



Unlocking potential for a better built environment

DAYLIGHT & SUNLIGHT

IMPACT ON NEIGHBOURING
PROPERTIES REPORT

Postal Street, Manchester

The Council of the City of Manchester

14 March 2025

GIA No: **21122** Fee Quote: FQ0013268

PROJECT DATA:

Client **The Council of the City of Manchester**
Architect **Hawkins Brown**
Project Title **Postal Street, Manchester**
Project Number **21122**

REPORT DATA:

Report Title **Impact on Neighbouring Properties Report**
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1 EXECUTIVE SUMMARY

GIA have assessed the Hawkins Brown scheme (the “Proposed Development”) for Postal Street, Manchester to understand the potential changes in light to the relevant sensitive receptors.

- 1.1 GIA have been instructed by the Council of the City of Manchester to provide daylight and sunlight advice in relation to the Proposed Development at Postal Street, Manchester.
- 1.2 GIA have undertaken daylight and sunlight assessments on the current and proposed surrounding residential properties to understand the potential effect of the Proposed Development on their amenity levels.
- 1.3 The technical analysis has been considered by reference to the criteria and methodology within the Building Research Establishment Guidance (BR209, 2022) which, when published, recognised that it *“is advisory and the numerical target values within it may be varied to meet the needs of the development and its location”*
- 1.4 The key headlines from the relevant policy documents are summarised in Section 3 of this report.
- 1.5 It is inevitable when constructing buildings in an urban environment that alterations in daylight and sunlight to surrounding properties can occur. It is well-established and accepted that the BRE Guidelines, which set out the numerical benchmark for daylight and sunlight assessments, are predicated on a relatively low-rise suburban environment. The Planning Practice Guidance (PPG) states that:

“All developments should maintain acceptable living standards. What this means in practice, in relation to assessing appropriate levels of sunlight and daylight, will depend to some extent on the context for the development as well as its detailed design. For example, in areas of high-density historic buildings, or city centre locations where tall modern buildings predominate, lower daylight and sunlight levels at some windows may be unavoidable if new developments are to be in keeping with the general form of their surroundings.”
- 1.6 Overall, the daylight and sunlight effects of the Proposed Development are considered reasonable in context.
- 1.7 This report is supported by several documents, drawings and results which are all enclosed within the Appendices as listed on the Contents Page. All assumptions used in collating this report can be found in Appendix 03.

2 THE SITE

GIA have been instructed to review and advise on the daylight and sunlight effects associated with the implementation of the Proposed Development at Postal Street, Manchester .

THE SITE

- 2.1 Figure 02 below illustrates the assessment baseline used to inform the content of this report. Further drawings are enclosed at Appendix 03 of this report.
- 2.2 Whilst the building shown in the baseline has been demolished, as that is the state of the site over which the surrounding buildings have been used to deriving their light, it has been included in order to provide a more realistic baseline against which the effect of the Proposed Development should be assessed.

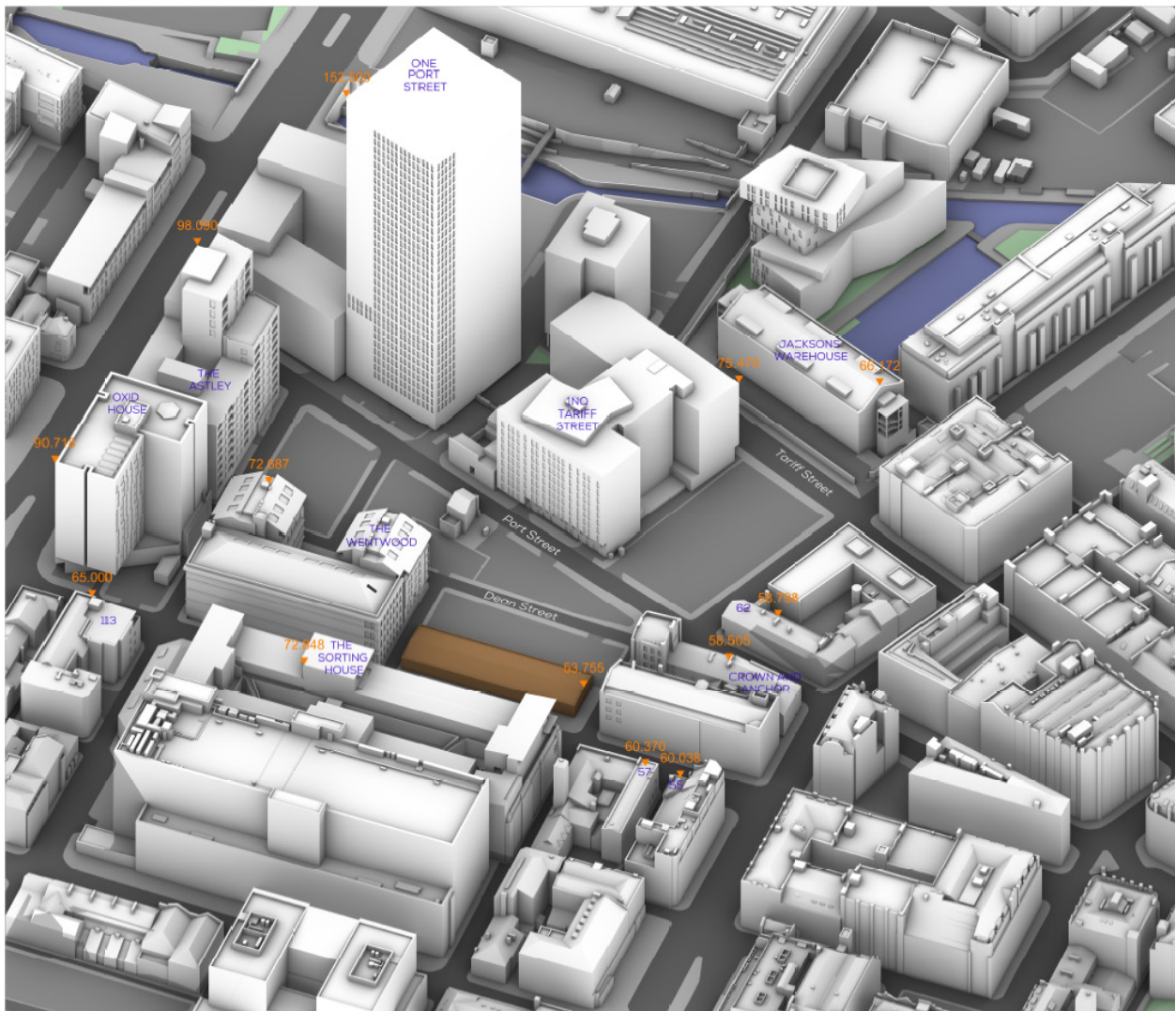


Figure 01: 3D model of the Existing Site

PROPOSED DEVELOPMENT

- 2.3 GIA's understanding of the Proposed Development is illustrated in Figure 03 and further drawings are enclosed at Appendix 03.

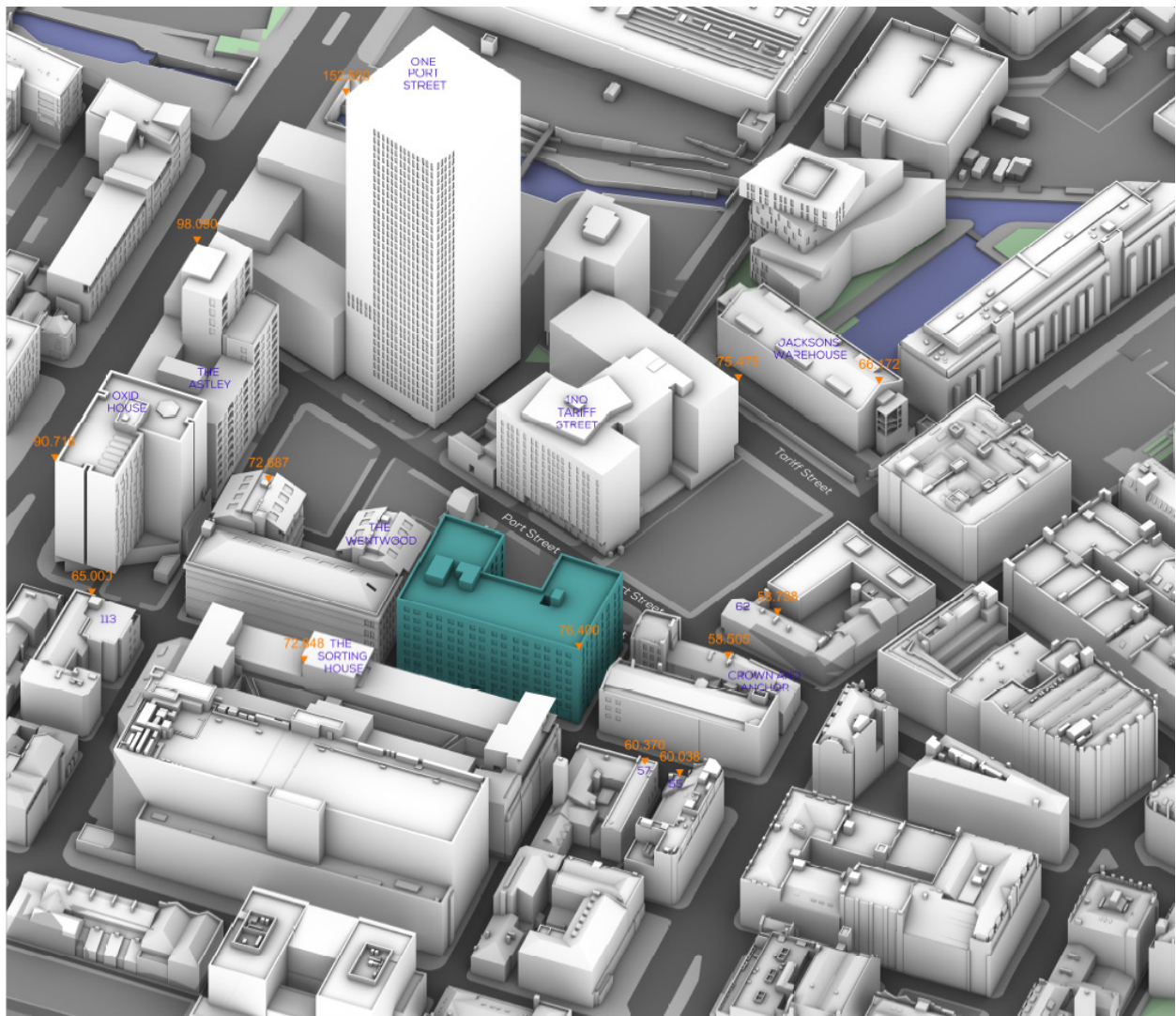


Figure 02: 3D Perspective View of the Proposed Development

3 POLICY & THE WIDER CONTEXT

3.1 Outlined below are sections from the following documents which are considered to be the most pertinent in relation to daylight and sunlight matters and how the effects of the Proposed Development on relevant neighbouring properties have been approached:

- National Planning Policy Framework (2024);
- Planning Practice Guidance (2019 and regularly updated as a 'live' resource); and
- Manchester Core Strategy (2012 – 2027)

3.2 The key headlines from the above policy documents can be summarised as follows:

NATIONAL PLANNING POLICY FRAMEWORK

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

PLANNING PRACTICE GUIDANCE

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

MANCHESTER CORE STRATEGY

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

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

4 BRE GUIDELINES & CONTEXT METHODOLOGY

The Building Research Establishment (BRE) have set out in their handbook 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (BR209, 2022)', guidelines and methodology for the measurement and assessment of daylight and sunlight.

BUILDING RESEARCH ESTABLISHMENT GUIDELINES (BR209, 2022)

- 4.1 The guidelines contained in the BRE handbook are *"...intended for use in rooms in adjoining dwellings where daylight is required, including living rooms, kitchens, and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas, and garages need not be analysed."*
- 4.2 The BRE Guidelines provides two methodologies for daylight assessment of neighbouring properties, namely;
- The Vertical Sky Component (VSC); and
 - The No Sky Line (NSL).
- 4.3 VSC is a measurement of the percentage of the skydome that can be seen from the centre of the outside of the window face. NSL is a measurement of the area of the rooms that can see sky through the window at table top height.
- 4.4 In respect to NSL the BRE states that *"The calculation can only be carried out where room layouts are known. Using estimated room layouts is likely to give inaccurate results and is not recommended"*.
- 4.5 There is one methodology provided by the BRE Guidelines for sunlight assessment, denoted as Annual Probable Sunlight Hours (APSH).
- 4.6 APSH is measured using a sun indicator which contains 100 spots, each representing 1% of APSH.
- 4.7 It is an inevitable consequence of the built-up urban environment that daylight and sunlight will be more limited in dense urban areas. It is well acknowledged that in such situations there may be many planning and urban design matters to consider other than daylight and sunlight.
- 4.8 Appendix 02 of this report elaborates on the mechanics of each of the above assessment criteria, explains the appropriateness of their use and the parameters of each specific recommendation.

- 4.9 The following table provides a summary of the criteria set out within the BRE Guidelines for daylight and sunlight.

Method	BRE Criteria
VSC	A window may be adversely affected if its VSC measured at the centre of the window is less than 27% and less than 0.8 times its former value.
NSL	A room may be adversely affected if the daylight distribution (NSL) is reduced beyond 0.8 times its existing area.
APSH	A window may be adversely affected if a point at the centre of the window receives for the whole year, less than 25% of the APSH including at least 5% of the APSH during the winter months (21 September to 21 March) and less than 0.8 times its former sunlight hours during either period, and for existing neighbouring buildings, if there is a reduction in total APSH which is greater than 4%.

- 4.10 Appendix F of the BRE guidelines provides an alternate baseline VSC value for city centre regions of 18% rather than the 27% referenced through the body of the document which is the level of VSC to be expected in an environment where the neighbouring construction angle is around 25 degrees i.e. a more suburban location.
- 4.11 When considering the significance of daylight and sunlight effects, professional judgement has been used. Consideration has been given to the proportion of rooms/windows affected, as well as the percentage alterations, absolute changes, retained daylight and sunlight levels and sensitivity of the receptor. This is in addition to any other relevant factors, including mitigating factors such as location and nature of the development, balconies, overhangs or design features which may also affect the determination of assigning the criteria.

5 DAYLIGHT & SUNLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

This section details the daylight and sunlight impacts in relation to the relevant residential properties neighbouring the Site.

5.1 A three-dimensional computer model of the Site and surrounding properties was produced based on photogrammetry. Where available we have included floor plans of the relevant properties and this context model has been used to carry out the technical assessments. All relevant assumptions made in producing this model can be found in Appendix 01.

RELEVANT SENSITIVE RECEPTORS

5.2 GIA have identified the following properties as relevant for daylight and sunlight assessment:

- 55 Newton Street
- 57 Newton Street
- The Wentwood
- Crown and Anchor 41 Hilton Street
- The Sorting House
- 62 Port Street
- Jacksons Warehouse
- 113 Newton Street
- One Port Street Port Street M1 2EQ
- The Astley
- Oxid House
- 1NQ Tarrif Street

5.3 The location of the above properties relative to the Site can be seen on the drawings within Appendix 03.

5.4 The effect of the Proposed Development upon the daylight and sunlight amenity within the following properties will be fully BRE compliant. This means that the daylight and sunlight amenity within these properties will not be significantly affected by the construction of the Proposed Development. The effect upon these properties is not discussed in any further detail within this report.

- 57 Newton Street
- Crown and Anchor 41 Hilton Street
- 62 Port Street
- Jacksons Warehouse
- 113 Newton Street
- One Port Street Port Street M1 2EQ
- The Astley
- Oxid House

55 NEWTON STREET

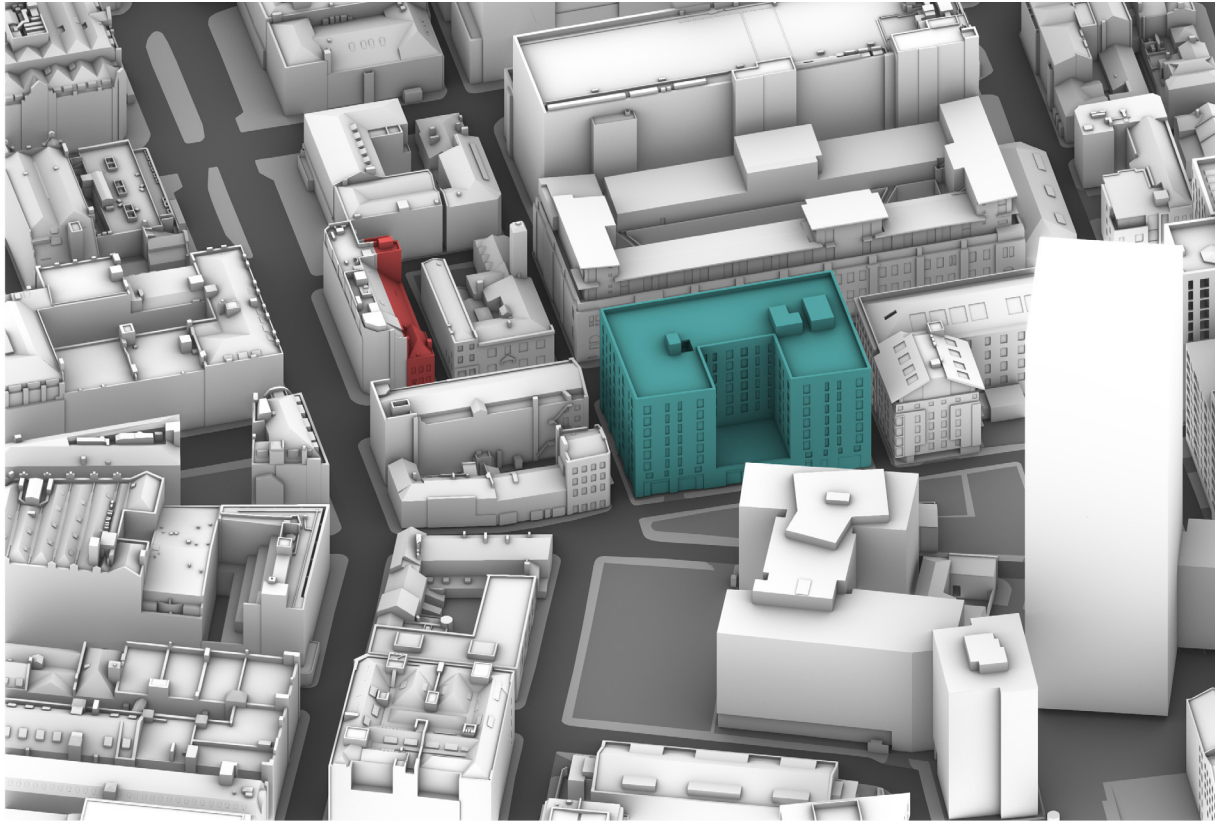


Figure 03: Rendered Image of 55 Newton Street

- 5.5 With the Proposed Development in place, this property will fully accord with the BRE target criteria for APSH sunlight. The occupants of this property will not, therefore, notice any change in their levels of sunlight amenity.
- 5.6 15 windows serving 3 site facing rooms have been modelled and assessed in daylight terms.
- 5.7 Any changes in daylight amenity (VSC & NSL) to 2 of the 3 rooms assessed will be fully BRE compliant. The diffuse daylight within these rooms will not, therefore, be adversely affected.
- 5.8 Any VSC change to the 7 windows serving the remaining room will be fully BRE compliant. The room will, however, experience a minor (24.7%) NSL change.
- 5.9 Overall, the daylight and sunlight effects of the Proposed Development are considered reasonable in context.

THE WENTWOOD

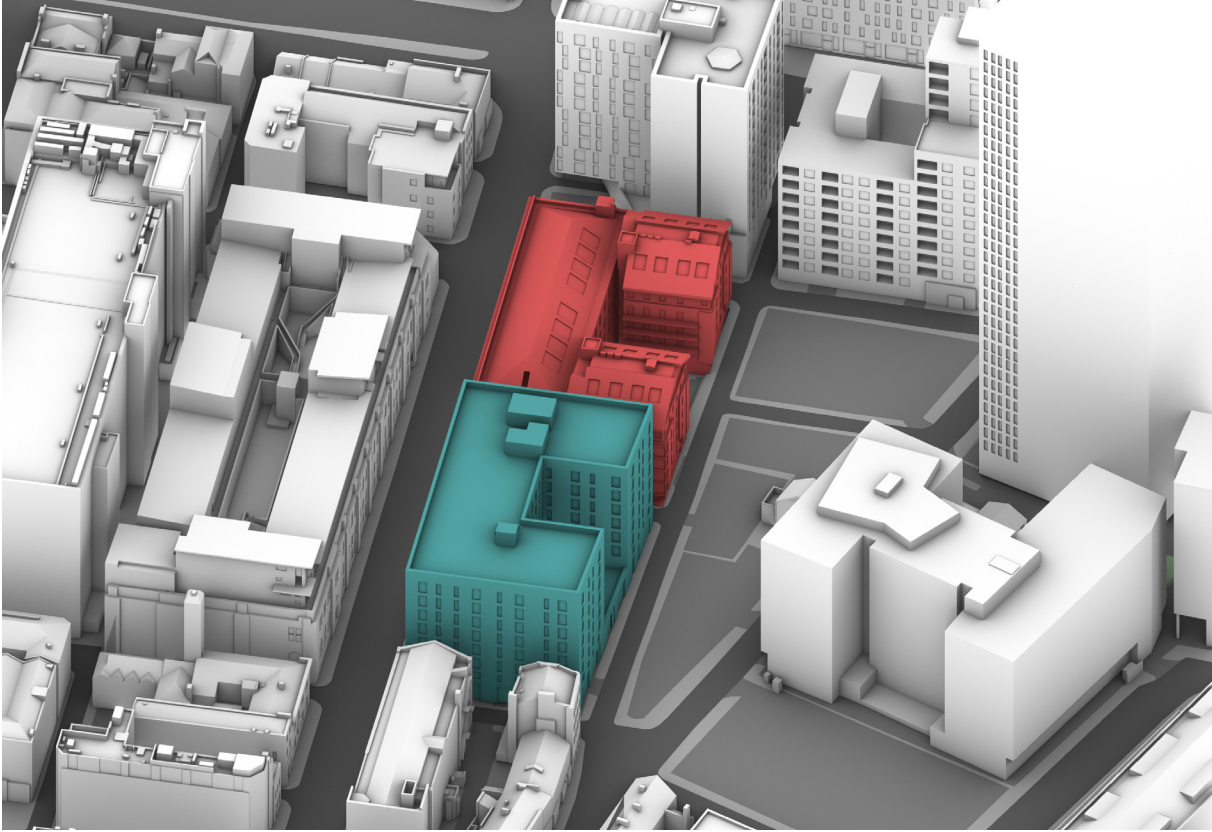


Figure 04: Rendered Image of The Wentwood

- 5.10 Compared to the surrounding context, the site is relatively undeveloped. Surrounding properties are, therefore, currently deriving an uncharacteristically high level of daylight and, where relevant, sunlight across it.
- 5.11 Paragraph F5 of the BRE guidelines states “... where an existing building has windows that are unusually close to the site boundary and taking more than their fair share of light...To ensure that new development matches the height and proportions of existing buildings, the VSC, daylight distribution, and APSH targets for these windows could be set to those for a ‘mirror-image’ building of the same height and size, an equal distance away on the other side of the boundary.”
- 5.12 As such, instead of the existing building on the site, a building that matches the same height and massing as the The Wentwood and located at the same distance from the boundary has been used to assess the baseline levels of daylight and sunlight amenity. This provides a more contextual approach to the analysis, and fully considers the specific site characteristics, history and location (See opposite)



Figure 05: Rendered Image of the mirror massing of The Wentwood

- 5.13 117 windows have been considered in the context of daylight amenity. NSL assessments have not been undertaken as no publicly available floor plans were located.
- 5.14 64 windows have been considered in the context of sunlight amenity as they are orientated to within 90 degrees of due south.
- 5.15 With the BRE permitted mirror baseline (see above) in place, the levels of visible sky from the windows (VSC) in the south west facing elevation will be, understandably, much lower than those from which those windows currently benefit .
- 5.16 With the Proposed Development in place and compared to the mirror baseline, the windows in the lowest two floors will experience absolute VSC changes ranging from 0% to 2% with, for context, the average being an imperceptible 1%
- 5.17 The windows on the upper floors will, compared to the mirror baseline, experience larger levels of VSC change with the Proposed Development in place. They will, however, retain VSC levels which are at least equal to but mostly greater than those from which the lower windows would benefit if a mirror

of The Wentwood were to be in existence on the site. This is, however, with the exception of some of the rooms on the 5th floor, which have additionally restricted views of the sky by virtue of a large roof overhang.

- 5.18 The same applies to the levels of sunlight to the windows in the south west facing elevation: the levels of sunlight will be, understandably, much lower than those from which those windows currently benefit and, with the Proposed Development in place there will be small changes to the lower levels, larger changes to the upper levels, but the windows will, with the exception of those on the 5th floor for the same reason as above, retain APSH levels, which are at least equal to but mostly greater than those from which the lower windows would benefit if a mirror of The Wentwood were to be in existence on the site.
- 5.19 Overall, the daylight and sunlight effects of the Proposed Development on The Wentwood are considered to be reasonable to be in context.

THE SORTING HOUSE

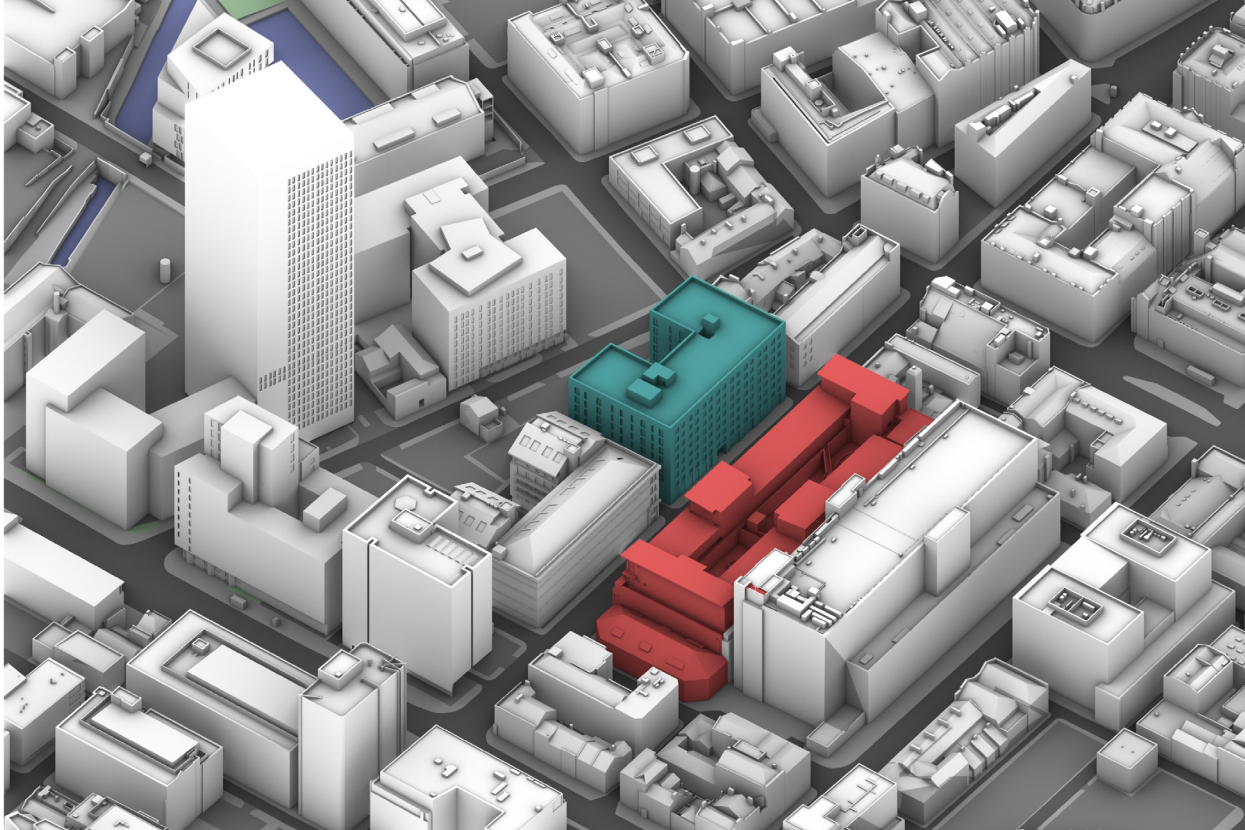


Figure 06: Rendered Image of The Sorting House

5.20 Compared to the surrounding context, the site is relatively undeveloped. Surrounding properties are, therefore, currently deriving an uncharacteristically high level of daylight and, where relevant, sunlight across it.

5.21 Paragraph F5 of the BRE guidelines states “... where an existing building has windows that are unusually close to the site boundary and taking more than their fair share of light...To ensure that new development matches the height and proportions of existing buildings, the VSC, daylight distribution, and APSH targets for these windows could be set to those for a ‘mirror-image’ building of the same height and size, an equal distance away on the other side of the boundary.”

5.22 As such, instead of the existing building on the site, a building that matches the same height and massing as the The Sorting House and located at the same distance from the boundary has been used to assess the baseline levels of daylight and sunlight amenity. This provides a more contextual approach to the analysis, and fully considers the specific site characteristics, history and location (See opposite)

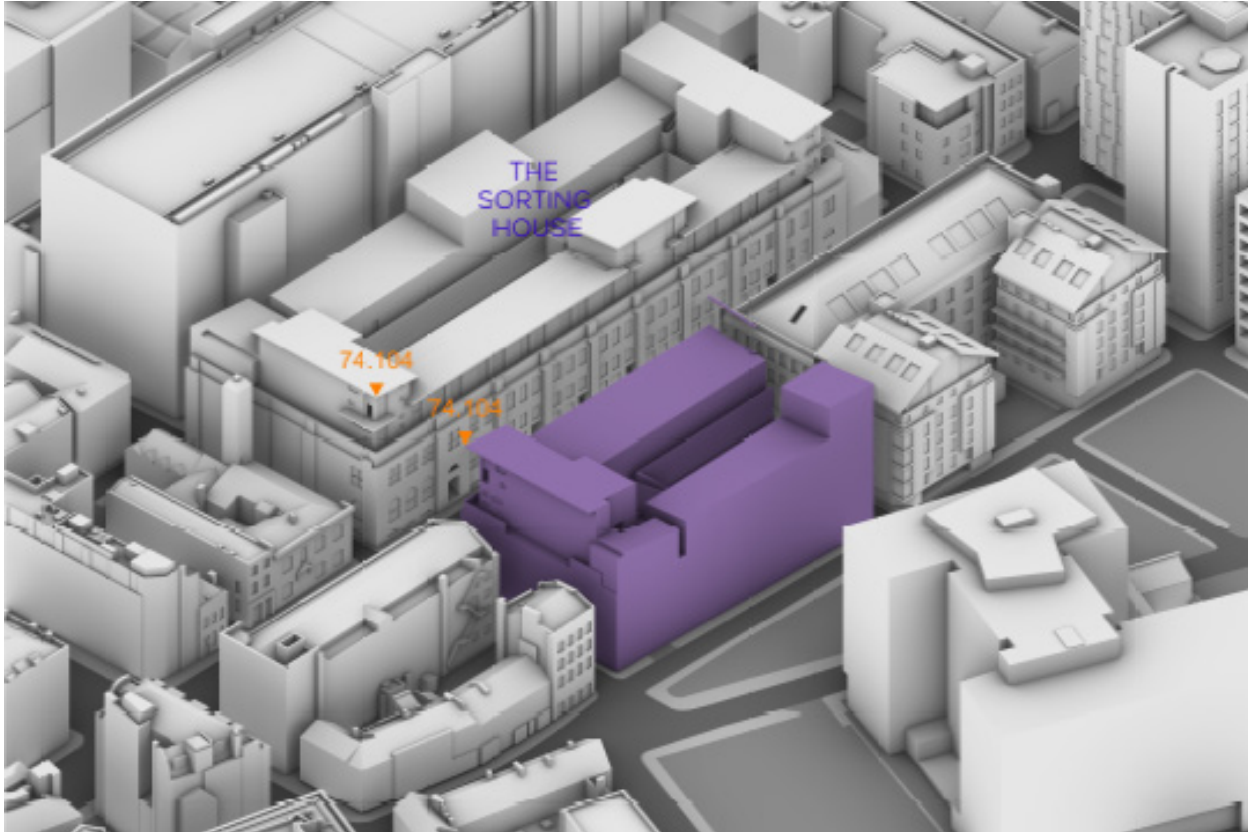


Figure 07: Rendered Image of the mirror massing of The Sorting House

- 5.23 111 windows serving 94 rooms have been considered in the context of daylight amenity. 89 rooms have been considered in the context of sunlight amenity as they have one or more windows which are orientated to within 90 degrees of due south.
- 5.24 Compared to the mirror baseline (see above) levels of visible sky from the windows (VSC), in respect to which the BRE guidelines state at paragraph F7 is *"...generally recommended as the appropriate parameter to use...because the VSC depends only on obstruction, and is therefore a measure of the daylight environment as a whole."* the Proposed Development would result in absolute VSC changes ranging from 0% to 8.5% with, for context, the average change being 3.7%.
- 5.25 Levels of retained VSC range from 13% to 34% with, for context, the average being 21%, which is in excess of the mid teens levels considered acceptable for an urban location
- 5.26 In terms of annual probable sunlight hours (APSH), there will be an isolated number (10) of lower level rooms which will experience changes in APSH compared to the mirror baseline (see above) which may be noticeable to the occupants.
- 5.27 That said, all 10 rooms will retain total APSH levels ranging from 21% to 35% compared to the BRE recommended 25% with, for context, the average retained total APSH level being 27%.
- 5.28 In terms of winter sunlight levels, the rooms will retain total APSH levels ranging from 3% to 7% compared to the BRE recommended 5% with, for context, the average retained winter APSH level being 4.6%.
- 5.29 Overall, the daylight and sunlight effects of the Proposed Development on The Sorting House are considered reasonable in context.

INQ TARIFF STREET

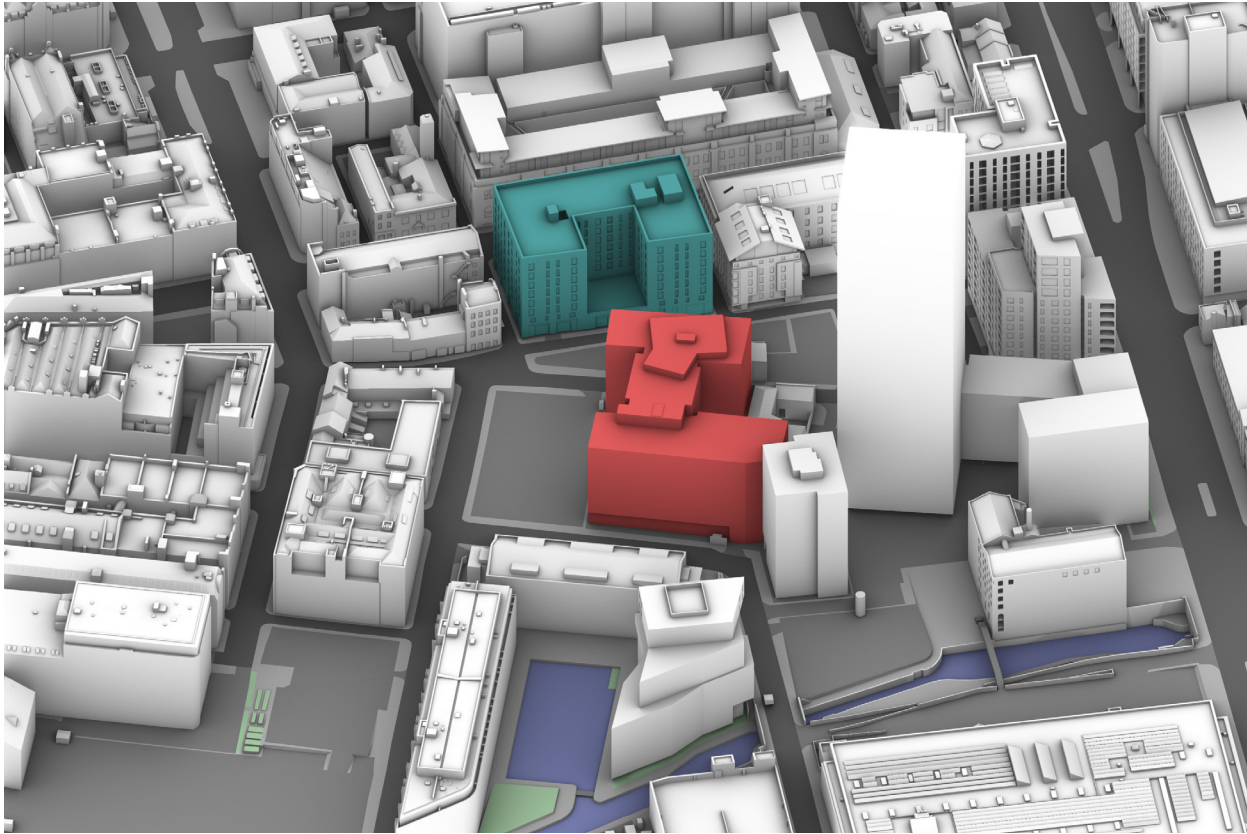


Figure 08: Rendered Image of INQ Tariff Street

- 5.30 This currently under construction property is not material for assessment in sunlight terms as none of its site facing windows will be orientated to within 90 degrees of due south.
- 5.31 164 windows serving 118 site facing rooms have been modelled and assessed in daylight terms.
- 5.32 Any changes in daylight amenity (VSC & NSL) to 80 (68%) of the 118 rooms assessed will be fully BRE compliant. The diffuse daylight within these rooms will not, therefore, be significantly affected.
- 5.33 The magnitude of change in VSC and/or NSL to 9 (8%) of the 118 rooms assessed will be no greater than 27.4% and all of the windows serving these rooms will retain VSC levels of between 17.4% and 33% with, for context, the average being 25.6%. The effect of the Proposed Development upon the daylight amenity within these rooms is, therefore, considered to be minor and not significant.
- 5.34 The remaining 29 rooms will experience VSC and/or NSL changes which are greater than 30% of their baseline levels. That said, the windows serving 17 (14%) of these rooms will retain VSC levels of between 18.2% and 31% with, for context, the average being 24.6%.

- 5.35 The BRE guidelines state at paragraph F7 that *"In assessing the loss of light to an existing building, the VSC is generally recommended as the appropriate parameter to use. This is because the VSC depends only on obstruction, and is therefore a measure of the daylit environment as a whole."* In view of the levels of retained VSC, the effect of the Proposed Development upon the daylight amenity within these 17 rooms is, therefore, also considered to be minor and not significant.
- 5.36 The remaining 12 rooms will experience similar levels of change in daylight as the 17 rooms referenced above. Their retained levels will, however, be lower. This is because they are all located at ground and first floor level beneath a cantilever element of building which restricts the view of the upper part of the sky.
- 5.37 By virtue of their location and, thereby, restricted view of the upper sky, these rooms will be similarly affected by any meaningful development on the site.
- 5.38 Overall, the daylight effects of the Proposed Development are considered reasonable in context.

6 CONCLUSIONS

GIA have undertaken a daylight and sunlight assessment in relation to the Proposed Development at Postal Street, Manchester . The technical analysis has been undertaken in accordance with the BRE handbook.

6.1 GIA have undertaken daylight and sunlight assessments on the current and proposed surrounding residential properties to understand the potential effect of the Proposed Development on their amenity levels.

6.2 The technical analysis has been considered by reference to the criteria and methodology within the Building Research Establishment Guidance (BR209, 2022) which, when published, recognised that it *"is advisory and the numerical target values within it may be varied to meet the needs of the development and its location"*

6.3 It is inevitable when constructing buildings in an urban environment that alterations in daylight and sunlight to surrounding properties can occur. The Planning Practice Guidance (PPG) states that:

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

6.4 When the effects of the Proposed Development are considered in a contextual manner, which is in accordance with the BRE guidelines, the overall daylight and sunlight effects upon the surrounding residential properties are considered reasonable in context.



What we do:

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Rights of Light
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Wind Analysis

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