

Apex Tower, Manchester

Environmental Impact Assessment Scoping Report

Project number

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Contents

1	INTRODUCTION	6
1.1	BACKGROUND TO THE PROPOSED DEVELOPMENT	6
1.2	REQUIREMENT FOR ENVIRONMENTAL IMPACT ASSESSMENT	6
1.3	THE PURPOSE OF SCOPING IN THE EIA PROCESS	6
1.4	STRUCTURE OF THE SCOPING REPORT	7
2.	SITE AND SURROUNDING AREAS	8
2.1	SITE DESCRIPTION	8
3.	DESCRIPTION OF THE PROPOSED DEVELOPMENT	10
3.1	INTRODUCTION	10
3.2	PROPOSALS FOR THE SITE	10
3.3	PLANNING APPLICATION CONTEXT	10
3.4	REMEDIATION AND SITE ENABLING WORKS	10
3.5	QUANTUM OF DEVELOPMENT AND DEVELOPMENT FORM	10
3.6	ACCESS	10
3.7	CONSTRUCTION PROGRAMME & PHASING	10
4.	PROPOSED APPROACH TO EIA	11
4.1	PURPOSE	11
4.2	SITE SPECIFIC TERMINOLOGY TO BE USED IN THE EIA	11
4.3	SCOPE OF THE ASSESSMENT	11
4.4	ASSESSING THE PROPOSED DEVELOPMENT	11
4.5	DEFINING SIGNIFICANCE	11
4.6	MITIGATION AND RESIDUAL EFFECTS	12
4.7	DEVELOPMENT ALTERNATIVES	12
4.8	ASSESSING THE PROPOSED DEVELOPMENT	12
4.9	ASSESSMENT OF CUMULATIVE ENVIRONMENTAL EFFECTS	12
4.10	PLANNING POLICY FRAMEWORK	20
5.	PROPOSED ASSESSMENTS AND STRUCTURE OF ES	21
5.1	NON-SIGNIFICANT ISSUES TO BE SCOPED OUT OF THE ES	21
5.2	ENVIRONMENTAL ISSUES TO BE SCOPED INTO THE ES	26
5.3	ENVIRONMENTAL STATEMENT GENERAL CHAPTERS	26
5.4	VOLUMES OF THE ES	26
6.	ENVIRONMENTAL ASSESSMENT – TOPICS SCOPED INTO THE ES	27
6.1	INTRODUCTION	27

6.2	AIR QUALITY	27
6.3	NOISE AND VIBRATION	28
6.4	WIND MICROCLIMATE	30
6.5	DAYLIGHT, SUNLIGHT AND OVERSHADOWING	31
6.6	BUILT HERITAGE	32
6.7	GREENHOUSE GAS EMISSIONS	34
6.8	TOWNSCAPE AND VISUAL IMPACT	35
7.	SUMMARY OF KEY ENVIRONMENTAL ISSUES	38
8.	OTHER PLANNING DOCUMENTS	39

Tables:

Table 4-1 Matrix for determining effect significance

Table 4-2 Cumulative/recently completed baseline schemes

Table 6-1 BS5228 significance of effect thresholds

Table 6-2 BS5228 guidance on effects of vibration levels

Table 6-3 BS8233 recommended guideline levels for habitable spaces

Table 6-4 Scale used to determine sensitivity of receptor

Table 6-5 Scale used to determine magnitude of effects

Table 6-6 Significance of Effect Matrix, according to IEMA Guidelines

Table 6-7 Lawsons Comfort Criteria

Table 6-8 Summary of items to be scoped in or out of the assessment

Table 6-9 Summary of assessment scope

Table 6-10 Likely Significant Effects and Receptors

Table 6-11 Baseline Studies / Surveys

Table 6-12 Townscape and visual effects

Table 7-1 Summary of key potential environmental effects

Figures:

Figure 2-1 Site location plan for site A

Figure 2-2 Site location plan for site B

Figure 4-1 Cumulative schemes map

Figure 6-1 Diagram showing the stages of a lifecycle GHG emissions assessment, taken from the LETI Embodied Carbon Primer (2020). Diagram based on lifecycle stages set out in BS EN 15978.

Glossary

Term	Definition
AQMA	Air Quality Management Area
AQO	Air Quality Objective
BRE	Building Research Establishment
CDA	Critical Drainage Area
CFD	Computation Fluid Dynamics
DEFRA	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EIA	Environmental Impact Assessment
ES	Environmental Statement
ESR	Existing Sensitive Receptors
EU	European Union
FRA	Flood Risk Assessment
GHG	Greenhouse Gas
GMAAS	Greater Manchester Archaeological Advisory Service
GMLRC	Greater Manchester Local Records Centre
HAP	Heritage Asset Plan
IAQM	Institute of Air Quality Management
IEMA	Institute of Environmental Management and Assessment
ILP	Institution of Lighting Professionals
LDDC	London Docklands Development Corporation
LI	Landscape Institute
MCC	Manchester City Council
NO ₂	Nitrogen Dioxide
NPPF	National Planning Policy Framework
NSL	No-Sky Line
NVC	National Vegetation Classification
OS	Ordinance Survey
PM	Particulate Matter
PPG	Planning Practice Guidance
PSR	Proposed Sensitive Receptors
SAC	Special Area of Conservation
SFRA	Strategic Flood Risk Assessment
SSSI	Site of Specific Scientific Interest
SuDS	Sustainable Urban Drainage Systems
SPZ	Source Protection Zone
TVIA	Townscape and Visual Impact Assessment
VSC	Vertical Sky Component
ZTV	Zone of Theoretical Visibility
WHO	World Health Organisation

1 INTRODUCTION

1.1 BACKGROUND TO THE PROPOSED DEVELOPMENT

- 1.1.1 This report presents a formal request to Manchester City Council (MCC) to adopt an Environmental Impact Assessment (EIA) scoping opinion for a development proposed at land located between Green Bridgewater Street, Albion Street and Trumpet Street (hereafter referred to as the “site”).
- 1.1.2 The applicant (Arrowsmith Investment Ltd.) is seeking an EIA scoping opinion under the Town and Country Planning (EIA) Regulations 2017 (as amended) for residential and commercial led development (hereafter referred to as the “proposed development”).
- 1.1.3 The applicant intends to submit two full planning applications concurrently (at the start of 2022), one for each site. The proposed development will be subject to an EIA and is therefore the focus of this EIA scoping report.
- 1.1.4 A full description of the proposed development, including the anticipated quantum, is provided in Chapter 3 of this EIA scoping report.

1.2 REQUIREMENT FOR ENVIRONMENTAL IMPACT ASSESSMENT

- 1.2.1 The Town and Country Planning (EIA) Regulations 2017 (as amended) (hereafter referred to as the “EIA Regulations”) transposed the European Union (EU) Directive 2014/52/EU (‘2014 EIA Directive’) into UK law on 16th May 2017.
- 1.2.2 Projects that require or may require an EIA are set out in Schedule 1 and 2 of the EIA Regulations. A Schedule 1 development automatically requires an EIA as this has the most potential to cause environmental effects. The proposed development is not considered a Schedule 1 development in accordance with the EIA Regulations.
- 1.2.3 Schedule 2 relates to development, other than exempt development, of a description mentioned in column 1 of the table in Schedule 2 of the EIA Regulations, where:
- any applicable threshold or criterion in the corresponding part of column 2 of that table is respectively exceeded or met
- 1.2.4 With regards to the first criteria for a Schedule 2 development, according to the EIA Regulations, a “sensitive area” relates to any of the following:
- t) of the Wildlife and Countryside Act 1981;

A National Park within the meaning of the National Parks and Access to the Countryside Act 1949;

The Broads;

A property appearing on the World Heritage List kept under article 11(2) of the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage;

A scheduled monument within the meaning of the Ancient Monuments and Archaeological Areas Act 1979;

an area of outstanding natural beauty designated as such by an order made by Natural England under section 82(1) (areas of outstanding natural beauty) of the Countryside and Rights of Way Act 2000 as confirmed by the Secretary of State; or

- 1.2.5 The site itself does not contain any of the designations outlined above, therefore it does not constitute a “sensitive area”.
- 1.2.6 Regarding the second criteria for a Schedule 2 development, the proposed development falls under Category 10b in Column 1 of the table in Schedule 2 of the EIA Regulations. This refers to infrastructure projects in the form of urban development projects.
- 1.2.7 The EIA Regulations include ‘applicable thresholds’, above which an EIA is typically required if significant environmental effects are considered likely. As the proposed development is classified as an urban regeneration development project, the following criteria set out in Column 2 of Schedule 2 apply:
- development; or

The development includes more than 150 dwellings; or
- 1.2.8 Although the proposed development does not exceed any of the criteria set out above, it is deemed that there is the potential for significant effects for certain technical areas. This is particularly the case due to the tall height of the proposed development. Therefore, the applicant acknowledges that the project constitutes an EIA development and has proceeded with this EIA scoping report without submitting a screening request.

1.3 THE PURPOSE OF SCOPING IN THE EIA PROCESS

- 1.3.1 There is no formal requirement for scoping to be undertaken prior to submission of the Environmental Statement (ES), although provision for it is made in the EIA Regulations to enable a scoping opinion to be requested and formally responded to. Regulation 15 requires that a “scoping opinion” request includes the following information:
- A brief description of the nature and purpose of the development, including its location and technical capacity (provided in Chapter 2 and Chapter 3 of this EIA scoping report);

An explanation of the likely significant effects of the development on the environment (provided in Chapter 4, Chapter 5 and Chapter 6 of this EIA scoping report); and

Such other information or representations as the person making the request may wish to provide or make.
- 1.3.2 The EIA Regulations set out a five-week timescale and the need to gain the opinion of statutory consultees. A scoping opinion is adopted when the local planning authority is satisfied that sufficient information has been provided for them to form a decision.
- 1.3.3 The submission of a scoping opinion request is considered to be good practice for EIA. It ensures that the scope of the assessment focuses on the important issues and eliminates detailed study of areas that are considered to be less significant. This makes sure that the EIA process is proportionate.
- 1.3.4 The scoping report will form a basis of common reference for consultation regarding the scope and methodology of the EIA. The responses received from consultees on the scoping report will feed into the EIA and where appropriate the EIA will inform the ongoing design of the scheme and the ES that accompanies the planning applications. It is not the purpose of this report to provide detailed measurement, calculation or assessment of potential impacts and effects. Detailed assessments will be carried out when the EIA of the proposed development is undertaken and presented in the ES.

1.4 STRUCTURE OF THE SCOPING REPORT

1.4.1 The remainder of the scoping report is set out as follows:

Chapter 2 describes the site, surrounding area, and potential sensitive resources and receptors;

Chapter 3 describes the proposed development;

Chapter 4 describes the overall approach for the EIA at a high level;

Chapter 5 provides a description of the environmental issues that are to be addressed by the EIA and sets out which environmental topics will not require detailed assessment and are scoped out;

Chapter 6 details the proposed approach to the EIA and the structure of the ES;

Chapter 7 summarises the key potential environmental issues that will be assessed; and

Chapter 8 provides a summary of the wider planning documents proposed to be submitted.

2. SITE AND SURROUNDING AREAS

2.1 SITE DESCRIPTION

Location and context

2.1.1 The anticipated area for both planning applications combined is 0.072 hectares, centred on Ordnance Survey Grid Reference 383686, 397608. The site is split into two parcels of land. Site A, the larger parcel of land (0.051 hectares), is located to the east of Albion Street, to the north of Trumpet Street and to the west of The Briton’s Protection public house (as shown in Figure 2-1). Site B, the smaller parcel of land (0.021 hectares), is to the south of Great Bridgewater Street, to the west of the Jurys Inn Hotel, to the north of Trumpet Street and to the east of The Briton’s Protection public house (as shown in Figure 2-2). The Briton’s Protection public house divides the two sites.

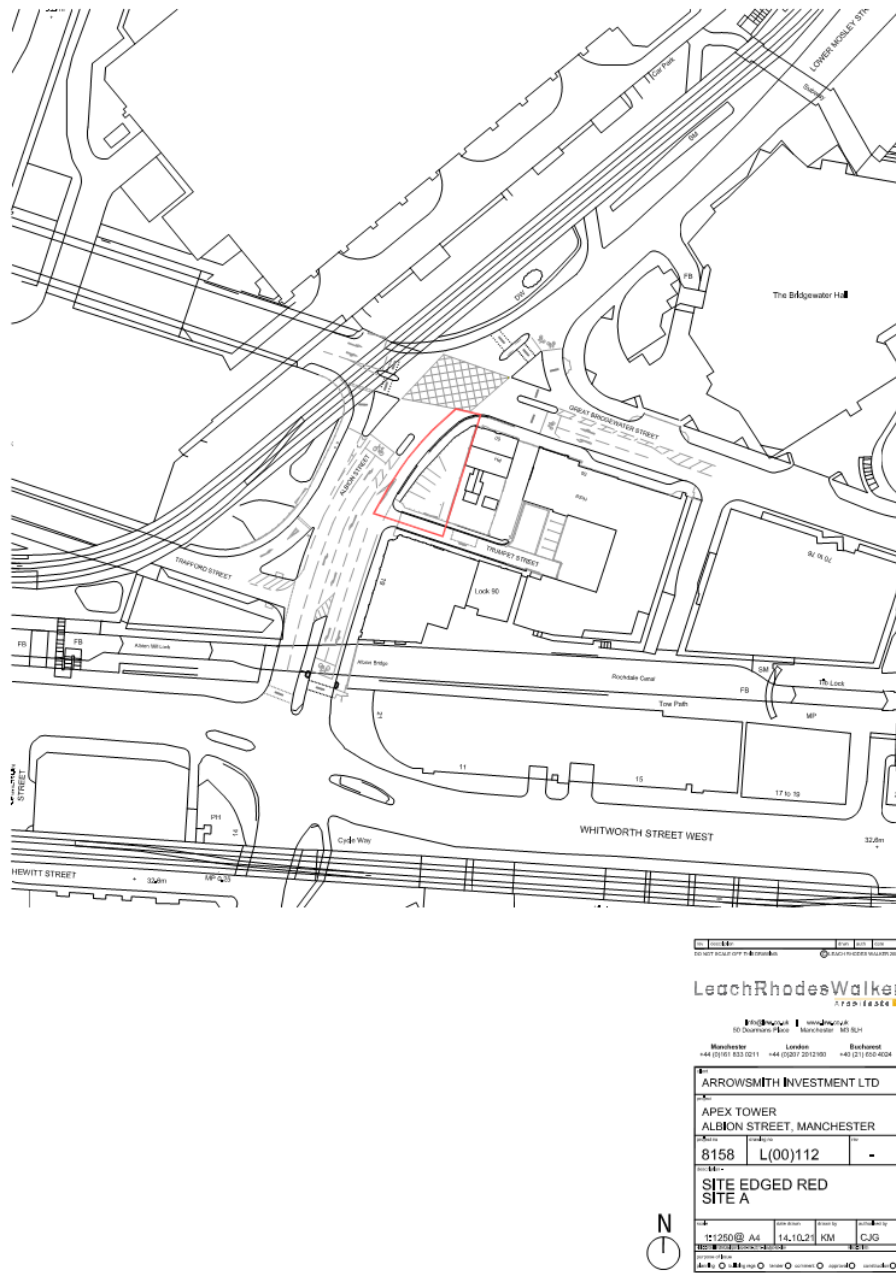


Figure 2-1 Site location plan for site A

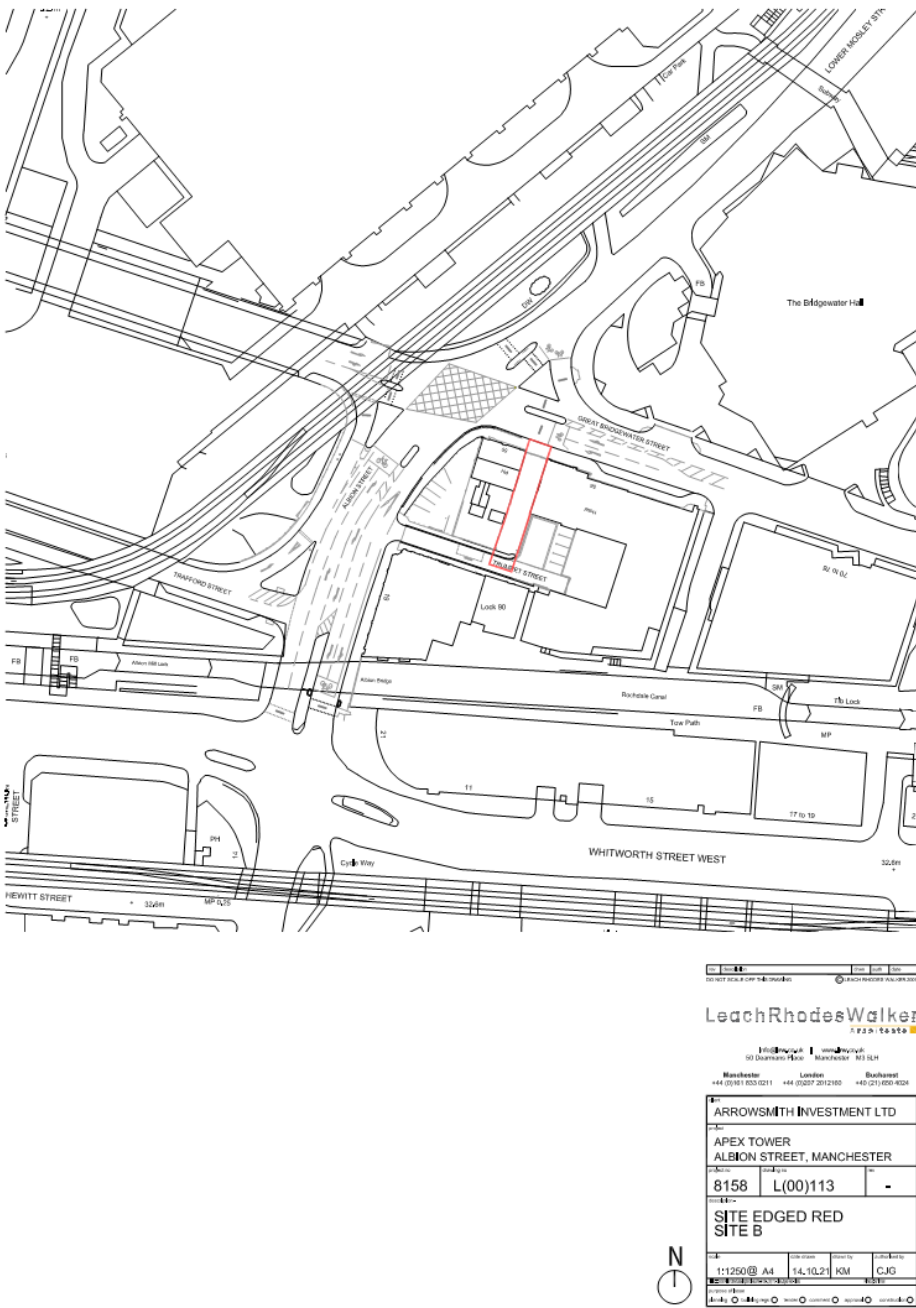


Figure 2-2 Site location plan for site B

Planning history

2.1.2 There are no recent major planning applications identified on the site.

Surrounding uses

2.1.3 The area in the vicinity of the site is characterised by office, leisure, hotel and residential uses. The Bridgewater Hall concert venue and Chepstow House are located to the north east of the site and the Manchester Central Convention Centre and the Tower of Light Energy Centre are located to the north of the site. The Jury's in Hotel

- is located to the west of the site and Axis Tower is located to the south west of the site. 13-17 Albion Street and the Hacienda apartments are located to the south.
- 2.1.4 A railway line runs east to west approximately 90m to the south of the site, with Deansgate Station located approximately 350m to the south west and Oxford Road station located approximately 600m to the south east. A tram line runs approximately 25m to the west of the site, with Manchester Central (Stop SP) located approximately 150m to the north and Deansgate-Castlefield tram stop located approximately 150m to the west of the site.
- 2.1.5 The Rochdale Canal is located approximately 35m to the south of the proposed development, running east to west. The River Medlock is located approximately 170m to the south of the proposed development, roughly running east to west,
- 2.1.6 There are a number of listed buildings in the immediate vicinity (within 250m) of the site, as follows:
- Grade II listed The Briton's Protection Public House. Directly adjacent to the site;
 - Grade II listed 13-17 Albion Street. Approximately 5m south of the site;
 - Grade II* listed G-MEX. Located approximately 70m north of the site;
 - Grade II listed Rochdale Canal Lock Number 89. Approximately 100m south east of the site;
 - Grade II listed Rochdale Canal Lock Number 90. Approximately 80m south west of the site;
 - Grade II listed Chepstow House. Approximately 110m to the east of the site;
 - Grade II listed Peveril of the Peak Public House. Approximately 160m to the east of the site;
 - Grade II listed Manchester South Junction and Altrincham Railway Viaduct. Approximately 190m south east of the site;
 - Grade II listed Deansgate Station. Approximately 200m south west of the site;
 - Grade II listed Rochdale Canal Lock Keepers Cottage at Lock Number 91. Approximately 200m west of the site;
 - Grade II listed Rochdale Canal Lock Number 91. Approximately 210m south west of the site;
 - Grade II* listed Deansgate Goods Station and Attached Carriage Ramp. Located approximately 230m north west of the site;
 - Grade II listed 235-291 Deansgate. Approximately 240m north west of the site;
 - Grade II* listed Midland Hotel. Located approximately 240m north of the site.
 - Grade II listed Canada House. Approximately 250m to the east of the site; and
 - Grade II listed Lee House. Approximately 250m to the east of the site.

Site description

- 2.1.7 Site A, the larger parcel of land to the west, is currently being used for surface car parking, with there being an asphalt surface and space for seven cars. Site B, the smaller parcel of land to the east, currently has no formal

usage, with there being a gravel surface. Both sites are accessed by car from the south via Trumpet Street, with the larger parcel of land also accessible on foot from the north and west.

3. DESCRIPTION OF THE PROPOSED DEVELOPMENT

3.1 INTRODUCTION

- 3.1.1 At present, the proposed development described here should be considered to be indicative only and whilst being at an early stage will naturally develop further during the design process and whilst the EIA is progressed.
- 3.1.2 This EIA scoping report provides a mechanism for consulting on and agreeing the content and methodology of the ES at an early stage in the process. Definition of the scope is dependent upon the current state of knowledge about the design of the proposed development and how it is proposed to be implemented.

3.2 PROPOSALS FOR THE SITE

- 3.2.1 It is proposed that the larger parcel of land (site A) is used for a wholly residential development and the smaller parcel of land (site B) is partially used for commercial office and partly used for residential.

3.3 PLANNING APPLICATION CONTEXT

- 3.3.1 The applicant team has previously engaged in pre-application discussions with MCC on 27th November 2020, 19th April 2021 and 15th September 2021. Pre-application discussions are continuing to progress, and two detailed planning applications will be submitted to MCC at the beginning of 2022, one for each site.
- 3.3.2 Detailed development plans and a Design and Access Statement submitted in support of the full planning applications will establish detailed information about the design of the proposed development.

3.4 REMEDIATION AND SITE ENABLING WORKS

- 3.4.1 Both parcels of land are currently being used for surface level car parking. At this stage, no remediation or site enabling works have been carried out on the site.

3.5 QUANTUM OF DEVELOPMENT AND DEVELOPMENT FORM

- 3.5.1 Drawings showing the quantum of development and development form shall be submitted alongside the planning applications.
- 3.5.2 Site A, the larger parcel of land located to the west, will be of wholly residential use. The floor area of this building is proposed to be up to 7,000 sqm. This will contain up to 75 residential apartments.
- 3.5.3 Site B, the smaller parcel of land located to the east, will be partly of commercial use and partly of residential use. The floor area of this building is proposed to be up to 1,500 sqm. This will contain 4 residential apartments (up to 1,250 sqm) and up to 250 sqm of commercial office space.
- 3.5.4 The proposed development will also incorporate the provision of new enhanced public realm at street level.

Development massing and height

- 3.5.5 Drawings showing the development massing and height shall be submitted alongside the planning applications.
- 3.5.6 It is proposed that the building on site A, the larger parcel of land located to the west, will be up to 26 storeys in height (up to 125 m AOD). There is no basement level proposed.

- 3.5.7 It is proposed that the building on site B, the smaller parcel of land located to the east, will be 6 storeys in height (up to 65 m AOD). There is no basement level proposed.

3.6 ACCESS

- 3.6.1 Vehicular access to the proposed development shall be from the south via Trumpet Street. Along this south side of the proposed development, there shall be three car parking spaces, with one being a disabled space and one being an electric vehicle charging space.
- 3.6.2 Pedestrian access to the western building on site A shall be from the north, on the intersection between Albion Street and Great Bridgewater Street. Pedestrian access to the eastern building on site B shall be from the north, on Great Bridgewater Street.
- 3.6.3 There will also be cycle provision as part of the proposed development, for use by residents and visitors.

3.7 CONSTRUCTION PROGRAMME & PHASING

- 3.7.1 The construction programme for the proposed development is likely to be 21 months in duration. This is likely to begin Q3 2022, with completion likely to be Q2 2024.
- 3.7.2 It is likely that the building on site A to the west will come forward first and be completed prior to commencement on the building on site B to the east.

4. PROPOSED APPROACH TO EIA

4.1 PURPOSE

- 4.1.1 The purpose of an EIA is to predict the effect of a proposed development on its surrounding environment and, where appropriate, to identify, evaluate and develop methods to mitigate significant effects.
- 4.1.2 An EIA is conducted by establishing baseline conditions for a number of topic areas and comparing these with the conditions that are predicted to occur were the scheme to be constructed and operated, to identify likely changes in environmental conditions. Environmental effects on sensitive and valued receptors (e.g. people, built resources and natural resources) as a result of the changes are then predicted and their significance determined.
- 4.1.3 The output of the EIA is an ES that is submitted with the planning applications. A robust ES allows the local planning authority to make an informed decision on the scheme in terms of its environmental effects.

4.2 SITE SPECIFIC TERMINOLOGY TO BE USED IN THE EIA

- 4.2.1 The terminology that shall be used throughout the EIA is as follows:
- The proposed development:** describes the project as a whole (i.e. both planning applications combined);
- The site:** describes the project site as a whole (i.e. the area covered by both planning applications combined);
- Application A or plot A:** will be specific to the full planning application area and development proposed for the larger parcel of land to the west; and
- Application B or plot B:** will be specific to the full planning application area and development proposed for the smaller parcel of land to the east.

4.3 SCOPE OF THE ASSESSMENT

Technical scope

- 4.3.1 The range of environmental topics to be addressed in the ES is referred to as the technical scope. Schedule 4 of the EIA Regulations notes that an ES should describe 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 hydro-morphological 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
- 4.3.2 Potential environmental issues have been evaluated as part of this scoping exercise in order to determine the extent to which they should be included in the EIA. These are discussed further in Chapter 5 and Chapter 6 of this report.

Spatial scope

- 4.3.3 The geographical or spatial scope of the EIA takes into account the following factors:
- The physical extent of the proposed works;
- The nature of the baseline environment;

The manner in which the impacts are likely to be propagated; and

Local, regional and national planning policy.

- 4.3.4 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 will be defined based on a combination of desk study, existing survey data, consultation and professional experience, as appropriate.

Temporal scope

- 4.3.5 The temporal scope for the proposed development is considered to include the preparation (enabling) works, construction works and the operation of the proposed development.
- 4.3.6 The programme for the construction works will be confirmed within the ES and will be assessed appropriately as part of the technical assessments.
- 4.3.7 It is likely that the building on site A to the west will come forward first and be completed prior to commencement on the building on site B to the east. Therefore, it is proposed that an intermediate year assessment is scoped out of the EIA.

Baseline and future baseline scenarios

Existing baseline (2022)

- 4.3.8 The existing baseline conditions will be reviewed, including the identification of existing receptors.

Future baseline – year of completion (without the proposed development in place)

- 4.3.9 This baseline will describe how environmental conditions may change if no development on the site came forward by the time the proposed development is anticipated to be fully operational. Consideration of such a baseline will allow for an appreciation of how environmental conditions could change over time without the proposed development in place, and whether any receptor sensitivities could change (for example, become more sensitive). There will also be a review of any future receptors approved in the way of a separate planning consent.

4.4 ASSESSING THE PROPOSED DEVELOPMENT

- 4.4.1 The EIA will provide an assessment of the proposed development combined across the site. This will be the combination of all planned development proposed under both full planning applications. This will represent a worst-case position for most disciplines i.e. the maximum quantum of development occurring at the same time.
- 4.4.2 However, it is recognised that, some effects could have the potential to change in the unlikely event that only one of the plots were to be approved and come forward individually. To account for this, once all residual effects have been predicted for the proposed development, these effects will be reviewed, and a targeted assessment made on the potential for these effects to be any less beneficial (or more adverse if one application offsets the effect of the other site) if only one application was to be approved and come forward in isolation.
- 4.4.3 The EIA will specify where supplementary mitigation is required and will make it clear where this mitigation applies to plot A, plot B, or both.

4.5 DEFINING SIGNIFICANCE

- 4.5.1 The ES will report on those environmental effects arising from the proposed development that are considered likely to be significant. There is no statutory definition for what is significant, but in many cases, there are

accepted methods for quantifying effects and determining the threshold of significance. Where a more qualitative approach is needed, a significant effect can be defined for the purposes of the assessment as an effect which, either in isolation or combination with others, should be taken into account in the decision-making process. Where there are professional institute-specific guidelines for assessment methodologies, these will be followed and are briefly set out under the relevant disciplines in section 6 of this report. Where there is no specific guidance, there will be a consistent approach to determination and in terminology, as set out below.

4.5.2 Receptor sensitivity will be defined as high, moderate, low or negligible and magnitude of change will be defined as large, medium, small or negligible. Significance of effect will then be determined using the following table, whereby a significant effect is one which is judged as moderate or major. Where there is a level of subjectivity, professional opinion will be used by the assessment author.

Table 4-1 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 Ideally a development will achieve environmental enhancement where possible; 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;
- Finding a way to reverse or repair the effect; and
- As a last resort, compensation.

4.6.2 Residual effects (assuming mitigation measures are applied) will then be classified as not significant or still significant (albeit reduced), as appropriate.

4.7 DEVELOPMENT ALTERNATIVES

4.7.1 It is proposed that the alternatives and design evolution section of the ES will consider:

- The ‘do nothing’ option; and
- Alternative development options considered, including an explanation of how the proposals have developed in response to initial EIA findings.

4.8 ASSESSING THE PROPOSED DEVELOPMENT

4.8.1 There will be full planning applications for the proposed development, therefore the ES will assess the detailed planning application plans.

4.9 ASSESSMENT OF CUMULATIVE ENVIRONMENTAL EFFECTS

4.9.1 Cumulative interactions can occur either as interactions between multiple effects of the proposed development on one receptor (intra-project effects) or through the effect of multiple development schemes on a receptor (inter-project effects).

4.9.2 The effects presented within each technical chapter will be reviewed to identify the potential for interactive effects and therefore cumulative effects. Where there is more than one effect on a particular receptor, the cumulative effect will be determined and if found to be significant, further mitigation will be proposed if necessary. This review of intra-project cumulative effects will be set out in the cumulative effects ES chapter.

4.9.3 A review of the combined effects of the proposed development with other proposed developments will also be presented within the cumulative effects chapter of the ES. As a threshold, the developments that will be considered within the assessment of inter-project cumulative effects are:

- Those submitted for planning via a planning application, permitted/with a resolution to grant permission or under construction;
- Located within approximately 1 km of the site;
- Those which are 10,000 square metres (m²) or greater Gross External Area (GEA); and
- Schemes below the above thresholds but of more than 50 residential units.

4.9.4 It is proposed that the nearby committed developments included in Table 4-2 and illustrated in Figure 4-1 are included in the assessment of inter-project cumulative effects.

4.9.5 It should be noted that if any of these developments are deemed to be fully constructed, occupied and operational at the time of the EIA, they will instead be considered as part of the baseline assessment, as opposed to a cumulative scheme. The status of each of the schemes will be reviewed again prior to the preparation of the ES.

4.9.6 Further guidance is sought from MCC on other schemes or changes to the assumptions made in the cumulative development schedule that should be considered to ensure the assessment meets their expectations.

4.9.7 As a matter of good practice, an EIA should ordinarily consider those schemes that have been submitted for planning ahead of the scheme being assessed. In doing so, each ES submitted to the local authority will present a cumulative effects assessment which evolves as each application comes forward. However, it is acknowledged that in some instances certain schemes are submitted at a very similar time and we would therefore welcome feedback in this regard from MCC i.e. on any other schemes anticipated for planning submission in late 2021/early 2022 that should be considered in the inter-project cumulative effects assessment.

Table 4-2 Cumulative/recently completed baseline schemes

Ref	Scheme	Application number	Description	Date approved	Maximum height	Anticipated construction phasing
Built out (part of baseline)						
1	Axis Tower	106490/FO/2014/C1 (Manchester City Council)	Construction of a lower ground plus 27 storey residential building (Class C3) with associated servicing arrangements, hard landscaping, pedestrian access bridge and associated works	21 st Nov 2014	27 storeys	Completed February 2020
2	Deansgate Square	111719/FO/2016/C1 (Manchester City Council)	Construction of four residential buildings, ancillary amenity building for residents accommodating a tennis court, swimming pool and gym facilities (Use Class C3), ground floor retail units (Use Classes A1, A2, or A3), amenity space for residents within residential buildings, new public realm and landscaping, basement car parking and related highway, access, servicing, engineering and associated works.	4 th July 2016	65 storeys	Completed April 2021
Cumulative Schemes with planning consent						
3	Olympia Trading Estate	116850/FO/2017 (Manchester City Council)	Demolition of the existing buildings on the site and construction of three residential buildings, 32, 26 and 18 storeys in height, comprising a total of 399 residential units (C3) and 50 retirement living units (C2) with roof top ancillary restaurant; 675sq.m of commercial floor space (Use Classes A1, A2, A3, A4, B1, D1 or D2); associated car and cycle parking within a basement level; public realm and landscaping; access and servicing arrangements; and other associated works.	3 rd May 2019	32-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
		128192/NMC/2020 (Manchester City Council)	Non-material amendment to planning permission 116850/FO/2017 to change the wording of the description and of condition 23 to allow changes to the internal layouts of the buildings and resulting external changes.	18 th Nov 2020		
4	Plot 9A First Street	121462/FO/2018 (Manchester City Council)	Erection of a ground plus sixteen storey building comprising commercial office (Use Class B1); hotel (Use Class C1); standalone flexible, commercial space across part of the ground and first floor (Use Classes A1 (Shops), A2 (Professional and Financial Services), A3 (Restaurants and Cafes), A4 (Drinking Establishments, B1 (offices), and D2(Gymnasium); flexible ancillary commercial and retail uses at ground and first floor (Use Class B1, A3, A4); basement car park, landscaping and associated works.	14 th December 2018	16-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
5	Plot 9 First Street	125833/FO/2019 (Manchester City Council)	Erection of a basement plus 11-storey building comprising office accommodation (Use Class B1), flexible commercial space (Use Classes A1 (Shops), A2 (Professional and Financial Services), A3 (Restaurants and Cafes), A4 (Drinking Establishments), B1 (offices), and D2 (Gymnasium), car parking, cycling parking and associated facilities, landscaping, and associated works.	15 th April 2020	11-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
6	Plot 11 First Street	125573/FO/2019 (Manchester City Council)	Construction of four buildings of heights varying from 10 storeys to 45 storeys together comprising co-living bedspaces (use class sui generis) and associated amenity facilities, with ground floor commercial units (Use classes A3 (café / restaurant and D2 (gym)), private amenity space and public realm comprising hard and soft landscaping, car parking and cycle facilities and other associated works.	9 th March 2021	45-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
7	10-12 Whitworth Street	111003/FO/2016/C1 (Manchester City Council)	Demolition of existing building at 10 - 12 Whitworth Street West, and redevelopment of the site for a new 35 storey residential building (Use Class C3) comprising 327 apartments, with associated residents' services, facilities and communal spaces: servicing, highways, public realm and associated works.	11 th April 2016	35-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
		115544/NMC/2017 (Manchester City Council)	Non-material change to planning permission ref: 111003/FO/2016/C1 (Demolition of existing building at 10-12 Whitworth Street West, and redevelopment of the site for a new 35 storey residential building (Use Class C3) comprising 327 apartments, with associated resident's services, facilities and communal spaces, servicing, highways, public realm and other associated works.) including minor refinements to lower external elevation, revisions to the roof top amenity area, revised cladding details, omission of windows at ground and first floor east and west elevations, replacement door, adjusted fence line, together with internal alterations including the omission of the basement, increase in number of cycling spaces, revisions to refuse area, alterations to lifts, and a re:planning of ground and first floor amenity areas.	5 th Apr 2017		
8	2-4 Whitworth Street	126308/FO/2020 (Manchester City Council)	The demolition of 2 to 4 Whitworth Street West and the construction of a mixed-use building, comprising flexible units for retail, food and drink use at ground floor level with a hotel at upper storeys, together with associated landscaping, servicing, cycle parking and other associated works.	18 th December 2020	7-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
9	325 - 327 Deansgate	125804/FO/2019 (Manchester City Council)	Demolition of existing buildings and structures on-site and erection of 22-storey building comprising apart-hotel (Use Class C1) with flexible commercial uses at ground floor and within existing viaduct arches (Use Class A1, A2, A3, A4, D2), access, landscaping and other associated works	26 th June 2020	22-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this

Ref	Scheme	Application number	Description	Date approved	Maximum height	Anticipated construction phasing
						scheme and the proposed development.
10	1 Alpha Place	120113/FO/2018 (Manchester City Council)	Erection of a seven storey apart-hotel (use class C1), comprising 59 rooms on the upper floors, with reception area and ancillary residents' lounge and breakfast area on the ground floor.	24 th September 2018	7-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
11	One City Road	128002/FO/2020 (Manchester City Council)	Full planning application for demolition of existing structures on site, erection of one 11-storey plus basement office building (Use Class E) and one 14-storey plus basement office building with ground floor commercial unit (Use Class E), landscaping, highways works, and associated works	26 th January 2021	14-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
12	70 Great Bridgewater Street	129081/FO/2021 (Manchester City Council)	Partial demolition and reconfiguration of 70 Great Bridgewater Street to create a new office building (Use Class E), including the replacement of building facades, a 2-storey rooftop extension and alterations to the internal layout including the infilling of the central atrium, servicing and cycle parking, access and associated works.	23 rd April	8-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
13	Hotspur Press	120635/FO/2018 (Manchester City Council)	Part demolition and redevelopment and part retention and refurbishment of the former Hotspur Press Complex (Medlock Mill) to deliver 171 residential units (10 no. 1 bed, 1 person apartments, 49 no. 1 bed, 2 person apartments, 2no. 2 bed, 3 person apartments and 110 no. 2 bed 4 person apartments) - Use Class C3, within refurbished mill space and 28 storey building (including two levels of basement), commercial floorspace (Use Classes A1 (shop), A2 (financial and professional services), A3 (restaurants and cafes), B1 (office), D1 (medical clinic, health centre, art gallery and museum only) and / or D2 (gymnasium or bowling alley only) together with servicing, access, landscaping including a new public space and pedestrian route between Gloucester Street and First Street, and other associated works	30 th October 2020	28-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
14	St Michael's	114664/FO/2016 (Manchester City Council)	Partial demolition of existing buildings. Development up to 171.6m AOD comprising residential (Use Class C3), offices (Use Class B1), hotels (Use Class C1), place of worship (Use Class D1) and leisure/food and drink uses (Classes A1, A3, A4, A5 and D2). Creation of public spaces and new public realm, provision of basement car parking, highway alterations, landscaping and associated works.	20 th June 2018	40-Storey	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
15	Great Marlborough Street Car Park	121252/FO/2018 (Manchester City Council)	Partial reconfiguration of existing Multi-Storey Car Park (MSCP), including temporary access off Great Marlborough Street, construction of 5 storey external ramps, closure of vehicular access to top level; and construction of new facade; and partial demolition of the surplus part of existing MSCP and erection of a part 55, part 11 storey, part 4 storey mixed-use building comprising 853 purpose built student accommodation units (sui generis), ancillary amenity space and support facilities, and 786sqm (GIA) SME incubator workspace (Use Class B1), including public realm improvements and other associated work	23 rd July 2021	55-Storey	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
16	98-116 Deansgate And 35-47 King Street West	129251/FO/2021 (Manchester City Council)	Change of use of upper floors and erection of three storey rooftop extension, including plant level, to Kendal Milne building to provide offices on floors 1-9 (Use Class E), together with change of use of ground, lower ground and basement levels of Kendal Milne building to flexible commercial spaces (Use Class E, F2 and /or Sui Generis (Drinking Establishments) and associated elevational alterations and works; Demolition of adjacent Fraser Building and link bridges and erection of 14 storey office building (Use Class E), including plant level, together with associated amenity space and ground and basement floor flexible commercial units (Use Class E, F2 and / or Sui Generis (Drinking Establishments)) and basement areas for cycle storage and plant; Highways landscaping and public realm works, engineering and infrastructure works and other associated works.	4 th June 2021	14-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
17	109-127 Market Street	127882/LO/2020 (Manchester City Council)	Listed Building Consent: Internal and external alterations to include: the erection of four storey roof-top extension; partial demolition of the floor structure to create the atrium; installation of a lightwell; external alterations to form new entrances on the ground floor; sub-division of the ground floor into smaller units the refurbishment; works to windows including replacements; demolition of a staircase; partial demolition of kitchen and plant structure on Floor 7; creation of winter gardens on the 6th floor; creation of external roof top amenity spaces; installation of new rooftop plant; refurbishment of the interiors and other associated works.	26 th January 2021	10-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development
18		118568/FO/2017 (Manchester City Council)	Refurbishment, restoration and re-use of Great Northern Warehouse building as mixed-use development including retail units (Use Classes A1 shop, A3 restaurant/cafe and A4 drinking establishment), gym (Use Class D2), casino (sui generis)	14 th March 2018	4-Storeys	Completion date is unknown; therefore, it is assumed that

Ref	Scheme	Application number	Description	Date approved	Maximum height	Anticipated construction phasing
	Great Northern Warehouse Redevelopment		and 118 no. residential apartments (Use Class C3), refurbishment, restoration and extension of 223-255 Deansgate Terrace and Goods Yard Entrance to accommodate ground floor retail units (Use Classes A1 shop, A3 restaurant/cafe and A4 drinking establishment) and 24 no. residential apartments (Use Class C3) on upper floors, reconfiguration of Great Northern Square to allow for redeveloped and additional public realm, to include hard and soft landscaping, and formation of Dean Street parallel to Deansgate, together with associated highway works, access, car parking, servicing, rooftop plant, removal of non-original modern installations and making good and associated works			there will be overlap in construction between this scheme and the proposed development
		122854/FO/2019 (Manchester City Council)	Revision to Phase 1 of approved planning application 118568/FO/2017 for Deansgate Terrace only to include reconfiguration of internal layouts for commercial and residential use areas (to now allow for 3 retail units instead of 2 as previously approved), creation of new residential entrance from Deansgate, relocation of residential plant to basement, revisions to external elevations and roof, introduction of additional Use Class A2 financial and professional services into the commercial space within ground/basement, and associated works	27 th Sep 2019		
		124847/JO/2019 (Manchester City Council)	Variation of condition application to vary/reword conditions 2 (Approved Plans and Documents), 3 (Materials), 4a (Ground Conditions), 5 (Odour Impact Assessment), 6 (Construction Management Plan), 8 (Acoustic Insulation), 12 (Archaeology), 13 (Landscaping Details), 15 (Surface Water Drainage), 18 (Piling Risk Assessment), 28 (Local Labour Agreement), 31 (Bird Nest) and 32 (Bats) attached to previously approved planning application 118568/FO/2017 to allow for a revision to Phase 1 of the approved development for Deansgate Terrace only to include reconfiguration of internal layouts for commercial and residential use areas (to now allow for 3 retail units instead of 2 as previously approved), creation of new residential entrance from Deansgate, relocation of residential plant to basement, revisions to external elevations and roof, introduction of additional Use Class A2 financial and professional services into the commercial space within ground/basement, and associated works, and to reflect the already discharged conditions on application 118568/FO/2017	12 th Dec 2019		
19	Plot 12 Circle Square	125451/FO/2019 (Manchester City Council)	Erection of new 15 storey building plus basement to include basement plant room, ground floor reception, cycle store and commercial space (flexible Use Classes A1 (Shop), A2 (Financial and Professional Services), A3 (Restaurant and Cafe), A4 (Drinking Establishment), D1 (Non-residential Institutions - Creche only) and D2 (Assembly and Leisure - Gym only) and 14 storeys of offices (Use Class B1) together with rooftop lounge and terrace, associated means of access and external landscaping around base of building	7 th February 2020	15-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development
20	St George's Place	123261/FO/2019 (Manchester City Council)	Erection of a part 8 and 9 storey building located on Arundel Street and Worsley Street, a part 11 and 23-storey residential building located on the Mancunian Way and refurbishment and conversion of the existing DOT Building to form 355 residential apartments in total (Use Class C3a) together with commercial uses (Use Classes A1, A2, B1, D1 and D2) along with associated car parking, cycle parking, access, landscaping and other associated work	23 rd August 2019	23-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development
Schemes Currently Under Construction						
21	Castle Wharf	113870/FO/2016 (Manchester City Council)	Construction of two residential apartment buildings with ancillary amenity facilities for residents including a gym, landscaped terrace and swimming pool, new public realm and landscaping including two new pedestrian connections to the Castlefield basin from Chester Road, basement car parking and related highway, access, servicing and associated works.	5 th April 2017	19-Storeys	Under Construction. Close to completion. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
		129524/NMC/2021 (Manchester City Council)	Non-material amendments to planning permission 113870/FO/2016 to alter the description of development to omit 'swimming pool' and replace with 'spa facilities'; and amendments to building design, comprising changes to basement levels (including omission of 3 parking spaces and swimming pool) to avoid culvert, increase in spa area and residents' lounge area, increase in building footprint to accommodate insulation changes, amendments to ventilation louvres, two 3-bed apartments changed to two 2-bed apartments, and amendments to cladding and windows.	13 th Apr 2021		
22	Elizabeth Tower & Victoria Residence	119806/FO/2018 (Manchester City Council)	Erection of two tall buildings (51 storeys and 21 storeys) comprising 664no residential units (use class C3) and commercial space (A1, A3 or D1), provision of two levels of basement parking, alterations to surface level car park, landscaping, highway alterations, access and associated works.	4 th July 2018	52-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
		128553/NMC/2020	Non material amendment application for changes to Condition 2 (plans) attached to planning permission 119806/FO/2018 to facilitate amendments to the internal layout and external appearance.	10 th Nov 2020		
		126668/FO/2020 (Manchester City Council)	Full planning permission for the erection of two 52-storey residential buildings (Use Class C3) each incorporating a podium accommodating residential amenity facilities and ground floor and first floor commercial units (Use Classes A1, A2, A3, or D1), private and public basement car parking, landscaping and a public park, servicing and access arrangements, highways improvements, and associated works (Phases A, B, and D as defined on Drawing Reference: 10292Z1SHPG000PL00 B5D802 and 10292Z1SHPG000PLB1B5D801). Outline planning permission (with all matters reserved) for an educational facility (Use Class D1) (Phase C as defined on Drawing References: 10292Z1SHPG000PL00B5D802 and 10292Z1SHPG000PLB1B5D801)	3 rd April 2020		
23	Viadux	115871/FO/2017 (Manchester City Council)	Erection of a 40 storey building to form 375 residential apartments (Use Class C3a) and the erection of a 14 storey building for form offices (Use Class B1) (31,756 sqm) together with ground floor commercial space (Use Class A1, A3 or A4) (1010	27 th July 2017	40-Storeys	Anticipated to be completed by spring 2024; therefore, it is

Ref	Scheme	Application number	Description	Date approved	Maximum height	Anticipated construction phasing
			sqm) with associated enclosed service yard, public realm including staircase and lift to connect with viaduct, car and le parking, landscaping and other associated works			assumed that there will be overlap in construction between this scheme and the proposed development.
		126868/JO/2020 (Manchester City Council)	Variation of planning conditions 2, 3, 21, 24, 25, 29, 30, 31, 32, 36 and 38 of planning permission 115871/FO/2017 (amended by 126604/NMC/2020) to allow for a reduction in overall height of the building by 2.5 metres, changes to the number and type of structural interventions into the listed arches, modification and alteration to the bridge over Great Bridgewater Street, alterations to the ground floor layout including enlargement of residents lobby together with re-location of the cycle store and reduction in car parking, alterations to the upper floor layout to remove 3 bedroom apartments and elevational alterations to main facade of the residential tower to modify the fin arrangement together with alteration to the podium with the introduction of perforated panels.	20 th Aug 2020		
24	Invicta House	126945/FO/2020 (Manchester City Council)	Redevelopment for a hotel use (Use Class C1), with ground floor ancillary facilities, comprising retention and refurbishment of main facade of Invicta House, erection of a ten-storey building to the rear, and other associated works.	15 th September 2020	10-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
25	iQ Echo Street	118267/FO/2017 (Manchester City Council)	Full planning permission for the demolition of existing buildings on site and their replacement with a mixed use (sui generis) development comprising 3 towers ranging in height (from 14, 20 and to 25 storeys (including lower ground floor level) and intermediary link buildings and providing: 403 units of Co-Living residential accommodation with associated shared amenity spaces; 94 units of purpose built student accommodation with associated shared amenity spaces; ground floor commercial floor space and children's day nursery together with cycle parking, recycling and refuse bin storage, associated plant and public realm enhancements to Granby Row, Echo Street, Cobourg Street and Back Acton Street	1 st June 2018	25-Storey	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
		122732/JO/2019 (Manchester City Council)	Application to vary condition number 2 (approved drawings) to allow developmental changes to design, and remove / amend conditions: 3 (cleaning of contractors vehicles) , 4 Building materials / samples), 6 (Construction Management Plan), 8 (Secured by Design), 9 (Surface Water Drainage), 10 (Public Realm/ landscape works), 11 (Wind Mitigation Measures), 12 (Sustainable Drainage SuDS), 31 (protected species), 32 (fumes vapours and odours) and 34 (acoustic insulation) attached to planning permission 118267/FO/2017 to reflect previously agreed details and conditions that have been partially / fully discharged.	19 th Feb 2019		
26	60 Charles Street	122644/FO/2019 (Manchester City Council)	Erection of 16 storey building plus plant level comprising a 278-room hotel (Use Class C1) with ancillary ground floor bar and restaurant uses (Use Classes A3, A4) with associated works to facilitate access, servicing and other associated works following demolition of existing building on-site.	31 st May 2019	16-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
27	John Dalton Tower	125799/FO/2019 (Manchester City Council)	Demolition of existing John Dalton West Building and associated structures, and erection of a new 7 storey education building (Use Class D1) for the Faculty of Science and Engineering (comprising teaching and research spaces, academic offices, social learning areas, catering/kitchen facilities and an energy centre), physical connections to and external refurbishment of the John Dalton Tower, hard and soft landscaping works, car and cycle parking and associated works.	12 th March 2020	7-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
28	Birley Plot E	120896/FO/2018 (Manchester City Council)	Construction of a part 6, part 11 and part 16 storey building comprising 491 student bedspaces (sui generis), amenity space, cycle parking, landscaping, and associated highways work.	19 th October 2018	16-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
		123767/JO/2019 (Manchester City Council)	Variation of condition numbers: 2 (Specified Plans), 11 (Landscaping), 15 (Operational Management Strategy), 16 (Access Strategy), 17 (Construction Management Plan), 18 (Local Labour Agreement), 20 (Acoustic Insulation) and 24 & 25 (Contaminated Land) of planning approval reference 120896/FO/2018 to allow for: re-positioning of building; internal arrangement amendments; and elevational amendments	5 th Jun 2019		
29	Units 3 And 4 Bentinck Street Industrial Estate	114961/FO/2017 (Manchester City Council)	Redevelopment of the site with a residential development comprising 109 dwellings (Use Class C3), with associated car parking and public realm.	5 th May 2017	10-Storey	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.

Ref	Scheme	Application number	Description	Date approved	Maximum height	Anticipated construction phasing
30	Sky Gardens	115211/FO/2017 (Manchester City Council)	Redevelopment of site with a mixed-use development comprising 174 dwellings (Use Class C3) and 4 commercial units (to include Use Classes A1, A2, A3, A4, B1a), with associated car parking and a landscaped public square.	30 th May 2017	12-Storey	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
31	Potato Wharf	114999/FO/2017 (Manchester City Council)	Erection of two residential buildings (Use Class C3) with a link building, comprising 191no apartments, residential amenity areas, car parking, bicycle parking, public realm and landscape works, access and servicing arrangements, and associated works, following demolition of the existing buildings and plant.	27 th April 2017	11-Storey	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
32	The Factory	114294/VO/2016 (Manchester City Council)	City council development of a new flexible arts and events space comprising a range of activities including theatre, music, dance, art, other performance and non-performance related events, exhibitions and conferences (Sui Generis) with ancillary facilities including retail exhibitions and conferences (Sui Generis) with ancillary facilities including retail and bar uses (Use Classes A1 and A3), offices, administrative and back of house functions (Use Class B1), training and educational facilities (Use Class D1), servicing and access arrangements, highways works, creation of new public realm, cycle parking and provision of new plant and associated works. Demolition of the Starlight Theatre, existing workshop and other structures and perimeter wall, removal of four existing trees and alterations to the Grade II listed Colonnaded Railway Viaduct.	16 th January 2017	7-Storey	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
		119890/VO/2018 (Manchester City Council)	City council development of a new flexible arts and events space comprising a range of activities including theatre, music, dance, art, other performance and non-performance related events, exhibitions and conferences (Sui Generis) with ancillary facilities including retail exhibitions and conferences (Sui Generis) with ancillary facilities including retail and bar uses (Use Classes A1 and A3), offices, administrative and back of house functions (Use Class B1), training and educational facilities (Use Class D1), servicing and access arrangements, highways works, creation of new public realm, removal of 4 trees, cycle parking and provision of new plant and associated works. Demolition of the Starlight Theatre, existing workshop and other structures and perimeter wall and alterations to the Grade II listed Colonnaded Railway Viaduct. (Amendment of application ref no 114294/VO/2016 approved in January 2017)	30 th Apr 2018		
33	Manchester Goods Yard	121511/FO/2018 (Manchester City Council)	Erection of two buildings comprising: 11 storey mixed use building (including ground and mezzanine) comprising workspace (Use Class B1), with retail uses at ground and mezzanine levels (Use Class A1/A2/A3/A4 and / or D2) and rooftop amenity spaces known as Manchester Goods Yard; and, a further 10 storey mixed use building (including ground) comprising workspace (Use Class B1), with retail uses at ground level (Use Class A1/A2/A3/A4 and / or D2) known as No.1 Grape Street, above two levels of basement parking for 391 cars and cycle storage, together with new public realm, landscaping, provision of external seating areas, access and other associated works.	14 th December 2018	11-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
		123047/NMC/2019 (Manchester City Council)	Non-Material Amendment to planning permission ref:121511/FO/2018, to include amendments to the wording of conditions, introduction of additional condition regarding phasing and additional condition regarding interim landscaping details, together with additional office floorspace to level 8 and revisions to layout of level 9.	12 th Apr 2019		
		127790/NMC/2020 (Manchester City Council)	Non Material Amendment to planning permission ref:121511/FO/2018, including minor reduction in building heights, minor reduction of distance between blocks, relocation of smoke extract, and re-alignment of canopy.	17 th Sep 2020		
34	Granada House	118040/FO/2017 (Manchester City Council)	Part redevelopment and part refurbishment of the site, following demolition of existing buildings and structures, including the Annex Building fronting Atherton Street, the Administration Block and Security Lodge fronting Quay Street, Mechanical Workshop areas and Stores to the rear of Studio 8, former Staff Welfare Suite to the rear of Studios 2 and 6, to allow the erection of 10 storey residential and office building (use Class C3 / B1) comprising 22 residential units with rooftop pool, ground floor retail units (Use Class A1, A2 or A3) and amenity space; conversion of Studios 2, 6, 8 and 12 to event spaces and filming studios (Sui Generis); conversion of the existing Granada House building into a hotel (Use Class C1) with associated private members club (Sui Generis); restaurant and cafe use (Use Class A3) and drinking establishment uses (Use Class A4); erection of a new single storey rooftop bar / restaurant associated with the hotel and private members club; erection of 4 storey modular office building the the rear of Granada House; inclusion of a Combined Heat and Power (CHP) Energy Centre; creation of temporary car parking to the rear of Granada House; works associated with access and servicing of the wider development, and associated public realm and landscaping works.	16 th May 2018	10-Storey	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
35	Water Street	125655/FO/2019 (Manchester City Council)	Full Planning Permission for the erection of 32 storey plus two basement level mixed use building (sui generis), comprising co-living units, amenity space, gym and flexible commercial space, landscaping, access and other associated works	15 th July 2021	32-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in

Ref	Scheme	Application number	Description	Date approved	Maximum height	Anticipated construction phasing
						construction between this scheme and the proposed development.
36	Union Living Tower One	126648/FO/2020 (Manchester City Council)	Full Planning Permission for the erection of 36 storey plus basement level mixed use building comprising co-living units, amenity space and flexible commercial space (Sui Generis), co-work (Use Class B1), landscaping, access and other associated works.	30 th July 2020	36-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
37	Novella	19/73721/REM (Salford City Council)	Details of reserved matters for access, appearance, landscaping, layout and scale for development of Plot C1 for the erection of a 23-storey building with associated 6-storey podium block to provide 211 apartments and ground floor commercial uses, together with associated ancillary facilities and servicing pursuant to outline planning permission 16/68325/OUT	3 rd October 2019	23-Storey	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
38	55 Portland Street	119265/FO/2018 (Manchester City Council)	Construction of a building of ground floor (including mezzanines) plus 16 upper storeys comprising a new hotel (Use Class C1), with ancillary uses at ground floor (bar, restaurant and public area, business suite), together with associated landscaping, servicing, cycle parking, and other associated works	4 th July 2018	17-Storeys	Under construction. Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
Schemes awaiting decision						
39	34 Great Jackson Street	129273/FO/2021 (Manchester City Council)	Demolition of existing structures and the construction of two residential buildings of 56 storeys (plus basement and roof plant) (use class C3), with ground floor commercial uses (use class E), car parking, cycle provision, landscaping, access and other associated works	Awaiting decision	56-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development.
40	Middlewood Locks Plot A-D and P	21/78212/OUTEIA (Salford City Council)	Outline planning application for mixed use development comprising a maximum of 93,000sqm office floorspace (Use Class E(g)); a maximum of 1,000 dwellings (Use Class C3); a maximum of 23,706sqm of commercial floorspace (Use Classes C1, E (a, b, e and f) and Sui Generis (drinking establishments)); multi-storey car park, landscaping, infrastructure and other associated works.	Awaiting decision	15-Storey	Construction period between 2023 and 2029. Therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development
41	Middlewood Locks Plot N	21/78214/REM (Salford City Council)	Reserved matters following outline planning permission 14/65793/OUT for the erection of a new mixed-use residential building (Use Class C3) comprising 250 units and 413sqm of ground floor commercial floorspace, together with associated ancillary facilities, servicing, landscaping and public realm	Awaiting decision	15-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development
42	Middlewood Locks Plot E	21/78211/REM (Salford City Council)	Reserved matters application following outline planning permission 16/67987/OUTEIA for the erection of a mixed-use residential development (Use Class C3) comprising two blocks (E1 & E2) totalling 659 units and 1,712qm of ground and first floor commercial uses, together with associated ancillary facilities, servicing, landscaping and public realm.	Awaiting decision	31-Storeys	Completion date is unknown; therefore, it is assumed that there will be overlap in construction between this scheme and the proposed development

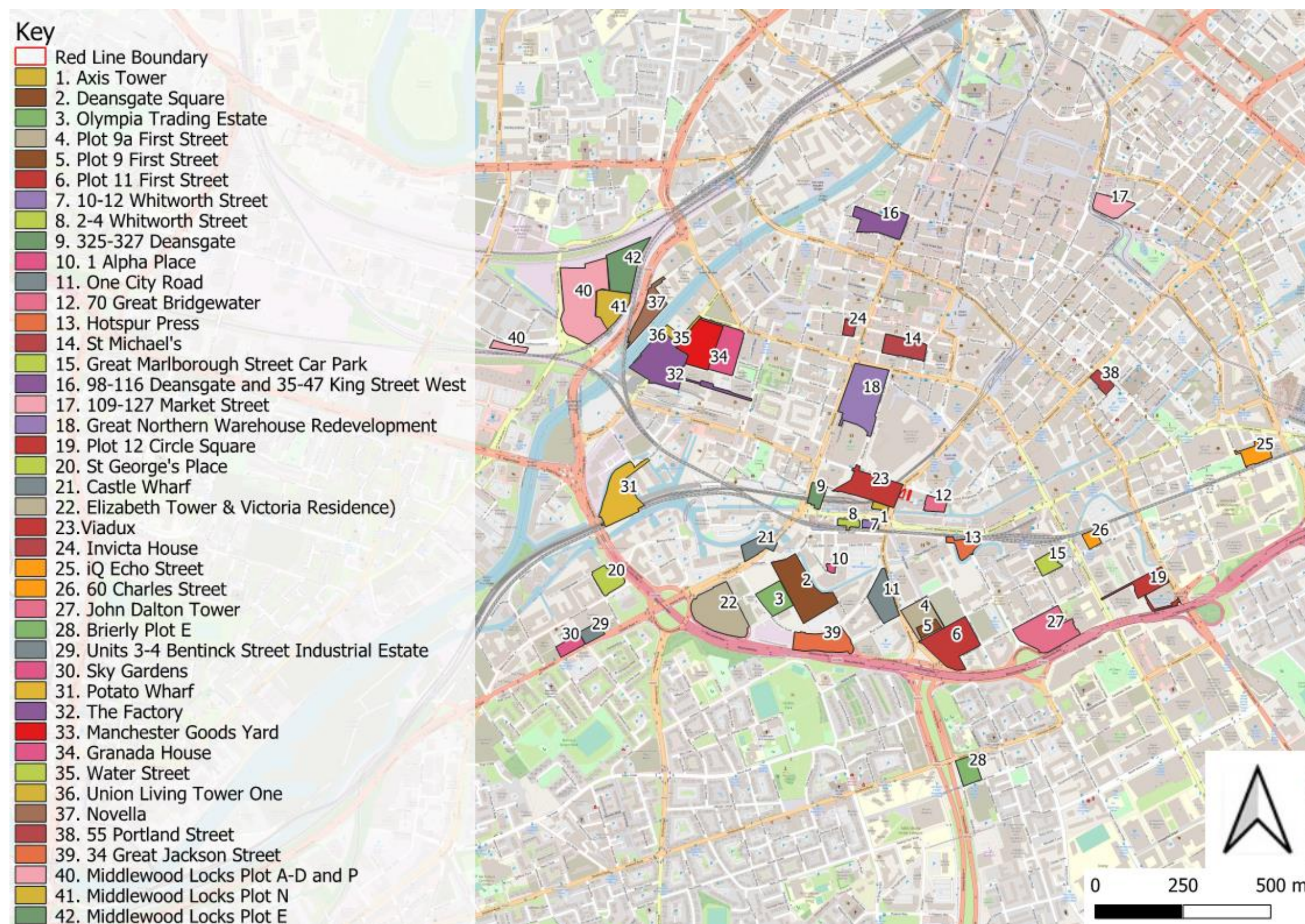


Figure 4-1 Cumulative schemes map

4.10 PLANNING POLICY FRAMEWORK

Planning Policy context

4.10.1 Each of the technical chapters contained within the ES will include reference to relevant national, regional and local planning policy and guidance documents.

National Planning Policy

- 4.10.2 The ES will have regard to the National Planning Policy Framework (NPPF) (July 2021), which sets out the Government’s planning policies for England and how these should be applied.
- 4.10.3 The ES will also have regard to the Planning Practice Guidance (PPG) where relevant (June 2021). The PPG is a web-based resource which brings together planning guidance on various topics into one place.
- 4.10.4 The release of the UK Government’s Planning for the Future White Paper is also noted, however, this is unlikely to influence the EIA as it is currently at the consultation stage and changes are unlikely to be made to the planning system prior to the targeted planning submission date.

Local and Regional Planning Policy and Guidance

- 4.10.5 The ES will have regard to the planning policies set out in MCC’s Local Development Framework Core Strategy Development Plan (July 2012) that are relevant to the proposed development.
- 4.10.6 The ES will also have regard to Places for Everyone Joint Development Plan Document – Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford, Wigan Publication Plan. The period of consultation for this document closed on 3th October 2021.

Other relevant guidance

- 4.10.7 Other supplementary planning documents that may be relevant to the proposed development include:
- Guide to Development in Manchester Supplementary Planning Document and Planning Guidance adopted April 2007; and
- Providing for Housing Choice – Supplementary Planning Document and Planning Guidance adopted 2nd September 2008.

5. PROPOSED ASSESSMENTS AND STRUCTURE OF ES

5.1 NON-SIGNIFICANT ISSUES TO BE SCOPED OUT OF THE ES

- 5.1.1 The purpose of the EIA Scoping Report is to help ensure that the EIA for the proposed development focusses on the significant effects that are possible from the proposed development. In doing so, issues may be scoped out, if significant effects are not considered likely. The following sections provide detail, and justification, on the issues that should be scoped out the EIA.

Traffic and transportation

Introduction

- 5.1.2 This section of the EIA scoping report has been prepared by Mosodi and has considered the potential effects of the proposed development on the existing local highway network.

Baseline conditions

- 5.1.3 The site is located in Manchester City Centre, between the railway stations of Deansgate and Manchester Oxford Road. Given its location, the site is highly accessible by active travel modes and by public transport:

The site is located within Manchester City Centre, which encompasses a wide variety of amenities;

The city centre benefits from excellent quality pedestrian facilities which will enable users to access the city centre on foot. Continuous connections are provided by means of controlled or uncontrolled crossings;

Good quality cycle infrastructure is provided throughout the city centre. In particular, national cycle network route 6 passes through the signalised junction of Lower Mosley Street/Great Bridgewater Street immediately to the west of the site. As part of the City Centre Bee Network proposals of walking and cycling routes, the City Centre Triangle is proposed along Whitworth Street West, south of the site. This will provide a radial route across and around the centre, linking to major trip attractors. Furthermore, Transport for Greater Manchester have announced the implementation of a new pay as you ride cycle hire facility for the city centre;

There is an extremely high frequency of bus services available from stops located on the site frontage (Great Bridgewater Street). Further stops and services are available nearby. Most of these offer frequent services into both Manchester Piccadilly Gardens and throughout Greater Manchester throughout the day and into the late evening;

Deansgate railway station is located approximately 350m west of the proposed development. The station is served by trains to and from Manchester Oxford Road, and towards Liverpool and Blackpool;

The site is located within 600m of Manchester Oxford Road railway station, which offers additional services, including to Edinburgh, Manchester airport, Chester, and Norwich; and

The site is located approximately 150m from the Deansgate-Castlefield tram station. The tram stop has three platforms which offer frequent services to a number of destinations.

Potentially sensitive receptors

- 5.1.4 Given the location of the proposed development within Manchester City Centre, a range of receptors with varying sensitivity exist. The proposed development seeks to provide residential and office development with a reduction in car parking on the site from the existing 7 spaces down to 3 spaces. Given the reduction in the

proposed number of parking spaces on the site, the proposed development is not expected to generate transport impacts that would affect sensitive local receptors.

Potential effects

- 5.1.5 A Transport Statement will be submitted with the planning applications and will include sections on relevant transport policy, accessibility by all modes, and an assessment of the impact of the proposed development on the safe operation of the local highway network.
- 5.1.6 In addition, the proposed development will be covered by a Travel Plan. The applicant sees the value in a proactive approach to travel planning and providing all existing and future development users with practical support to encourage sustainable travel and reduce the reliance on car journeys. Consequently, the Travel Plan will include a wide range of measures to ensure that people living and working at the proposed development are able to travel by non-car modes.
- 5.1.7 Based on the availability and high capacity of public transport services in the local area and taking into account the implementation of travel planning measures, it is anticipated that the proposed residential and office development associated with the proposed development will not represent a significant impact on the transport networks when compared to the existing use of the site.

Conclusions

- 5.1.8 It is considered that the proposed development does not have the potential to generate any significant transport effects as the number of car parking spaces is reduced on site. The Transport Statement and Travel Plan will provide an appropriate and robust assessment of the transport and highways considerations. As such, it is considered that traffic and transport should be scoped out of the EIA.

Water resources and flood risk

Introduction

- 5.1.9 This section of the EIA scoping report has been prepared by Buro Happold and informed by a desk-based assessment of publicly available information.

Baseline conditions

- 5.1.10 According to the Environment Agency (EA) flood map for planning, the site is located in flood zone 1, defined as land assessed to have less than a 1 in 1,000 (<0.1%) annual probability of river or sea flooding. EA surface water flood maps indicate that the site is at very low risk of surface water flooding, with an annual probability less than 1 in 1,000 (<0.1%).
- 5.1.11 According to the Manchester City, Salford City and Trafford Councils' Level 2 Hybrid Strategic Flood Risk Assessment (SFRA) (2011), the site lies within the Conurbation Core Critical Drainage Area (CDA). This CDA covers all of Manchester City Centre and the eastern area of Salford. The SFRA has developed CDAs where:

overland surface water flows, including the potential for flooding from the sewer network due to failure/blockage or exceedance events when the storm return period is greater than the sewer was designed for; or

Where there are areas of significant redevelopment planned that could have a significant impact on surface

- 5.1.12 The site does not lie within a Groundwater Source Protection Zone (SPZ), although a total catchment area (Zone III of a SPZ) lies approximately 22m east of site B boundary.

5.1.13 According to the EA ‘Water stressed areas – final classification 2021’ document (July 2021), the north-west of England is under low water stress (i.e., the availability of mains drinking water supply). The EA methodology for determining water stress identifies areas of serious water stress where:

able

to meet that demand; or

The future household demand for water is likely to be a high proportion of the effective rainfall available to

Potentially sensitive receptors

5.1.14 The following potentially sensitive receptors have been identified for the proposed development:

Rochdale Canal and Lake (water quality);

The River Medlock (water quality and flood risk);

Water services infrastructure (surface water);

Water services infrastructure (foul);

Water services infrastructure (potable water);

Site users; and

Construction staff

Potential effects during construction

5.1.15 The proposed development will potentially have the following effects during construction:

Impacts associated with the construction phase on the Rochdale Canal and the River Medlock i.e. an increase in sediment loads, the release of hydrocarbons and oils, accidental leaks and use of hazardous materials, dust and debris, and leaks or breakage of temporary sewerage systems;

Clogging of the surface water sewer system; and

Flood risk to construction workers and plant during the construction period.

5.1.16 However, these effects are not likely to be significant with a Construction Management Statement for the proposed development in place. The requirement for preparation and implementation of this document will be included as a planning condition and prepared by the Contractor, prior to construction of the proposed development. This will ensure that the risk of fuel and oil contamination is minimised by reducing the risk of accidental spillage as well as the severity of a spillage should it occur. This includes the use of appropriate containers, the construction of bunded areas within which fuels and oils will be stored and vehicles refuelled, and the implementation of an incident response plan.

5.1.17 A temporary surface water management strategy will be implemented by the contractor during the construction works phase. This should, where possible, utilise a staged Sustainable Drainage Systems implementation regime whereby the final drainage strategy is brought online incrementally.

Potential effects during operation

5.1.18 The proposed development will potentially have the following effects during operation:

Impacts associated with pollutants contained in surface water runoff on the water quality of the Rochdale Canal and the River Medlock;

Impact on water services infrastructure (surface water);

Increased foul water discharge;

Increased potable water demand;

Flood risk for the River Medlock; and

Flood risk for on site users.

5.1.19 However, these effects are not likely to be significant, with recommendations of the Flood Risk Assessment (FRA) and Drainage Strategy in place. Both the FRA and Drainage Strategy will form part of the suite of standalone reports submitted with the planning applications.

Conclusions

5.1.20 Based on a likely low residual flood risk to the site, the preparation of a standalone FRA and an appropriately designed Drainage Strategy with integrated sustainable urban drainage systems (SuDS), no likely significant effects are anticipated with respect to flood risk, surface water drainage and foul water drainage.

5.1.21 Furthermore, no likely significant effects are anticipated to water resources throughout the construction works following the implementation of a Construction Management Statement and various standard mitigating measures both pre-commencement and throughout the works.

5.1.22 On this basis, no further impact assessment work in respect of water resources, drainage and flood risk shall be presented within the ES and this topic will be scoped out of the EIA.

Ecology

Introduction

5.1.23 ERAP (Consultant Ecologists) Ltd was commissioned to carry out an ecological assessment of the site. The assessment was requested in connection with the planning applications to redevelop the site.

Initial assessment

Desktop study

5.1.24 There are no statutory designated sites for nature conservation within or immediately adjacent to the site. The site and adjacent land are not identified as Priority Habitat on MAGiC map.

5.1.25 On examination of MAGiC map on 29th September 2021, it is confirmed that the site lies within 10 km of the Rochdale Canal Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI), Hollinwood Branch SSSI and Huddersfield Canal SSSI. Although the site lies within the SSSI Impact Risk Zone for the above sites; the proposed development does not meet the SSSI Impact Risk Zone categories for which the Local Planning Authority must consult Natural England in relation to the likely risk of adverse impacts on designated sites.

5.1.26 No non-statutory designated sites (Sites of Biological Importance (SBI) are present on the site, the adjacent land or in the potential zone of influence. Adverse effects of the proposed development on non-statutory designated sites and their features of interest are therefore reasonably discounted.

5.1.27 Consultation of data provided by Greater Manchester Local Records Centre (GMLRC) confirmed that there are no known records of protected species reported for the site. Field records of common pipistrelle (a bat species) are reported for the area around the site.

Habitats and vegetation

- 5.1.28 An Extended Phase 1 Habitat Survey carried out on 19th October 2021 confirmed that the site is largely devoid of vegetation and comprises two areas of hard-standing used for car parking with margins of colonising ruderal herbs characterised by Butterfly Bush, Canadian Fleabane, Herb-Robert and Dandelion.
- 5.1.29 Other vegetation that will be affected (removed and/or shaded) by the proposed development are rupestral (wall-growing) herbs such as Ivy-leaved Toadflax, Wall-rue and Maidenhair Spleenwort that have colonised the lime-mortar of the brick walls bordering the public house yard/beer garden. Whilst this wall-growing plant community contributes to the biodiversity of the urban environment, none of the detected species are rare or identified as Priority Species.
- 5.1.30 There are no trees within the site. Young trees of Sycamore and a Whitebeam are present in the yard of the public house and overhang the brick wall at the eastern margin.
- 5.1.31 No invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) are present on the site or near the site boundaries.
- 5.1.32 No Priority Habitat will be adversely affected by the proposed development.
- 5.1.33 Recommendations for the conservation of the brick walls bordering the site and the associated rupestral plant communities (where feasible) will be made. In addition, recommendations outlining the scope for vegetative planting (such as green walls) to enhance the availability of habitats at the site to attract invertebrates and bird species typically associated with urban environments will be made.

Animal Life

Bats

- 5.1.34 No buildings will be demolished to facilitate the proposed development. As the proposed development will cause obstruction to the western and eastern elevations of the Briton's Protection public house, a licensed daylight bat survey and assessment of the exterior and interior (the roof void) was carried out on 19th October 2021. The objective of the survey was to determine the presence/absence of roosting bats at the building (as much as possible) and to assess the suitability of the building for use by roosting bats, taking into consideration the structure of the building and the surrounding habitats.
- 5.1.35 No evidence of the current or previous use of the building by roosting bats was detected. Gaps suitable for bat access are present beneath the ridge copings and between the roof slates of the building. Following comprehensive examination of the roof void and in the context of existing built development with artificial lighting bordering the site, the public house is assessed to have negligible suitability for use by roosting bats. None of the brick walls at the site boundaries support potential roost features.
- 5.1.36 No habitats within or adjacent to the site are considered to provide optimum conditions for foraging or commuting bats. It is therefore not considered necessary, in this instance, to implement a sensitive lighting strategy to limit excessive artificial lighting over the adjacent habitats, particularly in the interest of pedestrian safety in the city centre.

Birds

- 5.1.37 None of the colonising vegetation at the site is suitable for use by nesting birds. No evidence of the previous use of the public house or the walls bordering the site by nesting birds was detected. Guidance in relation to the protection afforded to nesting birds and recommendations in relation to the accommodation of features at the site for the attraction of nesting and feeding birds, particularly Priority Species and invertebrates associated with the urban environment will be presented in the report, which shall be submitted alongside the planning applications..

Other protected species and animal life

- 5.1.38 Appropriate and proportionate survey effort and/or assessment, in accordance with standard survey guidelines has been applied to rule out adverse effects on other relevant protected species. No further surveys for other protected species are necessary to support the planning application.

Conclusion

- 5.1.39 The ecological assessment of the site confirms that there are no significant ecological constraints at the site/associated with the proposed development. No potential significant adverse effects on statutory and non-statutory designated sites, Priority Habitats, invasive plant species, rare plants and protected species are identified.
- 5.1.40 Best practice recommendations to secure the protection of and to minimise disturbance of the trees and rupestral communities outside the site boundary will be made in the ecology report. To achieve compliance with relevant planning policy and best practice, recommendations will be made in relation to the improvement of opportunities for wildlife associated with urban areas at the proposed development.
- 5.1.41 Taking the above into account, it is concluded that ecology should be scoped out of the EIA.

Ground conditions

Introduction

- 5.1.42 Renaissance has been appointed to provide Civil and Structural Engineering advice in relation to the proposed development.
- 5.1.43 No intrusive site investigation works have been undertaken at this time, however, will be progressed as part of the development of the design post planning.

Site history

- 5.1.44 From references in the historical mapping within the Phase 1 Desk Study, which shall be submitted alongside the planning applications, records indicate the site has changed little over the last century. The 1850/51 map shows that plot A was utilised for coal storage, with a building occupying site B, and timber yard noted adjacent to this. The Briton's Protection public house is recorded between plot A and plot B at this time with the surrounding area occupied by various industrial uses.
- 5.1.45 The mapping to the surrounding area shows a gradual decline in the extent of manufacturing/light industry over time. Reference to the 1891 mapping indicates the site was developed with buildings present on each site until 1990 (plot A) and 1992 (plot B) respectively.

Geographical profile

- 5.1.46 Geological maps show Glacial Till deposits (Diamicton - clay to boulders, suspended in a matrix of mud or sand) overlying either Chester Pebble Beds (sandstones containing pebbles and conglomerates) or a narrow strip of Manchester Marls (lime rich mud/mudstone). There is also likely to be Made Ground present given the extent of previous development.
- 5.1.47 The western area (plot A) is indicated to be predominantly underlain by glaciofluvial sheet deposits, typically comprising sand and gravel. Glacial till, typically clay with minor silt, sand and gravel, is indicated to encroach into the northern end of plot A. The eastern area (plot B) is indicated to be predominantly underlain by glacial till (clays), with glaciofluvial deposits (sand and gravel) indicated to encroach into the southern area.

Hydrology

- 5.1.48
- The Chester Pebble Beds are designated as a Principal Aquifer, with at least the western part of the site also situated 22m to the east of a Source Protection Zone (SPZ).
- 5.1.49
- The nearest surface water feature to the site is the Rochdale Canal which lies approximately 35m south of the site, whereas the nearest natural watercourse is the River Medlock located approximately 170m south (flow direction is indicated to be from east to west).

Coal Authority status

- 5.1.50
- The site is recorded to lie within an area, deemed by the Coal Authority, to be potentially affected by coal mining. However, the potential in this city centre setting is considered limited and the site is unlikely to be affected.

Preliminary Conceptual Site Model

- 5.1.51
- A Preliminary Conceptual Site Model has been generated which defines overall risk from land contamination and controlled waters. Risks have been assessed to be low to moderate for the proposed development in relation to human risk to end users and controlled waters.
- 5.1.52
- Contamination and land gas risks from existing soils/groundwater, and from the proposed development, are likely to be limited given the context of the previous site use and periods of development.
- 5.1.53
- A plot specific detailed intrusive ground investigation will be completed at the next stage of design development, in accordance with industry best practice, to identify the Geo Environmental regime beneath each site and manage the risks to future site users defined in the Preliminary Contamination Site Model.

Conclusions

- 5.1.54
- As such, it is considered that the risks and resultant effects are sufficiently well understood and that based on the information currently available, it is likely that the residual effects associated with ground conditions and groundwater would be insignificant. It is therefore proposed that a Ground Conditions and Contamination chapter is scoped out of the EIA.

Socio-economics

Introduction

- 5.1.55
- This section of the EIA Scoping Report has been prepared by Buro Happold and considers the potential effects of the proposed development in relation to socio-economics.

Baseline conditions

- 5.1.56
- The existing site is located in Manchester City Centre and is divided into two parcels of land. Both parcels are currently being used for car parking. The area surrounding the site is characterised by office, leisure, hotel and residential uses, typical of a city centre location.

Potentially significant receptors

- 5.1.57
- The likely significant receptors during the construction and operational phases of the proposed development are considered to be:

Existing and future local businesses and employees;

Existing and future local residents; and

Local social infrastructure resources (including education, open space, play space and health facilities).

Potential effects

- 5.1.58
- The proposed development will generate temporary employment opportunities (direct and indirect) during the construction phase. This could potentially benefit both the local economy and labour market.
- 5.1.59
- During the operational phase of the proposed development, the following potential effects could arise:

The creation of employment opportunities from the proposed commercial (office) uses;

Benefits associated with the provision of new housing;

Additional local spending associated with the new residents and employees;

The provision of office floorspace in central Manchester; and

The demand for social infrastructure from the on-site population expected to reside within the proposed residential units, including on primary healthcare, primary and secondary education places and open space and play space provision.
- 5.1.60
- The proposed development will result in the addition of new residents and jobs to the local area. However, given the quantum of the proposed development, comprising up to 79 residential units and up to 250 sqm of office use, significant socio-economic effects are not expected during the construction or operational phases.

Conclusions

- 5.1.61
- As it is not anticipated that the proposed development will have significant socio-economics effects, it is concluded that socio-economics should be scoped out of the EIA.

Archaeology

Introduction

- 5.1.62
- This section of the EIA Scoping Report has been prepared by Archaeological Research Services and considers the potential effects of the proposed development in relation to archaeology.

Assessment context

- 5.1.63
- The Greater Manchester Historic Environment Record (HER), in addition to historical Ordnance Survey maps, town plans, and county maps dating back to the 19th century, have been appraised for any known heritage restraints within a 250m buffer around the site boundary.
- 5.1.64
- Extensive Romano-British remains have been found within Manchester, with the five-acre wooden fort known as Mamucium established within the area of Camp Street in Castlefield. A number of roads leading from the fort, such as the Manchester to Buxton road (HER 28.1.3), which ran c.40m south of the site boundary, linked Mamucium with other settlements to the north and south. During the second century, the fort was developed in association with an extramural settlement known as a vicus (HER 415.2.0). The majority of the vicus appears to be focussed to the north of the river Medlock, with the eastern extent of this falling within c.90m of the western boundary of the site. A number of Romano-British findspots, including coins and pottery, have been identified to the west and south of the site, suggesting that Romano-British remains may extend into this part of Manchester.
- 5.1.65
- Until the 18th century, the area surrounding the site was laid out as largely agricultural land. It was not until the construction of the Rochdale Canal, which linked the Bridgewater Canal to the Calder and Hebble Navigation in Yorkshire, that development began to expand further into this area of Manchester. Early 19th century plans show the establishment of a formal grid pattern of streets during this period, with the listed Briton's Protection Public House (NHLE 1292050) also constructed at this time.

- 5.1.66 Historic mapping indicates that a number of structures were once present within the site boundary by the mid-19th century, most of which appear to be temporary buildings associated with a coal yard, which occupied much of plot A. It is not until the late-19th century when extensive development occurred within the site. Ordnance Survey plans from the mid-late 19th century indicate that the site was once occupied by a series of commercial dwellings fronting Great Bridgewater Street and Albion Street. Some of these structures appear to have been run as coffee rooms and taverns, beer retailers, and tobacconists, amongst other professions.
- 5.1.67 Modern maps indicate that the site remained largely unchanged until the late-20th century, when all the buildings within the site were demolished. Currently, the site is utilised for private car parking.

Baseline assessment

- 5.1.68 An archaeological assessment will require a phased approach, initially comprising detailed desk-based research. Once the desk-based assessment has been completed, consultation will be undertaken with the Greater Manchester Archaeology Advisory Service (GMAAS) to agree upon a suitable strategy for further evaluation of the site, should this be deemed necessary. This may include techniques such as evaluation trenching of any features thus identified, or other targeted techniques. These further works would be subject pending approval of a written scheme of investigation.
- 5.1.69 The initial desk-based assessment will be undertaken in accordance with the guidelines set out in The Chartered Institute for Archaeologists' Standards and Guidance for Historic environment Desk-Based Assessment (CIfA 2020).

Potential construction effects

- 5.1.70 In general terms, the potential impacts to below-ground features or deposits of archaeological interest can be summarised as follow:
- Removal or truncation of heritage assets during ground works, site clearance and construction (e.g. removal of hardstanding, made-ground/fill, erection of fencing, traffic movement);

Damage to buried archaeological remains due to rutting from construction traffic movement; and

Other groundworks associated with two multi-storey buildings, such as foundation and service trenches, which have the potential to damage or destroy below-ground features or deposits of cultural heritage value, should they be present.

Potential operation effects

- 5.1.71 After completion of the construction works within the site boundary, there will be no further impacts to below-ground archaeological remains.

Assessment of effect significance

- 5.1.72 The approach to the assessment of significance is that set out in Conservation Principles (English Heritage 2008), which states that the significance of heritage assets derives from the 'heritage values' that they possess, which may be evidential, historical (either illustrative or associative), aesthetic, or communal. It is further outlined in Annexe 1 of Scheduled Monuments & Nationally Important but Non-Scheduled Monuments (DCMS 2013) which states that

erestand

 derive significance from both their physical presence and their setting. The following principles should be used to gauge the importance of heritage assets: period, rarity, documentation/finds, group value, survival/condition, fragility/vulnerability, diversity, and (DCMS 2013, 10-11).
- 5.1.73 Reference is also made to 'heritage significance' as described in the NPPF, which is defined as the heritage asset to this and future generations because of its heritage interest. That interest may be archaeological,

(MHCLG 2021, 71).

Conclusions

- 5.1.74 It is proposed that the topic of archaeology is scoped out of the EIA as it is unlikely that there will be significant effects. However, an archaeological desk-based assessment shall be undertaken and submitted alongside the planning applications.

Solar glare

- 5.1.75 The BRE guidelines provide that 'glare or solar dazzle can occur when sunlight is reflected from a façade or area of metal cladding'. This is considered an issue in relation to road users whereby an instance of reflection can obscure the view of traffic signals and thus have the potential to cause an accident.
- 5.1.76 The potential for solar glare effects is dependent on the design, location and orientation of glazed façade details. The facades of the proposed development will be designed with consideration given to solar glare, and any significant effects will be mitigated throughout the design evolution.
- 5.1.77 Overall, there is unlikely to be significant instances of solar glare arising from the building façades with inherent mitigation to mitigate significant solar glare effects should they arise. Therefore, it is considered that solar glare can be scoped out of the EIA.

Artificial lighting

- 5.1.78 The Institute of Lighting Professionals (ILP) publication 'Guidance Note for the Reduction of Obtrusive Light' (GN01:2020) makes recommendations aimed particularly at avoiding nuisance from obtrusive external lighting installations. The guidance advises that this can be achieved by good lighting design through careful selection of light sources, luminaires and the method of installation.
- 5.1.79 Any external lighting around the proposed development should be suitably designed and specified, taking on board the ILP recommendations, so that light spillage will be minimised.
- 5.1.80 Considering the nature of the proposed development, and nearby receptors, a dedicated ES chapter assessing light spill is not considered necessary and is scoped out of the ES. It is anticipated that preparation of a Lighting Strategy will be included as a planning condition for the proposed development.

Electronic interference

- 5.1.81 Due to its high frequency and reliance on static aerials, television signal reception is vulnerable from interference from buildings. A building of a significant mass and height can cause disruption. However, the digital switchover is now complete. This switched off the UK's analogue TV signal and replaced it with digital signal. The digital switchover means that everyone is able to receive digital TV through an aerial (Freeview), as part of Government policy to roll this out. As such it is considered that there will be no significant risks to television reception in relation to the proposed development. It is proposed that electronic interference will therefore not be considered within the ES.

Aviation

- 5.1.82 Manchester airport is located approximately 13km to the south of the site. It is proposed that aviation will not be included within the ES, as this primarily relates to health and safety requirements that are not necessarily well aligned to the environmental impact assessment process. In addition, the site is located in an urban area with multiple clusters of tall buildings that exceed the height of the proposed development.

Major accidents and/or natural disasters

- 5.1.83
- The proposed development is unlikely to produce a significantly elevated risk of accidents or natural disasters outside of the existing context. Construction practices will adhere to good practice guidance and a Construction Management Statement will be prepared for the construction phase. This will include mitigation as proposed by the various assessments to be included within the ES.
- 5.1.84
- As for the potential for accidents and/or disasters to impact on the proposed development itself, the proposed development will be designed in accordance with industry standards, including for drainage and building regulations. Furthermore, the FRA will assess the potential impacts and effects relating to flood risk to the proposed development itself. Additionally, a climate change resilience and adaptation risk assessment will be undertaken, and a summary included in the ‘Alternatives and Design Evolution’ ES chapter.
- 5.1.85
- It is acknowledged that there is potential for risk associated with working directly adjacent to busy roads, including Albion Street and Great Bridgewater Street. However, construction will adhere to good working practice.
- 5.1.86
- The proposed development itself would not include any potentially dangerous operations such as the use and processing of hazardous chemicals, however, the proposed land uses may be considered potentially vulnerable to malicious incidents such as terrorist attacks and public disorder (e.g., protests).
- 5.1.87
- Considering the commitments and measures outlined in this section of the EIA scoping report, a dedicated ES chapter assessing major accidents and/or natural disasters is scoped out of the ES.

Human health

- 5.1.88
- Potentially significant effects on human health will be directly or indirectly considered across the technical chapters of the ES, rather than in a dedicated ES chapter. For example, exposure to dust and pollutants will be assessed within the air quality ES chapter, exposure of future residents to noise disturbance will be assessed in the noise and vibration ES chapter, amenity access to daylight and sunlight will be assessed within the daylight, sunlight and overshadowing ES chapter, and pedestrian comfort and safety will be considered in the wind microclimate ES chapter. Non-significant human health aspects will be considered in the relevant standalone reports submitted with the planning applications, for example in the ground conditions desk study, FRA and drainage strategy.

Waste management

- 5.1.89
- It is proposed that waste management is scoped out of the EIA for the proposed development because effects associated with waste management will be suitably mitigated through other means.
- 5.1.90
- At the construction stage, waste management will be covered under the contractor’s waste management and procurement policies. Additionally, a Construction Management Statement will be produced for the construction phase, which will provide suitable mitigation measures for waste in line with industry best practice.
- 5.1.91
- For the operational phase of the proposed development, operational waste will be managed in line with relevant policies and building standards. A waste strategy will be included in the Design and Access Statement submitted with the planning applications.

5.2 ENVIRONMENTAL ISSUES TO BE SCOPED INTO THE ES

Technical chapters

- 5.2.1
- The assessment will focus on the potentially significant effects of the proposed development. The proposed technical studies for inclusion within the EIA are as follows:

- Air quality;
- Noise and vibration;
- Wind microclimate;
- Daylight, sunlight and overshadowing;
- Built heritage;
- Greenhouse gas emissions; and
- Townscape and visual impact.

Cross cutting issues

Climate change resilience and adaptation

- 5.2.2
- The assessment of greenhouse gas (GHG) emissions associated with the proposed development (climate change mitigation) shall be reported upon in the ‘Greenhouse Gas Emissions’ ES Chapter. The effects of climate change on the proposed development itself shall be assessed through a climate change resilience risk assessment, a summary of which shall be provided in the ‘Alternatives and Design Evolution’ ES chapter, as per the IEMA EIA Guide to Climate Change Resilience and Adaptation (2020). Additionally, in line with the IEMA (2020) guidance, the extent to which climate change exacerbates or ameliorates the effects of the project on the environment shall be covered across each ES chapter, where relevant (i.e. in-combination climate change effects). There shall be a dedicated section in each ES chapter, in which the technical specialist will discuss the extent to which the effects of climate change shall affect the significance of effects identified.

5.3 ENVIRONMENTAL STATEMENT GENERAL CHAPTERS

- 5.3.1
- Further to the technical chapters, the following chapters will also be prepared as part of the ES:
- Introduction;
- Development description and summary of construction works;
- Alternatives and Design Evolution;
- Methodology;
- Cumulative and interactive effects; and
- Residual effects and conclusions, including a summary of supplementary mitigation measures.

5.4 VOLUMES OF THE ES

- 5.4.1
- The ES will consist of the following volumes:
- Environmental Statement: Non-Technical Summary;
- Environmental Statement Volume I: Main Report;
- Environmental Statement Volume II: Townscape and Visual Impact Assessment; and
- Environmental Statement Volume III: Appendices to Main Report.

6. ENVIRONMENTAL ASSESSMENT – TOPICS SCOPED INTO THE ES

6.1 INTRODUCTION

- 6.1.1 Agreeing the assessment methodology is a crucial stage of the process and is the primary purpose of requesting a scoping opinion. Ensuring the EIA methodology is acceptable to decision makers and consultees helps to avoid unnecessary delays in the post-planning determination process.
- 6.1.2 The assessment methodologies for each of the topic areas that will determine the impact of the proposed development on environmental receptors are set out below. To aid MCC and the statutory consultees in determining whether the methodology proposed is adequate, some baseline contextual information is provided and preliminary consideration is given to potential areas of significant effects.

6.2 AIR QUALITY

Assessment context

- 6.2.1 The planning process is a key means of managing and improving air quality, particularly in the long term, through the strategic location and design of new developments. Any air quality consideration that relates to land use and its development can be a material planning consideration in the determination of planning applications, dependent upon the details of the proposed development. The Air Quality Assessment will be undertaken by Redmore Environmental.
- 6.2.2 The proposed development is located within a designated Air Quality Management Area (AQMA). This has been declared by MCC due to exceedances of the annual mean Air Quality Objective (AQO) for nitrogen dioxide (NO₂).
- 6.2.3 There are a number of residential properties within the vicinity of the site which may be affected by any fugitive dust emissions during construction of the proposed development. Additionally, there are a number of residential properties within the vicinity of roads which may be affected by changes in traffic flow and associated increases in vehicle exhaust emissions as a result of the operation of the proposed development.

Potential construction effects

- 6.2.4 During the construction of the proposed development, there is the potential for air quality effects as a result of fugitive dust emissions from earthworks, construction and trackout activities.

Potential operational effects

- 6.2.5 During the operation of the proposed development, there is the potential for air quality effects as a result of road traffic exhaust emissions associated with vehicles travelling to and from the site, as well as the exposure of future residents to elevated pollution levels.

Assessment methodology

Technical scope

- 6.2.6 The proposals have the potential to cause air quality impacts as a result of fugitive dust emissions during construction and road traffic exhaust emissions associated with vehicles travelling to and from the site during operation.

Baseline assessment

- 6.2.7 Baseline air quality conditions in the vicinity of the site will be defined based on recent monitoring results and information from the Department for Environment, Food and Rural Affairs (DEFRA) Air Quality Resource. Sensitive locations that could be affected by the proposed development will also be identified, as well as any relevant planning policies or guidance.

Effect prediction and assessment of effect significance

Construction effect significance

- 6.2.8 During the construction of the proposed development, there is the potential for air quality effects as a result of fugitive dust emissions from earthworks, construction and trackout activities. It is proposed to assess these in accordance with the IAQM guidance 'Assessment of Dust from Demolition and Construction V1.1'.

Operational effect significance

- 6.2.9 During the operation of the proposed development there is the potential for the exposure of future residents to elevated pollution levels. It is proposed to assess this through detailed dispersion modelling using ADMS-Roads in order to fully quantify NO₂, particulate matter with an aerodynamic diameter of less than 10µm (PM₁₀) and particulate matter with an aerodynamic diameter of less than 2.5µm (PM_{2.5}) concentrations across the site.
- 6.2.10 The assessment will be undertaken using relevant traffic data, local land use characteristics and 1-year of hourly meteorological records taken from the Manchester Airport observation station. The modelling outputs will be verified against local monitoring data in accordance with the DEFRA methodology. Predicted pollutant concentrations will be compared against the Air Quality Objectives, as defined in the UK Air Quality Strategy and associated regulations. This will determine the potential for the exposure of future residents to poor air quality. Concentrations will be displayed graphically throughout the assessment extents using contour plots.
- 6.2.11 The proposed development has the potential to increase concentrations of NO₂, PM₁₀ and PM_{2.5} as a result of road traffic exhaust emissions associated with vehicles travelling to and from the proposed development during the operational phase. Given there will be a reduction in vehicle movements from the site compared to the existing land use (i.e., 7 car parking spaces down to 3), potential air quality impacts associated with the operational phase are predicted to be not significant in accordance with the criteria contained within the IAQM 'Land-Use Planning & Development Control: Planning for Air Quality' guidance. As such, potential air quality impacts as a result of road traffic exhaust emissions associated with vehicles travelling to and from the site during the operational phase will not be considered further within the Air Quality Assessment.
- 6.2.12 If required following the assessment, suitable mitigation measures will be identified in order to reduce air quality effects to an appropriate level with reference to the recommendations included within the IAQM guidance.

6.3 NOISE AND VIBRATION

Assessment context

- 6.3.1
- This section of the EIA scoping report has been produced by Hydrock Consultants Ltd. (Hydrock). This section describes the proposed scope and methodology of the noise and vibration assessment that will be reported on in the ES.
- 6.3.2
- Site A is located in a mixed residential and commercial setting and is bordered by Albion Street, Great Bridgewater Street and Trumpet Street. Site B is bordered by Great Bridgewater Street and Trumpet Street. To the west and north-west is a tram line in addition to Manchester’s Tower of Light, situated approximately 35m away. To the south of the site is Bliss Club. Between site A and site B is the Briton’s Protection public house and associated beer garden.
- 6.3.3
- An assessment is required to consider the potential impacts of existing sources of noise and vibration on the proposed development, and also how the proposed development might impact Existing Sensitive Receptors (ESRs) in the vicinity of the site.
- 6.3.4
- The geographical scope will be the site and surrounding area, including nearby residences and other ESRs. The study area for the assessment will be established by the identification of potentially sensitive existing and proposed receptor locations which could be affected by noise and vibration during the works and/or completed and operational development. The temporal scope will cover the construction and occupation phases of the proposed development.

Potential construction effects

- 6.3.1
- The likely significant noise and vibration effects associated with the construction stage of the proposed development are as follows:

Construction noise at ESRs, associated with the works; and

Construction vibration at ESRs, associated with the works.

Potential operational effects

- 6.3.2
- The likely significant noise and vibration effects to be considered within the operational phase of the proposed development are as follows:

Existing noise environment for proposed sensitive areas of the proposed development; and

Noise from proposed ancillary equipment/building services within the proposed development at existing and proposed receptors.

Assessment methodology

Technical scope

- 6.3.3
- It is considered reasonable to scope out noise from development generated traffic at ESRs for both the construction and operational phase. This is due to the proposed development being located within a city centre, therefore the change in noise level due to construction traffic is likely to be minimal. Furthermore, during the operational phase, there will be a net reduction in the vehicle movements on the surrounding network, due to there being a reduction in car parking spaces on the site compared to the current use. The effect of development generated traffic during both the construction and operational phase is therefore considered to be negligible.

- 6.3.4
- The assessments will be undertaken in accordance with the assessment methodologies as detailed in relevant best practice guidance and standards.

Baseline assessment

- 6.3.5
- A noise survey will be carried out at the site.
- 6.3.6
- Monitoring will be carried out at the northern boundary of the site to measure the level of noise from vehicles travelling on Great Bridgewater Street. Monitoring will be carried out at this location in accordance with the shortened measurement procedure set out in Calculation of Road Traffic Noise, which requires that three consecutive hours are monitored between 10:00 and 17:00 hrs.
- 6.3.7
- Monitoring will be carried out at the north-western boundary of the site to measure the level of noise from vehicle movements on the A5103 and also noise from tram movements. Monitoring at this location will be carried out during the peak daytime (07:00 - 10:00 hrs) and night-time (05:00 – 07:00 hrs) transportation periods.
- 6.3.8
- Monitoring will be carried out to the east of the site near to ESRs off Trumpet Street. Monitoring will be carried out for a minimum of three hours during the quiet daytime (10:00 -17:00 hrs) and night-time (00:00 – 05:00 hrs) transportation periods. Monitoring at this location will be carried out to establish the ambient (BS5228) and background (BS4142) noise levels at ESRs.
- 6.3.9
- Additional noise monitoring will also be carried out at an appropriate period to monitor the level of entertainment-based noise from the Briton’s Protection public house and Bliss Club, and also at suitable location to establish the level of noise from the combined heat power engine (CHP) ductwork and outlet associated with Manchester’s Tower of Light.
- 6.3.10
- We have consulted with the Environmental Health Officer at MCC to confirm the methodology of the survey.
- 6.3.11
- An acoustic model will be prepared using SoundPLAN V8.2, which uses OS Mapping and topographical data to create a 3D study area of the site. Construction of a baseline model will facilitate assessment of baseline noise levels across the site, and at nearby noise sensitive receptors near the site boundaries to a reasonable level of accuracy.

Effect prediction and assessment of effect significance

Construction phase

- 6.3.12
- The construction phase of the proposed development will need to be assessed at existing noise sensitive receptors, and receptors of the proposed development itself, in accordance with BS5228 pt.1, noise and pt.2, vibration.
- 6.3.13
- At this stage specific construction details may not be available. However, if possible, we will seek to consider the following:

Activities/sub activities to be carried out at each stage of the project (e.g. site mobilisation and set-up; piling operations; structural underpinning; superstructure & building envelope and fit out.);

Plant and equipment required for each of the activities;

No. of plant required;

% Operating on-time for each item of plant;

Working locations for activities/plant; and

Indicative construction programme.

Construction noise

- 6.3.14
- The likely significant effects of noise from construction will be assessed in accordance with the ‘ABC Method’ of BS5228-1.
- 6.3.15
- This method defines category threshold values which are determined by the time of day and existing monitored ambient noise levels in the vicinity of ESRs (rounded to the nearest 5dB). Noise likely to be generated by the construction activities, known as the ‘total noise level’, is then compared with the ‘threshold value’. If the total noise level exceeds the ‘threshold value’, a significant effect is deemed likely to occur. Table 6-1 summarises the significance effect threshold values at receptors, recommended by BS5228-1.

Table 6-1 BS5228 significance of effect thresholds

Assessment Category Threshold Value Period	Threshold Value, dB		
	Category A *1	Category B*2	Category A *1
Weekday Daytime (07:00 to 19:00) and Saturdays (07:00 to 10:00)	65	70	75
*1 Category A: Threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are less than this value. *2 Category B: Threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are the same as category A values. *3 Category C: Threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are more than this value.			

- 6.3.16
- If these details aren’t readily available, then threshold limits will be set out to avoid the potential for significant effect.

Construction vibration

- 6.3.17
- An assessment of the construction vibration will be assessed against the threshold levels of disturbance set out in Table 6-2.

Table 6-2 BS5228 guidance on effects of vibration levels

Place and time	Effect
Residential building 16h day	Vibration might be just perceptible in the most sensitive situation for most vibration frequencies associated with construction. At lower frequencies, people are less sensitive to vibration.
Residential building 8h night	Vibration might be just perceptible in residential environments.
1.0 mms ⁻¹	It is likely that vibration of this level in residential environments will cause complaint, but can be tolerated if prior warning and explanation has been given to residents.
10 mms ⁻¹	Vibration is likely to be intolerable for any more than a very brief exposure to this level in most building environments.

Operational phase

Operational noise

- 6.3.18
- Noise levels will be presented for the proposed noise sensitive areas, including external amenity areas and internal living areas within dwellings for the completed and operational development. The noise levels will be quantitative in nature and in accordance with British Standard 8233 and WHO health-based guidance.
- 6.3.19
- The recommended guideline levels for habitable spaces as set out within BS8233 are shown in Table 6-3.

Table 6-3 BS8233 recommended guideline levels for habitable spaces

Noise Sensitive Area	Recommended Guideline Level,	Period
External living area	50-55 dB(A)	Daytime (0700-2300hrs)
Livingroom	35 L _{Aeq,16hour} , dB	Daytime (0700-2300hrs)
Bedroom	35 L _{Aeq,16hour} , dB	Daytime (0700-2300hrs) Night-time (2300-0700hrs)
	30 L _{Aeq,8hour} , dB	
	45 L _{Amax,F} , dB	

- 6.3.20
- Noise levels from proposed ancillary equipment associated with the proposed development, for example building services and fixed plant at the proposed residential and office uses, would need to be controlled to ensure that it would not have an adverse effect on Proposed Sensitive Receptors (PSRs) and EESRs, relative to the background noise level.
- 6.3.21
- Criteria for the assessment will be set in accordance with BS 4142:2014. Using the baseline noise levels established during the survey, noise limits for ancillary equipment will be provided to ensure the preliminary requirements of BS4142 are met.
- 6.3.22
- Consideration will also be given to the potential noise impacts associated with the Briton’s Protection public house and Bliss Club. An assessment of noise from this premises will be carried out in accordance with the guidance set out within MCC’s Planning and Noise Technical Guidance 2015 document.
- 6.3.23
- Specific design guidance, such as façade sound insulation requirements, acoustic ventilation requirements for control of noise ingress, numeric limits for control of future mechanical services noise (with a view to achieving no significant impacts) and specific review of external amenity areas will be addressed separately and detailed fully in the Noise Planning Report, which shall be submitted alongside the planning applications for the proposed development.

Significance of effect

- 6.3.24
- In accordance with IEMA, the significance of a noise impact is determined by both the magnitude of effect and the sensitivity of the receptor. For the purposes of scoping, it is assumed all receptors will be considered in terms of the sensitivities outlined in Table 6-4.

Table 6-4 Scale used to determine sensitivity of receptor

Sensitivity	Description
High	Receptor/resource has little ability to absorb change without fundamentally altering its present character, or of international or national importance. For example, hospitals, residential care homes, and internationally and nationally designated nature conservation sites which are also known to contain noise sensitive species (i.e. noise may change breeding habits or threaten species in some other way).
Moderate	Receptor/resource has moderate capacity to absorb change without significantly altering its present character. For example, residential dwellings, offices, schools, and play areas. Locally designated nature conservation sites which are also known to contain noise sensitive species (i.e. noise may change breeding habits or threaten species in some other way).
Low	Receptor/resources is tolerant of change without detriment to its character or is of low or local importance. For example, industrial estates.
Negligible	Receptor/resource is not sensitive to noise.

- 6.3.25
- Table 6-5 describes the magnitude of noise and vibration effects. These magnitude descriptors are based upon IEMA Guidelines for Environmental Noise Impact Assessment (2014), and the descriptions based on the Noise Exposure Hierarchy in PPG-Noise (2019).

Table 6-5 Scale used to determine magnitude of effects

Magnitude	Description
Small	Significant changes in behaviour and/or inability to mitigate effect of noise leading to psychological stress or psychological effects e.g. regular sleep deprivation/awakening less of appetite, significant medically definable harm e.g. auditory and non-auditory.
Medium	Causes a material change in behaviour and/or attitude e.g. avoiding certain activities during periods of intrusion. Potential for sleep disturbance resulting in difficulty getting to sleep, premature awakening and difficult getting back to sleep. Quality of life diminished due to change in character of the area.
Large	Noise impact can be heard and causes small changes in behaviour and/or attitude e.g. turning up the volume of television; speaking more loudly; closing windows. Potential for non-awakening sleep disturbance. Affects the character of the area such that there is a perceived change in the quality of life.
Negligible	Noise impact can be heard but not cause any change in behaviour or attitude e.g. turning up the volume of television; speaking more loudly; closing windows. Can slightly affect the character of the area but not such that there is a perceived change in the quality of life.

6.3.26 The significance of effect is determined by the interaction between the sensitivity of receptor and the magnitude of effects. Magnitude descriptors are based upon IEMA Guidelines for Environmental Noise Impact Assessment, and the descriptions based on the Noise Exposure Hierarchy in PPG-Noise. The significance of effect is shown in Table 6-6.

Table 6-6 Significance of Effect Matrix, according to IEMA Guidelines

Magnitude of Effect	Sensitivity of Receptor			
	High	Moderate	Low	Negligible
Large	Very substantial	Substantial	Moderate	None
Medium	Substantial	Substantial	Moderate	None
Small	Moderate	Moderate	Slight	None
Negligible	None	None	None	None

6.3.27 In terms of the significance of effect, the threshold between insignificant and significant lies between ‘Moderate’ and ‘Substantial’. Moderate impacts may be noticeable and intrusive but may cause a small change in behaviour. Whereas Substantial impacts are likely to be noticeable and disruptive and might cause a material change in behaviour or attitude. Whether each effect is considered to be significant or insignificant will be clearly stated in the ES chapter.

6.4 WIND MICROCLIMATE

Assessment context

- 6.4.1 This section of the ES will present an assessment of the potential effects of the proposed development on wind microclimate, which will be identified through a high-resolution Computational Fluid Dynamics (CFD) assessment across a full range of wind angles. The assessment will quantify the wind conditions and provide a measured understanding of the proposed development’s impact on wind.
- 6.4.2 To understand and quantify the baseline conditions at the site, a digital computer model will be constructed reflecting the existing built form of the site and the surrounding area within a 400m radius. This digital model will be analysed using CFD software which creates a ‘digital wind tunnel’ to allow the baseline wind microclimate conditions to be quantified.

Potential construction effects

- 6.4.3 Owing to the evolving and changing nature of construction activities, the assessment of potential effects during demolition and construction of the proposed development on wind microclimate of the site and surrounding area will not be modelled.
- 6.4.4 The potential wind microclimate effects relating to the construction works will vary throughout the construction programme and gradually increase to the potential effects identified for the completed development. Therefore, the interim construction effects are not assessed quantitatively as it is considered that the completed development represents the worst case assessment in terms of the likely wind microclimate.

Potential operational effects

- 6.4.5 Potential operational effects will be assessed using the results of full-scale CFD modelling to predict the air flow patterns and wind velocities around the proposed development. The assessment will be conducted using the digital model of the site and its surroundings with a resolution of 0.05-0.25m around the proposed development.
- 6.4.6 The results of the CFD assessment will then be combined with long-term wind climate statistics, corrected to apply at the site, and benchmarked against the Lawson Comfort Criteria.
- 6.4.7 The Lawson Comfort Criteria is recognised guidance used universally across the UK to assess the impact of a proposed 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 Comfort Criteria is set out in Table 6-7.

Table 6-7 Lawsons Comfort Criteria

Key	Comfort Category	Threshold	Description
	Sitting	0-4 m/s	Light breezes desired for outdoor restaurants and seating areas where one can read a paper or comfortably sit for long periods.
	Standing	4-6 m/s	Gentle breezes suitable for main building entrances, pick-up/drop-off points and bus stops.
	Strolling	6-8 m/s	Moderate breezes that would be appropriate for strolling along a city/town centre street, plaza or park.
	Walking	8-10 m/s	Relatively high speeds that can be tolerated if the objective is to walk, run or cycle without lingering.

Key	Comfort Category	Threshold	Description
●	Uncomfortable	> 10 m/s	Winds of this magnitude are considered a nuisance for most activities, and wind mitigation is typically recommended.

- 6.4.8 Such criteria identify the wind conditions and thresholds for a range of pedestrian activities, such as sitting, standing, strolling, walking, and uncomfortable. In this way, the results of the CFD can be used to determine the comfort and safety of the wind microclimate in relation to the expected pedestrian activities at and surrounding the site for all test scenarios. This will be particularly important for test scenarios 2 and 3 (see 6.4.11 below).
- 6.4.9 The LDDC also specifies a strong wind threshold when winds exceed 15m/s for more than 0.025% of the time (approximately 2.2 hours of the year) and would have the potential to cause distress to pedestrians and cyclists. These instances are referred to as ‘S15 Exceeded’ in the figures. Exceedances of this threshold may indicate a need for remedial measures or a careful assessment of the expected use of that location; e.g. is it reasonable to expect older adults or young children to be present at the location on the windiest day of the year?
- 6.4.10 Wind speeds that exceed 20m/s for more than 0.025% of the time (approximately 2.2 hours per year) represent safety issues for all members of the population and would require mitigation measures to provide an appropriate wind microclimate environment. These instances are referred to as ‘S20 Exceeded’ in figures.
- 6.4.11 Full high resolution CFD testing will be undertaken at a full scale and will include surrounding buildings up to 400m from the centre of the proposed development. The following scenarios will be undertaken:

Existing Site + all significant existing surrounding context.

Proposed Development + existing surrounding context; and

Proposed Development + existing surrounding context and committed developments.
- 6.4.12 The scenarios listed above will be assessed devoid of landscaping to give a worst case least sheltered result.
- 6.4.13 The above will determine the likely pedestrian level wind conditions in and around the site at specific locations such as main pedestrian routes, building entrances and amenity spaces for all three scenarios.
- 6.4.14 Should the results of the CFD testing for test scenario 2 or 3 reveal unacceptably uncomfortable conditions (i.e. if it exceeds the comfort criteria for that designated area) or unsafe wind conditions then mitigation measures will be explored, and further CFD testing undertaken to quantify the effectiveness of such mitigation.

Summary of assessment scope

- 6.4.15 Owing to the evolving and changing nature of demolition and construction activities, the assessment of potential effects during demolition and construction of the proposed development on wind microclimate to surrounding properties will not be modelled. Instead, a qualitative assessment will be undertaken using professional judgement and experience.
- 6.4.16 Table 6-8 outlines the receptors to be scoped into the assessment.

Table 6-8 Summary of items to be scoped in or out of the assessment

Receptor	Impact	Potential Effect	Scoped In / Out
On-site Thoroughfares	High	Moderate Beneficial to Moderate Adverse	Scoped in
On-site Entrances	High	Minor Beneficial to Major Adverse	Scoped in
On-site Amenity spaces	High	Negligible to Major Adverse	Scoped in
Off-site Thoroughfares	High	Negligible to Moderate Adverse	Scoped in

Receptor	Impact	Potential Effect	Scoped In / Out
Off-site Entrances	High	Negligible to Major Adverse	Scoped in
Off-site bus-stop/drop-off areas etc	High	Negligible to Major Adverse	Scoped in
On-site Thoroughfares	High	Moderate Beneficial to Moderate Adverse	Scoped in

6.5 DAYLIGHT, SUNLIGHT AND OVERSHADOWING

Assessment context

- 6.5.1 This section of the ES will present an assessment of the potential effects of the proposed development on daylight, sunlight and overshadowing which will be identified through desk-based research, site surveys and consultation with key stakeholders. The approach proposed in this scoping report has been informed by the findings of desk-based work and published best practice guidance.

Potential construction effects

- 6.5.2 Owing to the evolving and changing nature of demolition and construction activities, the assessment of potential effects during demolition and construction of the proposed development on daylight and sunlight to surrounding properties will not be modelled.
- 6.5.3 The potential daylight and sunlight effects relating to the demolition and construction works will vary throughout the construction programme and gradually increase to the potential effects identified for the completed development. Therefore, the interim construction effects are not assessed quantitatively as it is considered that the completed development represents the worst case assessment in terms of likely daylight, sunlight and overshadowing.

Potential operational effects

- 6.5.4 The Building Research Establishment (BRE) Guidelines suggest that residential properties have the highest requirement for daylight and sunlight and states that:

6.5.5 The following approaches will be undertaken to assess the daylight effect on the sensitive receptors within surrounding properties:

Vertical Sky Component (VSC); and

No Sky Line (NSL) Method.
- 6.5.6 The following approaches will be undertaken to assess the sunlight effect on the sensitive receptors within surrounding properties:

Annual Probable Sunlight Hours.
- 6.5.7 The technical analyses carried out to inform the daylight, sunlight, and overshadowing assessment will be undertaken by creating a digital three-dimensional (3D) model of the existing site and proposed development.
- 6.5.8 The 3D model uses Waldram Diagrams to establish the VSC and 3D geometric calculations for daylight distribution. This model (which is orientated to north by the use of Ordnance Survey (OS) information) enables the path of the sun to be tracked throughout the year to establish the shadow cast by the existing and proposed buildings and thus calculate the sun hours on ground in each scenario.

- 6.5.9

Only those surrounding residential properties which have windows facing towards the site are to be included in the assessment. If a nearby residential property has no windows facing the site, these properties would not be affected by the proposed development in terms of light.
- 6.5.10

The BRE Guide does not provide explicit targets on what constitutes minor, moderate or major adverse impacts. For daylight and sunlight, the BRE Guidelines outline the approach within the accompanying Appendix I, in terms of assigning criteria to assess the effects (para I3-I8), as outlined below:
- 6.5.11

is a significant decrease in the amount of skylight and sunlight reaching an
- 6.5.12

of skylight or sunlight fully meets the guidelines, the impact is assessed as negligible or minor adverse. Where the loss of light is well within the guidelines, or only a small number of windows or limited area of open space lose light (within the guidelines), a classification of negligible impact is more appropriate. Where the loss of light is only just within the guidelines and a larger number of windows or open space are affected, a minor adverse impact would be more appropriate, especially if there is a particularly strong requirement for daylight and
- 6.5.13

moderate or major adverse. Factors tending towards a minor adverse impact include:

Only a small number of windows are affected;

The loss of light is only marginally outside the guidelines;

An affected room has other sources of skylight or sunlight; and

The affected building only has a low level
- 6.5.14

The classification of major adverse is documented within Paragraph 7 of the BRE Guidelines:

a large number of windows are affected;

the loss of light is substantially outside the guidelines;

all the windows in a particular property are affected; and

the affected indoor spaces have a particular strong requirement for skylight or sunlight, e.g. a living room

- 6.5.15

Beneficial impacts occur when there is a significant increase in the amount of skylight and sunlight reaching an existing building. Beneficial impacts should be worked out using the same principals as adverse impacts.
- 6.5.16

Therefore, best practice guidance and professional judgment will be used to determine any impacts based on the guidance set out in Appendix I of the BRE Guidelines, the NPPF and the PPG. Potential effects will be identified as beneficial, adverse or negligible, and their magnitude of effects will be set out as minor, moderate and major.

Assessment methodology

Technical scope

- 6.5.17

Owing to the evolving and changing nature of demolition and construction activities, the assessment of potential effects during demolition and construction of the proposed development on daylight and sunlight to

- surrounding properties will not be modelled. Instead, a qualitative assessment will be undertaken using professional judgement and experience.
- 6.5.18

The properties set out in Table 6-9 will be considered due to their proximity to the site, and their use. An initial assessment has considered other adjacent residential properties and due to their distance and orientation from the proposed development, they are unlikely to be affected, so they will not be assessed in detail. It should be noted that, although there are windows on the western façade of the Jury’s Inn Hotel that will be blocked by the proposed development, these are corridors, rather than bedrooms.
- 6.5.19

The following scenarios will be assessed and considered in the ES chapter:

Existing baseline; and

Proposed development plus committed developments.
- 6.5.20

The above scenarios represent a worst case. This is the appropriate method to determine the daylight and sunlight impacts to surrounding receptors as the baseline scenario already considers any impact on the existing surrounding receptors resulting from consented developments. This approach is supported by the BRE.

Table 6-9 Summary of assessment scope

Receptor	Impact	Potential Effect	Scoped In / Out
Albion Wharf	Daylight/sunlight	Negligible to moderate adverse	In
Miller House	Daylight/sunlight	Negligible to moderate adverse	In
The Hacienda apartments	Daylight/sunlight	Negligible to moderate adverse	In
Jurys Inn	Daylight/sunlight	Negligible	Out
Axis Tower	Daylight/sunlight	Negligible	Out

6.6 BUILT HERITAGE

Assessment context

- 6.6.1

An assessment of the likely significant environmental effects to the above ground historic built environment of the site and the surrounding area for the construction and operation stages of the proposed development will be prepared by Turley Heritage. The results will be presented within the ES.
- 6.6.2

This section of the EIA scoping report identifies the study area that has been defined, in so far as it is presently understood, and describes the proposed method of assessment for identifying likely significant environmental effects.
- 6.6.3

The site comprises two areas of land including a roughly triangular plot at the corner of Great Bridgewater Street and Albion Street and a rectangular plot to the east of the grade II listed ‘The Briton’s Protection’ public house, fronting Great Bridgewater Street. The site is currently used for surface car parking.
- 6.6.4

To the east of the site on Great Bridgewater Street is the Jurys Inn Hotel. Most buildings on Great Bridgewater Street are large scale and positioned close to the street frontage, creating an enclosed urban grain. To the north, across Great Bridgewater Street is the Bridgewater Hall. The Great Bridgewater Street/Lower Mosley/Albion Street junction is to the immediate west of the site and the grade II* listed Manchester Central is beyond. This, combined with the curved roof of Manchester Central, creates a more open character. To the rear of the site is Trumpet Street and the north elevation of the grade II listed 13 – 17 Albion Street.

- 6.6.5

Below is a brief summary of the history and development of the site and surrounding area:
- 6.6.6

Until the end of the 18th century, the area surrounding the site was laid out as largely agricultural land with development concentrated along the Roman road of Deansgate (formerly known as Alport Street). To the south of the site, a series of cotton mills and finishing works lay along the River Medlock associated with the region’s textile industry.
- 6.6.7

A surge in growth of the cotton industry during the late 18th century was heightened by the construction of the canal system between 1790 and 1805 which connected Manchester with the principal towns in the manufacturing districts. A formal grid pattern of streets was laid out in the area around this time. Pigots Map of 1813 shows the early stages of this street pattern, but the Briton’s Protection public house building itself is not identifiable.
- 6.6.8

By the middle of the 19th century, the textile industry had expanded northwards and as illustrated in the 1850 Ordnance Survey map, the site area was developed with a number of large cotton mills. The ‘Briton’s Protection Inn’ is annotated on the 1850 map and an ‘L shaped building extended from the Great Bridgewater Street frontage to the rear of the building. The west side of the site is identified as a ‘coal yard’ and was developed with a number of smaller units abutting the street frontage.
- 6.6.9

The construction of Manchester Central Station and its associated infrastructure in 1876-9 resulted in a dramatic change to the character of the area. The station and railway lines replaced a number of the mills in the area and the resulting change to the urban grain and character of the area is visible in the 1922 map. In 1922 the west side of the site was developed to the curved road frontage with a series of defined units and a narrow building existed to the east of The Briton’s Protection public house within the site. The site and land to either side remained developed into the late 20th century.
- 6.6.10

During the late 20th century and early 21st century the area surrounding the site experienced marked change with the introduction of a number of modern buildings of increasing height and scale. The Bridgewater Hall and the large office buildings to the north were developed in the late 20th century. The Beetham Tower to the west was built in 2006 as a highly visible landmark and is now joined with additional tall buildings, including the Axis tower close to the site and the Deansgate Square towers beyond. In combination with the HOME development to the south of Whitworth Street West, the Tower of Light and a number of other extant planning permissions in the surrounding area, the site occupies an area experiencing significant change.

Assessment methodology

Technical scope

A Heritage Asset Plan (HAP) has been prepared, which identifies the site, study area and designated and non-designated heritage assets. The HAP is available in Appendix A of this EIA scoping report.

Identification of effects which are not significant

- 6.6.11

A Study Area of 500m from the site boundary has been defined following a site visit, inspection of relevant designated and non-designated heritage assets, review of a Zone of Theoretical Visibility (ZTV) (Appendix B) and informed by the following factors:
- The nature of the scope of the proposed development;
- The proximity of heritage assets to the site;
- The degree of inter-visibility between the heritage assets and the site, taking into consideration, for example, changes in topography as well as interposing townscape and landscape features; and
- The significance of the relevant heritage assets and the contribution made by their setting.

- 6.6.12

The following effects have been identified and are not considered significant. They will not be considered further with the EIA or reported in the ES. A factual evidence base has been provided below to support this.

Change in the setting of heritage assets outside the 500m Study Area

- 6.6.13

Although the ZTV indicates the proposed development is likely to be visible or partially visible beyond the 500m Study Area, heritage assets in these areas are unlikely to experience significant effects as a result of distance and intervening development. From these assets, the proposed development will be viewed in combination with other buildings as part of an existing and emerging backdrop. Therefore, the effect of changes in the setting of heritage assets beyond 500m are not considered to be significant and will not be considered further within the EIA or reported in the ES. These will be considered, as appropriate, within a separate Heritage Assessment to be submitted with the planning applications, prepared to address the requirements of Paragraph 194 of the NPPF.

Change in the setting of heritage assets within the 500m Study Area

- 6.6.14

A large number of heritage assets within the Study Area are also unlikely to experience significant environmental effects due to distance, intervening development, due to their orientation or the way in which they are experienced and appreciated, or by virtue of their significance being derived from their function as canal or rail infrastructure. Although visible or partially visible from some assets, the proposed development will be experienced in combination with existing and proposed buildings and will form part of a backdrop and wider cityscape in views. With the exception of those identified in Table 6-10, these assets are unlikely to experience significant effects during the construction or operation phases and will not be considered further within the ES.

Identification of likely significant effects and receptors

- 6.6.15

The following effects shown in Table 6-10 have been identified and will be assessed within the EIA and reported in the ES.

Table 6-10 Likely Significant Effects and Receptors

Effect	Receptor*	Applicable Development Phase (Construction or/and Operational)
Change in the setting of heritage assets	The Briton’s Protection Public House (grade II listed) 13-17 Albion Street (grade II listed) Manchester Central Convention Complex (grade II* listed) Chepstow House (grade II listed) Peveril of the Peak Public House (grade II listed)	C and O

C Construction / O Operational

* It should be noted that these assets are those considered likely to experience a significant environmental effect and thus reported within the ES. Other assets with potential to be affected (not significant) will be considered within the Heritage Assessment in line with the NPPF.

Background studies to inform assessment

- 6.6.16

Table 6-11 shows the studies that have been prepared or are proposed and will be used to inform the EIA.

Table 6-11 Baseline Studies/Surveys

Study/Survey	Overview	Date
Current or Pending		
Initial Heritage Appraisal and Heritage Assessment	An Initial Heritage Appraisal was prepared to inform scheme development and an NPPF compliant Heritage Assessment will be prepared in support of the applications. This will be carried out in light of the statutory duty of The Planning (Listed Buildings and Conservation Areas) Act 1990, relevant policies of the National Planning Policy Framework (NPPF) and national Planning Practice Guidance for the historic environment. Consideration will also be given to relevant guidance documents prepared by Historic England including Good Practice Advice in Planning Note 2, Managing Significance in Decision Taking in the Historic Environment (March 2015), and Good Practice Advice Note 3 The Settings of Heritage Assets (2017). The Heritage Assessment will identify heritage assets with the potential to be affected, describe their significance and setting and assess the impact of the proposed development upon that significance. It will also consider other heritage assets unlikely to experience a significant effect. It will be appended to the EIA as a technical appendix.	Ongoing

Assessment methodology of likely significant effects

- 6.6.17 Designated and non-designated heritage assets with the 500m Study Area have been identified and confirmed through a search of the Greater Manchester Historic Environment Record (provided by Greater Manchester Archaeological Advisory Service (GMAAS)) The HAP, which is based on the results of this search, is available in Appendix A of this EIA scoping report.
- 6.6.18 In the absence of specific prescribed criteria for the assessment of impacts on built heritage, the methodology for establishing the relative value or importance of heritage assets; the magnitude of change; and the significance of effect will be taken from Design Manual for Roads and Bridges (DMRB) (2019, LA 106 Cultural Heritage Assessment) and informed by Historic England including Good Practice Advice in Planning Note 2, Managing Significance in Decision Taking in the Historic Environment (March 2015), and Good Practice Advice Note 3 The Settings of Heritage Assets (2017).
- 6.6.19 The assessment will take into account the findings of the townscape and visual impact assessment to ensure integration of approach and assessment.
- 6.6.20 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, moderate, low and negligible) and the magnitude of change (on a scale of high, medium, small and negligible) to determine significance on a scale of major, moderate, minor and negligible. Significant effects will be determined through professional judgment.
- 6.6.21 With reference to guidance set out in the DMRB, the effect on the cultural heritage resource is not significant when the impact does not substantially diminish or enhance the heritage interest of the cultural heritage resource.

Limitations and assumptions

- 6.6.22 To ensure transparency within the EIA process, the following limitations and assumptions have been identified at this stage.

The assessment relies on available data, and best endeavours have been made to ensure that the data is accurate and up to date. It is assumed that information obtained from, Historic England, GMAAS and other sources is accurate.

6.7 GREENHOUSE GAS EMISSIONS

Assessment context

- 6.7.1 Buildings and construction account for 39% of the world’s greenhouse gas (GHG) emissions. Of this, operational emissions (from energy used to heat, cool and light buildings) account for 28%, while 11% comes from embodied emissions (the GHG emissions associated with materials and construction processes throughout the building lifecycle) (World Green Building Council, 2019). Therefore, it is of paramount importance that future buildings are designed in a way that minimises their GHG emissions.
- 6.7.2 Schedule 4 of the 2017 Town and Country Planning (EIA) Regulations state that the Environmental Statement should include 5. a description of the likely significant effects of the development on the environment resulting and the vulnerability of the project to climate ch
- 6.7.3 It is proposed that the GHG emissions ES chapter assesses the effects of the proposed development on climate change (i.e. climate change mitigation). GHG emissions associated with the proposed development shall be assessed for both the construction and operation phases and reported on in the GHG emissions chapter, in line with the IEMA EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance (2017).
- 6.7.4 The IEMA 2017 guidance states the following in relation to the significance of effects relating to GHG emissions:
- 6.7.5 significant and an EIA should ensure the project addresses their occurrence by taking mitigating ac

Potential construction effects

- 6.7.6 Sources of GHG emissions during the construction stage are as follows:

GHG emissions associated with waste removal;

GHG emissions associated the extraction and manufacturing of building materials (i.e. the product stage); and

GHG emissions associated with the transport of materials to the site and construction and installation of products on site (i.e. the construction process stage).
- 6.7.7 It is proposed that GHG emissions associated with the construction stage are estimated based on appropriate published benchmarks.

Potential operational effects

- 6.7.8 Sources of GHG emissions during the operational stage are as follows:

GHG emissions associated with the operational energy requirements for the day to day running of the proposed buildings (i.e. heating, cooling, lighting etc.);

GHG emissions associated with maintenance, repair, replacement and refurbishment within the proposed buildings (i.e. the embodied carbon); and

GHG emissions associated with operational water, where predicted water consumption figures are available.

Assessment methodology

Technical scope

- 6.7.9
- There is currently no standard methodology for quantifying GHG emissions within EIA. However, best practice will be drawn from the following:

EIA Guide to Assessing GHG Emissions and Evaluating their Significance (IEMA, 2017);

RICS Whole Life Carbon Assessment for the Built Environment (2017); and

BS EN 15978:2011 Sustainability of construction works. Assessment of environmental performance of buildings. Calculation method.

- 6.7.10
- An assessment period of 60 years is proposed, as per the principles outlined in BS EN 15978. This is based on the typical expected service life of a building. The total estimated GHG emissions will be estimated to 60 years after completion of the proposed development.

- 6.7.11
- The GHG emissions scope will align with the life cycle stages defined as modules within BS EN 15978, with building elements included as per guidance within the RICS guidance on Whole Life Carbon Assessment for the Built Environment (2017), as shown in Figure 6-1.

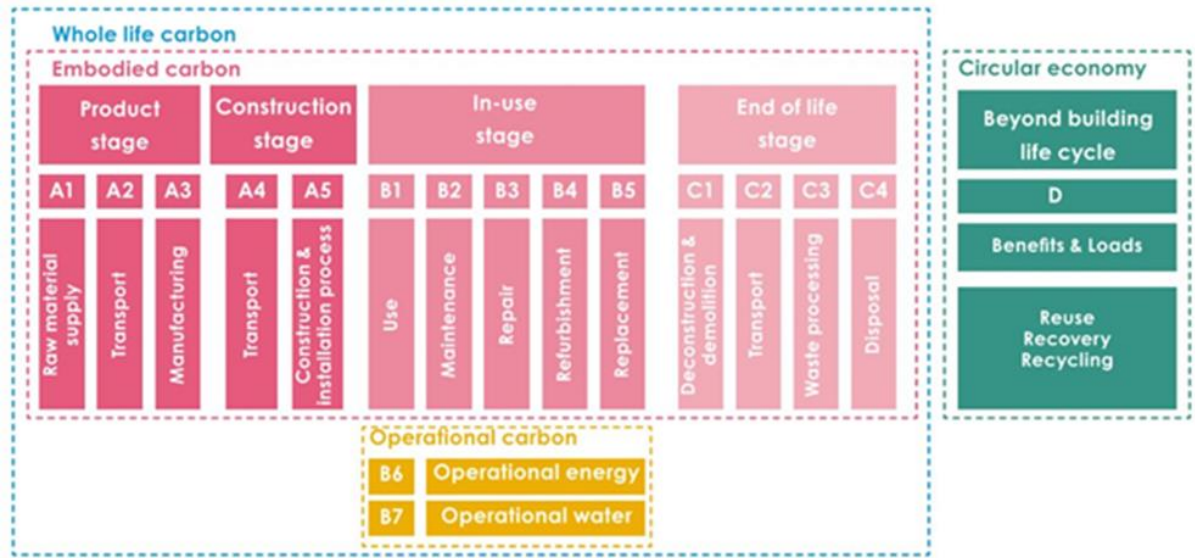


Figure 6-1 Diagram showing the stages of a lifecycle GHG emissions assessment, taken from the LETI Embodied Carbon Primer (2020). Diagram based on lifecycle stages set out in BS EN 15978.

- 6.7.12
- Whilst it is recognised that operational transport emissions can form a significant part of the whole life carbon of a development, this will not form part of the assessment as the number of car parking spaces proposed is less than the number currently on the site. Interventions and initiatives to support low and zero carbon travel will be implemented and monitored through the Travel Plan, with carbon emissions largely dependent on occupant behaviour and the city wide public and active transport provisions. Additionally, the proposed development provides minimal car parking for residents, therefore encouraging the use of public and active transport.

Baseline assessment

- 6.7.13
- The baseline for the proposed development is defined as the current GHG emissions arising from activities and infrastructure within the site boundary, in line with the IEMA (2017) guidance. As there are currently no permanent uses on the site, there is likely to be little activity taking place on the site that results in the release of GHG emissions. Therefore, the baseline GHG emissions are assumed to be zero.

Effect prediction and assessment of effect significance

- 6.7.14
- The majority of the construction phase GHG emissions are expected to come from the product stage (i.e. embodied carbon from building materials). An assessment detailing the embodied carbon of different building elements and how they interact with each other will be established. Mitigation measures focused around lean design and low embodied carbon opportunities will be suggested.
- 6.7.15
- During operation, it is anticipated that the operation of building services will represent the majority of GHG emissions. Measures to reduce consumption in line with current Building Regulations and best practice will be proposed.

6.8 TOWNSCAPE AND VISUAL IMPACT

Assessment context

Study area and spatial scope

- 6.8.1
- The purpose of the townscape and visual impact assessment (TVIA) will be to undertake an assessment of likely effects of the proposed development on the site and the surrounding area in terms of townscape and visual matters. It will be undertaken in accordance with The Guidelines for Landscape and Visual Impact Assessment, Third Edition, produced by the Landscape Institute and IEMA (2013).
- 6.8.2
- Following creation of an initial zone of theoretical visibility (ZTV) (based on a digital surface model that includes buildings and areas of vegetation and a maximum assumed building height parameter of 86m) a search area has been identified on the drawing in Appendix B extending out 5km from the site. This is proposed as a suitable extent given the generally level nature of the topography and the scale of the proposed development. The TVIA study area is proposed to be 2km as this will focus the assessment on areas where significant effects may occur on viewers in the surrounding area and indirect townscape effects.

The site

- 6.8.3
- The site comprises two parcels of land located to the east and west of The Briton's Protection public house. Land to the east is rectangular in form and contained by the Jurys Inn hotel situated to the east, Great Bridgewater Street to the north and Trumpet Street to the south. This parcel of land is currently vacant. Land to the west of The Briton Protection is irregular in form with open aspects fronting Great Bridgewater Street to the north, Albion Street to the west and Trumpet Street to the south. This parcel of land is currently being used as a surface carpark.

Site context

- 6.8.4
- The site is situated to the south of Manchester City Centre with frontages along Great Bridgewater and Albion Street. Further transport infrastructure is present in the form of the elevated Metrolink to the north while the Liverpool – Manchester railway is to the south of the site. Notable buildings in proximity to the site include Bridgewater Hall, Tower of Light Energy Centre and Manchester Central to the north of the site with Axis Tower and the Hacienda apartments to the south and southwest.
- 6.8.5
- The Bridgewater Canal is located to the south of the site along which the Salford Trail recreational walking route is aligned, linking Salford Quays and the River Medlock.

Potential construction effects

- 6.8.6
- Construction stage townscape impacts are anticipated to arise from building works, construction activity and construction compounds. Construction stage visual impacts are anticipated to arise from construction activity and building work (including the temporary impact of tower cranes).

- 6.8.7
- Townscape impacts which could cause significant effects in this instance, during construction, are likely to include the construction of the new buildings and associated tower cranes; and temporary construction activity and operations, across what is currently an open brownfield site.
- 6.8.8
- Potential visual impacts which could give rise to significant effects during construction are likely to include the impacts of building and construction works on the most sensitive receptors in close proximity or where there is a relatively clear line of sight including local residents, visitors to Manchester City Centre and users of local roads.

Potential operational effects

- 6.8.9
- Operation stage townscape impacts will include the direct change in character from a brownfield site to a fully operational and implemented scheme and to surrounding local townscape character areas. Impacts will arise from the proposed buildings and servicing activities associated with the proposed development. Visual impacts will arise from the proposed building locations, height, scale and massing, together with resident activity on the site.
- 6.8.10
- Visual impacts arising from the completed development and associated operational activity that will most likely result in significant effects include the scale and massing of the proposed buildings and from building operations, servicing and structures, if not sensitively sited, on the same receptor groups as identified during construction. There is, however, notable potential on this site to deliver a well-integrated, positive, iterative building and townscape design which avoids and minimises local and wider impacts.

Assessment methodology

Technical scope

- 6.8.11
- The TVIA ES Chapter will be prepared in accordance with the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) and Landscape Institute advice notes. The TVIA process deals with the separate but interlinked issues of:

Townscape Character: The effects of the proposed development upon discrete character areas and /or character types comprising features possessing a particular quality or merit; and

Visual Context: The effects of the proposed development on views experienced by visual receptors, and upon the amenity value of the views.

6.8.12

The effects of both aspects will be addressed in the assessment.

6.8.13

Townscape and visual effects are considered likely to arise during both the construction and operation phases of the proposed development. For the purposes of the assessment, the terms ‘impact’ refers to the causation of change. The changes will be judged to be positive (beneficial) or negative (adverse) in their consequences for townscape or for views and visual amenity.

6.8.14

The TVIA is to be undertaken as a process, providing input into the design evolution of the proposed development from the initial stages in order to embed mitigation measures into the proposed development, and seek opportunities to avoid or reduce adverse effects and identify opportunities for beneficial effects.

6.8.15

The TVIA ES chapter will also address and consider crossovers between disciplines and will involve collaborative working, including with the built heritage consultants and the architects.

Mitigation and mitigation effectiveness

6.8.16

In addition to measures developed through iterative design, embedded in the scheme design, other further mitigation measures will be identified, where appropriate. The effectiveness of the delivery of mitigation included within the scheme will also be considered and assessed.
- Table 6-12 Townscape and visual effects
- | Receptor | Effects | Scoped in? |
|---|---|------------|
| Local townscape character | Changes resulting from the introduction of new residential development. | Yes |
| Character of the Site | | Yes |
| Views experienced by visitors to Manchester City Centre | Introduction of new residential development into views. | Yes |
| Views experienced by visitors to Manchester Central | Introduction of new residential development into views. | Yes |
| Users of rights of way to the east of the Site | Introduction of new residential development into views. | Yes |
| Users of rights of way to the west of the Site | Introduction of new residential development into views. | Yes |
| Users of Local Roads | Intrusion of new residential development into views. | Yes |
- Baseline assessment
- 6.8.17

Townscape and visual baseline conditions will be established by undertaking a detailed desk study and fieldwork to ground truth the findings of the desk study and capture photographs from the photo viewpoints.

6.8.18

The townscape baseline will be established through gathering data from published assessments on the townscape character and how this varies within the study area, together with its geographic extent and how it is experienced and valued. These are as follows:

National Character Area 55 Manchester Conurbation; and

Strategic City Wide Character Area Assessment.

6.8.19

The visual baseline establishes the areas from where the new components of the proposed development can be seen, who can see them, the places where those who see them will be affected and the nature of views and visual amenity. This will be informed through the use of aerial imagery, Ordnance Survey (OS) mapping and the calculation of a ZTV of the proposed development.

6.8.20

Proposed representative viewpoints, preliminary townscape receptors and the proposed methodology will be submitted to MCC for their consideration and approval, these are identified on the drawing in Appendix C. The TVIA Assessment Methodology Summary of Approach and Criteria Tables is appended to this report (at Appendix D).

Effect prediction and assessment of effect significance

6.8.21

The TVIA will be carried out in accordance with GLVIA3 which is best practice guidance for assessing townscape and visual matters and current LI guidance notes relating to townscape and photography. Desktop and on-site appraisals will be used to identify potential receptors to change. Townscape receptors may be individual townscape elements, such as vegetation and buildings, or townscape character. Visual receptors are always people. Receptors that are identified but then deemed to not be affected by the proposed development will be scoped out of the assessment in accordance with the GLVIA3.

6.8.22

Changes to the townscape character can arise as a result of:

Changes to the fabric of the townscape including either through the loss of key elements or the introduction of new features which alter the distinct character of the townscape; and

Changes which alter the way in which the townscape is perceived or appreciated.

6.8.23

Changes to views will occur where there is:

Alteration of the view in terms of elements present and the overall composition;

Apex Tower, Manchester
Environmental Impact Assessment Scoping Report
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Revision 00
20 October 2021
Page 36

A change to the skyline; and/or

There is a change to the distribution or dominance of features.

- 6.8.24 The assessment criteria used for this TVIA includes consideration of value and susceptibility in determining receptor sensitivity; and consideration of the scale, extent and duration of the effect in determining magnitude.
- 6.8.25 The significance of identified townscape and visual effects will be assessed through the application of professional judgement combining the sensitivity of the townscape/visual receptor, the magnitude of the change and whether the change is likely to be temporary or permanent, long or short term. The assessment will identify which effects are considered to be significant as well as whether they are adverse or beneficial.

7. SUMMARY OF KEY ENVIRONMENTAL ISSUES

7.1.1 Table 7-1 provides a summary of the key potential environmental effects that will be addressed as part of the EIA, as well as those which will not be addressed as part of the EIA.

Table 7-1 Summary of key potential environmental effects

Environmental Topic	Proposed for inclusion in ES	Potential environmental effects / reason for inclusion or exclusion in ES
Topics to be scoped into the EIA		
Air Quality	Yes	There are a number of residential properties within the vicinity of the site which may be affected by any fugitive dust emissions during construction of the proposed development. Additionally, there are a number of residential properties within the vicinity of roads which may be affected by changes in traffic flow and associated increases in vehicle exhaust emissions as a result of the operation of the proposed development.
Noise and Vibration	Yes	The likely significant noise and vibration effects associated with the construction stage of the proposed development are construction noise at ESRs, associated with the works and construction vibration at ESRs, associated with the works. The likely significant noise and vibration effects to be considered within the operational phase of the proposed development are existing noise environment at proposed sensitive areas of the proposed development and noise from proposed ancillary equipment/building services within the proposed development at existing and proposed receptors.
Wind Microclimate	Yes	Due to the height and scale of the proposed development, there is potential to be significant effects in relation to wind microclimate.
Daylight, sunlight and overshadowing	Yes	A number of nearby residential receptors have been identified that have the potential to be impacted by the proposed development in terms of daylight, sunlight and overshadowing.
Built Heritage	Yes	The potential for significant effects has been identified on the following heritage assets: The Briton's Protection Public House (grade II listed); 13-17 Albion Street (grade II listed); Manchester Central Convention (grade II* listed); Chepstow House (grade II listed); and Peveril of the Peak Public House (grade II listed).
Greenhouse Gas Emissions	Yes	Potential for significant effects associated with GHG emissions during construction and operational stages of the development.
Townscape and Visual Impact	Yes	There are likely to be both townscape and visual impacts as a result of the proposed development during both the construction and operation phases.
Topics to be scoped out of the EIA		
Traffic and transport	No	It is considered that the proposed development does not have the potential to generate any significant transport effects as the number of car parking spaces will be reduced on site with the proposed development in place. The Transport Statement and Travel Plan will provide an appropriate and robust assessment of the transport and highways considerations.
Water resources and flood risk	No	Based on a likely low residual flood risk to the site and the preparation of a standalone FRA and an appropriate drainage strategy, no likely significant effects are anticipated with respect to flood risk, surface water drainage and foul water drainage. Furthermore, no likely significant effects are anticipated to water resources throughout the construction works following the implementation of a Construction Management Statement and various standard mitigating measures both pre-commencement and throughout the works.
Ecology	No	The ecological assessment of the site confirms that there are no significant ecological constraints at the site/associated with the proposed development. No potential significant adverse effects on statutory and non-statutory designated

Environmental Topic	Proposed for inclusion in ES	Potential environmental effects / reason for inclusion or exclusion in ES
		sites, Priority Habitats, invasive plant species, rare plants and protected species are identified. Best practice recommendations to secure the protection of and to minimise disturbance of the trees and rupestral communities outside the site boundary will be made in the ecology report. To achieve compliance with relevant planning policy and best practice, recommendations will be made in relation to the improvement of opportunities for wildlife associated with urban areas at the proposed development. Taking the above into account, it is concluded that ecology should be scoped out of the EIA.
Ground Conditions	No	It is considered that the risks and resultant effects are sufficiently well understood and that based on the information currently available, it is likely that the residual effects associated with ground conditions and groundwater would be insignificant. Therefore, ground conditions are to be scoped out of the EIA.
Socio-Economics	No	Given the nature and scale of the proposed development, it will not give rise to significant socio-economic effects. Therefore, a socio-economics ES chapter will be scoped out of the EIA.
Archaeology	No	It is proposed that the topic of archaeology is scoped out of the EIA as it is unlikely that there will be significant effects. However, an archaeological desk-based assessment shall be undertaken and submitted alongside the planning applications.
Solar glare	No	Overall, given the proposed palette of materials and massing of the buildings, there is unlikely to be significant instances of solar glare arising from the building façades and these will include inherent mitigation to mitigate significant solar glare effects should they arise. Therefore, it is considered that solar glare can be scoped out of the EIA.
Artificial Lighting	No	No significant environmental effects anticipated due to the nature and location of the proposed development and nearby receptors.
Electronic interference	No	No significant environmental effects anticipated due to the digital switchover.
Aviation	No	It is proposed that aviation will not be included within the ES, as this primarily relates to health and safety requirements that are not necessarily well aligned to the EIA process. In addition, the site is located in an urban area with multiple clusters of tall buildings that exceed the height of the proposed development.
Major Accidents and/or Natural Disasters	No	Considering the nature of the proposed development, the commitment to building regulations/statutory requirements and the commitment to undertake an FRA and a climate change resilience risk assessment, a dedicated ES chapter assessing major accidents and or natural disasters is scoped out of the ES.
Human Health	No	Potentially significant effects on human health will be directly or indirectly considered across the technical chapters of the ES, rather than in a dedicated ES chapter. Non-significant human health aspects will be considered in the relevant standalone reports submitted with the outline planning applications.
Waste management	No	This will be covered in the Construction Management Statement and operationally through the Design and Access Statement.

8. OTHER PLANNING DOCUMENTS

8.1.1 In addition to the ES, the following standalone documents will be submitted as part of the planning applications:

- Location Plan;
- Planning Statement;
- Design and Access Statement;
- Energy Statement;
- Environmental Standards Statement;
- Circular Economy Statement;
- Crime Impact Statement;
- Ground Conditions Phase 1 Report;
- Noise Planning Report;
- Flood Risk Assessment;
- Drainage Strategy;
- Ecology Phase 1 Report;
- Archaeological Assessment;
- Fire Statement;
- Travel Plan;
- Transport Statement; and
- Statement of Community Involvement.

8.1.2 The ES will contain the following appendices:

- EIA Scoping report;
- EIA Scoping opinion;
- Climate change resilience risk assessment;
- Appendices associated with the noise and vibration ES chapter;
- Appendices associated with the air quality ES chapter;
- Appendices associated with the wind microclimate ES chapter;
- Appendices associated with the daylight, sunlight and overshadowing ES chapter;
- Appendices associated with the built heritage ES chapter;
- Appendices associated with the GHG emissions ES chapter; and
- Appendices associated with the TVIA.

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Appendix A – Heritage Asset Plan



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Legend

Application Site

Study Area

Listed Buildings

I

II*

II

Conservation Area

Scheduled Monument

HER Site (point)

HER Site (area)

CLIENT:

Arrowsmith Investment Ltd.

PROJECT:

Great Bridgewater Street, Manchester

DRAWING:

Heritage Asset Plan

PROJECT NUMBER:

AWAM3001

DRAWING NUMBER:

GIS_100

CHECKED BY:

HB-S

REVISION:

1.0

STATUS:

Complete

DATE:

19/10/2021

SCALE:

1:5,000 @ A3

Ref	Name	Grade
1	Town Hall	I
2	Manchester Art Gallery	I
3	ALBERT MEMORIAL	I
4	TOWN HALL EXTENSION	II*
5	LAWRENCE BUILDINGS	II*
6	Free Trade Hall	II*
7	MEMORIAL HALL	II*
8	INDIA HOUSE (INCLUDING ATTACHED WROUGHT IRON GATEWAY LINKED TO LANCASTER HOUSE)	II*
9	DEANSGATE GOODS STATION AND ATTACHED CARRIAGE RAMP	II*
10	G MEX	II*
11	Manchester War Memorial	II*
12	CENTRAL PUBLIC LIBRARY	II*
13	THE ATHENAEUM	II*
14	MIDLAND HOTEL	II*
15	TOOTAL, BROADHURST AND LEE BUILDING	II*
16	FORMER REFUGE ASSURANCE COMPANY OFFICES	II*
17	Cobden House, 19 Quay Street	II*
18	CHORLTON NEW MILL AND ATTACHED CHIMNEY	II
19	CHORLTON OLD MILL	II
20	MILL ON NORTH EAST CORNER OF JUNCTION WITH CHESTER STREET	II
21	TWO BOLLARDS AT EAST END OF ST JOHNS PASSAGE	II
22	ALBERT CHAMBERS	II
23	CARLTON HOUSE	II
24	ST ANDREWS CHAMBERS	II
25	Gladstone's Statue	II
26	HEYWOODS STATUE	II
27	Former Market Hall	II
28	LLOYDS HOUSE	II
29	FORMER ST MATTHEWS SUNDAY SCHOOL	II
30	MUSEUM OF SCIENCE AND INDUSTRY, AIR AND SPACE MUSEUM	II
31	Manchester South Junction and Altrincham Railway Viaduct	II
32	2, HARTER STREET	II
33	ROYAL LONDON HOUSE	II
34	CASTLEFIELD INFORMATION CENTRE	II
35	Elliot House	II
36	15A, BYROM STREET	II
37	NUMBERS 25 TO 31 AND ATTACHED FORMER CHAPEL	II
38	Canada House	II
39	184 AND 186, DEANSGATE	II
40	ONWARD BUILDINGS	II
41	235-291, DEANSGATE	II
42	FLOODGATE ON EAST SIDE OF KNOTT MILL BRIDGE	II
43	63, GEORGE STREET	II
44	LEE HOUSE	II
45	104, BLOOM STREET (See details for further address information)	II
46	Mill chimney stack on west side of junction with Cambridge Street	II
47	29-41, LIVERPOOL ROAD	II
48	K6 TELEPHONE KIOSK BESIDE SOUTH WEST CORNER OF NUMBER 330 DEANSGATE	II
49	PRINCES BUILDINGS	II
50	61, OXFORD STREET	II
51	ST JAMES BUILDINGS	II
52	HARVESTER HOUSE	II
53	LANCASHIRE HOUSE	II
54	ROYALE CLUB	II
55	ALBERT MEMORIAL HALL	II
56	BASIL HOUSE	II
57	113-119, PORTLAND STREET	II
58	127-133, PORTLAND STREET	II
59	26-30, PRINCESS STREET	II
60	EASTERN HOUSE PORTLAND HOUSE	II
61	32, DICKINSON STREET (See details for further address information)	II
62	110-114, PORTLAND STREET	II
63	116 AND 118, PORTLAND STREET	II
64	PRINCESS BUILDINGS	II
65	34, PRINCESS STREET	II
66	No. 36, PRINCESS STREET, No. 94, PORTLAND STREET, and No. 75, FAULKNER STREET	II
67	LANGLEY BUILDINGS	II
68	THE OPERA HOUSE	II
69	ROCHDALE CANAL LOCK NUMBER 90, APPROXIMATELY 30 METRES WEST OF ALBION BRIDGE	II
70	ROCHDALE CANAL LOCK NUMBER 91 AT EAST END OF GAYTHORN TUNNEL	II
71	ROCHDALE CANAL LOCK NUMBER 89 (TIB LOCK), ON SOUTH SIDE OF HAVELOCK MILLS	II
72	ROCHDALE CANAL LOCK KEEPERS COTTAGE AT LOCK NUMBER 91, NEXT TO GAYTHORN TUNNEL	II
73	11-17, ST JOHN STREET	II
74	12-16, ST JOHN STREET	II
75	24A AND 26, ST JOHN STREET	II
76	Nos. 18 and 20, ST JOHN STREET	II
77	28, ST JOHN STREET	II

Ref	Name	Grade
78	PAIR OF K6 TELEPHONE KIOSKS NEAR LIBRARY	II
79	THE RITZ DANCE HALL	II
80	FORMER ELECTRICITY POWER STATION	II
81	Manchester Oxford Road Station (including platform structures)	II
82	MEMORIAL CROSS	II
83	24, ST JOHN STREET	II
84	21-25, ST JOHN STREET	II
85	8 AND 8A, ST JOHN STREET	II
86	10, ST JOHN STREET	II
87	22, ST JOHN STREET	II
88	K6 TELEPHONE KIOSK IN FRONT OF ST JOHN STREET CHAMBERS	II
89	ROCHDALE CANAL LOCK NUMBER 88, TO EAST OF OXFORD STREET	II
90	SUNLIGHT HOUSE	II
91	109 AND 111, PORTLAND STREET	II
92	SCULPTURAL GROUP ADRIFT TO SOUTH-WEST OF CENTRAL PUBLIC LIBRARY, PETER STREET, MANCHESTER	II
93	14 AND 16, PRINCESS STREET (See details for further address information)	II
94	56-58, PETER STREET (See details for further address information)	II
95	THE PALACE THEATRE	II
96	13-17, ALBION STREET	II
97	FORMER ENTRANCE TO DEANSGATE GOODS STATION INCLUDING NUMBERS 223 TO 233	II
98	BOUNDARY STONE ON KNOTT MILL BRIDGE	II
99	FORMER COTTON MILL ON WEST SIDE OF JUNCTION WITH CAMBRIDGE STREET	II
100	No. 14, BYROM STREET	II
101	CHEPSTOW HOUSE	II
102	BRIDGEWATER CANAL OFFICES	II
103	Manchester Quaker Meeting House, boundary walls and steps	II
104	TWO BOLLARDS AT WEST END OF ST JOHNS PASSAGE	II
105	THE BRITONS PROTECTION PH THE BRITONS PROTECTION PUBLIC HOUSE	II
106	Former Congregational Chapel	II
107	CASTLEFIELD RAILWAY VIADUCT FROM G-MEX TO DAWSON STREET	II
108	CHATHAM MILL	II
109	PEVERIL OF THE PEAK PUBLIC HOUSE	II
110	1-5, CENTRAL STREET (See details for further address information)	II
111	ABRAHAM LINCOLN STATUE	II
112	DEANSGATE STATION	II
113	Manchester & Salford Junction Canal Tunnel	II
114	Electricity Junction Box	II
115	Electricity Junction Box	II
116	Electricity Junction Box on Castle Street, Manchester	II
117	Electricity Junction Box in Castlefield canal basin, Manchester	II
118	Electricity Junction Box in Castlefield canal basin, Manchester	II
119	19, ST JOHN STREET	II
120	BRIDGEWATER HOUSE	II

Ref	List Entry I	Name
121	1001953	Remains of eastern wall of the Roman fort

Ref	Name
122	Bridgewater/Chester Road Viaduct
123	Deansgate/Gaythorn Tunnel
124	Wellington Cotton Waste Mills (former) (Area of Roman Manchester)
125	Picture House Cinema (former)
126	Textile Finishing Works (former)
127	Viaduct, West from Knott Mill and Deansgate Station to Dawson Street
128	White Lion Inn
129	Hotspur Press (Hotspur House) (former Medlock Mill)
130	Police Station (former) (Area of Roman Manchester)
131	Guardian Underground Telephone Exchange – access building
132	12–16 Southern Street
133	Manchester Reform Synagogue, Jackson's Row
134	Crown Hotel (now The Deansgate) (Area of Roman Manchester)

Appendix B – Zone of Theoretical Visibility



-  Site Boundary
-  5km Area of Search
-  2km Study Area

Notes:
The Zone of Theoretical Visibility (ZTV) illustrates the extent to which the development as a whole (modelled at 86m maximum height) is potentially visible from the surrounding area (1.6m high receptor).

The plan has been prepared using GIS computer software (MapInfo) and Environment Agency LiDAR DSM data, and as such takes into account built form. The DSM data provided by EA and while some vegetation is accounted for, it does not fully represent the potential screening observed in the field.

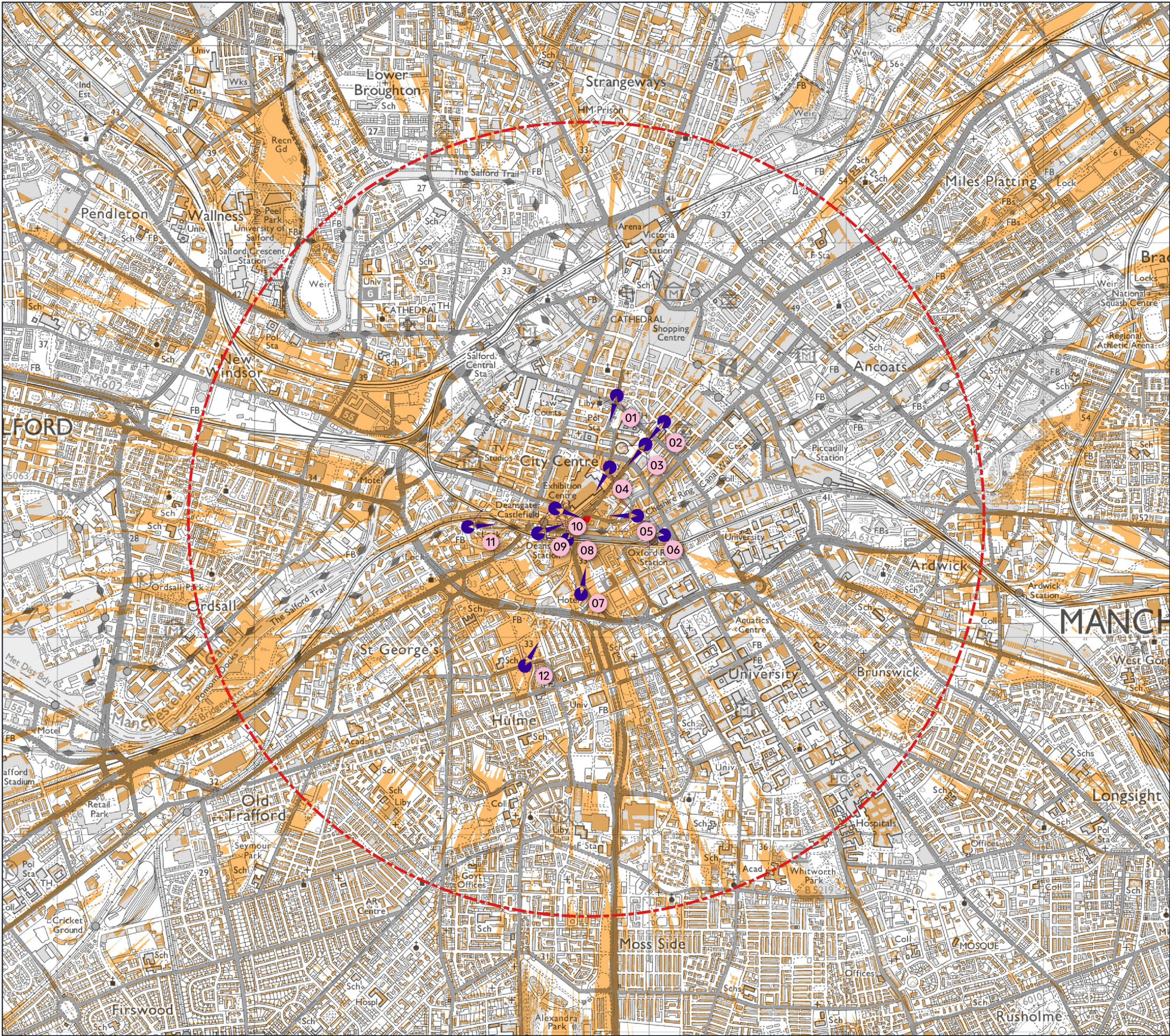


Project	Apex Tower, Manchester
Drawing Title	Zone of Theoretical Visibility
Scale	1:40,000 @ A3
Drawing No.	13721_P02_B
Date	October 2021
Checked	RM/xxx



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Appendix C – Proposed Representative Viewpoints



Site Boundary

2km Study Area

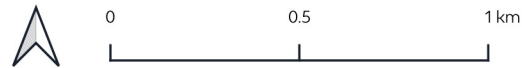
Viewpoints

Proposed Photoviewpoint Location

Notes:

The Zone of Theoretical Visibility (ZTV) illustrates the extent to which the development as a whole (modelled at 86m maximum height) is potentially visible from the surrounding area (1.6m high receptor).

The plan has been prepared using GIS computer software (MapInfo) and Environment Agency LiDAR DSM data, and as such takes into account built form. The DSM data provided by EA and while some vegetation is accounted for, it does not fully represent the potential screening observed in the field.



Project	Apex Tower, Manchester
Drawing Title	Zone of Theoretical Visibility and Viewpoints
Scale	1:20,000 @ A3
Drawing No.	13721_P03_B
Date	October 2021
Checked	RM/xxx



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Appendix D - TVIA Assessment Criteria

Technical Appendix D:

TVIA Assessment Criteria (Sensitivity of Receptors: Townscape & Visual / Magnitude of Change: Townscape & Views)

Table 1: Townscape Sensitivity Criteria

Sensitivity	Townscape Value	Key Characteristics and Features	Townscape Condition	Townscape Susceptibility
	Townscapes recognised and valued for their quality and / or cultural associations	As recognised in published SPD	Degree to which the townscape is intact and legible	The ability of a defined townscape to accommodate the specific proposed development without undue negative consequences
High	National / Regional Importance <i>(Landscape / Townscape Designations - AONB, National Park, Conservation Areas, Registered Parks and Gardens)</i>	Features which are dominant within the townscape and are fundamental to defining the distinct townscape character of an area. Important characteristics and features recognised as forming intrinsic part of nationally and regionally designated townscapes. Distinctive individual or rare features.	Distinct townscape structure with strong pattern and intact features. Few detractors or uncharacteristic features or elements present.	The townscape is such that changes in terms of the development proposed would be entirely at odds with the character of the local area, related to matters including pattern, grain, use, scale and mass.
Medium	Local Importance <i>(Other Designations – Specific Protected Features, Undesignated but value perhaps expressed through non-official publications and/or demonstrable use and/or local listing.)</i>	Locally important and notable features that contribute to the overall character of an area. Features and elements protected by local policy.	Townscape exhibits recognisable structure and characteristic patterns. Some detracting features present.	The proposed development has a degree of consistency with the existing scale, pattern, grain, land use of the prevailing character, although mitigation may be appropriate to enhance assimilation.
Low	No Designation. Areas identified for recovery.	Features or elements that are uncharacteristic and detract from the townscape character of an area.	Degraded townscape structure with fragmented pattern and poor legibility of character. Detracting features notable within the townscape. Opportunities for restoration through mitigation measures associated with proposals.	The development proposed is entirely consistent with the character of the local area, related to matters including use, scale and mass.

Table 2: Visual Sensitivity Criteria

Sensitivity	Occupation and Activity of Users	Viewpoint Context	Visual Susceptibility
High	• Observers whose attention or interest may be focussed on the landscape and recognised views in particular. • Recognised / Important Viewpoints, including those identified within and protected by policy. These viewpoints may be tourist destinations and marked on maps. • Designed views, including from within historic landscapes. • Residential Properties - Views from rooms occupied during daylight / waking hours (predominantly ground floor rooms). • Users of Rights of Way and Recreational Trails. • Users of land with public access (i.e. Open Access Land and National Trust Land).	A viewpoint considered to be highly exceptional nature, identified in the listing of a designated heritage asset, or a planning policy designation; and/or mentioned in a number of guidebooks or on tourist maps; and/or referenced in art and literature.	People visiting recognised viewpoints with views towards the development. People using Public Rights of Way and Access Land as part of recreational routes with extensive views towards the development.
Medium	• Views of the landscape are part of, but not the sole purpose of the receptors' activities. • Residential Properties - Views from rooms unoccupied during daylight / waking hours (1st floor rooms)¹. • Those playing or participating at outdoor sports or undertaking formal outdoor recreation. • Users of local roads where there are clear / open views across the landscape and low levels of traffic.	The view from the representative viewpoint has a view of scenic value, with moderate local importance and scenic quality: it is typically identified to a heritage asset; and/or of local visual amenity importance. Limited potential for substitution of some elements within the view.	People using recreational facilities or playing outdoor sports with views of the development but for whom views are not the main focus. Users of Public Rights of Way and Access Land with intermittent views towards the development.
Low	• Attention is focussed upon the activity of the receptor and not upon the wider views. • Users of main roads travelling at speed, or local roads where the focus is upon the road ahead owing to traffic conditions and the context / composition of views. • Places of Work.	The view from the representative viewpoint is not related to designated, or non-designated, heritage asset, or a planning designation. Unsightly and of low importance. Potential for substitution of some or all elements in the view.	People travelling along roads or using transport routes where the focus is not on the views and views of the development are fleeting. People at places of work where attention is not on the views. Users of Public Rights of Way and Access Land where views towards the development are limited to glimpses and are not the main focus of attention.

¹ This is based on the premise that habitable rooms are on the ground floor with bedrooms occupying the upper floors.

Table 3: Magnitude of Change Criteria – Townscape

Magnitude	Change experienced
High	• Development would result in the irrevocable loss of key townscape elements and features, resulting in a permanent change to the character and context of the area. • Introduction of uncharacteristic, dominant elements within the townscape. • Proposals erode of the context of existing features and their perception within the landscape. Result of change may undermine any designation. • Mitigation measures do not reserve loss although will deliver some localised benefits. • Proposals strengthen existing townscape structure through the introduction of lost or degraded features and reinstatement of fragmented townscape patterns. • Development fits within existing townscape character and enhances and / or reinstates key townscape features. • Delivers policy objectives for townscape conservation or enhancement.
Medium	• Development would result in the localised medium to long-term loss of some key characteristic features. • Introduction of development / uncharacteristic elements within the landscape alongside characteristic features. • Proposals introduce characteristic development and key townscape features whilst respecting the scale and pattern of the townscape.
Low	• Development would result in the temporary loss of a low number of localised key features. Mitigation is possible and can maintain or restore losses. • The proposals introduce temporary uncharacteristic features into the townscape. • The proposals retain existing key features and respect the pattern of the townscape. • Proposals allow for local enhancements through the removal of detracting features.
Negligible	• The development would introduce barely discernible elements or physical change to the townscape. Key characteristics of the townscape and the integrity of the townscape remain unaffected.

Table 4: Magnitude of Change Criteria – Visual

Magnitude	Change experienced
High	- Proposals introduce dominant, discordant elements altering the composition and balance of the view. - Total and complete change in the composition of the view with the introduction of features and elements not present in the locality. - Development interrupts or detracts from the focus of a recognised important view or vista. - Proposals introduce features not present in skyline views of the area. - Proposal removing existing visual detractors and introduce development that respects the scale, form and layout of existing visual components. - Development introducing positive elements that enhance legibility and composition of degraded views. - Proposals reinstate a formerly lost valued view. - Development introduces a valued landmark or feature within views from a recognised vantage point
Medium	- Development is clearly visible, but not prominent in views. - Proposals may introduce some uncharacteristic elements that are incongruous in limited localised views. - Development may form skyline features amongst existing development and / or vegetation where such skyline views are not typical. - Proposals complement the composition of the view and the scale and form of development within it.
Low	- Development does not introduce uncharacteristic or incongruent features into the view. - Proposals do not alter the overall composition of the view or the dominance or balance of elements within it. - Development does not protrude above existing elements to be dominant on the skyline. - Views of the proposals are filtered or seen in partial, glimpsed views between existing development and vegetation. - Views of development brief and fleeting as seen from moving vehicles.
Negligible	The development would be barely discernible in views. Proposals perceived as a background component in views or are subservient to other elements within it.

Table 5: Significance of Effect

Significance	Justification
Major	Total permanent loss or major alteration to key elements and features of the townscape, to include the introduction of elements totally uncharacteristic of the surrounding townscape (adverse). Development would be visually intrusive and would disrupt fine and valued views both into and across the area (adverse). Fitting well with the scale, landform and pattern of the townscape, and enhancing the existing townscape character (beneficial). The development would create a highly improved change in views (beneficial).
Moderate	Effects that are at variance with some of the characteristics of the townscape, adversely affecting the character (adverse). Development would be visible, but not wholly incongruous (adverse); or Fitting well with the landscape characteristics but changing their emphasis for improvement (beneficial). The development would enhance the visual setting and complement the existing composition of the view (beneficial).
Minor	Not quite fitting the characteristics of the townscape (but not considered wholly uncharacteristic), will have local / limited scale adverse impact (adverse). Development would introduce some incongruous elements to views (adverse); or Locally improving or adding to the quality of the townscape (beneficial); and Complementing the composition and balance of elements within existing views (beneficial).
Negligible	Complementing the townscape characteristics and maintaining the existing townscape character and quality. The development would be barely discernible in views, would be perceived as a background component, or would be subservient to other elements within views.
Neutral	No perceptible changes. Instances where impacts are neither harmful nor beneficial.