population)

Magnitude of change/impact

5.2.16 The criteria used to assess how far an effect deviates from the baseline condition, i.e. the magnitude of change, are described in Table 5-3.

Table 5-3 Criteria for determining magnitude of change/impact

Magnitude	Criteria
Large	Effects that would have a significant economic or social effect locally or would be felt more widely than the city scale. Likely to directly affect a large number of receptors or those with high sensitivity.
Medium	Effects that have a material economic or social effect locally or would be felt at a city scale.
Small	Effects that have some economic or social effect at a much-localised level.
Negligible	Effects that have minimal economic or social effects.

Significance evaluation

5.2.17 The significance of a potential effect is derived by considering both the sensitivity of the feature and the magnitude of change, as demonstrated in Table 5-4.

Table 5-4 Matrix for determining effect significance

		Magnitude of change/impact			
		Large	**Medium**	**Small**	**Negligible**
Receptor sensitivity	**High**	Major	Major	Moderate/Minor	Negligible
	Moderate	Major	Moderate	Minor	Negligible
	Low	Moderate/Minor	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

5.2.18 Note that moderate and major effects are considered to be 'significant' in EIA terms.

5.2.19 Effects can also be described, for example, as:

- Beneficial or adverse;
- Direct or indirect/secondary;
- Permanent or temporary/reversible;
- Short term (effects that would be of short duration and would occur for up to 2 years);
- Medium term (effects that occur for a period of between 2-10 years);
- Long term (effects that occur for 10 years or more and include permanent effects); and
- Significant (major or moderate) or insignificant (negligible or minor).

5.3 LEGISLATION AND POLICY WHICH HAS INFLUENCED ASSESSMENT OR MITIGATION

National policy and guidance

National Planning Policy Framework (NPPF) (MHCLG, 2025)

5.3.1 The NPPF was first published in March 2012, and has since been revised and updated several times, before the latest revision, published in December 2024 (amended in early 2025). The NPPF guides local authorities, planning inspectors, and decision-makers in England on how to prepare plans for efficient and sustainable development. The NPPF provides a framework on how to achieve economic, social, and environmental objectives.

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5.3.2 The Government has recently consulted on a revised NPPF, published on 16 December 2025. The consultation process sought views on the draft NPPF and wider changes to the planning system, including reforms relating to data centres, onsite energy generation, standardised viability inputs, and site-size thresholds. The draft proposes a major overhaul, replacing the current structure with 133 coded policies arranged like a local plan, and introduces a clearer separation between plan-making and national decision-making policies, with the latter expected to carry very limited weight for conflicting local plans.

5.3.3 Local authorities are required to take the NPPF into account when preparing their local development plans and making planning decisions. The NPPF provides a set of principles and objectives for balancing competing interests, such as the need for housing and economic growth with environmental protection and community well-being. Other policies that should be interpreted and included in plans to meet local and community aspirations include promoting healthy and safe communities, promoting sustainable transport, and making effective use of land.

5.3.4 Chapter 5, 'Delivering sufficient supply of homes' outlines the importance of considering an appropriate mix of housing size and type of tenure to reflect the housing need for different groups within the local communities, and this should be reflected in any plan. This includes those requiring affordable housing, families with children, students, people with disabilities, and other groups.

5.3.5 Chapter 6, 'Building a strong, competitive economy', emphasises that planning policies should have a clear economic vision to encourage sustainable growth, identify strategic sites, and address any barriers to investment such as inadequate infrastructure, services or housing, or a poor environment.

5.3.6 Chapter 8, 'Promoting healthy and safe communities', sets out the requirement for planning policies to aim to achieve healthy, inclusive and safe places which:

- Promote social interactions, including opportunities for meetings between people;
- Are safe and accessible such that crime, and the fear of crime, do not undermine the quality of life or community cohesion; and
- Enable and support healthy lives, through promoting good health and preventing ill-health, especially where this would address identified local needs and reduce health inequalities.

Planning Practice Guidance (PPG) (MHCLG, 2025)

5.3.7 PPG refers to a series of documents issued by the UK government that guide local planning authorities, developers, and other stakeholders on various aspects of the planning system. The PPG was first published in 2016, and individual guidance categories have received updates and revisions since, with the most recent update in December 2024. It offers detailed advice and interpretation of national planning policies, helping to ensure consistency and effective implementation across different planning authorities. This guidance is designed to assist local planning authorities in preparing their local development plans, as well as guiding developers and other stakeholders in understanding the expectations and requirements of the planning system.

5.3.8 The PPG highlights the importance of delivering housing to meet the needs of the diverse local population. It provides guidance on housing density, mix, and design quality, and the provision of affordable housing.

5.3.9 The Design and Placemaking Planning Practice Guidance (PPG) consolidates four existing design documents into a streamlined resource to improve consistency in applying national design policy. It supports the draft NPPF (2025) by outlining priorities for well-designed, sustainable, healthy and locally distinctive places and providing clearer expectations for design quality across planning decisions. The updated guidance reinforces a shift toward neighbourhoods that are better integrated with their surroundings, nature-positive, and responsive to local identity, avoiding uniform development through stronger emphasis on character, connectivity and high-quality placemaking.

Regional policy and guidance

Greater Manchester Strategy 2025-2035 (GMCA, 2025)

5.3.10 This is the city-region's overarching strategy for the next decade, setting the long-term vision and priorities across different domains, including economic development, housing delivery, transport, public services and environmental resilience. The overarching aim of the strategy is to create the conditions for a thriving city region where everyone can live a good life. It provides a framework that guides spatial decision-making, investment and partnership activity across Greater Manchester.

5.3.11 The strategy will be delivered through seven connected workstreams:

- Healthy homes for all: target to build 75,000 new homes across the region by 2030, including 10,000 affordably net zero homes. Aim to drive up housing standards, and improving support to help people find and keep homes
- Safe and strong communities: focus on reducing harm and strengthening community resilience, ensuring neighbourhoods are safer, more cohesive, and better supported through coordinated local services.
- A transport system for a global city region: deliver an integrated, accessible and reliable transport network that supports economic growth, connects people to jobs and services, and reduces carbon emissions across the region.
- A clear line of sight to high-quality jobs: improve pathways into secure, well-paid employment by strengthening skills, education and training routes, ensuring residents can access the opportunities created by the region's growing economy.
- Everyday support in every neighbourhood: enhance access to essential local services, ensuring consistent, community-based support for health, wellbeing, early intervention and day-to-day needs.
- A great place to do business: create the conditions for businesses to thrive through strengthened innovation, investment and sector growth, helping drive productivity and inclusive economic expansion.
- Digitally connected places and people: expand digital connectivity and inclusion so residents and businesses benefit from reliable digital infrastructure, improved access to services, and greater participation in the digital economy.

Places for Everyone (PfE) Joint Development Plan 2022-2039 (GMCA, 2024)

5.3.12 Places for Everyone (PfE) is a long-term joint development plan for nine Greater Manchester districts, setting the plan for sustainable growth, creating the conditions for inclusive economic growth, provide opportunities for housing, and enhancing the natural environment. The plan also provides a framework for the scale, type and distribution of development while prioritising the use of brownfield land and safeguarding the Green Belt.

5.3.13 The plan was informed by input from residents, businesses and the development industry throughout its preparation. It became part of the statutory development plan for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan in March 2024. Key policies include:

- **JP-Strat1**: Core Growth Area – Strangeways lies directly adjacent to and therefore within the City Centre Fringe, the area immediately outside Manchester's inner ring road. The fringe adjoins the designated Core Growth Area, which is anchored by the City Centre, south-east Salford and north Trafford, and is identified for intensified economic and residential development.
- **JP-Strat5:** Inner Area Regeneration – promotes residential-led regeneration linked to reducing deprivation, improving health and wellbeing, and integrating new development with existing communities.

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- **Policy JP-H1:** Scale, distribution and phasing of new housing development – sets a minimum requirement of 175,185 net additional dwellings across the nine authorities between 2022 and 2039 (approx. 10,305 per year), including 60,061 dwellings for Manchester averaging 3,533 per year.
- **Policy JP-H2:** Affordability of New Housing – prioritises maximising the delivery of affordable homes to improve access to housing at accessible price points. This includes requiring on-site affordable provision wherever feasible, supported by planning obligations where viability constrains delivery.
- **Policy JP-H3:** Housing Type, Size and Mix – requires new development to provide an appropriate mix of dwelling types and sizes based on local evidence of need, supporting balanced, inclusive neighbourhoods through a suitable range of homes and tenures.
- **Policy JP-J1:** Supporting Long-Term Economic Growth – the emphasis is on maintaining a diverse regional economy, enabling high-value sector growth, and promoting local job creation. It also seeks to secure local labour and skills benefits by encouraging developers, including housebuilders, to enter into employment and training agreements through planning obligations. Additionally, a new resident population will support local economic activity.
- **Policy JP-P1**: Sustainable Places – promotes well-designed, inclusive, safe, resilient and high-quality places, including improved public realm.
- **Policy JP-P5:** Education, Skills and Knowledge – the policy aims to make enhancements to education, skills and knowledge to benefit existing and new residents. This will be done by enabling the delivery of new and improved facilities. Furthermore, by ensuring the delivery of sufficient school places to respond to the demands from new housing, such as through working with education providers to forecast changes in demand for school places, and where appropriate requiring housing developments to make a financial contribution to the provision of additional school places.

Local policy and guidance

Manchester Core Strategy (2012-2027) (MCC, 2012)

5.3.14 The Manchester Core Strategy forms part of the statutory Local Plan and is a key planning document, providing the spatial planning framework for development, regeneration and land use change across the city. Following the adoption of Places for Everyone (PfE) in 2024, several housing policies have been superseded, but the Core Strategy's spatial principles and area-based policies remain applicable:

- **Policy SP1:** sets out the overarching approach and provides key spatial principles to guide development across Manchester to 2027. This includes supporting development that enhances neighbourhood quality, and promoting improvements to health, safety and wellbeing. It also emphasises the need for good access to jobs, services and sustainable transport, and is particularly relevant to regeneration areas and the City Centre Fringe, where development is expected to support sustainable growth.
- **Policy CC1:** identifies the City Centre Fringe, including Strangeways, as a suitable location for high-density, mixed-use development, reflecting its strategic role in extending City Centre regeneration into surrounding neighbourhoods.
- **Policy EC4:** recognises Strangeways as a major long-established employment area in North Manchester, characterised by industrial and warehouse uses. Its strategic proximity to the City Centre supports redevelopment for office-led mixed-use schemes in the City Centre Fringe portion of Strangeways, while industrial and warehousing growth is directed to the Strangeways Employment Area to the north is safeguarded for the retention and growth of general industry, warehousing and distribution.
- **Policy H2,** the Strategic Housing Location policy, identifies the area north and east of Manchester City Centre as a key focus for new residential development, supporting land assembly, mixed-use regeneration and environmental improvement.
- **Policy H3:** states that North Manchester is expected to accommodate around 20% of new housing to 2027, with high-density residential development permitted within or adjacent to the Regional Centre, explicitly including the Strangeways area due to its accessibility and regeneration potential.
- **Policy H8:** sets the citywide approach to affordable housing, requiring new residential schemes to use the 20% affordable housing target as a starting point, with the final proportion determined by scheme type and viability considerations. Affordable homes should be integrated and inclusively designed, with flexibility allowed where viability or wider regeneration priorities, including those set out within the area's Strategic Regeneration Framework, justify a varied approach.
- **Policy EN1:** sets out the city's design principles, requiring development to deliver public realm, providing places that are easy to get to and move through, and contribute positively to local character and environmental quality.

Great Ducie Street Strategic Regeneration Framework (SRF) (Deloitte, 2018)

5.3.15 The Great Ducie Street Strategic Regeneration Framework (2018) sets a long-term vision to transform the area north of the Inner Ring Road into a dense, mixed-use extension of Manchester City Centre. It acts as a material planning consideration, guiding development across five character areas and addressing issues of poor-quality industrial land, fragmented uses, and limited permeability. The SRF promotes a comprehensive approach to regeneration, capitalising on the area's strategic position next to Victoria Station, the Manchester Arena, and the River Irwell to deliver a high-quality neighbourhood and support city-centre growth objectives.

5.3.16 The Framework establishes a 50:50 split between residential and non-residential uses, enabling the area to play a role in growth and enhanced productivity of the city, deliver diverse housing options, and improve local amenity. Key principles include active frontages, high-density and tall-building opportunities in appropriate locations, enhanced riverside access, improved pedestrian and cycle routes, the retention of character buildings, and sustainable design measures such as drainage and flood-risk management. Delivery is expected to be phased over approximately 20 years, with the earliest phase centred on riverside plots reflecting strongest developer interest in Riverside, Park Place and the Cheetham Hill corridor. These will set a benchmark for subsequent development.

Strangeways & Cambridge SRF (MCC & SCC, 2025)

5.3.17 The Strangeways and Cambridge Strategic Regeneration Framework (2025) has been jointly prepared by Manchester City Council and Salford City Council to guide long-term regeneration across the key city fringe area. The SRF will function as a material planning consideration, providing a coordinated spatial vision, development principles and neighbourhood-specific guidance to shape future planning decisions across the area. The framework has been endorsed and approved, assuming its upcoming formal adoption.

5.3.18 The SRF sets out a framework for delivering up to 7,000 new homes, significant commercial space, major green and blue infrastructure improvements, and substantial public realm and active travel enhancements. It articulates expectations around land-use change, movement, streetscape quality, urban design, heritage-led regeneration and flood-resilient development, forming a comprehensive blueprint for managing transformation in Strangeways and Cambridge over the next 20–30 years.

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5.3.19 Dutton Street is identified as a city-centre-edge, residential-led mixed-use neighbourhood, building on the substantial development already progressing under the Great Ducie Street SRF. The SRF expects high-density schemes with active frontages along Great Ducie Street and Cheetham Hill Road, supported by upgraded movement corridors and improved connections into the wider city centre. As a key early-delivery area, Dutton Street is envisaged to accommodate significant new homes and commercial space, reflecting the proposed natural extension of the city centre.

Manchester Housing Strategy (2022-2032) (MCC, 2022)

5.3.20 The Manchester Housing Strategy sets out the long-term vision to deliver homes that people want and need. The strategy sets a target to deliver 36,000 new homes by 2032, including 10,000 affordable homes (28% of total supply), to meet the city's significant housing shortfall and population growth. The Strategy places strong emphasis on delivering new homes in high-density, accessible urban locations, with at least 80% of all new housing expected to come forward on brownfield sites close to public transport and major employment centres. It supports mixed-tenure development, diversification of housing supply, and the creation of sustainable, well-connected neighbourhoods.

Assessment limitations (technical deficiencies or lack of knowledge)

5.3.21 The assessment of the significance of effects has been carried out against a benchmark of current socioeconomic baseline conditions prevailing around the site. As with any dataset, they may be subject to change over time, which may influence the findings of the assessment and could lead to the assessment suffering from statistical time lag.

5.4 BASELINE CONDITIONS

5.4.1 This section summarises the existing socioeconomic conditions of the site and its surroundings. As set out in the assessment methodology, the baseline socioeconomic conditions have been established through the interpretation and analysis of a range of national recognised data sources. These conditions are considered in the context of the wider local, regional, and national socioeconomic context. This information provides the baseline against which the socioeconomic effects of the proposed development can be assessed.

Current baseline (2026)

5.4.2 While the current baseline is 2026, the baseline conditions use the most recently available data across all relevant sources and is still considered to provide an accurate and robust picture of baseline conditions in Manchester.

Existing site

5.4.3 The site is located in an area known as Strangeways, which comprises predominantly light-industrial/warehouse and commercial uses. The site is bound by Robert Street to the east and Dutton Street to the south, and is currently occupied by an indoor sports venue, Pure Padel Manchester.

Population profile

5.4.4 In 2024, the population of Manchester reached 589,670, an increase of 8.0% compared to 545,947 in 2019 (ONS, 2025c). This is comparatively higher than the growth rates in the wider region and nationally: the north-west saw an increase of 5.1% and England saw an increase of 4.3% across the same period. The population in Manchester is projected to grow to 638,904 by 2035, which is an 8.3% increase from the 2024 population (ONS, 2025e)

5.4.5 The proportion of the population of working age (aged 16-64) in Manchester was 70.8% in 2024. This was higher than the proportion in the north-west and England, which were 62.6% and 62.9% respectively. This figure is projected to remain fairly consistent, rising to 72.4% in Manchester by 2035 (ONS, 2025c). Figure 5-1 shows the population by age group in Manchester, the north-west, and England in 2024.

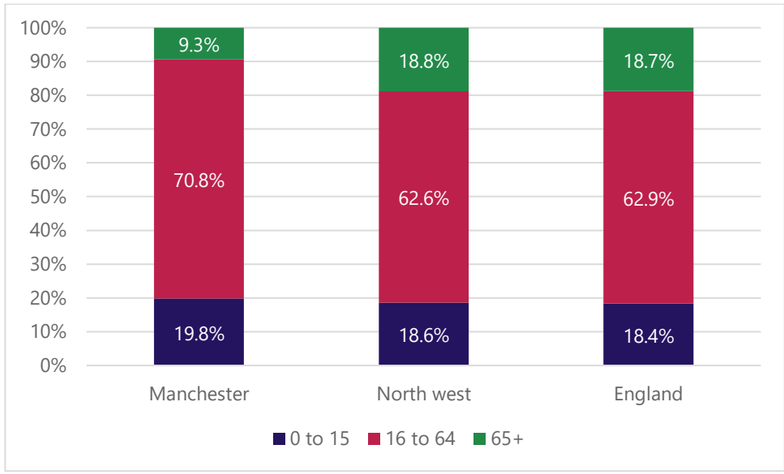


Figure 5-1 Population by age group at the local authority, regional, and national levels (ONS, 2025c)

5.4.6 According to the ONS Census 2021, Manchester has a population density of 4,772.7 (measured by the number of usual residents per square kilometre). This is significantly higher than the population density across the north-west, which is 525.8, and England which is 433.5 (ONS, 2021). Of the 331 local authorities across the UK, Manchester ranks highly, being the 29th most densely populated local authority. The most densely populated local authorities above Manchester mainly fall within London, and Manchester is the most densely populated local authority in the north west.

5.4.7 Data from the 2021 Census shows that the ethnic minority population forms 43.2% of the population in Manchester. This represents a significant increase from the proportion recorded in 2011, where 33.4% of the population were from ethnic minority backgrounds. The proportion of the population from an ethnic minority is much higher in Manchester compared to regional and national levels, where only 14.4% and 19.0% respectively are from an ethnic minority (ONS, 2011). The largest minority ethnic group was Asian, Asian British or Asian Welsh, in both Manchester and the north-west, comprising 20.9% and 8.4% of the population respectively (ONS, 2011).

Economic profile

5.4.8 Figure 5-2 shows the economic activity rate and employment rate in 2024 for Manchester, the north-west, and England. In 2024, the economic activity rate of those aged 16-64 was 72.8% in Manchester, which is lower than both the regional and national levels, which were 76.5% and 78.9% respectively. This level has increased slightly in Manchester from 2019 where the economic activity rate was 71.3% (ONS, 2025a). The employment rate among those aged 16-64 in Manchester lagged significantly behind the regional national levels in 2019, at just 66.8% compared to 74.5% regionally and 76.0% nationally. This gap has persisted, by 2024 the employment rate of the working-age population had decreased to 66.0%, while the regional and national rates stood at 73.4% and 75.7% respectively.

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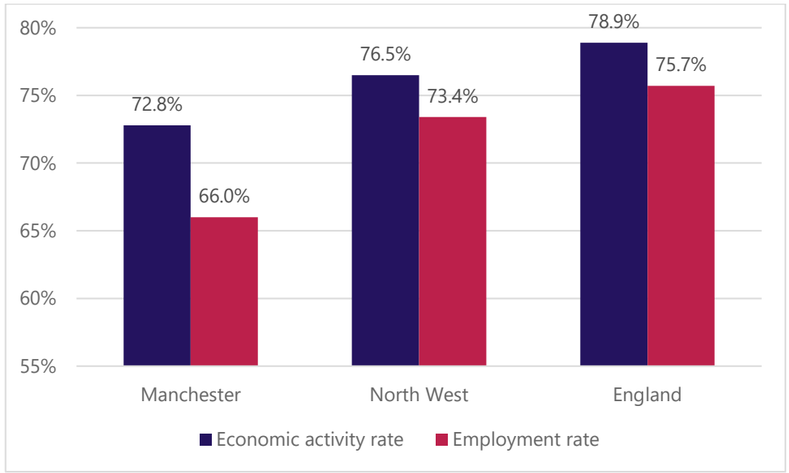


Figure 5-2: Economic activity and employment rates at local authority, regional, and national levels (ONS, 2025a)

5.4.9 In 2024, 45.5% of the population aged 16-64 in Manchester had a degree level qualification or above (Regulated Qualifications Framework (RQF) Level 4+). This is higher than the regional level, which was 42.8%, but lower than the national level which was 47.1%. The proposed of those aged 16-64 with no qualifications was 7.8% in Manchester, which is slightly lower than the regional level, at 8.0%, but higher than the national level at 6.4% (ONS, 2025a).

5.4.10 The employment rates measured by occupation group are presented in Table 5-5. The largest share of employment in Manchester is in the professional, scientific & technical group (13.3%), followed by health (11.8%) and business administration & support services (11.4%). The professional, scientific & technical industry group is higher than the proportions in the north west and England, while health is slightly lower than the proportions regionally and nationally. The occupation groups with the smallest share of the workforce are agriculture, forestry & fishing (0.0%), mining, quarrying & utilities (0.4%) and motor trades (0.5%).

Table 5-5: Proportion of employment by broad industrial group (ONS, 2025b)

Broad Industrial Group	Manchester	North West	England
Agriculture, forestry & fishing	0.0%	1.0%	1.2%
Mining, quarrying & utilities	0.4%	1.1%	1.1%
Manufacturing	2.6%	8.5%	7.0%
Construction	2.2%	5.0%	5.0%
Motor trades	0.5%	1.6%	1.8%
Wholesale	2.8%	3.7%	3.7%
Retail	7.4%	8.7%	8.2%
Transport & storage (inc postal)	6.3%	4.7%	5.1%
Accommodation & food services	7.9%	7.5%	7.6%
Information & communication	5.5%	2.9%	4.7%
Financial & insurance	5.5%	2.4%	3.3%
Property	3.5%	2.0%	2.2%
Professional, scientific & technical	13.3%	9.6%	9.7%
Business administration & support services	11.4%	8.6%	8.7%
Public administration & defence	5.2%	5.0%	4.4%
Education	9.4%	8.1%	8.4%
Health	11.8%	15.6%	13.5%
Arts, entertainment, recreation & other services	4.2%	4.0%	4.5%

Index of multiple deprivation

5.4.11 The Index of Multiple Deprivation (IMD) is a national dataset published by the MHCLG, that provides a tool for ranking deprivation spatial analysis in England at the local authority level and LSOAs. The IMD combines deprivation information from seven domains: income; employment; education, skills and training; health deprivation and disability; crime; barriers to housing and services; and living environment.

5.4.12 There are 295 LSOAs in Manchester local authority, of which 41% (120 LSOAs) were ranked among the 10% most deprived LSOAs in 2025. An additional 54 LSOAs fell within the 20% most deprived in 2025, meaning that over half of all LSOAs in Manchester were in either the 10% or 20% most deprived nationally. By contrast, only five LSOAs were in the 10% least deprived and five in the 20% least deprived each. Overall, Manchester exhibits high levels of deprivation, ranking as the second most deprived local authority out of 296 (MHCLG, 2025).

5.4.13 As of 2025, Manchester was ranked 1 out of 296 for crime deprivation, with 39% of the LSOAs in the 10% most deprived nationally. Manchester also ranks poorly in terms of health deprivation, ranking 4 out of 296, with 46% of the LSOAs in the 10% most deprived. Manchester performs better for education, skills and training, ranking 63rd with 11% of LSOAs in the 10% most deprived.

5.4.14 The site is located within Manchester LSOA 058C, within the Cheetham Ward. This LSOA is ranked within the 20% most deprived LSOAs in England. Compared to other LSOAs in Manchester, 57% of LSOAs across the city are more deprived than LSOA 058C. The LSOA exhibits highest level of deprivation in relation to crime and health, both of which ranked among the 10% more deprived neighbourhoods in England, while it is comparatively less deprived in terms of employment, ranking within the 50% most deprived. Figure 5-3 shows the IMD for LSOAs in Manchester and Salford, with LSOA 058C highlighted in red.

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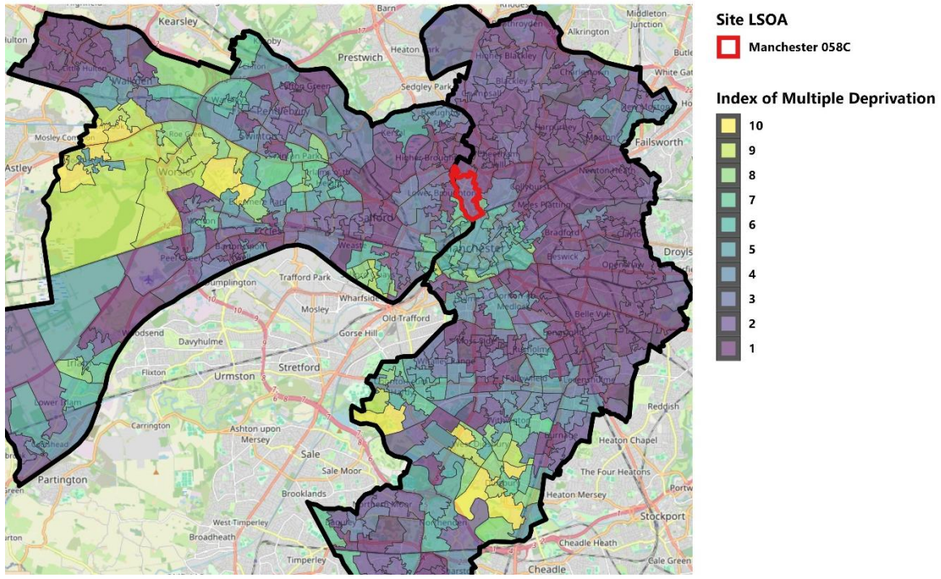


Figure 5-3 Index of Multiple Deprivation

Housing profile

5.4.15 According to the 2021 Census, Manchester has a total of 214,732 households. Of these, 65.3% were living in detached, semi-detached or terraced houses, while 34.6% lived in flats, maisonettes or apartments. The proportion of households living in houses is lower than the north-west average, where 83.9% lived in detached, semi-detached or terraced housing, and the national average, where 77.4% of households lived in houses (ONS, 2021). Dwelling types in Cheetham Ward are broadly comparable to those across Manchester, with a total of 6,952 households, of which 61.6% were living in detached, semi-detached or terraced houses, while 37.7% were in flats, maisonettes or apartments.

5.4.16 The proportion of households that are owned is 37.2% in Manchester, which is much lower compared to regional and national averages, which are 62.3% and 61.3% respectively. In Manchester, 29.5% of households are socially rented compared to 17.6% regionally and 17.1% nationally. Private renting accounts for 32.3% of households in Manchester, compared to 19.2% in the north-west and 20.5% in England (ONS, 2021).

5.4.17 In November 2025, the average price of a property in Manchester was £255,489, with averages ranging from £201,008 for a flat/maisonette, to £481,660 for a detached house. The average property price in Manchester was more expensive compared to the average across the north-west, which was £216,741 in November 2025, but cheaper than the average across England which was £293,131 (Land Registry, 2026).

Health

5.4.18 NHS Greater Manchester serves a total of 3,314,590 patients registered across a total of 406 GP practices. There are a total of 2,067 FTE GPs across Greater Manchester, equating to an average patient list size of 1,603 per FTE GP (NHS England, 2026). This is lower than the Department for Health (DfH) target of registered patients per FTE GP (1,800), signifying available capacity across Greater Manchester (NHS England, 2026).

5.4.19 There are five GP practices situated within a 1.5km walking distance from the site, shown in Table 5-6. These practices have an average patient-to-FTE GP ratio of 2,102, signifying over capacity within existing facilities.

Table 5-6 GP practices within 1.5km of the site (NHS England, February 2025)

GP Practice	Distance (km)	Registered Patients	FTE GPs	Patients per FTE GP
Blackfriars	1	16,335	4	3,735
Lower Broughton Health Centre - Dr A Chaudhry & Dr I Jeet	1	11,490	13	868
City Health Centre	1	4,168	1	3,223
Cheetham Hill	1.3	20,768	6	3,446
Whitley Road Medical Centre	1.5	6,336	3	1,989
	Total	**59,097**	**28***	**2,102***

* Numbers may not sum due to rounding

Education

5.4.20 It is considered that a reasonable walking distance to primary schools is 2 miles and to secondary schools is 3 miles (DfE, 2024). As such, the baseline assessment considers primary schools within 2 miles of the site, and secondary schools within 3 miles of the site.

Primary education

5.4.21 Table 5-7 presents information on the 27 primary schools located within 2 miles of the site. There are two additional voluntary academy primary schools within walking distance, but details of their capacity and number of pupils enrolled are not known. The table indicates which schools have the capacity to accept new pupils, and which schools are already at or above capacity. Overall, the data indicates a surplus of 1,378 spaces in primary schools located within walking distance of the site.

5.4.22 It is assumed that 95.0% occupancy should be planned for, as per Audit Commission Guidance. At a 95% level, the provision of primary school places is in a surplus of 868 places.

Table 5-7 Primary education schools within walking distance of the site (DfE, 2025)

School Name	Pupils Enrolled	Capacity	Surplus/Deficit	Surplus/Deficit at 95% Capacity
Abbott Community Primary School	229	240	11	-1
Irk Valley Community School	459	472	13	-11
Cheetwood Primary School	216	210	-6	-17
Crumpsall Lane Primary School	421	460	39	16
St Augustine's CofE Primary School	205	240	35	23
St Philip's Church of England Primary School	187	210	23	13
St Anne's RC Primary School Crumpsall Manchester	432	454	22	-1
St Malachy's RC Primary School	218	242	24	12

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School Name	Pupils Enrolled	Capacity	Surplus/Deficit	Surplus/Deficit at 95% Capacity
St Wilfrid's RC Primary School	211	210	-1	-12
CofE School of the Resurrection	210	210	0	-11
Saviour CofE Primary School	141	210	69	59
St Anne's RC Primary School	193	218	25	14
Ashbury Meadow Primary School	486	494	8	-17
Cheetham CofE Community Academy	628	690	62	28
Oasis Academy Harpur Mount	460	465	5	-18
King David Primary School	399	425	26	5
Co-op Academy New Islington	381	420	39	18
Manchester Communication Primary Academy	426	420	-6	-27
Cravenwood Primary Academy	396	450	54	32
Unity Community Primary	364	420	56	35
Rolls Crescent Primary School	400	472	72	48
Oasis Academy Temple	655	709	54	19
St Chad's Roman Catholic Primary School, a Voluntary Academy	216	240	24	12
Park View Community Primary Academy	368	459	91	68
Co-op Academy Medlock	411	500	89	64
The Olive School, Manchester	60	420	360	339
Crown Street Primary School	44	234	190	178
Total	**8,816**	**10,194**	**1,378**	**868**

Secondary education

5.4.23 Table 5-8 provides information for the 11 secondary schools within 3 miles of the site, showing the current number of pupils, capacity, and surplus/deficit of places. The data suggests there is currently a surplus of 677 places located within 3 miles of the site. Once the 95% occupancy level has been accounted for, there is a surplus of 57 places.

Table 5-8 Secondary schools within walking distance (DfE, 2025)

School Name	Pupils Enrolled	Capacity	Surplus/Deficit	Surplus/Deficit at 95% Capacity
St Peter's RC High School	1,035	1,000	-35	-85
Manchester Academy	1,117	1,170	53	-6
Manchester Communication Academy	1,299	1,200	-99	-159
Co-op Academy Manchester	1,610	1,650	40	-43
The King David High School	778	775	-3	-42
Trinity CofE High School	1,503	1,500	-3	-78
Dean Trust Ardwick	1,339	1,200	-139	-199
The East Manchester Academy	1,031	1,100	69	14
Eden Boys' Leadership Academy, Manchester	648	800	152	112
Eden Girls' Leadership Academy, Manchester	636	800	164	124
Co-op Academy Belle Vue	722	1,200	478	418
Total	**11,718**	**12,395**	**677**	**57**

Open space

5.4.24 An Open Space Assessment was conducted in 2025 in Manchester City and identified over 1,010 sites, covering a total area of 1,909.85 hectares (ha). Parks and gardens make up the majority, covering a total area of 771 hectares. The report highlights the importance of all communities being able to access high quality open space (MCC, 2025). Cheetham sits within the north sub-area of analysis for the assessment, which has a total of 322 open spaces, providing 907.36 ha of open space. Parks and gardens form the largest category of open space provision in this sub-area, accounting for 406 ha.

5.4.25 The 2025 open space assessment recommends the proposed local standards for different types of open spaces, outlining the quantity standard measured by hectares per 1,000 population, and the accessibility standards measured by walking time and driving time to the space. This criteria is applied to city parks, local parks, natural and semi natural open space, amenity green space, provision for children and young people, and allotments.

5.4.26 While new standards have been proposed in the open space assessment, these have not been adopted yet. Table 5-9 therefore presents the existing and proposed quantity standards for different open space typologies.

Table 5-9 Open space in Manchester

Open space typology	Existing Quantity standard (ha per 1,000 population)	Proposed Quantity Standard (ha per 1,000 population)	Accessibility standard and distance in metres	Example and distance from the proposed development (m)
Allotments	0.13	0.1	15 minute walk (720 metres)	Crumpsall & Cheetham Model Allotments (2.2km)

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Open space typology	Existing Quantity standard (ha per 1,000 population)	Proposed Quantity Standard (ha per 1,000 population)	Accessibility standard and distance in metres	Example and distance from the proposed development (m)
Parks and gardens – city parks	0.20	1.36	15 minute public transport time City centre - 15 minute drive time (public transport)	St Michael's Flags & Angel Meadow Park (570 / approx. 13 minute public transport time)
Parks and gardens – local parks	0.49	1.36	10 minute walk time (480m)	Blackfriars Park (900m / approx. 15 minute public transport time)
Natural and semi natural green space	1.86	1.02	15 minute walk (720) 15 minute drive (City Centre)	St Catherine's (550 / approx. 8 minute drive)
Amenity green space	0.4	0.55	10 minute walk (480)	Bridgewater Community Garden (600 / approx. 12 minute walk)
Provision for children	0.027	0.04	10 minute walk (480)	Green Grosvenor Park (1.1km)
Provision for young people	0.03	0.04	15 minute walk (720)	Cheetham Park MUGA (900)

5.4.27 Baseline data and information provided in the Open Space Assessment shows the site has good access to several open spaces, including parks and gardens, and natural and semi-natural greenspace. The site is however, further away than the recommended accessibility standard for allotments.

Play space

5.4.28 There are 237 sites for children and young people identified in the open space assessment, providing a total of 21.74 ha. Within the north sub-area of assessment, there are 100 such sites, covering 7.45 ha. For a large proportion of the north sub-area, access to play provision is limited, particularly LAP (Local Areas for Play) and LEAP (Locally Equipped Area for Play). However, there is good access to other types of play space, including MUGAs (multi-use games areas).

5.4.29 The closest children's playground is located just over 1km from the project site, and the closest area for young people is located just under 1km from the site. This indicates a shortfall in accessible provision for children and young people within Manchester City Council's accessibility standards.

Future baseline (2028)

5.4.30 If the proposed development did not go ahead, it is unlikely that the future baseline (2028) would change significantly in terms of the current baseline conditions.

5.4.31 Future conditions for the surrounding area can be considered through population projections for Manchester and the north-west as a whole. The population of Manchester is projected to increase to 613,717 by 2028, which is a 4.1% increase from the 2024 population. The population in the north-west is expected to increase by 1.3% to reach 7,836,472 by 2028 (ONS, 2025e).

5.4.32 The population increase will likely place additional pressure on local social infrastructure, including health services. However, other potential regeneration activities, such as other new development within the vicinity of the proposed development and elsewhere in Manchester would likely provide additional resources through Section 106 contributions and other funding mechanisms to help address future needs.

Identified receptors and their sensitivity

5.4.33 Receptors sensitive to socioeconomic factors vary in their nature and scale, and as such their value cannot be directly compared. Evaluation of socioeconomic receptors therefore requires a qualitative, rather than a quantitative assessment of the sensitivity of each receptor, with particular regard to their ability to respond to change based on recent rates of change and turnover.

5.4.34 The socioeconomic environment is dynamic and adaptive, with constant background changes influencing receptors. The assessment of receptor sensitivity in this ES chapter is based on professional judgment and broadly ascribes 'low' sensitivity to receptors that are adaptive to change. For example, displaced workers who can find alternative employment in the wider council area or Greater Manchester, are deemed to be less sensitive than receptors that are less adaptable, such as social infrastructure resources. Table 5-10 provides a summary of the identified receptors and their sensitivity.

Table 5-10 Identified receptors and their sensitivity

Receptor	Sensitivity	Justification
Local residents in the vicinity of the proposed development	Moderate	There are currently no residents on the site. However, nearby residents may be sensitive to alteration in traffic patterns and property values. Furthermore, the introduction of 189 dwellings will lead to an increase in the local population, and existing residents will be affected by an increase in service demand.
Children & young people in the local area	Low/moderate	There are currently no residents and no children on the site. The introduction of 189 dwellings will lead to a slight increase in children in the local area, and residents in the neighbouring areas will be affected by an increase in services and service demand.
Existing local employees	Low	There is existing employment on site. Any displacement is likely to be limited, and employees are expected to be able to find alternative employment in the wider council area or Greater Manchester.
New local employment	Low	Employment opportunities are expected to be created through construction activities, but no employment is expected to be created during the operational phase.
Local businesses	Low	Sensitivity varies depending on the nature of the business. Businesses located near the proposed development are likely to exhibit greater sensitivity to shifts in accessibility and competitive factors. While certain businesses might experience temporary disruptions during the construction phase, it is important to note that long-term impacts will ensure owing to the rise in local expenditure.
New residents within the proposed development	Low	The proposed development will have a moderate to high level of impact and direct effect on new residents. New residents are likely to be readily adaptive to change.
Local housing market	Moderate/high	The proposed development will deliver 189 new residential units. Local policy identifies a need for housing in Manchester and local housing market would therefore be highly sensitive to the proposed development.

5.5 DEMOLITION AND CONSTRUCTION EFFECTS

Relevant aspects of the proposed development

5.5.1 This section of the ES chapter analyses the scale, duration and significance of socioeconomic impacts of demolition and construction relative to the baseline socioeconomic conditions presented within the previous sections of this chapter.

5.5.2 Demolition and construction activity will result in employment which represents a positive economic effect that can be estimated as the function of the scale and type of construction (infrastructure and buildings).

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5.5.3 It is assumed that the proposed development will entail a construction period of a total of approximately 1-2 years, starting in 2027 and ending in 2028. Although temporary in nature, construction employment has positive economic effects, helping to increase output in the Manchester, north-west, and UK economy.

Potential effects of the proposed development and their significance

Construction employment and economic effects

5.5.4 The demolition and construction work associated with the proposed development will generate new construction employment opportunities. The scale of construction employment created has been estimated using standard ratios for gross output per construction employee. This chapter first projects the total gross construction employment resulting from the proposed development and subsequently consider factors such as leakage, displacement, and multiplier effects. These analyses have enabled an evaluation of the net impacts on both local and regional economies.

Gross direct construction employment

5.5.5 The direct expenditure involved in the construction phase of the proposed development will lead to increased output generated in Manchester, the north-west, and UK economies. The employment resulting from the temporary construction phase can be estimated by applying an average output per construction industry employee to the estimated total construction cost (ONS, 2024a; ONS, 2024b). The proposed development is therefore assessed to generate a total of 292 person years of construction employment on-site, on average, during the construction phase.

5.5.6 By using the convention of equating ten person years of employment to one FTE job in the construction sector, it is estimated that approximately 29 FTE gross direct construction jobs would be created during the temporary construction phases.

Leakage

5.5.7 Leakage effects are defined as the effects occurring outside the immediate area. For the proposed development, leakage refers to the creation of employment outside the target areas, which is defined as Manchester. Analysis of the 2021 Census data indicates that 37.1% of people working in Manchester live outside the area (ONS, 2021). This corresponds to a medium to high leakage rate by HCA guidance (HCA, 2014). Residents working and living in Manchester which make up 62.9%, include residents travelling within Manchester to a place of work, and those who work from home.

5.5.8 A leakage rate of 37.1% was applied to the estimated 29 gross direct construction jobs created by the proposed development, indicating that on average 11 persons from outside Manchester will be working on-site during the construction period.

Displacement

5.5.9 Displacement measures the extent to which the benefits of a project are offset by reductions of output or employment elsewhere. Any additional demand for labour cannot be treated as solely a net benefit – it has the potential to remove workers from posts elsewhere. The net benefit is reduced to the extent to which this occurs.

5.5.10 Construction workers often shift between projects, especially when delays occur or to meet project deadlines. It is assumed that due to the labour market's flexibility and the fact that construction workers at the proposed development represent a small proportion of the Manchester labour force, displacement effects on direct construction employment will be minimal. In the context of a Manchester construction project, a low displacement rate of 25% is considered appropriate, as per the HCA Guide (HCA, 2014). Applying this displacement rate to the total gross direct employment figure of up to 29 construction employees yields a net direct employment of up to 22 workers.

Multiplier effect

5.5.11 In addition to the direct employment generated by the proposed development itself, there will be an increase in local employment arising from indirect and induced effects of the construction activity. Employment growth will arise locally through manufacturing services and suppliers to the construction process (indirect or supply linkage multipliers). Additionally, part of the income of the construction workers and suppliers will be spent within the wider Greater Manchester area, generated further employment (in terms of induced or income multipliers).

5.5.12 Applying a multiplier of 1.5 to the total net direct employment figure of 22 construction workers results in net indirect and induced employment of 11 jobs during the construction period.

Net construction employment effects

5.5.13 Table 5-11 presents the temporary employment generated by construction of the proposed development, taking leakage, displacement, and multiplier effects into account. The total net additional employment created by the proposed development within Manchester is estimated to be up of 21 FTE jobs, whilst up to 12 FTE jobs will be created outside Manchester, supporting a total of 33 FTE net jobs during the temporary construction phase.

Table 5-11 Construction employment effects

	Manchester	Outside Manchester	Total
Gross direct employment	18	11	29
Displacement	5	3	7
Net direct employment	14	8	22
Indirect & induced employment	7	4	11
Total net employment	**21**	**12**	**33**

5.5.14 In the context of a large labour pool of construction workers in Manchester, the direct, indirect, and induced employment and expenditure created by the temporary construction phase of the proposed development is assessed to result in a negligible effect on the Manchester economy.

Climate change and adaptation

5.5.15 There are not anticipated to be any discernible effects on socioeconomics arising from climate change during the demolition and construction phase of the proposed development. As such, no climate adaptation or mitigation measures specific to socioeconomics are required.

Summary of effects

5.5.16 Table 5-12 provides a summary of the identified socioeconomic effects during demolition and construction of the proposed development.

Table 5-12 Summary of effects during construction

Receptor	Sensitivity	Description of effect	Magnitude of change / impact	Effect significance
New local employment	Low	Creation of 33 direct, indirect and induced temporary FTE jobs created during the demolition and construction phase	Negligible	Negligible (not significant)

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Supplementary mitigation measures

5.5.17 There are no significant adverse socioeconomic effects identified for the proposed development that require mitigation during the demolition and construction phase.

5.6 OPERATIONAL EFFECTS

Relevant aspects of the proposed development and designed-in mitigation

5.6.1 This section of the ES chapter assesses the scale, duration, and significance of socioeconomic effects relative to the baseline socioeconomic conditions recognised in the previous sections of this chapter. Effects are assessed for the proposed development once completed and occupied.

Potential effects of the proposed development and their significance

Existing Employment

5.6.2 The existing employment that the site supports can be referred to as the 'deadweight' level of employment. 'Deadweight' refers to the outcome which would have occurred without intervention.

5.6.3 Construction of the proposed development requires the demolition of an existing building currently occupied by Pure Padel, which supports employment of 6 FTEs. The Pure Padel centre is a temporary use limited to three years, and as such, this employment is temporary in nature.

5.6.4 Manchester has a large and diverse labour market, and it is expected that the existing employees would be able to secure alternative employment locally. Consequently, the deadweight of up to 6 FTE jobs is assessed as resulting in a minor adverse (not significant) effect on existing local employment.

Operational employment and economic effects

5.6.5 The proposed development will generate long-term jobs once complete and operational. In estimating operational job generation, it is important to consider not just gross effects of the proposed development but also net effects taking into account leakage, displacement and multiplier effects.

Existing Employment Deadweight

5.6.6 The existing employment that the site supports can be referred to as the 'deadweight' level of employment. 'Deadweight' refers to the outcome which would have occurred in the absence of any intervention. At present, the site supports 6 temporary FTE jobs. Given their temporary nature, these jobs have not been treated as deadweight in the assessment of total net employment, as they will likely cease regardless of the proposed development once the temporary permission expires.

Gross Operational Employment

5.6.7 Based on information provided by the applicant, approximately 3 operational gross FTE jobs will be generated by the operation of reception and communal areas, and associated cleaning and maintenance of these areas.

Net Operational Employment

5.6.8 The proposed development will also give rise to further employment effects through indirect and induced effects. Assuming a leakage rate of 37.1%, a low level of displacement, a 1.5 composite multiplier, it is estimated that the proposed development will result in a total net gain of 3 jobs. A detailed breakdown is provided in Table 5.13.

Table 5.13: Net Operational Employment

	Manchester	Outside Manchester	Total
Gross impact	2	1	3
Displacement	0	0	1
Net direct employment	1	1	2
Indirect & induced employment	1	0	1
Total net employment	**2**	**1**	**3**

* Numbers may not add due to rounding

5.6.9 Taking into account the additional net direct, indirect and induced employment created by the permanent employment of the proposed development, it is assessed that there will be a negligible, long-term permanent effect on the Manchester economy, during the operational phase.

Indicative tenure size and unit mix

5.6.10 The proposed development will introduce 189 new residential market units to the neighbourhood. No affordable housing is included within the proposed development. Table 5-14 presents the unit size mix for the 189 residential units.

Table 5-14 Unit mix

Dwelling type	No. of units
1-bed apartment	64
2-bed apartment	121
2-bed townhouse	4
Total	**189**

5.6.11 The Places for Everyone Joint Development Plan identified the need of 60,061 additional dwellings in Manchester across the plan period from 2022 to 2039, which equates to approximately 3,533 dwellings per year. The proposed development will therefore contribute to meeting these housing targets by providing an additional 189 units, contributing 0.3% to the overall housing target and 5.3% to the annual housing target.

5.6.12 Once the proposed development is completed, the additional 189 homes are considered to have a minor beneficial (not significant), long-term permanent effect on meeting the target for housing provision in Manchester.

Population

5.6.13 Based on the average household size in Manchester of 1.29 people living in 1 bedroom dwellings, and 1.96 people living in 2 bedroom dwellings (ONS, 2021), it is expected that once complete, the proposed development will lead to an additional 328 new residents to the local area.

Additional local spending

5.6.14 To estimate the additional local expenditure generated by the proposed development, average weekly spending figures for residents in north-west England have been applied to the estimated 328 residents.

5.6.15 The ONS provides estimates of gross yearly expenditure per person by region. To ensure a conservative estimate of new local spending, it is further assumed that some of those moving to the new market tenure homes would already reside in the local area, Manchester, and would thus not generate net new expenditure. To account for this, a displacement rate of 25% has been applied based on HCA ready reckoners.

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5.6.16 To account for additional regional expenditure rather than at the city of Manchester level, a leakage rate is accounted for. It is assumed that 37.1% of the household expenditure will be leaked outside of Manchester.

5.6.17 By applying these assumptions, a total net expenditure of £5,660 per person per annum is generated into the Manchester economy, as shown in Table 5-15.

Table 5-15 Direct, indirect and induced spending per person per annum in Manchester (HCA, 2014; ONS, 2025; Buro Happold calculations, 2026)

	Gross direct expenditure (£)	Net direct expenditure (£)	Total net expenditure (£)
Total net spending per person	12,002	9,001	5,660

5.6.18 Applying the average expenditure figures to the estimated 328 residents occupying market homes within the proposed development, an estimated total net benefit of up to £1.9m per annum of additional local spending is generated. Table 5-16 shows the direct, indirect and induced residential spending in Manchester, arising from the proposed development.

Table 5-16 Direct, indirect and induced residential spending in Manchester (HCA, 2014; ONS, 2025; Buro Happold calculations 2026)

	Gross direct expenditure (£)	Net direct expenditure (£)	Total net expenditure (£)
Total net spending	3,932,737	2,949,553	1,854,530

5.6.19 Considering the additional annual spending by residents within the proposed development, it is assessed that there will likely be a minor beneficial (not significant) effect at the local level, and a minor beneficial (not significant) effect at all other spatial levels.

Education

Education demand

5.6.20 This section assesses the effects of increasing demand for education. The proposed development will result in an increased demand for educational places in any households with children occupying new units.

5.6.21 Latest DfE data for 2021/22 (DfE, 2022), for pupil yields in Manchester for different sizes of residential units have been applied to calculate the number of children in the proposed development who will likely require access to schools within the local area. These yields represent raw and unadjusted outputs from the DfE Pupil Yield Dashboard, and reflect a theoretical pupil generation based solely on the proposed development's housing mix. Table 5-17 presents the application of these yields, based on size, to the accommodation schedule to estimate the total number of school places at different stages of education.

Table 5-17 Estimated school places yield from the proposed development

	Primary school	Secondary school	Total
Number of pupils	9	3	12

Primary education

5.6.22 The baseline analysis indicates that there is currently a surplus of 868 primary school places within 2 miles of the site at a 95% occupancy rate.

5.6.23 Considering the assessment above, the expected demand arising for primary school places of up to 9 students could be met within local schools. As a result, it is anticipated that the proposed development will have a negligible effect on the provision of primary school places at the local level.

Secondary education

5.6.24 The baseline analysis indicates that there is currently a surplus of 57 secondary school places within 3 miles of the site at a 95% occupancy rate.

5.6.25 Considering the assessment above, it is estimated that the proposed development will result in demand for up to 3 additional secondary school places, which could be met locally. As such, the proposed development is likely to have a negligible effect on secondary education provision within the local area.

Primary healthcare

5.6.26 The baseline analysis identifies five GP surgeries within 1.5km of the site. The current patient-to-FTE GP ratio stands at 2,102, which is higher than the national guidance of 1,800 patients per FTE-GP.

5.6.27 The projected additional of 328 residents due to the proposed development will increase the demand on local healthcare facilities.

5.6.28 In the scenario where all new residents choose to register with local GPs, the patient-to-GP ratio would rise to 2,113 patients-to-FTE GP, which is higher than the national standard of 1,800 patients per GP but only a small increase from the current patient-to-GP ratio. As a result, it is assessed that the proposed development is likely to have a minor adverse effect on primary healthcare provision at the local level, which is not significant.

Open space

5.6.29 The baseline analysis shows the proposed development is within a reasonable distance of three open spaces, as per MCC accessibility standards.

5.6.30 MCC sets out standards for the provision of open space, including parks and gardens, amenity green space, and natural and semi-natural greenspace. It is estimated that the proposed development will accommodate 328 residents, who will place additional demand on open space. Applying MCC standards for open space, the minimum requirements from the proposed development are outlined in Table 5-18.

Table 5-18 Required open space provision

Open space typology	Existing quantity standard (ha per 1,000 population)	Required provision (ha)
Parks and gardens – city parks	0.2	0.07
Parks and gardens – local parks	0.49	0.16
Natural and semi-natural greenspace	1.86	0.61
Amenity greenspace	0.4	0.13
Total		0.97

5.6.31 The proposed development includes a range of on-site open space, delivered through roof terraces, neighbourhood gardens, resident woodland gardens and a private courtyard. These areas will incorporate lawns, planted areas, outdoor seating and water features.

5.6.32 The baseline assessment shows the site is within reasonable walking distance of three open spaces, which will provide the required provision for the residents within the proposed development, as well as additional open space being provided on site. As such, it is estimated that the proposed development will have a minor beneficial effect (not significant) on open space provision in the local area.

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Play space

5.6.33 The baseline analysis shows that within the north sub-area of assessment, there are 100 sites for provision for children and young people, covering 7.45 ha. For a large proportion of the north sub-area, there is little access to play provision, particularly LAP (local area for play) and LEAP (locally equipped area for play) provision. However, there is good access to other play space types, including MUGAs (multi-use games areas).

5.6.34 The closest play area for children is located just over 1km from the site and the closest provision for young people is located just under 1km from the site. These are both above the accessibility standard outlined by MCC.

5.6.35 Applying current MCC standards for play space, the minimum requirements from the proposed development are 0.02ha. The proposed development includes play space on site, including a playful nature trail through the forest terraces and woodland garden, playful timber stepping logs, informal play space, and roof top play space.

5.6.36 Overall, it is assessed that the proposed development is likely to have a negligible effect on play space provision within the local area.

Climate change and adaptation

5.6.37 There are not anticipated to be any discernible effects on socioeconomics arising from climate change during the operational phase of the proposed development. As such, no climate adaptation or mitigation measures specific to socioeconomics are required.

Summary of effects

Table 5-19 Summary of effects during operation

Receptor	Sensitivity	Description of effect	Magnitude of change / impact	Effect significance
New local employment	Low	Generation of 3 net additional jobs once complete and operational.	Negligible	Negligible (not significant)
Local housing market	Moderate/high	Provision of 189 units of different sizes and types.	Small	Minor beneficial (not significant), long-term and permanent effect
Existing local employees	Low	Deadweight loss of up to 6 FTE jobs through the demolition of Pure Padel	Small	Minor adverse (not significant), long-term and permanent effect
Local businesses	Low	Increase in residential population could lead to an increase in local spending	Small	Minor beneficial (not significant), long-term and permanent effect at the local level and all other spatial levels.
Local children & young people	Low/moderate	The proposed development could lead to demand for up to an additional 9 primary school places.	Negligible	Negligible (not significant)
Local children & young people	Low/moderate	The proposed development could lead to demand for up to an additional 3 secondary school places.	Negligible	Negligible (not significant)
Existing local residents and new residents	Low/moderate	The proposed development could lead to an additional 328 people requiring healthcare through GP services. This will increase the demand for current provision, worsening the current overcapacity slightly in existing services.	Small	Minor adverse (not significant), long-term effect
Existing local residents and new residents	Low/moderate	The proposed development could lead to an additional 328 people in the local area, increasing the pressure on green space. The residents of the proposed development would require approx. 0.97ha of open space. However, the site is within a reasonable distance of three open spaces which cover these requirements,, and further open space is provided on site through roof terraces, courtyards, and gardens.	Small	Minor beneficial (not significant), long-term and permanent effect
Local children & young people	Low/moderate	The proposed development could lead to an additional 328 people in the local area requiring 0.02ha of provision for children and young people.	Negligible	Negligible (not significant)

Supplementary mitigation measures

5.6.38 There are no significant adverse socioeconomic effects identified for the proposed development that require mitigation during the operational phase.

5.7 RESIDUAL EFFECTS AND CONCLUSIONS

Table 5-20 Summary of residual effects during demolition and construction

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
New local employment	Creation of 33 direct, indirect and induced temporary FTE jobs created during the demolition and construction phase	Negligible (not significant)	N/A	Negligible (not significant)

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Table 5-21 Summary of residual effects during operation

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
New local employment	Generation of 3 net additional jobs once complete and operational.	Negligible (not significant)	N/A	Negligible (not significant)
Local housing market	Provision of 189 units of different sizes and types.	Minor beneficial (not significant), long-term and permanent effect	N/A	Minor beneficial (not significant), long-term and permanent effect
Existing local employees	Deadweight loss of up to 6 FTE jobs through the demolition of Pure Padel	Minor adverse (not significant), long-term and permanent effect	N/A	Minor adverse (not significant), long-term and permanent effect
Local businesses	Increase in residential population could lead to an increase in local spending	Minor beneficial (not significant), long-term and permanent effect at the local level and all other spatial levels.	N/A	Minor beneficial (not significant), long-term and permanent effect at the local level and all other spatial levels.
Local children & young people	The proposed development could lead to demand for up to an additional 9 primary school places.	Negligible (not significant)	N/A	Negligible (not significant)
Local children & young people	The proposed development could lead to demand for up to an additional 3 secondary school places.	Negligible (not significant)	N/A	Negligible (not significant)
Local residents	The proposed development could lead to an additional 328 people requiring healthcare through GP services. This will increase the demand for current provision, worsening the current overcapacity slightly in existing services.	Minor adverse (not significant), long-term effect	N/A	Minor adverse (not significant), long-term effect
Local residents	The proposed development could lead to an additional 328 people in the local area, increasing the pressure on green space. The residents of the proposed development would require approx. 0.97ha of open space. However, the site is within a reasonable distance of three open spaces which cover these requirements, and further open space is provided on site through roof terraces, courtyards, and gardens.	Minor beneficial (not significant), long-term and permanent effect	N/A	Minor beneficial (not significant), long-term and permanent effect
Local children & young people	The proposed development could lead to an additional 328 people in the local area requiring 0.02ha of provision for children and young people.	Negligible (not significant)	N/A	Negligible (not significant)

5.8 FUTURE MONITORING OF SIGNIFICANT RESIDUAL ENVIRONMENTAL EFFECTS

5.8.1 As there are no significant adverse residual socioeconomic effects identified for the proposed development, no future monitoring is identified or recommended.

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5.10 GLOSSARY

Term	Definition
BAU	Business as Usual
DfE	Department for Education
DfH	Department for Health
EIA	Environmental Impact Assessment
ES	Environmental Statement
FTE	Full Time Equivalent
GMCA	Greater Manchester Combined Authority
GP	General Practitioner
HCA	Homes and Communities Agency
HMT	His Majesty's Treasury
IMD	Index of Multiple Deprivation
LAP	Local Areas of Play
LEAP	Locally Equipped Areas of Play
LSOA	Lower-layer Super Output Area
MCC	Manchester City Council
MHCLG	Ministry of Housing, Communities and Local Government
MUGA	Multi-Use Games Area
NHS	National Health Service
NPPF	National Planning Policy Framework
ONS	Office for National Statistics
PfE	Places for Everyone
PPG	Planning Practice Guidance
RQF	Regulated Qualification Framework
SCC	Salford City Council
SRF	Strategic Regeneration Framework

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6 GREENHOUSE GAS EMISSIONS

6.1 INTRODUCTION

6.1.1 This chapter of the ES assesses the likely environmental effects of the proposed development with respect to greenhouse gas emissions. This chapter also describes the methods used to assess the effects; the baseline conditions; the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been adopted.

6.1.2 In line with the recommendations of the IEMA EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance 2nd Editions (IEMA, 2022) (the 'IEMA GHG Guidance'), an inter-development cumulative effects assessment has not been undertaken on a specific cumulative scheme basis. Instead, the proposed development's GHG emissions have been considered in the context of both national and local carbon budgets in this ES chapter, ensuring that the cumulative contributions of other GHG sources that make up the national and local contexts have been considered. Further discussion on cumulative effects is set out in Chapter 11 Cumulative and Interactive Effects. Note that IEMA rebranded in 2025 to the Institute of Sustainability and Environmental Professionals (ISEP). The above document was published under the IEMA branding, however IEMA is now known as ISEP.

6.1.3 Climate change resilience has been assessed in the form of a Climate Change Risk Assessment (CCRA), which is reported in Appendix 6.1 ES Volume II. It has concluded that, with the incorporation of the proposed mitigation, the residual risks related to climate change are in line with typical expectations for urban developments of this nature in the UK. Nevertheless, due to the nature of many hazards exacerbated by climate change, some level of residual risk remains.

6.2 METHODOLOGY AND ASSESSMENT CRITERIA

Consultation

EIA scoping

6.2.1 As explained in Chapter 4, Methodology, no formal EIA scoping process was undertaken and a scoping report was not produced. However, the applicant's proposal to include a greenhouse gas emissions assessment within the ES was agreed by MCC planning officers via email correspondence.

Pre-application consultation

6.2.2 No other pre-application consultation with statutory or non-statutory stakeholders was undertaken with respect to greenhouse gas emissions.

Baseline study methodology

6.2.3 The baseline is a reference point against which the effects of the proposed development can be compared. The IEMA GHG Guidance states that '*the ultimate goal of establishing a baseline is being able to assess and report the net GHG impact of the proposed project*'.

6.2.4 The site is currently used as a temporary indoor sports venue, occupied by Pure Padel Manchester. The planning permission for this temporary change of use is for a period of three years (139686/FO/2024).

6.2.5 Although the current activities on site generate GHG emissions (for example, from energy and water consumption and vehicle trips associated with staff and site users), the total GHG emissions from the temporary use are not known. In the absence of reliable activity data, and to ensure a conservative approach consistent with the IEMA GHG Guidance, the baseline emissions for the assessment have been considered to be zero.

6.2.6 In order to provide a point of comparison for the impact of the proposed development on emissions of GHGs to the global atmosphere over the lifetime of the development (considered to be 60 years for the purpose of this assessment), the emissions from the site have been considered over this timeframe. This approach is in line with the IEMA GHG Guidance.

6.2.7 Should the proposed development not come forward, given the temporary nature of the current planning permission, the long-term future of the site is uncertain. In line with the approach applied to establishing the current baseline, the future annual baseline GHG emissions are also considered to be zero. This is considered a conservative approach.

Assessment approach

Identification of the study area

6.2.8 The GHG emission impacts and resulting effects are global. As such, the spatial scope of the assessment is global.

6.2.9 In line with the advice provided in the IEMA GHG Guidance, the proposed development's GHG emissions have been considered in the context of both the UK national carbon budgets, Tyndall Centre recommended energy-only carbon budgets and Logika carbon budgets for Manchester City.

Site Survey

6.2.10 No site survey has been undertaken as part of this assessment and a survey is not considered necessary.

6.2.11 The assessment reported in this chapter is based on scheme information provided in the following documents:

- Energy Strategy Report (Ridge & Partners, 2024) (5022556-RDG-XX-XX-RP-ME-510000 0 Energy Strategy Report)
- Circular Economic Statement (Ridge & Partners LLP, 2026) (5022556 Robert Street- Circular Economy Statement Rev 2)
- Transport Assessment (SK Transport, 2024)
- Design and Access Statement (Tim Groom Architects, 2026)

Overview

6.2.12 The metric for assessing the climate change impacts of GHG emissions in this assessment is Global Warming Potential (GWP). This is expressed in units of CO_2 equivalent (CO_2e) over 100 years. This allows for the emissions of the seven key GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3) and sulphur hexafluoride (SF_6), expressed in terms of their equivalent global warming potential in mass of CO_2e.

6.2.13 There is currently no standard methodology for quantifying GHG emissions within the EIA process. The IEMA GHG Guidance instead advocates for flexibility and proportionality to suit the specific development being assessed.

6.2.14 A GHG emissions assessment typically covers the whole life of a development. This can be broken down into 'lifecycle stages' or 'modules' of the proposed development, as set out in BS EN 15978 Sustainability of Construction Works – Assessment of Environmental Performance of Buildings – Calculation Method, as shown in Figure 6-1.

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6.2.15

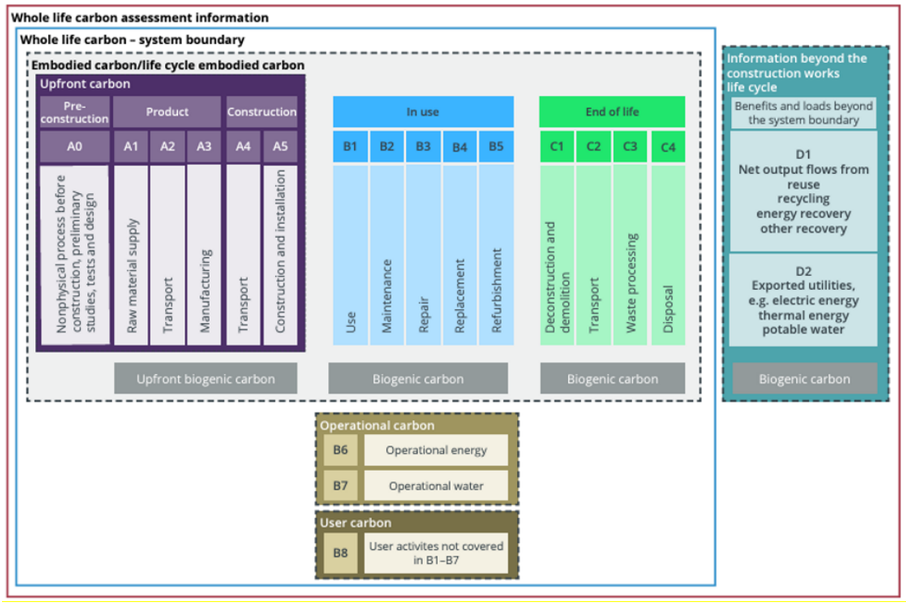


Figure 6-1 Diagram showing the stages of a lifecycle GHG emissions assessment, taken from Whole Life Carbon Assessment for the Built Environment (RICS, 2023), based on lifecycle stages set out in EN 15643:2021, EN 15978 and more.

6.2.16 Relevant activities within lifecycle stages A, B and C have been included in this assessment. Any activities that have been excluded are explained and justified in the 'Sources of GHG emission excluded from the assessment' section of this part of the chapter. The assessment has taken into account the design detail currently available.

6.2.17 GHG emissions caused by an activity are often categorised into 'scope 1', 'scope 2' or 'scope 3', following the guidance of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol suite of guidance documents (WRI and WBSCD, 2014).

6.2.18 The ES chapter does not refer to scope 1, 2 and 3 emissions throughout, instead referring to emissions by lifecycle stage. However, the following section provides an overview of which scope the assessed emissions fall within.

6.2.19 Scope 1 emissions comprise direct emissions from the owner or controlled sources. With respect to the proposed development, this may include emissions from vehicles owned by the applicant or from fuel combustion on site during the construction stage.

6.2.20 Scope 2 emissions comprise indirect emissions from energy purchased by the applicant. With respect to the proposed development, this would include electricity generated offsite, purchased and consumed by the applicant in relation to the proposed development and its construction. For example, electricity used for lighting, heating and cooling in the on-site construction site offices or marketing suite.

6.2.21 Scope 3 emissions comprise indirect value chain emissions, resulting from the activities of assets not controlled or owned by the applicant occurring before or after they have control of an asset. With respect to the proposed development this may include:

- Upstream emissions related to the extraction, manufacture and transport of building materials to the site during construction and construction-related emissions from sub-contractors; and
- Downstream emissions related to the future residents and homeowners, including purchased energy, water use, personal vehicle use and waste generated; as well as embodied carbon associated with use, maintenance, repair, refurbishment and replacement in the properties in the future. This may also include downstream emissions associated with demolitions and management of waste from the development at the end of its life.

6.2.22 For the purpose of this assessment, in line with the principles set out in BS EN 15978, a Reference Study Period (RSP) of 60 years after opening (the opening year) has been used.

Construction stage GHG emissions

6.2.23 Based on the criteria set out in Figure 6-1, the assessment of the construction stage takes into account the following sources of GHG emissions:

- A1-A3 Product stage: GHG emissions associated with the material extraction, transportation and manufacturing of construction products; and
- A4-A5 Construction process stage: GHG emissions associated with product delivery to site and the installation process.

6.2.24 Embodied carbon associated with the construction stage of the proposed development has been estimated by applying the RIBA 2030 Climate Challenge benchmarks for the residential areas, based on maximum proposed floor areas. These are considered conservative benchmarks for developments of this type. Further information on these benchmarks and how they have been applied in the assessment is provided in Appendix 6.2, ES Volume II.

Operational stage GHG emissions

6.2.25 Based on the criteria set out in Figure 6-1, the assessment of the operational stage takes into account the following sources of GHG emissions:

- B1-B5 In-use stage: This stage captures GHG emissions associated with the operation of the built assets over their period of use, from practical completion to the end of their service life, including use, maintenance, repair, refurbishment and replacement. Embodied carbon associated with these activities has been estimated by applying the RIBA 2030 Climate Challenge benchmarks for residential areas, based on proposed maximum floor areas. Further information on these benchmarks and how they have been applied in the assessment is provided in Appendix 6.2, ES Volume II.
- B6 Operational energy: GHG emissions associated with the estimated total operational energy. Predicted Carbon Emissions for the proposed residential areas fall within scope 2 emissions. The maximum energy use intensity per square metre of floorspace (KWh/m^2/yr) has been applied from information provided by Ridge & Partners, the project energy consultant, (45.64 KWh/m^2/yr). Department for Energy Security and Net Zero (DESNZ) Greenhouse Gas Reporting: Conversion Factors 2025 for grid electricity have then been applied to provide an estimate of annual operational energy GHG emissions associated with the proposed development. The 2025 DESNZ carbon factor has been applied consistently across the RSP and therefore this assessment does not account for any decarbonisation of the electricity grid over this period. This represents a conservative approach. Further information on these figures and how they have been applied in the assessment is provided in Appendix 6.2, ES Volume II.
- B7 Operational water: GHG emissions associated with operational water consumption and foul water. For residential areas, the maximum occupancy, as provided by the design team, has been used, with the BRSIA BG 85_2024 Mechanical Criteria benchmarks for water consumption and DESNZ emission factors. Further information on these benchmarks and how they have been applied in the assessment is provided in Appendix 6.2, ES Volume II.

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- Operational transport emissions, which are not included in Figure 6-1, have also been included in the assessment due to the substantial role they play in the UK's total GHG emissions. Surface transport is the largest source of GHG emissions in the UK, accounting for 24% of emissions in 2023 according to the Committee on Climate Change (2025). The GHG emissions associated with vehicles travelling to and from the proposed development during the operational stage have been estimated by applying a DESNZ emissions factor for average vehicle use, to trip numbers provided by the project transport consultant, and an indicative trip distance figure estimated by the Department for Transport. These emissions factors include wheel to tank emissions, as well as tail pipe emissions. Additional information on the assumptions that have been made is provided in Appendix 6.2, ES Volume II.

Decommissioning phase GHG emissions

6.2.26 Based on the criteria set out in Figure 6-1, the assessment of the decommissioning stage takes into account the following sources of GHG emissions:

- C1-C4 End of life stage: GHG emissions associated with the demolition and disassembly of the proposed development at the end of its life. GHG emissions associated with this stage have been estimated by applying the RIBA 2030 Climate Challenge Benchmarks for the residential areas, based on the maximum proposed floor areas. Further information on the assumptions that have been made when calculating the estimated GHG emissions from the decommissioning stage is provided in Appendix 6.2, ES Volume II.

Sources of GHG emissions excluded from the assessment

6.2.27 The IEMA GHG Guidance states that '*certain life cycle modules (or stages) can be excluded if these exclusions are clearly highlighted and justified by the practitioner using professional judgement and in accordance with the materiality and cut-off guidance.*' The following sources of GHG emissions have been excluded from the scope of the assessment:

- Operational waste: The opportunities for design and construction decisions to significantly influence the reduction of GHG emissions associated with operational waste are low as it is highly dependent on occupant behaviour and waste processing at the borough scale by the Local Authority. The emissions associated with operational waste are also not expected to be material in scale such that they could influence the overall significance of effects, and have therefore been scoped out;

- Carbon sequestration from green infrastructure: GHG emissions/savings associated with carbon sequestration from green infrastructure, and how this is affected by land use changes on site, are not expected to be material in scale such that they could influence the overall significance of effects. On this basis, in line with the advice provided in the IEMA GHG Guidance, this GHG emissions source/sink is proposed to be scoped out of the assessment. Excluding this from the assessment is considered conservative and robust.; and

- Module D: Beyond Asset Life Cycle' Stage: the 'Beyond Asset Life Cycle' stage, encompasses emissions associated with activities beyond the site boundary and life cycle of the proposed development. This module relates to the repurposing of discarded building elements or any energy recovered from beyond a project's lifecycle. Reliable information about how the components of the scheme could potentially be repurposed following its demolition at the end of its life is not currently available. Given that Module D lies outside the proposed development's lifecycle and only covers GHG emissions that could potentially be avoided as a result of repurposing of discarded materials, it is considered that the proposed assessment of Modules A to C (only) comprises a conservative assessment. On this basis, consideration of Module D has not been included in the scope of the assessment.

- Inter-project cumulative effects: The atmospheric concentration of GHGs and the resulting effects on climate change are affected by all sources (anything emitting GHG) and sinks (anything absorbing GHG) globally, anthropogenic or otherwise. As GHG emission effects are global rather than affecting one localised area, the approach to the assessment of cumulative effects for GHGs differs to the approach used for other EIA topics, where only projects within a specific radius of the application site would be included. As stated in the IEMA GHG Guidance, the effects of GHG emissions from specific 'cumulative schemes' should not be individually assessed, as there is no basis for selecting any particular cumulative scheme for assessment over any other. The Guidance goes on to advise that the contextualisation of GHG emissions should incorporate by its nature the cumulative contributions of other GHG sources which make up that context. An inter-project cumulative effects assessment has therefore not been undertaken on a specific cumulative scheme basis; however, the proposed development's GHG emissions have been considered in the context of both the UK national carbon budgets and both the Logika carbon budgets for Manchester. As such, the cumulative contributions of other GHG sources that make up the national and Manchester City contexts have been considered within the assessment.

Consideration of scope 3 emissions

6.2.28 As previously stated, this ES chapter has been prepared in line with the IEMA GHG Guidance and other good practice industry guidance. With minor exceptions (explained and justified in the previous section), the assessment has included a consideration of all scope 1, 2 and 3 GHG emissions from all activities within lifecycle stages A, B and C of relevance to the proposed development, as set out in the Whole Life Carbon Assessment for the Built Environment (RICS, 2023) (the "RICS 2023 Guidance") and BS EN 15978 Sustainability of Construction Works – Assessment of Environmental Performance of Buildings – Calculation Method ("BS EN 15978") guidance.

6.2.29 The Supreme Court judgement on the application of Finch (on behalf of the Weald Action Group) v. Surrey County Council and others (judgement given on 20 June 2024) has raised implications for the assessment of scope 3 emissions from development projects in the EIA process, potentially requiring the consideration of additional indirect emissions that do not, to date, require consideration under the relevant industry good practice guidance, including the IEMA GHG Guidance, the RICS 2023 Guidance and BS EN 15978.

6.2.30 A consideration of the Finch case judgement and the alignment of the assessment of scope 3 emissions within this assessment with the judgement is provided in Appendix 6.3 (ES Volume II). The methodology employed in this assessment is considered to align with the Finch case Supreme Court judgement.

Programme

6.2.31 The proposed developed is expected to be completed and become operational in a single phase. It is anticipated that the construction works will commence onsite in July 2027, with completion anticipated in May 2028. The proposed development is anticipated to be fully operational by July 2028.

6.2.32 The baseline and proposed development GHG emissions have been assessed from the start of the construction phase in July 2027 to the end of the 60 year RSP period in July 2088 (measured from the commencement of the operational phase in July 2028).

6.2.33 Decommissioning has been assumed to take place in the final year of the RSP. However, it should be noted that the applicant does not necessarily propose to decommission the development at the end of this 60-year period.

Emission Factors

6.2.34 Emissions factors have been applied to operational energy (lifecycle stage B6) using the Greenhouse Gas Reporting: Conversion Factors 2025 for grid electricity which applies a fixed national grid electricity carbon emissions factor expressed in kgCO2e/kWh. Emissions factors have also been applied to calculate the GHG emissions from operational water use (lifecycle stage B7) using DESNZ 2025 Carbon factors for water supply and water treatment factors kgCO2e per m^3.

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6.2.35 Emissions factors have also been used for operational transport GHG emissions. DESNZ 2025 Emissions factors for the average car with unknown fuel have been used (kgCO2e/km).

Assessment of effects

6.2.36 The assessment of the likely effects of the proposed development has taken into account the construction stage, the operational stage and the decommissioning stage.

Receptor sensitivity

6.2.37 The impacts and effects of GHG emissions are global, with the global atmosphere serving as the sensitive receptor. The IEMA GHG Guidance advises that '*the receptor has a high sensitivity, given the severe consequences of global climate change and the cumulative contributions of all GHG emission sources.*' However, in line with the methodology set out in the IEMA GHG Guidance, it is not considered necessary to explicitly determine the sensitivity of the receptor or the magnitude of the impact in order to assess the significance of GHG emissions effects.

Significance evaluation

6.2.38 Specific criteria for assessing the significance of GHG emissions effects are provided in the IEMA GHG Guidance. The guidance also recommends that the context of the project's carbon footprint is determined in order to establish whether the project supports or undermines a trajectory towards net zero. This can help decision makers in their evaluation of the effects of the proposals. The IEMA GHG Guidance has been adapted and applied to this assessment.

6.2.39 Three overarching principles are set out in the IEMA GHG Guidance, which IEMA advise should be considered when looking to establish the effect significance of GHG emissions. These comprise:

- 'The GHG emissions from all projects will contribute to climate change, the largest interrelated cumulative environmental effect;
- The consequences of a changing climate have the potential to lead to significant environmental effects on all topics in the EIA Directive (e.g. human health, biodiversity, water, land use, air quality); and
- GHG emissions have a combined environmental effect that is approaching a scientifically defined environmental limit; as such any GHG emissions or reductions from a project might be considered to be significant.'

6.2.40 IEMA has further built on these principles in the guidance, as follows:

- 'When evaluating significance, all new GHG emissions contribute to a negative environmental impact; however, some projects will replace existing development or baseline activity that has a higher GHG profile. The significance of a project's emissions should therefore be based on its net impact over its lifetime, which may be positive, negative or negligible;
- Where GHG emissions cannot be avoided, the goal of the EIA process should be to reduce the project's residual emissions at all stages; and
- Where GHG emissions remain significant, but cannot be further reduced, approaches to compensate the project's remaining emissions should be considered.'

6.2.41 The goal of the Paris Agreement is to limit global temperature rise to well below 2°C, aiming for 1.5°C, compared with pre-industrial levels, in order to stand a greater chance of avoiding severe adverse effects from climate change. The UK has set a legally binding GHG reduction target for 2050 through the Climate Change Act, including interim five-yearly carbon budgets, which define a trajectory towards net zero. The Climate Change Committee (CCC) has confirmed that the 2050 target and interim budgets are compatible with the required magnitude and rate of GHG emissions reductions required in the UK to meet the goals of the Paris Agreement, thereby limiting severe adverse effects.

6.2.42 To meet the 2050 target and interim budgets, action is required to reduce GHG emissions from all sectors, including urban development projects. As stated in the IEMA GHG Guidance, '*EIA for any proposed project must therefore give proportionate* consideration *to whether and how that project will contribute to or jeopardise the achievement of these targets…the crux of significance therefore is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contribu*tes to reducing GHG emissions relative to a *comparable baseline consistent with a trajectory towards net zero by 2050*'.

6.2.43 Building on this, the IEMA GHG Guidance sets out an approach to the assessment of effect significance that comprises judgements on the proposed development's consistency with policy requirements (as these have been implemented to ensure the economy decarbonises in line with the UK's net zero target); and the extent to which the proposed development's GHG emissions have been mitigated.

6.2.44 Table 6—1 sets out the significance of effect criteria provided in the IEMA GHG Guidance. The significance of effect scale is also shown in Figure 6-2 to illustrate how this relates to the 1.5ºC compliance trajectory.

Table 6—1 Criteria for determining significance of effect

Significance	Descriptor
Major adverse	The proposed development's GHG impacts are not mitigated or are only compliant with do-minimum standards set through regulation, and do not provide further reductions required by existing local and national policy for projects of this type. A project with major adverse effects is locking in emissions and does not make a meaningful contribution to the UK's trajectory towards net zero.
Moderate adverse	The proposed development's GHG impacts are partially mitigated and may partially meet the applicable existing and emerging policy requirements but would not fully contribute to decarbonisation in line with local and national policy goals for projects of this type. A project with moderate adverse effects falls short of fully contributing to the UK's trajectory towards net zero.
Minor adverse	The proposed development's GHG impacts would be fully consistent with applicable existing and emerging policy requirements and good practice design standards for projects of this type. A project with minor adverse effects is fully in line with measures necessary to achieve the UK's trajectory towards net zero.
Negligible	The proposed development's GHG impacts would be reduced through measures that go well beyond existing and emerging policy and design standards for projects of this type, such that radical decarbonisation or net zero is achieved well before 2050. A project with negligible effects provides GHG performance that is well 'ahead of the curve' for the trajectory towards net zero and has minimal residual emissions.
Beneficial	The proposed development's net GHG impacts are below zero and it causes a reduction in atmospheric GHG concentration, whether directly or indirectly, compared to the without-project baseline. A project with beneficial effects substantially exceeds net zero requirements with a positive climate impact.

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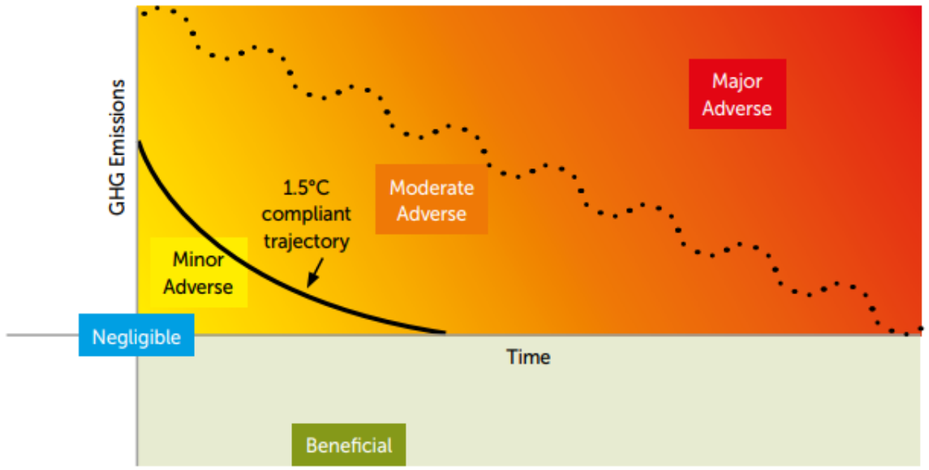


Figure 6-2 Different levels of significance plotted against the UK's net zero compatible trajectory. Source: IEMA guide to 'Assessing Greenhouse Gas Emissions and Evaluating their Significance' Second edition

6.2.45 In line with the IEMA GHG Guidance, major and moderate adverse and beneficial effects are considered significant. Effects can also be described, for example, as:

- Beneficial or adverse;
- Direct or indirect;
- Permanent or temporary;
- Reversible or reversible
- Short, medium or long term

6.2.46 The IEMA GHG Guidance advises that the approach should be modified for the very largest-scale developments, which can in themselves have magnitudes of GHG emissions that materially affect the UK's or a devolved administration's total carbon budget. In the case of such developments, irrespective of the level of mitigation proposed, if net GHG emissions exceed 5% of the relevant UK or devolved administration's carbon budget, the effects of the development are likely to be significant.

6.2.47 The guidance also advises that *'Practitioners should note that existing policy and regulation may in some cases lag behind the necessary levels of GHG emission reductions (or types of actions to achieve those) that are compatible with the UK's or devolved administration's targets and with a science based 1.5°C compatible trajectory towards net zero. Meeting the minimum standards set through existing policy or regulation cannot necessarily be taken as evidence of avoiding a significant adverse effect, and it is recommended that practitioners consider and have reference also to emerging policy/standards and the guidance of expert bodies such as the CCC on necessary policy developments, particularly for multi-phased projects with long timescales. This must be evaluated by the practitioner as part of the evidence base used in the assessment of effects. References to 'existing' and 'emerging' policy in the principles of significance and example criteria above must be interpreted with this in mind.'*

Contextualisation of the GHG emissions

6.2.48 The IEMA GHG Guidance also recommends that the context of the project's carbon footprint is determined in order to establish whether the project supports or undermines the trajectory towards net zero. This can help decision makers in their evaluation of the effects of the proposals.

6.2.49 As noted in the previous section, the UK has a defined national carbon budget and budgets have also been set by devolved administrations, which the CCC has confirmed are compatible with net zero and international climate commitments. The IEMA GHG Guidance advised that the starting point for contextualising the project's GHG emissions should be the percentage contribution of the project to the relevant national or devolved administration carbon budget. However, it goes on to advise that the contribution of most individual projects to national-level budgets will be small and so this context will have limited value. In response, the guidance presents a good practice approach for contextualising a project's GHG emissions against pre-determined carbon budgets or against emerging policy and performance standards, where a budget is not available. This is shown in Figure 6-3.

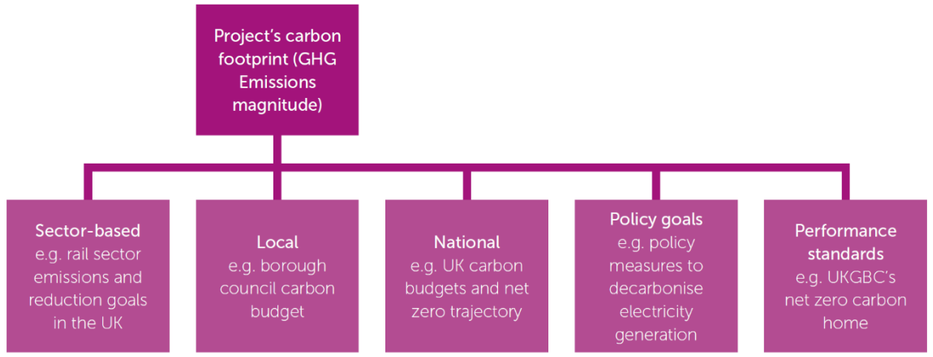


Figure 6-3 Good practice approaches for contextualising a project's GHG emissions. Source: IEMA guide to 'Assessing Greenhouse Gas Emissions and Evaluating their Significance' Second edition

6.2.50 Under the Manchester Climate Change Action Plan, Manchester City Council (MCC) has a 'target for the Council to reduce its direct CO_2 emissions by 50% between 2020 and 2025'. This target is only applicable to the activities of the Council, and not for all emissions occurring within the Council boundary. Whilst MCC has not yet formally adopted carbon budgets, Logika Group has a carbon budget tool (the "The Logika Local Authority Carbon Budget Tool") that provides recommended climate change commitments for UK Local Authority areas aligned with the commitments in the Paris Agreement, informed by recent science on climate change and defined by science based carbon budget setting. The carbon budgets provided by the Logika Carbon Budget Tool do not have any legislated status. However, because they are derived from the UK's legislated carbon budgets and the CCC Balanced Pathway, they are intended to be representative of Local Authority emissions as a sub-division of the legislated national budgets. The Logika carbon budgets include all emissions sources, and all greenhouse gases, that occur geographically within the local authority area.

6.2.51 The net GHG emissions arising from the proposed development have been considered in the context of both the UK national carbon budgets and the Logika recommended carbon budgets for Manchester.

6.2.52 The UK national carbon budgets for the period over which the proposed development will be under construction and operational are presented in Table 6—2. The CCC has also provided recommendations for the seventh carbon budget period (2038-2042), which have been included in the table. However, the UK Government has not yet formally adopted a seventh carbon budget.

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Table 6—2 UK National Carbon Budgets

Carbon budget	Period	Million tonnes of CO_2
Fourth	2023-2027	1,950
Fifth	2028-2032	1,725
Sixth	2033-2037	965
Seventh	2038 – 2042	535

6.2.53 The construction period for the proposed development is expected to fall within the fourth and fifth budget period, whilst the operational phase is expected to fall within the fifth, sixth and seventh budget periods.

6.2.54 The Logika carbon budgets for Manchester for the same period (2023-2042) are presented in Table 6—3.

Table 6—3 Logika Carbon Budgets for Manchester

Period	Million tonnes of CO_2
2023-2027	10.58
2028-2032	7.79
2033-2037	4.91
2038-2042	2.77

6.2.55 For the purpose of this assessment, the results of the emissions calculations have been presented in terms of their percentage contribution to the relevant carbon budget period, as set out above.

6.3 LEGISLATION AND POLICY WHICH HAS INFLUENCED ASSESSMENT OR MITIGATION

6.3.1 The following legislation, policy and guidance has been considered in the completion of this assessment. Further information on these documents is provided in Appendix 6.4 (ES Volume II).

Legislation

- Paris Agreement (United Nations Framework Convention on Climate Change, 2015);
- The Special Report on Global Warming of 1.5°C (International Panel on Climate Change (IPCC), 2018);
- The Climate Change Act (2008) & The Climate Change Act 2008 (2050 Target Amendment) Order (2019);
- Planning and Energy Act (2008);
- Carbon Budgets Order (2021); and
- The Seventh Carbon Budget, Climate Change Committee (2025).

National policy

- National Planning Policy Framework (NPPF) Ministry of Housing Communities & Local Government (MHCLG (formerly DLUHC), 2025);
- Draft National Planning Policy Framework (NPPF) (MHCLG, undergoing consultation December 2025-March 2026);
- National Planning Practice Guidance (NPPG) (MHCLG (formerly DLUHC), 2025);
- The Building Regulations Part L 2021 Edition;
- The Carbon Plan: Delivering our Low Carbon Future (DESNZ (formerly DECC), 2011);
- British energy security strategy (DESNZ, 2022);
- Net Zero Strategy: Build Back Greener (HM Government, 2021); and
- The Third National Adaption Programme and the Fourth Strategy for Climate Adaptation Reporting (Defra, 2023).

Regional policy

- Places for Everyone (PfE) Joint Development Plan for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan (2024);

Local policy

- Guide to Development in Manchester Supplementary Planning Document and Planning Guidance (2007);
- Manchester's Local Development Framework. Core Strategy Development Plan Document (MCC, 2012) (as amended, 2024);
- Manchester City Council Climate Change Action Plan 2020-2025;
- Manchester Climate Change Partnership. (2025). Manchester Climate Ready: The Plan (2025–2030). Manchester Climate.

Guidance

- IEMA EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance 2nd Edition (Institute of Environmental Management and Assessment (IEMA), 2022) (the 'IEMA GHG Guidance');
- RIBA 2030 Climate Challenge (Royal Institute of British Architects (RIBA), 2021);
- BS EN 15978 Sustainability of Construction Works – Assessment of Environmental Performance and Buildings – Calculation Method (British Standards Institution (BSI), 2011);
- Building Services Research and Information Association (BSRIA) Rules of Thumb Guidance for Building Services (2024);
- Royal Institution of Chartered Surveyors (RICS) Whole Life Carbon Assessment for the Built Environment 2nd edition (RICS, 2023);
- UK Green Building Council (UKGBC) Embodied Carbon: Developing a Carbon Brief (UKGBC, 2017);
- Waste and Resource Action Programme (WRAP) Cutting Embodied Carbon in Construction Projects (WRAP, 2011a);
- WRAP Procurement Requirements for Carbon Efficiency (WRAP, 2011b);
- Greater London Authority Construction Scope 3 (Embodied) Guidance on Greenhouse Gas Accounting and Reporting (GLA, 2013);
- Mayor of London Whole Life-Cycle Carbon Assessments Guidance (GLA, 2022);
- Low Energy Transformation Initiative (LETI) Embodied Carbon Primer (LETI, 2020);
- LETI Climate Emergency Design Guide (2020);
- ISO 14090:2019 Adaptation to Climate Change – Principles, Requirements and Guidelines (BSI, 2019); and
- C40 Cities Climate Change Risk Assessment Guidance (C40 Cities 2018, Amended 2025).

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Assessment limitations (technical deficiencies or lack of knowledge)

6.3.2 When undertaking this assessment, there are a number of assumptions and limitations affecting the outputs. These include:

- The assessment reported in this chapter is based on scheme information provided by the design team and the appointed energy consultant;
- There is inherent uncertainty in the Department for Energy Security and Net Zero (DESNZ) emissions factors. The emissions factors are in line with the UKs decarbonisation trajectory towards net zero in 2050, however this is an assumption, and the actual emissions trajectory is unknown;
- The detailed scheme information required to undertake a full embodied carbon assessment of the proposed development, such as construction material quantities, is not yet available. Embodied carbon benchmarks have therefore been used to calculate the GHG emissions instead, based on maximum floor areas and building uses. Whilst these benchmarks have given an estimate of the scale of GHG emissions associated with the proposed development, they will not be completely accurate due to variations between buildings, including geography, construction processes and construction materials used. However, these are considered the best methods for estimating GHG emissions available to us at the time the chapter was prepared. Where there has been uncertainty, a conservative approach has been taken.
- The AADT Transport data, used to estimate GHG emissions arising from operational transport has been undertaken on a maximum capacity of 189 dwellings. This therefore represents a worst-case scenario;
    - The total occupancy for the proposed development is currently unknown. An estimate has therefore been made based on the number of proposed bedspaces within the development. This is likely to provide an overestimation of the total occupancy and is therefore considered to represent a conservative approach.
    - The maximum Gross Internal Area (GIA) of residential areas used for this assessment is 16,579m^2, provided by Tim Groom Architects, as stated in the Chapter 2 Development Description.
- It is assumed that embodied carbon from maintenance and replacement (lifecycle stage B1-B5) will occur from 15 years after the beginning of the operational phase, to the end of the lifecycle of the development. This is because replacement and maintenance are not expected to be required in the first 15 years of operation.
- As no formal EIA Scoping Report was submitted to MCC in relation to this EIA, the scope of this assessment has been defined based on professional judgement, a review of available information, relevant statutory requirements, best-practice guidance and industry benchmarks.
- In the absence of reliable activity data on for the existing temporary padel use, and uncertainty over the future use of the site following the completion of the temporary planning permission (in the absence of the proposed development), to ensure a conservative approach consistent with IEMA GHG guidance, the baseline emissions for the assessment have been considered to be zero.

6.4 BASELINE CONDITIONS

Current baseline (2026)

6.4.1 The baseline is a reference point against which the effects of the proposed development can be compared. The IEMA GHG Guidance states that '*the ultimate goal of establishing a baseline is being able to assess and report the net GHG impact of the proposed project.*'

6.4.2 The current baseline for the proposed development is defined as the current GHG emissions arising from activities and infrastructure within the site boundary. The site is currently used as a temporary indoor sports venue, occupied by Pure Padel Manchester. The planning permission for this temporary change of use is for a period of three years (139686/FO/2024).

6.4.3 Although the current activities on site generate GHG emissions (for example, from energy and water consumption and vehicle trips associated with staff and site users), the total GHG emissions from the temporary use are not known. In the absence of reliable activity data, and to ensure a conservative approach consistent with the IEMA GHG Guidance, the baseline emissions for the assessment have been considered to be zero.

Future baseline (2028)

6.4.4 Should the proposed development not come forward, given the temporary nature of the current planning permission, the long-term future of the site is uncertain. In line with the approach applied to establishing the current baseline, the future annual baseline GHG emissions are also considered to be zero. This is considered a conservative approach.

Identified receptors and their sensitivity

6.4.5 The impacts and effects of GHG emissions are global, with the global atmosphere serving as the sensitive receptor. The IEMA GHG Guidance advises that *'the receptor has a high sensitivity, given the severe consequences of global climate change and the cumulative contributions of all GHG emission sources.'* However, as set out in the methodology section of this chapter, in line with the methodology set out in the IEMA GHG Guidance, it is not considered necessary to explicitly determine the sensitivity of the receptor or the magnitude of the impact in order to assess the significance of GHG emissions effects. As such, this ES Chapter makes no further reference to receptor sensitivity or impact magnitude.

6.5 DEMOLITION AND CONSTRUCTION EFFECTS

Relevant aspects of the proposed development

6.5.1 Construction effects comprise GHG emissions associated with the product stage (lifecycle stages A1-A3) and the construction process stage (lifecycle stages A4-A5).

6.5.2 The Circular Economy Statement (Ridge & Partners, 2026) sets out the following embedded mitigation measures to reduce construction stage GHG emissions from the proposed development:

- Materials will be selected to maximise reuse and recycled content. Where feasible, reinforced steel (rebar) with a high recycled content will be specified, and the potential to incorporate reclaimed bricks within the façade will be explored. Reclaimed brickwork offers significantly lower embodied carbon compared with using newly manufactured bricks;
- A Pre-Demolition Audit will be conducted to identify material reuse and recycling opportunities. Excavation will be minimized, and efforts will be made to reuse excavation waste on-site. The target is to divert 95% of demolition waste from landfill;
- A Construction Resource Management Plan will be developed prior to the start of on-site works. The plan will set out the approach to minimising construction waste, and monthly monitoring will be undertaken to ensure subcontractors are fully engaged and compliant with the waste-reduction measures;
- A waste hierarchy approach will be followed with the intention first to minimise waste generation, followed by reuse, and then recycling on-site. Where materials cannot be reused or recycled on-site, the contractor will identify opportunities for potential reuse off-site;

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- Waste segregation and monitoring will be implemented during construction;
- Dedicated waste storage areas will be provided on the ground floor, with at least 50% of bins allocated for recycling, including organic waste. Aligning with the Greater Manchester Municipal Waste Management Strategy.

Potential effects of the proposed development

6.5.3 The estimated GHG emissions arising from construction of the proposed development are set out in Table 6-4.

Table 6-4 GHG emissions arising from the construction of the proposed development

Lifecycle stage	Total GHG emissions (tCO2e)
Product stage (A1-A3)	13,263.20
Construction process stage (A4-A5)	824.53
Total	**14,087.73**

Climate change and adaptation

6.5.4 In-combination climate changes effects have been considered in each of the other technical chapters scoped into the ES. It is not appropriate to assess in-combination climate change effects in this ES chapter.

6.5.5 Climate change resilience has been assessed in the form of a Climate Change Risk Assessment (CCRA), which is reported in Appendix 6.1, ES Volume II. It has concluded that, with the incorporation of the proposed mitigation, the residual risks related to climate change are in line with typical expectations for urban developments of this nature in the UK. Nevertheless, due to the nature of many hazards exacerbated by climate change, some level of residual risk remains.

Summary of effects

6.5.6 The summary of effects associated with the construction phase is provided post mitigation in Table 6-10.

Supplementary mitigation measures

Table 6-5 Summary of construction supplementary mitigation measures

Adverse effect	Mitigation measure	Responsibility / mechanism for implementation	Timing
Construction process stage GHG emissions (lifecycle A4- A5)	Review opportunities to reduce the number and distance of construction transport trips, such as using locally sourced materials and implementing a travel plan for site staff.	Developer/contractor To be included in the CEMP, which will be secured by planning condition.	Prior to the commencement of site enabling works
	Review opportunities to reduce energy consumption associated with the construction and installation process such as minimising the use of on-site diesel generators, and implementing a site energy monitoring and improvement programme.	Developer/contractor To be included in the CEMP, which will be secured by planning condition.	Prior to the commencement of site enabling works

6.6 OPERATIONAL EFFECTS

Relevant aspects of the proposed development and designed-in mitigation

6.6.1 Operational effects refer to GHG emissions associated with operational embodied carbon resulting from maintenance, repair and replacement (lifecycle stages B1-B5), operational energy consumption (lifecycle stage B6), operational water consumption (lifecycle stage B7), operational transport and end-of-life demolition (lifecycle stage C1-C4).

6.6.2 The Energy Strategy Report (Ridge & Partners, 2026), Circular Economy Statement (Ridge & Partners, 2026) and Design and Access Statement (Tim Groom Architects, 2026) set out the following designed-in measures to reduce operational stage GHG emissions from the proposed development:

<u>In-use stage embodied carbon (lifecycle stages B1-B5)</u>

- The design follows the "Building in Layers" approach, ensuring different parts of the building can be maintained, replaced, or reused independently.

<u>Operational energy use (lifecycle stage B6)</u>

- Connection to a district heat network has been explored; however the distance between the nearest district heating mains and the application site is 1.3 miles, which is considered too far to be economically viable. This has therefore been discounted.
- No solar PV is currently embedded into the design as the building passes Part L 2021 Building Regulations without the addition of PV panels. Solar PV opportunities are however being explored onsite to increase renewable energy provision;
- The proposed development will use low-energy implementations such as Air Source Heat Pumps (ASHP) for heating and cooling. They also require less maintenance than a combustion heating system;
- Incorporation of passive design measures, such as thermal insulation, mixed mode ventilation, natural daylight, air tightness, solar shading, low energy fit out and sub metering (power, lighting, plant);
- Natural ventilation is to be used in a mixed mode approach, with mechanically powered ventilation using mechanical ventilation with heat recovery (MVHR) units. Natural ventilation is to be used in a mixed mode approach, with mechanically powered ventilation using mechanical ventilation with heat recovery (MVHR) units. This will help to reduce on site carbon emissions by reducing the operation of electrically driven systems;
- Variable Refrigerant Flow (VRF) heat pumps will also provide heating and cooling in amenity areas;
- High efficiency/Low specific fan power (SFP's) ventilation fans which will used to reduce the energy consumption of the air handling systems;
- To reduce the energy used for artificial lighting, natural daylight entering occupied spaces will be maximised by optimising window size and orientation. Absence detection systems are to be fitted on lighting in corridors and daylight diming of lighting within amenity spaces is to be incorporated;
- An uplift in fabric improvements and solar shading within the proposed development to maximise the retention of heat in winter and reduce solar gains in summer, reducing the reliance in the heating and cooling systems and lowering operational energy demand.
- A low energy and low carbon fit out of the building will be undertaken. All installed goods and appliances will be highly energy efficient (e.g. A Rated where feasible);

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- High levels of air tightness to reduce heat loss, with all dwellings to be tested for air leakage (in exceedances of Part L 2021 requirements). The current air tightness target for the proposed development is 3 $m^3/(h.m^2)$ at 50 Pa, this is a 63% improvement over the Part L minimum of 8 $m^3/(h.m^2)$ at 50 Pa.

Operational water use (lifecycle stage B7)

- Low water consuming sanitaryware (WC, urinals, taps, showers, baths, dishwashers) are to be specified within the proposed development.
- Leak detection systems will be installed to identify and address water leaks quickly, reducing water wastage.

Operational Transport

- The proposed development is car free, with the exception of two disabled parking spaces to be provided outside of the proposed development boundary, along Robert Street.
- Residential cycle parking will be provided at a rate of one space per unit to encourage active travel.

Potential effects of the proposed development

6.6.3 Table 6-6 sets out the GHG emissions (tCO2e) produced by the proposed development across the 60-year RSP.

Table 6-6 GHG emissions arising from the operation of the proposed development

Lifecycle stage	Total GHG emissions (tCO2e)
In-use stage embodied carbon (B1-B5)	13,410.57
Operational energy use (B6)	8,877.05
Operational water use (B7)	645.00
Operational transport	7,700.33
End-of-life stage (C1-C4)	580.27
Total	**31,213.22**

Climate change and adaptation

6.6.4 In-combination climate changes effects have been considered in each of the other technical chapters scoped into the ES. It is not appropriate to assess in-combination climate change effects in this ES chapter.

6.6.5 Climate change resilience has been assessed in the form of a Climate Change Risk Assessment (CCRA), which is reported in Appendix 6.1, ES Volume II. It has concluded that, with the incorporation of the proposed mitigation, the residual risks related to climate change are in line with typical expectations for urban developments of this nature in the UK. Nevertheless, due to the nature of many hazards exacerbated by climate change, some level of residual risk remains.

Summary of effects

6.6.6 The summary of effects associated with the operational phase is provided post mitigation in Table 6-11.

Supplementary mitigation measures

6.6.7 No supplementary mitigation measures are proposed for the operational phase.

6.7 RESIDUAL EFFECTS AND CONCLUSIONS

Comparison with UK national carbon budgets and Logika carbon budgets for Manchester

6.7.1 Table 6-7 and Table 6-8**Error! Reference source not found.** set out the net GHG emissions arising from the proposed development's construction and operational phases in the context of the UK national carbon budgets and Logika Carbon Budgets for Manchester.

6.7.2 While it is likely that the proposed embedded and additional mitigation would reduce the proposed development's GHG emissions, given that the assessment has been based on benchmarks rather than full detailed scheme information (as explained in the assumptions and limitations section), it has not been possible to quantify these reductions at this stage. This is considered to be a conservative approach.

6.7.3 Given that the future baseline GHG emissions from the site are considered to be zero, the proposed development's net GHG emission are consistent with the gross GHG emissions. The budget comparison has therefore been undertaken based on the proposed development's gross GHG emissions.

Table 6-7 Post mitigation comparison of the GHG emissions arising from the proposed development with UK Carbon Budgets

UK Carbon Budgets		**Impact**	
UK Carbon Budget Period	**UK Carbon Budget (MtCO2e)**	**GHG emissions from the proposed development (tCO2e)**	**Proposed development % of UK Carbon Budget**
Fourth (2023-2027)	1,950	7,723.88	0.000396
During the fourth budget period, the proposed development would generate GHG emissions from the construction process (A1-A5). This equates to 0.000396% of the total carbon budget for the proposed development. It is expected that the proposed mitigation measures would reduce these GHG emissions; however, it has not been possible to quantify these reductions at this stage. It is not considered that the proposed development would have a material impact on the UK's ability to meet this carbon budget.			
Fifth (2028-2032)	1,725	7,655.53	0.000437
During the fifth budget period, the proposed development would generate GHG emissions from the construction process (A1-A5), in use stage embodied carbon (B1-B5), operational energy (B6), operational water consumption (B7), and operational transport. This equates to 0.000437% of the total carbon budget for the proposed development. It is expected that the proposed mitigation measures would reduce these GHG emissions; however, it has not been possible to quantify these reductions at this stage. It is not considered that the proposed development would have a material impact on the UK's ability to meet this carbon budget.			
Sixth (2033-2037)	965	1,435.20	0.000149
During the sixth budget period, the proposed development would generate GHG emissions from in use stage embodied carbon (B1-B5), operational energy (B6), operational water consumption (B7), and operational transport. This equates to 0.000149% of the total carbon budget for the proposed development. It is expected that the proposed mitigation measures would reduce these GHG emissions; however, it has not been possible to quantify these reductions at this stage. It is not considered that the proposed development would have a material impact on the UK's ability to meet this carbon budget.			
Seventh (2038 – 2042)	535	1,435.20	0.000268
During the seventh budget period, the proposed development would generate GHG emissions from in use stage embodied carbon (B1-B5), operational energy (B6), operational water consumption (B7), and operational transport. This equates to 0.000268% of the total carbon budget for the proposed development. It is expected that the proposed mitigation measures would reduce these GHG emissions; however, it has not been possible to quantify these reductions at this stage. It is not considered that the proposed development would have a material impact on the UK's ability to meet this carbon budget.			

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Table 6-8 Post mitigation comparison of the GHG emissions arising from the proposed development with the Logika Carbon Budgets for Manchester City.

Logika Carbon Budgets		**Impact**	
Carbon Budget Period	Logika Carbon Budget for Manchester (MtCO2e)	**GHG emissions from the proposed development (tCO2e)**	**Proposed development % of UK Carbon Budget**
Fourth (2023-2027)	10.58	7,723.88	0.0730
During the fourth budget period, the proposed development would generate GHG emissions from the construction process (A1-A5). This equates to 0.0730% of the total carbon budget for the proposed development. It is expected that the proposed mitigation measures would reduce these GHG emissions; however, it has not been possible to quantify these reductions at this stage. It is not considered that the proposed development would have a material impact on Manchester's ability to meet this carbon budget.			
Fifth (2028-2032)	7.79	7,655.53	0.0983%
During the fifth budget period, the proposed development would generate GHG emissions from the construction process (A1-A5), in use stage embodied carbon (B1-B5), operational energy (B6), operational water consumption (B7), and operational transport. This equates to 0.0983% of the total carbon budget for the proposed development. It is expected that the proposed mitigation measures would reduce these GHG emissions; however, it has not been possible to quantify these reductions at this stage. It is not considered that the proposed development would have a material impact on Manchester's ability to meet this carbon budget.			
Sixth (2033-2037)	4.91	1,435.20	0.0292%
During the sixth budget period, the proposed development would generate GHG emissions from in use stage embodied carbon (B1-B5), operational energy (B6), operational water consumption (B7), and operational transport. This equates to 0.0292% of the total carbon budget for the proposed development. It is expected that the proposed mitigation measures in would reduce these GHG emissions; however, it has not been possible to quantify these reductions at this stage. It is not considered that the proposed development would have a material impact on Manchester's ability to meet this carbon budget			
Seventh (2038 – 2042)	2.77	1,435.20	0.0518%
During the seventh budget period, the proposed development would generate GHG emissions from in-use stage embodied carbon (B1-B5), operational energy (B6), operational water consumption (B7), and operational transport. This equates to 0.0518% of the total carbon budget for the proposed development. It is expected that the proposed mitigation measures would reduce these GHG emissions; however, it has not been possible to quantify these reductions at this stage. It is not considered that the proposed development would have a material impact on Manchester's ability to meet this carbon budget.			

Review of alignment with policy requirements and Net Zero trajectory

6.7.4 As set out in Section 6.2, IEMA GHG Guidance outlines an approach for the assessment of effect significance comprising judgements on the proposed development's consistency with net zero policy. A comprehensive review of the compliance of the proposed development with relevant policy is presented within the following sections.

Review of existing and emerging policy

6.7.5 Relevant policies from the key national, regional and local planning policy documents are summarised below.

National Planning Policy Framework (MHCLG, 2025)

6.7.6 Paragraph 164: *'New development should be planned for in ways that help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings in plans should reflect the Government's policy for national technical standards.'*

6.7.7 Paragraph 165: *'To help increase the use and supply of renewable and low carbon energy and heat, plans should:*

a. *provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life extension, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);*

b. *consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and*

c. *identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.'*

6.7.8 Paragraph 166: *'In determining planning applications, local planning authorities should expect new development to:*

a. *comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and*

b. *take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.'*

The Building Regulations Part L 2021 Edition

6.7.9 *A 31% reduction in carbon emissions over the previous Part L (2013) standard, achieved through better fabric performance standards, alongside low carbon heating and/or renewable energy generation e.g., solar photovoltaics (PV).*

Places for Everyone (PfE) Joint Development Plan for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan (2024)

6.7.10 Policy JP-S 2 Carbon and Energy:

- Promote the 'retrofitting of existing buildings with measures to improve energy efficiency and generate renewable and low carbon energy, heating and cooling'
- 'Use of life cycle cost and carbon assessment tools'
- 'Positive approach to renewable and low carbon energy schemes'
- 'An expectation that new development will, unless it can be demonstrated that it is not practicable or financially viable:
- Be net zero carbon
- Incorporate adequate electric vehicle charging points
- prioritise connection to a renewable energy/heating/cooling network in the first instance or a low carbon energy/heating/cooling network that is adaptable to non-fossil fuels at a later date'

6.7.11 Policy JP-S 6 Resource Efficiency:

- 'Using sustainable design and construction techniques to reduce carbon emissions, adapt and future proof to the impact of climate change, reduce and recycle waste and minimise water use.'

Guide to Development in Manchester Supplementary Planning Document and Planning Guidance. Adopted April 2007

6.7.12 *'Developers should aim to reduce CO_2 emissions by at least 25% more than the requirements of the current Building Regulations'*

6.7.13 *'Developers should aim for at least 20% of final site energy demand to be met by on-site renewable energy technologies.'*

6.7.14 *'New developments should seek to use water efficiently, through specification of water efficient device and through the use of rainwater harvesting and grey water recycling.'*

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6.7.15 '*building materials used in new development and refurbishment schemes [are required] to be environmentally friendly wherever possible, and encourages the use of recycled building materials, which is also energy efficient. Site waste management plans should, therefore, be implemented to reduce the quantity of waste generated, and to increase re-use and recycling. Opportunities for reuse of existing structures should be explored, and where this is not appropriate, materials should be reused on site and incorporated into the new design where practicable. Materials that are environmentally friendly, of low embodied energy, locally sourced, and can be recycled or reclaimed when the building comes to the end of its life should be prioritised. Materials that contain environmentally damaging chemicals should be avoided.*'

Manchester's Local Development Framework. Core Strategy Development Plan Document (MCC, 2012) (as amended, 2024)

6.7.16 Policy EC 1 Employment and Economic Growth in Manchester

- 'Development proposals should have regard to: an aim of zero carbon emissions, through energy efficiency, renewable energy and contributing to low and zero carbon decentralised energy infrastructure'

6.7.17 Policy EN 4 Reducing CO_2 Emissions by enabling Low and Zero Carbon Development

- 'All development must follow the principle of the Energy Hierarchy.'
- 'New development must be located and designed in a manner that allows advantage to be taken of opportunities for low and zero carbon energy supplies'
- 'New development will be used as a mechanism to help improve energy efficiency and provide low and zero carbon energy supplies to existing buildings;
- 'where appropriate new development will be required to connect to and/or make contributions to low or zero carbon energy schemes and/or to incorporate provision to enable future connection to any existing/potential decentralised energy schemes.'
- 'use of building materials with low embodied carbon in new development and refurbishment schemes.'

Identification of key policy themes

6.7.18 The review of national, regional and local policy set out above has identified a number of key policy themes, which are set out in Table 6-9. A review of alignment of the proposed development with these policy themes is set out in the section below.

Review of policy alignment

6.7.19 The Energy Strategy Report and Circular Economy Statement (Ridge & Partners, 2026) both include an appraisal of the proposed mitigation measures (set out within paragraphs 6.5.2 and 6.6.2), demonstrating how the proposed development complies with and supports the requirements of national, regional and local net zero carbon policies throughout both the construction and operational phases.

6.7.20 Buro Happold's review of the proposed development and its mitigation measures and the extent to which they align with the identified policy themes is provided in Table 6-9.

Table 6-9 Alignment of the proposed development with net zero policy

Policy Theme	Compliance with existing and emerging policy
Positive approach to renewable energy	- No PV is currently embedded into the design as the building passes Part L 2021 Building Regulations without the addition of PV panels. Solar PV opportunities are however being explored onsite to increase renewable energy provision.
Use of life cycle cost and carbon assessment tools	- This GHG Emissions ES chapter has been prepared that uses relevant industry benchmarks and good practice methodologies to quantify the total GHG emissions generated by the proposed development across its lifetime, including its construction, operation and eventual decommissioning.
Connection to decentralised energy & heat networks	- Connection to a district heat network has been explored; however the distance between the nearest district heating mains and the application site is 1.3 miles, which is considered too far to be economically viable. This has therefore been discounted.
Use of low embodied carbon materials	- The design follows the "Building in Layers" approach, ensuring different parts of the building can be maintained, replaced, or reused independently. - Materials will be selected to maximise reuse and recycled content. Where feasible, reinforced steel (rebar) with a high recycled content will be specified, and the potential to incorporate reclaimed bricks within the façade will be explored. Reclaimed brickwork offers significantly lower embodied carbon compared with using newly manufactured bricks.
Improved energy efficiency	- Incorporation of passive design measures, such as thermal insulation, mixed mode ventilation, natural daylight, air tightness, solar shading, low energy fit out and sub metering (power, lighting, plant) (see Energy Strategy report, 2026).; - The proposed development will use low-energy implementations such as ASHP for heating and cooling. They require less maintenance than a combustion heating system; - Natural ventilation is to be used in a mixed mode approach with mechanically powered ventilation using MVHR units. This will help to reduce on site carbon emissions by the avoidance of operating electrically driven systems. - VRF heat pumps will also provide heating and cooling in the amenity areas. - High levels of air tightness to reduce heat loss, with all dwellings to be tested for air leakage (in exceedances of Part L 2021 requirements). The current air tightness target for the proposed development is 3 $m^3/(h.m^2)$ at 50 Pa, this is a 63% improvement over the Part L minimum of 8 $m^3/(h.m^2)$ at 50 Pa. - An uplift in fabric improvements and solar shading on the development can maximise the retention of heat in winter and reduce solar gains in summer. reducing the reliance in the heating and cooling systems and lowering operational energy demand. - High efficiency/Low SFPs ventilation fans will be used to reduce the energy consumption of the air handling systems. - To reduce the energy used for artificial lighting, natural daylight entering occupied spaces will be maximised by optimising window size and orientation - A low energy and low carbon fit out of the building will be undertaken. All installed goods and appliances will be highly energy efficient (e.g. A Rated where feasible); - Absence detection systems are to be fitted on lighting in corridors and daylight dimming of lighting within amenity spaces is to be incorporated.
Retrofitting of existing buildings	- The current buildings are coming to the end of their useful life and are deemed unsuitable for refurbishment and reuse as a residential development of this scale. Most of the materials forming the existing structure will be recycled.
Alignment with Part L requirements	- As detailed within the Energy Strategy Report (Ridge & Partners, 2026), the proposed development will pass Part L 2021. It will more than exceed the MCC Core Strategy policy of exceeding the 15% improvement on Part L 2010 requirement. - High levels of air tightness to reduce heat loss, with all dwellings to be tested for air leakage (in exceedances of Part L 2021 requirements). The current air tightness target for the proposed development is 3 $m^3/(h.m^2)$ at 50 Pa, this is a 63% improvement over the Part L minimum of 8 $m^3/(h.m^2)$ at 50 Pa.
Water efficiency	- Low water consuming sanitaryware (WC, urinals, taps, showers, baths, dishwashers) are to be specified within the proposed development. - Leak detection systems will be installed to identify and address water leaks quickly, reducing water wastage

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Policy Theme	Compliance with existing and emerging policy
Waste management	- A Pre-Demolition Audit will be conducted to identify material reuse and recycling opportunities. Excavation will be minimized, and efforts will be made to reuse excavation waste on-site. The target is to divert 95% of demolition waste from landfill. - A Construction Resource Management Plan will be developed prior to the start of on-site works. The plan will set out the approach to minimising construction waste, and monthly monitoring will be undertaken to ensure subcontractors are fully engaged and compliant with the waste reduction measures. - Waste segregation and monitoring will be implemented during construction. - Dedicated waste storage areas will be provided on the ground floor, with at least 50% of bins allocated for recycling, including organic waste. Aligning with the Greater Manchester Municipal Waste Management Strategy. - A waste hierarchy approach will be followed with the intention first to minimise waste generation, followed by reuse, and then recycling on-site. Where materials cannot be reused or recycled on-site, the contractor will identify opportunities for potential reuse off-site.
Reducing transport related Emissions	- The proposed development is car free, with the exception of two disabled parking spaces to be provided outside of the proposed development boundary, along Robert Street. - Residential cycle parking will be provided at a rate of one space per unit to encourage active travel.

Significance of effects Assessment

6.7.21 Table 6-10 and Table 6-11 set out the assessment of residual effect significance for the construction and operational stages respectively, in accordance with the IEMA GHG Guidance.

Table 6-10 Summary of residual effects during demolition and construction

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
Global atmosphere	As set out in Table 6-9, it is considered that the proposed development is consistent with applicable existing and emerging local, regional, and national net zero policy and good practice design standards for projects of this type. Therefore, in line with the IEMA GHG Guidance, this is considered to be a minor adverse effect. In line with the guidance, this effect is not significant.	Increased GHG emissions as a result of construction phase	Supplementary mitigation measures are provided within Table 6-5.	Minor adverse, direct, long term and permanent. Not significant

Table 6-11 Summary of residual effects during operation

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
Global atmosphere	As set out in Table 6-9, it is considered that the proposed development is consistent with applicable existing and emerging local, regional, and national net zero policy and good practice design standards for projects of this type. Therefore, in line with the IEMA GHG Guidance, this is considered to be a minor adverse effect. In line with the guidance, this effect is not significant.	Increased GHG emissions as a result of operational phase	None	Minor adverse, direct, long term and permanent. Not significant

6.8 FUTURE MONITORING OF SIGNIFICANT RESIDUAL ENVIRONMENTAL EFFECTS

6.8.1 No future monitoring is proposed.

6.9 REFERENCES

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6.10 GLOSSARY

Term	Definition
ASHP	Air Source Heat Pumps
BREEAM	Building Research Establishment Environmental Assessment Method
CCC	Committee on Climate Change
CCRA	Climate Change Risk Assessment
CEMP	Construction Environmental Management Plan
CO2	Carbon Dioxide
CO2e	Carbon Dioxide Equivalent
COP	Conference of the Parties
DESNZ	Department for Energy Security and Net Zero
DLUHC	Department for Levelling Up, Housing and Communities
EIA	Environmental Impact Assessment
ES	Environmental Statement
ES	Environmental Statement
GHG	Greenhouse Gas
GLA	Greater London Authority
GWP	Global Warming Potential
HFC	Hydrofluorocarbons
IEMA	Institute of Environmental Management and Assessment
IPCC	International Panel on Climate Change
LETI	Low Energy Transformation Initiative
MCC	Manchester City Council
MHCLG	Ministry of Housing, Communities & Local Government
NAP	National Adaptation Programme
NF3	Nitrogen Trifluoride
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
PFC	Perfluorocarbons
RIBA	Royal Institute of British Architects
RICS	Royal Institution of Chartered Surveyors
RSP	Reference Study Period
SPD	Supplementary Planning Document
tCO2e	Tonnes of Carbon Dioxide Equivalent
UKGBC	UK Green Building Council
WBCSD	World Business Council for Sustainable Development
WLC	Whole Life Carbon
WRAP	Waste and Resource Action Programme
WRI	World Resources Institute

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6.11 LIST OF APPENDICES (ES VOLUME II)

Reference	Title
Appendix 6.1	Climate Change Resilience Risk Assessment
Appendix 6.2	Greenhouse gas calculation inputs
Appendix 6.3	Scope 3 Emissions Considerations
Appendix 6.4	Legislation, Policy & Guidance

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7 WIND MICROCLIMATE

7.1 INTRODUCTION

7.1.1 This chapter of the ES assesses the likely environmental effects of the proposed development with respect to Wind Microclimate. This chapter also describes the methods used to assess the effects; the baseline conditions currently existing at the site and surrounding area; the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been adopted.

7.1.2 Cumulative effects associated with Wind Microclimate have additionally been considered within the ES and can be found in Chapter 11 Cumulative and Interactive Effects.

7.2 METHODOLOGY AND ASSESSMENT CRITERIA

Consultation

EIA scoping

7.2.1 As explained in Chapter 4, Methodology, no formal EIA scoping process was undertaken and a scoping report was not produced. However, the applicant's proposal to include a wind microclimate assessment within the ES was agreed by MCC planning officers via email correspondence, and has been produced in line with best practice.

Pre-application consultation

7.2.2 No pre-application consultation with statutory or non-statutory stakeholders was undertaken with respect to wind microclimate.

Baseline study methodology

7.2.3 Baseline conditions have been established using a 3D model, extending in a 400m radius from the site, and tested using high resolution Computational Fluid Dynamics (CFD), for a scenario where the existing building is still on site.

Assessment approach

CFD testing

7.2.4 CFD is a digital modelling technique, which simulates the effect of wind for the built environment. The air is divided into hundreds of millions of "cells", within which the equations of motion are solved.

7.2.5 A suitable atmospheric boundary layer (to accurately capture the effect of local buildings and terrain on atmospheric wind speeds and turbulence) was generated.

7.2.6 A 3D model of the proposed development was included in the CFD model and wind speeds were measured on and around the site to determine the strength and frequency of pedestrian level wind speeds.

7.2.7 Wind speeds on and around the site were measured at 1.5m above any surfaces expected to be used for pedestrian activity, to determine the conditions at and around the site. The model was run at full scale from 18 wind angles, spaced using 10° or 30° increments such that no sector contributes more than 10% of the annual wind.

7.2.8 The wind microclimate effects have been assessed annually and seasonally. The windiest season (typically the winter months of December, January and February) are reported as this is when the strongest winds are expected, summer conditions (June, July, August) are reported as this is the season when pedestrian usage of outdoor spaces is expected to be highest.

Meteorological conditions

7.2.9 On-site and local wind speeds measured through the CFD modelling were combined with 30 years-worth of weather data for Manchester International Airport, corrected for terrain local to the airport and the site, to obtain annual and seasonal frequency and magnitude of wind speeds across the model. This allows the 'grading' of the pedestrian level winds according to the Lawson Comfort Criteria, which are explained later in this section of the chapter.

7.2.10 Correction factors have been applied to take into account the different extended surroundings of the site relative to the airport, and their influence on the wind conditions. Land surrounding airports is typically flat and open, to minimise wind turbulence for aircraft. The local atmospheric boundary layer of the wind will be different to that at the site.

7.2.11 The correction factors between the airport (measured 10m above ground) and the site (at a reference height of 120m) are shown in Table 7-1.

7.2.12 These correction factors help to translate wind conditions measured at the airport, to the site. It should be noted that the terrain analysis has been performed using sectors of 30°.

Table 7-1 Wind Correction Factors

0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	300°
1.45	1.40	1.38	1.35	1.33	1.32	1.33	1.34	1.34	1.35	1.45	1.34

Assessment of effects

Lawson Comfort Criteria

7.2.13 Effects were assessed through comparison of measured wind conditions against the Lawson Comfort Criteria.

7.2.14 The Lawson Criteria is recognised guidance used universally across the UK to assess the impact of development on wind flows in public spaces. Lawson devised a scale for assessing the suitability of wind conditions in the urban environment based upon threshold values of wind speed and frequency of occurrence. This guidance will be used to inform the assessment. The commonly used London Docklands Development Corporation (LDDC) method of the Lawson Criteria is set out in Table 7-2 and Table 7-3 below.

Table 7-2 Lawson Comfort Criteria (LDDC variant)

Comfort Category	Mean Wind Speed (5% exceedance)	Description
Sitting	4m/s	Acceptable for outdoor sitting use (e.g. cafes, benches, balconies)
Standing	6m/s	Acceptable for main building entrances, pick-up / drop-off points and bus stops
Walking (leisure)	8m/s	Acceptable for strolling
Walking (business)	10m/s	Acceptable for external pavements, walking purposefully without lingering
Uncomfortable	>10m/s	Not comfortable for regular pedestrian access

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Table 7-3 Lawson Safety Criteria (LDDC variant)

Safety Category	Mean Wind Speed (2hrs/year exceedance)	Description
No Safety Exceedance	<15m/s	No significant risk of strong winds for any users.
S15 (distress)	>15m/s	Unsafe for frail individuals, or cyclists
S20 (safety)	>20m/s	Wind conditions considered unsafe for all users

Target wind conditions

7.2.15 Thoroughfares and roadways are targeted to be suitable for walking in winter (the windiest season).

7.2.16 The areas immediately outside any building entrances should be suitable for standing use during the windiest season to provide a "buffer" between the still conditions in interior spaces and the general thoroughfare.

7.2.17 There are no bus stops, tram stops or railway platforms within the study area.

7.2.18 Amenity areas are targeted to be suitable for a mixture of standing and sitting in summer conditions.

Strong winds

7.2.19 Any areas which are classified as either in the distress category or the safety category (in accordance with Table 7-3) will be classified as subject to strong winds and will pose an unacceptable risk to pedestrian safety.

Test scenarios

7.2.20 The following scenarios were tested as part of the assessment:

- Scenario 1: Baseline for site and surrounds;
- Scenario 2: Proposed development in baseline surrounds; and
- Scenario 3: Proposed development in cumulative surrounds.

7.2.21 Trees and soft landscaping were not included in any of the above scenarios, to ensure that worst case conditions were captured.

Receptor sensitivity

7.2.22 The criteria used to assess receptor sensitivity is described in Table 7-4.

Table 7-4 Criteria for determining receptor sensitivity

Sensitivity	Criteria
High	Locations where pedestrians would be expected to linger such as external amenity spaces, entrances or bus stops. Any wind safety risks.
Moderate	All other locations which are accessible to pedestrians or cyclists on and around the site, such as thoroughfares or roadways.
Low	Locations for which access is restricted to construction or maintenance workers (such as those within the site hoardings during construction).
Negligible	Locations which are not accessible at any time.

Magnitude of change/impact

7.2.23 The criteria used to assess how far an effect deviates from the baseline condition, i.e. the magnitude of change, are described in Table 7-5.

Table 7-5 Criteria for determining magnitude of change/impact

Magnitude	Criteria
Large	Wind conditions which are three categories windier/calmer than the target conditions (unless consistent with the baseline conditions) OR any safety risks due to strong winds that are introduced/eradicated by the inclusion of the proposed development
Medium	Wind conditions which are two categories windier/calmer than the target conditions (unless consistent with the baseline conditions)
Small	Wind conditions which are one category windier/calmer than the target conditions (unless consistent with the baseline conditions)
Negligible	Wind conditions which are consistent with the target conditions or consistent with the baseline conditions.

Significance evaluation

7.2.24 The significance of a potential effect is derived by considering both the sensitivity of the feature and the magnitude of change, as demonstrated in Table 7-6.

Table 7-6 Matrix for determining effect significance

		Magnitude of change/impact			
		Large	**Medium**	**Small**	**Negligible**
Receptor sensitivity	**High**	Major	Major	Moderate/Minor	Negligible
	Moderate	Major	Moderate	Minor	Negligible
	Low	Moderate/Minor	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

7.2.25 Any adverse effects (for strong winds and comfort) are categorised as significant, as these will require mitigation in order to achieve suitable comfort and safety conditions. Any beneficial effects for strong winds will be categorised as significant, as this will reduce the overall wind safety risk for the area. Any negligible (for strong winds and comfort) or beneficial effects (for comfort) will have suitable conditions for the intended use without mitigation, so are not classed as significant.

7.2.26 All wind effects will be either site or local effects. For the purposes of this study, a site effect is classified as one which is measured within the site red line boundary, a local effect is one which is measured elsewhere in the study area (the study area being the area shown in Figure **7-4**, consisting of 195,000 sqm centred on the site).

7.2.27 All effects for the completed and operational proposed development will be permanent effects, any effects during construction will be temporary effects. All wind effects are direct effects resulting from the impact of the proposed development on the local wind environment.

7.3 LEGISLATION AND POLICY WHICH HAS INFLUENCED ASSESSMENT OR MITIGATION

National policy and guidance

National Planning Policy Framework (2025)

7.3.1 The National Planning Policy Framework (NPFF) was revised February 2025 by the Ministry of Housing, Communities and Local Government (MHCLG). The relevant paragraphs are as follows:

7.3.2 Paragraph 135 of the National Planning Policy Framework states that:

- "Planning policies and decisions should ensure that developments:

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- will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;
- are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;
- are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);
- establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;
- optimise the potential of the Site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and
- create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience."

7.3.3 There is no specific planning policy guidance dealing with microclimate in terms of pedestrian comfort set out in the revised NPPF.

National Planning Practice Guidance (2021)

7.3.4 The NPPG identifies the potential for tall and large buildings to affect the wind microclimate, as part of the National Design Guide as set out below.

7.3.5 The National Design Guide (2021) states in Paragraph 41 that good design "enhances positive qualities and improves negative ones. Some features are physical, including:…environment – including landscape and visual impact, microclimate, orientation, flood risk, noise, air and water quality."

7.3.6 The National Design Guide (2021) also states in Paragraph 71 that: "Proposals for tall buildings (and other buildings with a significantly larger scale or bulk than their surroundings) require special consideration. This includes their […] environmental impacts, such as […] wind. These need to be resolved satisfactorily"

Historic England Advice Note 4: Tall Buildings, 2022

7.3.7 The Historic England Advice Note 4: Tall Buildings (2022) states in Section 3.3 that:

7.3.8 "The following factors need to be considered to determine the impacts a tall building could have upon the historic environment[…] the influence on local micro-climates such as creation of wind tunnels, canyon effect, over-shadowing, glare, and air quality and effect on heritage assets in terms of the impact these micro-climatic changes could have upon their fabric, and how they are experienced."

Regional policy and guidance

Places for Everyone Joint Development Plan (2024)

7.3.9 Places for Everyone (2024) Policy JP-P-1 "Sustainable Places" states that "all development […] should be consistent with: […] comfortable and inviting, with indoor and outdoor environments: […] addressing microclimate issues such as sunlight, indoor air quality, overheating, shade, wind and shelter".

Local policy and guidance

Manchester Core Strategy (2012 – 2027)

7.3.10 Manchester's Local Development Framework, Core Strategy Policy EN 2 relates to Tall Buildings. Policy EN2 – Tall Buildings, which states that, by their very size, tall buildings can have a significant impact on the local environment and its micro-climate. It is therefore expected that this impact be modelled and that submissions for tall buildings also include appropriate measures to create an attractive, pedestrian friendly local environment. This policy is still part of the Manchester Core Strategy following the adoption of the 2024 Addendum to the Manchester Core Strategy 2024.

7.3.11 Paragraph 12.4 supports this stating "Tall buildings by their very nature can dominate the street scene and be highly visible over long distances. They can also have an impact on the local micro-climatic conditions, for example, by creating wind tunnels. It is for these reasons that it is considered particularly important that they are designed to the highest quality, both in terms of appearance and their impact on the functioning of surrounding space."

Assessment limitations (technical deficiencies or lack of knowledge)

7.3.12 The accuracy of the results is dependent upon the accuracy of the architectural CAD drawings used to construct the model.

- The proposed development has been modelled based on the 1181-TGA-XX-XX-M3-A-00004_BuildingModel, supplied by Tim Groom Architects on 24/02/2026.

7.3.13 There is an inherent assumption that on-site wind speeds will scale linearly with the measured wind speeds at the airport (Manchester International).

7.3.14 It is assumed that, during the construction process, wind conditions will gradually change from the baseline conditions to the conditions for the completed proposed development.

7.3.15 It is assumed that on-site activity during construction will be able to withstand a higher category of pedestrian comfort level that for the completed proposed development.

7.3.16 The CFD testing has been undertaken using steady state analysis, with gust effects modelled indirectly based on empirical data. The empirical relationship used is chosen to give a conservative estimate of gust effects, so may mean that gust wind speeds are over-estimated (i.e. windier than reality), especially at lower mean wind speeds where gust effects tend to be dominant.

7.4 BASELINE CONDITIONS

Current baseline (2026)

7.4.1 A CFD scenario (Scenario 1) consisting of the existing site within existing surrounds was tested to establish baseline conditions.

7.4.2 Figure 7-1 shows winter comfort for Scenario 1. Figure 7-2 shows summer comfort for Scenario 1. Figure 7-3 shows strong winds for Scenario 1.

Pedestrian comfort

7.4.3 General thoroughfares and roadways range between suitable for sitting, standing and leisure walking in all seasons. This is suitable for the intended use.

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7.4.4 The principal off-site entrances (marked O in results figures) range between suitable for sitting or standing in all seasons. This is suitable for the intended use.

Strong winds

7.4.5 There is one pre-existing instance of strong winds (exceeding 15m/s for more than 0.025% annually) within the grounds of the Old Brewery Gardens (marked 1 on Figure 7-3).

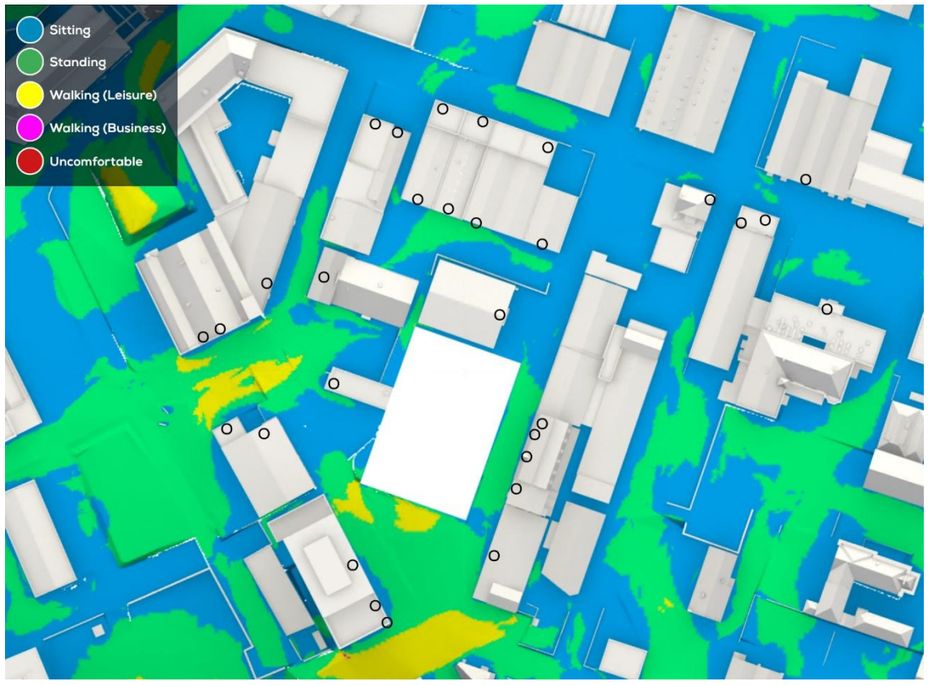


Figure 7-1 Winter Comfort at Ground Level for Scenario 1 (Existing Site with Existing Surrounds)

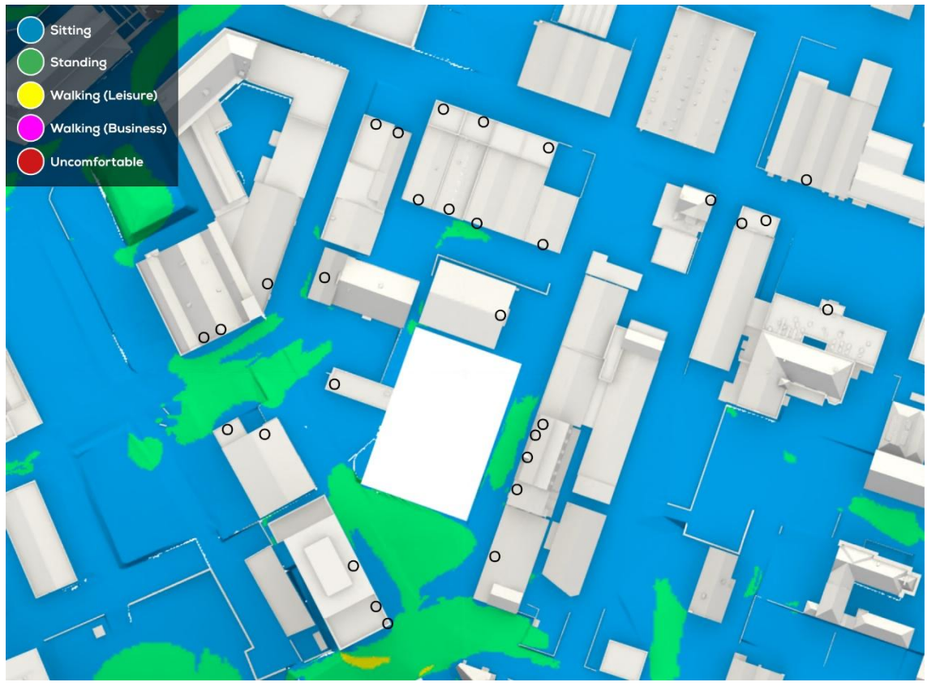


Figure 7-2 Summer Comfort at Ground Level for Scenario 1 (Existing Site with Existing Surrounds)

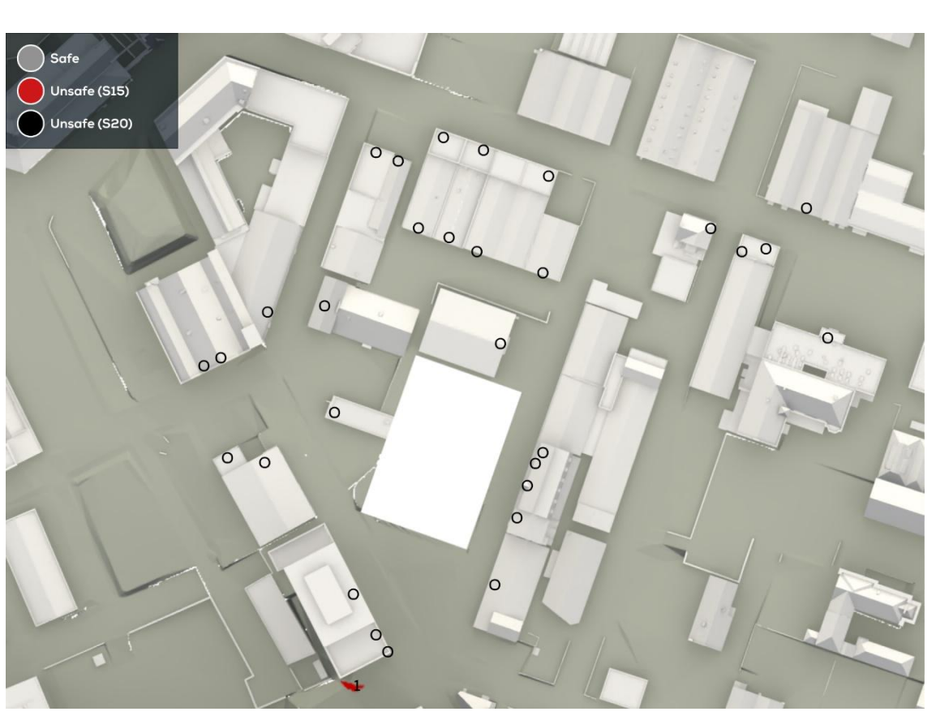


Figure 7-3 Strong Winds at Ground Level for Scenario 1 (Existing Site with Existing Surrounds)

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Future baseline (2028)

7.4.6 From a comparison of the results of Scenarios 2 and 3 (i.e. the impact of cumulative schemes) it is apparent that cumulative schemes do not have a material impact on wind conditions on and around the site. Therefore, future baseline conditions would not be materially different from the baseline conditions.

Identified receptors and their sensitivity

7.4.7 The following existing sensitive receptors have been identified:

- Local throughfares and roadways, targeted to be suitable for walking in winter;
- Off-site entrances, targeted to be suitable for standing in winter;

7.4.8 The following proposed sensitive receptors have been identified:

- Entrances to the proposed development, targeted to be suitable for standing in winter;
- Ground level amenity in the form of public realm to the south or the site (marked PR in Figure **7**-**4**) and the private courtyard amenity space to the west (marked C in Figure **7**-**4**), targeted to be suitable for a mix of sitting and standing in summer.
- Private terraces at levels 10 and 11, targeted to be suitable for a mix of sitting and standing in summer.
- Balconies on the southern and eastern elevations, targeted to be suitable for sitting or standing in summer.

Table 7-7 Identified receptors and their sensitivity

Receptor	Sensitivity	Justification
Local throughfares and roadways	Moderate	Will be subject to regular pedestrian access
Off-site entrances	High	Pedestrians likely to linger in these locations
Entrances to the proposed development	High	Pedestrians likely to linger in these locations
Ground level amenity	High	Pedestrians likely to linger in these locations
Private Terraces	High	Pedestrians likely to linger in these locations
Balconies	High	Pedestrians likely to linger in these locations

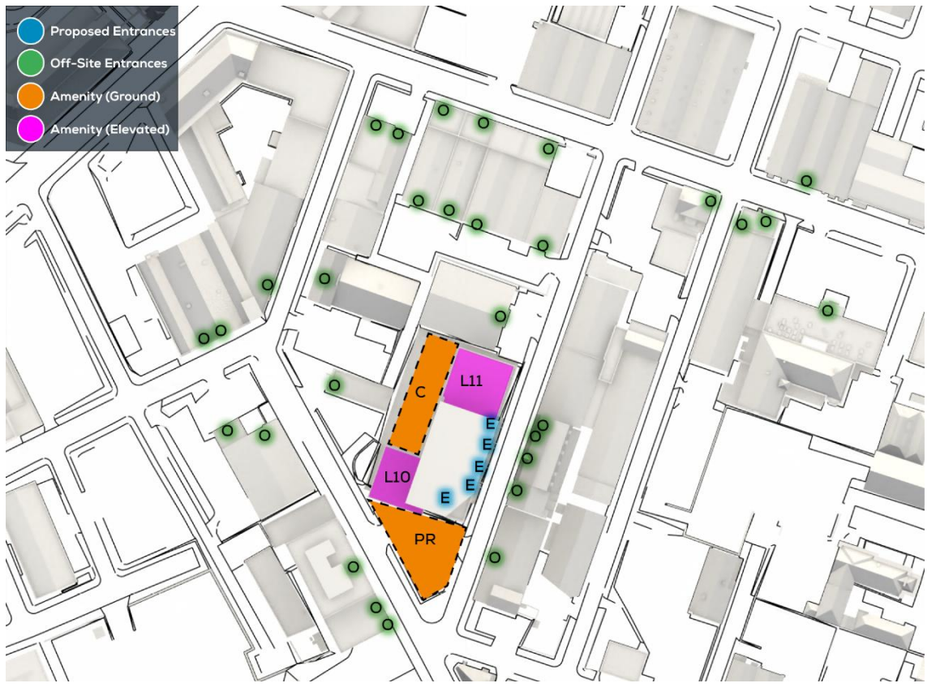


Figure 7-4 **Sensitive Receptors**

7.5 DEMOLITION AND CONSTRUCTION EFFECTS

Relevant aspects of the proposed development

7.5.1 The aspects of the proposed development which are relevant to demolition and construction effects are how the scale, massing and orientation of the proposed building relate to the scale massing and orientation of the existing building which is to be demolished.

Potential effects of the proposed development and their significance

7.5.2 During demolition and construction, conditions will gradually change from the baseline conditions to conditions for the completed and operational development. Therefore, construction effects can be inferred from the effects due to the completed and operational development.

7.5.3 As all wind effects for the completed and operational development are negligible, all demolition and construction wind effects will also be negligible (not significant).

Climate change and adaptation

7.5.4 The demolition and construction phase is expected to last until 2029. Climate forecasts show that there will not be a significant change in wind speeds between 2026 and 2029, so no specific measures are considered necessary for wind microclimate with respect to climate change.

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Summary of effects

Table 7-8 Summary of effects during construction

Receptor	Sensitivity	Description of effect	Magnitude of change / impact	Effect significance
All thoroughfares and roadways	Moderate	Pedestrian comfort due to wind conditions	Negligible	Negligible (direct, temporary, long-term, irreversible, insignificant)
Existing off-site entrances	High	Pedestrian comfort due to wind conditions	Negligible	Negligible (direct, temporary, long-term, irreversible, insignificant)
All locations accessible to pedestrians or cyclists	Moderate	Pedestrian safety due to strong winds	Negligible	Negligible (direct, temporary, long-term, irreversible, insignificant)

Supplementary mitigation measures

7.5.5 No supplementary mitigation measures are required with regard to wind microclimate effects during demolition and construction.

7.6 OPERATIONAL EFFECTS

Relevant aspects of the proposed development and designed-in mitigation

7.6.1 The scale, massing and orientation of the proposed development are relevant to its potential impact on wind conditions.

7.6.2 There are no aspects of the proposed development which are considered to comprise designed-in mitigation.

Potential effects of the proposed development and their significance

7.6.3 A CFD scenario (Scenario 2) consisting of the proposed development within existing surrounds was tested to establish operational wind effects.

7.6.4 Figure 7-5 shows winter comfort at ground level for Scenario 2. Figure 7-6 shows summer comfort at ground level for Scenario 2. Figure 7-7 shows strong winds at ground level for Scenario 2.

7.6.5 Figure 7-8 shows winter comfort at elevated levels for Scenario 2. Figure 7-9 shows summer comfort at elevated levels for Scenario 2. Figure 7-10 shows strong winds at elevated levels for Scenario 2.

Pedestrian comfort

7.6.6 General thoroughfares and roadways would range between suitable for sitting, standing and leisure walking in winter and for sitting, standing and leisure walking in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

7.6.7 The principal entrances to the proposed development (marked E in results figures) would be suitable for sitting in all seasons. This is suitable for the intended use and is a negligible wind effect (not significant).

7.6.8 The entrance to Building A of Old Brewery Gardens (marked O and circled in Figure 7-5) is adjacent to a region which is suitable for walking in winter. This is a category above the target condition, but this entrance is designed to be recessed from the building facade which will create a buffer region between internal and external conditions (and therefore will be suitable for the intended use). All other principal off-site entrances (marked O in results figures) would range between suitable for sitting or standing in all seasons. This is suitable for the intended use and is a negligible wind effect (not significant).

7.6.9 Conditions for the proposed public realm (marked "PR" in results figures) are suitable for standing in winter and for a mix of sitting and standing in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

7.6.10 The proposed private courtyard (marked C in results figures) would be suitable for a mix of sitting and standing in winter and for sitting in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

7.6.11 The proposed level 10 terrace would be suitable for a mix of standing and leisure walking in winter and for a mix of sitting and standing in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

7.6.12 The proposed level 11 terrace would be suitable for a mix of sitting, standing and leisure walking in winter and for a mix of sitting and standing in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

7.6.13 The proposed balconies would be suitable for sitting in all seasons. This is suitable for the intended use and is a negligible wind effect (not significant).

Strong winds

7.6.14 There is a pre-existing instance of strong winds (exceeding 15m/s for more than 0.025% annually) within the grounds of the Old Brewery Gardens (marked 1 on Figure 7-7). This instance is reduced in extent with the proposed development in place, relative to the baseline scenario, so the proposed development would not increase the level of wind safety risk. This is a negligible wind effect (not significant).

7.6.15 No regions of strong winds (exceeding 15m/s for more than 0.025% annually) have been introduced by the proposed development. This is suitable for the intended use and is a negligible wind effect (not significant).

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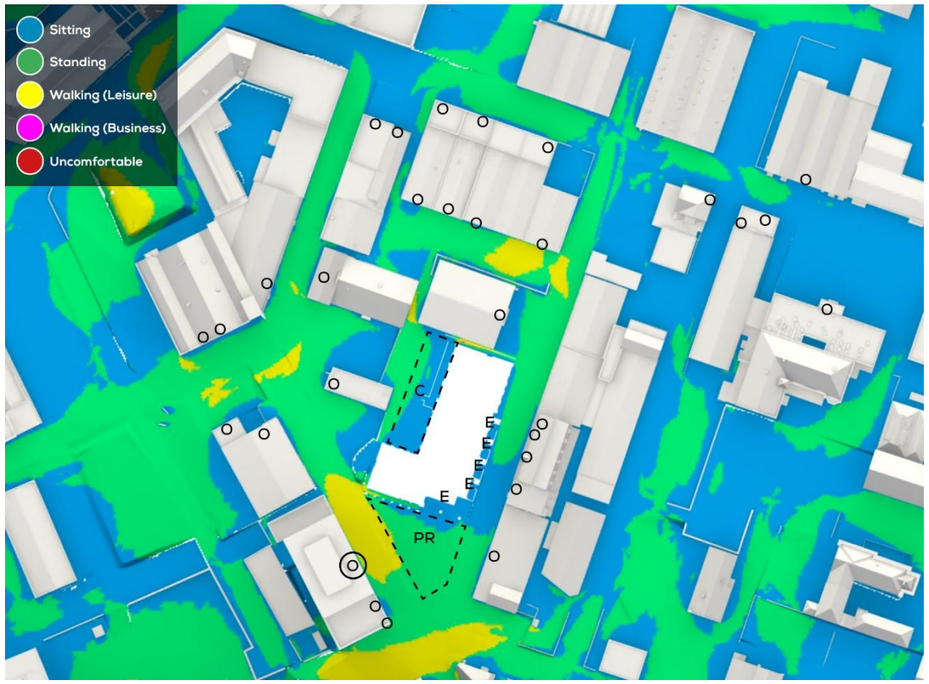


Figure 7-5 Winter Comfort at Ground Level for Scenario 2 (Proposed Development with Existing Surrounds)

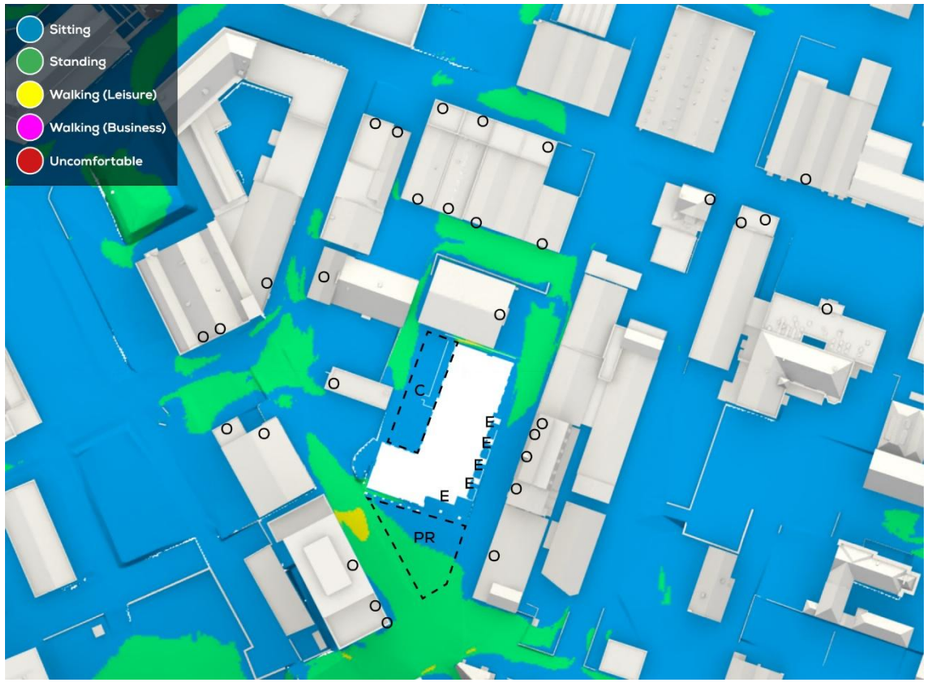


Figure 7-6 Summer Comfort at Ground Level for Scenario 2 (Proposed Development with Existing Surrounds)



Figure 7-7 Strong Winds at Ground Level for Scenario 2 (Proposed Development with Existing Surrounds)

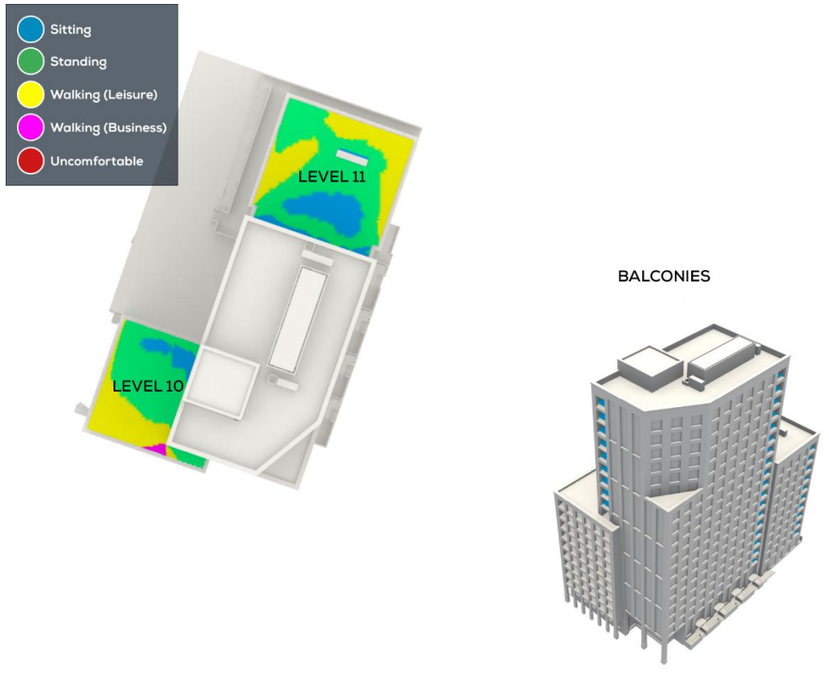


Figure 7-8 Winter Comfort at Elevated Levels for Scenario 2 (Proposed Development with Existing Surrounds)

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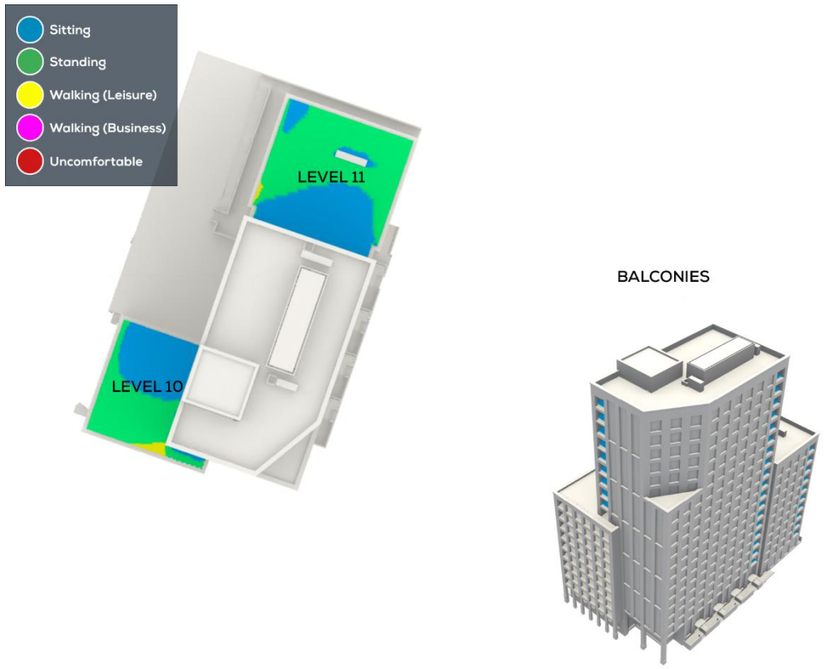


Figure 7-9 Summer Comfort at Elevated Levels for Scenario 2 (Proposed Development with Existing Surrounds)



Figure 7-10 Strong Winds at Elevated Levels for Scenario 2 (Proposed Development with Existing Surrounds)

Climate change and adaptation

7.6.16 The UKCP18 climate predictions suggest that any changes in daily mean wind speeds in the Manchester area are likely to be smaller than the current year to year variability, so it is unlikely that there will be a significant change in the average wind conditions due to climate change. As such, no specific measures are considered necessary for wind microclimate with respect to climate change

Summary of effects

Table 7-9 Summary of effects during operation

Receptor	Sensitivity	Description of effect	Magnitude of change / impact	Effect significance
All thoroughfares and roadways	Moderate	Pedestrian comfort due to wind conditions	Negligible	Negligible (direct, permanent, long-term, irreversible, insignificant)
Existing off-site entrances, proposed entrances and proposed amenity	High	Pedestrian comfort due to wind conditions	Negligible	Negligible (direct, permanent, long-term, irreversible, insignificant)
All locations accessible to pedestrians or cyclists	Moderate	Pedestrian safety due to strong winds	Negligible	Negligible (direct, permanent, long-term, irreversible, insignificant)

Supplementary mitigation measures

7.6.17 No supplementary mitigation measures are required with regard to operational wind microclimate effects.

7.7 RESIDUAL EFFECTS AND CONCLUSIONS

Table 7-10 Summary of residual effects during demolition and construction

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
All thoroughfares and roadways	Pedestrian comfort due to wind conditions	Negligible	N/A	Negligible (direct, temporary, long-term, irreversible, insignificant)
Existing off-site entrances	Pedestrian comfort due to wind conditions	Negligible	N/A	Negligible
All locations accessible to pedestrians or cyclists	Pedestrian safety due to strong winds	Negligible	N/A	Negligible (direct, temporary, long-term, irreversible, insignificant)

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Table 7-11 Summary of residual effects during operation

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
All thoroughfares and roadways	Pedestrian comfort due to wind conditions	Negligible	N/A	Negligible (direct, permanent, long-term, irreversible, insignificant)
Existing off-site entrances, proposed entrances and proposed amenity	Pedestrian comfort due to wind conditions	Negligible	N/A	Negligible (direct, permanent, long-term, irreversible, insignificant)
All locations accessible to pedestrians or cyclists	Pedestrian safety due to strong winds	Negligible	N/A	Negligible (direct, permanent, long-term, irreversible, insignificant)

7.8 FUTURE MONITORING OF SIGNIFICANT RESIDUAL ENVIRONMENTAL EFFECTS

7.8.1 There are no significant residual wind microclimate effects, so no future monitoring will be required.

7.9 REFERENCES

7.9.1 This ES Chapter has been prepared in reference to the following:

- Ministry of Housing, Communities and Local Government (MHCLG), National Planning Policy Framework (NPFF). 2025
- Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government. Planning Practice Guidance. 2021.
- Greater Manchester Combined Authority Joint Development Plan "Places for Everyone". 2024
- Manchester City Council, Manchester Core Strategy (2012 – 2027)
- Historic England Advice Note 4: Tall Buildings, 2022

7.10 GLOSSARY

Term	Definition
CFD	Computational Fluid Dynamics
LDDC	London Docklands Development Corporation (with reference to the LDDC variant of the Lawson Comfort Criteria)

7.11 LIST OF APPENDICES (ES VOLUME II)

Reference	Title
Appendix 7.1	Detailed Wind Microclimate Methodology

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8 DAYLIGHT AND SUNLIGHT

8.1 INTRODUCTION

8.1.1 This chapter of the ES assesses the likely environmental effects of the proposed development with respect to daylight and sunlight. This chapter also describes the methods used to assess the effects; the baseline conditions currently existing at the site and surrounding area; the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been adopted.

8.1.2 Cumulative effects associated with daylight and sunlight have additionally been considered within the ES and can be found in Chapter 11, Cumulative and Interactive Effects.

8.2 METHODOLOGY AND ASSESSMENT CRITERIA

Consultation

EIA scoping

8.2.1 As explained in Chapter 4, Methodology, no formal EIA scoping process was undertaken and a scoping report was not produced. However, the applicant's proposal to include a daylight and sunlight assessment within the ES was agreed by MCC planning officers via email correspondence, and has been produced in line with best practice.

Pre-application consultation

8.2.2 No pre-application consultation with statutory or non-statutory stakeholders was undertaken with respect to daylight and sunlight.

Baseline study methodology

8.2.3 An existing baseline characterisation was completed by firstly undertaking a review of the surrounding land uses, using information from the Valuation Office Agency ('VOA') and Google Maps. Information and data derived from these sources were reviewed to determine the uses of existing buildings.

8.2.4 The BRE Guidelines suggest that residential properties have the highest requirement for daylight and sunlight and states that *"the guidelines are intended for use for rooms in adjoining dwellings where light is required, including living rooms, kitchens and bedrooms."*

8.2.5 The scope of residential properties that have been assessed has been determined through professional judgement, considering their orientation and proximity to the proposed development.

8.2.6 Where nearby developments are under construction these have been included in the baseline scenario.

8.2.7 The following properties are defined as sensitive receptors and will be considered due to their proximity to the site, and their use:

- Old Brewery Gardens Block 1
- Old Brewery Gardens Block 2

8.2.8 There are no amenity areas/public spaces identified to be assessed against the overshadowing criteria in proximity of the site.

Assessment approach

8.2.9 The technical analyses carried out to inform the daylight and sunlight assessments have been undertaken by creating a digital three-dimensional (3D) model of the existing site and proposed development.

8.2.10 In accordance with Building Research Establishment (BRE) guidance, only those surrounding properties which have windows facing towards the site were included in the assessment. If a nearby property has no windows facing the site, these properties would not be affected by the proposed development in terms of light.

8.2.11 To assess the daylight and sunlight effects on the identified sensitive receptors, the model of the proposed development was inserted into the three-dimensional context model of the site and its surroundings to represent the proposed conditions.

Assessment of effects

8.2.12 The assessment of daylight and sunlight effects is based principally on the amount of visible sky before and after the construction of a new development.

8.2.13 The BRE recommends the following assessment methodologies:

- Daylight
    - Vertical Sky Component (VSC); and
    - No Sky Line (NSL) Method.
- Sunlight
    - Annual Probable Sunlight Hours (APSH).

8.2.14 The 3D model uses Waldram Diagrams to establish the VSC and 3D geometric calculations for daylight distribution (NSL).

Daylight

Vertical Sky Component (VSC) Method

8.2.15 The VSC method of assessment is defined in the BRE Guidelines as the *"ratio of that part of illuminance at a point on a given vertical plane that is received directly from a CIE standard overcast sky, to illuminate on a horizontal plane due to an unobstructed hemisphere of this sky".*

8.2.16 This ratio is the percentage of the total unobstructed view that is available, once obstructions (e.g. the proposed development), are placed in front of the point of view.

8.2.17 The assessment is calculated from the centre of a window on the outward face and measures the amount of light available on a vertical wall or window following the introduction of visible barriers, such as buildings. The VSC has been calculated using a 'Waldram Diagram'.

8.2.18 The Waldram Diagram is effectively a snapshot taken from that point of the sky in front of the window, together with all relevant obstructions to it, i.e. the buildings. For calculation purposes, trees may be ignored unless they form dense continuous belts.

8.2.19 Due to the limitations of peripheral vision, the maximum VSC value is almost 40% for a completely unobstructed vertical wall or window. In terms of assessment criteria, the BRE Guidelines state that *"if the VSC, with the development in place, is both less than 27% and less than 0.8 times its former value, occupants of the existing building will notice the reduction in the amount of skylight".*

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No Sky Line (NSL) Method

8.2.20 The BRE guidelines provide that where room layouts are known, the effect on the daylight distribution can be calculated by plotting the NSL.

8.2.21 The NSL method is a measure of the distribution of daylight at the 'working plane' within a room. The 'working plane' means a horizontal 'desktop' plane 0.85m in height for residential properties. The NSL divides those areas of the working plane which can receive direct sky light from those which cannot. If a significant area of the working plane lies beyond the NSL (i.e. it receives no direct sky light), then the distribution of daylight in the room will be poor and supplementary electric lighting may be required.

8.2.22 The potential effects of daylighting distribution in an existing building can be found by plotting the NSL in each of the main rooms. For houses, this will include living rooms, dining rooms and kitchens. Bedrooms should also be analysed, although the BRE state that they are less important. The BRE Guidelines identify that if the area of a room that does receive direct sky light is reduced to less than 0.8 times its baseline value, then this would be noticeable to its occupants. It is, therefore, implied that an NSL of at least 80% would be considered satisfactory.

8.2.23 In regard to deep rooms which are lit by windows on one side, the BRE Guidelines states *"If an existing building contains rooms lit from one side only and greater than 5m deep, then a greater movement of the no sky line may be unavoidable"* (paragraph 2.2.10).

Diffuse Daylight

8.2.24 Paragraph 2.2.23 of the BRE Guidelines states that "*...the diffuse daylighting of the existing building may be adversely affected...if either*:

- the VSC measured at the centre of an existing main window is less than 27%, and less than 0.80 times its former value
- the area of the working plane in a room which can receive direct skylight is reduced to less than 0.80 times its former value."

8.2.25 This assessment process is summarised in Figure 20 of the BRE Guidelines, Decision Chart: diffuse daylight in existing buildings, which can be seen in Figure 8-1.

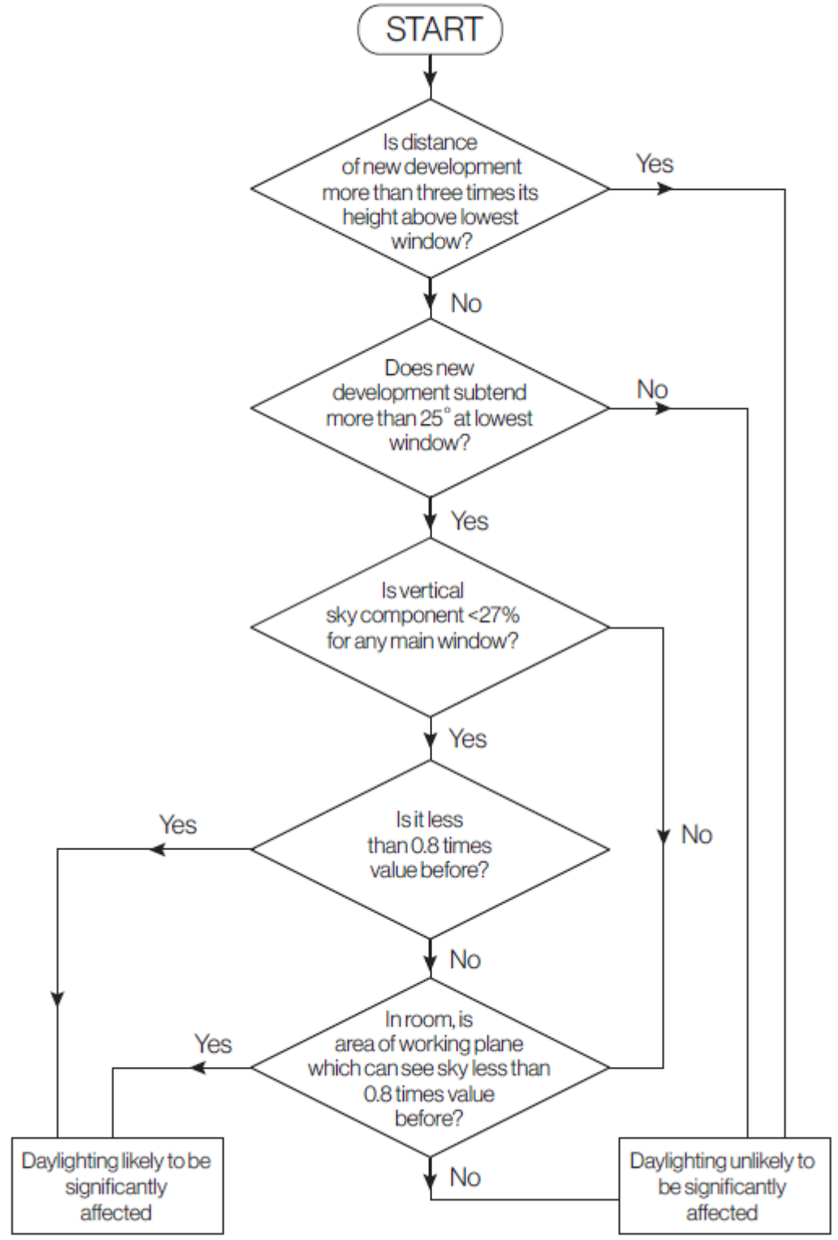


Figure 8-1 Figure 20 of the BRE Guidelines: Decision chart: diffuse daylight in existing buildings.

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Sunlight

Annual Probable Sunlight Hours (APSH) Method

8.2.26 Sunlight is measured using a sun indicator which contains 100 spots, each representing 1% of APSH. Therefore, where no obstruction exists the total annual probable sunlight hours for Manchester would be 1392, and each spot equates to 13.92 hours of the total annual sunlight hours.

8.2.27 The number of spots is calculated for the baseline and proposed development scenarios during the year and also during the winter period, and a comparison made between the two. This provides a percentage of APSH for each of the time periods for each window assessed.

8.2.28 Paragraph 3.2.3 of the BRE Guidelines states "*To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south…Normally loss of sunlight need not be analysed to kitchens and bedrooms, except for bedrooms that also comprise a living space, for example a bed sitting room in an old people's home*"

8.2.29 Regarding existing surrounding receptors, the BRE Guidelines provide that a window may be adversely affected if a point at the centre of the window receives less than 25% of the APSH, including at least 5% of the APSH during the winter months (21 September to 21 March), or less than 0.8 times its baseline sunlight hours during either period, or if there is a reduction in total APSH which is greater than 4%.

8.2.30 As is often the case, it is not possible to determine the room uses within each of the neighbouring properties, nor is it clear which window should be considered as the 'main windows'. Therefore, unless the rooms use is known through plans, all the rooms with windows facing the site and within 90 degrees of due south have been considered in the assessment. Windows that do not face within 90 degrees of due south do not have a realistic expectation of direct sunlight, due to their orientation and the sunlight path in the northern hemisphere.

Receptor sensitivity

8.2.31 It is important that the location and nature of the site and surroundings are considered when determining the significance of any impacts identified. The BRE guide is very clear that the targets provided are not mandatory. The location of the development could be deemed to be special circumstances in which the planning authority may wish to use different target values. This scope and view should also be followed through to the sensitivity of the surrounding receptors. There should be an expectation that a higher degree of obstruction is inevitable in an area with modern high-rise buildings. This point is also made in the NPPF and PPG (See Section 8.3).

8.2.32 For these reasons, the surrounding receptors may have a lower sensitivity to change in an urban location than those located in suburban, less dense areas. Sensitivity classification is assigned on how the proposed receptor is able to accommodate or adapt to the effect of the development. The criteria used to assess receptor sensitivity is described in Table 8-1 Criteria for determining receptor sensitivity

Table 8-1 Criteria for determining receptor sensitivity

Sensitivity	Criteria
High	The receptor has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Moderate	The receptor has moderate capacity to absorb change without significantly altering its present character, or is of high importance.
Low	The receptor is tolerant of change without detriment to its character, is of low or local importance.

8.2.33 The existing residential receptors surrounding the site are in a developing city centre location where there is an expectation for a higher density of development. All of the daylight and sunlight sensitive receptors are, therefore, considered to be of moderate sensitivity.

Magnitude of change/impact

8.2.34 The criteria used to assess how far an effect deviates from the baseline condition, i.e. the magnitude of change, are described in Table 8-2.

Table 8-2 Criteria for determining magnitude of change/impact

Magnitude	Percentage Alteration from Baseline
Large	40% +
Medium	30.1% to 40%
Small	20.1% to 30%
Negligible	0 to 20%

Significance evaluation

8.2.35 The significance of a potential effect is derived by considering both the sensitivity of the sensitive receptor and the magnitude of change, as demonstrated in Table 8-3.

Table 8-3 Matrix for determining effect significance

		Magnitude of change/impact			
		Large	**Medium**	**Small**	**Negligible**
Receptor sensitivity	**High**	Major	Major	Moderate/Minor	Negligible
	Moderate	Major	Moderate	Minor	Negligible
	Low	Moderate/Minor	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

8.2.36 Note that moderate and major effects are considered to be 'significant' in EIA terms.

8.2.37 Effects can also be described, for example, as:

- Beneficial or adverse;
- Direct or indirect/secondary;
- Permanent or temporary/reversible;
- Short term (effects that would be of short duration and would occur for up to 2 years);
- Medium term (effects that occur for a period of between 2-10 years);
- Long term (effects that occur for 10 years or more and include permanent effects); and
- Significant (major or moderate) or insignificant (negligible or minor).

8.2.38 When assigning significance criteria for daylight and sunlight effects, professional judgement has been used. Consideration has been given to the proportion of rooms/windows affected, as well as the percentage alterations, absolute changes, sensitivity of the receptor, and any other relevant factors. There may be mitigating factors such as location and nature of development, balconies, overhangs or design features which may also affect the determination of assigning the criteria.

Significance of Effects in Context to the Locality

8.2.39 The context of the site and surrounding area is key to understanding the sensitivity of the surrounding receptors and significance of daylight and sunlight effects.

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8.2.40 It is well established that the published targets within the BRE guide are based on low rise, suburban development. The PPG – Making Effective Use of Land, updated 22 July 2019, Paragraph 007 Reference ID: 66-007-20190722 states:

"All developments should maintain acceptable living standards. What this means in practice, in relation to assessing appropriate levels of sunlight and daylight, will depend to some extent on the context for the development as well as its detailed design. For example, in areas of high-density historic buildings, or city centre locations where tall modern buildings predominate, lower daylight and sunlight levels at some windows may be unavoidable if new developments are to be in keeping with the general form of their surroundings."

8.2.41 This is a key point to consider in respect of the proposed development and its impact on surrounding properties, particularly as it is situated in Manchester city centre. The Manchester Core Strategy 2012-2027 sets out development principles for the city centre in Policy CC 6 (p60), which states the following:

"City Centre development will generally be high-density. It is a location where land should be used to its maximum efficiency. The appropriate scale, massing and height of development in the City Centre will significantly exceed what is appropriate elsewhere in the City."

8.2.42 Policy DM1 of the Manchester Core Strategy also states:

"Development should have regard to the character of the surrounding area".

8.2.43 In other words, when considering acceptability of matters such as daylight and sunlight, the height, proximity and levels of light already established in should be taken into account.

8.2.44 This approach is also acknowledged in the BRE guide, which states:

"in special circumstances the developer or planning authority may wish to use different target values… in a historic city centre, or in an area with modern high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".

8.2.45 Additionally, the National Planning Policy Framework ("NPPF") states the following at paragraph 130 (c):

"…when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight…(as long as the resulting scheme would provide acceptable living standards)."

8.2.46 The Planning Practice Guidance ("PPG") also supports this approach, stating:

Paragraph 007 Reference ID: 66-007-20190722

"All developments should maintain acceptable living standards. What this means in practice, in relation to assessing appropriate levels of sunlight and daylight, will depend to some extent on the context for the development [emphasis added] as well as its detailed design. For example, in areas of high-density historic buildings, or city centre locations where tall modern buildings predominate, lower daylight and sunlight levels at some windows may be unavoidable…"

Paragraph: 004 Reference ID: 66-004-20190722

"A range of considerations should be taken into account in establishing appropriate densities on a site or in a particular area. Tools that can assist with this include…characterisation studies [emphasis added] and design strategies, dealing with issues such as urban form, historic character, building typologies, prevailing sunlight and daylight levels [emphasis added], green infrastructure and amenity space…"

8.2.47 It would therefore be unrealistic for the surrounding residential properties to expect to maintain similar levels of daylight as those currently experienced, as the site is underutilised with only very low structures.

Manchester City Centre Benchmarking

8.2.48 Considering the contextual discussion above, in order to fully understand the results in context, it is appropriate to consider what are deemed to be appropriate daylight levels in Manchester city centre. A detailed characterisation study as recommended by the Manchester Core Strategy, the NPPF & PPG has, therefore, been produced.

8.2.49 The retained VSC daylight levels in established, successful residential areas in the city centre of Manchester have been reviewed and are set out below. The areas reviewed all include residential buildings and are recognised as positive urban environments that people choose to live in. The locations give practical, recognisable examples of living conditions around the city centre. This is an evidential method of benchmarking daylight levels in a dense, urban area, which allows a better understanding of the application of the BRE guide in such locations.

8.2.50 The VSC assessment has been used to inform the study on the basis that the BRE guidelines state at paragraph F7:

"In assessing the loss of light to an existing building, the VSC is generally recommended as the appropriate parameter to use. This is because the VSC depends only on obstruction, and is therefore a measure of the daylit environment as a whole."

8.2.51 The characterisation study provides a benchmark as to what is acceptable/sufficient daylight in context and, indeed, what residents living within Manchester city centre, in which a successful residential market operates and where properties are in high demand, experience when exercising choice in where they live.

8.2.52 The range of visible sky levels from each window of the relevant façade of each relevant building is then summarised. In order to provide an overall understanding of the amount of visible sky each building can see, an average level of visible sky has also been provided.

Table 8-4 – Retained VSC Daylight Levels in Manchester city centre

Address	Average level of VSC from the development facing elevation	Minimum VSC Level
Deansgate Quay	3.0%	0%
The Astley	5.5%	1.4%
Hill Quays	6.2%	0%
Millbank Street Apartments	6.3%	5.6%
53-55 Great Ancoats Street	9.1%	2.1%
12 Thomas Street	10.2%	1.5%
Princess House	10.76%	0%
Carding Building, Manchester New Square	13.4%	4.2%
The Birchin	14.2%	3.2%
Jefferson Place	15.3%	4.3%
Linter Building, Manchester New Square	18.2%	2.8%

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8.2.53 Table 8-4 demonstrates that several of the most successful and desirable residential locations in Manchester city centre do not meet the BRE target criteria. In some cases, the levels of retained daylight are substantially below the written BRE targets. The city centre context is such that deviations from the BRE target criteria are to be anticipated, and this sets the benchmark of what is acceptable in terms of daylight giving due consideration to the specific site characteristics, history and location. It is an inevitable consequence of living in a city centre that compromises are made on certain aspects, such as daylight amenity, in order to avail of other benefits that living in such a location provides.

8.2.54 The impacts discussed to the surrounding sensitive receptors below have therefore been considered in context to the BRE guidance, but also against what is considered acceptable in other residential locations in Manchester city centre.

8.3 LEGISLATION AND POLICY WHICH HAS INFLUENCED ASSESSMENT OR MITIGATION

8.3.1 There is no legislation that governs daylight and sunlight. The criteria for assessment relating to daylight and sunlight is covered by national and local policy in addition to BRE guidance as set out below.

National policy and guidance

National Planning Policy Framework (NPPF) (2025)

8.3.2 The NPPF highlights the Government's recognition that increased flexibility is required on daylight and sunlight in response to the requirement for higher density development by stating that "*when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)*"

Planning Practice Guidance (PPG) (2024 and regularly updated as a 'live' resource)

8.3.3 Paragraph: 006 Reference ID: 66-006-20190722 – Effective use of land within the PPG states that *"All developments should maintain acceptable living standards. What this means in practice, in relation to assessing appropriate levels of sunlight and daylight, will depend to some extent on the context for the development as well as its detailed design. For example, in areas of high-density historic buildings, or city centre locations where tall modern buildings predominate, lower daylight and sunlight levels at some windows may be unavoidable if new developments are to be in keeping with the general form of their surroundings."*

Local policy and guidance

Manchester Core Strategy (2012-2027)

8.3.4 Policy DM1 – Development Management – States that all developments should have regard to the effects on amenity including privacy, light, noise, vibration, air quality and odours.

8.3.5 Policy EN2 – Tall Buildings – States that, by their very size, tall buildings can have a significant impact on the local environment and its micro-climate. It is therefore expected that this impact be modelled and that submissions for tall buildings also include appropriate measures to create an attractive, pedestrian friendly local environment.

Manchester Residential Quality Guidance (2016)

8.3.6 The Residential Quality Guidance states that *"Developers and their design teams will be expected to demonstrate how the bulk, massing and scale of proposals have been considered in terms of its impact on the neighbourhood, street and block and how it influenced the architecture and design of the building and/or space."*

Building Research Establishment (BRE) 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice', Third Edition, 2022 (the BRE guidelines)

8.3.7 The BRE guidelines provide advice on site layout planning to achieve good sunlighting and daylighting within buildings, and in the open spaces between them. It is intended for use by building designers, developers, consultants and Local Planning Authorities (LPAs). The advice it gives is not mandatory and should not be used as an instrument of planning policy. On page 4 (Summary) it states that "*It is purely advisory and the numerical target values within it may be varied to meet the needs of the development and its location."*

8.3.8 It also states at paragraph 1.6 that *"… the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. In special circumstances the developer or planning authority may wish to use different target values… in an area with modern high-rise buildings, a higher degree of obstruction maybe unavoidable if new developments are to match the height and proportions of existing building*"

Assessment limitations (technical deficiencies or lack of knowledge)

8.3.9 Best estimates were made in determining building uses (residential or commercial). Generally, these were made from external observations and recourse to the Valuation Office Agency's (VOA) council tax records.

8.3.10 Where publicly available, room layouts have been included within the modelling of the sensitive receptors. Reasonable assumptions as to the floor levels within these modelled rooms, which dictate the level of the working plane relevant for the NSL assessments, have been based on external observations.

8.4 BASELINE CONDITIONS

Current baseline (2026)

8.4.1 This scenario consists of the existing surrounding environment to the site and the current daylight and sunlight levels at sensitive receptors.

8.4.2 The existing site is currently occupied by Pure Padel Manchester, an indoor sports venue. The surrounding land uses comprise predominantly of light-industrial/warehouse and commercial use.

8.4.3 Detailed drawings of the baseline scenario models can be found at Appendix 8.1. The drawings in Appendix 8.1 indicate the position of the surrounding sensitive receptors in relation to the existing site.

8.4.4 A total of 539 site facing windows serving 348 rooms within 2 buildings were assessed for VSC and NSL and 3 rooms within 2 buildings were assessed for APSH.

8.4.5 The full baseline daylight and sunlight results can be found in Appendix 8.2 and are summarised in Table 8-5 below.

Table 8-5 Identified receptors and their sensitivity

Receptor	Total No. Windows that meet VSC Criteria		Total No. Rooms that meet NSL Criteria		Total No. Rooms that meet APSH Criteria	
	Total	Pass	Total	Pass	Total	Pass
Old Brewery Gardens Block 1	321	312	210	210	25	25
Old Brewery Gardens Block 2	218	129	138	97	3	3
TOTALS	539	441	348	307	28	28

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8.4.6 Out of the 539 windows assessed for VSC daylight, 441 (82%) meet or exceed the BRE recommended criteria. For NSL, 307 (88%) of the 348 rooms assessed as floor plans were publicly available meet the BRE recommended criteria. For sunlight, all 28 rooms (100%) assessed meet the BRE criteria for both Winter and Annual APSH.

8.4.7 From the above, it is evident that, due to their urban location and the presence of restrictive existing balconies, a number of windows and rooms do not meet the minimum standards recommended within the BRE Guidelines. This means that even small actual changes may result in percentage of baseline changes which are disproportionate to the actual change experienced.

Future baseline (2028)

8.4.8 If the proposed development was not constructed the baseline daylight and sunlight levels would remain the same as there are no 'natural' factors that would influence baseline conditions, only human induced changes (i.e., development).

Identified receptors and their sensitivity

8.4.9 In order to undertake the daylight and sunlight assessments, the pertinent neighbouring receptors surrounding the site were identified in accordance with the guidelines within the BRE. Sensitive receptors were therefore considered to be "*adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms*." The BRE also states that "*Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.*."

8.4.10 In accordance with the above, the windows serving neighbouring residential properties were identified to be relevant within the assessment of effects for daylight.

8.4.11 In relation to sunlight, the BRE states that *"…all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken to not block too much sun."*

8.4.12 Table 8-6 details the daylight and sunlight receptors identified and their level of sensitivity. The location of these sensitive receptors relevant to the proposed development can be seen on the drawings in Appendix 8-1.

Table 8-6 Identified receptors and their sensitivity

Receptor	Sensitivity	Justification
Old Brewery Gardens Block 1	Moderate	The neighbour is residential in nature and in very close proximity to the proposed development in a low rise existing context.
Old Brewery Gardens Block 2	Moderate	The neighbour is residential in nature and in close proximity to the proposed development in a low rise existing context.

8.5 DEMOLITION AND CONSTRUCTION EFFECTS

Relevant aspects of the proposed development

8.5.1 Owing to the evolving and changing nature of construction activities, the assessment of potential effects during construction of the proposed development on daylight and sunlight to surrounding receptors have not been modelled.

8.5.2 Since the potential daylight and sunlight effects relating to construction works will vary throughout the construction programme and gradually increase to the potential effects identified for the completed development, the interim construction effects will not be assessed quantitatively as it is considered that the completed development represents the worst-case assessment in terms of likely daylight and sunlight.

8.5.3 During the construction phase, the daylight and sunlight effects will gradually change from negligible in the baseline position to that described below in the operational phase with the proposed development in place. For these reasons, the construction phase will not be discussed further in this chapter.

8.6 OPERATIONAL EFFECTS

Relevant aspects of the proposed development and designed-in mitigation

8.6.1 Detailed drawings of the completed development scenario models can be found at Appendix 8.1. The drawings in Appendix 8.1 indicate the position of the surrounding sensitive receptors in relation to the site.

8.6.2 Designed in mitigation has been incorporated into the design of the proposed development's bulk and massing to minimise the effects to the surrounding properties.

8.6.3 A total of 539 site facing windows serving 348 rooms within 2 buildings were assessed for VSC and NSL and 3 rooms within 2 buildings were assessed for APSH.

8.6.4 The full completed development daylight and sunlight results can be found in Appendix 8.2 and are summarised in Table 8-7 to 8-10 below.

Table 8-7 - Summary of Baseline v Proposed VSC Results

Address	Total No. of windows	No. of windows that meet BRE Guidelines Negligible	Below BRE Guidelines - Magnitude of Change		
			Minor	Moderate	Major
Old Brewery Gardens Block 1	321	251	5	34	31
Old Brewery Gardens Block 2	218	211	7	0	0
Totals	**539**	**462**	**12**	**34**	**31**

Table 8-8 - Summary of Baseline v Proposed NSL Results

Address	Total No. of rooms	No. of rooms that meet BRE Guidelines Negligible	Below BRE Guidelines - Magnitude of Change		
			Minor	Moderate	Major
Old Brewery Gardens Block 1	210	170	24	2	14
Old Brewery Gardens Block 2	138	135	2	1	0
Totals	**348**	**305**	**26**	**3**	**14**

Table 8-9 - Summary of Baseline v Proposed Annual APSH Results

Address	Total No. of rooms	No. of rooms that meet BRE Guidelines Negligible	Below BRE Guidelines - Magnitude of Change		
			Minor	Moderate	Major
Old Brewery Gardens Block 1	25	25	0	0	0
Old Brewery Gardens Block 2	3	3	0	0	0
Totals	**28**	**28**	**0**	**0**	**0**

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Table 8-10 - Summary of Baseline v Proposed Winter APSH Results

Address	Total No. of rooms	No. of rooms that meet BRE Guidelines Negligible	Below BRE Guidelines - Magnitude of Change		
			Minor	Moderate	Major
Old Brewery Gardens Block 1	25	25	0	0	0
Old Brewery Gardens Block 2	3	3	0	0	0
Totals	**539**	**462**	**12**	**34**	**31**

Potential effects of the proposed development and their significance

Reduction in daylight and sunlight Levels

8.6.5 As the assessment of daylight and sunlight is based upon the extent to which the sky is obstructed by a proposed development, there is the potential for reduced levels of daylight and sunlight within the surrounding sensitive receptors as a result of the proposed development being greater in massing than the existing buildings on the site.

Old Brewery Gardens Block 1

8.6.6 A total of 321 windows serving 210 rooms were assessed for daylight within this building. The 25 rooms with site facing windows orientated to within 90° of due south were assessed for sunlight.

VSC Daylight

8.6.7 251 (78%) of the 321 windows assessed would meet the BRE's criteria and so experience a negligible magnitude of VSC change.

8.6.8 Based on the initial numerical criteria for determining the magnitude of change detailed in Table 8-2 the magnitude of VSC change to 5 (2%) of the affected windows is small.

8.6.9 The magnitude of VSC change to the remaining 65 (20%) windows is moderate to major. However, due to the uncharacteristically high baseline values for a property in an urban location, ranging between 32.5% and 39.1% (with, for context, an average of 37.4%), the VSC levels with the proposed development in place, remain very reasonable in an urban context, ranging from 19.2% to 26.8% (with, for context, an average of 22.9%) and commensurate with/better than the levels in other successful residential buildings in Manchester, as shown in Table 8-4 above.

8.6.10 The overall magnitude of VSC daylight change is considered to be small.

NSL Daylight

8.6.11 170 (81%) of the 210 rooms assessed would meet the BRE's criteria and so experience a negligible magnitude of NSL change.

8.6.12 Based on the initial numerical criteria for determining the magnitude of change detailed in Table 8-2 the magnitude of NSL change to 24 (11%) of the rooms is small.

8.6.13 The magnitude of NSL change to the remaining 16 (8%) rooms (all bedrooms, which the BRE considers to be "less important") is moderate to major. However, due to the uncharacteristically high baseline values for a property in an urban location, ranging between 97.1% and 98.2% (with, for context, an average of 97.5%), the NSL levels with the proposed development in place, remain very reasonable in an urban context, ranging from 50.1% to 60.7% (with, for context, an average of 53.2%).

8.6.14 The overall magnitude of NSL daylight change is considered to be small.

Diffuse Daylight

8.6.15 141 (67%) of the 210 rooms assessed would meet the BRE's criteria shown in Figure 8-1 and so experience a negligible magnitude of diffuse daylight change.

8.6.16 In accordance with the significance criteria described above, 13 (6%) rooms will experience changes in VSC and/or NSL which amount to a small magnitude of diffuse daylight change.

8.6.17 The affected windows serving the remaining 56 (27%) rooms will experience medium to large magnitudes of VSC change. They will, however, retain VSC levels of between 19.2% to 26.8% (with, for context, an average of 22.9%) and commensurate with/better than the levels in other successful residential buildings in Manchester, as shown in Table 8-4 above.

8.6.18 The rooms served by these windows will experience negligible to large magnitudes of NSL change but will retain sky visibility within the room (NSL) to between 50.1% and 94.4% for those rooms with more than one window (with, for context, an average of 73.4%)

8.6.19 The overall magnitude of diffuse daylight change is considered to be small.

Daylight Effect

8.6.20 The sensitivity of this receptor is considered to be moderate. The overall magnitude of daylight change is considered to be small. The effect of the proposed development upon the daylight within this property is therefore considered to be minor adverse , direct, permanent, irreversible and not significant.

APSH Sunlight

8.6.21 Any changes to the sunlight amenity to the 25 rooms material for assessment will be fully BRE compliant. The magnitude of APSH change is, therefore, negligible.

Sunlight Effect

8.6.22 The sensitivity of this receptor is considered to be moderate. The magnitude of APSH change is negligible. The effect upon sunlight amenity within this property is therefore considered to be negligible, direct, permanent, irreversible and not significant

Old Brewery Gardens Block 2

8.6.23 A total of 218 windows serving 138 rooms were assessed for daylight within this building. The three rooms with site facing windows orientated to within 90° of due south were assessed for sunlight.

VSC Daylight

8.6.24 211 (97%) of the 218 windows assessed would meet the BRE's criteria and so experience a negligible magnitude of VSC change.

8.6.25 Based on the initial numerical criteria for determining the magnitude of change detailed in Table 8-2 the magnitude of VSC change to all seven (100%) of the affected windows is small and does not exceed an alteration of 22.6%.

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8.6.26 The overall magnitude of VSC daylight change is considered to be small.

NSL Daylight

8.6.27 135 (98%) of the 138 rooms assessed would meet the BRE's criteria and so experience a negligible magnitude of NSL change.

8.6.28 Based on the initial numerical criteria for determining the magnitude of change detailed in Table 8-2 the magnitude of NSL change to two (1%) of rooms is small. The magnitude of NSL change to the one (1%) remaining affected room is moderate. All three rooms which would experience a minor or moderate magnitude of NSL change serve bedrooms which the BRE considers to be “less important”.

8.6.29 The overall magnitude of VSC daylight change is considered to be small.

Diffuse Daylight

8.6.30 131 (95%) of the 138 rooms assessed would meet the BRE's criteria shown in Figure 8.1 and so experience a negligible magnitude of diffuse daylight change.

8.6.31 In accordance with the significance criteria described above, six (4%) rooms will experience changes in VSC and/or NSL which amount to a small magnitude of diffuse daylight change.

8.6.32 The window serving the remaining room (a bedroom, which the BRE considers to be “less important”) will experience a negligible magnitude of VSC change and a medium magnitude of NSL change.

8.6.33 The overall magnitude of diffuse daylight change is considered to be small.

Daylight Effect

8.6.34 The sensitivity of this receptor is considered to be moderate. The overall magnitude of daylight change is considered to be small The effect of the proposed development upon the diffuse daylight within this property is therefore considered to be minor adverse, direct, permanent, irreversible and not significant.

APSH Sunlight

8.6.35 Any changes to the sunlight amenity to the three rooms material for assessment will be fully BRE compliant. The magnitude of APSH change is, therefore, negligible.

Sunlight Effect

8.6.36 The sensitivity of this receptor is considered to be moderate. The magnitude of APSH change is negligible. The effect upon sunlight amenity within this property is therefore considered to be negligible, direct, permanent, irreversible and not significant

Climate change and adaptation

8.6.37 The assessment of daylight and sunlight is based upon the extent to which the sky is obstructed by a proposed development.

8.6.38 The analysis of daylight amenity is undertaken using a standard overcast sky. The analysis of sunlight amenity is undertaken using 100 positions of the sun throughout the year which is then overlaid with average weather data. The predicted increase in the level of cloud cover could, therefore, redefine the standard overcast sky used to assess daylight amenity and the sky conditions used to assess sunlight amenity. Should this be the case the daylight and sunlight effects described in this chapter could change both the baseline and proposed assessment scenarios. The difference is, however, unlikely to materially change the effects described above in terms of their scale and significance.

Summary of effects

Table 8-11 Summary of effects during operation

Receptor	Sensitivity	Description of effect	Magnitude of change / impact	Effect significance
Old Brewery Gardens Block 1	Moderate	Reduction in daylight levels	Small adverse	Minor adverse, direct, permanent, irreversible, not significant
Old Brewery Gardens Block 2	Moderate	Reduction in daylight levels	Small adverse	Minor adverse, direct, permanent, irreversible, not significant
Old Brewery Gardens Block 1	Moderate	Reduction in sunlight levels	Negligible	Negligible, direct, permanent, irreversible, not significant
Old Brewery Gardens Block 2	Moderate	Reduction in sunlight levels	Negligible	Negligible, direct, permanent, irreversible, not significant

Supplementary mitigation measures

Table 8-12 Summary of operational supplementary mitigation measures

Adverse effect	Mitigation measure	Responsibility / mechanism for implementation	Timing
Reduction in daylight levels	None	n/a	n/a

8.7 RESIDUAL EFFECTS AND CONCLUSIONS

Table 8-13 Summary of residual effects during operation

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
Old Brewery Gardens Block 1	Reduction in daylight levels	Small adverse	n/a	Minor adverse, direct, permanent, irreversible, not significant
Old Brewery Gardens Block 2	Reduction in daylight levels	Small adverse	n/a	Minor adverse, direct, permanent, irreversible, not significant
Old Brewery Gardens Block 1	Reduction in sunlight levels	Negligible	n/a	Negligible, direct, permanent, irreversible, not significant
Old Brewery Gardens Block 2	Reduction in sunlight levels	Negligible	n/a	Negligible, direct, permanent, irreversible, not significant

8.8 FUTURE MONITORING OF SIGNIFICANT RESIDUAL ENVIRONMENTAL EFFECTS

8.8.1 No significant residual effects have been identified, and therefore monitoring of significant residual environmental effects is not required.

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8.9 REFERENCES

- Ministry of Housing, Communities & Local Government (2021). National Planning Policy Framework. 2025.
- Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government (2021). Planning Practice Guidance. 2019 (regularly updated).
- Manchester City Council (2012). Manchester Core Strategy (2012 – 2027).
- Building Research Establishment (BRE) (2022). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice, Third Edition.

8.10 GLOSSARY

Term	Definition
Annual probable sunlight hours (APSH)	The long-term average of the total number of hours during a year in which direct sunlight reaches the unobstructed ground (when clouds are taken into account).
Vertical sky component (VSC)	This is a measure of the amount of light reaching a window. It is the ratio of that part of illuminance, at a point on a given vertical plane, that is received directly from a CIE standard overcast sky, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. Usually the 'given vertical plane' is the outside of a window wall. The VSC does not include reflected light, either from the ground or from other buildings.
No sky line (NSL)	The outline on the working plane of the area from which no sky can be seen.

8.11 LIST OF APPENDICES (ES VOLUME II)

Reference	Title
Appendix 8.1	Drawings of the Assessment Scenarios
Appendix 8.2	Daylight and Sunlight Results for the Existing v Proposed Scenario, and Cumulative Scenario

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9 BUILT HERITAGE

9.1 INTRODUCTION

9.1.1 This chapter of the ES assesses the likely environmental effects of the proposed development with respect to built heritage. This chapter also describes the methods used to assess the effects; the baseline conditions currently existing at the site and surrounding area; the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been adopted.

9.1.2 Cumulative effects associated with built heritage have additionally been considered within the ES and can be found in Chapter 11 Cumulative and Interactive Effects.

9.2 METHODOLOGY AND ASSESSMENT CRITERIA

Consultation

EIA scoping

9.2.1 As explained in Chapter 4, Methodology, no formal EIA scoping process was undertaken and a scoping report was not produced. However, the applicant's proposal to include a built heritage assessment within the ES was agreed by MCC planning officers, and has been produced in line with best practice.

Pre-application consultation

9.2.2 No pre-application consultation with statutory or non-statutory stakeholders was undertaken with respect to built heritage.

Baseline study methodology

9.2.3 Baseline data of the study area was collected utilising Historic England's Online Mapping tool, plotting structures identified on the Historic England's National Heritage List for England (NHLE), MCC's local designations information available online, primarily in regard to Conservation Areas, and through a visual survey undertaken in March 2024. Google Earth was also utilised as part of the baseline data collection.

9.2.4 The baseline assessment was undertaken using a combination of desk-based review of plans, maps, records, and other documents. The principal source of baseline information therefore included NHLE.

9.2.5 Desk based research has been supplemented by on-site survey in order to identify and assess the heritage significance of the heritage asset receptors. It also establishes the way in which the settings and the site contribute to the heritage significance of these assets.

9.2.6 Consideration has also been given to the historical development of the site and the local area (set out in detail in the Heritage Statement at Appendix 9.1), building types and materials, key views to the notable historic buildings which contribute to the identification of the built form, and understanding of the special interest of the area.

Assessment approach

9.2.7 A study area of a 500m radius from the site boundary has been determined by Levrant as being appropriate for the consideration of potential significant effects of the proposed development on the setting of heritage assets in the local area. The determination of the study area has been based on an understanding of the existing nature of the site and its surroundings, heritage sensitivities in the locality of the site, the form and character of the proposed development, a Zone of Theoretical Visibility ('ZTV') (refer to TVIA) and has been further informed by professional judgement and experience in similar assessments. It is acknowledged that there are heritage assets outside of the study area and in the wider setting of the site.

9.2.8 Due consideration has been given to heritage assets outside of the 500m study area, however, through the assessment of the ZTV and Verified Views, it has been determined that there will be no significant effects on these receptors due to separating distance and interposing built form and landscape, and thus these heritage assets are not addressed within the chapter of the Heritage Statement at Appendix 9.1.

Assessment of effects

9.2.9 The assessment methodology for the historic environment is a synthesis of established guidance, best practice, and professional judgement. The assessment of effects of the proposed development has been undertaken in accordance with an adapted form of the methodology set out in the International Council on Monuments and Sites (ICOMOS) guidance on 'Heritage Impact Assessments' (January 2011), in which the value of heritage attributes is assessed in relation to statutory designations. The judgements on the significance or heritage value of assets are also informed by priorities or recommendations set out in national research agendas and ascribed values. Professional judgement is then used to determine the importance of the resource. The receptor (which for the purposes of this assessment are 'heritage assets') which has the potential to be affected by the proposed development is ascribed a value and subsequently the impact of the proposed development on them is assessed in order to determine the significance of the effect.

9.2.10 The following Historic England guidance has also informed the assessment undertaken in this chapter:

- Historic England's Conservation Principles, Policies and Guidance (2008);
- Historic England's Good Practice Advice Note 3: The Setting of Heritage Assets (2017);
- Historic England's Advice Note 4: Tall Building Guidance (2022); and
- Historic England's Understanding Place: Conservation Area Designation, Appraisal and Management (2019).

9.2.11 The built heritage chapter will identify and evaluate the nature and likelihood of the impacts of the proposed development, both permanent and temporary, in both the short term and long term, on built heritage receptors against clearly defined criteria. Indirect effects relate to changes to a heritage receptor's setting, i.e. changing the ability to appreciate the significance of a heritage receptor in the view, or other experiential effects which might change the setting of a heritage asset, such as increased levels of public activity in their locality. Direct effects relate to physical change to a heritage receptor through intervention to its fabric.

9.2.12 Criteria has been established to appraise a heritage asset's significance. Statutory criteria, as set out in the Principles of Selection for Listing Buildings', DCMS (2018), provides a list of principles of assessing significance based on architectural and historic interest, age and rarity, aesthetic merits, selectivity and national interest. Historic England's criteria outlined in 'Conservation Principles, Policies and Guidance' (2008), are also considered in this assessment.

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9.2.13 Evaluation of significance has been informed primarily by the designation of the assets at an international, national, regional or local level as well as their ability to contribute to an understanding of the past. This value rating has also been applied when considering sensitivity of views containing heritage assets. Indicative definitions for each of these ratings are outlined in Table 9-1.

9.2.14 The relative 'value' and importance attributed to the identified heritage assets largely coincides with their national status. In line with ICOMOS terminology, generally, Grade I buildings are considered to be of very high significance; Grade II* of high significance; and Grade II of medium heritage significance. As indicated in Table 9-1, this tabulated approach is not intended to be prescriptive, but rather a guide to assessing significance. For instance, some Grade II listed buildings are identified as 'high-medium' due to the completeness/sensitivity of their setting and some Grade II* listed buildings are also identified as 'high-medium' due to their degree of alteration/greater capacity for change within their setting. The value of Conservation Areas is informed by the quality and significance of the built form within them and may be influenced by the status of listed and locally listed buildings which make up the designated area. The Heritage Statement (Appendix 9.1) has been written within this overarching framework.

9.2.15 The magnitude of impact or 'significance of effect' is a product of the extent of change which is likely to result from the proposed development on the setting of a heritage asset (indirect) or the fabric and character of a heritage asset (direct).

9.2.16 Where the proposed changes are considered to enhance the setting or appreciation of a heritage asset, the impact on its significance will be deemed to be beneficial. Conversely, where the proposed development is considered to compromise or diminish its positive heritage values, the impact on the significance will be deemed adverse.

9.2.17 Measuring the heritage impact of the proposed development is essentially an evaluation of change to the fabric, character, and appearance of the identified heritage asset, balanced against its relative significance. Table 9-2 and 9-3 provide a basis from which the magnitude of impact and the significance of the effect upon the identified heritage asset are derived. The effects are rated as: major, moderate, minor, negligible or neutral, and can be direct or indirect, adverse, or beneficial. This follows the recommended approach to evaluating heritage impact derived by ICOMOS (2011) and the tests set by Historic England in the 2017 guidance on the evaluation of: 'The Setting of Heritage Assets' (Historic Environment Good Practice Advice in Planning. Note 3).

9.2.18 As Historic England's Guidance Note on producing Statements of Heritage Significance makes clear, the reliance and use of tabulated matrices can lead to a reductionist approach when assessing the true 'significance' of impact. Consequently, the following impact assessment is formed of a non-technical narrative argument that sets out 'what matters and why' in terms of the heritage significance and setting of the assets affected, together with the effects of the development upon them. These tables are therefore not considered to be prescriptive, and the assessment accounts for elements of setting and significance which can increase or decrease relative value, magnitude of change, and the significance of the effect of the change.

9.2.19 The significance of an environmental impact is determined by the interaction of magnitude and sensitivity, whereby the impacts can be beneficial, adverse or neutral. The impact Significance Matrix is set out in Table 9-3. Major, major-moderate and moderate effects are representative of a 'significant' effect, in EIA terms.

Receptor sensitivity

9.2.20 The criteria used to assess receptor sensitivity is described in Table 9-1.

Table 9-1 Criteria for determining receptor sensitivity

Significance/Sensitivity	Criteria
Very High	Grade I listed buildings/Grade I registered parks and gardens; and World Heritage sites.
High	Grade I and Grade II* listed buildings; Other buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade; and Conservation Areas containing very important buildings.
Medium	Grade II listed buildings; Historic buildings that can be shown to have exceptional qualities in their fabric or historical associations; and Conservation areas containing buildings that contribute significantly to its historic character.
Low	Locally listed buildings/identified non-designated heritage assets; and Historic buildings of modest quality in their fabric or historical association.
Negligible	Recorded on the HER in record form or as 'Find sites'; and Buildings, structures, or designed landscape features, which detract from the architectural design, historic, communal, or townscape interest of the principal heritage asset.
Unknown/none	Buildings/sites where the potential importance interest requires determination; or Sites determined to be of no heritage interest

Magnitude of change/impact

9.2.21 The criteria used to assess how far an effect deviates from the baseline condition, i.e. the magnitude of change, are described in Table 9-2.

Table 9-2 Criteria for determining magnitude of change/impact

Magnitude	Criteria
Major Beneficial	The proposed development considerably enhances the heritage values of the heritage assets, or the ability to appreciate those values.
Moderate Beneficial	The proposed development enhances to a clearly discernible extent the heritage values of the heritage assets, or the ability to appreciate those values.
Minor Beneficial	The proposed development enhances to a minor extent the heritage values of the heritage assets, or the ability to appreciate those values.
Negligible Beneficial	The resultant difference will be imperceptible but have a positive impact on the understanding or appreciation of the heritage asset.
Neutral	This does not necessarily mean that there will be no physical or visual change, rather that the resultant difference will be imperceptible or appropriately balanced.
Negligible Adverse	The proposed development would not diminish the value of the heritage assets' significant physical fabric, their settings or significance to any appreciable degree.
Minor Adverse	The proposed development erodes to a minor extent the heritage values of the heritage assets, or the ability to appreciate those values.
Moderate Adverse	The proposed development erodes to a clearly discernible extent the heritage values of the heritage assets, or the ability to appreciate those values.
Major Adverse	The proposed development severely erodes the heritage values of the heritage assets, or the ability to appreciate those values.

Significance evaluation

9.2.22 The significance of a potential effect is derived by considering both the sensitivity of the feature and the magnitude of change, as demonstrated in Table 9-3.

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Table 9-3 Matrix for determining effect significance

		Magnitude of change/impact				
		Major	**Moderate**	**Minor**	**Negligible**	**Neutral**
Receptor sensitivity	**Very High/High**	Major Adverse/Beneficial	Major-Moderate Adverse/Beneficial	Moderate-Minor Adverse/Beneficial	Negligible Adverse/Beneficial	Neutral
	Medium	Major-Moderate Adverse/Beneficial	Moderate-Minor Adverse/Beneficial	Minor Adverse/Beneficial	Negligible Adverse/Beneficial	Neutral
	Low	Moderate/Minor Adverse/Beneficial	Minor Adverse/Beneficial	Minor Adverse/Beneficial	Negligible Adverse/Beneficial	Neutral

9.3 LEGISLATION AND POLICY WHICH HAS INFLUENCED ASSESSMENT OR MITIGATION

National policy and guidance

9.3.1 The Heritage Statement (Appendix 9.1) has been prepared in accordance with or with reference to the following legislation, policy, and guidance.

9.3.2 Section 66 of the Planning (Listed Building and Conservation Areas) Act 1990 requires the Local Planning Authority to "have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses" when considering whether to grant planning permission. This section of the 1990 Act is of relevance as there are a number of listed buildings within the immediate and wider setting of the site.

9.3.3 National Planning Policy Framework (2025)

9.3.4 Chapter 12 (Design) of the NPPF establishes the Government's framework and approach towards design. The NPPF states at Paragraph 131 that "good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities".

9.3.5 At Paragraph 135, the NPPF establishes a set of principles that Local Authorities should ensure are at the forefront when considering planning policies and development proposals. These principles stipulate that developments should: function well and contribute to the overall quality of the area; be visually attractive through the use of high quality architecture, successful layouts and effective landscaping; be sympathetic to local townscape character and history (including the built environment and landscape setting); reinforce and maintain sense of place through considered arrangement of streets, spaces, typologies and materiality; optimise the potential of sites and create a sustainable mix of developments; and create spaces that are safe, inclusive and accessible to all.

9.3.6 Paragraph 139 states that developments that are that not well designed should be refused by Local Authorities (including and especially where proposals fail to reflect local design policies and government design guidance). Conversely, the NPPF states in the same paragraph that "significant weight" should be given to schemes that reflect local policy requirements and government guidance on design, and those that reflect "innovative designs which promote high levels of sustainability".

9.3.7 Read together, Paragraphs 134 and 139 demonstrate the Government's encouragement of Local Authorities to support schemes which embody high quality sustainable design.

9.3.8 Chapter 16 (Conserving and Enhancing the Historic Environment) of the NPPF sets out the Government's planning policies on the conservation of the historic environment.

9.3.9 The policies in the NPPF constitute the Government's view of what sustainable development in England means in practice. In these terms, development proposals which fail to give due weight to the conservation of heritage assets are deemed not to be sustainable development and consequently shall not be supported. One of the key dimensions of sustainability is protecting and enhancing our historic environment.

9.3.10 The NPPF stresses that "great weight" should be given to the conservation of designated heritage assets (paragraph 212), emphasising the need to avoid substantial harm, in terms of demolition, alteration or the compromise of its setting. The fundamental objective is to ensure that the balance of the impact on the heritage assets is demonstrably beneficial, minimising any negative impact on their significance.

9.3.11 The NPPF establishes a clear hierarchy of significance for heritage assets, derived from their designated status. The fundamental objective is to avoid compromising designated heritage assets, such that any potential 'harm' from a development must be balanced against the potential advantages of the public benefits that may outweigh any harm.

9.3.12 Degrees of harm to designated heritage assets are categorised within the NPPF as 'substantial' and 'less than substantial'. Paragraph 214 states that "where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss". Four subsequent tests apply to mitigate such harm.

9.3.13 Paragraph 215 relates to 'less than substantial harm', stating that "Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use".

9.3.14 The 'designated heritage asset' status of the identified listed buildings and conservation areas within and in the setting of any site requires that any potential 'harm' must be weighed and balanced against the potential advantages of the particular development proposal. It is thus necessary to establish whether the benefits of the proposals outweigh any perceived harm, in the context of the statutory duties.

9.3.15 Planning Practice Guidance ('PPG') (2014 and as subsequently amended)

9.3.16 The PPG is an online document which is amended as required by the Government. It provides current advice to assist with the interpretation of the NPPF. The section "conserving and enhancing the historic environment" of the current iteration of the PPG has been reviewed and referenced in the course of producing this Heritage Statement. As evidenced in recent case law, the PPG is considered to carry considerable weight in Planning decisions, in line with that of the NPPF (see recent judgement in Mead Realisations Ltd v Secretary of State for Housing Communities and Local Government [2025] EWCA Civ 32).

9.3.17 Historic England Guidance

9.3.18 In 2015 Historic England released three Good Practice Advice notes supporting the implementation of national policy and the related guidance provided within the PPG. Good Practice Advice Note 2 - Managing Significance in Decision-Taking in the Historic Environment (2015) ('GPA2') and Good Practice Advice Note 3 - The Setting of Heritage Assets (amended December 2017) ('GPA3') and Tall Buildings Advice Note 4 (March 2022) were both utilised as part of this assessment in order to gain a full understanding of the relevant issues.

9.3.19 In particular, this chapter and the accompanying Heritage Statement (Appendix 9.1) take account of the advice contained within the revised version of GPA3 on understanding what constitutes the setting of a listed building, Conservation Area, or other heritage asset. Furthermore, this chapter relies on the guidance provided on the identification of assets and their settings which have the potential to be affected by development proposals, as well as the approach to the selection of indicative key views of a proposed development in a context which includes heritage assets and heritage sensitivities.

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9.3.20 In terms of assessing the impacts of development proposals, this chapter takes account of the advice in GPA3 which states that, "setting and views are matters of qualitative and expert judgement [...] technical analyses [and] should be seen primarily as material supporting a clearly expressed and non-technical narrative argument that sets out 'what matters and why' in terms of the heritage significance and setting of the assets affected, together with the effects of the development upon them."

9.3.21 This chapter also accords with the guidance and approach established in Historic England Advice Note 12 - Statements of Heritage Significance: Analysing Significance in Heritage Assets (2019) and Conservation Principles, Policies and Guidance (2008).

Regional policy and guidance

9.3.22 Greater Manchester Combined Authority, Places for Everyone ('PfE') (2024)

9.3.23 PfE is the long-term plan of nine Greater Manchester districts for jobs, new homes, and sustainable growth. The plan sets out a strategic policy framework for the nine boroughs and helps these areas to meet their local housing and employment needs by identifying land and infrastructure to support growth.

9.3.24 Objective 4 of the PfE seeks to: "Enhance our cultural, heritage and educational assets; - Improve sustainable transport and active travel access to these locations; - Improve access for local people to jobs in these locations."

9.3.25 Policy JP-P 2 addressing 'Heritage', states: "Through this Plan we will proactively manage and work with partners to positively conserve, sustain and "enhance its historic environment and heritage assets and their settings. Opportunities will be pursued to aid the promotion, enjoyment, understanding and interpretation of heritage assets, as a means of maximising wider public benefits and reinforcing Greater Manchester's distinct identity and sense of place. Local Plans will set out the key elements which contribute to the district's identity, character and distinctiveness and which should be the priority for safeguarding and enhancing in the future and demonstrate a clear understanding of the historic environment and the heritage values of sites, buildings or areas and their relationship with their surroundings. This knowledge should be used to inform the positive integration of our heritage by:

- Setting out a clear vision that recognises and embeds the role of heritage in place-making;
- Utilising the heritage significance of a site or area in the planning and design process, providing opportunities for interpretation and local engagement;
- Integrating the conservation and enhancement of heritage assets and their settings, with creative contextual architectural responses that contribute to their significance and sense of place;
- Delivering positive benefits that sustain and enhance the historic environment, as well as contributing to the economic viability, accessibility and environmental quality of a place, and to social wellbeing; and
- Exploring opportunities to reduce greenhouse gas emissions that restoration of historic buildings offer."

9.3.26 Particular consideration will be given to ensure that the significance of key elements of the historic environment which contribute to Greater Manchester's distinctive identity and sense of place are protected from harm. These include historic town centres, places of worship, historic transport routes including the canal network, industrial buildings and structures including textile mills, farmsteads and other sites, buildings and areas of identified archaeological, architectural, artistic and historic value.

9.3.27 Development proposals affecting a designated heritage asset (or an archaeological site of national importance) and a conservation area should conserve those elements which contribute to its significance including those identified in any conservation area appraisal as making a positive contribution to the area. Harm to such elements will only be permitted where this is clearly justified and outweighed by the public benefits of the proposal.

9.3.28 Proposals should be informed, as necessary, by the findings and recommendations of the appropriate heritage assessment(s) in the development plan evidence base and/or any updated heritage assessment submitted as part of the planning application process.

Local policy and guidance

9.3.29 Manchester City Council, Core Strategy (2012)

9.3.30 The relevant, local heritage planning policy maintains the same focus as the NPPF. The City Council's heritage policies focus on the fundamental importance of "preserving or, where possible, enhancing the historic environment". The following policies from Manchester's Core Strategy are of relevance.

9.3.31 Policy CC9 (Design and Heritage) states that development in Manchester City Centre should preserve or enhance the heritage assets that have been identified, including listed buildings, conservation areas and scheduled monuments. The policy also establishes that new development must support the range of uses the Council expects in the City Centre and contribute to a coherent and integrated physical environment.

9.3.32 Policy EN3 (Heritage) states that Manchester City Council will encourage development that complements and takes advantage of the distinct historic and heritage features of its districts and neighbourhoods. Development options must be designed to support the Council in preserving or, where possible, enhancing the historic environment, the character, setting and accessibility of areas and buildings of acknowledged importance.

9.3.33 Unitary Development Plan for the City of Manchester, 1995

9.3.34 The Unitary Development Plan (the 'UDP') for Manchester was adopted by the Council in 1995. The Core Strategy, adopted in 2011, replaced significant elements of the UPD, though there are saved policies which are extant, and which are relevant to a consideration of the impact of development proposals on heritage assets.

9.3.35 Development Control Policies 18.1 and 19.1 are saved from the UPD and address conservation areas and listed buildings respectively. The policies stipulate the careful consideration is given to development proposals which affect the respective heritage assets, providing a series of provisions to consider such as relationships between new and old buildings, and promote their preservation and enhancement.

Assessment limitations (technical deficiencies or lack of knowledge)

9.3.36 Surveys of the identified heritage assets within the study area was taken from publicly accessible areas (survey was carried out in March 2024). As such, the study is limited to an assessment from ground level.

9.3.37 An assessment of below ground archaeology does not form part of this chapter.

9.4 BASELINE CONDITIONS

Current baseline (2026)

9.4.1 The site is located to the north of Manchester city centre, and forms a light industrial site bounded by Robert Street to the east, Dutton Street to the west, and in industrial unit (11 Robert Street) to the north.

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9.4.2 The site's context is highly varied, with mid-to-late and late 20th century buildings, largely poor quality commercial or light industrial in character and cleared plots, which sit cheek-by-jowl with occasional, high quality and interesting historic buildings, such as the collection of four Grade II listed Victorian buildings that form Strangeways Prison.

9.4.3 The site does not contain any listed buildings or non-designated heritage assets and is not located within any designated conservation areas; however, it is within the immediate a wider vicinity of a number of designated and non-designated heritage assets, the settings of which require due regard. The site itself is not considered to yield any heritage interest.

Future baseline (2028)

9.4.4 If the proposed development did not go ahead, the future baseline heritage position is expected to be consistent with the existing baseline.

Identified receptors and their sensitivity

9.4.5 The area of analysis (500m radius beyond the site boundary) has captured 22 listed buildings, however, due to the density, typology surrounding the site and the visibility of the proposed development from surrounding streets/buildings, as highlighted on the Zone of Visual Influence plan (ZVI) provided by rbmp Ltd, it is considered that a considerable number of listed buildings will not be susceptible to potential indirect impacts from the proposed development, and, consequently, these buildings have been scoped out of assessment within the ES.

9.4.6 Consequently, a total of seven listed buildings have been considered as receptors. In addition to this, there are several non-designated heritage assets (NDHAs) within the immediate vicinity of the site, of which, 3-12 Park Place, 37 Park Street (Dutton Hotel), and 45-55 Julia Street (Clarence Hatworks), have been scoped into the assessment. Finally, the ZVI demonstrated that there would be limited visibility of the proposed development from the Cathedral Conservation Area, and so a discussion of the potential impact on the setting of this conservation area is included within the assessment. Receptor locations are shown on Figure 4 and Figure 4a in Appendix 9.1.

9.4.7 A wider list of receptors considered as part of the Heritage Statement is provided at Table 1 of Appendix 9.1. Only those receptors which have been determined to have the potential to be impacted by the proposed development are outlined in this chapter.

Table 9-4 Identified receptors and their sensitivity

Receptor Number as per Figure 4/4a of the Heritage Statement	Receptor	Grade/List Entry Number
1	Gatehouse of HMP Manchester	II, 1254670
2	Main Prison Block of HMP Manchester	II, 1254636
3	The Tower of HMP Manchester	II, 1254672
4	Former Boys Prison Block of HMP Manchester	II, 1254635
5	Former Synagogue	II, 1208420
6	St Chad's Cheetham Hill First World War Memorial Cross	II, 1485562
7	Roman Catholic Church of St Chad and Attached Presbytery, And Boundary Walls	II, 1208542
	Cathedral Conservation Area	/
6a	3, 12 Park Place	NDHA
7a	37 Park Street (Dutton Hotel)	NDHA
12a	45-55 Julia Street (Clarence Hatworks)	NDHA

9.5 DEMOLITION AND CONSTRUCTION EFFECTS

Relevant aspects of the proposed development

9.5.1 Potential effects associated with the demolition and construction phase of the proposed development will relate to indirect temporary visual/setting impacts only as there are no designated or non-designated heritage assets within the site.

Potential effects of the proposed development and their significance

9.5.2 The assessment methodology and approach to the relative impact on heritage assets during the construction phase is based on evidence-based assumptions in relation to common indirect issues such as demolition, dust, noise, site hoarding, scaffolding, increased pressure on local road networks through presence of construction traffic and appearance of construction machinery in views which also take in heritage assets.

9.5.3 The construction phase will result in some disruption to the streetscape surrounding the site, resulting in some temporary adverse impacts upon the setting of the NDHAs 37 Park Street (Dutton Hotel), and 45-55 Julia Street (Clarence Hatworks).

9.5.4 It is therefore considered that the proposed development will give rise to negligible adverse indirect temporary impacts on the settings of these heritage assets during the construction phase. Paragraph 216 of the NPPF states that for NDHAS, "a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset". The effect on the settings of the non-designated heritage assets is not considered to be a significant effect in EIA terms.

9.5.5 All other identified heritage assets are considered to be unaffected by the construction phase of the proposed development, resulting in a 'neutral' impact. Consequently, these are not reported further in this chapter.

Climate change and adaptation

9.5.6 The construction period is planned to last until May 2028. Climatic effects are not considered to be a material consideration for built heritage over the time frame assessed, and thus there is not a need for specific supplementary mitigation to reduce the risk on heritage assets from climatic effects during construction.

Summary of effects

Table 9-5 Summary of effects during construction

Receptor	Sensitivity/Significance	Description of effect	Magnitude of change / impact	Effect significance
37 Park Street (Dutton Hotel)	Low	Indirect temporary visual/setting impacts during the construction period.	Negligible	Negligible adverse indirect temporary Not significant
45-55 Julia Street (Clarence Hatworks)	Low	Indirect temporary visual/setting impacts during the construction period.	Negligible	Negligible adverse indirect temporary Not significant

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Supplementary mitigation measures

9.5.7 During the construction phase, works related to the proposed development will trigger various construction impacts which in turn will indirectly affect heritage assets within the setting of the site (temporary effects).

9.5.8 Prior to any demolition, a method statement by a suitably trained contractor should be submitted to MCC. This should include relevant protection measures to avoid unnecessary dust, noise and debris impacting upon the surrounding built environment.

9.5.9 Recommended measures, to be included within a Construction Environmental Management Plan ('CEMP'), typically secured via planning condition, include:

- Use of high quality hoardings;
- Dust management;
- Regular cleaning of roads and the public realm surrounding the site;
- Edge protection to be affixed whilst concreting operations are in place;
- Implementation of a traffic management plan; and
- Vibration monitoring.

Table 9-6 Summary of construction supplementary mitigation measures

Adverse effect	Mitigation measure	Responsibility / mechanism for implementation	Timing
Negligible adverse indirect temporary visual/setting impacts	Construction Environmental Management Plan ('CEMP')	CEMP to be secured by planning condition and developed into a live document. Ensure CEMP is adhered to by the appointed contractors.	Demolition and construction period

9.6 OPERATIONAL EFFECTS

Relevant aspects of the proposed development and designed-in mitigation

9.6.1 Potential effects associated with the operational phase of the proposed development will relate to indirect permanent visual/setting impacts only as there are no designated or non-designated heritage assets within the site.

9.6.2 Mitigation for the impacts derived from the proposed development on heritage assets in the operational phase is embedded in the high-quality architecture and design of the buildings, public realm enhancements, and the regeneration of a complex site. This includes the choice of high-quality materials and detailed design elements which respond to, and are complementary of the surrounding townscape, the activation of frontages across the site, and enhanced connections with neighbouring developments. On balance, it is considered that the mitigation (embodied in the high-quality design of the replacement building) will have a limited impact on the identified likely significant effects on heritage assets, and thus the impacts remain the same pre-and-post mitigation.

9.6.3 The assessment methodology and approach to the relative impact on heritage assets during the operational phase has been assessed utilising the suite of application plans and drawings, the Design and Access Statement (DAS) by Tim Groom Architects, the AVRs prepared by rbmp, and professional judgement.

Potential effects of the proposed development and their significance

9.6.4 The Visual Impact Assessment (VIA), which is discussed in detail in the Heritage Statement (Appendix 9.1) assesses seven key viewpoints (supporting a total of 15 views as part of the wider Townscape and Visual Impact Assessment), and demonstrates that the proposed development has the potential to result in the following impacts on the settings of 11 identified heritage assets:

- three instances of minor adverse indirect permanent impact on the settings of the Main Prison Block of HMP Manchester (grade II), The Tower of HMP Manchester (grade II), and the Former Boys Prison Block of HMP (grade II).
- one instance of negligible adverse/beneficial indirect permanent impact on the setting of 37 Park Street (Dutton Hotel) (NDHA).
- seven instances of neutral impact to the settings of the Gatehouse of HMP Manchester (grade II), Former Synagogue (grade II), St Chad's Cheetham Hill First World War Memorial Cross (grade II), Roman Catholic Church of St Chad and attached Presbytery, and boundary walls (grade II), Cathedral Conservation Area, 3,12 Park Place (NDHA), and 45-55 Julia Street (Clarence Hatworks) (NDHA).

9.6.5 As previously noted, utilising the findings from the ZTV Study, and the Verified Views, all other identified heritage assets were considered to sustain no impact on their setting or significance as a result of the Proposed Development. Consequently, these assets are not reported further in this chapter but are listed in full within Table 1 of the Heritage Statement (Appendix 9.1).

9.6.6 There are no impacts that have been identified that are considered to result in significant effects in EIA terms. All minor adverse effects regarding designated heritage assets represent an impact to the lower end of 'less than substantial' as per Paragraph 215 of the NPPF. Regarding the negligible adverse impact on the non-designated 37 Park Street (Dutton Hotel), Paragraph 216 of the NPPF states that "a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset." The effect on the settings of the non-designated heritage asset is not considered to be a significant effect in EIA terms.

Climate change and adaptation

9.6.7 The development is expected to be complete and fully operational by 2028. Climatic effects are not considered to be a material consideration for built heritage over the time frame assessed, and thus there is not a need for specific supplementary mitigation to reduce the risk on heritage assets from climatic effects during operation.

Summary of effects

Table 9-7 Summary of effects during operation

Receptor	Sensitivity / Significance	Description of effect	Magnitude of change / impact	Effect significance
Gatehouse of HMP Manchester (grade II)	Medium	Indirect permanent visual/setting impacts.	Negligible	Neutral Not significant
Main Prison Block of HMP Manchester (grade II)	Medium	Indirect permanent visual/setting impacts.	Minor	Minor adverse indirect permanent Not significant
The Tower of HMP Manchester (grade II)	Medium	Indirect permanent visual/setting impacts.	Minor	Minor adverse indirect permanent Not significant

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Receptor	Sensitivity / Significance	Description of effect	Magnitude of change / impact	Effect significance
Former Boys Prison Block of HMP Manchester (grade II)	Medium	Indirect permanent visual/setting impacts.	Minor	Minor adverse indirect permanent Not significant
Former Synagogue (grade II)	Medium	Indirect permanent visual/setting impacts.	Negligible	Neutral Not significant
St Chad's Cheetham Hill First World War Memorial Cross (grade II)	Medium	Indirect permanent visual/setting impacts.	Negligible	Neutral Not significant
Roman Catholic Church of St Chad and attached Presbytery, and boundary walls (grade II)	Medium	Indirect permanent visual/setting impacts.	Negligible	Neutral Not significant
Cathedral Conservation Area	High	Indirect permanent visual/setting impacts.	Negligible	Neutral Not significant
3, 12 Park Place (NDHA)	Low	Indirect permanent visual/setting impacts.	Negligible	Neutral Not significant
37 Park Street (Dutton Hotel) (NDHA)	Low	Indirect permanent visual/setting impacts.	Negligible	Negligible adverse/beneficial indirect permanent Not significant
45-55 Julia Street (Clarence Hatworks)	Low	Indirect permanent visual/setting impacts.	Negligible	Neutral Not significant

Supplementary mitigation measures

9.6.8 As no significant effects regarding heritage assets have been identified in the assessment, no supplementary mitigation measures are required.

9.7 RESIDUAL EFFECTS AND CONCLUSIONS

9.7.1 The residual impacts, i.e., the remaining effects of the proposed development following implementation of proposed mitigation, are summarised in the construction and operational phases in Table 9-8. These effects are not considered to be significant in EIA terms and the minor adverse impacts relating to the setting of the Main Prison Block of HMP Manchester (grade II), The Tower of HMP Manchester (grade II), and the Former Boys Prison Block of HMP (grade II) would equate to the lower end of 'less than substantial' as per Paragraph 215 of the NPPF.

9.7.2 Regarding the setting of non-designated heritage assets, principally 37 Park Street (Dutton Hotel), Paragraph 216 of the NPPF states that "a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset." The effect on the settings of the non-designated heritage asset is not considered to be a significant effect in EIA terms.

Table 9-8 Summary of residual effects during demolition and construction

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
37 Park Street (Dutton Hotel)	Indirect temporary visual/setting impacts during the construction period.	Negligible adverse indirect temporary Not significant	Ensure that CEMP is adhered to.	Negligible adverse indirect temporary Not significant
45-55 Julia Street (Clarence Hatworks)	Indirect temporary visual/setting impacts during the construction period.	Negligible adverse indirect temporary Not significant	Ensure that CEMP is adhered to.	Negligible adverse indirect temporary. Not significant

Table 9-9 Summary of residual effects during operation

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
Gatehouse of HMP Manchester (grade II)	Indirect permanent visual/setting impacts.	Neutral Not significant	None required	Neutral Not significant
Main Prison Block of HMP Manchester (grade II)	Indirect permanent visual/setting impacts.	Minor adverse indirect permanent Not significant	None required	Minor adverse indirect permanent Not significant
The Tower of HMP Manchester (grade II)	Indirect permanent visual/setting impacts.	Minor adverse indirect permanent Not significant	None required	Minor adverse indirect permanent Not significant
Former Boys Prison Block of HMP Manchester (grade II)	Indirect permanent visual/setting impacts.	Minor adverse indirect permanent Not significant	None required	Minor adverse indirect permanent Not significant
Former Synagogue (grade II)	Indirect permanent visual/setting impacts.	Neutral Not significant	None required	Neutral Not significant
St Chad's Cheetham Hill First World War Memorial Cross (grade II)	Indirect permanent visual/setting impacts.	Neutral Not significant	None required	Neutral Not significant

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Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
Roman Catholic Church of St Chad and attached Presbytery, and boundary walls (grade II)	Indirect permanent visual/setting impacts.	Neutral Not significant	None required	Neutral Not significant
Cathedral Conservation Area	Indirect permanent visual/setting impacts.	Neutral Not significant	None required	Neutral Not significant
3, 12 Park Place (NDHA)	Indirect permanent visual/setting impacts.	Neutral Not significant	None required	Neutral Not significant
37 Park Street (Dutton Hotel) (NDHA)	Indirect permanent visual/setting impacts.	Negligible adverse indirect permanent Not significant	None required	Negligible adverse/beneficial indirect permanent Not significant
45-55 Julia Street (Clarence Hatworks)	Indirect permanent visual/setting impacts.	Neutral / Negligible adverse indirect permanent Not significant	None required	Neutral Not significant

9.8 REFERENCES

- Planning (Listed Buildings & Conservation Areas) Act 1990.
- Department of Communities and Local Government (2025). National Planning Policy Framework.
- Department of Communities and Local Government (2019) Planning Practice Guide. Conserving and enhancing the historic environment
- Historic England (2019). Understanding Place: Conservation Area Designation, Appraisal and Management.
- Historic England (2008). Conservation Principles. Policies and Guidance.
- Historic England (2017). The Setting of heritage assets.
- Historic England (2016). Making Changes to Heritage Assets. Historic England Advice Note 2.
- Historic England (2015). Historic Environment Good Practice Advice in Planning. Note 2: Decision-Taking in the Historic Environment.
- Historic England (2019). Statements of Heritage Significance.
- Historic England (2022). Tall Buildings.

9.9 GLOSSARY

Term	Definition
NDHA	Non-designated Heritage Asset
NPPF	National Planning Policy Framework
AVR	Accurate Visual Representation

9.10 LIST OF APPENDICES (ES VOLUME II)

Reference	Title
Appendix 9.1	Heritage Statement

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10 TOWNSCAPE AND VISUAL IMPACT ASSESSMENT (TVIA)

10.1 INTRODUCTION

10.1.1 This chapter assesses the likely environmental effects of the proposed development with respect to townscape character of the area and on the visual amenity of people who may experience views of the proposed development.. This chapter also describes the methods used to assess the effects; the baseline conditions currently existing at the site and surrounding area; the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been adopted.

10.1.2 Cumulative effects associated with townscape and visual impact have additionally been considered and are set out within Chapter 11, Cumulative and Interactive Effects of this ES.

10.2 METHODOLOGY AND ASSESSMENT CRITERIA

Consultation

EIA scoping

10.2.1 As explained in Chapter 4, Methodology, no formal EIA scoping process was undertaken and a scoping report was not produced. However, the applicant's proposal to include a TVIA within the ES was agreed by MCC planning officers and has been produced in line with best practice.

10.2.2 The scope of the assessment was determined through professional judgement, informed by desk study including Zone of Theoretical Visibility (ZTV) analysis (see Appendix 10.2, Zone of Theoretical Visibility and Viewpoints) and site survey.

10.2.3 Viewpoint locations were selected by the assessor based on ZTV analysis, mapping of heritage assets and conservation areas, and site visits. The viewpoint selection was informed by the viewpoint locations plan (Appendix 10.2) and covers the principal visual receptors within the study area.

Pre-application consultation

10.2.4 No pre-application consultation with statutory or non-statutory stakeholders was undertaken with respect to TVIA.

Baseline study methodology

10.2.5 The TVIA and supporting studies and surveys were conducted in accordance with the principles set out by Landscape Character Assessment Guidance for England and Scotland (CA and SNH, 2002) and Guidelines for Landscape and Visual Impact Assessment 3rd Edition (LI and IEMA, 2013).

10.2.6 This methodology also takes account of the Landscape Institute's Technical Guidance Note LITGN-2024-01: Notes and Clarifications on Aspects of GLVIA3, published August 2024, which provides a compilation of clarifications on the 3rd Edition of the Guidelines. Where relevant, these clarifications have informed the approach set out below.

10.2.7 GLVIA3 defines townscape as "areas where the built environment is dominant... including the buildings, the relationships between them, the different types of urban open spaces, including green spaces, and the relationship between buildings and open spaces". Townscape, like landscape, is a combination of both cultural and physical characteristics or components that give rise to patterns that are distinctive to particular localities and help to define a 'sense of place'. The townscape character is an interaction of influences including topography, land use and management, historic and cultural associations together with built form and its relationship with the surroundings.

10.2.8 As confirmed by LITGN-2024-01 (Clarification 2(1)), TVIA should follow the same processes as LVIA but within a townscape setting, using an appropriate methodology based on GLVIA3. When defining value outside designated areas, judgements can be based on suitable criteria. Judgement regarding whether the effect is positive or negative should be as objective as possible, clearly explained and related to the baseline, and should take account of more than just architectural quality.

10.2.9 Townscape and visual assessments are two separate but interlinked processes that are undertaken in parallel. The assessments are informed by a combination of desk and site based appraisal techniques and professional judgements.

10.2.10 The townscape assessment considers the effects of the proposed development on the physical townscape and landscape, which may give rise to changes in its character, and how this is experienced; separately considering the effects of development on defined townscape character areas and designated townscape resources.

Stages in townscape and visual impact assessment

10.2.11 The TVIA process comprises the following stages:

- Baseline assessment: record and analyse the existing nature and value of the townscape character and features, and visual amenity of the study area through desk and field based appraisal;
- Description of the nature, forms and features of the proposed development including constraints and opportunities;
- Assessment of sensitivity of the existing townscape and identified visual receptors to change;
- Identification of potential townscape and visual impacts due to the proposed development;
- Identification of proposed mitigation measures appropriate to the development and its townscape context;
- Assessment of the magnitude of effect upon the identified receptors, likely to result from implementation of the proposed development;
- Assessment of the significance of the residual effects on townscape and visual resource, taking into account appropriate mitigation.

10.2.12 The assessment process is iterative; the analysis of the baseline conditions and evaluation of the potential effects resulting from a development informs the evolution of the proposed development. It is, therefore, important to take into consideration the mitigation that is inherent or proposed as part of the development in order to assess the residual effects and their significance.

10.2.13 In accordance with LITGN-2024-01 (Clarification 3(5)), statements of significance are reported post primary (designed-in) mitigation. The level of effect is identified and a clear statement is made as to whether the effect is significant or not significant.

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10.2.14 The visual assessment considers the potential changes that would occur to available views in the townscape as a result of the development proposals, the resultant effect on visual amenity and people's responses to the changes.

10.2.15 Consultation with the LPA alongside published guidance provides recommendations on the extent of the Zone of Theoretical Visibility that should be produced to assess the area that would potentially experience significant visual effects.

10.2.16 The purpose of the TVIA is to identify significant townscape and visual effects. It is, therefore, reasonable to limit the study area in various respects to meet the requirements of the specific project and its landscape context and to reflect the likelihood of significant effects arising over very long distances. It is also important that the more significant effects occurring over shorter distances are given appropriate emphasis. This report has adopted the following approach:

10.2.17 The focus of the visual assessment, identification of receptors and the selection of representative viewpoints is generally limited to 2km from the site.

10.2.18 Effects on townscape character areas and designations are considered within the study area, limited by the 2km study area. This is based on professional experience of residential and mixed-use development assessment, that visibility over greater distance does not have the potential to result in significant changes to the townscape character or value in the local landscape context.

10.2.19 For the purpose of informing the assessment, desk top study on the site and its surrounding areas have been undertaken to survey any potential receptors and key views.

10.2.20 Photographs illustrating views from a selected series of viewpoints have been taken using a Nikon D810 full frame sensor camera with Nikon 50mm f/1.8, Nikon 28mm f/1.8 and PC-E Nikon 24mm f/1.8 shift lenses. Viewpoint photographs have been presented in accordance with the Landscape Institute's Technical Guidance Note 06/19: Visual Representation of Development Proposals.

10.2.21 The site visits for baseline photography were conducted on 3rd and 11th March 2026. Original baseline photography and survey were captured in January 2024 and informed the final view selection within this document.

10.2.22 Historic England Advice Note 4: Tall Buildings (2nd edition, March 2022) provides advice on planning for tall buildings within the historic environment. Its purpose is to support local planning authorities, developers, communities and other stakeholders in dealing with tall buildings proposals within the legislative and planning framework relevant to the historic environment.

10.2.23 The guidance focuses on plan-making and the importance of a plan-led approach to tall building development; the information needed to support plan-making and to assess and determine individual development proposals; and how to identify appropriate locations for tall buildings and define design parameters in relation to the historic environment.

10.2.24 Key considerations from the guidance relevant to this assessment include: identifying the zones of visual influence; understanding the character of areas that may be affected and determining which individual heritage assets are likely to be affected; guiding and improving design; understanding what illustrative material is likely to be needed; and careful assessment of cumulative impacts in relation to other existing tall buildings and concurrent proposals.

10.2.25 Landscape is a combination of both cultural and physical components that give rise to patterns that are distinctive to particular localities and help to define a 'sense of place'. Landscape character is defined by the interaction of influences and components such as landform, hydrology, vegetation, landcover, land use pattern and cultural features and associations, and their relationship with the surroundings.

10.2.26 Although landscape has some intrinsic sensitivity, different landscape receptors have different elements and features that can accommodate a variety of development types. Landscape sensitivity is assessed combining judgments on the value attached to a landscape and the susceptibility to the type of change or development proposed.

10.2.27 In accordance with LITGN-2024-01 (Clarification 5(4) and Errata E5), landscape susceptibility relates to the type or nature of development (in this case, high density residential development including a tall building) and the relative size of the development, rather than the fully detailed proposal. Higher susceptibility indicates a greater liability to be harmed by the type of change proposed. Care has been taken to avoid double-counting between susceptibility and magnitude of effect.

Assessment approach

10.2.28 The assessment is based on professional judgement, informed by desk study, ZTV analysis and field survey. The assessment is supported by 15 verified views (AVRs) prepared by RBMP Ltd to Type 4 visualisation standard in accordance with TGN 06/19. Baseline photography was undertaken on 3rd March 2026 and 11th March 2026 using a Nikon D810 full frame sensor camera with Nikon 50mm f/1.8, Nikon 28mm f/1.8 and PC-E Nikon 24mm f/1.8 shift lenses. Original baseline photography and survey were captured in January 2024 and informed the final view selection within the study area.

10.2.29 In accordance with LITGN-2024-01 (Clarification 3(5)), statements of significance are reported post primary (designed-in) mitigation. The level of effect is identified and a clear statement is made as to whether the effect is significant or not significant.

10.2.30 The AVRs prepared for this assessment include both the proposed development and the cumulative schemes within a single image. Where cumulative schemes are referenced within the individual viewpoint assessments, this is to assist the reader in interpreting the AVRs. The standalone magnitude and significance judgements relate to the proposed development only. A separate cumulative assessment is provided in Chapter 11, Cumulative and Interactive Effects.

Assessment of effects

10.2.31 The significance of a potential effect is derived by considering both the sensitivity of the receptor and the magnitude of change, using professional judgement.

Receptor sensitivity

10.2.32 The criteria used to assess receptor sensitivity are described in Table 10-1.

Table 10-1 Criteria for determining receptor sensitivity

Sensitivity	Criteria
High	Receptors of high susceptibility to the type of change proposed, located in areas of high value townscape. Includes nationally designated heritage assets, conservation areas, and users of highly valued public open spaces whose primary purpose is enjoyment of the landscape/townscape.
Moderate	Receptors of moderate susceptibility to change, located in areas of moderate townscape value. Includes locally listed heritage assets, residential areas, and users of public rights of way and recreational spaces.
Low	Receptors of low susceptibility to change, located in areas of lower townscape value. Includes users of transport corridors, commercial and industrial areas, and locations where views are transient or incidental to the receptor's primary activity.
Negligible	Receptors with very limited susceptibility to change and/or located in areas of negligible townscape value.

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Magnitude of change/impact

10.2.33 The criteria used to assess how far an effect deviates from the baseline condition are described in Table 10-2.

Table 10-2 Criteria for determining magnitude of change/impact

Magnitude	Criteria
Large	Total loss of or major alteration to key elements, features or characteristics of the townscape or view. The proposed development would form a dominant and immediately apparent feature.
Medium	Partial loss or alteration to one or more key elements, features or characteristics of the townscape or view. The proposed development would form a clearly visible and recognisable new element.
Small	Minor loss or alteration to one or more key elements, features or characteristics of the townscape or view. The proposed development would form a visible but not prominent element.
Negligible	Very minor loss or alteration to key elements, features or characteristics of the townscape or view. The proposed development would be barely perceptible or not visible.

Significance evaluation

10.2.34 The significance of a potential effect is derived by considering both the sensitivity of the receptor and the magnitude of change, as demonstrated in Table 10-3.

Table 10-3 Matrix for determining effect significance

		Magnitude of change/impact			
		Large	**Medium**	**Small**	**Negligible**
Receptor sensitivity	**High**	Major	Major	Moderate/Minor	Negligible
	Moderate	Major	Moderate	Minor	Negligible
	Low	Moderate/Minor	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

10.2.35 Note that moderate and major effects are considered to be 'significant' in EIA terms.

10.2.36 Effects are described according to the following characteristics:

- Beneficial or adverse;
- Direct or indirect/secondary;
- Permanent or temporary/reversible;
- Short term (up to 2 years), medium term (2–10 years) or long term (10+ years); and
- Significant (major or moderate) or not significant (negligible or minor).

10.2.37 The nature of effect describes whether the effect is beneficial, adverse or neutral. Beneficial effects are those that contribute positively to townscape character or visual amenity. Adverse effects are those that detract from townscape character or visual amenity. Neutral effects are those where the change neither enhances nor detracts, or where beneficial and adverse aspects are balanced.

Assessment limitations

10.2.38 The assessment is based on baseline photography captured in March 2026 (with original survey photography from January 2024). The baseline represents winter conditions when deciduous vegetation is without leaf cover, representing the worst-case scenario for visual effects as screening by vegetation is at its minimum. In summer conditions, increased vegetation cover would provide additional screening and therefore reduced visual effects at several viewpoints.

10.2.39 The assessment considers the proposed development as designed at the date of the planning application. Any subsequent design changes would require reassessment. The AVRs represent the proposed development to Type 4 standard (photomontage render) which provides the most accurate representation of the completed development but remains a visualisation tool rather than a photograph of the built scheme.

10.2.40 The assessment does not include a detailed assessment of effects on the significance of designated heritage assets, which is addressed separately in Chapter 9, Built Heritage.

10.3 LEGISLATION AND POLICY

10.3.1 A full review of planning policy and guidance relevant to this assessment is provided in Appendix 10.1. The key documents of relevance are summarised below.

National policy and guidance

10.3.2 National Planning Policy Framework (Ministry of Housing, Communities and Local Government (MHCLG), December 2024, amended February 2025): Section 12 (Achieving well-designed places) and Section 16 (Conserving and enhancing the historic environment) are of particular relevance. Paragraph 124 gives substantial weight to the value of using suitable brownfield land within settlements for homes.

10.3.3 National Design Guide (MHCLG, January 2021): identifies the importance of landscape setting, context and local identity in achieving well-designed places. A draft replacement, the Design and Placemaking Planning Practice Guidance, was published for consultation in January 2026 (consultation closed 10 March 2026).

Regional policy and guidance

10.3.4 Places for Everyone (PfE), Joint Development Plan Document, adopted 21 March 2024: establishes the growth potential of the Core Growth Area through higher density development. Policy JP-H4 specifies a minimum density of 200 dwellings per hectare for the city centre.

Local policy and guidance

10.3.5 Manchester Core Strategy (2012): Policies CC6 (City Centre High Density Development), CC8 (Change and Renewal), CC9 (Design and Heritage), EN1 (Design Principles and Strategic Character Areas), EN2 (Tall Buildings) and EN3 (Heritage) are of particular relevance.

10.3.6 Great Ducie Street SRF (Deloitte, November 2018): the site is within the Park Place character area where mixed-use development is supported with graduated building heights. A key public space is identified at the head of Park Place.

10.3.7 Former Boddingtons Brewery Site SRF (Deloitte, April 2015; Addendum June 2019): the SRF area is located immediately to the south-west of the site on the opposite side of Dutton Street.

10.3.8 Strangeways and Cambridge SRF (Manchester City Council and Salford City Council, Consultation Draft, February 2025): identifies the Dutton Street area as a natural extension of the city centre and confirms that indicative building heights are not a cap or a target.

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10.3.9 Draft Manchester Local Plan (Regulation 18 Consultation, September 2025): proposes expanding the City Centre boundary to include the Great Ducie Street area and identifies the area as suitable for tall buildings close to the Inner Ring Road. As an emerging plan at Regulation 18 stage it carries limited weight.

10.4 BASELINE CONDITIONS

Current baseline (2026)

Townscape character assessment

National townscape character

10.4.1 The site is located within National Character Area (NCA) 55: Manchester Conurbation. It is described as dense urban and industrial development, commercial, financial, retail and administrative centres, commuter suburbs and housing, interspersed with a network of green infrastructure. The conurbation is centred on low hills, crossed by several river valleys that thread through the urban fabric.

Local townscape character

10.4.2 At the local level, a strategic level characterisation study of Manchester was completed in support of the Core Strategy.

10.4.3 The Study takes a broad-brush approach and provides eleven over-lapping areas ('strategic character areas') of varying size which can each be viewed as having a distinctive character. The site is located within the City Centre Character Area.

10.4.4 The study characterises the City Centre as a townscape of contrasts. The primary pre-Victorian legacy is the historic core's street pattern and its radiating routes, while the core itself consists largely of Victorian and subsequent developments. Intersecting street grids have significantly shaped the built environment, as well as the city centre's overall legibility and permeability. Although architectural scale varies considerably, the core is predominantly defined by taller, larger-scale structures.

10.4.5 The urban form surrounding the core illustrates the city's ongoing economic, social, and physical evolution. This transitional zone features a diverse mix of building ages, types, and conditions. It is generally characterised by lower-scale developments, lower density, and a greater sense of space resulting from tracts of cleared, previously developed land. As the core expands outwards, this non-core area is seeing a growing amount of contemporary residential development.

10.4.6 Within the core, the overriding character is defined by a dense mix of non-industrial commercial spaces and residential apartments. Beyond the core, overall activity levels decrease and land uses become less integrated, incorporating industrial elements alongside expanding modern residential projects.

10.4.7 Regarding the evidence base for the Greater Manchester Combined Local Plan, a 2018 Landscape Character Assessment was conducted to evaluate regional landscape sensitivity. However, like the majority of the Manchester City Local Authority area, the site does not fall within any designated Landscape Character Type or Area.

Description of the site and surroundings

10.4.8 The site is located at the junction of Robert Street and Dutton Street, within the Park Place character area of the Great Ducie Street SRF. It is situated north of Victoria train station and the Inner Ring Road, west of Cheetham Hill Road, and close to the prison estate to the north-west.

10.4.9 The site is bounded by Robert Street to the north-east, Dutton Street to the south-west, and the wholesale distribution unit to the north. The total site area is approximately 0.3ha. The site currently serves as a car park and indoor paddle court, comprising low-rise commercial structures of limited architectural quality.

10.4.10 The surrounding area is undergoing substantial transformation in line with the Great Ducie Street SRF, the Former Boddingtons Brewery SRF, and the wider Strangeways and Cambridge SRF objectives. On the opposing side of Dutton Street, the Old Brewery Gardens development (12 to 26 storeys) and the Former Boddingtons Brewery development (17 to 27 storeys) are at various stages of construction and completion, with the Old Brewery Gardens development substantially complete and occupied. These major residential schemes, predominantly finished in brickwork, are fundamentally altering the character of the immediate area from its former low-rise commercial and industrial character towards a higher density residential neighbourhood.

10.4.11 The surrounding architectural character is in a state of transition. Following post-industrial decline, the area was characterised by repurposed red-brick buildings and metal-clad industrial units, mostly low-rise at 3 to 4 storeys, with building heights gradually increasing toward the south and the city centre core. This industrial heritage remains evident in the warehouse buildings along Park Place and the textile and wholesale businesses that continue to operate in the wider Strangeways area. However, the baseline has shifted substantially with the Boddingtons construction, resulting in an emerging character that is approximately equal parts historic industrial fabric and new high-density residential development.

10.4.12 To the north-west, the Grade II listed HMP Manchester (Strangeways) is a notable and prominent feature of the area. Designed by Alfred Waterhouse in Romanesque and French Gothic styles, the original prison and its distinctive ventilation tower form key visual landmarks. The prison wall along Southall Street gives a distinctive character to this edge of the Park Place area, providing an imposing boundary between the SRF area and the prison estate.

10.4.13 To the east, Cheetham Hill Road (A665) is a major arterial route into the city centre, lined with a mix of commercial and retail uses. The Grade II listed former Synagogue on Cheetham Hill Road sits within the Park Place character area. Beyond Cheetham Hill Road to the east is the Green Quarter, a primarily residential area with contemporary mid-to-high rise buildings.

10.4.14 To the south, the Manchester College City Campus occupies the western portion of the former Boddingtons Brewery site. Beyond the Inner Ring Road (Trinity Way/New Bridge Street) lies the AO Arena, Victoria Station and the city centre core. The Inner Ring Road forms a significant physical and perceptual barrier between the site and the established city centre, although the emerging Draft Local Plan (September 2025) proposes extending the city centre boundary northward to include the Great Ducie Street area.

10.4.15 The rectilinear street grid of the historic warehouse district remains clearly legible within the Park Place character area and is identified in the Great Ducie Street SRF as a significant contributor to the character of the area. Robert Street, Dutton Street and Park Street define the principal routes, with the narrower Carnarvon Street and Cheviot Street providing a finer grain within the blocks.

10.4.16 The area displays a variety of building typologies, materials and styles. Nineteenth century brick-built warehouse buildings along Park Place are flanked by more recent infill development. The low-rise commercial units that characterise much of the remaining pre-development townscape are generally of poor quality and do not contribute positively to the character of the area. A number of noteworthy historic buildings are present, including the Dutton Hotel on Park Street and several former industrial buildings of local interest. Where new development has occurred, the use of brick facades has helped to establish a degree of visual continuity with the area's industrial heritage.

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10.4.17 The area currently lacks a unified identity, being situated at the meeting point of various characteristically different districts – the established Strangeways commercial area to the north, the emerging Boddingtons residential neighbourhood to the south, the Green Quarter to the east, and HMP Manchester to the west. This transitional quality is, however, consistent with the SRF vision for the area as a place of managed change and intensification.

10.4.18 Cultural venues within the vicinity of the site, including the White Hotel, Hidden and the Derbyshire Brewery Arms Hotel contribute to the area's identity within the nighttime economy and provide cultural anchors within the evolving townscape.

Future baseline (2028)

10.4.19 The future baseline year for the assessment is 2028, representing the anticipated operational year. In the absence of the proposed development, the site would remain in its current condition. However, the surrounding area would continue to change as the Boddingtons developments reach completion, further establishing the high-density residential character on Dutton Street. Other consented schemes within the wider area, including 1 Park Place and 1 Lord Street, may also be progressing. The character of the Park Place area would therefore continue its transition from low-rise commercial/industrial to a mixed character of retained heritage buildings and new residential development, albeit without the contribution of the proposed development to this process.

Identified receptors and their sensitivity

10.4.20 The assessment identifies both townscape receptors and visual receptors. Visual receptors have been identified through ZTV analysis, mapping of heritage assets and conservation areas, and site visits. The 15 representative viewpoints are set out in Appendix 10.2. Table 10-4 sets out the identified visual receptors and their sensitivity.

Table 10-4 Identified visual receptors and their sensitivity

VP	Receptor	Sensitivity	Justification
VP01	Users of Sandhills Park	Low	Park users at 1.2km distance; elevated position but views heavily screened by intervening development and vegetation; park feels removed from city centre.
VP02	Users of Barney's Steps PROW	Low	PROW users at 1km; elevated but isolated route; transient views; limited amenity value of immediate surroundings.
VP03	Users of Cheetham Hill Rd (Jewish Museum)	Low	Motorists and pedestrians on arterial route at 660m; transient views; visually cluttered commercial streetscape.
VP04	Users of Cheetham Hill Rd (St Chad's)	Low	Motorists and pedestrians at 330m; proximity to Grade II listed St Chad's Church elevates susceptibility; transitional commercial character.
VP05	Users of Robert Street (local context)	Moderate	Local residents and workers at 85m; close-range views along residential street; evolving character with Boddingtons precedent.
VP06	Users of Dutton Street (local context)	Moderate	Local residents and workers at 140m; close-range views along principal SRF route; transitional character.
VP07	Users of Ring Road interchange	Low	Motorists and pedestrians at busy interchange at 250m; transient views dominated by traffic infrastructure.
VP08	Users of Dantzic Street walkway	Low	Pedestrians at 540m; channelled view between contemporary office buildings; corporate city centre context.
VP09	Users of Cathedral Gardens	Moderate	Users of valued civic amenity space at 600m; heritage setting with Chetham's Library (Grade I) and National Football Museum; high susceptibility.
VP10	Users of Victoria St / Cathedral	Moderate	Pedestrians in heritage setting at 650m; Manchester Cathedral (Grade I) and Chetham's visible; high susceptibility.
VP11	Users of Trinity Way bridge	Low	Motorists and pedestrians at 440m; transient views from busy dual carriageway; dominated by road infrastructure.
VP12	Users of Irwell footbridge (Salford)	Moderate	Pedestrian bridge users at 510m; scenic river corridor with mature trees; valued green setting within urban context.
VP13	Users of Julia Street / Clarence Hat Works	Moderate	Local users at 125m; close-range view illustrating transitional character; lower elevation looking uphill.
VP14	Users of Sherborne St / HMP Manchester	Low	Local users at 365m; elevated position; dominated by Grade II listed HMP Manchester; prison forms principal visual feature.
VP15	Users of Broughton Bridge / River Irwell	Moderate	Footpath users at 0.97km; scenic river corridor; long-distance panoramic view towards city skyline.

10.5 DEMOLITION AND CONSTRUCTION EFFECTS

Relevant aspects of the proposed development

10.5.1 The construction programme is anticipated to comprise site mobilisation including demolition and clearance from April 2027, with main construction starting July 2027 and completion by May 2028. Residents are anticipated to start moving in from July/August 2028 following Building Safety Regulator Gateway 3 checks.

10.5.2 Construction activities would include demolition of existing low-rise structures, site clearance, piling and foundation works, erection of the reinforced concrete frame, external cladding and fit-out. Construction plant including tower cranes, concrete pumps and hoists would be visible during the construction period. Temporary hoardings and site welfare facilities would be present at ground level.

Potential effects of the proposed development and their significance

Townscape character effects during construction

10.5.3 The construction of the proposed development on a site within the Great Ducie Street SRF area will involve procedures and processes that are typical of large-scale construction sites. The surrounding area is already subject to substantial ongoing construction activity, most immediately the adjacent Boddingtons developments on Dutton Street. Residents and users of the area are accustomed to construction activity as part of the ongoing regeneration programme.

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10.5.4 The construction phase will result in a temporary change to the townscape character of the immediate area through the presence of cranes, scaffolding, hoardings and construction traffic. This is consistent with the existing baseline condition in which construction activity is already a defining characteristic of the area. The magnitude of change is assessed as small. Given the low sensitivity of the site itself (comprising underutilised land of limited architectural quality), the effect is assessed as minor adverse (direct, temporary, short-term, reversible, not significant).

Visual effects during construction

10.5.5 Construction activity would be visible from the same receptors identified for the operational assessment, with the degree of visibility varying with distance and the extent of intervening screening. At close range (VP05, VP06, VP13), construction plant and activity would be clearly visible. At medium range (VP04, VP07, VP14), construction cranes would be visible above the skyline. At longer range (VP01, VP02, VP03, VP08–VP12, VP15), construction activity would be seen in the context of existing construction cranes and activity already present in the baseline.

10.5.6 Since the completed proposed development represents the worst-case assessment in terms of permanent visual change, and the construction effects will gradually change from negligible in the baseline position to the operational effects described below, the interim construction effects on visual receptors are assessed as being no greater than the operational effects in all cases, and temporary in nature. The effect on visual receptors during construction is assessed as minor adverse or less (direct, temporary, short-term, reversible, not significant) for all receptors.

Climate change and adaptation

10.5.7 Climate change is not anticipated to materially alter the townscape and visual effects during the construction phase. Seasonal variations in weather conditions may affect the timing of construction activities but would not change the nature, scale or significance of construction-related visual effects.

Summary of effects

Table 10-5 Summary of effects during construction

Receptor	Sensitivity	Description of effect	Magnitude	Effect significance
Townscape character of Park Place area	Low	Temporary change through presence of cranes, scaffolding, hoardings and construction traffic	Small adverse	Minor adverse, direct, temporary, short-term, reversible, not significant
Visual receptors (all VPs)	Low to Moderate	Temporary visibility of construction activity, plant and cranes	Small adverse	Minor adverse or less, direct, temporary, short-term, reversible, not significant

Supplementary mitigation measures

10.5.8 There are no significant adverse TVIA effects identified for the proposed development that require mitigation during the demolition and construction phase. However, construction management measures will help to mitigate effects, including site hoardings, dust suppression and construction traffic management to be secured through a Construction Environmental Management Plan (CEMP).

Table 10-6 Summary of construction supplementary mitigation measures

Adverse effect	Mitigation measure	Responsibility	Timing
Temporary townscape and visual effects	CEMP including site hoardings, dust suppression and construction traffic management	Contractor	During construction

10.6 OPERATIONAL EFFECTS

Relevant aspects of the proposed development and designed-in mitigation

10.6.1 The proposed development has been designed to respond to its context and the SRF design principles for the Park Place character area. Key designed-in mitigation measures are set out below.

10.6.2 The proposed development comprises the demolition of existing structures and erection of a part 10, part 11, part 14 and part 20 storey residential building comprising 189 units with associated residents' amenity space, servicing and public realm.

10.6.3 The building is arranged as a series of stepped volumes that respond to the surrounding context. The tallest element, at 20 storeys, anchors the prominent corner at the junction of Robert Street and Dutton Street, aligning with the emerging Boddingtons development context to the south. A 14-storey element addresses the main body of the Dutton Street frontage, stepping down to an 11-storey rear block to reduce visual impact to the north. A 10-storey volume addresses the new public square, mediating between the taller elements and the lower-scale warehouse district beyond.

10.6.4 A key feature of the proposals is the creation of a new landscaped public square at the junction of Robert Street and Dutton Street. The building line has been deliberately set back from Dutton Street to create this space, which forms a key node within the wider Great Ducie Street SRF masterplan, strengthening connectivity and offering a clear sense of place. The public square includes a neighbourhood forest garden with a café/plant kiosk.

10.6.5 Townhouses at ground floor level activate the Robert Street frontage, each accessed via individual front doors with defensible front gardens providing a layer of separation from the pavement. This animates the streetscape with activity and contributes to the vitality of the emerging neighbourhood.

10.6.6 The main entrance is located on the corner, demarcated by a double-height entrance bay with brick columns and cast stone plinths. Residents' amenity zone at ground floor animates the space adjacent to the new public square, creating an active frontage at this prominent junction.

10.6.7 The material palette references the predominant materials and tones of neighbouring historic buildings. The main facade is composed of red brickwork and cast stone elements, with the tones of red referencing the historic fabric of the area. The use of brick as the primary material continues the site's association with masonry, reflecting the historic Fancy Brick Manufactory formerly sited nearby. The facade is articulated through a stepped composition, with deep recesses and overhangs providing depth and interest. Secondary elements include recessed brickwork, aluminium panels, architectural metalwork and fluted ceramic panels.

10.6.8 The chamfered corner of the tallest block introduces an architectural gesture that softens the overall mass and enhances townscape interest. The proportions of the tall building have been designed in both plan and elevation to achieve a slender appearance.

10.6.9 Landscaped roof terraces are provided at levels 10 and 11, including a communal kitchen hub, high quality planting, biodiversity areas and communal seating areas. These stepped terraces create opportunities for usable amenity space while reducing the perceived bulk of the building.

10.6.10 Ancillary accommodation including plant rooms, substation and refuse stores are deliberately located on the north and west elevations, maximising the active street frontage to Robert Street and Dutton Street.

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Potential effects of the proposed development and their significance

Townscape character effects

10.6.11 An important consideration in the appraisal of the potential impact of the proposals on the townscape character is the designation of the site within the Great Ducie Street SRF Park Place character area, the adjacent Boddingtons SRF developments currently under construction, and the overarching framework provided by the Strangeways and Cambridge SRF (February 2025). The ongoing construction and investment represent a continued commitment to regenerating this part of Manchester.

10.6.12 The existing townscape is in a state of active transition between its former low-rise commercial and industrial character and the emerging high-density residential neighbourhood envisaged by the SRFs. The site itself currently comprises underutilised land and structures that do not contribute positively to the townscape. The character of the immediate urban grain is derived from the rectilinear street grid, the proximity to Dutton Street and Robert Street, and the area's evolving relationship with the Boddingtons development to the south and the established warehouse district to the north.

10.6.13 The site is an appropriate and suitable site for development in the townscape due to its existing character and set within the context of the surrounding SRFs. The Great Ducie Street SRF identifies the Park Place area for mixed-use development with graduated building heights, and the site occupies a prominent position at the junction of Robert Street and Dutton Street where the SRF supports landmark development of scale.

10.6.14 The proposals are an opportunity to contribute positively to the townscape in this location. The four-tier stepped massing responds to the SRF principle of graduating scale between the warehouse district to the north and the taller Boddingtons development to the south. The creation of a new public square at the Robert Street/Dutton Street junction directly delivers the key public space identified in the Great Ducie Street SRF for the Park Place character area. The townhouse frontage along Robert Street activates the streetscape and reinforces the historic street pattern. The material palette of red brick and cast stone references the local heritage context.

10.6.15 The proposed development will read as part of the wider programme of regeneration and intensification that is already underway in this area, consistent with the adopted and emerging policy framework. While the tallest element at 20 storeys exceeds the indicative SRF height range for this part of the Park Place area (6–15 storeys), this is consistent with the approach of the consented and under-construction Boddingtons schemes which exceed their own SRF parameters by approximately five storeys. The Strangeways and Cambridge SRF (February 2025) explicitly states that indicative building heights are not a cap or a target, and the emerging Draft Manchester Local Plan identifies the area as suitable for tall buildings close to the Inner Ring Road.

10.6.16 The townscape sensitivity of the site is assessed as low (comprising underutilised land of limited architectural quality in an area undergoing planned transformation). The magnitude of townscape change is assessed as medium (a clearly visible new element that partially alters the character of the area). The effect is assessed as minor beneficial (direct, permanent, long-term, not significant).

Visual effects

10.6.17 The baseline views were recorded on 3rd March 2026 and 11th March 2026 by Richard Bennett, RBMP Ltd, a Chartered Landscape Architect.

10.6.18 This section looks at the baseline experience for the potentially sensitive receptors and the potential effects on their visual amenity. Visual effects relate to changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes and to the overall effects with respect to visual amenity.

10.6.19 The views are set out in Appendix 10.2, and are summarised as:

- Views from elevated ground to the north-east (Sandhills Park and Barney's Steps);
- Views from Cheetham Hill Road looking south and west;
- Views from the immediate local context of the site (Robert Street, Dutton Street, Julia Street);
- Views from the road interchange at Cheetham Hill Road, Trinity Way and Inner Ring Road;
- Views from the city centre looking north (Dantzic Street, Cathedral Gardens, Victoria Street/Cathedral);
- Views from the River Irwell corridor and bridges (Trinity Way bridge, Irwell footbridge, Broughton Bridge); and
- Views from north of the site over HMP Manchester.

Sensitive Visual Receptors

Users of Sandhills Park to East of Site with Views South over the City Centre from Higher Ground

10.6.20 Represented by Viewpoint VP01. Distance from site: 1.2km.

10.6.21 From this elevated position within Sandhills Park, views extend southward across overgrown vegetation and disused railway land towards the city centre skyline. Note the site clearance that has occurred immediately adjacent to the site since the original baseline photography was captured in January 2024. The skyline comprises a variety of building heights and architectural styles, perceived as belonging to the city centre zone. The HMP Manchester ventilation tower is visible to the right of the view. The park itself feels removed from the surrounding urban landscape, offering a connection to the natural environment that contrasts with the city centre. Mature vegetation within the park partially filters views. The overall experience is of an urban-fringe position set back from the core city zone.

10.6.22 These receptors have a low sensitivity to the proposals.

Potential Visual Effects

10.6.23 The site is substantially screened by the existing intervening vegetation and developments along Cheetham Hill Road. The Grade II listed ventilation tower at HMP Manchester is visible but there is clear separation between the site and tower. The cumulative AVR indicates that towers at elevated positions, particularly 1 Park Place and 1 Lord Street, would be more prominent additions to the skyline from this location. Future development within the Red Bank Neighbourhood will further increase screening of the site.

10.6.24 The magnitude of change is assessed as negligible. These receptors will receive a negligible magnitude of change on their visual amenity. This effect is not significant. The nature of the effect is neutral.

Users of PROW between Collyhurst Road and Collingham Street known as Barney's Steps East of Site with Views South over the City Centre from Higher Ground

10.6.25 Represented by Viewpoint VP02. Distance from site: 1km.

10.6.26 From this elevated public right of way across the now disused railway lines, views extend south over a brick retaining wall towards the city centre skyline. The foreground is characterised by mature deciduous trees currently without canopies and the somewhat isolated position of the route, with evidence of graffiti and litter. Beyond, the city centre skyline is visible as a general mass of varying heights, with taller residential and commercial buildings forming the established skyline. Construction cranes are visible, indicating ongoing development activity. The viewpoint provides a broad panorama of the city fringe and city centre skyline from an elevated position on the rising ground to the north-east.

10.6.27 These receptors have a low sensitivity to the proposals.

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Potential Visual Effects

10.6.28 The AVR indicates that the proposed development nestles in with the currently under-construction Boddingtons site, reading as part of the emerging cluster of development in this area. The taller surrounding buildings are more prominent and there is limited change to the skyline as a result of the proposed development. Further development in and around the Great Ducie Street SRF area will contribute to additional screening over time. The cumulative AVR shows that towers at elevated positions, particularly 1 Park Place and 1 Lord Street, would be prominent additions to the skyline. Future development within the Red Bank Neighbourhood will further increase screening. The Grade II listed ventilation tower at HMP Manchester is visible but there is clear separation between the site and tower.

10.6.29 These receptors will receive a negligible magnitude of change on their visual amenity as a result of the proposed development. This effect is not significant. The nature of the effect is neutral.

Users of Cheetham Hill Road Adjacent to Manchester Jewish Museum Looking South Towards the site

10.6.30 Represented by Viewpoint VP03. Distance from site: 660m.

10.6.31 From this position on Cheetham Hill Road, the view south is characterised by the busy arterial road corridor lined with low-rise commercial frontages including retail, automotive and wholesale businesses. The varied building types, materials and signage create a visually cluttered streetscape typical of this part of Cheetham Hill Road. The city centre skyline is visible above the roofline, with taller buildings forming a general massing in the distance. Construction cranes are visible above the skyline. The primary receptors are motorists and pedestrians travelling along this major arterial route into the city centre.

10.6.32 These receptors have a low sensitivity to the proposals.

Potential Visual Effects

10.6.33 The AVR indicates that the proposed development is absorbed within the existing and emerging massing of the Boddingtons development. Only part of the taller element is visible above the intervening roofline, sitting in front of the taller Boddingtons tower. There is no material change to the skyline as experienced from this viewpoint. Further development in and around the Great Ducie Street SRF area will contribute to additional massing in this sightline over time.

10.6.34 These receptors will receive a negligible magnitude of change on their visual amenity as a result of the proposed development. This effect is not significant. The nature of the effect is neutral.

Users of Cheetham Hill Road Adjacent to St Chad's Roman Catholic Church, Looking West Towards the site at the Corner of St Chad's Street

10.6.35 Represented by Viewpoint VP04. Distance from site: 330m.

10.6.36 From the junction of Cheetham Hill Road and St Chad's Street, the view west is framed by low-rise commercial properties with varying signage. Beyond the immediate commercial frontage, the Boddingtons development is visible as a taller brick element rising above the established low-rise built form. The city centre skyline is visible in the distance with construction cranes indicating ongoing development. The view represents the transitional character between the Cheetham Hill commercial strip and the emerging development context to the west. The Grade II listed Church of St Chad's is located to the left and behind the viewpoint.

10.6.37 These receptors have a low sensitivity to the proposals.

Potential Visual Effects

10.6.38 The AVR indicates that the proposed development is visible as a taller element in the view, but it sits within the emerging cluster of buildings associated with the Boddingtons site, reading as part of this group rather than as an isolated new element. Although the site falls within a different SRF character area (Park Place rather than the former Boddingtons Brewery SRF area), the proximity of the two areas means the development is perceived in the context of the adjacent Boddingtons massing. The cumulative AVR shows that 1 Park Place is a much taller element in the view, appearing at a higher elevation on Cheetham Hill Road.

10.6.39 These receptors will receive a small magnitude of change on their visual amenity as a result of the proposed development. This effect is not significant. The nature of the effect is neutral.

Users Within the Local Context of the site Looking South Along Robert Street, from the Junction with Carnarvon Street

10.6.40 Represented by Viewpoint VP05. Distance from site: 85m.

10.6.41 This is a close-range view looking south along Robert Street towards the site. The immediate foreground is characterised by low-rise industrial and commercial buildings including distribution units with metal cladding, palisade fencing and gates. The Boddingtons development (Old Brewery Gardens) is the dominant feature in the view, its tall brick-clad residential tower rising above the surrounding low-rise urban fabric. The contrast between the existing low-rise commercial/industrial character and the recently constructed tall residential development is pronounced. The street itself has a utilitarian character with limited landscaping or public realm quality. The site is immediately adjacent to this viewpoint.

10.6.42 These receptors have a moderate sensitivity to the proposals.

Potential Visual Effects

10.6.43 The AVR shows the proposed development appearing as a substantial brick-clad building rising behind and to the right of the existing Boddingtons tower, extending the residential massing further along Robert Street. The stepped profile of the building is clearly legible, with the taller element stepping down through the intermediate tiers. The warm brick tone and regular fenestration pattern read as a continuation of the emerging residential scale established by the Boddingtons development rather than an isolated new element. The low-rise industrial buildings in the immediate foreground remain unchanged, so the contrast between the existing low-rise foreground and the taller development backdrop becomes more pronounced. However, this contrast is already a defining characteristic of the baseline view following the completion of the initial Boddingtons development phase.

10.6.44 These receptors will receive a small magnitude of change on their visual amenity as a result of the proposed development. The development is clearly visible within the view, but it is read alongside the already-established Boddingtons massing which has set the precedent for taller development on this street. This effect is not significant. The nature of the effect is direct, permanent and beneficial, contributing to the regeneration of the streetscape and the delivery of the SRF vision for the Park Place character area.

Users Within the Local Context of the site Looking North Along Dutton Street, Close to the Junction with Trinity Way

10.6.45 Represented by Viewpoint VP06. Distance from site: 140m.

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10.6.46 From this position looking north along Dutton Street, the Boddingtons development dominates the left side of the view, its tall brick facade establishing the new scale of development on this frontage. The town-house row at the base of the building with private entrances and associated landscaping, provide an active frontage mirroring the existing heritage assets on the road. Looking north beyond the Boddingtons buildings, the view reveals a mix of lower-rise buildings, surface car parking, and the remnants of the pre-development townscape. The street has a transitional quality, with the established tall residential development on one side and the lower-rise, fragmented townscape of the Park Place area on the other. The site is located on the right-hand side of the view, beyond the immediate foreground. The HMP Manchester ventilation tower is visible to the right of the view.

10.6.47 These receptors have a moderate sensitivity to the proposals.

Potential Visual Effects

10.6.48 The AVR shows the proposed development appearing as a brick-clad building visible above the existing low-rise gabled buildings and surface car parking in the centre of the view, terminating the vista looking north along Dutton Street, and visible in front of the distant HMP Manchester complex. The stepped massing is clearly legible, with the taller element to the left stepping down to the right. The regular fenestration pattern and warm brick tone are visible, and the building reads as a deliberate focal point within the view. The Boddingtons building on the left provides scale context; the proposed development sits comfortably alongside it in terms of material palette but is set further back along the street. The existing low-rise buildings in the middle ground remain, so the development reads as rising behind them rather than replacing them at street level.

10.6.49 These receptors will receive a small magnitude of change on their visual amenity as a result of the proposed development. The development is clearly visible within the view, but it is read alongside the already-established Boddingtons massing which has set the precedent for taller development on Dutton Street. This effect is not significant. The nature of the effect is direct, permanent and beneficial, providing a landmark building that contributes to the definition of the streetscape and the delivery of the SRF vision.

Users of the Road Islands Crossing the Road Interchange Junction with Cheetham Hill Road, Trinity Way and Inner Ring Road

10.6.50 Represented by Viewpoint VP07. Distance from site: 250m.

10.6.51 This viewpoint is located at a busy traffic interchange where Cheetham Hill Road meets Trinity Way and the Inner Ring Road. The view is dominated by traffic infrastructure – signal-controlled junctions, box junctions, street lighting and signage. The Boddingtons development is visible to the left, with its brick residential towers providing a strong built edge. To the right, the Steven Charles Snooker Centre and a stone-fronted building sit at lower level. Beyond the immediate junction, the view through towards the site is partially available above the lower-rise buildings. The receptors here are primarily pedestrians crossing at this complex junction and motorists navigating the interchange.

10.6.52 These receptors have a low sensitivity to the proposals.

Potential Visual Effects

10.6.53 The AVR shows the proposed development appearing as a brick-clad building rising above and behind the snooker hall, filling what was previously open sky in the gap between the Boddingtons buildings on the left and the stone-fronted building on the right. The stepped profile is visible, with the taller element to the left stepping down to the right. At street level the snooker hall screens the lower portions, but the upper storeys are visible above the roofline. The building reads as a natural extension of the brick residential massing already established by the Boddingtons development, closing the gap in the skyline and creating a more continuous built edge when viewed from this junction. The material tone complements the Boddingtons palette.

10.6.54 These receptors will receive a small magnitude of change on their visual amenity as a result of the proposed development. The development is visible and adds to the skyline, but it is perceived as part of the wider emerging massing rather than an isolated new element, and the primary visual experience at this junction remains dominated by the traffic infrastructure and the immediate built form. This effect is not significant. The nature of the effect is direct, permanent and beneficial.

Users at the Pedestrianised Dantzic Street Walkway Leading from Inner Ring Road, Adjacent to the Listed New Century Hall Looking North-West Towards the site Through the Gap Between 4 Angel Square and New Victoria

10.6.55 Represented by Viewpoint VP08. Distance from site: 540m.

10.6.56 From this pedestrianised walkway, the view is channelled north-west between the tall contemporary buildings of 4 Angel Square and New Victoria. These substantial office buildings frame the view with their glazed and concrete facades, creating a strongly urban, corporate character. Through the gap between the buildings, views open towards the Inner Ring Road and beyond. The arena multi-storey car park and the inner ring road infrastructure are visible in the middle ground. The viewpoint represents a contemporary city centre context where the built form is at a larger scale and more recent than the site's immediate surroundings.

10.6.57 These receptors have a low sensitivity to the proposals.

Potential Visual Effects

10.6.58 There is some visibility of the proposed development through the gap between the Angel Square and New Victoria buildings, which increases as the user walks west along the Inner Ring Road. At this location, at the road-crossing into the pedestrianised area around New Century Hall, the low-level distance view is mostly compromised by the Boddingtons site, but the skyline is clearly visible through between the buildings. The proposed development reads as a distant element within this framed view, partially screened by the intervening Boddingtons massing.

10.6.59 These receptors will receive a negligible magnitude of change on their visual amenity as a result of the proposed development. This effect is not significant. The nature of the effect is neutral.

Users of Cathedral Gardens Looking North Towards the site with Chetham's Library in View

10.6.60 Represented by Viewpoint VP09. Distance from site: 600m.

10.6.61 Cathedral Gardens is a high-quality civic amenity space at the centre of Manchester's cultural quarter. The view north includes Chetham's Library (Grade I listed) and the National Football Museum within the Urbis building. The gardens are well-used as an amenity space for city-centre users, sitting on the grass and passing through the space. The backdrop to the north comprises a layered skyline of varying ages and heights, with the red brick of Chetham's prominent in the foreground. This is a valued public open space with a high concentration of designated heritage assets contributing to its character and quality.

10.6.62 These receptors have a moderate sensitivity to the proposals.

Potential Visual Effects

10.6.63 This is a sensitive viewpoint given the heritage setting. At this time of year when the trees do not have canopies, there is a slight visible section of the top corner of the proposed building behind the Stoller Hall building. However, this would be substantially screened by the trees when in leaf and would be largely unnoticeable unless the viewer were specifically aware of the change. The National Football Museum building already introduces a contemporary glass and brick material palette into this heritage setting. The cumulative AVR indicates that the proposed 1 Lord Street and 1 Park Place developments would be much taller elements affecting the skyline from this viewpoint.

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10.6.64 These receptors will receive a negligible magnitude of change on their visual amenity as a result of the proposed development. This effect is not significant. The nature of the effect is neutral.

Users Around the Pedestrianised Area Adjacent to Victoria Street and Manchester Cathedral Looking North Towards the site with the Cathedral and Chetham's Library in View

10.6.65 Represented by Viewpoint VP10. Distance from site: 650m.

10.6.66 From the pedestrianised area adjacent to Victoria Street, the view north includes Manchester Cathedral (Grade I listed) to the right, with its Gothic tower prominent against the sky. Chetham's Library and associated buildings are visible in the middle ground. The Embankment contemporary commercial buildings frame the left of the view. The Bee Network bike hire station occupies the foreground. The mix of heritage and contemporary buildings creates a layered townscape of considerable interest. This is a well-used pedestrian arterial network area within the city centre with strong heritage associations.

10.6.67 These receptors have a moderate sensitivity to the proposals.

Potential Visual Effects

10.6.68 The AVR indicates that the proposed development nestles in with the Boddingtons site at a lower level, reading as part of the larger development cluster. The material palette references the Boddingtons brick tones. Although the viewpoint is adjacent to the Cathedral, the new glass frontages of the Embankment building are the predominant contemporary visual materials in the view. The skyline is already affected by the AO Arena building in the middle distance. The cumulative AVR shows that 1 Park Place and 1 Lord Street would be much taller elements in the view at the higher elevation on Cheetham Hill Road, having a greater effect on the skyline than the proposed development.

10.6.69 These receptors will receive a small magnitude of change on their visual amenity as a result of the proposed development. The development reads as part of the Boddingtons cluster and the cumulative schemes have a greater skyline effect. This effect is not significant. The nature of the effect is neutral.

Users of Trinity Way at the Road Bridge Over the River Irwell, Adjacent to the Greengate Neighbourhood Looking North Towards Site from Within Salford

10.6.70 Represented by Viewpoint VP11. Distance from site: 440m.

10.6.71 From the Trinity Way road bridge over the River Irwell, the view north is dominated by the wide carriageway and road infrastructure. The HMP Manchester ventilation tower is visible in the left of the view, with construction cranes and the emerging Boddingtons and city fringe developments visible beyond. The Greengate neighbourhood of Salford is to the right. Metal-clad leisure facilities and the Manchester College campus are visible on the right. The receptors are primarily motorists and pedestrians crossing the bridge, with transitory views northward.

10.6.72 These receptors have a low sensitivity to the proposals.

Potential Visual Effects

10.6.73 The AVR indicates that the proposed development is only slightly visible behind the built Boddingtons tower, with the majority of the building screened by the intervening massing. The cumulative schemes have the greater level of visibility and have a greater effect on the skyline, with the proposed massing blocks occupying a substantial portion of the view above the road bridge. This is a busy four-lane dual carriageway where receptors are primarily focused on navigating the road environment. The Grade II listed ventilation tower at HMP Manchester is visible but there is clear separation between the site and the tower.

10.6.74 These receptors will receive a negligible magnitude of change on their visual amenity as a result of the proposed development. The development is almost entirely screened by the Boddingtons tower and the cumulative schemes are far more prominent. This effect is not significant. The nature of the effect is neutral.

Users of the Footbridge Over the River Irwell from Salford Connecting Routes from Bridgewater Site, Irwell Footpaths and Cottenham Lane Looking East Towards the site

10.6.75 Represented by Viewpoint VP12. Distance from site: 510m.

10.6.76 From this footbridge over the River Irwell, the view east is characterised by the river corridor with mature deciduous trees lining both banks, creating a scenic quality that contrasts with the surrounding urban landscape. The skyline beyond comprises a mix of historic red-brick industrial buildings in the middle ground with taller contemporary residential and commercial developments behind. Construction cranes are visible, indicating the ongoing transformation of the area. The bridge provides a pedestrian link from the Salford side and connects to the Irwell footpath network. The natural character of the river corridor, with its tree-lined banks, provides a valuable green setting within the urban context.

10.6.77 These receptors have a moderate sensitivity to the proposals.

Potential Visual Effects

10.6.78 The AVR indicates that the proposed development is visible within the skyline to the left of the existing Boddingtons tower, appearing as an addition partially screened by the intervening riverbank trees in their winter condition. The cumulative schemes dominate the change in this view, with the Boddingtons (not yet built) and Ducie Street blocks occupying a substantial portion of the skyline behind the river corridor. 1 Lord Street and 1 Park Place are also visible further to the left. The overall cumulative effect is a substantial intensification of the skyline above the river corridor, of which the proposed development is a contributor. The scenic quality of the river corridor in the foreground and middle ground remains unchanged.

10.6.79 These receptors will receive a small magnitude of change on their visual amenity as a result of the proposed development. The cumulative effect is more notable, but the proposed development itself is a contributor rather than stand-out addition within the collective change. This effect is not significant. The nature of the effect is neutral.

Users of Julia Street in the Local Proximity of the site from the Lower Elevation at the Corner of Briddon Street with Former Clarence Hat Works in View

10.6.80 Represented by Viewpoint VP13. Distance from site: 125m.

10.6.81 This close-range viewpoint from Julia Street at the corner of Briddon Street provides a clear illustration of the area's transitional character. The left side of the view is dominated by a tile and metal-clad industrial unit typical of the area's former commercial and light industrial use, with the former Clarence Hat Works building nearby. The right side is dominated by the recently constructed Boddingtons development, its tall brick-clad residential tower rising above the low-rise industrial fabric. Surface car parking occupies the middle ground. The contrast between the two sides of the view – old industrial and new residential – encapsulates the transformation underway in this area. The viewpoint is at a lower elevation than the site, looking uphill towards Dutton Street.

10.6.82 These receptors have a moderate sensitivity to the proposals.

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Potential Visual Effects

10.6.83 The AVR shows the proposed development as a prominent new element in the sightline of the view, its full stepped profile clearly legible. The tallest element rises to a height comparable, but lower than the existing Boddingtons tower to the right, with the lower tiers stepping down to the left. The brick materiality and regular fenestration pattern are clearly visible. 1 Park Place is just visible in the gap between the proposed development and the Boddingtons tower. From this lower elevation on Julia Street, looking uphill towards Dutton Street, the full height of the building is accentuated by the topography. The existing low-rise industrial foreground – the metal-clad unit, the surface car park, the Clarence Hat Works area – remains unchanged, so the contrast between the retained low-rise foreground and the new taller development backdrop is pronounced. However, this contrast is already a defining characteristic of the view following the construction of the initial Boddingtons development phase.

10.6.84 These receptors will receive a medium magnitude of change on their visual amenity as a result of the proposed development. The development is highly prominent, occupies a substantial portion of the view, and transforms the skyline above the existing low-rise buildings. This effect is significant. The nature of the effect is direct, permanent and beneficial, as the development delivers the SRF vision for the area and replaces views of underutilised land with a high-quality brick-clad building that contributes to the emerging residential neighbourhood character.

Users of Sherborne Street Looking South Towards Site Over the Top of HMP Manchester (Known as Strangeways Prison)

10.6.85 Represented by Viewpoint VP14. Distance from site: 365m.

10.6.86 From Sherborne Street, at this elevated position, the view south is dominated by HMP Manchester (Strangeways Prison). The prison buildings, including the Grade II listed main prison block and the distinctive Victorian Gothic ventilation tower designed by Alfred Waterhouse, form the principal features of the middle ground. A cleared commercial site with concrete hard-standing occupies the foreground. The skyline above the prison is relatively open, with construction cranes and the emerging city centre developments visible beyond. The prison's substantial massing and distinctive architectural character create a strong sense of enclosure and boundary between the Strangeways area to the north and the SRF area to the south.

10.6.87 These receptors have a low sensitivity to the proposals.

Potential Visual Effects

10.6.88 The AVR indicates that the proposed development is visible above the prison roofline to the left of the Grade II listed Waterhouse ventilation tower. The upper storeys of the building appear as a new brick-clad element in the skyline, partially screened by the intervening prison buildings but clearly discernible as an addition to the view. The stepped profile is legible above the roofline. While the Waterhouse tower and the listed prison buildings remain the dominant features of the view, the proposed development introduces a taller element into the backdrop that was previously open sky above the prison complex. The cumulative AVR shows that 1 Lord Street (to the far left) and the Boddingtons not yet built would also add to the skyline from this viewpoint, collectively extending the city centre skyline behind the prison.

10.6.89 These receptors will receive a small magnitude of change on their visual amenity as a result of the proposed development. The development is visible as a new element in the skyline but is read behind and secondary to the listed prison buildings, which continue to dominate the middle ground. This effect is not significant. The nature of the effect is neutral.

Users at the Footpath on Broughton Bridge Looking East Towards Site Along the River Irwell

10.6.90 Represented by Viewpoint VP15. Distance from site: 0.97km.

10.6.91 From Broughton Bridge, the view east along the River Irwell presents a scenic river corridor with grass-lined banks and mature trees in winter condition. The city centre skyline is visible in the distance, forming a broad panorama of varying building heights and styles. The HMP Manchester ventilation tower is discernible within the skyline. Contemporary residential and commercial buildings flank the right side of the view beyond the riverbank. The overall experience is of a long-distance view along the river corridor towards the city, with the natural elements of the river and its tree-lined banks providing foreground interest.

10.6.92 These receptors have a moderate sensitivity to the proposals.

Potential Visual Effects

10.6.93 The AVR shows the proposed development rendered in brick in the centre of the skyline, sitting to the right of 1 Lord Street and to the left of the Boddingtons site. Its stepped profile is discernible above the winter tree line along the river corridor, with 1 Park Place just visible behind. At this distance of nearly 1km, the proposed development reads as one component within a broader emerging cluster of tall buildings along the city fringe skyline. It is clearly visible but does not dominate, sitting comfortably within the overall massing. The cumulative schemes collectively have a substantial effect on the skyline. The scenic quality of the river corridor – the Irwell, the grass-lined banks, the mature winter trees, the footbridge – remains the primary visual experience in the foreground and middle ground.

10.6.94 These receptors will receive a small magnitude of change on their visual amenity as a result of the proposed development. The cumulative effect is more notable, but the proposed development is a contributor to the collective change. This effect is not significant. The nature of the effect is neutral to beneficial, contributing to the coherent development of the city fringe skyline without disrupting the river corridor character in the foreground.

Climate change adaptation

10.6.95 Climate change may result in longer growing seasons and changes to vegetation cover over the long term. This could marginally increase the level of vegetation screening at viewpoints where deciduous trees contribute to filtering views (e.g. VP09, VP12 and VP15), which would be beneficial. Changes to climate are not anticipated to materially alter the operational townscape and visual impact assessment conclusions.

Summary of effects

Table 10-7 Summary of effects during operation

Receptor	Sensitivity	Magnitude	Effect significance	Significant?
Townscape character	Low	Medium	Minor beneficial, direct, permanent, long-term, not significant	No
VP01: Sandhills Park	Low	Negligible	Negligible, not significant	No
VP02: Barney's Steps	Low	Negligible	Negligible, not significant	No
VP03: Cheetham Hill Rd (Jewish Museum)	Low	Negligible	Negligible, not significant	No
VP04: Cheetham Hill Rd (St Chad's)	Low	Small	Minor adverse, not significant	No
VP05: Robert Street	Moderate	Small	Minor beneficial, not significant	No
VP06: Dutton Street	Moderate	Small	Minor beneficial, not significant	No
VP07: Ring Road interchange	Low	Small	Minor beneficial, not significant	No

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Receptor	Sensitivity	Magnitude	Effect significance	Significant?
VP08: Dantzic Street	Low	Negligible	Negligible, not significant	No
VP09: Cathedral Gardens	Moderate	Negligible	Negligible, not significant	No
VP10: Victoria St / Cathedral	Moderate	Small	Minor adverse, not significant	No
VP11: Trinity Way bridge	Low	Negligible	Negligible, not significant	No
VP12: Irwell footbridge	Moderate	Small	Minor adverse, not significant	No
VP13: Julia Street	Moderate	Medium	Moderate beneficial, significant	Yes
VP14: Sherborne St / HMP	Low	Small	Minor adverse, not significant	No
VP15: Broughton Bridge	Moderate	Small	Minor adverse/beneficial, not significant	No

Supplementary mitigation measures

10.6.96 No supplementary mitigation measures are required. All mitigation is designed-in as described above.

10.7 RESIDUAL EFFECTS AND CONCLUSIONS

10.7.1 Summarised below are the residual effects of the proposed development.

Table 10-8 Summary of residual effects during demolition and construction

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
Townscape character	Temporary construction activity	Minor adverse	CEMP measures	Minor adverse, direct, temporary, short-term, reversible, not significant
Visual receptors (all VPs)	Temporary visibility of construction	Minor adverse or less	CEMP measures	Minor adverse or less, direct, temporary, short-term, reversible, not significant

Table 10-9 Summary of residual effects during operation

Receptor	Effect	Significance before mitigation	Supplementary mitigation	Residual effect significance
Townscape character	Change to townscape character	Minor beneficial	N/A – designed-in	Minor beneficial, direct, permanent, long-term, not significant
VP13: Julia Street	Prominent new element at close range	Moderate beneficial	N/A – designed-in	Moderate beneficial, direct, permanent, long-term, significant
All other VPs	Various levels of visual change	Minor adverse or less	N/A – designed-in	Minor adverse or less, direct, permanent, long-term, not significant

10.8 FUTURE MONITORING OF SIGNIFICANT RESIDUAL ENVIRONMENTAL EFFECTS

10.8.1 As there are no significant adverse residual TVIA effects identified for the proposed development, no future monitoring is identified or recommended.

10.9 REFERENCES

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10.10 GLOSSARY

Term	Definition
AVR	Accurate Visual Representation – a verified photomontage showing the proposed development within the existing view
GLVIA3	Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (Landscape Institute and IEMA, 2013)
SRF	Strategic Regeneration Framework
TVIA	Townscape and Visual Impact Assessment
ZTV	Zone of Theoretical Visibility
TGN 06/19	Technical Guidance Note 06/19: Visual Representation of Development Proposals (Landscape Institute, 2019)

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10.11 LIST OF APPENDICES (ES VOLUME II)

Reference	Title
Appendix 10.1	Planning Policy Context
Appendix 10.2	Zone of Theoretical Visibility and Viewpoints
Appendix 10.3	AVR Verified Views

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11 CUMULATIVE AND INTERACTIVE EFFECTS

11.1 INTRODUCTION

11.1.1 This chapter describes the cumulative impacts and associated effects arising for the proposed development.

11.1.2 Cumulative effects have been defined as:

11.1.3 "*The impacts on the environment which result from incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*" (Council on Environmental Quality, 1970).

11.1.4 In other words, those impacts that may be considered to generate a non-significant effect in isolation may result in a significant effect when combined with other potential non-significant environmental effects of one or more projects.

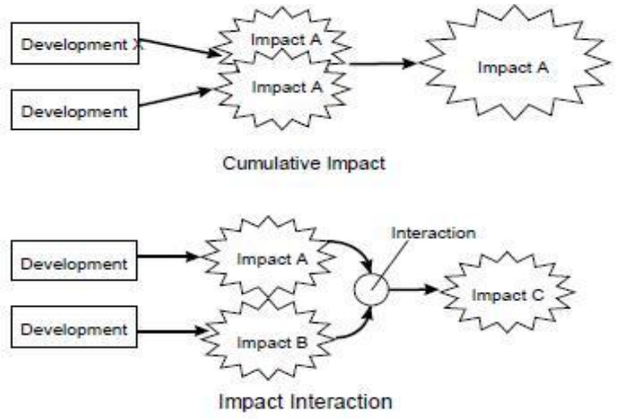


Figure 11-1 Types of cumulative effect (European Commission, 1999)

11.1.5 For the purposes of this ES, cumulative effects are addressed in the context of the following:

- Interaction effects: the accumulation of different predicted effects generated by the scheme upon the same sensitive receptors; and
- In-combination effects: the combination of predicted effects from adjacent or nearby scheme(s) together with those predicted for the scheme.

11.1.6 In terms of assessing the potential in-combination effects in relation to other relevant developments, the 2017 EIA Regulations specify that the following should be provided: "A description of the likely significant effects of the development on the environment resulting from…the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources". This ES has adhered to this position, and goes further by considering the cumulative effects of a number of planning applications submitted in proximity to the site which were under consideration through the planning process at the time of the assessment, but as yet without a planning consent. This is to account for the potential cumulative environmental effects that could occur should these schemes be granted planning permission.

11.1.7 The cumulative effects of schemes not as yet advanced to the planning application stage are not considered in this ES. This is not a requirement of the EIA regulations and is not considered to form good practice as such schemes are not fixed. The cumulative effects of those schemes, with Robert Street, will be assessed where relevant in an ES for those schemes when they submit a planning application.

11.2 INTERACTION EFFECTS

Potential receptors

11.2.1 By considering the residual effects (greater than negligible) described in each technical assessment and the receptors they act upon (Table 11-1), it is possible to identify a list of specific receptors at risk of interaction effects.

Table 11-1 Residual effects greater than negligible and the receptors upon which they act

Topic	Residual effects	Effect significance	Receptor
Demolition and construction			
Socio-economics	No residual effects greater than negligible have been identified		
Greenhouse gas emissions	Increased greenhouse gas emissions as a result of construction phase	Minor adverse	Global atmosphere
Wind microclimate	No residual effects greater than negligible have been identified		
Daylight and sunlight	N/A – see Chapter 8, Daylight and Sunlight for further details		
Built heritage	No residual effects greater than negligible have been identified		
Townscape and visual impact	Temporary change of townscape character through presence of cranes, scaffolding, hoardings and construction traffic	Minor adverse	Park Place area
	Temporary visibility of construction activity, plant and cranes	Minor adverse	All viewpoints
Operation			
Socio-economics	Provision of 189 units of different sizes and types	Minor beneficial	Local housing market
	Increase in residential population could lead to an increase in local spending	Minor beneficial	Local businesses
	Access to and provision of green and open spaces	Minor beneficial	Local residents
	Deadweight loss of up to 6 FTE jobs through the demolition of Pure Padel	Minor adverse	Existing local employees
	Demand for healthcare through GP services	Minor adverse	Local residents
Greenhouse gas emissions	Increased greenhouse gas emissions as a result of operational phase	Minor adverse	Global atmosphere
Wind microclimate	No residual effects greater than negligible have been identified		
Daylight and sunlight	Reduction in daylight levels	Minor adverse	Old Brewery Gardens Block 1
	Reduction in daylight levels	Minor adverse	Old Brewery Gardens Block 2
Built heritage	Indirect and permanent visual effect upon setting of receptor	Minor adverse	Main Prison Block of HMP Manchester (grade II)
	Indirect and permanent visual effect upon setting of receptor	Minor adverse	The Tower of HMP Manchester (grade II)
	Indirect and permanent visual effect upon setting of receptor	Minor adverse	Former Boys Prison Block of HMP Manchester (grade II)

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Topic	Residual effects	Effect significance	Receptor
Townscape and visual impact	Change to townscape character	Minor beneficial	Townscape character
	Prominent new element at close range	Moderate beneficial	Viewpoint 13: Julia Street
	Various levels of visual change	Minor adverse, or less	All viewpoints (excluding view point 13)

11.2.42 The majority of receptors highlighted in Table 11-1 are affected by single, isolated effects. Multiple residual effects upon a singular receptor are required to potentially trigger an interactive cumulative effect.

Demolition and construction

11.2.43 No construction phase interactive cumulative effects are anticipated.

Operation

11.2.44 It is anticipated that local residents will experience a minor beneficial effect from access to, and provision of, green and open spaces. However, they are also anticipated to face a minor adverse effect upon access to GP healthcare due to increased demand for services. Whilst it can be hypothesised that the assumed health benefits of access to open space have the potential to offset some of the GP demand, it is deemed negligible in the absence of data specific to the operation of the site and the local resident experience. It is therefore assumed the cumulative interaction between the identified beneficial and adverse local resident effects is negligible, and not significant.

11.2.45 No other operational phase interactive cumulative effects are anticipated.

11.3 IN-COMBINATION/CUMULATIVE SCHEME ASSESSMENT

Schemes considered

11.3.1 The in-combination cumulative schemes for assessment were agreed with MCC (see Chapter 4, Methodology for further details). The developments have been considered in the technical assessments of this ES can be seen in Figure 11-2 and are outlined in Table 11-2.

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Table 11-2 Schemes for cumulative assessment

Ref	Scheme	Application number	Description	Status
Within Manchester City Council administrative area				
1	One North Parade	144653/FO/2025	Erection of a 14-storey office building (Use Class E(c)), with commercial ground floor use (Use Class E (b)), basement, provision of cycle storage together with landscaping and public realm, highways, drainage and associated works following demolition of One North Parade and 5 Parsonage.	Validated January 2026, awaiting decision
2	1 Park Place	138302/FO/2023	Erection of a part 25 and part 15 storey residential building comprising 154 apartments (Use Class C3a) with ground floor commercial uses (Use Class E), together with associated residents amenity space, cycle parking, substation, servicing, and associated landscaping works following demolition of existing buildings	Approved February 2024
3	Red Bank - Land Bounded By Dantzic Street, Dalton Street And The Railway Line Known As Plots NT02, NT03 And NT04 Manchester	136814/FO/2023	Erection of a phased residential led mixed use development comprising three residential towers (Use Class C3a) (NT02 34 storeys, NT03 part 8, part 20 and part 31 storeys and NT04 part 8, part 27 storeys) with associated flexible non-residential floorspace comprising commercial, business, service and community uses (Use Classes E, F and Sui Generis); erection of a 6 storey residential amenity space within a clubhouse building (part of NT02), with associated car and cycle parking, hard and soft landscaping, improvement works to Dantzic Street, drainage infrastructure and associated engineering works following demolition of existing buildings and structures	Approved December 2023
4	Land Bound By Gould Street, Williamson Street, Bromley Street And Bilbrook Street	128248/FO/2020	Erection of 9 buildings ranging from 8 to 34 storeys in height to form 1202 residential apartments (Use Class C3a) and ground floor commercial uses (Use Class E) (192 sqm) together with associated car parking, new vehicular and pedestrian access, public realm, landscaping and other associated works following demolition of existing structures and buildings	Approved December 2023
5	Land To The North Of Renaissance Hotel, Blackfriars Street	132088/FO/2021	Erection of a part ground and 26 storey, part ground and 13 storey building to form 300 no. residential apartments (Class C3) and ground floor retail/ leisure floorspace (Class E/ Sui Generis (drinking establishments), together with private amenity space for residents (gym, cinema room and external terraces), new public realm to include riverside walkway and leisure/ food and beverage space (Class E/ Sui Generis (drinking establishments/ drinking establishments with food provision/ hot food takeaways), new landscaping, parking (36 spaces level -1), 300 cycle parking spaces, servicing, supporting infrastructure and associated works.	Approved February 2023
6	Land bounded by Angel Street, Miller Street and Angel Square Known As Plots M And N Manchester	134307/FO/2022	Erection of 2 Angel Square, a 14 storey building (excluding roof top plant) to form a mixed use office development (Use Class Egi) with two flexible commercial units at Upper Ground floor Level (Use Classes Ea, b, c, e, f, and / or Use Class Sui Generis (p) and (q)), and with a flexible office (Use Class Egi) and/or restaurant (Use Class Eb) space at Level 12, along with Lower Ground Level car and cycle parking, hard and soft landscaping and other associated works; Erection of 3 Angel Square, a 13 storey building (excluding roof top plant) to form a mixed use office development (Use Class Egi) with two flexible commercial units provided over Lower and Upper Ground Floor Levels (Use Classes Ea, b, c, e, f, and / or Use Class Sui Generis (p) and (q)), a further flexible commercial unit at Upper Ground Floor Level only allowing for ancillary seminar space and / or Sui Generis Use Class (t) Cinema space, together with an ancillary gym space at Upper Ground Floor, as well as Lower Ground Level car and cycle parking, hard and soft landscaping and other associated works.	Approved October 2022
7	87 Rochdale Road	136574/NMC/2023	Non material amendment to planning permission 131708/FO/2021 to alter condition 7 (Ground Conditions) to allow the demolition and site clearance to take place	Approved March 2023

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Ref	Scheme	Application number	Description	Status
		131708/FO/2021	Erection of a part 11, part 13 storey building to form residential apartments (Use Class C3a) together with the erection of two blocks of 3 storey duplexes (Use Class C3a) to form 237 residential homes in total with associated commercial floor (Use Class E) (132 sqm), basement car parking, landscaping and public realm, and associated engineering and infrastructure works following demolition of existing buildings and structures	Approved February 2022
8	Speakers House 39 Deansgate	131314/FO/2021	Erection of a 17 storey building comprising office use (Use Class E(g)(i)) and flexible ground floor commercial units (Use Classes E(a),(b),(c) and sui generis 'drinking establishment'), new electricity sub-station, basement cycle parking and rooftop plant enclosure, together with access, servicing and associated works following demolition of the existing building	Approved January 2022
9	Land Bound By Dantzic Street, Gould Street, Williamson Street And Bromley Street (Known As Victoria Riverside)	126944/FO/2020	Erection of a residential-led mixed use development comprising 3 no. towers (37, 26 and 18 storeys) and podium levels (6 storey) to form 634 residential apartments and townhouse accommodation (Use Class C3) together with commercial accommodation (1222 sqm) (Use Classes A1,A2,A3,A4,A5,B1, D1 and D2)); with associated residential amenity areas, refuse storage, plant (including substation), car parking, cycle storage, landscaping and new public realm including the re-instatement of Bromley Street and other associated works	Approved January 2021
10	25 Rochdale Road	127537/FO/2020	Erection of a 11 storey 229 bedroom hotel (Use Class C1) with ancillary ground floor bar/restaurant together associated public realm and other associated works	Approved October 2020
11	Former Boddington Brewery Site Land Off Great Ducie Street Manchester M2 5PE	143540/NMC/2025	Non-material amendment to Planning Permission 138031/JO/2023 to amend the trigger in condition 33 (Secured by Design)	Approved August 2025
		142629/NMC/2025	Non material amendment to planning permission 138031/JO/2023 to amend conditions 2, 4b, 5a, 5b, 6b, 7c, 7d, 8, 11, 13, 20, 31, 38 (reflect update phasing plan) and condition 37 (highways works)	Approved May 2025
		138031/JO/2023	Variation of condition 3 (Specified Plan) attached to planning permission 118831/FO/2018 to include basement area to block A	Approved March 2024
		137941/FO/2023	Erection of two buildings part 29, 25 and 20 storeys and 12 storeys to create a mixed-use development comprising 505 residential apartments (Use Class C3a) with commercial uses (Use Class E) provided at the ground floor level, together with public realm including courtyard pocket, cycle parking, accessible parking spaces, access arrangements, and other associated works.	Approved March 2024
		137897/NMC/2023	Non-Material Amendment to Planning Permission Reference 118831/FO/2018 to amend wording on Conditions 3, 18, 22, 26, 28, 29, 30, 35, 36, 41 and 42 to reflect updated drawings that supersede those previously approved.	Approved September 2023
		137321/NMC/2023	Non-Material Amendment to planning permission 118831/FO/2018 to amend Condition 6a (Drainage of Surface Water)	Approved July 2023
		132416/FO/2021	Erection of two buildings part 27, 20, 17 storeys and part 11 and 10 storeys to form a mixed use development comprising of 461 residential apartments (Use Class C3a) and ground floor commercial uses (Use Class E) (718 sqm) together with public realm including courtyard pocket park, landscaping, car parking and other associated works	Approved June 2022
		118831/FO/2018	Erection of two buildings (a part 17, part 12 storey building and a part 26, part 23 storey building) to form 556 residential units (Use Class C3a) together with the creation of 3490 sqm of commercial floor space (Use Classes A1, A2, A3, B1 and D1) with associated landscaping, access and other associated works	Approved February 2019
12	Land Bounded By Dantzic Street & Aspin Lane, Land Bounded By Gould Street & Angel Meadows And Land Bounded By Old Mount Street, School Street, Naples Street & Ludgate Street (Land Bounded By Gould Street & Angel Meadows is the address for plot 4)	116366/FO/2017	Erection of four residential buildings (22 storey building, 17 storey building, 40 storey building and part 12, part 9 storey building) to form 756 residential apartments (Use Class C3a) together with ground floor commercial uses (616 sqm) (Use Classes A1, A2, A3, A4, A5, D1 and B1) with associated car parking, landscaping, amenity areas, creation of new public realm following the closure of Aspin Lane, Mincing Street and Irk Street and other associated works following demolition of existing structures	Approved August 2017 (all plots built aside from plot 4, which is a 40 storey building with 334 units)

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Ref	Scheme	Application number	Description	Status
13	1 Lord Street	113914/FO/2016	Erection of a 16 storey building to form 192 residential apartments (Use Class C3a) together with ground floor commercial unit (172 sqm) (Use Class A1, A2, A3 or B1) with associated vehicular access from Fernie Street, car parking and hard and soft landscaping following demolition of existing buildings	Approved November 2016
14	New Victoria, Corporation Street	137792/FO/2023	Erection of a 12 storey building (inc. (Ground + Mezzanine) + 11 storeys, basement and roof terrace and plant), comprising office accommodation, a ground floor retail unit, roof terraces, plant, cycle parking, hard and soft landscaping, access and servicing and other associated works.	Approved May 2025
		134092/FO/2022	Erection of a 10 storey office building (Use Class E) plus basement, a ground floor commercial unit (Use Class E), with associated external amenity in the form of roof terraces, plant, substation, cycle parking, hard and soft landscaping, access and servicing and other associated works	Approved October 2022
		128667/JO/2020	Variation of condition 2 (specified plans) attached to previously approved planning application	Approved March 2021
		111777/FO/2016/C	111777/FO/2016/C1 to allow for changes to the approved plans to include formation of a new enclosed amenity use bridge link between the two approved residential buildings at upper ground floor level only, together with roof top amenity space/terrace on top of new bridge link.	Approved September 2016
Within Salford City Council administrative area				
15	Land At Gorton Street And Adjacent Railway Arches	23/82208/FULEIA	Demolition of existing lean-to building adjacent to railway arches 6-8 and erection of a 42-storey building, including basement and rooftop plant levels, comprising 568 co-living units with associated amenity, management and back of house space, plant rooms, accessible roof terraces, with ancillary facilities comprising amenity space, sporting facilities and waste storage in arches 1-3, and associated landscaping and engineering works [EIA application accompanied by an Environmental Statement]	Approved with conditions March 2025
16	Site Between Trinity Way And Audacious Church	23/81487/FUL	Demolition of all existing on-site buildings and structures and the development of a Class C3 residential building comprising 250 dwellings, including Class E ground floor unit, together with associated landscaping, highways and other works.	Approved with conditions March 2024

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Figure 11-2 Indicative cumulative schemes locations

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11.4 ASSESSMENT

11.4.1 This section outlines the predicted environmental effects of the proposed development in-combination with the other cumulative development schemes identified.

Socio-economics

11.4.2 Cumulative effects occur when a single receptor is affected by more than one effect at any point in time. Prospective developments within the surrounding area could have cumulative socioeconomic effects with respect to population, housing provision, employment, spending, and demand for social infrastructure such as schools, healthcare and open space.

11.4.3 This section of the chapter assesses the socioeconomic effects of the proposed development in combination with the potential socioeconomic effects of the committed developments.

11.4.4 All of the cumulative schemes have been considered for their cumulative effect within Manchester. Those cumulative schemes which have residential units have been included in the calculations.

Demolition and construction

11.4.5 The demolition and construction phase of the proposed development along with the committed developments identified will generate additional construction related employment within Manchester and the north-west. The scale of the construction employment generated cannot be readily quantified on the basis that the information available for each scheme is commercially sensitive. In addition, the timing and phase of the construction of these schemes along with the proposed development may not occur over the same periods, therefore the temporary construction related effects may not coincide.

11.4.6 The combined effects of the developments are likely to have a major beneficial (significant), long-term, temporary cumulative effect on construction employment due to the potential for the committed developments to generate a considerable amount of construction employment (in addition to the proposed development).

Operational

11.4.7 All of the cumulative schemes have been assessed during the operational phases due to the effects on the same target economic areas. Detailed information regarding the specific use of employment floorspace to be generated by the cumulative schemes is not readily available, and therefore gross direct employment resulting from the cumulative schemes cannot be calculated.

11.4.8 The cumulative schemes together with the proposed development, assuming they are built and complete, will provide an approximate combined 5,000 new homes, of which approximately 4,750 will be in Manchester and 250 in Salford. The cumulative effect of housing in Manchester will account for approximately 8% of the overall total housing target as identified in the Places for Everyone Joint Development Plan. Thus, there will be an overall permanent moderate beneficial (significant), long term cumulative effect on housing in Manchester.

11.4.9 Residents within the proposed development and the cumulative developments will put additional demand on existing social infrastructure. Current provision may not be adequate to meet the demand arising from the number of residential units coming forward. However, given the identified housing need in policy documents and the absence of identified capacity issues, it is expected that planning policy will continue to ensure that there is sufficient investment into the necessary services and infrastructure to accommodate the demand of additional users. In addition, it is likely that other residential developments will make S106 contributions towards social infrastructure provision, wherever necessary to supplement the provision planned within the committed developments. Therefore, the cumulative schemes are likely to have a negligible effect on social infrastructure provision.

11.4.10 The increase in residential units arising from the cumulative developments will increase the demand for open and play space and put pressure on existing provision. However, some of the cumulative schemes are expected to include public realm improvements, and hard and soft landscaping, which will accommodate their own demands (i.e., the demand arising from each individual scheme). However, there is no identified play space provision in the cumulative schemes. Given the existing shortfall in access to play provision identified in the baseline assessment, the proposed development and cumulative schemes will likely place additional pressure on play space. However, it is anticipated that any relevant developments would be required to secure appropriate mitigation through S106 contributions or equivalent planning obligations to address identified shortfalls. The cumulative developments are therefore assessed to have a negligible effect on open space and play space provision.

Greenhouse gas emissions

11.4.11 The atmospheric concentration of GHGs and the resulting effects on climate change are affected by all sources (anything emitting GHG) and sinks (anything absorbing GHG) globally, anthropogenic and otherwise. As GHG emission impacts and resulting effects are global rather than affecting one localised area, the approach to cumulative effects assessment for GHGs differs from that for many EIA topics where only projects within a geographically bounded study area would be included. As such, as stated in the IEMA GHG Guidance, effects of GHG emissions from specific cumulative schemes should not be individually assessed, as there is no basis for selecting any particular (or more than one) cumulative project that has GHG emissions for assessment over any other.

11.4.12 The IEMA GHG Guidance goes on to advise that the contextualisation of GHG emissions should incorporate by its nature the cumulative contributions of other GHG sources which make up that context. As part of this assessment, an inter-development cumulative effects assessment has not been undertaken on a specific cumulative scheme basis; however, the proposed development's GHG emissions have been considered in the context of both the UK national carbon budgets and the Logika Group carbon budgets for Manchester. As such, the cumulative contributions of other GHG sources that make up the national and local contexts have been considered within the assessment included in Chapter 6 Greenhouse Gas Emissions.

Wind microclimate

11.4.13 A CFD scenario was tested to ascertain the impact of local cumulative schemes.

11.4.14 The following scheme was considered sufficiently advanced to be included within the baseline surrounds:

- Former Boddington Brewery Site (118831/FO/2018)

11.4.15 The following schemes were included as part of the cumulative surrounds:

- 1 Lord Street (113914/FO/2016); and
- 1 Park Place (138302/FO/2023).

11.4.16 All other cumulative schemes were scoped out of the wind assessment, on grounds of distance from the Site.

Demolition and construction

11.4.17 During demolition and construction, conditions will gradually change from the baseline conditions to conditions for the completed and operational development. Therefore, construction effects can be inferred from the effects due to the completed and operational development.

11.4.18 As all cumulative wind effects for the completed and operational development are negligible, all demolition and construction wind effects will also be negligible (not significant)

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Operational

11.4.19 A CFD scenario (Scenario 3) consisting of the proposed development within cumulative surrounds was tested to establish cumulative wind effects.

11.4.20 Figure 11-3 shows winter comfort at ground level for Scenario 3. Figure 11-4 shows summer comfort at ground level for Scenario 3. Figure 11-5 shows strong winds at ground level for Scenario 3.

11.4.21 Figure 11-6 shows winter comfort at elevated levels for Scenario 3. Figure 11-7 shows summer comfort at elevated levels for Scenario 3. Figure 11-8 shows strong winds at elevated levels for Scenario 3.

Pedestrian comfort

11.4.22 General thoroughfares and roadways would range between suitable for sitting, standing and leisure walking in winter and for sitting, standing and leisure walking in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

11.4.23 The principal entrances to the proposed development (marked E in results figures) would be suitable for sitting in all seasons. This is suitable for the intended use and is a negligible wind effect (not significant).

11.4.24 The entrance to Building A of Old Brewery Gardens (marked O in Figure 11-3) is adjacent to a region which is suitable for walking in winter. This is a category above the target condition, but this entrance is designed to be recessed from the building facade which will create a buffer region between internal and external conditions (and therefore will be suitable for the intended use). All other principal off-site entrances (marked O in results figures) would range between suitable for sitting or standing in all seasons. This is suitable for the intended use and is a negligible wind effect (not significant).

11.4.25 Conditions for the proposed public realm (marked "PR" in results figures) are suitable for standing in winter and for a mix of sitting and standing in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

11.4.26 The proposed private courtyard (marked C in results figures) would be suitable for a mix of sitting and standing in winter and for sitting in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

11.4.27 The proposed level 10 terrace would be suitable for a mix of standing and leisure walking in winter and for a mix of sitting and standing in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

11.4.28 The proposed level 11 terrace would be suitable for a mix of sitting, standing and leisure walking in winter and for a mix of sitting and standing in summer. This is suitable for the intended use and is a negligible wind effect (not significant).

11.4.29 The proposed balconies would be suitable for sitting in all seasons. This is suitable for the intended use and is a negligible wind effect (not significant).

Strong winds

11.4.30 There is a pre-existing instance of strong winds (exceeding 15m/s for more than 0.025% annually) within the grounds of the Old Brewery Gardens (marked 1 on Figure 11—5). This instance is reduced in extent with the proposed development in place, relative to the baseline scenario, so the proposed development would not increase the level of wind safety risk. This is a negligible wind effect (not significant).

11.4.31 No regions of strong winds (exceeding 15m/s for more than 0.025% annually) have been introduced by the proposed development. This is suitable for the intended use and is a negligible wind effect (not significant).

Figure 11-3 Winter Comfort at Ground Level for Scenario 3 (Proposed Development with Cumulative Surrounds)

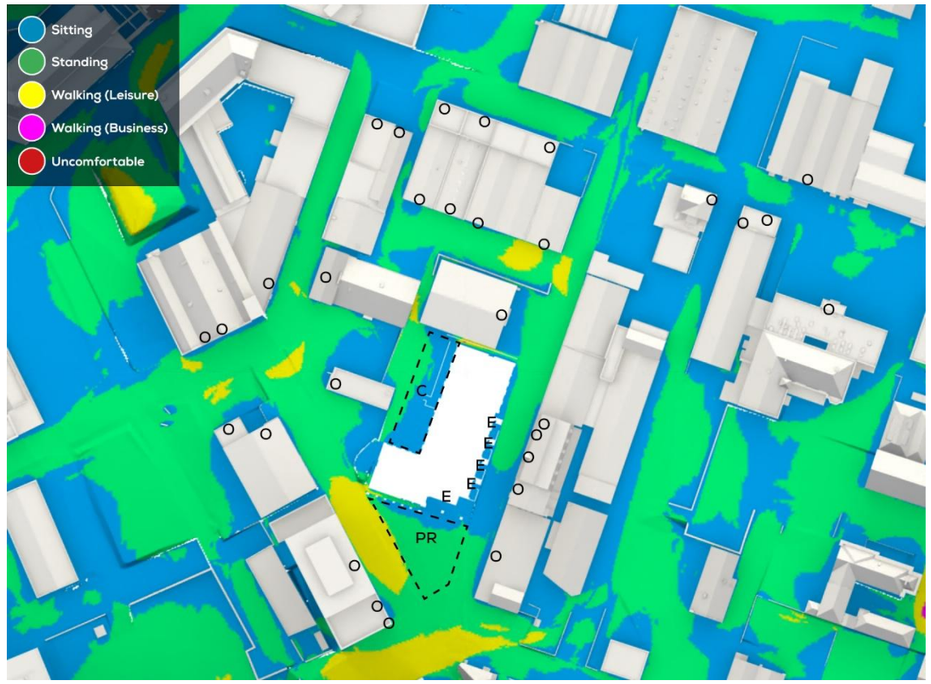
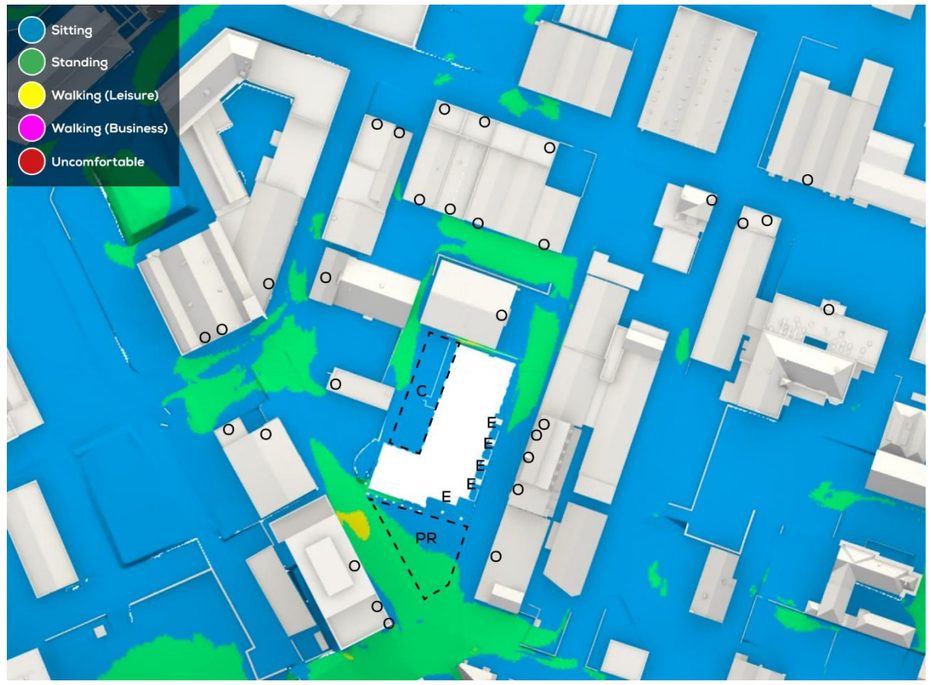


Figure 11-4 Summer Comfort at Ground Level for Scenario 3 (Proposed Development with Cumulative Surrounds)



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Figure 11-5 Strong Winds at Ground Level for Scenario 3 (Proposed Development with Cumulative Surrounds)



Figure 11-6 Winter Comfort at Elevated Levels for Scenario 3 (Proposed Development with Cumulative Surrounds)

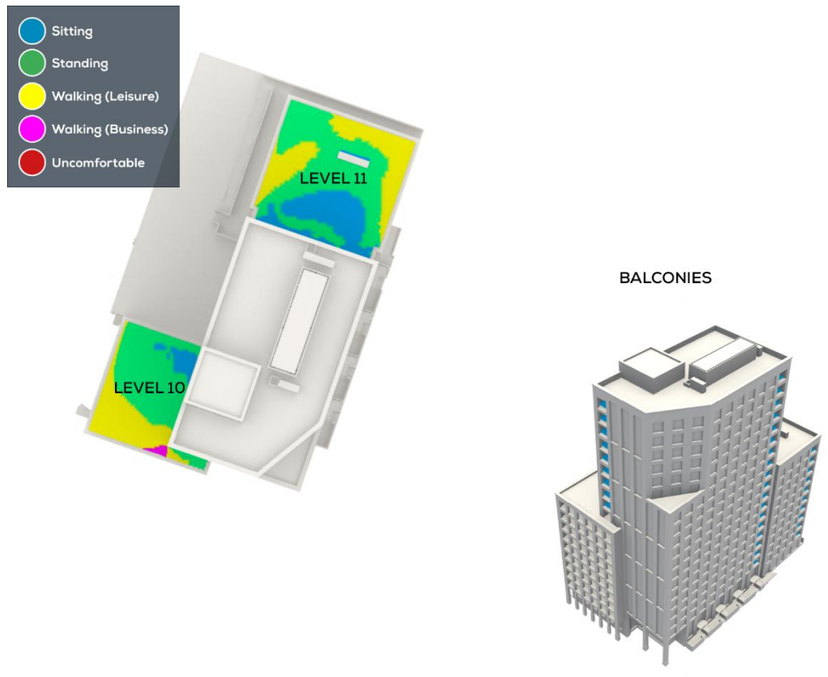


Figure 11-7 Summer Comfort at Elevated Levels for Scenario 3 (Proposed Development with Cumulative Surrounds)

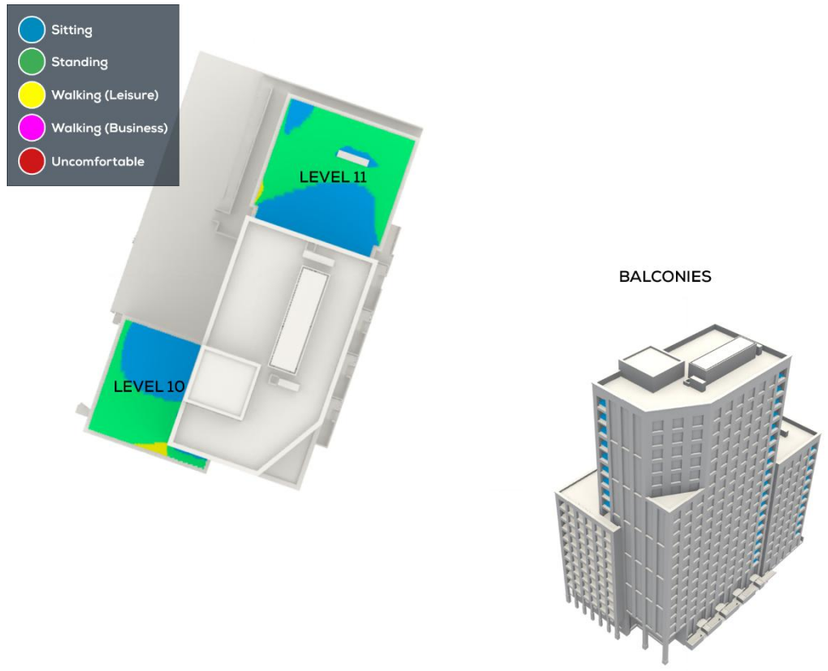
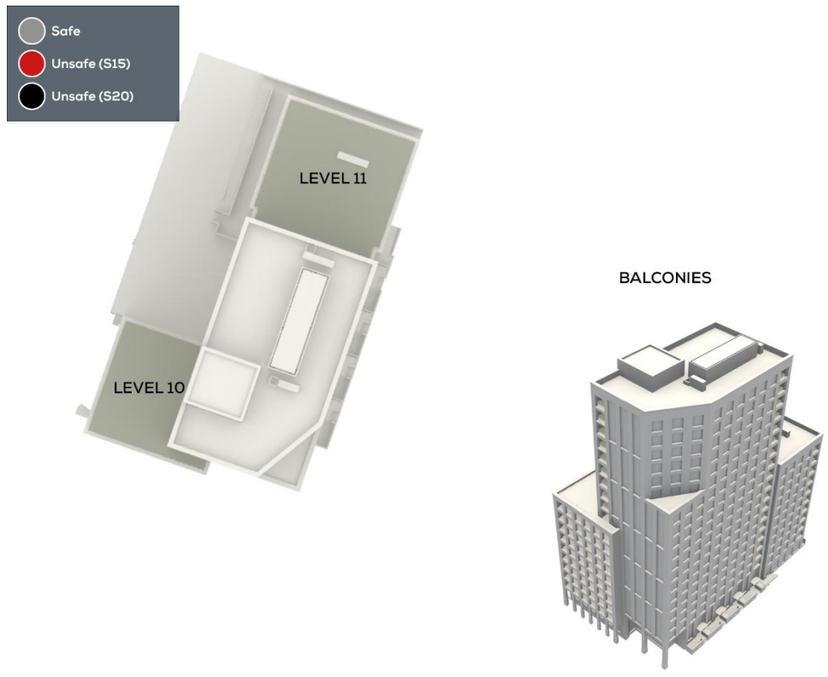


Figure 11-8 Strong Winds at Elevated Levels for Scenario 3 (Proposed Development with Cumulative Surrounds)



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Daylight and sunlight

Demolition and construction

11.4.32 Potential daylight and sunlight effects relating to construction works will vary throughout the construction programme from negligible in the baseline position, gradually increasing to the potential effects identified for the completed proposed development. As the completed proposed development represents the worst-case assessment, neither individual (proposed development in isolation) or cumulative construction effects have been quantitatively assessed.

Operational

11.4.33 The following consented developments have been identified as having the potential to result in cumulative impacts:

- 1 Park Place (138302/FO/2023)
- 1 Lord Street (113914/FO/2016)

11.4.34 Due to their planning status, scale and/or distance from the site, no other consented schemes have been identified to be likely to generate additional daylight and sunlight effects to sensitive receptors in combination with the proposed development.

11.4.35 The full cumulative development daylight and sunlight results can be found in ES Volume 2 Appendix 8.3 and are summarised in Tables 11-3 to 11-6 below.

VSC Daylight

11.4.36 If the proposed development and the identified committed developments were constructed simultaneously then, compared to the proposed development in isolation:-

- 6 fewer windows within Old Brewery Gardens Block 1 would experience negligible magnitudes of VSC change.
- 1 more window within Old Brewery Gardens Block 1 would experience small magnitudes of VSC change.
- 2 more windows within Old Brewery Gardens Block 1 would experience medium magnitudes of VSC change.
- 3 more windows within Old Brewery Gardens Block 1 would experience large magnitudes of VSC change.

NSL Daylight

11.4.37 If the proposed development and the identified committed developments were constructed simultaneously then, compared to the proposed development in isolation, there would be no change in the magnitudes of NSL change.

APSH Sunlight

11.4.38 If the proposed development and the identified committed developments were constructed simultaneously then, compared to the proposed development in isolation (negligible effect), there would be no change in the magnitudes of APSH change.

Daylight Effect

11.4.39 Despite the isolated increases in magnitudes of VSC change to Old Brewery Gardens Block 1, the daylight effect on both sensitive receptors would remain as minor adverse (not significant) if the proposed development and the committed developments were constructed simultaneously.

Sunlight Effect

11.4.40 The sunlight effect on both sensitive receptors would remain as negligible (not significant) if the proposed development and the committed developments were constructed simultaneously.

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Table 11-3 Comparison of existing v proposed and existing v proposed + cumulatives VSC Results

Address	Total No. of windows	Baseline v Proposed Negligible	Baseline v Cumulative Negligible	Baseline v Proposed Small	Baseline v Cumulative Small	Baseline v Proposed Medium	Baseline v Cumulative Medium	Baseline v Proposed Large	Baseline v Cumulative Large
Old Brewery Gardens Block 1	321	251	245	5	6	34	36	31	34
Old Brewery Gardens Block 2	218	211	211	7	7	0	0	0	0
Totals	**539**	**462**	**456**	**12**	**13**	**34**	**36**	**31**	**34**

Table 11-4 Comparison of existing v proposed and existing v proposed + cumulatives NSL Results

Address	Total No. of rooms	Baseline v Proposed Negligible	Baseline v Cumulative Negligible	Baseline v Proposed Small	Baseline v Cumulative Small	Baseline v Proposed Medium	Baseline v Cumulative Medium	Baseline v Proposed Large	Baseline v Cumulative Large
Old Brewery Gardens Block 1	210	170	170	24	24	2	2	14	14
Old Brewery Gardens Block 2	138	135	135	2	2	1	1	0	0
Totals	**348**	**305**	**305**	**26**	**26**	**3**	**3**	**14**	**14**

Table 11-5 Comparison of existing v proposed and existing v proposed + cumulatives Annual APSH Results

Address	Total No. of rooms	Baseline v Proposed Negligible	Baseline v Cumulative Negligible	Baseline v Proposed Small	Baseline v Cumulative Small	Baseline v Proposed Medium	Baseline v Cumulative Medium	Baseline v Proposed Large	Baseline v Cumulative Large
Old Brewery Gardens Block 1	25	25	25	0	0	0	0	0	0
Old Brewery Gardens Block 2	3	3	3	0	0	0	0	0	0
Totals	**28**	**28**	**28**	**0**	**0**	**0**	**0**	**0**	**0**

Table 11-6 Comparison of existing v proposed and existing v proposed + cumulatives Winter APSH Results

Address	Total No. of rooms	Baseline v Proposed Negligible	Baseline v Cumulative Negligible	Baseline v Proposed Small	Baseline v Cumulative Small	Baseline v Proposed Medium	Baseline v Cumulative Medium	Baseline v Proposed Large	Baseline v Cumulative Large
Old Brewery Gardens Block 1	25	25	25	0	0	0	0	0	0
Old Brewery Gardens Block 2	3	3	3	0	0	0	0	0	0
Totals	**28**	**28**	**28**	**0**	**0**	**0**	**0**	**0**	**0**

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Built heritage

11.4.41 In assessing the likely significant effects of the proposed development, due consideration has been paid to the other committed developments (i.e., those that have already commenced construction or those that have not commenced but have a valid planning permission or those that are reasonably foreseeable, i.e., as part of an approved Masterplan), where there are likely to be significant effects. Additional committed developments are set out in the committed developments list.

11.4.42 The cumulative built heritage assessment considers the cumulative effect of the proposed development in conjunction with other developments in the local and wider townscape which, when considered individually might be insignificant, but when considered together could create a significant cumulative effect.

11.4.43 Upon assessment of the cumulative AVRs, it is evident the developments of relevance to the cumulative assessment of heritage impacts are, One Park Place (View 4), Former Boddingtons Brewery site (View 9, 10, 11, 14), and Land Bound by Great Ducie Street (View 11).

11.4.44 Upon assessment of the views, it is considered that when the effects of the proposed development are considered in combination with other nearby developments, only the Former Boddingtons Brewery Site would form a material consideration in heritage terms. The other committed developments outlined are not considered to result in any cumulative effects when considered in conjunction with the proposed development, and would incur no further/greater impact on heritage assets.

Demolition and construction

11.4.45 With the exception of the Former Boddingtons Brewery site, the identified impacts/significance of effect on built heritage for the demolition and construction phase will remain unchanged when compared with the effects of the proposed development in isolation. It is not considered that any of the additional cumulative developments outlined above will result in any material change to the conclusions. If the construction phase of the proposed development runs concurrently with the construction phase of the Former Boddingtons Brewery site, there is expected to be further disruption to the streetscape surrounding the site, resulting in some additional temporary adverse impact upon the setting of the NDHAs 37 Park Street (Dutton Hotel), and 45-55 Julia Street (Clarence Hatworks).

11.4.46 Paragraph 216 of the NPPF states that "a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset. The effect on the settings of the non-designated heritage asset is not considered to be a significant effect in EIA terms.

Operational

11.4.47 With the exception of the Former Boddingtons Brewery site, the identified impacts/significance of effect on built heritage for the operational phase will remain unchanged when compared with the effects of the proposed development in isolation. It is not considered that in any of the additional cumulative developments outlined above will result in any material change to the conclusions, and there are not considered to be any significant effects in EIA terms relating to the cumulative effects of the outlined committed developments.

11.4.48 As discussed in the Heritage Statement (Appendix 9.1), the primary consideration of cumulative impact relates to View 14, where the combination of the proposed development and the Former Boddingtons Brewery Site would create a cluster of development which would encapsulate the roof of the grade II listed Former Boys Prison Block. Although the darker red hue of the proposed development will be comparative to the colouring of the existing prison complex, it is not considered to reduce the legibility of these buildings as individual heritage assets. Due to the expanse of the view, the proposed development, when read cumulatively with the Former Boddingtons Brewery Site would incur a minor adverse indirect impact when viewed from this location, which is not significant.

11.4.49 The application material demonstrates how the proposed development could integrate with committed developments. The scale, massing and character of the identified cumulative schemes is, in overall terms, consistent with that of the proposed development. Regarding the Former Boddingtons Brewery site development, the proposed new buildings would be highly visible and viewed alongside the proposed development, however, it is considered that the developments in tandem would ensure public realm enhancements and encourage the integration of the proposed development within the evolving streetscape, thereby improving the existing situation. On this basis it is considered that no greater cumulative adverse effect on the settings of heritage assets would be experienced, and this is not considered to result in a significant effect in EIA terms. The assessed level of harm to the settings of designated heritage assets would therefore remain ascribed as 'less than substantial,' as per Paragraph 215 of the NPPF. Regarding the impact on the settings of the non-designated heritage assets Paragraph 216 of the NPPF states that "a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset." The effect on the settings of the non-designated heritage asset is not considered to be a significant effect in EIA terms.

Townscape and visual impact

11.4.50 This section assesses the potential effects of the proposed development in combination with other nearby consented developments. The cumulative schemes modelled in the AVRs are:

- 1 Lord Street (113914/FO/2016);
- Land bound by Great Ducie Street (132416/FO/2021);
- Former Boddingtons Brewery site, Dutton Street (118831/FO/2018);
- 1 Park Place, Cheetham Hill Road (138302/FO/2023);
- Victoria North, Redbank Plots NT02/NT03/NT04 (136814/FO/2023);
- 87 Rochdale Road (131708/FO/2021, as amended by 136574/NMC/2023); and
- 25 Rochdale Road (127537/FO/2020).

11.4.51 A total of 16 cumulative schemes within 1km of the site have been identified in the EIA methodology. Seven schemes have been modelled in the verified views on the basis of their proximity to the site and their potential to contribute to cumulative visual change in combination with the proposed development. The remaining schemes are at greater distance from the site, located within different visual catchments, or would not materially alter the cumulative assessment given that the modelled schemes represent the most relevant cumulative context for the site.

Demolition and construction

11.4.52 Cumulative construction effects are not considered significant. The surrounding area is already characterised by ongoing construction activity across multiple sites, including the Boddingtons developments on Dutton Street and emerging schemes within the wider SRF area. The addition of construction activity associated with the proposed development would not materially alter the cumulative construction experience for townscape or visual receptors. The cumulative construction effect is assessed as minor adverse (direct, temporary, short-term, reversible, not significant).

Operational

11.4.53 Collectively, these projects will increase the overall height and massing of the townscape north of the city centre, in terms of scale, height, and form. The proposed development will be read as part of this wider programme of regeneration and intensification that is consistent with the adopted and emerging policy framework for this area.

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11.4.54 The cumulative AVRs demonstrate that in the majority of viewpoints, the cumulative schemes – particularly 1 Park Place and 1 Lord Street – have a greater effect on the skyline than the proposed development. From longer-range viewpoints (VP01, VP02, VP03, VP08–VP12, VP15), the proposed development reads as one component within a broader emerging cluster of tall buildings along the city fringe. From close-range viewpoints (VP05, VP06, VP07, VP13), the proposed development is the primary change but the cumulative context of the Boddingtons developments establishes the precedent for taller buildings on Dutton Street.

11.4.55 The cumulative townscape effect is assessed as minor beneficial (direct, permanent, long-term, not significant), as the collective development programme delivers the SRF vision for the area and is consistent with the adopted policy framework. The cumulative visual effects are no greater than the individual effects identified above, as the proposed development is absorbed within the wider cluster of cumulative development in all viewpoints.

Summary of significant effects for the in-combination cumulative scheme scenario

11.4.56 Table 11-7 outlines the significant in-combination cumulative effects that have been identified in relation to the proposed development.

Table 11-7 Summary of significant cumulative development effects

Topic	Receptor	Cumulative effect	Significance of effect
Demolition and construction			
Socio-economics	Local employment	Construction employment / job creation	Major beneficial
Greenhouse gas emissions	N/A, as explained in section 11.4		
Wind microclimate	No significant cumulative effects have been identified		
Daylight and sunlight	N/A – see Chapter 8, Daylight and Sunlight for further details		
Built heritage	No significant cumulative effects have been identified		
Townscape and visual impact	No significant cumulative effects have been identified		
Operation			
Socio-economics	Local housing market	Provision of approximately 5,000 new homes	Moderate beneficial
Greenhouse gas emissions	N/A, as explained in section 11.4		
Wind microclimate	No significant cumulative effects have been identified		
Daylight and sunlight	No significant cumulative effects have been identified		
Built heritage	No significant cumulative effects have been identified		
Townscape and visual impact	No significant cumulative effects have been identified		

11.5 CONCLUSIONS

11.5.1 An assessment has been undertaken of the potential for interactive cumulative effects to arise – that is, whether individual receptors could be subject to the interaction of more than one effect simultaneously, leading to more significant effects on those individual receptors.

11.5.2 An assessment has also been undertaken, within each discipline, of the potential for the proposed development to give rise to cumulative effects when viewed "in-combination" with other developments.

Interactive cumulative effects

11.5.3 No interactive cumulative effects were identified for the demolition and construction phase.

11.5.4 During operation, a negligible interactive cumulative effect upon local residents has been identified due to the combination of minor beneficial access to green and open spaces, alongside minor adverse effects upon access to GP healthcare.

In-combination cumulative effects

11.5.5 During construction, significant in-combination cumulative effects have been identified for local employment as a result of construction employment and job creation.

11.5.6 During operation, significant in-combination cumulative effects have been identified for the local housing market as a result of the provision of approximately 5,000 new homes.

11.5.7 No other significant in-combination effects have been identified.

11.6 REFERENCES

- Council on Environmental Quality (1970) National Environmental Policy Act, as amended, part 1508: terminology and index;
- European Commission (1999) Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions; and
- Stationary Office (2017) The Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

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12 RESIDUAL EFFECTS AND CONCLUSIONS

12.1 SUMMARY OF SIGNIFICANT RESIDUAL ENVIRONMENTAL EFFECTS

12.1.1 This chapter summarises the potentially significant residual effects resulting from the proposed development following the adoption of the mitigation measures recommended in this Environmental Statement (ES). The significant residual effects have been derived from the assessments carried out in each of the technical chapters within this ES.

12.1.2 The supplementary mitigation measures have been summarised in Section 12.2 for reference. A summary of the significant residual effects, both adverse and beneficial, have been provided in Section 12.3.

Socio-economics

Demolition and Construction

12.1.3 There are no anticipated significant residual socio-economic effects from the demolition and construction phase. Supplementary mitigation measures are not required.

Operation

12.1.4 There are no anticipated significant residual socio-economic effects from the operational phase. Supplementary mitigation measures are not required.

Greenhouse gas emissions

Demolition and Construction

12.1.5 There are no anticipated significant residual greenhouse gas emission effects from the demolition and construction phase. However, supplementary mitigation measures have been proposed to limit construction phase emissions associated with transport, materials and energy consumption. Measures are to be secured via CEMP prior to the commencement of site enabling works.

Operation

12.1.6 There are no anticipated significant residual greenhouse gas emission effects from the operational phase. Supplementary mitigation measures are not required.

Wind microclimate

Demolition and Construction

12.1.7 There are no anticipated significant residual wind microclimate effects from the demolition and construction phase. Supplementary mitigation measures are not required.

Operation

12.1.8 There are no anticipated significant residual wind microclimate effects from the operational phase. Supplementary mitigation measures are not required.

Daylight and sunlight

Demolition and Construction

12.1.9 There are no anticipated significant residual daylight or sunlight effects from the demolition and construction phase. Supplementary mitigation measures are not required.

Operation

12.1.10 There are no anticipated significant residual daylight or sunlight effects from the operational phase. Supplementary mitigation measures are not required.

Built heritage

Demolition and Construction

12.1.11 There are no anticipated significant residual built heritage effects from the demolition and construction phase. However, supplementary protection measures have been proposed to avoid unnecessary dust, noise and debris impacting upon the surrounding built environment. Measures are to be secured via CEMP prior to the commencement of site enabling works.

Operation

12.1.12 There are no anticipated significant residual built heritage effects from the operational phase. Supplementary mitigation measures are not required.

Townscape and visual impact

Demolition and Construction

12.1.13 There are no anticipated significant residual TVIA effects from the demolition and construction phase. However, supplementary protection measures have been proposed to mitigate effects, including site hoardings, dust suppression and construction traffic management. Measures are to be secured via CEMP prior to the commencement of site enabling works.

Operation

12.1.14 There is an anticipated significant, moderate beneficial residual effect upon viewpoint 13, Julia Street from the operational phase. The proposed development forms a prominent new element in the sightline of the view, improving its visual amenity.

12.1.15 All other operational effects are not anticipated to be significant. Supplementary mitigation measures are not required.

Cumulative effects

Interactive cumulative effects

12.1.16 During construction, no interactive cumulative effects were identified.

12.1.17 During operation, a negligible interactive cumulative effect upon local residents has been identified due to the combination of minor beneficial access to green and open spaces, alongside minor adverse effects upon access to GP healthcare.

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In-combination cumulative effects

12.1.18 During construction, significant in-combination cumulative effects have been identified for local employment as a result of construction employment and job creation.

12.1.19 During operation, significant in-combination cumulative effects have been identified for the local housing market as a result of the provision of approximately 5,000 new homes.

12.1.20 No other significant in-combination effects have been identified

12.2 SUMMARY OF SUPPLEMENTARY MITIGATION MEASURES REQUIRED

12.2.1 Where adverse effects have been predicted, mitigation measures have been proposed to reduce the effects where required. These are summarised in Table 12-1 (for demolition and construction effects) and Table 12-2 (for operational effects). Reference should be made to individual technical assessment chapters for further details of the mitigation measures proposed.

Demolition and construction

Table 12-1 Summary of supplementary mitigation measured required to limit demolition and construction effects

Topic	Adverse effect	Mitigation measure	Responsibility/mechanism for implementation	Timing
Socio-economics	No adverse effects requiring supplementary mitigation have been identified			
Greenhouse gas emissions	Construction process stage GHG emissions (lifecycle A4- A5)	Review opportunities to reduce the number and distance of construction transport trips, such as using locally sourced materials and implementing a travel plan for site staff.	Developer/contractor	Review opportunities to reduce the number and distance of construction transport trips, such as using locally sourced materials and implementing a travel plan for site staff.
		Review opportunities to reduce energy consumption associated with the construction and installation process such as minimising the use of on-site diesel generators, and implementing a site energy monitoring and improvement programme.	Developer/contractor	Review opportunities to reduce energy consumption associated with the construction and installation process such as minimising the use of on-site diesel generators, and implementing a site energy monitoring and improvement programme.
Wind microclimate	No adverse effects requiring supplementary mitigation have been identified			
Daylight and sunlight	N/A – see Chapter 8, Daylight and Sunlight for further details			
Built heritage	Indirect and temporary visual or setting effects	CEMP measures: • Use of high quality hoardings • Dust management • Regular cleaning of roads and the public realm surrounding the site • Edge protection to be affixed whilst concreting operations are in place • Implementation of a traffic management plan • Vibration monitoring	Developer/contractor	Demolition and construction period
Townscape and visual impact	Temporary townscape and visual effects	CEMP measures: • Use of site hoardings • Dust suppression and management • Implementation of a construction traffic management plan	Developer/contractor	Demolition and construction period

Operation

Table 12-2 Summary of supplementary mitigation measures required to reduce adverse operational effects

Topic	Adverse effect	Mitigation measure	Responsibility/mechanism for implementation	Timing
Socio-economics	No adverse effects requiring supplementary mitigation have been identified			
Greenhouse gas emissions	No adverse effects requiring supplementary mitigation have been identified			
Wind microclimate	No adverse effects requiring supplementary mitigation have been identified			
Daylight and sunlight	No adverse effects requiring supplementary mitigation have been identified			
Built heritage	No adverse effects requiring supplementary mitigation have been identified			
Townscape and visual impact	No adverse effects requiring supplementary mitigation have been identified			

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12.3 SUMMARY OF RESIDUAL EFFECTS

12.3.1 Table 12-3 shows a summary of the significant residual effects associated with construction and operation of the proposed development, following the implementation of mitigation measures.

Table 12-3 Summary of significant residual effects

Topic	Receptor	Effect	Residual Significance
Effects during demolition and construction			
Socio-economics	No significant residual effects have been identified		
Greenhouse gas emissions	No significant residual effects have been identified		
Wind microclimate	No significant residual effects have been identified		
Daylight and sunlight	N/A – see Chapter 8, Daylight and Sunlight for further details		
Built heritage	No significant residual effects have been identified		
Townscape and visual impact	No significant residual effects have been identified		
In-combination cumulative effects during construction			
Socio-economics	Local employment	Construction employment / job creation	Major beneficial
Greenhouse gas emissions	N/A – see Chapter 11, Cumulative and Interactive Effects for further details		
Wind microclimate	No significant residual effects have been identified		
Daylight and sunlight	N/A – see Chapter 8, Daylight and Sunlight for further details		
Built heritage	No significant residual effects have been identified		
Townscape and visual impact	No significant residual effects have been identified		
Effects during operation			
Socio-economics	No significant residual effects have been identified		
Greenhouse gas emissions	No significant residual effects have been identified		
Wind microclimate	No significant residual effects have been identified		
Daylight and sunlight	No significant residual effects have been identified		
Built heritage	No significant residual effects have been identified		
Townscape and visual impact	Viewpoint 13: Julia Street	Prominent new element at close range	Moderate beneficial
In-combination cumulative effects during operation			
Socio-economics	Local housing market	Provision of approximately 5,000 new homes	Moderate beneficial
Greenhouse gas emissions	N/A – see Chapter 11, Cumulative and Interactive Effects for further details		
Wind microclimate	No significant residual effects have been identified		
Daylight and sunlight	No significant residual effects have been identified		
Built heritage	No significant residual effects have been identified		
Townscape and visual impact	No significant residual effects have been identified		

12.4 CONCLUSIONS

12.4.1 The majority of environmental effects associated with the proposed development are deemed to be non-significant. The significant residual effects identified are beneficial in nature and therefore do not require further mitigation. No residual effects are deemed to be significant adverse.

Demolition and Construction

12.4.2 During construction, the majority of environmental effects associated with the proposed development were deemed to be negligible or minor (i.e., non-significant). No individual topic assessment identified stand-alone significant effects.

12.4.3 The only significant effect identified is the socio-economic in-combination cumulative effect of construction employment and job creation on local employment. This effect is major beneficial.

Operation

12.4.4 During operation, the majority of environmental effects associated with the proposed development were deemed to be negligible or minor (i.e., non-significant).

12.4.5 A significant TVIA effect has been identified for viewpoint 13, Julia Street. The proposed development forms a prominent new element in the sightline of the view, improving its visual amenity. This effect is moderate beneficial.

12.4.6 A significant socio-economic in-combination cumulative effect is anticipated with respect to the local housing market. The cumulative schemes assessed in combination with the proposed development provide approximately 5,000 homes. This effect is moderate beneficial.

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