Weston Halls and Pendulum Hotel, Manchester

Volume 4: Non-Technical Summary (NTS)

December 2025

Turley

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Document Version	Lead Author	Reviewed By	Approved By
V1 (Draft)	SM	CP	MB
V2 (Final)	SM	CP	MB

1. Introduction

What is an Environmental Statement and Non-Technical Summary?

1.1 This document, the Non-Technical Summary (NTS), is part of the Environmental Statement (ES) that has been prepared and submitted in support of a planning application for a Purpose Built Student Accommodation (PBSA) development (the 'Proposed Development') at the site of the existing Weston Halls PBSA and Pendulum Hotel in Manchester city centre (the 'Site'). The planning application has been submitted on behalf of iQ Student Accommodation, who are the 'Applicant'.

1.2 Details of the Proposed Development are provided in **Section 2**.

1.3 The ES, which comprises four Volumes[1], will inform Manchester City Council's (MCC) determination of the planning application. The purpose of EIA and the ES is to assess and report the 'likely significant effects' of the Proposed Development on the environment. The ES is the output of the Environmental Impact Assessment (EIA) process (described in **Section 3**) undertaken in accordance with the 'EIA Regulations'[2].

1.4 In line with the EIA Regulations, the ES should include a non-technical summary of the information presented within the ES. As defined in Planning Practice Guidance (PPG)[3], the non-technical summary should be written in '*plain English*', so as to ensure that the findings reported in **Volume 1: Primary Report and Supporting Graphics** (and where applicable **Volume 2: Technical Appendices to the Primary Report**) can be easily understood.

1.5 The EIA Regulations have various requirements of what needs to be reported in the ES (and thus summarised in the NTS), which are set out in **Appendix 1,** alongside where that information is located in this document to ensure clarity that regulatory requirements have been met.

What does this NTS include?

1.6 The NTS provides the summary of the EIA process and outputs of assessments, specifically covering the following key aspects:

- An overview of the Proposed Development and what it includes (**Section 2**);
- Outline of the 'EIA Process' and the approach taken for this specific project (**Section 3**);
- The existing relevant baseline conditions of the Site and surrounding area (**Section 4**), as EIA is focused on the 'changes' caused by the Proposed Development;

[1] **Volume 1: Primary Report and Supporting Graphics**; **Volume 2: Technical Appendices to the Primary Report**; **Volume 3: Environmental Management Plan;** and **Volume 4: Non-Technical Summary**.

[2] The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (SI 2017/571).

[3] PPG, Paragraph 035, Reference ID: 4-035-20170728.

- A summary of the outputs of the technical assessments undertaken to determine the 'effects' of the Proposed Development and if they are significant (**Section 5**); and

- Synopsis of the evaluation of 'cumulative effects' of the Proposed Development and with other projects (**Section 6**).

What Happens Next

1.7 The ES has been submitted to MCC in support of the planning application and is now with MCC for determination, which follows the general process outlined within **Extract 1**. The process of determination of the planning application (once validated by MCC) is 16 weeks. MCC can request an extension to this period, if agreed in writing with the Applicant.

1.8 The ES (**Volumes 1 – 4**) has been submitted in digital format and is available on the MCC planning portal website (**Box 1**).

1.9 Electronic copies of the ES can be requested from Turley at a fee of £15 (digital file) using the contact details within **Box 1**.

1.10 During the determination of the planning application members of the public and statutory consultees have an opportunity to comment on the planning application via the MCC planning portal website (**Box 1**).

Box 1: Contact Details

Manchester City Council

Address:
Planning
Growth and Development
Manchester City Council
P.O. Box 532
Town Hall
Manchester
M60 2LA

Tel: 0161 234 4516

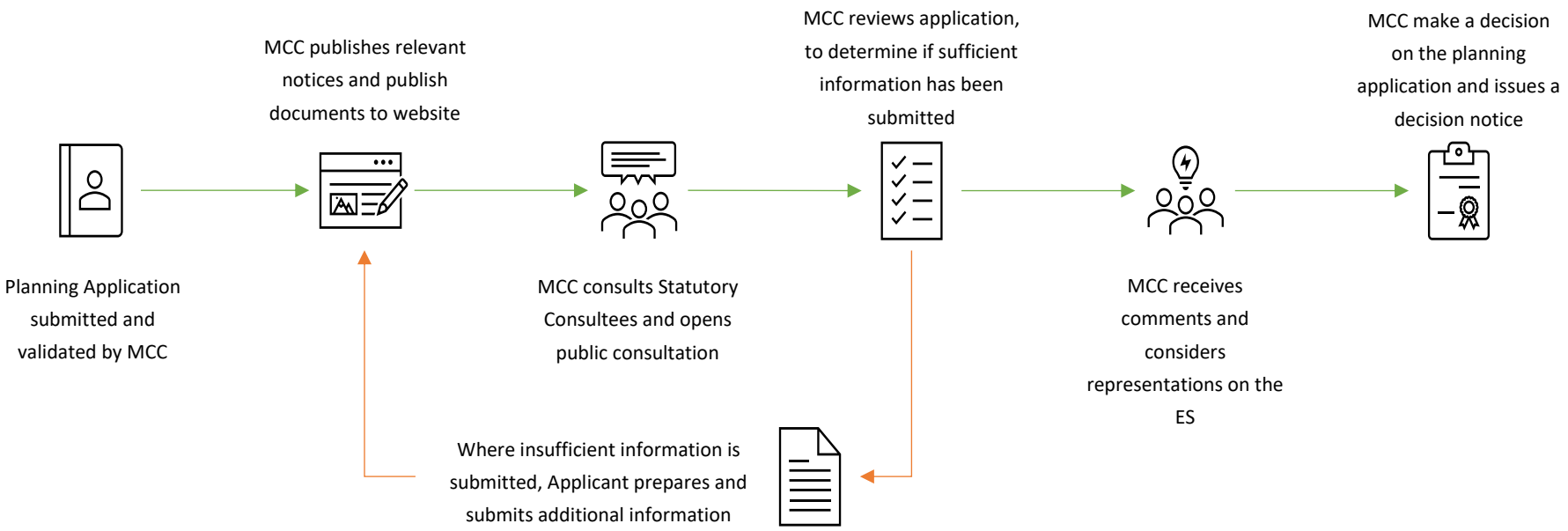
Email: planning@manchester.gov.uk

Planning Portal Website: https://pa.manchester.gov.uk/online-applications/

Turley (EIA Team)

Address:
Level 5
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6 Atherton Street
Manchester
M3 3GS

Tel: 0161 233 7676



Extract 1: Overview of the determination of planning application process

2. The Proposed Development

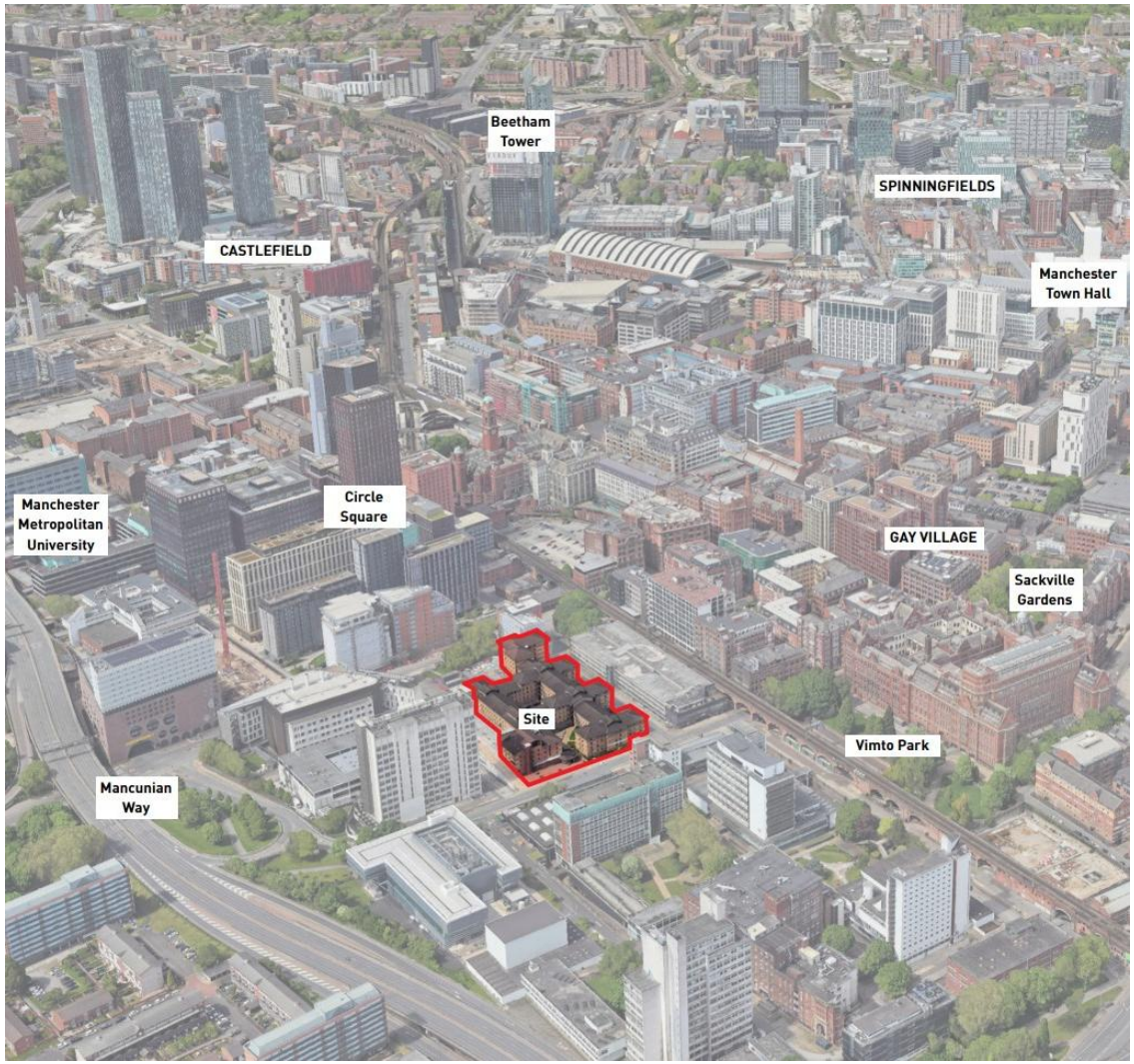
2.1 The Applicant is seeking planning permission for a new PBSA development and other supporting amenity uses.

2.2 The Site currently comprises Weston Halls, an existing, operational student accommodation development of 528 beds, and Pendulum Hotel, an existing/operational hotel with 118 rooms and a conference centre, with no on-Site parking spaces. An aerial view of the Site (with the existing Weston Halls and Pendulum Hotel) is shown on **Extract 2**.

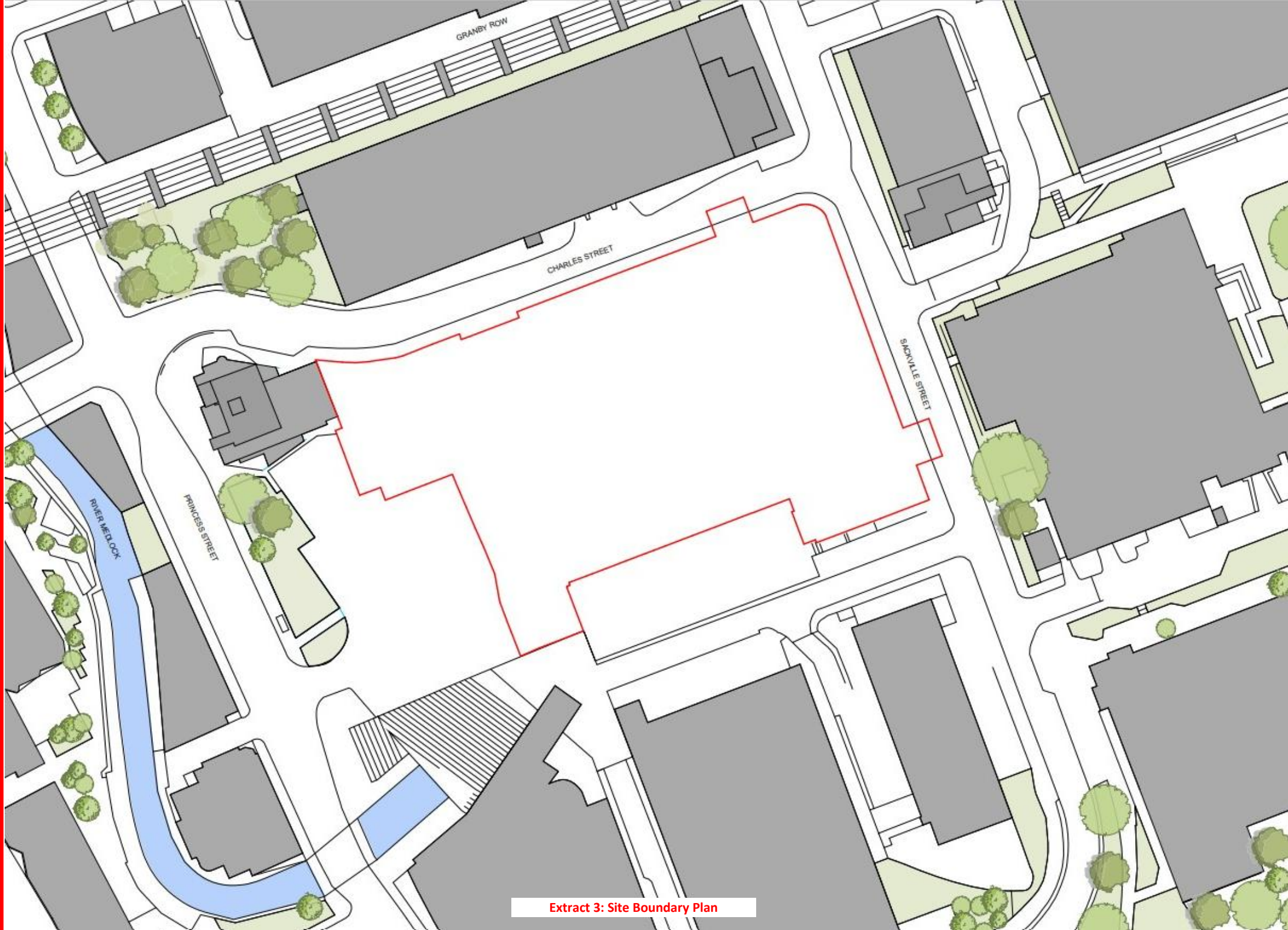
2.3 Further details on the Site and the surrounding area are presented in **Section 4**.

2.4 As shown on **Extract 3**, the Site is bound by Charles Street to the north, Sackville Street to the east, Drover Lane, and Faraday Tower and George Begg Building (both buildings associated with The University of Manchester) to the south, and a hotel and a ground-level parking lot to the west.

2.5 The planning application submitted is termed a 'full' planning application, where details of the Proposed Development are submitted for approval. Therefore, the assessments were based on a set of 'detailed' plans and drawings of the Proposed Development and a description which defined the Proposed Development considered across all technical assessments within the ES. This approach to the EIA is discussed further in **Section 3**.



Extract 2: Aerial view of the Site and surrounding context



Extract 3: Site Boundary Plan

2.6 The key characteristics of the Proposed Development, specifically the details assessed within the ES, are set out below.

Proposed Land Use and Quantum

2.7 The Proposed Development is for the following uses and quantum:

- Purpose built student accommodation – 2,511 units.

2.8 Supporting amenity spaces are also proposed, which are ancillary to the student accommodation use. These areas will include a gym, study spaces, extensive lounges and private and social dining.

Layout, General Arrangement and Building Heights

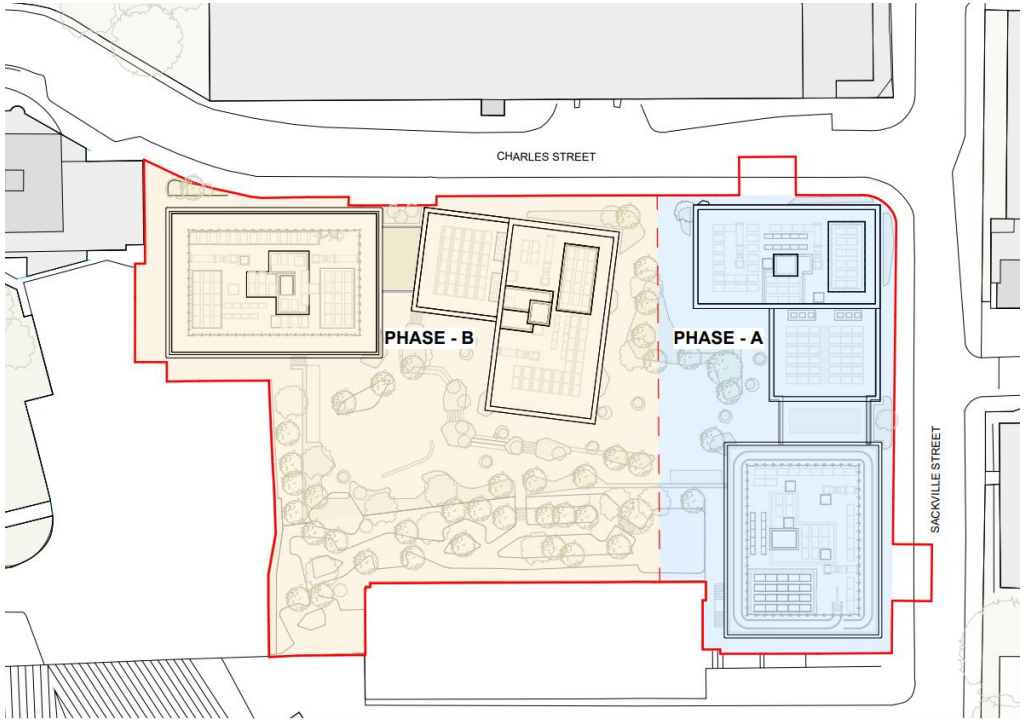
2.9 The Proposed Development is split into two phases (Phase A in the east of the Site and Phase B at the north-west, each with a tower and adjoining lower-level buildings (as shown on **Extract 4**).

2.10 The tallest tower within Phase A tower will be 50 storeys in height and is located to the south-east side of the Site. The lower-level building in Phase A will be 17 storeys, adjacent to Charles Street and Sackville Street. Both buildings will be connected by a smaller 8-storey building (as shown on **Extract 5**).

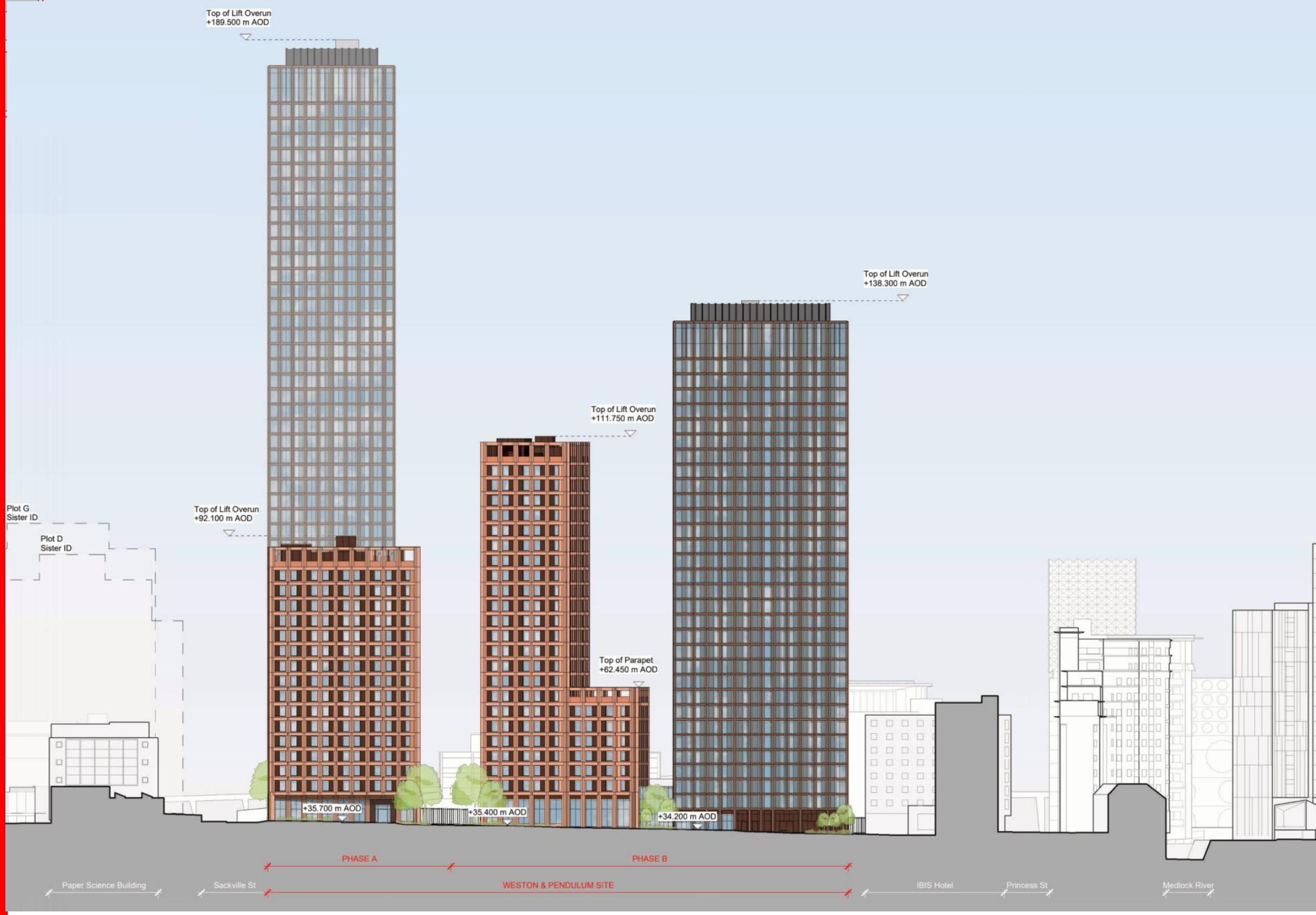
2.11 The tallest tower Phase B will be 33 storeys in height and is located at the west of the Site. A lower-level building (part-24 storey and part 8-storey) will also be provided as part of Phase B adjacent to Charles Street, connected by a 1-storey building link (shown on **Extract 5**).

2.12 Basements will be provided in both phases of the Proposed Development which will contain plant.

2.13 The buildings have been located to reinforce the street frontages along Charles and Sackville Street and positioned to the north and east of the Site, creating a generous south-facing landscape space.



Extract 4: Site wide Phasing Plan



Extract 5: North Elevation from Charles Street, with the Phase A at the left and Phase B on the right

Landscaping, Public Realm and Biodiversity

2.14 The proposed landscaping will be organised into two distinct spaces, defined by the change in level at the Site (**Extract 6**).

2.15 The northern section will be private in character, framed by planting and light-dappled trees and offering a network of both active and quiet areas, whilst the lower woodland edge is proposed approximately 3m beneath the main garden and will be accessible via both stepped and levelled pathways.

2.16 In addition to the above spaces, accessible podium and green roof terraces spaces will also be created, providing additional amenity and recreational space for students within the buildings.

2.17 The streetscape will also be enhanced at various points through tree and vegetation planting along Charles Street with seating opportunities for users provided.

Operational Access Arrangements and Parking Provision

2.18 No vehicular access (including service vehicle access) and on-Site parking places are provided within the Site. Two new on-street loading bays will serve the Site (one on Charles Street, one on Sackville Street).

2.19 There are 8 existing on street Pay & Display parking bays on Sackville Street. There will be a reduction in one parking bay due to the creation of the Loading Bay but otherwise, the parking remains unchanged.

2.20 The main operational daily activity will be servicing of the Site and also some taxi drop offs/pickup, with the majority of trips to the Site made by sustainable modes on foot/cycle or by public transport.

2.21 Drop off / pick up on move in and out days will be managed with booked arrival times and slots so that there is no congestion, either occurring at the existing parking bays on Sackville Street or from the single yellow lines on Charles Street. A Move-In/Move-Out Strategy will be a managed system where drivers book arrival slots.

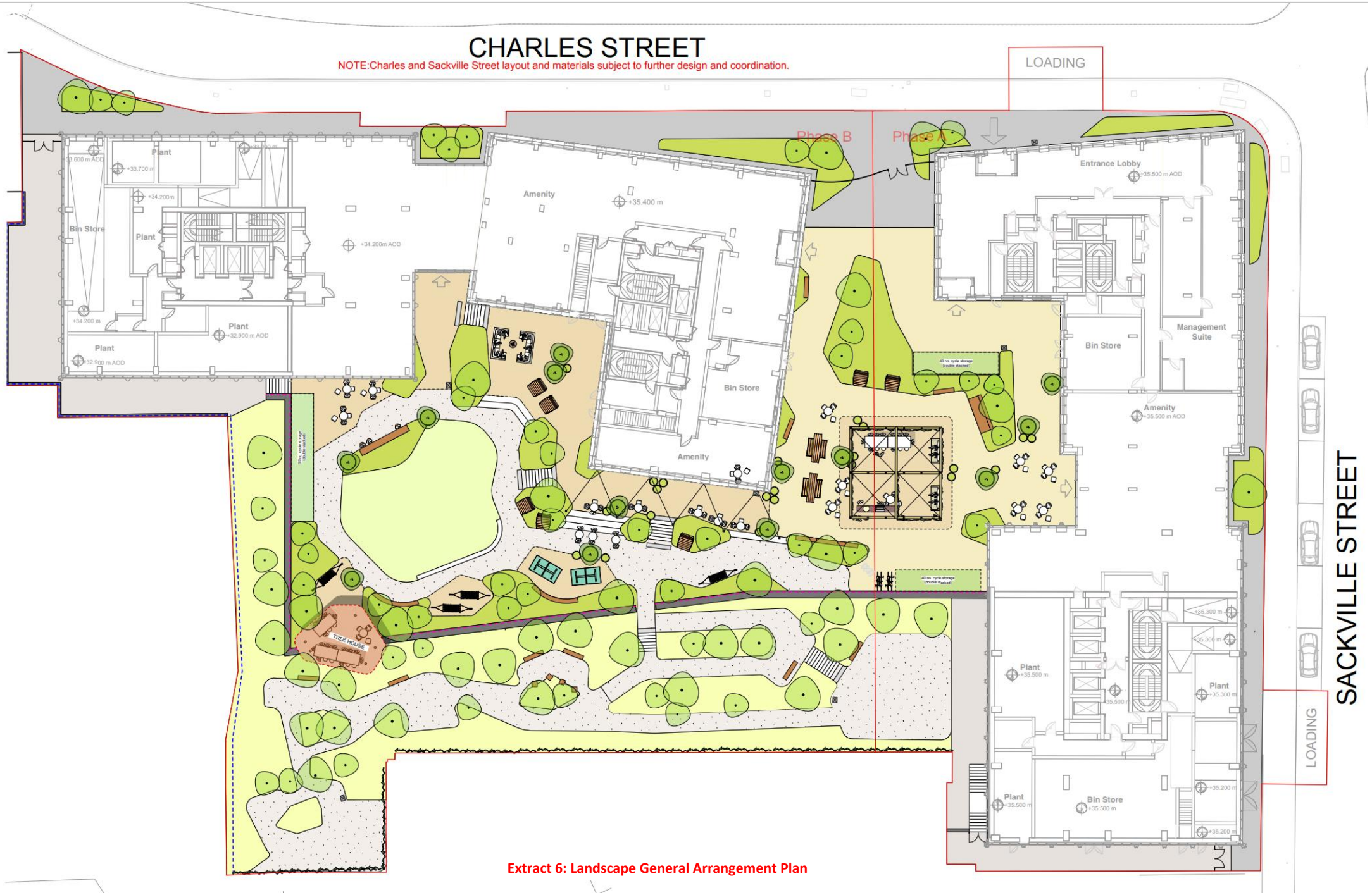
Operational Hours

2.22 The Proposed Development will be operational 24 hours a day / 7 days a week.

Lighting Strategy

2.23 The Proposed Development will include lighting at accesses, pedestrian routes, and for the operation of the buildings. Where lighting is proposed, it will be designed and installed in line with relevant industry best practice and guidance[4] to ensure a safe environment for all.

[4] Including CIE 150: 2017; ILP GN01; and BS 5489-1 : 2020, etc.



Extract 6: Landscape General Arrangement Plan

Noise Mitigation Strategy

2.24 A suitable façade design specification has been formulated to ensure that the proposed sensitive receptors will be adequately protected, following the guideline noise levels within relevant guidance[5], and agreed with MCC (a standard practice for all residential buildings in a city centre). This will include an appropriate glazing and ventilation specification, as required, and take account of the source with most influence on the façade of interest.

2.25 Plant noise limits will be established based on background sound levels captured during baseline surveys, following relevant industry best practice and guidance[6] (this will be agreed with MCC and integrated into the design).

Energy Strategy

2.26 The Proposed Development will be designed and built to go beyond the requirements of Part L 2021[7].

2.27 The buildings will be constructed in accordance with the 'energy hierarchy' (or 'fabric first' approach)[8], delivering a high standard of fabric insulation and airtightness and utilising a range of renewable and low carbon energy technologies such as roof mounted solar photovoltaic (PV) and Air Source Heat Pumps[9].

2.28 The Proposed Development will be all-electric, with no gas boilers. This means that the carbon associated with the buildings use will reduce over time, ultimately reaching net zero in line with the decarbonisation of the grid.

Other Operational Strategies

2.29 Additional operational strategies will be implemented as part of the Proposed Development, in relation to surface water drainage, foul water, potable water, overheating, climate resilience, waste, building safety / crime prevention principles. These strategies have all been prepared in line with relevant best practice or technical guidance / legislation / regulation (these measures will be secured through appropriately worded planning condition(s)).

Construction of the Proposed Development

2.30 Demolition, Site preparation and construction of the Proposed Development is anticipated to commence in 2027, with Phase A construction being completed over 4.5 years and opening for the Academic Year 2031/32. Phase B construction is anticipated to

[5] Such as the British Standard 8233:2014. Guidance on sound insulation and noise reduction for buildings.
[6] Specifically, the British Standard 4142:2014+A1:2019. Methods for rating and assessing industrial and commercial sound.
[7] The building regulations in England that sets the standards for the energy performance of new and existing buildings, mainly focusing on the conservation of fuel and power.
[8] A fabric-first approach in building design means prioritising the improvement of the performance of a building's components and materials before considering other systems or technologies.
[9] Devices used to absorb heat from the outside air and transfer it indoors.

commence in 2031, being completed over 3.5 years and opening for the Academic Year 2034/35.

2.31 A commitment has been made to adopt a series of construction methods which will avoid, offset and reduce environmental effects associated with the construction. These measures will be provided within the Construction Environmental Management Plan (CEMP) and submitted to MCC for approval[10] in advance of construction activities occurring. These measures are derived from best practice measures or technical specific guidance / recommendations. As such, these measures are 'tried and tested' and proven to effectively prevent construction related environmental effects.

2.32 Construction works are anticipated to comprise the following key stages, broadly in chronological order:

- Site securement;
- Formation of construction access(s) and temporary construction compound (within the Site);
- Site preparation works, including clearance works, demolition, utilities diversions (where appropriate), provision of retained features, etc;
- Construction of new access junctions, including temporary closures/diversions (where required);
- Excavation, earthworks, levels and material management;
- Construction of buildings and associated infrastructure (i.e. services and plant); and
- Implementation of proposed landscaping, lighting, internal and external finishing.

Reasonable Alternatives

2.33 The EIA Regulations require "*a description of the reasonable alternatives studied by the developer*", including in relation to alternative sites; design; technology or a do nothing scenario. The alternative studied by the Applicant comprised alternative designs for the Proposed Development.

2.34 With respect to the 'Do Nothing Scenario', the Site and surrounding area will continue to change regardless of the Proposed Development due to the following:

- Decrease in full time employment in Manchester with an increase in employment across Greater Manchester;
- Decrease in construction sector employment in both Manchester and Greater Manchester;

[10] The CEMP will be maintained and updated (as required) throughout the construction process.

- Continued growth of existing trees around the perimeter of the Site;
- Marginally calmer wind conditions, as existing vegetation would continue to grow and create a greater obstruction to the wind;
- Reduction in greenhouse gas emissions, with carbon budgets reducing to achieve net zero; and
- Continued improvement in air quality, with the change of vehicle fleet.

2.35 The Proposed Development was chosen to be bought forward rather than a do-nothing scenario due to the economic benefits and requirement for higher quality accommodation. The Proposed Development also replaces the existing PBSA and hotel buildings which are of limited architectural and townscape merit with buildings of high architectural quality, set within high-quality landscaped areas.

2.36 The design of the Proposed Development has developed to adapt to Site constraints as well as feedback from stakeholders. The text below provides an overview of how alternative design options have been discounted in order to avoid, reduce or offset the Proposed Development's environmental impacts:

- **Massing and Layout –** The design of the Proposed Development positions the built form away from the nearby buildings, pedestrian routes and public realm proposed as part of the Sister (Innovation District (ID) Manchester) Framework[11] and instead, places the taller elements of the Proposed Development at the south-eastern and north-western corners. This responds better to the scale and mass of the nearby and existing buildings to the west. The positioning of the buildings at the edge of the Site also allows for the introduction of a large, south facing landscape courtyard with maximum space and sunlight (which ties in well with the improvements at nearby neighbourhoods). The buildings within Phase A and B are also slightly separated, with glazed links introduced for connectivity to create visual separation. Therefore, the final design of the Proposed Development was considered to be a better alternative with respect to townscape and visual effects.
- **Materiality** – The contrast in the use of more earthy, darker tones and materials used on the lower elements, with the proposed towers utilising lighter tones, was chosen as opposed to having a singular colour grade throughout the proposed buildings to create visual interest and contrast. This also utilises colour tones that incorporate influences from the nearby historic buildings

[11] A key development opportunity and framework developed in partnership with the University of Manchester, located in the city centre and aligned with adjacent developments at Piccadilly and Mayfield in Manchester.

in Manchester. The tower elements also utilise lighter tones to be visually lighter when viewed from across the city. This was considered to be the favoured option in terms of townscape and visual considerations.

3. The EIA Process and Approach

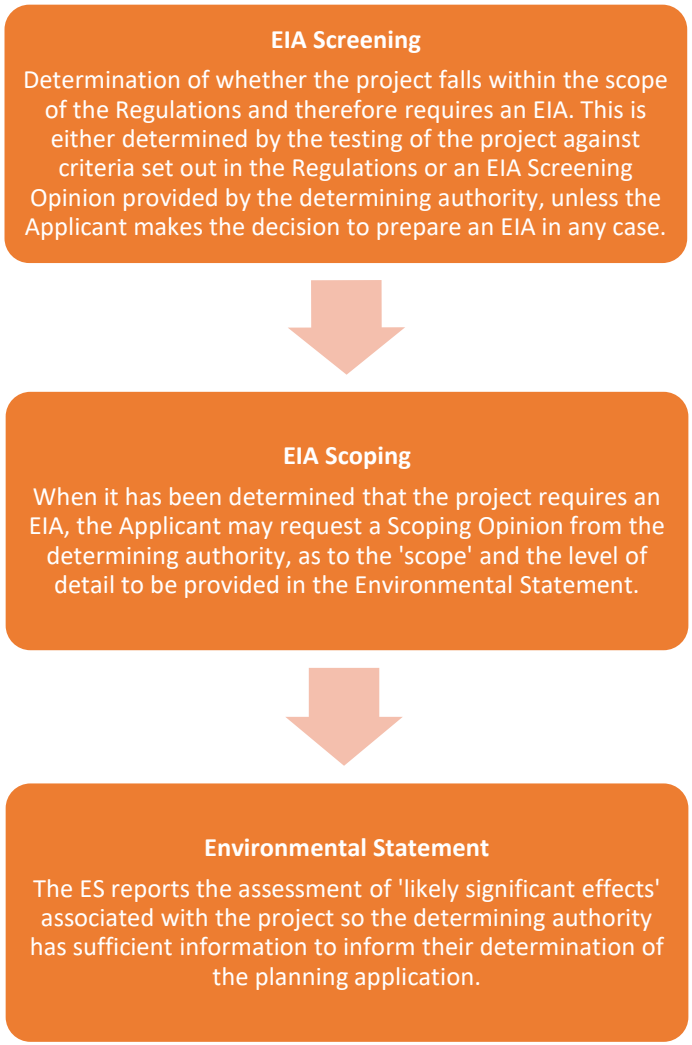
The EIA Process

3.1 The aim of EIA is to protect the environment by ensuring that a determining authority (in this case, MCC) when deciding whether to grant planning permission for a project, does so in the full knowledge of the likely significant environmental effects of the project and takes them into account in the decision-making process.

3.2 As such, EIA is a tool to assess and report likely significant environmental effects.

3.3 The EIA process generally comprises a series of steps, which are summarised in **Extract 7**. It should be noted that the first step (Screening) is not mandatory, and the second stage (Scoping) is voluntary. For this project, the Scoping and Environmental Statement stages of the EIA process were completed.

3.4 The EIA Regulations specify that EIA must "*identify, describe and assess the direct and indirect significant effects"* of the Proposed Development on a number of 'factors'. These factors, generally broken down into specific sensitive receptors or groups (e.g. the users of a residential property or a building with heritage importance), have been considered/assessed within a number of technical topics and appraised at each stage of the EIA process.



Extract 7: Steps in EIA process

EIA Screening

3.5 As indicated in **Extract 7**, the purpose of the EIA Screening process is to establish if the Proposed Development for which consent is being sought is considered 'EIA Development', principally due to the presence of likely significant effects.

3.6 EIA Screening was not undertaken for the Proposed Development as it was considered that an EIA would be required at the outset of the project. For a number of topics, likely significant effects were unable to be ruled out, and therefore, the team considered the Proposed Development was EIA development.

EIA Scoping

3.7 The EIA Scoping process, informed by a series of baseline studies, undertook a preliminary assessment in order to identify technical topics and/or specific effects which were considered 'not significant'. This process was used to 'scope' the ES, thereby ensuring only those topics and/or effects that where likely to be significant would be subject to further assessment and reported as part of the ES.

3.8 The EIA Scoping process, culminating in an EIA Scoping Report[12] , was submitted to MCC on 30th September 2025. An EIA Scoping Opinion[13], informed by consultee responses, was received on 18th November 2025.

3.9 Within the EIA Scoping Report, it was proposed to scope out the following technical topics because no likely significant effects were anticipated:

- Archaeology;
- Transport;
- Air Quality;
- Noise and Vibration;
- Water Environment;
- Ground Conditions and Contamination;
- Biodiversity;
- Lighting;
- Major Accidents and/or Disasters; and
- Waste.

3.10 The EIA Scoping Opinion from MCC (and supporting consutlation responses) largely confirmed the scoping approach set out within the EIA Scoping Report. The exception to this was in relation to construction stage air quality and noise effects, which MCC were of the view should be assessed in the ES. Therefore,

[12] The EIA Scoping Report has been submitted with the ES, as **Volume 2, Appendix 2.1**.

[13] The EIA Scoping Opinion has been submitted within the ES, as **Volume 2, Appendix 2.2**.

construction-stage air quality and noise effects were included and assessed within the ES.

3.11 The ES has reported the assessment of '*likely significant effects*' for the following technical topics[14]:

- Socio-Economics and Human Health;
- Built Heritage;
- Townscape and Visual;
- Wind Microclimate;
- Daylight, Sunlight and Overshadowing;
- Solar Glare;
- Climate Change;
- Air Quality; and
- Noise and Vibration

3.12 The precise approach to the assessment of likely significant effects varies somewhat between the various technical topics, reflecting relevant industry and technical guidance/regulations. The adopted methodology for each technical topic was confirmed through the EIA Scoping process. The methodologies adopted are clearly outlined for each technical topic within **Volume 1** of the ES.

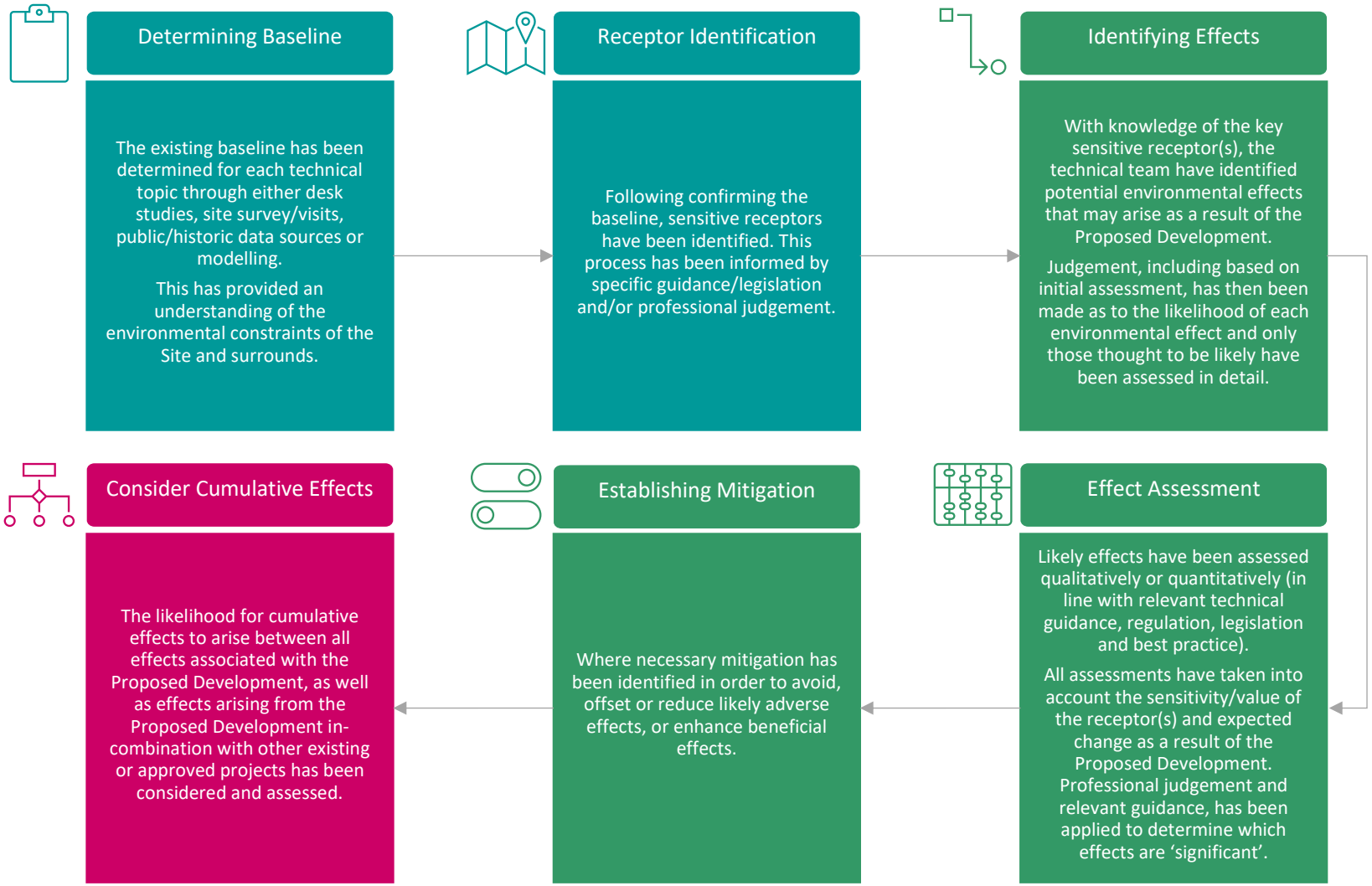
3.13 Nonetheless an overarching approach, required by the EIA Regulations that covers all technical topics is set out in **Extract 8**. The steps within **Extract 8** are colour coded, with the subsequent sections of this NTS following a similar colour coding, allowing readers to understand how each step within the assessment approach (**Extract 6**) has been completed as part of the ES.

Environmental Statement

3.14 As set out within **Section 1,** the purpose of EIA and the ES is to assess and report the 'likely significant effects' of the Proposed Development on the environment. On this basis the summary of the technical assessments presented within this NTS (**Section 5**) concludes by identifying whether an effect was considered 'significant' or 'not significant'.

3.15 Furthermore, where the determination of 'significant' or 'not significant' is linked to the implementation of specific mitigation, this proposed mitigation has been noted as part of the summary within **Section 5**.

[14] In some instances, specific effects within topics were scoped out following the EIA Scoping process as they were identified to not be significant following further design information or assessment for example. Where this is the case, it is clearly documented in **Volume 1, Technical Chapters 6 – 14**.



Extract 8: Overview of the EIA process

4. Description of the Baseline

4.1 As set out within **Extract 8**; in order to determine the environmental effects of the Proposed Development, it was necessary to establish the existing characteristics of the Site and surrounding area (i.e., the existing baseline conditions).

4.2 As such, a summary of relevant baseline information for the various technical topics scoped into the assessment are provided below.

Context

- The Site is located within the administrative area of Manchester City Council (MCC) and currently comprises Weston Halls (an existing student accommodation) and Pendulum Hotel (an existing hotel and conference centre).
- The Site is bound by Charles Street to the north; a hotel and a ground-level parking lot to the west; Drover Lane, and Faraday Tower and George Begg Building (both buildings associated with The University of Manchester to the south; and Sackville Street to the east.
- The wider surroundings of the Site comprise:
  - Beyond Charles Street lies the Manchester Oxford Road-Manchester Piccadilly railway line, residential apartments and the wider City Centre to the north;
  - Beyond the hotel and ground-level parking lie Princess Street (A34), further PBSA premise, commercial buildings, and the River Medlock to the west;
  - Educational facilities associated with The University of Manchester, including the George Begg Building and John Garside Building are located to the south, with the A57 motorway (Mancunian Way Ring Road) located approximately 160m south; and
  - Further educational facilities associated with The University of Manchester such as Pariser Building, The Masdar Building and Renold Building, across Sackville Street are located to the east.

Socio-economics and Human Health

- Economic activity rates[15] amongst the resident working-age population (aged 16 to 64 years) of Manchester[16] and Greater Manchester[17] are lower than the activity rates in England as a whole.

[15] According to the ONS's Annual Population Survey (APS), from July 2024 – June 2025.

[16] The local impact area.

[17] The wider impact area.

- The employment rates in the Manchester and Greater Manchester were also recorded to be lower than the rate in England as a whole.

- Manchester accommodates a total of circa 457,370 workforce jobs[18]. The wider Greater Manchester region supports a total of circa 1.5 million jobs.

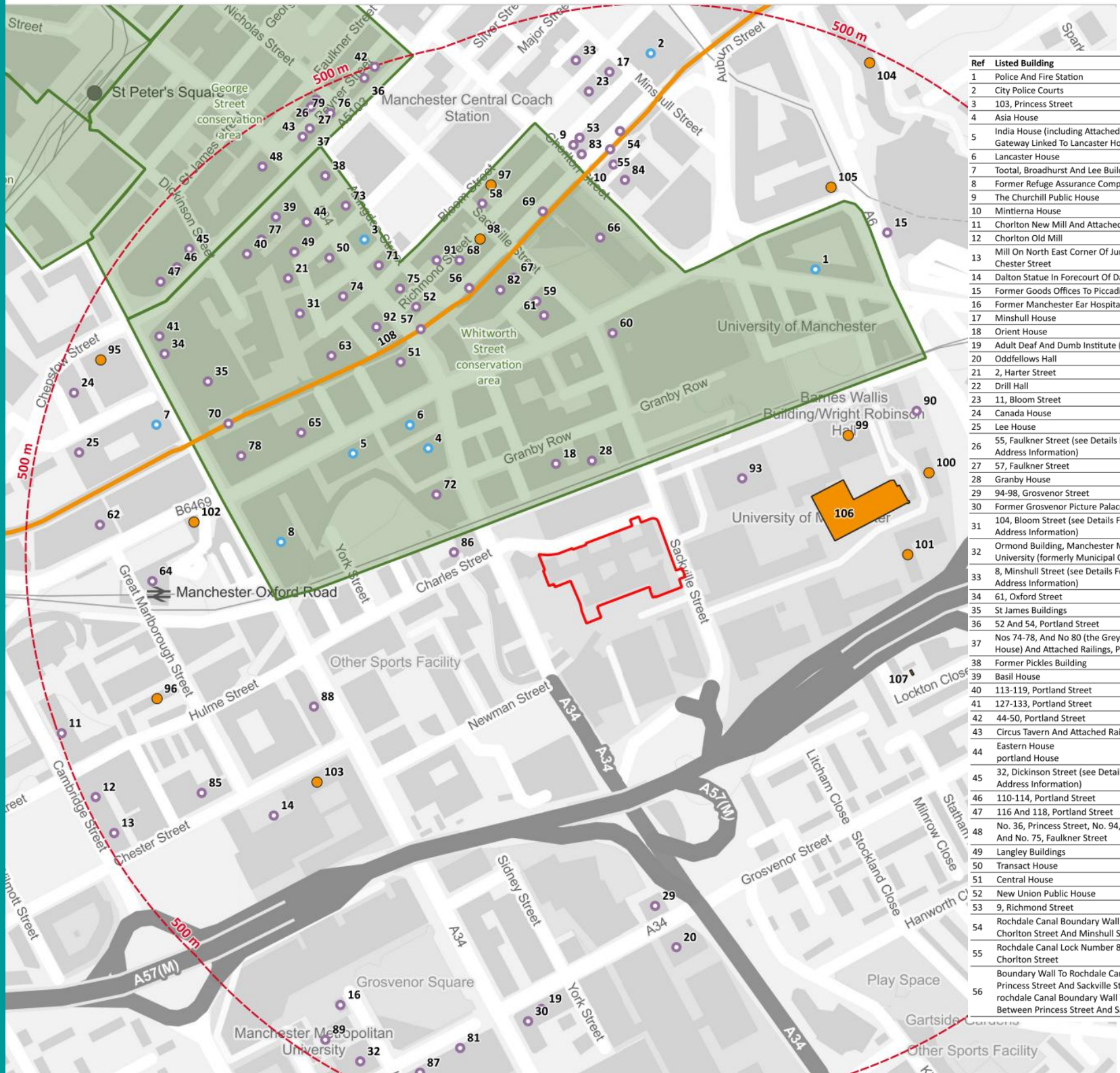
- A report presented to MCC in 2023[19] identified the need for an additional 5,440 to 11,320 student accommodation bedspaces up to 2030 and concluded that demand for PBSA city-wide equated to need for 750 new bed spaces annum up to 2030. This affirms the clear need for additional PBSA in Manchester. The Site is identified by the report ('IQ Masterplan Charles Street') as one of 20 sites that could contribute towards meeting PBSA need in Manchester during this period.

Built Heritage

- There are no designated or non-designated heritage assets[20] within the Site, however it lies close to a number of listed buildings, conservation areas and non-designated heritage assets, as shown in **Extract 9** below.

- The Site is located to the south of the Whitworth Street Conservation Area, separated from the southern boundary of the designated area by the grade II listed Manchester South Junction and Altrincham Railway Viaduct, an existing car park and Charles Street.

[18] Identified through the latest (2024) ONS Business Register and Employment Survey (BRES).
[19] Manchester City Council (2023) Purpose Built Student Accommodation: Supply and Demand Update.
[20] Designated heritage assets comprise listed buildings, scheduled monuments, conservation areas, registered parks and gardens, registered battlefields and battle sites, protected wreck sites, and world heritage sites. Non-designated heritage assets (NDHAs) can comprise a similar range of sites which have been identified by the local planning authority as having 'a degree' of heritage significance but not enough to merit designation.



Ref	Listed Building	Grade
1	Police And Fire Station	II*
2	City Police Courts	II*
3	103, Princess Street	II*
4	Asia House	II*
5	India House (including Attached Wrought Iron Gateway Linked To Lancaster House)	II*
6	Lancaster House	II*
7	Tootal, Broadhurst And Lee Building	II*
8	Former Refuge Assurance Company Offices	II*
9	The Churchill Public House	II
10	Mintierna House	II
11	Chorlton New Mill And Attached Chimney	II
12	Chorlton Old Mill	II
13	Mill On North East Corner Of Junction With Chester Street	II
14	Dalton Statue In Forecourt Of Dalton College	II
15	Former Goods Offices To Piccadilly Station	II
16	Former Manchester Ear Hospital	II
17	Minshull House	II
18	Orient House	II
19	Adult Deaf And Dumb Institute (former)	II
20	Oddfellows Hall	II
21	2, Harter Street	II
22	Drill Hall	II
23	11, Bloom Street	II
24	Canada House	II
25	Lee House	II
26	55, Faulkner Street (see Details For Further Address Information)	II
27	57, Faulkner Street	II
28	Granby House	II
29	94-98, Grosvenor Street	II
30	Former Grosvenor Picture Palace	II
31	104, Bloom Street (see Details For Further Address Information)	II
32	Ormond Building, Manchester Metropolitan University (formerly Municipal Offices)	II
33	8, Minshull Street (see Details For Further Address Information)	II
34	61, Oxford Street	II
35	St James Buildings	II
36	52 And 54, Portland Street	II
37	Nos 74-78, And No 80 (the Grey Horse Public House) And Attached Railings, Portland Street	II
38	Former Pickles Building	II
39	Basil House	II
40	113-119, Portland Street	II
41	127-133, Portland Street	II
42	44-50, Portland Street	II
43	Circus Tavern And Attached Railings	II
44	Eastern House portland House	II
45	32, Dickinson Street (see Details For Further Address Information)	II
46	110-114, Portland Street	II
47	116 And 118, Portland Street	II
48	No. 36, Princess Street, No. 94, Portland Street, And No. 75, Faulkner Street	II
49	Langley Buildings	II
50	Transact House	II
51	Central House	II
52	New Union Public House	II
53	9, Richmond Street	II
54	Rochdale Canal Boundary Wall To Canal Between Chorlton Street And Minshull Street	II
55	Rochdale Canal Lock Number 86, To East Of Chorlton Street	II
56	Boundary Wall To Rochdale Canal Between Princess Street And Sackville Street rochdale Canal Boundary Wall To Canal Street Between Princess Street And Sackville Street	II
57	Rochdale Canal Lock Number 87, To East Of Princess Street, With Cast Iron Footbridge Beside Street	II
58	27, Sackville Street	II
59	46, Sackville Street	II
60	Institute Of Science And Technology (university Of Manchester)	II
61	Regency House With Barclays Bank	II
62	The Ritz Dance Hall	II
63	Former Electricity Power Station	II
64	Manchester Oxford Road Station (including Platform Structures)	II
65	Bridgewater House	II
66	The Shena Simon Sixth-form College	II
67	42 And 44, Sackville Street	II
68	51 And 53, Richmond Street	II
69	Rochdale Canal Boundary Wall To Canal Between Sackville Street And Chorlton Street	II
70	Rochdale Canal Lock Number 88, To East Of Oxford Street	II
71	Brazil House	II
72	Manchester House	II
73	101, Princess Street	II
74	Rhodesia House	II
75	109, Princess Street	II
76	70 And 72, Portland Street (see Details For Further Address Information)	II
77	109 And 111, Portland Street	II
78	The Palace Theatre	II
79	59 And 61, Faulkner Street	II
80	Train Shed And Undercroft At Manchester Piccadilly Station	II
81	Former Town Hall Facade To Mabel Tylecote Building, Manchester Metropolitan University	II
82	3, Brazil Street	II
83	39, Chorlton Street	II
84	Minshull House	II
85	Chatham Mill	II
86	Lass O Gowrie Public House	II
87	Grosvenor Building, Manchester Metropolitan University Faculty Of Art And Design	II
88	Dancehouse Theatre Including Numbers 6-14	II
89	Roman Catholic Church Of St Augustine	II
90	Sculptural Wall	II
91	Former Warehouse	II
92	Lionesse House	II
93	Renold Building, Umist Campus	II
94	Manchester South Junction And Altrincham Railway Viaduct	II

Ref	GMAAS HER Entry
95	Picture House Cinema (former)
96	Textile finishing works (former)
97	The Goose public house (formerly 'Paddys Goose'; formerly Kingston public house)
98	39â41 Richmond Street
99	Wright Robinson Hall and Barnes Wallis Building
100	Chemical Engineering Pilot Plant (Morton Laboratory)
101	Mathematics and Social Sciences Building
102	The Cornerhouse
103	John Dalton College of Technology (John Dalton Building)
104	Gateway House
105	Monroes public house (36 London Road)
106	Jackson Street Mills (UMIST Campus) (now University of Manchester)
107	Guardian Underground Telephone Exchange: air intake/ emergency exit building
108	Rochdale Canal

Extract 9: Heritage Asset Plan (500m study area)

- A group of listed buildings are located nearby, including:
  - Asia House, India House, Lancaster House and the Former Refuge Assurance Company Offices (all grade II* listed) and the Manchester House and Lass O Gowrie public house (both grade II listed) to the north-west of the Site;
  - Orient House, Granby House and Manchester South Junction and Altrincham Railway Viaduct (all grade II listed) are located to the north;
  - The Institute of Science and Technology (grade II listed building) is located to the north-east; and
  - The Renold Building (recently Grade II listed) and non-designated heritage assets within the former University of Manchester Institute of Science and Technology (UMIST) campus (including Jackson Street Mills, Wright Robinson Hall and Barnes Wallis Building, the Morton Laboratory, and the Mathematics and Social Sciences Building) are located to the east of the Site.

Townscape and Visual

- The Site lies within an urban townscape setting and university faculty buildings and student accommodation uses are typical of the wider character area.
- The Site is located within the Local Townscape Character Area[21] (LTCA) 1 – University Buildings, Living and Ancillary Uses[22]. This includes the Site and the streets which extend east and west across Oxford Road and Princess Street and north off the Mancunian Way towards the City Centre and covers the various university buildings including lecture halls and the library, and student accommodation.
- Key positive contributors[23] to the visual amenity of the area surrounding the Site include: the listed buildings located to the north of the Site, and Vimto Park and Sackville Gardens to the north and north-east.
- Due to the existing built-up area and the relatively low-rise built form within the Site, views of the Site are limited to the immediate vicinity, with principal views of the Site currently experienced from the roads that directly border the Site.

[21] Townscape Character Areas (TCAs) are unique areas which are the discrete geographical areas of a particular townscape type. A local TCA includes a local-level character of the landscape.

[22] Identified within an urban characterisation study prepared by MCC in 2010 to identify the varied characters across the city.

[23] These are features or assets that contribute positively to the visual amenity / a view experienced by a receptor.

- Following Zone of Theoretical Visibility (ZTV) mapping[24], the key visual receptors were identified to be the open space users in Vimto Park and the users of the pedestrian route and roads immediately adjacent to the Site (this includes Sackville Street, Charles Street and the pedestrian link and open space along the southern Site boundary).

Wind Microclimate

- Wind conditions throughout the existing Site and surrounding areas satisfy the criteria for safe wind conditions and are also expected to be generally suitable for existing pedestrian activities.

- Baseline conditions range between suitable sitting, standing and walking. Baseline conditions are windier to the south-east of the Site on Sackville Street and calmer to the north and west of the Site.

- There are no instances of strong winds[25].

Daylight, Sunlight and Overshadowing

- The buildings surrounding the Site include a mix of uses (including education and residential occupancy). At present, there is a reasonable level of baseline daylight and sunlight[26] compliance considering the city centre context of the Site.

Solar Glare

- The Site includes buildings with predominantly non reflective facades, with small, punched windows; therefore, there is currently a low potential for solar glare.

Climate Change

- The Site is currently occupied by an existing student accommodation and hotel. Whilst the existing Site may result in the release of greenhouse gas (GHG) emissions, no data are currently available on energy demand and emissions. Therefore, the scale of such GHG emissions is considered likely to be limited (an approach that ensures a reasonable 'worst-case' scenario regarding the GHG effects of the Proposed Development).

- The table below presents the most recent (2023) data on baseline GHG emissions for the MCC administrative area and North West of England as sourced from Government's UK Local Authority & Regional CO_2 Emissions Statistics.

Geographical Area	2023 GHG Emissions (tonnes of CO2 equivalents (tCO_2e)[27])
The Site	0
MCC	2,188,800
North West	38,977,000

[24] A computer-generated tool to identify the likely (or theoretical) extent of visibility of a development.
[25] Exceeding 15m/s for more than 0.025% of the year.
[26] Daylight is directly received from an unobstructed overcast sky whilst sunlight is light received directly from the sun.
[27] tCO_2e is a common unit of measure for GHG emissions and footprint.

5. Effects of the Proposed Development

5.1 A summary of the assessments in the ES and the identified 'likely significant effects' reported within **Volume 1: Primary Report and Supporting Graphics**, taking each topic in turn, is provided below.

5.2 The summary is reflective of the scope of assessments, as discussed within **Section 3** and therefore technical topics or effects 'scoped out' have not been discussed. Assessments within **Volume 1** have considered effects arising from the demolition, construction and operational stages of the Proposed Development, however, where the text only considers one of these stages, this is due to that fact that effects associated with the other stage where also 'scoped out'.

5.3 As with the requirements of the Non-Technical Summary, to be written in plain English, the summaries of assessment presented below are not overly technical and parties interested in understanding the specifics of an assessment process or output are directed to **Volume 1**.

5.4 A summary of the technical topics is provided in the following table, where:

- No significant effects were identified – denoted by ×;
- Significant adverse effects were identified – denoted by ✓;
- Significant beneficial effects were identified – denoted by ✓; and
- Significant neutral[28] effects were identified – denoted by ✓; and
- A mixture of significant adverse, beneficial and neutral effects was identified – denoted by ✓.

Technical topic	Significant effects?
Socio-economics and Human Health	✓
Built Heritage	×
Townscape and Visual	✓
Wind Microclimate	×
Daylight, Sunlight and Overshadowing	×
Solar Glare	×
Climate Change	×
Air Quality	TBC
Noise and Vibration	TBC

[28] Within the townscape and visual assessment, 'neutral' is a term used to describe an effect that is both adverse and beneficial.

Socio-Economics and Human Health

What effects were considered?

5.5 The following effects were considered in **Chapter 6: Socio-Economics and Human Health**:

- Employment generated during the construction stage; and
- The provision of PBSA.

What receptors were considered?

- Labour force in Manchester and Greater Manchester; and
- Students requiring accommodation.

What did the assessments identify?

5.6 The number of jobs[29] anticipated to be generated during the construction stage was calculated to be a total of 200 net additional full time equivalent jobs (FTE) [30, 31] in Greater Manchester, inclusive of 80 jobs which would be taken in Manchester. The additional jobs generated by the Proposed Development will therefore make an important contribution towards sustaining employment in the sector going forwards. Overall, although beneficial, this effect was not considered to be significant given the number of jobs created (due to the scale of the Proposed Development) and only being temporary to the construction period (7-years).

5.7 The delivery of the 2,511 new PBSA units (equating to a net on-Site uplift of 1,983 bedspaces and residents in relation to the existing Weston Halls PBSA) as part of the Proposed Development would represent a notable increase on provision of PBSA in Manchester. Specifically, the scale of net additional provision to be delivered by the Proposed Development would equate to between 18% and 36% of the overall need to 2030, as most-recently estimated by MCC. In addition, the Proposed Development will provide high-quality, healthy homes for students that result in notable enhancements to the PBSA supply, in a location that benefits from easy access to both University of Manchester (UoM) and Manchester Metropolitan University (MMU) campuses and other services, amenities and sustainable transport options. Overall, this was considered to be a significant beneficial effect on the provision of PBSA for students, given the identified deficit of provision of PBSA city-wide in Manchester and the improvement in terms of the standard of PBSA provision for students in Manchester.

[29] Calculations informed by estimated construction costs (provided by the Applicant) and the average turnover per employee per annum in the construction sector in the North West.

[30] This measures the number of full-time hours worked by all employees in a business.

[31] Taking into account leakage of jobs being taken outside of Manchester and Greater Manchester; the displacement (i.e. a proportion of jobs being taken by those who, in the absence of the Proposed Development, could otherwise be working on alternative construction projects locally); indirect employment and financial benefits for the construction sector, along with appropriate multiplies drawn from HCA guidance.

Built Heritage

What effects were considered?

5.8 The following effects were considered in **Chapter 7: Built Heritage** during the construction and operational stages:

- Impact on the heritage significance[32] (character and appearance) of conservation areas;
- Change on the heritage significance of listed buildings, as a result of change within their setting[33]; and
- Impact on the heritage significance of non-designated heritage assets, as a result of change within their setting.

What receptors were considered?

- Whitworth Street Conservation Area;
- Listed buildings, specifically:
  - Asia House, grade II* listed;
  - India House, grade II* listed;
  - Lancaster House, grade II* listed;
  - Manchester House, grade II listed;
  - Orient House, grade II listed;
  - Granby House, grade II listed;
  - Former Refuge Assurance Company Offices, grade II* listed;
  - Institute of Science and Technology, grade II listed;
  - Lass O' Gowrie Public House, grade II listed;
  - Manchester South Junction and Altrincham Railway Viaduct, grade II listed; and
  - Renold Building, UMIST Campus, grade II listed; and
- Non-designated heritage assets, specifically
  - Jackson Street Mills (UMIST Campus);
  - Wright Robinson Hall and Barnes Wallis Building;
  - Chemical Engineering Pilot Plan (Morton Laboratory); and
  - Mathematics and Social Sciences Building.

What did the assessments identify?

5.9 The construction of the Proposed Development will change the character of the setting of all assets to varying degrees through the presence of machinery, vehicle movements, earthworks and

[32] The heritage significance refers to the value or meaning of an asset due to its heritage qualities.

[33] The surroundings in which the historic asset is understood, experienced and appreciated.

material movements as well as construction works. Whilst the standard measures set out within the CEMP (such as hoarding for partial screening) will partially mitigate these effects, such changes can detract from the heritage significance of these assets. This will result in adverse effects on Whitworth Street Conservation Area, Manchester House, Manchester South Junction and Altrincham Railway Viaduct, the Lass O' Gowrie Public House, the Renold Building and the Institute of Science and Technology, albeit the effects were not considered to be significant. All other identified heritage assets will experience negligible effects during construction (largely due to intervening built form or distance).

5.10 During operation, the Proposed Development will be visible from the Whitworth Street Conservation Area, given the height of buildings proposed and the arrangement and alignment of streets in this part of the city, principally since the Proposed Development will impact views from Princess Street (noted to be an important route within the conservation area). Although effects are adverse, the proximity of the Site to the southern boundary of the Whitworth Street Conservation Area has influenced the approach to building design, materials and the proposed colour palette for the Proposed Development, ensuring that when viewed as a backdrop from within the conservation area, the buildings adopt an appearance that responds well to the surrounding context. The Whitworth Street Conservation Area is also not experienced in isolation, but instead, is connected to the wider city, with the character of its setting is already influenced by taller buildings and modern development. Therefore, the effect was considered to be not significant.

5.11 For all other identified heritage assets, the Proposed Development will have negligible effects, given that the assets are either already viewed with modern development of increased height, the incorporation of a colour palette and design that aligns with those found in listed buildings, or there is intervening built form, thereby sustaining the significance of the assets and avoiding significant effects.

Townscape and Visual

What effects were considered?

5.12 The following effects were considered in **Chapter 8: Townscape and Visual** during the operational stage:

- Change in character of the townscape; and
- Change to character of the view and visual amenity.

What receptors were considered?

- TCA 1 – University Buildings, Living and Ancillary Uses; and
- Visual groups[34] [35] including,

[34] The ZTV mapping looked at a total of 12 viewpoint locations within the visual study area (as shown on **Extract 10**).

[35] It should be noted that the Chapter focuses on only those visual receptors that were considered likely to be significant. The effects of the Proposed

– Pedestrian and road users immediately adjacent to the Site (Sackville Street, Charles Street and the pedestrian link along the southern Site boundary) – Viewpoints 6a, b, c, and d on **Extract 10**; and

– Open space users in Vimto Park – Viewpoint 2 on **Extract 10**.

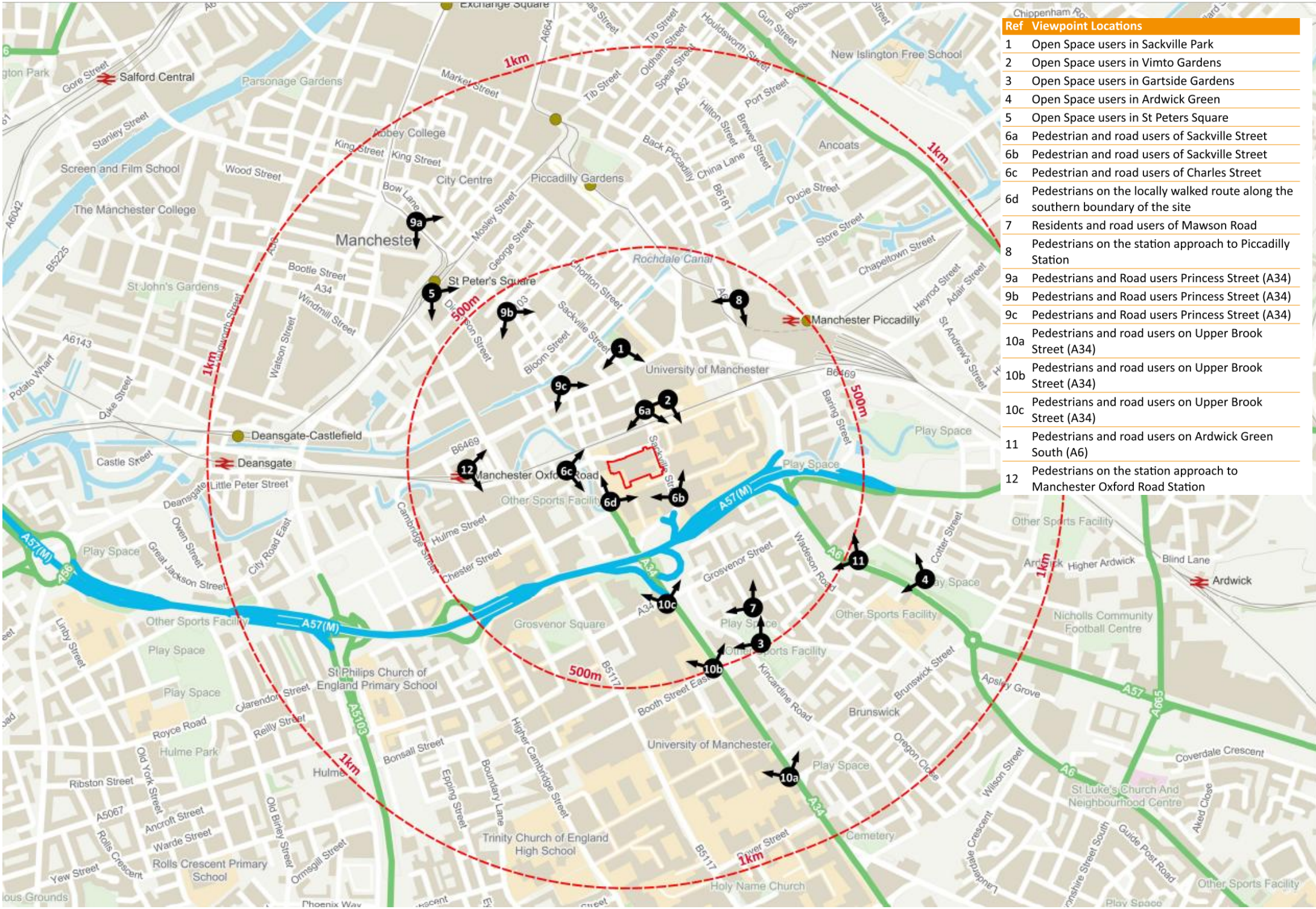
What did the assessment identify?

5.13 The Proposed Development would directly influence the characteristics of LTCA1 – University Buildings, Living and Ancillary Uses. This is due to the introduction of a large PBSA development and an improved street scene along the immediate routes bordering the Site, on a site which currently contains PBSA and hotel buildings of limited architecture and townscape merit. The overall change to the LTCA once the Proposed Development is operational is seen as a beneficial and significant effect as the introduction of the buildings of further height and massing with high quality design within landscaped areas would overall create a greater sense of vibrancy in the local area, thereby representing an improvement to the baseline conditions. These elements have also been appropriately designed to the Site's location on the edge of the City Centre, where taller development is appropriate.

5.14 Once the Proposed Development is operational, both positive and negative changes to the views will be experienced by a number of visual receptors near the Site, particularly with respect to the area which would experience the greatest level of change in views.

5.15 Regarding views of open space users at Vimto Park, the Proposed Development would be visible from the majority of Vimto Park. Once complete, the Proposed Development would result in an increased sense of enclosure and a reduction in the amount of visible open sky, which is likely to be perceived as an adverse change; however, positive changes such as the removal of a low-quality building and the introduction of a contemporary, well-designed architectural form would also take occur. The variation in heights, massing, and materiality would help to break up the overall bulk of the massing, providing visual interest and further articulation on the skyline. The inclusion of architectural details (such as the decorative panel patterns and the scalloped parapets/roof crowns) would also contribute positively to the view. Given the balance of adverse and beneficial effects to the views, effects are considered to be significant and neutral.

Development on other visual receptors have been considered separately within a Townscape and Visual Impact Assessment (**Volume 2, Appendix 8.1**) which concluded that there would be no likely significant effects on the other receptors.



Ref	Viewpoint Locations
1	Open Space users in Sackville Park
2	Open Space users in Vimto Gardens
3	Open Space users in Gartside Gardens
4	Open Space users in Ardwick Green
5	Open Space users in St Peters Square
6a	Pedestrian and road users of Sackville Street
6b	Pedestrian and road users of Sackville Street
6c	Pedestrian and road users of Charles Street
6d	Pedestrians on the locally walked route along the southern boundary of the site
7	Residents and road users of Mawson Road
8	Pedestrians on the station approach to Piccadilly Station
9a	Pedestrians and Road users Princess Street (A34)
9b	Pedestrians and Road users Princess Street (A34)
9c	Pedestrians and Road users Princess Street (A34)
10a	Pedestrians and road users on Upper Brook Street (A34)
10b	Pedestrians and road users on Upper Brook Street (A34)
10c	Pedestrians and road users on Upper Brook Street (A34)
11	Pedestrians and road users on Ardwick Green South (A6)
12	Pedestrians on the station approach to Manchester Oxford Road Station

Extract 10: Plan showing the viewpoint locations considered for the visual assessment

5.16 Even with the increased scale and massing of the Proposed Development which would result in an increased sense of enclosure and a reduction of visible open sky in views from the surrounding streets, beneficial and significant effects are likely to be experienced by the users of the road network in close proximity to the Site. This is because the proposed design elements (such as the building detailing, materiality, tree and shrub planting, and high-quality landscaped and semi-private garden spaces and improved open spaces) would help soften the building's appearance and be readily appreciable at close range. In addition, the replacement of existing low-quality buildings with well-designed contemporary architecture, enhancements to the public realm, and improved interfaces between the building and surrounding streets would bring a positive change to views.

Wind

What effects were considered?

5.17 The following effects were considered in **Chapter 9: Wind Microclimate:**

- Exceedance of criteria (Lawson[36]) for pedestrian safety[37] and pedestrian comfort[38].

What receptors were considered?

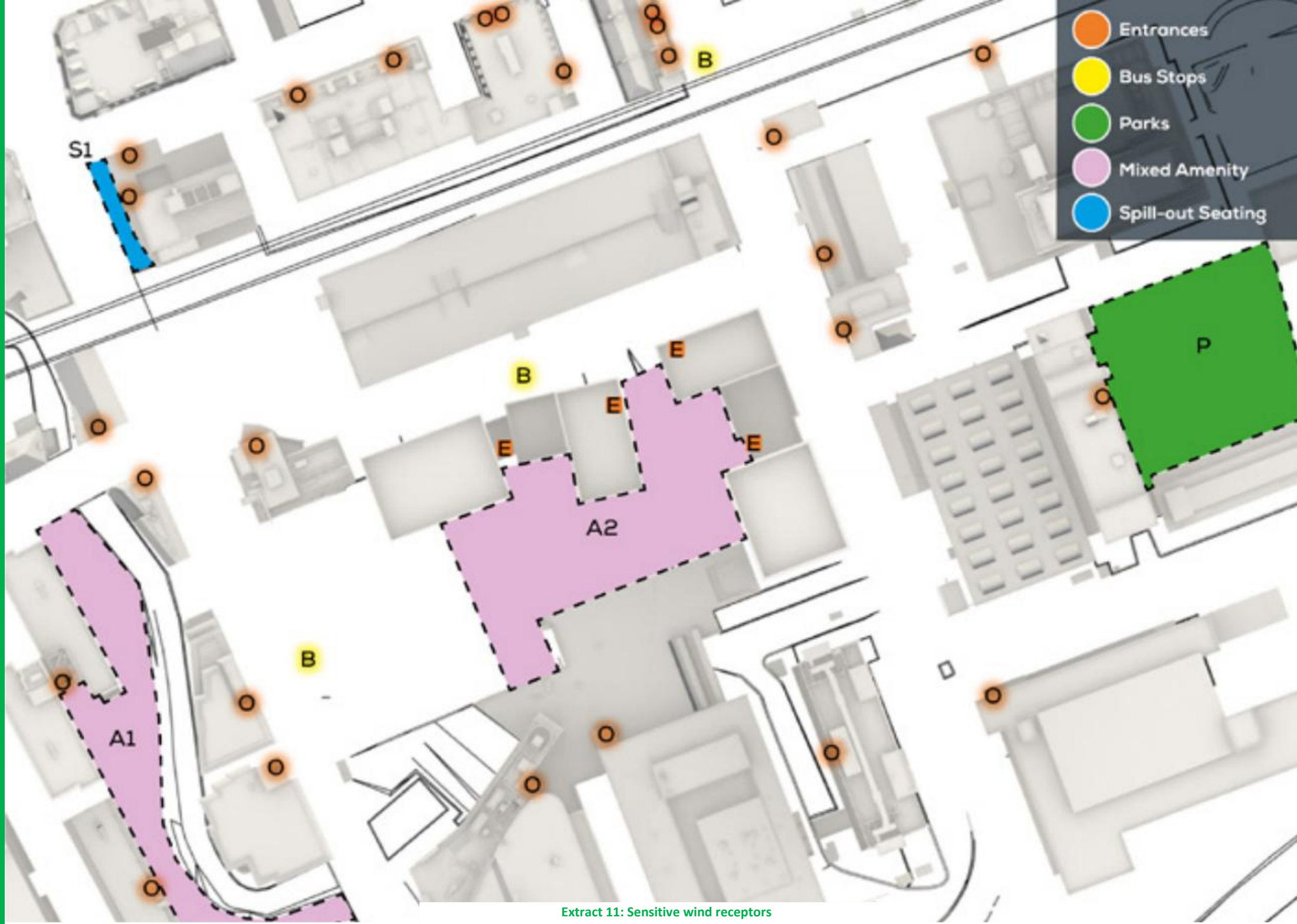
- Thoroughfares, entrances, waiting areas and recreational spaces within and around the Site (the locations are shown on **Extract 11**).

What did the assessments identify?

5.18 A Computational Fluid Dynamics (CFD) assessment[39] was undertaken to determine the strength and frequency of pedestrian level wind speeds, extending from a 400m radius from the centre of the Site. In addition, an 'Interim' scenario was also included to inform the assessment of wind effects at the "worst case" stage of construction (following the completion of Phase A).

5.19 The assessment/modelling identified that for both scenarios (i.e. at the construction stage (following Phase A completion) and at the operational stage), wind comfort and safety conditions will be met throughout the study area. Therefore, effects are considered to be negligible (and not significant) at all locations.

[36] The Lawson Pedestrian Wind Criteria is a globally accepted standard used to assess wind impacts (with respect to pedestrian safety and comfort).
[37] Criteria which determine whether or not strong winds will be generated that create unsafe conditions for pedestrians.
[38] Criteria which determine whether public spaces are suitable for sitting (occasionally or frequently), standing (including at entrances of buildings) and strolling for pedestrians.
[39] CFD is a digital modelling technique, which simulates the effect of wind for the built environment.



Extract 11: Sensitive wind receptors

Daylight, Sunlight, and Overshadowing

What effects were considered?

5.20 The following effects were considered in **Chapter 10: Daylight, Sunlight, and Overshadowing**:

- Change in daylight and sunlight amenity.

What receptors were considered?

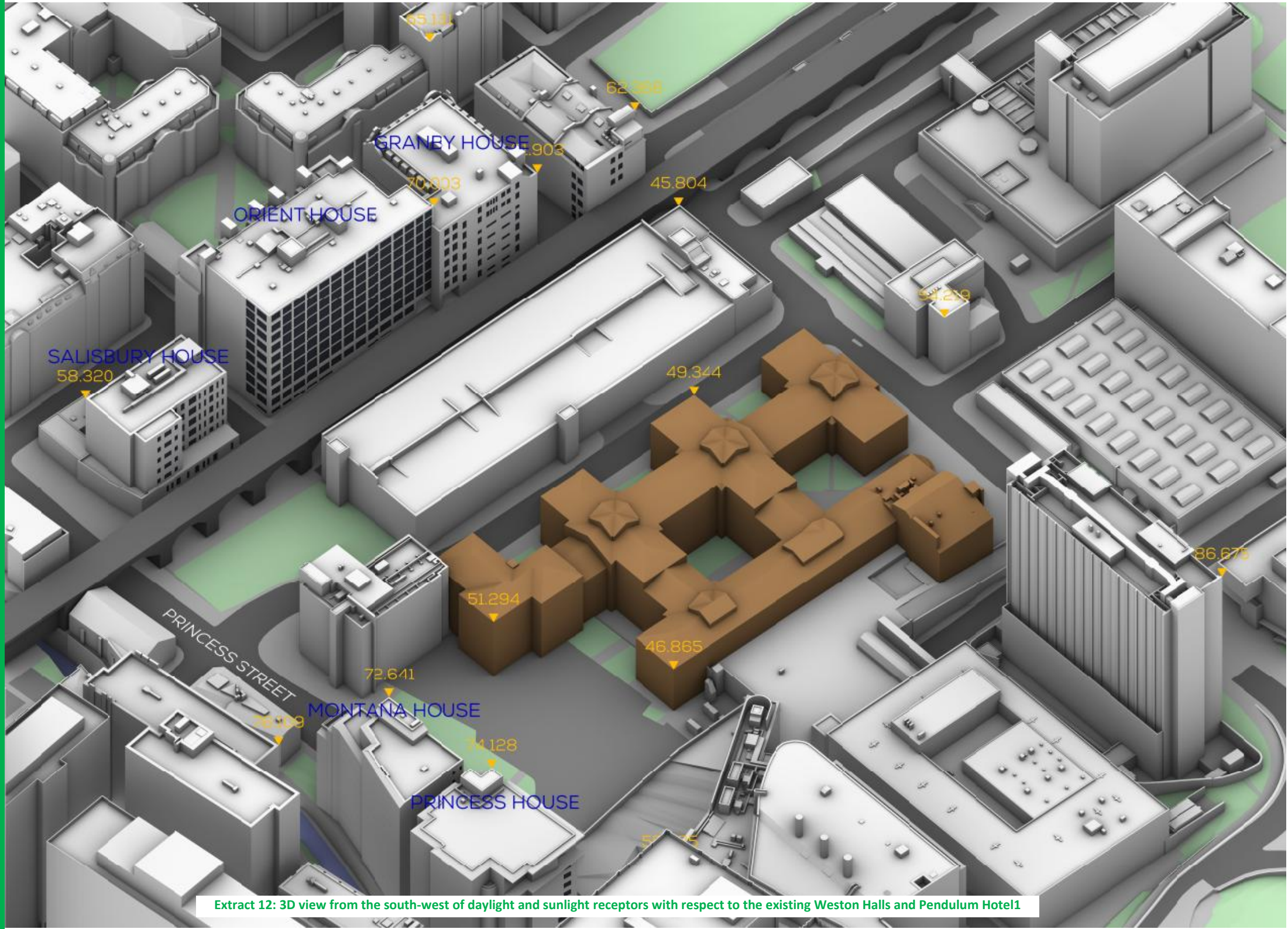
- Five existing surrounding buildings were assessed as part of the assessment (shown on **Extract 12** below), specifically:
  - Granby House;
  - Montana House;
  - Orient House;
  - Salisbury House; and
  - Princess House.

What did the assessments identify?

5.21 The new buildings on-Site have the potential to lessen the availability of daylight and sunlight received by surrounding receptors due to the increased heights of the buildings proposed. The assessment of daylight and sunlight was completed using technical analyses of a 3D computer model of the Site, the surround sensitive receptors, and the Proposed Development's massing.

5.22 The assessment noted that an adverse but not significant change in daylight is likely to be experienced by residents of Granby House, Montana House, Orient House, Salisbury House and Princess House as a result of the Proposed Development.

5.23 Similarly, loss of sunlight as a result of the Proposed Development in operation will have an adverse but not significant effect upon residents of Granby House, Orient House and Salisbury House. The remaining identified receptors (Montana House and Princess House) will have a negligible effect which is not significant.



Extract 12: 3D view from the south-west of daylight and sunlight receptors with respect to the existing Weston Halls and Pendulum Hotel1

Solar Glare

What effects were considered?

5.24 The following effects were considered in **Chapter 11: Solar Glare**:

- Solar glare effects[40].

What receptors were considered?

- Road users and rail locations identified within a 500m radius of the Site, as follows (the location of which is shown on **Extract 13**):
  - PS_01 – Princess St (Northbound) junction with Charles St;
  - PS_02 – Princess St (Southbound) junction with Whitworth St;
  - SS_01 – Sackville St (Northbound) merging of two lanes;
  - SS_02 – Sackville St (Southbound) junction with Whitworth St;
  - CS_01 – Charles St (Eastbound) junction with Princess St;
  - HS_01 – Hulme St (Eastbound) junction with Oxford Rd;
  - BS_01 – Brook St (Northbound) junction with Sackville St;
  - E_50-500 – Railway line from Oxford Rd station to Piccadilly station (Eastbound); and
  - W_50-700 – Railway line from Piccadilly station to Oxford Rd station (Westbound).

What did the assessments identify?

5.25 Solar glare can cause temporary dazzling effects leading to discomfort or risk of accidents). The assessment considered the potential occurrence of solar reflections from the Proposed Development owing to its size and large areas of glazing on its façades at these locations. The duration of solar reflections as well as their proximity to a driver's line of sight were considered.

5.26 Solar glare has been considered to have an adverse but not significant effect upon users at the following locations:

- BS_01 – Brook St (Northbound) junction with Sackville St;
- E_50-500 – Railway line from Oxford Rd station to Piccadilly station (Eastbound); and

[40] This is visual disturbance caused by sunlight reflected from the external material of a building (e.g. a reflective façade).

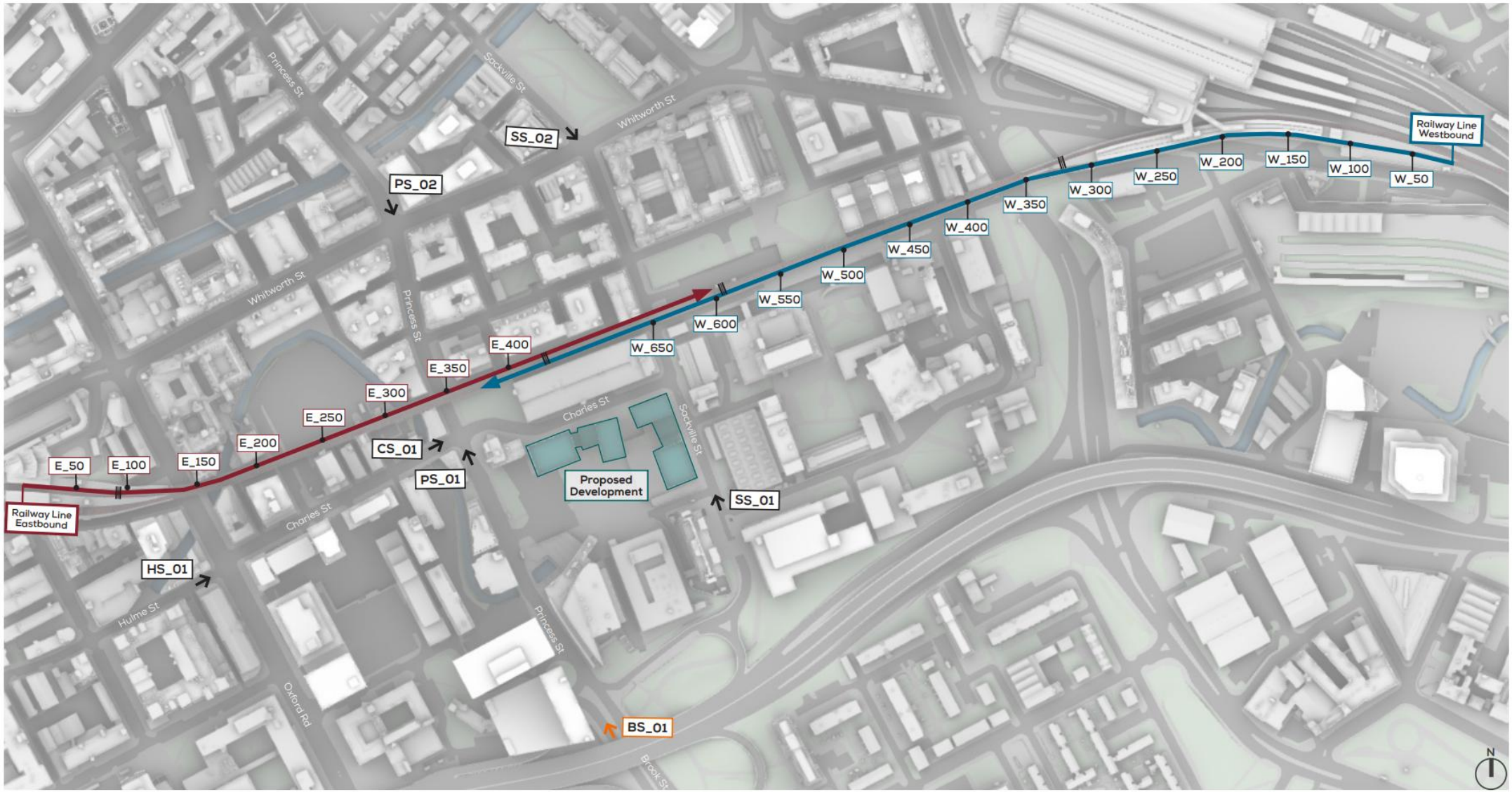
- W_50-700 – Railway line from Piccadilly station to Oxford Rd station (Westbound).

5.27 This is due to the angle of the reflection not causing significant glare.

5.28 The Proposed Development would not be visible, or reflections would be at angles greater than 30° from the driver's line of sight (which is a negligible solar glare effect) at the following locations (**Extract 13**):

- PS_01 – Princess St (Northbound) junction with Charles St;
- PS_02 – Princess St (Southbound) junction with Whitworth St;
- SS_01 – Sackville St (Northbound) merging of two lanes;
- SS_02 – Sackville St (Southbound) junction with Whitworth St;
- CS_01 – Charles St (Eastbound) junction with Princess St; and
- HS_01 – Hulme St (Eastbound) junction with Oxford Rd.

5.29 These effects are not significant.



- Train Track - Eastbound (E)
- Train Track - Westbound (W)
- Reflections visible within 30° at the sensitive location from the road
- Scheme not visible from the road, or reflections beyond 30°
- Train signals are assumed based on observations from Google Maps and Bing Maps

ROAD VIEWPOINTS	
BS	Brook St
SS	Sackville St
PS	Princess St
CS	Charles St
HS	Hulme St

Extract 13: Location of the Proposed Development, and the road and railway viewpoints

Climate Change

What effects were considered?

5.30 The following effects were considered in **Chapter 12: Climate Change:**

- GHG emissions during demolition/construction and operational stages.

What receptors were considered?

- The global climatic system.

What did the assessments identify?

5.31 Demolition and construction activities will result in GHG emissions both on- and off-site, from a range of activities including demolition of existing buildings, the manufacture of construction materials and products, the transport of materials and waste on- and off-site, the consumption of water, etc. The construction stage of the Proposed Development is estimated to result in total emissions of 64,341 tCO_2e, equating to annual demolition and construction emissions of 6,971 tCO_2e for Phase A and 7,372 tCO_2e for Phase B, with the peak annual emissions of 14,343 tCO_2e in 2031 when the two phases overlap. However, the upfront carbon[41] of the Proposed Development shows a reduction against relevant good practice benchmarks[42] for designing lower construction carbon. In addition, a demolition audit will be carried out to review opportunities for the reuse and recycling of materials from the existing buildings. Therefore, the demolition/construction will represent an appropriate contribution to the UK net zero targets. Although adverse, effects were not considered to be significant.

5.32 Similarly, the operational stage of the Proposed Development will result in GHG emissions from the generation of energy consumed by the proposed buildings. It is estimated that the Proposed Development will result in GHG emissions accumulating to 732 tCO_2e across the assessed operational stage (2031 – 2042)[43]. In addition, the estimated annual operational energy demand from the Proposed Development represents a circa 30% improvement over the operational energy target for 2025 (RIBA targets)[44]. The performance is considered to make an appropriate contribution to the UK net zero targets through the provision of good practice mitigation regarding operational carbon. Therefore, GHG emissions during operation, whilst adverse, are not considered to be significant.

5.33 An assessment of combined GHG emissions has also been provided considering total demolition, construction and operational GHG emissions from the Proposed Development. It was found that the Proposed Development's demolition, construction and operational stage mitigation is considered to

[41] Carbon emissions released during the production of products and materials.
[42] London Energy Transformation Initiative (LETI).
[43] Operational GHG emissions are assessed from 2031 up to the end of 2042 to enable comparison with the UK carbon budgets ending 2042. GHG emissions of 79 tCO_2e during the first year of operation (2031), dropping to 49 tCO_2e in 2042 are reported.
[44] The RIBA targets have been set (for 2020, 2025 and 2030) for domestic buildings and help developments to reach the 2050 net zero carbon targets in a structured manner.

comprise current and emerging good practice and contribute to the UK's net zero trajectory and therefore, as for the above, effects are adverse but not significant.

Air Quality

5.34 TBC.

Noise and Vibration

5.35 TBC.

6. Cumulative Effects

6.1 It is a requirement of the EIA Regulations for the EIA to assess the 'cumulative effects' arising from the Proposed Development.

6.2 There is no standard set methodology for the assessment of cumulative effects, but it is common (and in accordance with accepted guidance) for two types of cumulative effects to be considered, namely:

- **Effect interactions**: the interaction of environmental effects of the Proposed Development affecting the same receptor either within the Site or in the surrounding area[45], for example an adjacent residential location experiencing an increase in construction noise and change in visual amenity during construction; and

- **In-combination interactions**: the combination of environmental effects of the Proposed Development with existing or cumulative projects affecting the same receptor, for example multiple new tall buildings in-combination with the Proposed Development changing townscape character.

6.3 For both types of cumulative effects there needs to be a 'common receptor', e.g. the same receptor that is considered in either two or more topics (for effect interactions) or by the Proposed Development and another existing or approved project (for in-combination effects). If there is an absence of a common receptor it is considered that a cumulative effect does not occur.

Effect Interactions

6.4 The evaluation of effect interactions first looks to combine all of the effects assessed within all technical chapters and categorise them into 'receptor groups' that are specified within the EIA Regulations[46]. The receptors considered within the technical assessments will fall within one of the receptor groups. By sorting all effects into these factors / groups, the potential for an effect interaction to occur can be identified.

6.5 The assessment of effect interactions identified that effect interactions would be experienced by the 'population and human health' factors / receptor groups for the construction and operational stages.

6.6 At the construction stage, the potential effect interactions are in relation to the adverse effect of reduced daylight and sunlight amenity and increased solar glare (albeit this is most likely when the full massing is implemented towards the end of the construction period) and the beneficial effect of employment generated (in Manchester and Greater Manchester). Overall, there is not likely to be an effect interaction during the

[45] I.e the technical study areas as defined in **Technical Chapters 6 – 14.**

[46] i.e. population, human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape.

construction stage due to the different temporal and spatial scales the effects will be experienced.

6.7 During the operational stage of the Proposed Development, there is also a possible effect interaction in relation to the adverse effects of reduced daylight and sunlight amenity and increased solar glare; and the beneficial effects from the change in visual amenity and provision of PBSA. The provision of PBSA is not likely to interact with other effects as it benefits the students requiring accommodation, which are not common receptors for the other residual effects. The common receptors assessed in the daylight, sunlight, solar glare and visual assessments were appraised, and no significant interactions are anticipated. The most adverse individual effect is likely to drive the perceived effect interaction.

In-Combination Effects

6.8 The first step for this assessment is to identify other existing or approved projects that should be considered in-combination with the Proposed Development. A location plan of the identified Cumulative Projects can be found at **Extract 14**.

6.9 The evaluation of in-combination effects was undertaken for each environmental topic. The evaluation was informed by technical reports submitted in support of the other projects, or where this was not available, professional judgement was applied.

6.10 The evaluation considered the following:

(a) Do the projects share a common receptor, across either the construction and / or operational stages?

(b) Does the combined effect of each project together give rise to an effect that is greater than that reported for the Proposed Development in isolation?

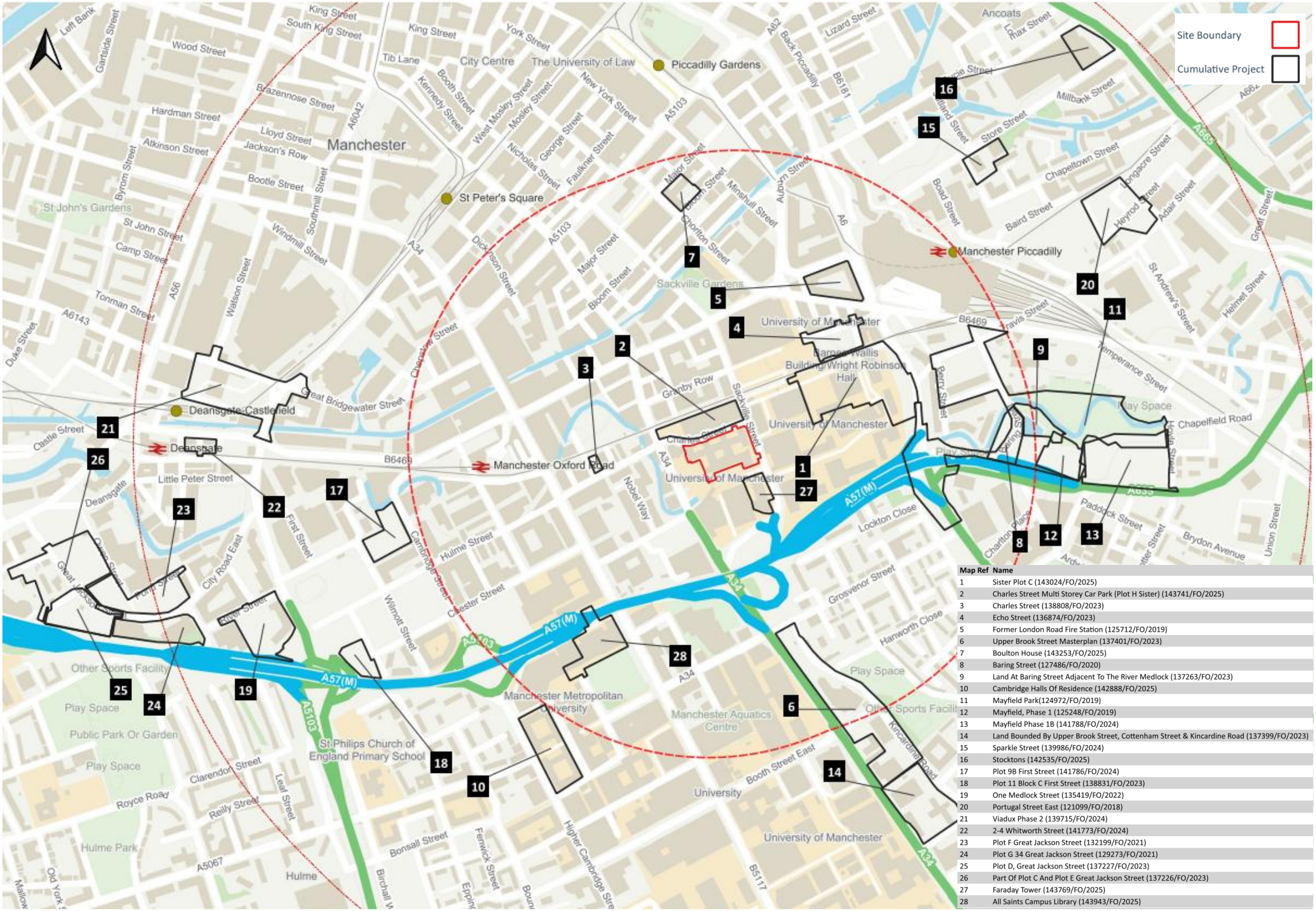
6.11 The evaluation of in-combination effects is normally undertaken qualitatively but for some topics quantitative modelling accounted for the other projects identified (e.g. for wind microclimate).

6.12 A summary of the evaluation of in-combination effects is provided within the table below.

6.13 Where a greater in-combination effect is identified and is considered to be Significant, this has been highlighted in grey**.**

Technical Topic	Summary of In-Combination Effects with Relevant Projects
Socio-economics and Human Health	All Cumulative Projects will generate employment in the construction sector. This will exceed the level of effect considered at the project level and result in a significant cumulative effect. Cumulative Projects 3, 4, 6, 10, 14, 17 and 18 will provide PBSA. This will result in a cumulative effect quantitatively greater than at the project level (albeit the level of effect remains the same), which is significant.

Technical Topic	Summary of In-Combination Effects with Relevant Projects
Built Heritage	Cumulative Projects 1, 4, 6 and 27 have common receptors with the Proposed Development. None of the effects for the Proposed Development or Cumulative Projects in isolation exceed minor to moderate adverse significance and in-combination do not give rise to significant effects.
Townscape and Visual	Cumulative Projects 1, 2, 3, and 27 have common receptors with the Proposed Development. Significant effects arise only in a small number of cases and are associated with receptors already subject to a significant effect as a result of the Proposed Development. This means that any additional change associated with the Cumulative Projects would give rise to overall significant cumulative effects.
Wind Microclimate	Cumulative Projects 1, 2, 3, 6, 13, 27 and 28 have the potential to result in in-combination wind effects. These were modelled in CFD which demonstrated the effects would not be greater than at the project level. These effects are not significant.
Daylight and Sunlight	There are no in-combination effects as the Cumulative Projects are either not big enough or close enough to the Site to result in cumulative effects with the Proposed Development.
Solar Glare	The Proposed Development in isolation represents the worst-case assessment in terms of likely solar glare effects, as Cumulative Projects could block reflections. Effects of the Proposed Development in isolation are not significant.
Climate Change	All global cumulative GHG sources are relevant to the effect on climate change, which is taken into account when defining the global climatic system receptor as being of high sensitivity to further emissions in **Chapter 12: Climate Change**. Therefore, the cumulative effect remains as reported in **Chapter 12: Climate Change**, which is not significant.
Air Quality	TBC
Noise and Vibration	TBC



Map Ref	Name
1	Sister Plot C (143024/FO/2025)
2	Charles Street Multi Storey Car Park (Plot H Sister) (143741/FO/2025)
3	Charles Street (138808/FO/2023)
4	Echo Street (136874/FO/2023)
5	Former London Road Fire Station (125712/FO/2019)
6	Upper Brook Street Masterplan (137401/FO/2023)
7	Boulton House (143253/FO/2025)
8	Baring Street (127486/FO/2020)
9	Land At Baring Street Adjacent To The River Medlock (137263/FO/2023)
10	Cambridge Halls Of Residence (142888/FO/2025)
11	Mayfield Park(124972/FO/2019)
12	Mayfield, Phase 1 (125248/FO/2019)
13	Mayfield Phase 1B (141788/FO/2024)
14	Land Bounded By Upper Brook Street, Cottenham Street & Kincardine Road (137399/FO/2023)
15	Sparkle Street (139986/FO/2024)
16	Stocktons (142535/FO/2025)
17	Plot 9B First Street (141786/FO/2024)
18	Plot 11 Block C First Street (138831/FO/2023)
19	One Medlock Street (135419/FO/2022)
20	Portugal Street East (121099/FO/2018)
21	Viadux Phase 2 (139715/FO/2024)
22	2-4 Whitworth Street (141773/FO/2024)
23	Plot F Great Jackson Street (132199/FO/2021)
24	Plot G 34 Great Jackson Street (129273/FO/2021)
25	Plot D, Great Jackson Street (137227/FO/2023)
26	Part Of Plot C And Plot E Great Jackson Street (137226/FO/2023)
27	Faraday Tower (143769/FO/2025)
28	All Saints Campus Library (143943/FO/2025)

Extract 14: Cumulative Project Plan

Appendix 1: Regulatory Compliance Checklist

Regulation 18, Paragraph 3 (e) of the EIA Regulations requires '*a non-technical summary of the information referred to in sub-paragraphs (a) to (d)*' to be provided. Schedule 4, Paragraph 9 of the EIA Regulations requires '*A non-technical summary of the information provided under paragraphs 1 to 8*' to be provided. To provide clarity on compliance with the EIA Regulations, the checklist below identifies where the information from paragraphs a to d of Regulation 18a and paragraphs 1 to 8 of Schedule 4 is located in this NTS.

Regulation 18. Environmental Statements	Schedule 4. Information for Inclusion in Environmental Statements	Location of Information in this Non-Technical Summary
(a) a description of the proposed development comprising information on the site, design, size and other relevant features of the development	1. A description of the development, including in particular: (a) a description of the location of the development; (b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases; (c) a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; (d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.	**Section 2: The Proposed Development** and **Section 4: Description of the Baseline**
(d) a description of the reasonable alternatives studied by the developer, which are relevant to the	2. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by	**Section 2: The Proposed Development**

Regulation 18. Environmental Statements	Schedule 4. Information for Inclusion in Environmental Statements	Location of Information in this Non-Technical Summary
proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment	the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	
-	3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	**Section 2: The Proposed Development** and **Section 4: Description of the Baseline**
-	4. A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.	**Section 4: Description of the Baseline** and **Section 5: Effects of the Proposed Development**
(b) a description of the likely significant effects of the proposed development on the environment	5. A description of the likely significant effects of the development on the environment resulting from, inter alia: (a) the construction and existence of the development, including, where relevant, demolition works;	**Section 5: Effects of the Proposed Development** and **Section 6: Cumulative Effects**

Regulation 18. Environmental Statements	Schedule 4. Information for Inclusion in Environmental Statements	Location of Information in this Non-Technical Summary
	(b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources; (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste; (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters); (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources; (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; (g) the technologies and the substances used. The description of the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project, including in particular	

Regulation 18. Environmental Statements	Schedule 4. Information for Inclusion in Environmental Statements	Location of Information in this Non-Technical Summary
	those established under Council Directive 92/43/EEC[47] and Directive 2009/147/EC[48].	
-	6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	**Section 5: Effects of the Proposed Development**
(c) a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment	7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.	**Section 5: Effects of the Proposed Development**
-	8. A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU[49] of the European Parliament and of the Council	n/a (scoped out, as confirmed in **Section 3: The EIA Process and Approach**)

[47] The Council of the European Communities, Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora;
[48] The European Parliament and the Council of the European Union, Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds;
[49] The European Parliament and the Council of the European Union, Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC Text with EEA relevance;

Regulation 18. Environmental Statements	Schedule 4. Information for Inclusion in Environmental Statements	Location of Information in this Non-Technical Summary
	or Council Directive 2009/71/Euratom[50] or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	

[50] The Council of the European Union, COUNCIL DIRECTIVE 2009/71/EURATOM of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations

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