



2-4 Whitworth Street West
Environmental Statement:
Non-Technical Summary

December 2024



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Introduction

1. This Environmental Statement (ES) Non-Technical Summary (NTS) has been prepared in support of development proposals coming forward at 2-4 Whitworth Street West in Manchester City Centre. A Site Location Plan is provided in Figure 1 in the following section.
2. Alongside the ES are a range of stand-alone reports and plans. Further details are contained within the Planning and Tall Building Statement.
3. The Proposed Development comprises the demolition of existing buildings on-site, the stopping-up of Rowendale Street and the delivery of 364 residential apartments in a new development rising to 44-storeys and consisting of a mix of 1, 2 and 3 bed apartments. Entrance into the building will be from Whitworth Street West into the Ground Floor residents' amenity space, which also occupies Levels 1 and 2.
4. A summary of the Proposed Development can be found within Chapter 2 of this NTS.
5. The application is submitted to Manchester City Council ('MCC') by Glenbrook WWS Ltd ('the Applicant').
6. This ES NTS sets out the findings of an Environmental Impact Assessment ('EIA') carried out in respect of the development of the Site.
7. The EIA has been carried out in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended) ('the EIA Regulations') and best practice guidance.
8. The Non-Technical Summary (NTS) is a standalone document and is required under the EIA Regulations.

Purpose of the Environmental Impact Assessment and Non-Technical Summary

9. The purpose of an EIA is explained by the Government in the National Planning Practice Guidance at paragraph 002 (Reference ID: 4-002-20140306), which sets out:
"The aim of Environmental Impact Assessment is to protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process."
10. In simple terms, an EIA is an information gathering exercise in relation to the effect that the Proposed Development may have on the local environment when compared to the existing conditions. These are typically carried out on projects of a large scale.
11. Conducting an EIA is a systematic process, which leads to a final report: the ES.
12. This NTS is designed to be read on its own. It explains the environmental implications of the Proposed EIA Development to the public, informing them, and allowing them to decide whether they would like more detail on the Proposed Development.
13. More information and greater technical details are available in the ES. The ES is a separate document which has been submitted as part of the planning application. Please see the section on "Availability of Environmental Statement" within this NTS for details on how and where to view the ES.

Environmental Impact Assessment Process

14. The first step is understanding if the Proposed Development meets the criteria set out within legislation, which means that further consideration should be given to if it comprises an EIA development. The legislation sets out different 'schedules' of projects and how the EIA should be carried out.
15. A Proposed Development may then go through a 'Screening' and/or a 'Scoping' process. This is the process whereby an Applicant may submit a request to the Local Planning Authority for a formal opinion as to whether they consider the Proposed Development to be meet the criteria for an EIA and, if so, what technical topics it considers to be relevant to the EIA.

16. If an EIA is determined to be required, the Applicant will prepare an ES, which sets out the findings from the technical assessments undertaken. The ES is then submitted to the Local Planning Authority as part of an application for Planning Permission.

Assessment Methodology

Scoping

17. An EIA Scoping Report was issued to MCC for consideration on 15 October 2024. A response was received from MCC on 21 November 2024 confirming their agreement with the proposed Scope of the EIA.

Technical Topics not included in the Environmental Impact Assessment

18. It has been confirmed via the Scoping opinion that the following disciplines will not give rise to likely significant effects on the environment and therefore do not require inclusion in the Environmental Statement.
- Agricultural Circumstances;
 - Aviation
 - Traffic and Transport
 - Air Quality
 - Archaeology
 - Ground Conditions
 - Water Resources
 - Ecology
 - Television, FM Radio and DAB Radio Reception
19. Further information detailing why each of these technical topics were scoped out of the EIA can be found in **Appendix 3.1** of the ES (Volume 2).

Approach to Technical Studies

20. Various technical studies were commenced at an early stage in the development process. The findings of the baseline (existing) environmental studies have played an important role in the design of the Proposed Development by defining the environmental sensitivities, constraints and opportunities associated with the Site.
21. Design team reviews, attended by members of the project team, were held throughout the pre-application process. These reviews provided a valuable forum for the exchange of information and ensured that the design team was fully aware of the environmental constraints and opportunities, and of the interactions between disciplines. Meetings were also held with MCC as the Local Planning Authority, as well as pre-application discussions with technical consultees as described in the Statement of Consultation and individual ES Chapters.
22. The technical studies have been undertaken in accordance with current best practice. Specific guidance used is referenced within each of the respective technical chapters, with a reference list at the end of each chapter.
23. The technical studies undertaken within the ES have been progressed in a transparent, impartial and unbiased way with equal weight attached, as appropriate, to beneficial and adverse effects. Where possible, this has been based upon quantitative and accepted criteria together with the use of value judgements and expert interpretations.

Who has been involved in the EIA process?

24. The EIA process has involved communication and collaboration between the Applicant, Deloitte LLP, MCC, the project team (shown in **Table 1**), statutory consultees and the public.

Table 1 – Project Team

Topic	Assessment carried out by
EIA Coordinator	Deloitte LLP
Architecture and Design	Sheppard Robson
Construction Management	Glenbrook WWS Ltd
Climate Change	Mainer
Daylight/Sunlight/Overshadowing and Solar Glare	GIA
Heritage	Katherine Sather & Associates
Human Health	Enfusion
Noise and Vibration	Hilson Moran
Socio-Economic	CBRE
Solar Glare	GIA
Townscape and Visual Impact	Layer Studios
Wind	GIA

What were the results of the EIA?

25. The following sections summarise the methodology used in determining the likely significant effects of the Proposed Development and summarise the outcomes of the EIA.
26. This section is organised into technical subjects. Greater detail can be found in the relevant chapters of the Environmental Statement (6 to 14) and their technical appendices.
27. The technical topics are those elements of the environment considered likely to experience significant effects and therefore assessed in the EIA.
28. With regard to the assessment for each topic, the subsequent sections discuss:
 - Methodology and scope;
 - Baseline conditions;
 - Likely significant effects of the Proposed EIA Development;
 - Mitigation;
 - Cumulative effects with other developments; and
 - Likely ‘residual’ effects following mitigation.
29. A summary of proposed mitigation measures and residual effects is also included in Chapter 15 of the ES Volume 1.

Significance of Effects

30. The likely effects of the Proposed EIA Development have been classified according to their significance.

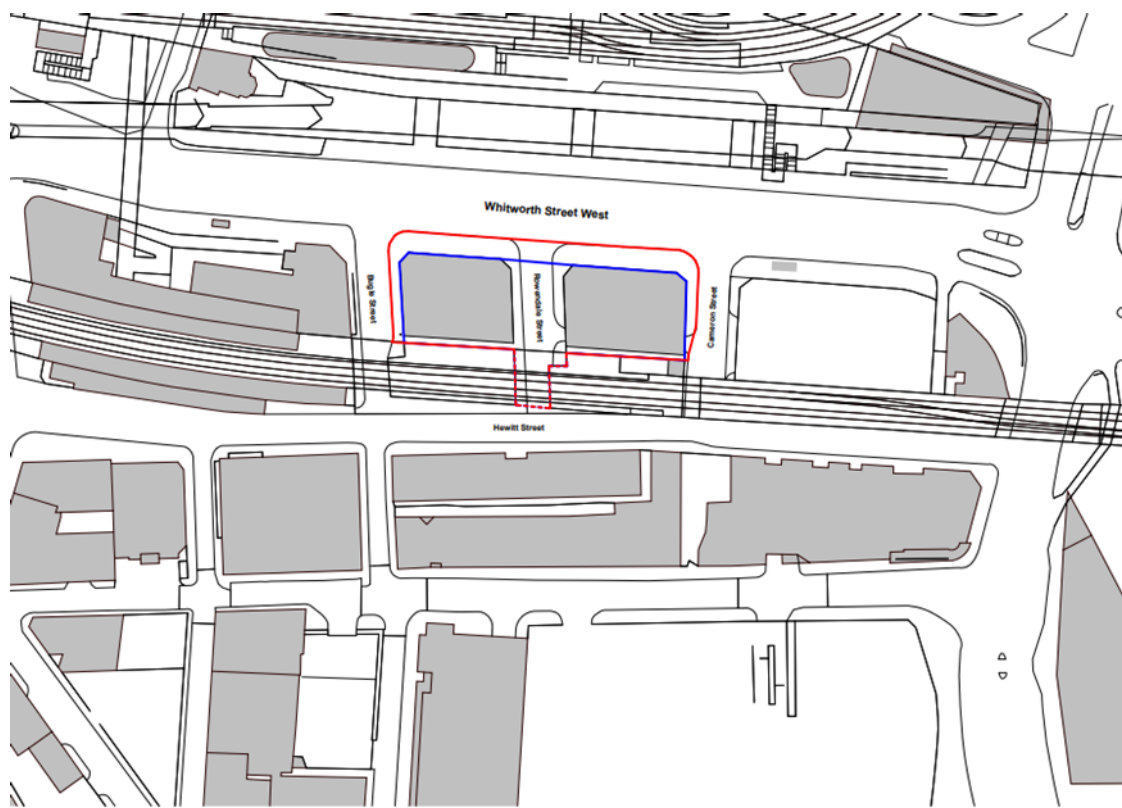
31. Significance is determined as a function of both the scale (magnitude) of change from the existing (baseline) environment and the sensitivity of environmental receptors, such as population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between these factors. Chapter 2 of the ES Volume 1, EIA Methodology, describes this process in greater detail.
32. This serves as a useful guide for specialists to assess effect significance. Where discipline-specific methodology has been applied that differs from these generic criteria, this has been clearly explained within the relevant ES Chapters Volume 1 (6 to 14).

Description of the Site and the Proposed Development

Where is the EIA Site?

33. The Site is bound by Whitworth Street West to the north, with the listed railway viaduct and Deansgate Station platform immediately to the south and at first floor level to the existing buildings. Rowendale Street bisects the Site travelling under the railway viaduct providing vehicle and pedestrian links to Hewitt Street to the south. The Site is bound by Cameron Street to the east and Bugle Street to the west, which also provide vehicle and pedestrian access into the Knott Mill area, characterised by a mix of employment and residential buildings. Beyond Bugle Street is a live music venue (Rebellion) and Deansgate Station is beyond this.
34. A Site Location Plan is shown in Figure 1 below.

Figure 1 – Site Location Plan (Source Sheppard Robson)



35. The Site is located within the Deansgate Ward, an area that has witnessed significant investment and regeneration over the last 20 years. The Site presents a strategically important location for the city and within a cluster of high-rise buildings within the southern gateway of the City Centre, close to key public transport hubs, to the south of the Civic Quarter and to the north of Knott Mill.

What is located on the Site at the moment?

36. The Site currently comprises two buildings. 2 Whitworth Street West is a four-storey, red brick building which is vacant. 4 Whitworth Street West is a three-storey red brick building which is also vacant.

37. The Site is located adjacent to the Deansgate Rail Station and the redline boundary runs underneath the Grade II Listed Viaduct. The roadway underneath the Viaduct to which the Site relates, does not form part of the Grade II listed structure.
38. The Site is currently bisected by Rowendale Street which offers a through route towards Hewitt Street. Rowendale Street will be stopped up as part of the Proposals in order to facilitate the Proposed Development. Access to Hewitt Street will be retained either side of the Site via Bugle Street and Cameron Street.

Are there any sensitive designations in or around the Site?

39. The Development Plan allocates the Site as within the City Centre and Regional Centre.
40. It is within an Air Quality Management Area. The Site is also within Flood Zone 1, meaning it is at low risk of flooding, but is within a Critical Drainage Area. It is not located within a statutory or non-statutory nature conservation site and no record of protected species have been found at the Site.
41. The Site is not in a Conservation Area. St. Peter's Square Conservation Area, Albert Square Conservation Area, Deansgate Conservation Area, St John Street Conservation Area and Castlefield Conservation Area are located in close proximity to the north and west. The redline boundary runs underneath the Grade II Listed Viaduct. The roadway underneath the Viaduct to which the Site relates, does not form part of the Grade II listed structure.
42. Furthermore, there are 72 Listed Buildings within a 500m radius.
43. The surrounding area is characterised by a mix of residential, commercial, retail, leisure, hotel and civic uses.

What is being proposed?

44. The Proposed Development involves demolishing two existing buildings, closing Rowendale Street, and constructing a 44-storey residential tower with 364 units. Levels 3 and above comprise of residential units, consisting of a mixture of 1-bed, 2-bed and 3-bed apartments. The ground floor comprises plant, bin storage and secure cycle parking alongside residents' amenity space, which also occupies Levels 1 and 2. Further bin storage is proposed underneath the Viaduct and a secure boundary is proposed to the Hewitt Street Elevation. Access to the building is primarily from Whitworth Street West, with secondary service access points on the sides. The Proposed Development also includes new public realm around the building, featuring landscaping, seating, and external amenity space.

45. The description of the Proposed Development on the application for planning consent is set out below:

"Demolition of buildings at 2 and 4 Whitworth Street West and the construction of a residential building (Class C3) with associated servicing arrangements, landscaping, and associated works."

Table 2 – Development Quantum

Parameters for Development		
Site Area	Ha 0.17	
Residential (homes)	Total Apartments (homes)	364
Maximum Height	Total Storeys (including ground)	44
	Building heights (m)	136.5m
	AOD (m)	170.3m
Cycle Parking	Spaces	182
Public Realm	TOTAL Public realm (sqm) across the Site	706

Private Amenity Space	Private Amenity Space (sqm)	718
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46. Further information on the Proposed Development can be found within Section 4 of the ES and the Design and Access Statement prepared by Sheppard Robson.

Why is this development coming forward?

47. The Site is currently underutilised within an existing tall building cluster and has been identified within the Whitworth Street Development Framework (2008), which identifies the Site as uniquely qualified to advance the area's destination status further through the development of landmark structures. The Framework highlights that the Site has been identified for regeneration for many years.
48. The Proposed Development sits within the Southern Gateway, a key arrival point into the southern part of Manchester City Centre, further enhancing its importance to the city from a regeneration perspective.
49. The Site is located within the Petersfield area of Manchester City Centre, beside the civic centre of the city, which continues to see significant levels of investment in the form of various City Council projects, including the redevelopment of the Town Hall Complex, Central Library and St. Peter's Square. Complementing this there has also been significant investment in numerous private sector projects in the surrounding areas including at St Peter's Square, Oxford Road and the City's Conference Quarter. Consequently, the Site benefits from being in close proximity to extensive commercial, cultural and leisure activities and has the potential to further contribute to the creation of a vibrant city centre environment.

Who has been consulted?

50. The planning application has been submitted following pre-application consultation with Officers at MCC, local Ward Councillors, the local community, and a wide range of statutory and non-statutory consultees. Consultation has taken place in line with MCC's Statement of Community Involvement and Historic England's advice note on tall buildings (2022).
51. Further details of the pre-application consultation undertaken, together with a summary of how comments have been considered in the design development, are contained within the supporting Statement of Consultation (SoC).
52. A summary of the pre-application consultation undertaken is provided below:
- Local Planning Authority (LPA): Ongoing liaison with the LPA including meetings on 8 May 2024, 19 June 2024, 23 July 2024, 21 August 2024, and 19 September 2024.
 - Ward Councillors: Briefing emails were issued to Deansgate Ward Councillors to provide information about the Proposed Development and approach to consultation. Briefing meetings were offered with a virtual meeting subsequently taking place with Councillor McCaul on 4 October to present the plans and address queries. Written feedback and queries were raised and responded to via email with Councillor Johns.
 - Public consultation website: Pre-application public consultation was undertaken virtually and in person. A consultation website was live for three-weeks and opened on 9 October 2024. The website included information about the Site and the Proposed Development and invited members of the public to provide their feedback. The consultation was publicised via a leaflet drop to 1,533 homes, businesses and landowners in the local area and via local press. It was visited 1,350 times. The comments received have been considered as part of the design development and are summarised and responded to in this Statement.
 - Drop-in events: An in-person public drop-in event was held on 15 October to provide an opportunity for the local community to learn more about the proposals, raise questions for the project team to answer, and to provide written feedback. The drop-in session was advertised through the aforementioned leaflet drop and on the consultation website. An additional dedicated drop-in

session was held for local businesses in the area and advertised through direct invites. Across both sessions, there was a total of 9 people who visited, of which 7 completed feedback forms.

- Community organisations: Ahead of the launch of the consultation, an email was issued to the Ropeworks Residents Association to provide details about the proposals, the consultation website and drop-in events.
- Statutory consultees: A range of statutory consultees have been engaged throughout the design development process on a range of technical matters. This includes: MCC Highways; MCC Property and Estates Team; Environmental Health; MCC Waste Team; National Air Traffic Services and Manchester Airport Group; Greater Manchester Police; and Transport for Greater Manchester (TfGM).
- Historic England: A meeting with Historic England took place virtually on 3rd October in order to discuss the proposals and seek any feedback into the design from an early stage. Historic England then issued formal feedback on 11th October setting out their broad content with the proposals subject to addressing minor recommendations highlighted in the report. The comments received have been considered as part of the design development and within the submitted Planning and Tall Building Statement.

53. Other organisations were consulted during the pre-application stages including inter alia MCC Highways, MCC Waste, Environmental Health, Network Rail, Greater Manchester Police (GMP), and Transport for Greater Manchester (TFGM)
54. Overall, pre-application engagement has indicated general support for the delivery of new residential developments and public realm improvements in the area.
55. Technical queries, comments and issues raised during the consultation period have been addressed within the SoC, this Statement, Design and Access Statement, and accompanying technical documents. Further statutory consultation will be undertaken on the proposals during the determination period and the Applicant will continue to engage with the Local Planning Authority as part of the on-going planning process.

What will the redevelopment process involve?

56. Broadly, the construction process Proposed Development will involve:
- Demolition of existing buildings on-site;
 - Groundworks and laying foundations;
 - Construction of the residential building;
 - External works to the public realm along Whitworth Street West, Bugle Street and Cameron Street and installation of boundary treatments to Hewitt Street. This include a mix of hard and soft landscaping; and
 - Internal fit out of the residential building.
57. Machinery used during redevelopment will consist of standard demolition and construction plant, and will include plant items such as: excavators, concrete crushing plant, mobile cranes, compacting and vibrating mechanical plant, wheel washing and road sweeping equipment.
58. The Site will be secured and surrounded with hoardings to ensure public safety and mitigate adverse environmental effects during construction.

How long will it take?

59. The total construction programme will span a period of up to 3 years within which there will be elements of demolition, ground works, foundations, frame construction, façade cladding and internal fit out.
60. In terms of planned delivery programme and proposed timeline, the current plan see works commencing in Q3 of 2026, and with a target completion date of Q3 2029. These dates have been used for the basis of technical assessments.
61. These are indicative construction programmes. The Applicant highlights that there are multiple risks involved in the development process. The Applicant notes that this programme may ultimately be extended in the

event delays caused by, for example: sustained periods of poor weather; discovery of archaeological remains, unexpected ground conditions or other unforeseen construction challenges; volatility in economic and housing markets; political uncertainty; or the availability of development finance and funding.

62. The programme is based upon normal working hours in line with MCC Guidance of 7.30hrs to 1800hrs Monday to Friday and 0800hrs to 1400hrs on Saturdays.
63. Noisy working will generally not be planned on Sundays and bank holidays. On some occasions there are certain operations that maybe required to proceed during these periods, for example tower crane erection and dismantling. These will be infrequent and will be agreed with the Environmental Health Officer (EHO) and local residents will be notified in advance. The frequency of these will vary and respond to demand. Access to the Site will be permitted 30 minutes prior to working day commencing with noise being kept to a minimum for the first half hour of each day.
64. The Applicant acknowledges the close proximity of the neighbouring properties and as such will endeavour at all times to ensure the working hours are adhered to in order to protect their amenity.

Alternative Options

65. The EIA Regulations require the ES to identify the main alternatives that were considered during the design process.
66. The Proposed Development has been influenced by a range of factors, including location, surrounding land use and input from MCC, Statutory and Non-Statutory Consultees and other stakeholders.
67. This Chapter reviews the principal land use and siting options explored and the reasoning for the selection of the current design for the Proposed Development which forms the subject of assessment within the ES.
68. This Chapter considers the following four options in the context of the existing Development Brief:
 - The 'do nothing' alternative where the Proposed Development is not progressed;
 - Alternative Locations for the Proposed Developments;
 - Alternative uses for the Site; and
 - Alternative Design/layout for the Proposed Development in the context of the design evolution.

The 'Do Nothing' Alternative

69. The "do nothing" scenario, which would see the site remaining as vacant buildings, represents a significant missed opportunity for positive urban regeneration and sustainable economic growth in Manchester City Centre. Leaving the site undeveloped in its current state offers no tangible benefits to the local area and fails to capitalise on the potential of the space. Additionally, it ignores the pressing and increasing demand for housing within the city centre.
70. Redeveloping the site with the proposed project offers a contrast to the "do nothing" approach. It would not only revitalise an underutilised and neglected space but also provide much-needed housing for a range of residents, from young professionals to growing families. This, in turn, would stimulate the local economy through job creation during both the construction and operational phases, as well as increase local spending and support existing businesses. Furthermore, the project incorporates new, high-quality public realm with green spaces, promoting biodiversity, improving air quality, and providing a sustainable approach to urban drainage.

Consideration of Alternative Use

71. While the site was previously granted permission for a mixed-use development including retail and a hotel, this project was never realised. Given the site's location within Manchester City Centre, its proximity to existing amenities, sustainable transport links, and large employment hubs like the First Street regeneration area, a residential development is also considered appropriate.
72. This shift in focus aligns with a wider planning strategy for Manchester, which has identified a significant need for increased housing within the city centre. Both the Core Strategy and Places for Everyone policy documents highlight the importance of high-density housing in this area to meet growing demand. Furthermore, the Manchester Housing Strategy (2022-2032) sets a target of 36,000 new homes by 2032, with a significant proportion concentrated within and around the city centre.
73. The proposed development of 364 apartments directly addresses this need, providing a range of housing options designed to appeal to a diverse city centre population. The project will deliver high-quality apartments designed in line with the Urban Land Institute's 'Build to Rent' guidance, offering an attractive alternative within the private rented sector. This approach ensures long-term management and maintenance of the building, fostering a sustainable and thriving residential community within the heart of Manchester.

Consideration of Alternative Location

74. The proposed development site is ideally situated within Manchester City Centre, benefitting from excellent access to sustainable transport options. Its proximity to the Deansgate Interchange Metrolink station, as well as numerous bus routes, allows for convenient and environmentally friendly travel throughout the city and

the wider Greater Manchester region. Furthermore, the site's central location places residents within easy walking distance of a wide range of amenities, including employment opportunities, retail outlets, and leisure facilities, contributing to a highly sustainable lifestyle.

75. Beyond its inherent accessibility, developing this site will enhance the surrounding urban environment. The project will create a vibrant street frontage along Whitworth Street West, improving the pedestrian experience and contributing to a safer, more welcoming atmosphere. Given its location, history, and existing planning policy context, the site is uniquely positioned to deliver this much-needed regeneration within the city centre, making it the most suitable location for the proposed development.

Design Evolution

76. The proposed development's design is the result of a comprehensive and iterative process undertaken by Sheppard Robson, as detailed in the accompanying Design and Access Statement. This process involved evaluating a range of design options, including various configurations, building massing, and materials, to arrive at a high-quality design that meets the project's requirements while respecting its sensitive urban context.
77. A key consideration throughout the design process was mitigating potential impacts on the surrounding environment. The building's footprint was carefully considered in relation to the nearby railway line, ensuring a safe offset while also minimising overshadowing on neighbouring buildings and public spaces. This careful positioning also allowed for the creation of new public realm areas, enhancing connectivity and pedestrian experience within the immediate vicinity.
78. The design team also prioritised sensitivity to nearby heritage assets and the existing character of Whitworth Street West. Various options for the building's façade, including its colonnade design and materiality, were explored to ensure a cohesive and contextual response. Terracotta cladding was ultimately chosen for its aesthetic versatility, durability, and ability to complement the surrounding architectural styles.
79. The final design has been subject to extensive consultation with stakeholders, including Historic England and Manchester City Council, as well as a public consultation process. A detailed Planning and Tall Building Statement, submitted alongside the planning application, provides further justification for the building's height and scale, demonstrating minimal visual impact on key views within the area. The chosen design represents a carefully considered approach that balances the project's objectives with the surrounding urban environment.

Construction Management

80. Chapter 5 of the ES provides an outline of the Demolition and Construction Programme and Methodology.
81. The Construction (Design and Management) Regulations 2015 will apply to this project and all appropriate controls and systems will be in place to comply with the standards of the Regulations and associated guidance.
82. It is important to acknowledge the Proposed Development and the potential impacts that may arise during the construction stage. A further detailed Demolition Construction Management Plan and Construction Management Plan will be prepared by the appointed Contractors in due course and updated as appropriate to reflect comments received and the wording of any planning conditions attached to any future permissions.
83. In terms of planned delivery programme and proposed timeline, the current plan is as follows:
- Planning Submission Q4 2024;
 - Start on site Q3 2026; and
 - Completion Q3 2029.
84. Subject to planning, the demolition works will be completed in advance of the main construction works. The demolition works are due to commence Q3 2026, with a duration of circa 16 weeks. The main construction works will then follow with a view to completing Q3 2029.
85. A detailed programme of demolition and construction activities and sequencing will be provided by the Contractors as part of the detailed demolition construction management plan and the construction management plan.
86. The following narrative explains this methodology and timescales envisaged at the time of the planning application. More detailed proposals will be developed once the contractors are appointed and prior to commencement on-site. This will include preparation of detailed plans to incorporate Demolition and Construction Management, Construction Phase Health and Safety, Environmental Management as well as Site Waste Management, Logistics and Traffic Management.
87. Every stage of the project will be pre-risk assessed and appropriate controls applied, subcontractors will be pre-vetted and will be subject to extensive pre contract requirements of information transfer and risk assessment.
88. A fundamental aspect of the Principal Contractor's role is the development of a Demolition Management Plan and Construction Management Plan, which will take account of all known risks, which have been identified at pre-construction stage by the Principal Designer/CDM Consultant, the Design Team and also through site investigations.
89. The Demolition Management Plan and Construction Management Plan will describe arrangements and procedures for managing these key risk areas in more detail, as well as any future risk, and also the resources, including personnel, which will be applied to the scheme and will ensure the Health and Safety of all those working on or affected by the project works.
90. The Principal Contractor will have an on-going process of monitoring health and safety standards throughout its organisation. This is normally done directly (on-site) by the site management team through regular inspections, toolbox talks etc., and via the risk assessment process both during the completion of risk assessments and then by monitoring the effectiveness of risk control measures, which have been implemented. Site managers will also undertake regular reviews of safety on-site, including any accidents or incidents and any matters raised will be dealt with accordingly.
91. Health and safety are also incorporated as a fundamental aspect of the overall project review. The Applicant will appoint a Principal Contractor that can demonstrate competency in the management and execution of Health and Safety. The Principal Contractor will work closely with the Principal Designer at this early stage of the project and will influence the detailed design to remove construction and residual safety risks.

92. At the earliest opportunity (prior to commencement of demolition and construction operations), the Principal Contractor will enter into dialogue with all relevant parties, including neighbours to ensure there is effective co-ordination throughout all stages of the build.
93. The Applicant also acknowledges that the Site is located in close proximity to other large-scale construction sites, some of which may be progressing at the same time as the Proposed Development. The Applicant is committed to working collaboratively with neighbouring developers and contractors to coordinate activities and mitigation measures such that any inconvenience are minimised the works collectively are well-managed. This will be considered in detail as part of the detailed Demolition Management Plan and Construction Management Plan that will need to be agreed with the LPA before any construction works start on-site.

Climate Change

What is Climate Change

94. The International Panel on Climate Change (2022) defines Climate Change as "a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer". Climate change is brought about by human caused changes in the make-up of the atmosphere by emitting green-house gasses (GHG).
95. As the impacts of climate change are severe, it is important to assess how much the Proposed Development will contribute towards climate change. This has been done by following the RICS v2 (2023) guidance on assessing the whole life carbon impacts of a building, as well as Environmental Impact Assessment Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance (IEMA, 2022).

What has been assessed?

96. This report has assessed the quantity of GHG emissions that the Proposed Development will produce through being constructed and operated. The assessment was then used to compare the Proposed Development's estimated GHG emissions to the RIBA 2030 Climate challenge targets. These targets are voluntary targets for GHG emissions which will bring carbon emissions in-line with the UK's pathway to Net Zero by 2050. Once the GHG emissions have been compared to the targets, the assessment was able to determine how significant an impact the Proposed Development will have on the Climate.
97. Embodied Carbon emissions are made up of all the GHG emissions associated with the materials used in the demolition of the building currently on the site as well as the construction, maintenance and eventual deconstruction of the Proposed Development. This includes any emissions associated with the extraction of raw materials to create a product, up until the end of its service life when it will be recycled or sent to landfill.
98. The Embodied Carbon emission was calculated by following the RICS v2 professional standard for the Whole Life Carbon Assessment for the built environment (2023). Furthermore, this was calculated using estimated material quantities provided by the design team. These measurements were used along with a set of standard assumptions to calculate estimated embodied GHG emissions for the Proposed Development.
99. Similarly, the analysis examines the GHG emissions associated with the Proposed Development's energy in operation (operational energy). This is because all energy used for heating, cooling, ventilation, lighting, etc has GHG emissions associated with it as the UK's electricity grid still relies of the burning of fossil fuels. An estimate of the amount of energy used during the operation of the Proposed Development was calculated by Futureserv in the Energy Statement.

What is the effect of the Proposed Development on Climate Change

100. The Embodied Carbon and operational energy estimates were then compared to the RIBA 2030 Climate Challenge benchmarks in order to assess how significant an impact the Proposed Development will have on Climate change.
101. When compared to the RIBA benchmarks, both operational energy and Embodied Carbon are slightly above the '2030' benchmarks. Therefore, the significance of their impact on climate change has been determined as 'Moderate Adverse'. A Moderate Adverse level of significance is where a project's GHG impacts are partially mitigated and may partially meet the requirements but would not fully contribute to decarbonisation in line with local and national goals. This also means that the Proposed Development falls short of fully contributing to the UK's trajectory towards net zero.
102. However, it is important to note that the assessment was done at an early stage which means that the operational energy and Embodied Carbon GHG emissions that have been reviewed are only estimates. This mean that they are not wholly accurate and can be different to the finalised figures.
103. Despite this, the assessment suggests a set of potential mitigation and monitoring methods which could be used on the Proposed Development. This includes a carbon monitoring and goal setting system which would be used across the Proposed Development's design and construction to limit its Embodied Carbon with

agreed upon targets. In addition, the operational energy could be reduced by doing further studies to determine how Low/Zero carbon technologies could be used in the Proposed Development.

104. The proposed measures could help reduce the Operational and Embodied Carbon emissions of the Proposed Development to below the RIBA 2030 Climate Challenge Targets. This would not only reduce how significant an impact the Proposed Development has on Climate Change, but also would bring the development in-line with the UK's pathway to Net Zero by 2050 and reduce the significance of its effects to Minor Adverse.

Daylight, Sunlight and Overshadowing

What is Daylight, Sunlight and Overshadowing?

- 105. Daylight is the amount of natural light from the sky from which a surrounding property can benefit.
- 106. Sunlight is the amount of direct sunlight from which a surrounding property can benefit.
- 107. Overshadowing is the amount of shadow which is cast by surrounding structures upon areas of amenity space such as gardens and parks.

What has been assessed?

- 108. The assessment of daylight, sunlight and overshadowing effects is based principally on the amount of visible sky before and after the construction of a new development.
- 109. Using a 3D model of the Site and surrounding properties and specialist software, the amount of natural light and direct sunlight within the surrounding residential properties has been assessed both before the construction of the Proposed Development and after it.
- 110. The before and after assessment results are then compared and reviewed against the guidance given in the Building Research Establishment's (BRE) document entitled Site layout planning for daylight and sunlight: A guide to good practice (the BRE Guidelines).

What is the effect of the Proposed Development on Daylight, Sunlight & Shadow?

- 111. Whilst the construction of the Proposed Development will result in some changes in the levels of daylight amenity within some of the surrounding properties that will be beyond the levels discussed within the BRE Guidelines, the levels of change and retained levels of amenity are, however, considered to be reasonable in context.
- 112. Any changes in sunlight amenity and overshadowing will be fully BRE compliant.
- 113. The overall effect of the Proposed Development upon the daylight within the surrounding residential properties is considered to be no greater than minor adverse (not significant).
- 114. The overall effect of the Proposed Development upon the sunlight amenity within the surrounding residential properties and the overshadowing of surrounding areas of amenity space is considered to be negligible (not significant).

Heritage

What is Heritage?

115. Heritage is an assessment of the potential cultural heritage impacts of the Proposed Development on the identified heritage assets and what measures can be taken to mitigate possible heritage impacts to the heritage assets in the vicinity of the site. The assessment will include qualitative descriptions of heritage assets, assessments of the significance and settings of the heritage assets, and an assessment of likely effects of the Proposed Development on the significance and settings of the heritage assets.

What has been assessed?

116. The potential likely impact of the Proposed Development has been assessed with respect to the significance and settings of heritage assets in the vicinity. The assessment considers the potential effect of the Proposed Development during both the construction and operational phases.
117. The potential heritage impact includes assessments of the settings and views of the heritage assets in the immediate vicinity of the Proposed Development as well as certain more distant views.
118. In terms of heritage, the Proposed Development includes direct alterations to the Manchester South Junction and Altrincham Railway Viaduct to the rear of the Site for security and operational purposes.

What is the effect of the Proposed Development on Heritage

119. The assessment has demonstrated both temporary and permanent effects on the heritage assets of which have either a neutral or minor adverse effect.
120. Due to the proximity of the Manchester South Junction and Altrincham Railway Viaduct, Deansgate Station, Castlefield Railway Viaduct and Rochdale Canal Lock Keepers Cottage to the Site, Manchester Central. The Midland Hotel and Deansgate Goods Station the potential effects of the demolition and construction phase will result in localised temporary minor adverse impacts to these heritage assets.
121. It has been assessed that 2 and 4 Whitworth Street West do not qualify to be considered as non-designated heritage assets in section 5 of the Heritage Statement. Likewise, Rowendale Street has been assessed that it is not a non-designated heritage asset in its own right but is within the setting of other heritage assets. For these reasons, the demolition of the existing structures and the infilling of Rowendale Street are assessed as alterations to the settings of the heritage assets in the vicinity. However, mitigation measures of recording prior to demolition have been identified for these elements.
122. No significant adverse effects resulting from the operational phase of the Proposed Development have been identified in regards to Heritage. The ability to appreciate a very small section of the Manchester South Junction and Altrincham Railway Viaduct will be adversely affected by the Proposed Development as the existing arch to Rowendale Street will be hidden from the public. However, this is not a significant effect considering that the railway viaduct is a massive, long structure which has a conspicuous presence in the streetscape and forms the backdrop to the structures in the area. The viaduct will remain prominent, and the new development will not be a distraction or appear overly dominant within the setting of the viaduct. The direct impacts on the Manchester South Junction and Altrincham Railway Viaduct, due to the installation of gates, will not have any effect on the significance of the viaduct.
123. Mitigation measures are identified for 2 and 4 Whitworth Street West and for Rowendale Street, which do not meet the criteria to be considered as non-designated heritage assets. Mitigation for instances of adverse harm is accrued by the public benefits of the Proposed Development. The Proposed Development will add a new feature to the skyline signifying presence and activity within a key gateway site. It will encourage movement through the surrounding area which will help to revitalise the area. In particular, the use of terracotta, a significant historic material along Whitworth Street West and in central Manchester generally, is a sympathetic and contextual choice which is beneficial and mitigating factor of the Proposed Development.
124. In conclusion, the results of this assessment have identified the potential heritage impacts resulting from the Proposed Development on the heritage assets range from neutral to temporary minor adverse impacts as well as providing that mitigation measures are implemented as part of the Proposed Development.

Human Health

What is Human Health?

125. Human health and well-being are affected by a complex interaction of multiple factors, such as access to health and social care, healthy food, freedom from pollution to air/land/water, access to open and green space, reducing crime and fear of crime, and availability of housing, employment, and other services. Health is not just absence of disease but rather a combination of a person's physical, mental, and social well-being. This interaction of different factors can be organised into four themes for healthy urban living – Healthy Housing; Active Travel; Healthy Environment; and Vibrant Neighbourhoods.

What has been assessed?

126. A checklist of topics that are relevant to development proposals and health and wellbeing issues was used to help identify the topics that may be significant. The topics that were scoped into the EIA through the scoping process were considered for those aspects of the studies that are relevant to human health. Summary relevant findings were taken from the impact assessment of each factor scoped as significant for this proposed development and that contributes to human health and well-being – housing, townscape and visual impact, air quality, noise, sunlight and daylight amenity, wind microclimate, socioeconomic, and climate change. Effects have been assessed using professional judgment according to the themes for healthy urban living – social environment and health-related behaviour; economic environment; bio-physical environment; and institutional and built environment.

What is the effect of the Proposed Development for Human Health?

127. The site is located within the city centre, in the Deansgate Ward, and where residents generally have very good health. Deansgate is one of the least deprived Wards in the City according to the Index of Multiple deprivation (IMD). The majority of the population living in the area are aged between 16 and 39, and this group tend to be more healthy than other groups. The provision of additional 359 residential apartments will have moderate beneficial effects since access to good quality housing is known to have positive effects for human health and wellbeing.
128. There will also be some minor beneficial effects for employment and the local economy during the construction phase. There is likely to be less risk of crime since there will be new occupied buildings and thus less risk to wellbeing through fear of crime. No significant adverse effects were found with regard to provision and availability of healthcare and educational facilities, open space and amenity space. Being a city centre location, there is wide range of leisure, cultural, amenity and recreational facilities within easy accessibility.
129. For potential townscape and visual effects, mitigation measures have been embedded into the location and design of the proposed development such that impacts on townscape character were found to be minor beneficial or minor adverse. Effects on most views are likely to be minor and moderate/major adverse effects were only found for one viewpoint. The Proposed Development with 44 storeys is located in the context of Petersfield and in proximity to other tall residential blocks such that it is in keeping with its surroundings in the city centre context. There will be minor beneficial effects for residents and visitors through new and improved high quality public realm.
130. Overall, the location of the site in an area with excellent accessibility to public transport, and with varied access to pedestrian and cycle networks for employment, services, and facilities in the city centre, will encourage active travel with likely major positive effects in the local area.
131. Residential uses of the Proposed Development may be exposed to elevated environmental noise levels where façades overlook the main roads and railway lines to the north and south of the Site but this has been resolved through provision of a suitable glazing and ventilation strategy. Entertainment noise from nearby nightclubs will require specific mitigation to reduce the noise levels emitted at source to a level suitable for residents.
132. Climate change effects have been reduced through design and construction to be not significant. Changes to daylight, sunlight and overshadowing, and the wind microclimate can adversely affect health and well-being

with regard to a healthy environment. Effects were found to be not significant with regard to daylight, sunlight and overshadowing, and the wind microclimate.

Noise and Vibration

What is Noise and Vibration?

133. Noise is defined as sound that is unwanted. In the context of the Proposed Development this would include noise that is introduced by activities or equipment included within the scheme, and also existing noise from nearby sources such as road, rail, and nightclubs. Where the Proposed Development causes changes to the existing noise environment this would be considered an effect.
134. Vibration is the mechanical oscillations of an object relative to an equilibrium. This can cause an adverse effect where a new vibration source introduced by the Proposed Development (whether in construction or operation) is felt at nearby receptors, or where an existing vibration source is felt by users of the Proposed Development. Additionally, vibration can cause structure-borne noise, which is noise re-radiated from the structure through which vibration has transmitted. This can also affect receptors.
135. The nature of noise and vibration in the context of the Proposed Development is that an increase in noise or vibration would be considered adverse, and a decrease would be considered beneficial.

What has been assessed?

136. Noise and vibration resulting from the construction and operation of the Proposed Development has the potential to cause temporary or permanent disturbance to surrounding sensitive receptors.
137. During the construction and demolition of the Proposed Development there is the potential that noise and vibration from the works will have a temporary impact on the surrounding environment. There is also the potential for construction related road traffic to affect the noise levels on local roads and any surrounding receptors.
138. Once the Proposed Development is complete and operational, noise associated with new building services plant due to the Proposed Development has the potential to impact on existing sensitive receptors. The existing and future noise and vibration environment has the potential to impact new residents of the Proposed Development within their homes and amenity areas.
139. Baseline noise and vibration surveys were conducted to establish the existing noise and vibration climate at and around the Site as a basis for setting limiting noise emission criteria for noise sources associated with the Proposed Development, and to establish the impacts of existing environmental noise and vibration and changes to environmental noise levels as a result of the Proposed Development.

What is the effect of the Proposed Development of Noise and Vibration?

140. The assessments showed that construction activities have the potential to cause temporary vibration disturbance to surrounding sensitive receptors during piling. This can be controlled through the use of low-vibration piling techniques such as continuous flight auger piling or rotary bored methods. Construction noise and construction traffic noise are expected to cause negligible adverse effects on surrounding receptors.
141. Future residential uses of the Proposed Development may be exposed to elevated environmental noise levels where façades overlook the main roads and railway line running to the north and south of the Site respectively. With the provision of a suitable glazing and ventilation strategy, conditions suitable for residential amenity inside the new residential properties can be achieved.
142. The noise surveys showed that levels of music noise from the Rebellion nightclub during DJ sets on Friday and Saturday nights are such that mitigation is required to attenuate noise ingress to a level compliant with MCC's entertainment noise limits in the apartments. It is anticipated that this would be achieved via either insulation within the façade build-up or attenuation measures at source within the nightclub premises, or a combination of the two. This can be controlled by a planning condition attached to the consent.
143. Noise levels are elevated in external residential amenity spaces however this is to be expected for an urban environment affected by noise and should not be prohibitive to development. Provisions of imperforate balustrades to the terrace areas will reduce noise levels to a degree.

144. The risk of excessive noise ingress due to the control of overheating will be controlled through the use of vent panels and supporting mechanical systems to limit the amount of time that the panels need to be open and minimise impacts on the Proposed Development.
145. Vibration from passing trains on the railway lines to the south was measured with site surveys, and levels of vibration and related structure-borne noise was predicted in the proposed apartments. The levels were found to be insignificant and no mitigation is required to achieve suitable levels for the uses proposed.
146. Building services introduced by the Proposed Development would be controlled by requiring the acoustic design of services to meet the Council's plant noise limits. There would be no resulting impact on sensitive receptors assuming these limits are complied with.

Socio-economic

What is Socio-Economics?

147. Socio-Economics considers the interconnected influences of social and economic factors upon residents, communities, and labour markets.

What has been assessed?

148. The Socio-Economic assessment considers the effects to be generated through both the construction and operational phases of the Proposed Development. The Assessment has included:
- Review of the national and local policy context of the Proposed Development.
 - Establishing the social and economic baseline position using a range of nationally recognised research and survey information.
 - Assessing the potential scale and significance of socio-economic effects to be generated through the construction and operational phases of the Proposed Development using standard industry ratios, data, assumptions, and professional judgement.
 - Assessing the potential scale and significance of the socio-economic effects of the Proposed Development in combination with those of other, committed development proposals within the local area.
 - Determining the necessary mitigation measures and the resulting effects after any mitigation measures have been taken into account (the residual effects) of the Proposed Development.
 - Assessing the cumulative effects of the Proposed Development, in combination with a number of other development proposals within the local area which have the potential to come forward alongside the Proposed Development.

What is the effect of the Proposed Development on Socio-Economics?

149. The Proposed Development will generate, on average, c.200 FTE (full-time equivalent) construction jobs per year during the construction phase. This is assessed as being a temporary effect and of minor beneficial significance at the Greater Manchester level. This effect is not significant in EIA terms.
150. Throughout the operational phase, the Proposed Development will generate benefits relating to revenue that will accrue to MCC via the generation of additional Council Tax from new homes. This is assessed as being a permanent effect and of minor beneficial significance at the District (Manchester) level. This effect is not significant in EIA terms. The Proposed Development could lead to a minor adverse effect in relation to primary and early years education. However, it is important to note that worst case assumptions have been adopted in assessing this environmental effect and it is not significant in EIA terms. There is no requirement for mitigation.
151. During the operational phase, the Proposed Development will generate negligible (neither positive or negative) effects in relation to both healthcare facilities (through the addition of new residents requiring access to GP and dental services) and open/amenity space and children's playspace provision. These effects are not significant in EIA terms.

Solar Glare

What is Solar Glare?

152. Solar glare assessments are considered necessary when a proposed development has sections of glazed façade or reflective cladding that may reflect sunlight and obstruct the vision of road users and train / tram drivers.

What has been assessed?

153. The assessments are conducted using a 3D computer model of the area created using photogrammetry and architectural models as a reference.
154. Viewpoints are chosen surrounding the development in order to give a realistic representation of potential instances of solar reflections. Viewpoints are located at a focal point such as traffic signal, pedestrian crossing or incoming traffic for major road locations within 500 metres of the Site.
155. The assessment results show the time period and months in which potential solar reflections can occur. The assessment shows a worst-case scenario, as a clear sky is necessary for solar reflections to occur, which in the UK is often not the case.
156. Whilst the assessment details the effects at various viewpoints of a junction, the receptor is a driver of a car at the road junctions or on train / tram lines, as such, the junctions, road or rail locations are assessed as a whole, considering all potential viewpoints of a driver.
157. Solar glare is not a comparative assessment and instead assesses any occurrences from the Proposed Development in absolute terms.
158. Even if solar glare does occur from the existing site buildings, this does not necessarily justify its occurrence from the Proposed Development. However, it should be noted that the Proposed Development will be located on a Site where its existing state is split-level car parking, thus there is limited opportunity for instances of solar glare from the Site to be experienced. Solar glare from surrounding buildings is not assessed.

What is the effect of the Proposed Development of Solar Glare?

159. Overall, nine locations sensitive for road users and five train / tram lines sensitive for drivers have been identified and assessed. Significant effects have been identified at the following five locations:
- Collier Street Car Park pedestrian crossing (CSCP);
 - Eastbound trams from Cornbrook to Deansgate-Castlefield (Tram 4-6);
 - Westbound trains from Manchester Oxford Road Station to Deansgate Station (Rail 1-2);
 - Eastbound trains from Trafford Park to Deansgate Station (Rail 3-6);
 - Eastbound trains from Salford to Deansgate Station (Rail 3,4,7).
160. Owing to the proximity of the EIA Site to several sensitive road and rail locations, as well as the highly glazed nature of the Proposed Development mitigation strategies have been incorporated within the façade design. The following strategies have been embedded within the façade design:
- Solid façade elements have been used to break up reflections; and
 - The use of low reflectance glazing where necessary to reduce the intensity of reflections.
161. Given the location of the site and scale of the development, potential for reflections from the Proposed Development are unavoidable. It should be noted that the assessment considers a scenario whereby the sun shines on every day of the year to consider all potential circumstances in which reflections will occur (i.e. 'worst case'). According to the sunlight availability protractor, based on UK weather data, the sunshine probability will be significantly reduced and therefore the likelihood of the instances of reflections are considerably reduced.

162. The probability of the sun shining during the times of the year when significant potential reflections are expected to occur ranges from 10% to 30%.
163. The assessment does not include the sun itself within any viewpoints which would also cause very intense glare to drivers at all of the affected viewpoints. For the majority of affected viewpoints, the sun would be directly visible at other times of the day if the Proposed Development were not present as seen in the solar glare assessment. In comparison, the reflections from the Proposed Development would appear less intense and would not cause significantly worse effects when compared with a direct view of the sun.
164. To reduce the significant effects identified, low reflectance glazing is required to reduce the intensity of any reflections that occur. It is recommended that low-reflectance glazing is specified on the following facades, subject to further detailed testing in due course. The further detailed testing would establish the appropriate Visible Light Reflectance (VLR) of glazing to be specified in order to mitigate the significant effects as much as is practically possible. Low VLR glazing is recommended as follows and is to be confirmed by further detailed testing:
- Northern Elevation - full height;
 - Eastern Elevation - full height;
 - Southern Elevation - up to Level 20; and
 - Western Elevation - full height.
165. With the incorporation of these mitigation strategies, the post-mitigation residual effects would reduce at two locations. Minor to moderate adverse and significant effects would remain at one location and moderate adverse and significant effects would remain at the two locations listed below, however the solar glare effects have been mitigated to the greatest extent feasible and the intensity of any reflections minimised:
- Collier Street Car Park pedestrian crossing (CSCP) - Minor to Moderate Adverse and significant;
 - Westbound trains from Manchester Oxford Road Station to Deansgate Station (Rail 1-2) - Moderate Adverse and significant;
 - Eastbound trains from Trafford Park to Deansgate Station (Rail 3-6) - Moderate Adverse and significant.
166. For the Collier Street Car Park pedestrian crossing, given the momentary nature of the reflections, the low traffic volume at this location and speed vehicles would be travelling at, the reflections would not be considered to present a safety concern. Regarding the two train tracks, given the momentary nature of the reflections and the inclusion of low VLR glazing that will ensure the reflections are low intensity, the reflections are not considered to present a safety concern.

Townscape and Visual Impact

What has been assessed?

167. Prepared by a Chartered Landscape Architect at Layer.studio, the TVIA assesses the likely townscape and visual impact of The Proposed Development upon The Site and surrounding area.
168. The TVIA has considered the effects on townscape and visual receptors (people) during the short-term construction and long-term operational stages, as well as the cumulative effect of the Proposed Development in conjunction with other approved and proposed developments within the study area.
169. The assessment considered a study area with a radius of 500m and involved a desk study, field survey and digital mapping to analyse the townscape of the study area and to understand where the Proposed Development will be visible from. Using this data, twelve locations were selected for analysis using verified visual images, with one view (View 7) also being assessed as a nighttime view.
170. Landscape and visual receptors were identified and their sensitivity recorded as part of a baseline assessment. An assessment of significance was then undertaken with reference to the sensitivity of the receptor and magnitude of effect.

What is the effect of the Proposed Development?

171. **Construction phase** townscape impacts range from minor - minor/moderate adverse. The majority of viewpoints experience a minor/moderate level of impact and only one viewpoint experiences a moderate/major level of impact.
172. Urban grain will change as existing buildings are demolished and two plots are compressed into one. Similarly, land use will quickly change from the baseline position to an active construction site. Buildings heights will fluctuate as demolition and building works proceed. Public realm and the streetscape will be disrupted while construction takes place and space is utilised to facilitate construction on what is a constrained city centre plot.
173. The effect on visual receptors is heavily dependent on proximity to The Site and varies from minor to moderate/major adverse. From more distant locations, demolition and early construction will not be visible as intervening buildings prevent views of activity at low level. As the building rises out of the ground, its height makes it visible from more distant viewpoints.
174. The viewpoint that will experience the greatest magnitude of change is number 7 as this is located on Whitworth Street West, close to The Site and with visibility to every level of The Proposed Development. Viewpoints 5) Whitworth Street East and 6) Medlock Street will also experience views of construction once it progresses above approximately level 6 and clears existing buildings in the foreground.
175. **Operational phase** townscape impacts range from minor /moderate adverse to minor/moderate beneficial. The majority of viewpoints experience a minor/moderate level of impact and only one viewpoint experiences a moderate/major level of impact.
176. The amalgamation of two plots into one makes urban grain coarser resulting in a minor adverse significance of effect. Incorporation of a colonnade does however mean that the ground floor footprint is small than those above and reduces the significance from the construction phase. It is also noted that the new footprint, although larger than the baseline position, it remains congruous with the Petersfield area and Hewitt Street.
177. Following on from the temporary nature of a construction site, once operational The Site will host residential land use which is precedented elsewhere in Petersfield and is more congruous with land uses in the neighbouring areas of Castlefield and First Street.
178. Inside The Site boundary, Proposed Development is taller than the baseline position. Proposed Development is however located in the context of Petersfield and in proximity to other tall residential blocks. It is therefore in keeping with its surroundings and the effect is neutral.

179. Proposed Development creates high quality public realm with more space for pedestrians and opportunity to engage with the streetscape. Once complete, the building will present an active frontage onto adjoining streets, enhanced by new public realm with soft landscape including trees and rain gardens, feature archways and seating areas. These changes are an enhancement on the baseline position and therefore of benefit to public realm and site character.
180. The effect on visual receptors follows the same trend as during the construction phase in that significance of effect is heavily dependent on proximity to The Site and varies from minor to moderate/major adverse.
181. From more distant locations, only the upper parts of The Proposed Development will be visible. From these locations, the change is either minor due to the context of other tall buildings or, change is negligible due to the quantity of intervening buildings that screen much of Proposed Development from view.
182. The viewpoint that will experience the greatest magnitude of change is number 7 as this is located on Whitworth Street West, close to The Site and visibility to every level of The Proposed Development. Viewpoints 5) Whitworth Street East and 6) Medlock Street will experience a moderate magnitude of change as much of the new building is visible above existing buildings in the foreground.
183. Overall, there is considered to be a minor/moderate significance of impact on the townscape and visual receptors. During the construction phase the nature of effect will be adverse but this will reduce once the building is operational, so that in most instances the nature of the effect becomes neutral.
184. During the operational phase, with respect to visual impact, the building has a neutral nature of effect for the majority of views assessed. Whilst there are instances of adverse impact from a minority of views, the building will generally be experienced as a member of an established cluster of tall buildings formed around the Deansgate-Castlefield transport hub. Proposed architecture and materials connect the building to its ground level and skyline settings. In terms of townscape, the Proposed Development has a beneficial effect on land use, public realm and the site's character.

Cumulative Effects

185. The visual cumulative assessment identifies in combination effects for viewpoints 2, 3, 4, 6 and 12. This is because The Proposed Development is viewed in the context of other tall buildings and when considered cumulatively, these developments have a greater magnitude of change and therefore so significance increases. It is often the case that if these other tall buildings are constructed first, they will screen views of the Proposed Development.

Wind Microclimate

What is Wind Microclimate

186. Wind microclimate is the study of wind conditions at pedestrian level, to determine whether the wind speeds experienced are safe and suitable for the intended pedestrian activities at a given location.

What has been assessed?

187. The wind microclimate has been assessed through comparison of computational simulations of the wind around the site and surrounding area with and without the Proposed Development.
188. Conditions have been assessed on local thoroughfares, roadways, building entrances (both for the Proposed Development and surrounding buildings), bus stops, railway platforms, tram stop platforms, existing ground floor amenity spaces, proposed ground floor amenity spaces and the proposed terraces on level 2.

What is the effect of the Proposed Development on Wind Microclimate

189. The inclusion of the Proposed Development does not introduce any wind safety risks, and wind conditions would be suitable (or otherwise consistent with the existing conditions) for all local thoroughfares, roadways, building entrances (both for the Proposed Development and surrounding buildings), bus stops, tram stop platforms, existing ground floor amenity spaces, proposed ground floor amenity spaces and the proposed terraces on level 2.
190. For the platforms of Deansgate Railway Station, there would be a slight increase in windiness, leading to 5 to 6 days of the winter in which the threshold for standing conditions (in accordance with the Lawson Criteria outlined below) would be exceeded on the northern platform. This region of windier conditions would be reduced in extent by the inclusion of future committed developments.

Table 4: Lawson Criteria

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

Availability of Environmental Statement

191. The ES is available for public viewing online via MCC's Public Access website, and during normal office hours at the following address:

Planning Department
Manchester City Council
Town Hall
Manchester
M2 5DB

192. The ES may be purchased in volumes, the costs for which are set out below:

- Non-Technical Summary - £15
- Volume 1: ES Main Text & Figures - £150
- Volume 2: ES Appendices - £150

193. For copies of any of the above please contact the Viadux Planning and EIA team at Deloitte:

Viadux Phase 2 – Planning and EIA Team
Deloitte LLP,
100 Embankment
Cathedral Approach
Manchester
M3 7FB



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