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DAYLIGHT & SUNLIGHT REPORT

Bromley North Station Road

Bromley BR1 3LP

Our Ref: 5153

23 September 2022

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Report details

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1 Introduction

1.1.1 eb7 have been instructed to assess the effect of proposed development at Bromley North Station Road on the daylight and sunlight to the existing surrounding properties and neighbouring amenity spaces. These assessments consider the latest Mae architects scheme proposals issued on the 25th August 2022.

1.1.2 The methodology and criteria used for these assessments is provided by Building Research Establishment's (BRE) guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (BRE 209 2nd edition, 2011).

1.1.3 In order to carry out an assessment, we have generated a 3D computer model (Test Environment) of the existing site, the key surrounding properties and the proposed scheme. Using this model and our specialist software, we have calculated the daylight and sunlight levels in both the existing and proposed conditions for the relevant neighbouring buildings and within the proposal itself.

1.1.4 We have also quantified the overshadowing effects to neighbouring amenity areas and gardens, again considering both the existing and proposed conditions.

1.1.5 As the proposed development includes residential accommodation, the daylight and sunlight to rooms within the proposal has also been considered.

1.1.6 The numerical criteria suggested within the BRE guidelines has been applied to each of the assessments mentioned above. It is important to note that these guidelines are not a rigid set of rules but are advisory and need to be applied flexibly according to the specific context of a site.

2 Guidance

2.1 Daylight & sunlight for planning

'Site layout planning for daylight and sunlight: A guide to good practice', BRE 2011

2.1.1 The Building Research Establishment (BRE) Report 209, *'Site layout planning for daylight and sunlight: A guide to good practice'*, is the reference document used by most local authorities for assessing daylight and sunlight in relation to new developments. Commonly referred to as 'the BRE guidelines', it provides various testing methodologies to calculate the potential light levels received by neighbours of a development site and provided within proposed new development.

2.1.2 The guidance given within the BRE document makes direct reference to the British Standard BS8206 Part 2: Code of Practice for Daylighting (2008) and the CIBSE (Chartered Institute of Building Services Engineers) guide LG10: Daylighting – a guide for designers (2014). It is intended to be used in conjunction with these guides as they provide more detailed background to the assessments and methodologies used for assessment of proposed dwellings.

2.1.3 The European Standard EN17037 was published in 2018 and is intended to replace the British Standard BS8206 Part 2: Code of Practice for Daylighting. Current policy and guidance from most planning authorities still refers to the BRE guide and its methodologies, which in turn are based upon the BS8206 document. The 2022 update to the BRE guidance was published on 9th June 2022 although, as yet, has not been widely applied by Local Authorities and we anticipate a period where the 2011 guidance will continue to be adopted until planning policy dictates otherwise. The scheme has been assessed in line with the BRE 2011 guidance given that the design of the proposal was developed whilst the previous guidance was in effect and included two pre-application submissions.

Daylight and Sunlight to Neighbouring Properties

Detailed daylight assessments

2.1.4 The guidance outline three detailed methods for calculating daylight: the Vertical Sky Component (VSC), the No-Sky Line (NSL) and the Average Daylight Factor (ADF).

2.1.5 The VSC and NSL are primarily used for the assessment of existing buildings, while the ADF test is generally recommended for proposed rather than existing dwellings. The ADF test may sometimes be useful as a supplementary analysis for existing buildings, particularly newer ones, and a number of local authorities request this as a standard measurement for impact assessments. It can help in judging whether impacts to daylight, which might otherwise be deemed 'noticeable', are nonetheless acceptable if affected rooms continue to receive levels of daylight sufficient for their use.

2.1.6 The VSC test measures the amount of sky that is visible to a specific point on the outside of a property, which is directly related to the amount of daylight that can be received. It is measured on the outside face of the external walls, usually at the centre point of a window.

2.1.7 The NSL test calculates the distribution of daylight within rooms by determining the area of the room at desk / work surface height (the 'working plane') which can and cannot receive a direct view of the sky and hence 'sky light'. The working plane height is set at 850mm above floor level within residential property.

2.1.8 For the above methods, the guidance suggests that existing daylight may be noticeably affected by new development if: -

- Windows achieve a VSC below 27% and are reduced to less than 0.8 times their former value; and / or
- Levels of NSL within rooms are reduced to less than 0.8 times their former values.

2.1.9 Where rooms are greater than 5m in depth and lit from only one side, the guidance recognises that *"a greater movement of the no sky-line may be unavoidable"* (page 8, paragraph 2.2.10).

Daylight to new buildings

2.1.10 The ADF method calculates the average illuminance within a room as a proportion of the illuminance available to an unobstructed point outdoors under a sky of known luminance and luminance distribution. This is the most detailed of the daylight calculations and considers the physical nature of the room behind the window, including window transmittance and surface reflectivity. The BRE guidance 2011 references the former British Standard BS8206 Part 2 and sets the following recommended ADF levels for habitable room uses: -

Bedrooms	1% ADF
Living rooms & dining rooms	1.5% ADF
Kitchens	2% ADF

Table 1 - ADF targets by room use

Detailed sunlight assessments

2.1.11 For sunlight, the Annual Probable Sunlight Hours (APSH) test calculates the percentage of probable hours of sunlight received by a window or room over the course of a year.

2.1.12 In assessing sunlight effects to existing properties surrounding a new development, only those windows orientated within 90° of due south and which overlook the site require assessment. The main focus is on living rooms, with bedrooms and kitchens deemed less important.

2.1.13 The British Standard guidance BS8206 part 2 advises that the degree of satisfaction

for occupants is related to the expectation of sunlight, so if a room is north facing, or if the building is in a densely-built urban area, the absence of sunlight is more acceptable than where its exclusion seems arbitrary.

> *"The degree of satisfaction is related to the expectation of sunlight. If a room is necessarily north facing or if the building is in a densely-built urban area, the absence of sunlight is more acceptable than when its exclusion seems arbitrary."*

2.1.14 The guidelines suggest that the main living rooms within new buildings should achieve at least 25% of annual sunlight hours, with 5% during the winter period. For neighbouring buildings, the guide suggests that occupiers will notice the loss of sunlight if the APSH to main living rooms is both less than 25% annually (with 5% during winter) and that the amount of sunlight, following the proposed development, is reduced by more than 4%, to less than 0.8 times its former value.

3 Application of the guidance

3.1 Scope of assessment

Impact analysis for neighbouring buildings

3.1.1 The BRE guidelines advise that, when assessing any potential effects on surrounding properties, only those windows and rooms that have a 'reasonable expectation' of daylight and sunlight need to be considered. At paragraph 2.2.2 it states: -

> *"The guidelines given here are intended for use for 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."*

3.1.2 Our assessments therefore consider the neighbouring residential properties only, which the BRE recognises to have the highest expectation for natural light. We have tested the impact on the main rooms in each residential property and ignored non-habitable space (e.g. staircases, hallways, bathrooms, toilets, stores etc.) as per BRE guidance.

Assessment for proposed accommodation

3.1.3 Our assessment has considered all of the proposed residential units within the scheme. The daylight assessment considers all of the main habitable rooms (bedrooms, living rooms, kitchens etc.), toilets, hallways and staircases are not considered habitable use.

3.1.4 For sunlight the BRE acknowledges that windows with a predominantly northern orientation are unlikely to satisfy its targets and that main living rooms are most important. Therefore, our sunlight assessment focusses on the relevant living areas with windows facing within 90° of due south only.

3.2 Application of the numerical criteria

3.2.1 The opening paragraphs of the BRE guidelines state:

> *"The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer.*
>
> *Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design… In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".*

3.2.2 It is therefore very important to apply the BRE guidance sensibly and flexibly, with

careful consideration of the specific site context. Its numerical targets theoretically apply to any built environment, from city centres to rural villages. However, in more tightly constrained environments, achieving the default BRE targets can be very challenging and conflict with other beneficial factors of site layout design.

3.2.3 With the above in mind, rigid adherence to the BRE in certain situations could easily result in an inappropriate form of development. In which case it may be appropriate to adopt lower target values more appropriate to the location concerned. This is acknowledged in the BRE guidance at paragraph 2.2.3 (page 7):

> *"Note that numerical values given here are purely advisory. Different criteria maybe used, based on the requirements for daylighting in an area viewed against other site layout constraints.*

3.2.4 For buildings that neighbour a new development, the guidance suggests that daylight will be adversely affected by the development, if either; its windows achieve a VSC below 27% and have their levels reduced to less than 0.8 times their former value, or the levels of NSC within rooms are reduced to less than 0.8 times their former values.

3.2.5 Some recent planning decisions by the Mayor of London[1] and Planning Inspectorate[2] have suggested that retained levels of daylight (VSC) above 20% can be considered reasonably good and levels in the 'mid teens' should be acceptable for residential properties neighbouring new developments in London. The decision at 8 Albert Embankment[3], however, reiterated that material reductions should not be set aside. We have therefore assessed the severity of impacts to the neighbouring residential properties in light of this guidance.

[1] Monmouth House, Islington (Ref.: D&P/3698/02)
[2] Whitechapel Estate (Ref: APP/E5900/W/17/3171437)
[3] 8 Albert Embankment (Ref: APP/N5660/V/20/3254203 & APP/N5660/V/20/3257106)

4 Planning Policy

4.1.1 We have considered local, regional and national planning policy relating to daylight and sunlight. In general terms, planning policy advises that new development will only be permitted where it is shown not to cause unacceptable loss of daylight or sunlight amenity to neighbouring properties.

4.1.2 The need to protect amenity of neighbours is echoed within recent publications from the Mayor of London and the Secretary of State for Housing, Communities and Local Government. Although, these documents also stress that current guidance needs to be used flexibly where developments are located in urban areas and intend to achieve higher densities. Specifically, these documents suggest that the nationally applicable criteria given within the BRE guidance needs to be applied in consideration of the development's context.

4.2 London Borough of Bromley - Local Plan (January 2019)

Valued Environments

4.2.1 This section of the Local Plan sets out the policies which protect and enhance the natural, built and historic environment of the Borough. Paragraphs D & E of Policy 37 relates specifically to daylight and sunlight amenity:

Policy 37 – General Design of Development

"All development proposals, including extensions to existing buildings, will be expected to be of a high standard of design and layout. Developments will be expected to meet all of the following criteria where they are relevant:

a -Be imaginative and attractive to look at, of a good architectural quality and should complement the scale, proportion, form, layout and materials of adjacent buildings and areas;

b -Positively contribute to the existing street scene and/or landscape and respect important views, heritage assets, skylines, landmarks or landscape features;

c -Space about buildings should provide opportunities to create attractive settings with hard or soft landscaping (including enhancing biodiversity);

d -The relationship with existing buildings should allow for adequate daylight and sunlight to penetrate in and between buildings;

e - Respect the amenity of occupiers of neighbouring buildings and those of future occupants, providing healthy environments and ensuring they are not harmed by noise and disturbance, inadequate daylight, sunlight, privacy or by overshadowing;

f -The development should address sustainable design and construction and include where appropriate on-site energy generation;

g - Suitable access should be provided for people with impaired mobility and meet the principles of inclusive design. Where necessary and relevant to the development, contributions may be sought to improve accessibility around the development;

h -Security and crime prevention measures should be included in the design and layout of building and public areas;

i - Recycling and waste storage facilities are incorporated within the design layout;

j -Respect non designated heritage assets. Applications should be accompanied by a written statement setting out design principles and illustrative material showing the relationship of the development to the wider context."

4.3 The London Plan – The Mayor of London (March 2021)

4.3.1 The Mayor of London's New London Plan gives the following: -

Policy D6 Housing quality and standards

"C. Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating."

"D. The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space."

4.4 The Housing SPG – The Mayor of London (March 2016)

4.4.1 The London Plan Housing SPG confirms the flexibility that should be applied in the interpretation of the BRE guidelines having regard to the 'need to optimise capacity; and scope for the character and form of an area to change over time.'

1.3.45. Policy 7.6Bd requires new development to avoid causing 'unacceptable harm' to the amenity of surrounding land and buildings, particularly in relation to privacy and overshadowing and where tall buildings are proposed. An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets. This should take into account

local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time.

1.3.46 The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm.

4.5 The National Planning Policy Framework - Department for Housing, Communities and Local Government (July 2021)

4.5.1 The latest version of the National Planning Policy Framework was issued in July 2021. The document sets out planning policies for England and how these are expected to be applied. In respect of daylight and sunlight it stresses the need to make optimal use of sites and to take a flexible approach to daylight and sunlight guidance. Para 125 States: -

11. Making effective use of land

Achieving appropriate densities

"125. Area-based character assessments, design guides and codes and masterplans can be used to help ensure that land is used efficiently while also creating beautiful and sustainable places. Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site. In these circumstances:

c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, 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).

5 Sources of Information & Assumptions

5.1.1 A 3D measured survey, architectural drawings, site photographs and Ordnance Survey information have been used to create a 3D computer model of the proposed development in the context of the existing site and surrounding buildings.

5.1.2 Where survey or planning information was unavailable, the position of the neighbouring property elevations has been estimated based upon brick counts from site photographs. Window positions and dimensions used directly affect the results of all assessment methods.

5.1.3 We have not sought access to the surrounding properties and, unless we have been able to source floor layouts via public records, the internal configuration and floor levels have been estimated. Unless the building form dictates otherwise, we assume room depths of c. 4.2m for principal living space. Room layouts used directly affect the results of the NSL assessments.

5.1.4 Where possible neighbouring building use has been identified via online research, including Valuation Office Agency (VOA) searches, and/or external observation.

5.1.5 The full list of source of information used in this assessment is as follows: -

5.2 Cloud 10

3D Measured Survey

Bromley North 27-04-2022.dwg
Received 27/04/22

5.3 Mae Architects

Proposed 3D model

220824_2102_BromleyNorthStationRoad
Received 25/08/22

Proposed 2D drawings

2102-MAE-B1-00-DR-06-0100 Ground Floor Plan - Block 01.dwg
2102-MAE-B1-01-DR-06-0101 First Floor Plan - Block 01.dwg
2102-MAE-B1-02-DR-06-0102 Second & Third Floor Plan - Block 01.dwg
2102-MAE-B1-04-DR-06-0103 Fourth Floor Plan - Block 01.dwg
2102-MAE-B1-05-DR-06-0104 Fifth Floor Plan - Block 01.dwg
2102-MAE-B1-06-DR-06-0105 Roof Plan - Block 01.dwg
2102-MAE-B2-00-DR-06-0110 Ground Floor Plan - Block 02.dwg
2102-MAE-B2-01-DR-06-0111 First Floor Plan - Block 02.dwg
2102-MAE-B2-02-DR-06-0112 Second & Third Floor Plan - Block 02.dwg
2102-MAE-B2-04-DR-06-0113 Fourth Floor Plan - Block 02.dwg
2102-MAE-B2-05-DR-06-0114 Fifth Floor Plan - Block 02.dwg

2102-MAE-B2-06-DR-06-0115 Roof Plan - Block 02.dwg
2102-MAE-ZZ-00-DR-06-0000 Proposed Ground Floor Plan.dwg
Received 26/08/22

5.4 Promap

Ordnance survey map

5.5 Eb7 ltd

Site photographs

6 The Site and Proposal

6.1.1 The site is located in Bromley, bound by Bromley North bus station to the east, Mitchell Way to the south and Station Road to the west. It is currently occupied by a surface car-park and 2 single storey industrial units to the south of the site.

6.1.2 The site is neighboured by 2-3 storey terraced properties on Station Road and Glebe Road to the west, a 3-storey block of flats and a 2-storey clinic to the north.

6.1.3 The proposals comprise the construction of 2 blocks arranged up to 6-storeys, with commercial uses occupied on parts of the ground floor and the provision of 75 residential units in total across all floors. The design responds to the closest residential neighbours on Station Road and Glebe Road by stepping down at the top levels and allowing separation between the proposed buildings in order to limit any potential daylight and sunlight effects.

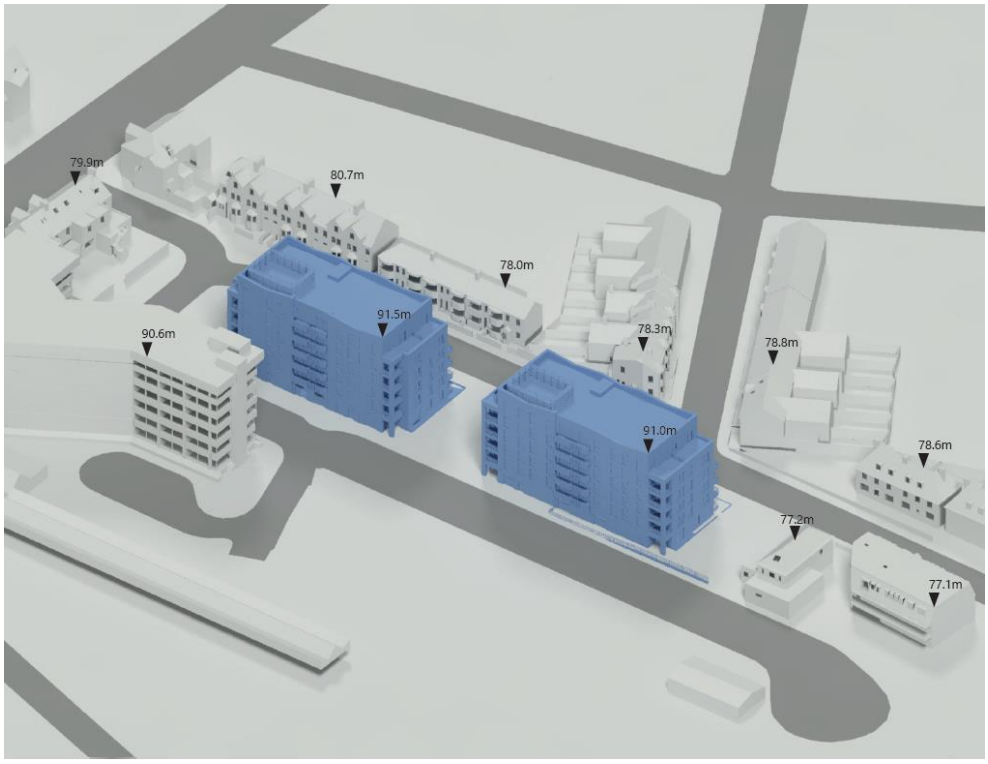


Image 1 - 3D view of the proposed development and neighbouring context

7 Assessment results

7.1 Daylight and sunlight to neighbouring buildings

7.1.1 Full results of the daylight and sunlight assessments are attached within Appendix 2. Drawings to show the existing and proposed buildings in the context of the neighbouring properties as well as window maps showing individual window references are attached within Appendix 1.

7.1.2 Our assessment has considered all the closest neighbouring residential properties with windows overlooking the proposed development. The neighbours included within our consideration are shown below and on the following image: -

1. 1-3 Babbacombe Road
2. Babbacombe House
3. 1-3 Mitchell Way
4. 5-11 Station Road
5. 13-23 Station Road
6. 28-32 Glebe Road
7. 31-43 Glebe Road

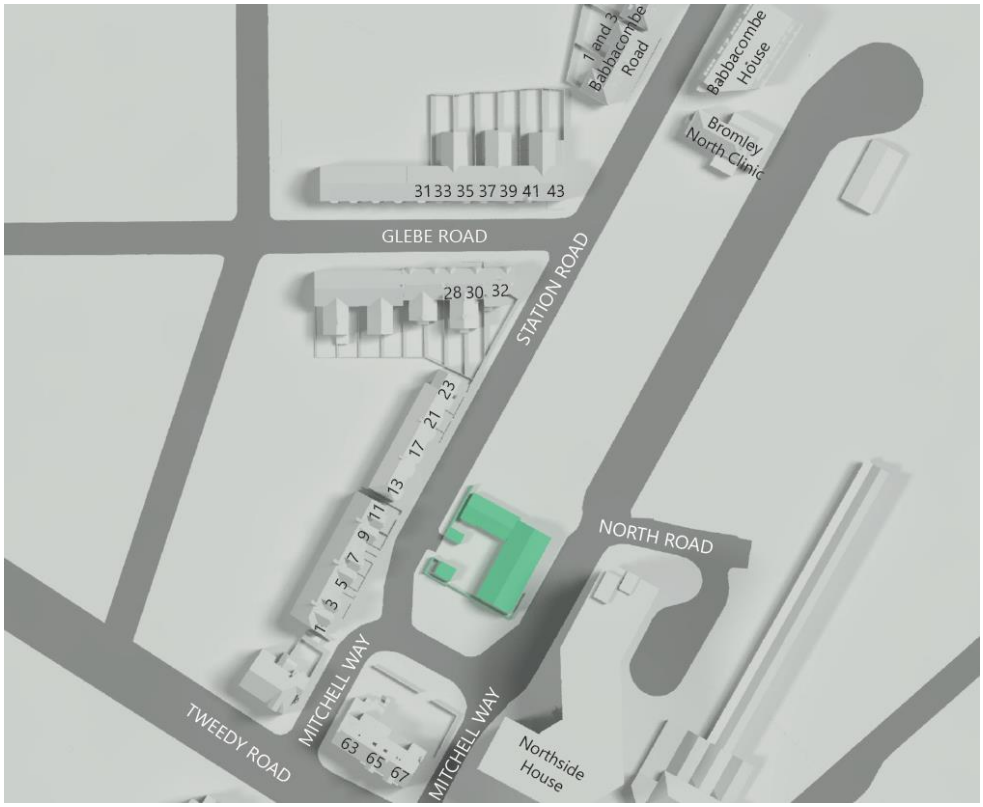


Image 2 - Map showing site location and neighbouring residential properties

7.1.3 The following neighbouring properties either experience no material change as a result of the proposals or experience changes to non-habitable space. As such the effects to these properties are considered fully compliant with the BRE guidelines for daylight and sunlight: -

- 1-3 Babbacombe Road
- Babbacombe House
- 1-3 Mitchell Way (odds)

7.1.4 Full results of the daylight and sunlight effects of the proposed scheme upon all the neighbouring properties are attached within Appendix 2 of this report.

7.1.5 A detailed commentary of the effects to the remaining neighbouring properties is set out below.

5-11 Station Road (odds)

Image 3 - Front elevation of 5-11 Station Road (odds)

7.1.6 These 3-storey terraced properties front Station Road, to west of the existing buildings. There are a number of windows across the front elevations that will have a view of the proposal.

7.1.7 The internal modelling of these properties has been based on a combination of assumed layouts and planning drawings in relation to no.11 (planning ref: 09/00409). The ground floor hallways/ entranceways are not considered relevant for assessment under the BRE guidance given their non-habitable use.

Daylight

7.1.8 The results of our Vertical Sky Component (VSC) assessment demonstrate that the majority of the front elevation windows will retain VSC levels within 0.80 times their former values and will therefore comply with the BRE targets.

7.1.9 Whilst there are reductions beyond the BRE targets to ground floor bay windows, paragraph 2.2.6 within the guidance states that in such circumstances, the principle central window of the bay can be considered as the main window. On this basis, the VSC effect to the ground floor bay and first floor windows either meet the recommended targets or are limited to very marginal transgressions which are within 0.70 times their existing position. In terms of the two affected first floor windows at no.11 (W1 & W2), these are understood to serve bedrooms which are regarded 'less important' for daylight under the BRE.

7.1.10 Notwithstanding the minor shifts recorded, the absolute retained VSC values across the principal ground floor bay windows and two first floor bedroom windows are within a range of c.23.3%-26.2% and are therefore considered good for

development.

7.1.11 The limited impact on daylight across these properties is confirmed by the No-Sky Line (NSL) analysis which show that all but one of the neighbouring rooms will retain daylight distribution levels in accordance with the BRE criteria. Although a single room falls below the BRE targets, this is a very minor transgression with the retained NSL levels falling to 0.75 times its former level. Despite this, there remains good daylight penetration to this room with c.72% of the floor area maintaining direct sky visibility.

7.1.12 Overall, whilst there are proportional reductions marginally below the BRE recommendations, they are very minor effects and would not have a significant impact on the daylight amenity to the neighbours.

Sunlight

7.1.13 In terms of sunlight, our Annual Probable Sunlight Hour (APSH) study show that all habitable spaces with a southerly aspect will retain excellent levels of direct sunlight well in excess of the BRE criteria of 25% APSH and 5% during the winter months.

13-23 Station Road (odds)

Image 4 - Front elevation of 13-23 Station Road (odds)

7.1.14 This row of 2-storey terraced properties is located to the west of the site, across Station Road. There are several windows to the front elevations overlooking the proposals and have therefore been considered for potential daylight / sunlight effects.

7.1.15 Our modelling of these properties is based on a combination of assumed layouts and estate agent floorplans for no.13 and no.17. Again, where ground floor openings

are understood to serve hallways or bathrooms, we have not considered the potential impact to these in line with the BRE recommendations.

Daylight

7.1.16 These properties enjoy an unusually open outlook across the existing surface car park element of the site. Given this unusually high starting point for an urban location any development of reasonable scale on the site will inevitably lead to larger proportional changes from the existing amenity levels. Our VSC results show there are windows across these properties that experience a change beyond the BRE criteria.

7.1.17 The majority of the effects are to ground and first floor windows within a bay such that the central window can be considered as the main window. Despite there being proportional reductions beyond the BRE targets to these bay windows, the retained levels to the main window remain high with the proposal in place at between c.18%-22%. Retained VSC values within this range are typically considered to be good for urban development particular in greater London.

7.1.18 The retained daylight levels across these neighbours are confirmed by our NSL analysis which shows that all of the habitable rooms either retain daylight distribution levels in accordance with the BRE guidelines at 0.80 or are limited to modest deviations from the guidelines within 0.69-0.75 times their existing level. The proposal is therefore not considered to result in a significant change in daylight penetration to the neighbouring rooms.

7.1.19 Overall, while effects are experienced below the BRE recommendations, these are principally driven by the underdeveloped nature of the existing site such that transgressions are unavoidable. Given retained daylight levels remain good and would be commensurate for a development in London the scheme is unlikely to materially impact the pattern of use of these properties. As such, these effects are considered fully acceptable and in line with the BRE guidelines and planning policy.

Sunlight

7.1.20 Our APSH study show that all habitable rooms served by windows within 90° of due south will significantly exceed the BRE criteria of 25% APSH with at least 5% during the winter months.

28-32 Glebe Road

Image 5 - Aerial view of 28-32 Glebe Road

7.1.21 These 2-storey terraced dwellings front Glebe Road, to the west of the development site across Station Road. Their rear elevations are orientated to the south and contain windows that will have a view of the proposals.

7.1.22 Some of the rear windows at no.30 are restricted in their outlook being inset to the rear elevation and enclosed upon by the rear outrigger element of no.32. This reduces existing amenity level and potentially makes the windows at no.30 more sensitive to neighbouring development.

Daylight

7.1.23 Our VSC analysis demonstrate that the retained levels across the majority of the neighbouring windows comply with the BRE criteria with the proposal in place. There are two localised effects to the floor flank windows at no.30 (labelled as W2 and W3 in our window maps) As noted above, these windows are in their existing outlook due to the obstruction of the neighbouring property at no.32, which makes them sensitive to changes. The BRE states that larger relative reductions may be unavoidable where existing windows have projecting wings on one or both sides, therefore a degree of flexibility should be applied in this case.

Image 6 - Street view of ground floor windows at no.30

7.1.24 Additionally, there are VSC effects beyond the BRE targets to some individual ground and first floor windows at no.32, although these are understood to serve rooms that contain multiple windows. Paragraph 2.2.6 within the BRE guidance states that in such circumstances, the mean VSC may be considered. On this basis, the mean effects are either in accordance with the BRE guidelines or the retained VSC levels are at 0.73-0.74 times their former value and therefore limited to very minor shifts from the 0.80 ratio target. Such minor transgressions are unlikely to result in a significant change from the existing daylight levels.

7.1.25 This is verified results of the NSL assessments for no.28-32 show that the neighbouring rooms retain daylight distribution levels in accordance with the BRE recommendations or are limited to minor shifts of only up to 0.76 times the former value compared to the 0.80 target.

7.1.26 Overall, the scheme is not considered to have a material impact on the daylight amenity within these neighbouring properties and therefore the effects are considered acceptable and in line with the design principles set by the BRE guidance.

Sunlight

7.1.27 Our sunlight assessment demonstrates that all habitable rooms with a southerly aspect will either have an annual reduction of no more than 4% or will maintain good levels of sunlight materially in excess of the BRE target of 25 % total APSH and 5% during the winter months.

31-43 Glebe Road (odds)

Image 7 - Front elevation of 31-43 Glebe Road (odds)

7.1.28 This row of 2-storey terraced houses is situated to the west of the site on the northern side of Glebe Road, all of which have windows across their front elevation overlooking the scheme.

Daylight

7.1.29 As these properties are served by bay windows at ground and first level, we have considered the VSC effect to the principle central window in line with the BRE guidance. Our VSC results have shown that all central bay windows across 31-43 Glebe Road will retain VSC levels within 0.80 times their former value and therefore meet the BRE targets.

7.1.30 There is a single first floor window that experiences a very minor shift below the VSC target value of 27%, retaining an absolute level of 26.8%. This is considered an unnoticeable shift from the recommended value.

7.1.31 The NSL results show that all of the neighbouring habitable rooms record no material loss in daylight distribution to the rooms where all rooms remain within 00.80 the existing position and thus fully comply with the BRE targets.

7.1.32 As such, these neighbours will retain good levels of daylight amenity, with the effects of the proposal considered acceptable and in line with the BRE recommendations for VSC / NSL daylighting.

Sunlight

7.1.33 The results from our sunlight analysis show that the neighbouring rooms served by the windows across the front elevation, will retain excellent levels of sunlight with APSH levels that considerably exceed the BRE criteria for direct sunlight.

Bromley North Clinic

Image 8 - Street view of Bromley North Clinic from Station Road

7.1.34 This 2-storey building is situated on Station Road, to the north of the development site boundary and was previously used as a clinic but is now currently unoccupied.

7.1.35 We understand that the neighbouring site received outline planning permission (Appeal Ref: APP/G5180/W/16/3164927) in May 2017 for the demolition of the existing clinic building on the site and the redevelopment with a 3-storey building comprising of residential accommodation.

7.1.36 The approved 3-storey building will be sufficiently offset to the north of the site and only contains windows within its eastern / western facades facing away from the proposal. As such the consented development will not experience any noticeable daylight or sunlight effects as a result of the scheme.

7.2 Planning Precedents

7.2.1 As noted above the proposal directly responds to the neighbouring context and generally performs well against the BRE target criteria. The effects to some of the closest neighbouring experience deviations from the recommended target levels however the London Plan, NPPF and recent appeal decisions recognise the need for flexibility to optimise the land use of sites particularly for housing.

7.2.2 The Mayor of London's Housing SPG states that regard should be had for the need to optimise housing capacity at sites. Furthermore, when considering daylight / sunlight effects to the neighbouring properties it recommends that alternative daylight targets can be drawn from broadly comparable typologies within the area:

"1.3.46 The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm"

7.2.3 Such an approach has been applied elsewhere in the Borough with the following consents illustrating where comparable reductions have been evident and similar retained amenity has been considered acceptable.

Site Address	Summary of Proposed Scheme	Summary of Daylight & Sunlight impacts to neighbours
208 – 212 High Street Orpington BR6 0JN July 2021	The construction of a 5-storey block, comprising 40 residential units.	• The report indicates that the proposed development would lead to VSC effects to a neighbouring property that deviate from the BRE guidance • The affected windows experience proportional reductions of c.0.68 times their existing value. Absolute levels within a range of c.18%-23% were deemed acceptable.
Pike Close Estate February 2022	The construction of 2-3 storey houses and apartment buildings ranging from 4 to 13 storeys.	• The daylight/sunlight report submitted alongside the planning application details that the scheme development will lead to VSC changes beyond the BRE targets. • Absolute retained VSC values were within a range of c.17.5%023.5% and within 0.61-77 times their existing levels. These proportional reductions and retained VSC levels were considered acceptable.

7.2.4 The above examples demonstrate the flexible approach to daylight / sunlight effects that are appropriate in London locations and which have been considered acceptable in recent decisions by the London Borough of Bromley. In particular these schemes demonstrate that similar deviations from the BRE targets may occur in areas of

changing context however retained VSC levels around the 'high teens' may be considered acceptable as broadly typical of urban development.

7.2.5 Both the principles accepted in these earlier decisions and the detailed technical results support our view that the Bromley North proposals are acceptable within its context.

7.3 Overshadowing to neighbouring amenity

Sunlight Amenity Assessment (2-hour sun on ground)

7.3.1 The BRE guide defines criteria by which to assess the impact of a proposed development on open spaces using the sunlight amenity test. This test quantifies the area of each space that receives at least two hours of sunlight on the 21st of March, in both the existing and the proposed situations. The 21st of March is chosen as it represents the mid-point of the sun's position throughout the year.

7.3.2 The guidance suggests that, for a space to appear well-sunlit throughout the year, at least 50% of its area should receive two or more hours of sunlight on the 21st of March. If the space fails to meet the above, then the area receiving at least 2 hours of sunlight should not be reduced to less than 0.8 times its former area.

7.3.3 Our assessments have considered the neighbouring gardens to the rear of 28-32 Glebe Road given their orientation and proximity to the site. The results of the analysis are shown below and in more detail on our drawings labelled 5153-SA01 within Appendix 3.

Image 9 - BRE 2-hour sun contour to the gardens of 28-32 Glebe Road on 21st March

7.3.4 The results of our 2-hour sunlight assessment shows that the neighbouring gardens at 28-30 Glebe Road receive at least 2 hours of direct sunlight to c.68%-80% of their area on the 21st March and therefore exceed the BRE recommendations for 50% of the space achieving at least 2 hours of sunlight on the 21st March.

7.3.5 In respect of the remaining rear garden at 28 Glebe Road, this space is situated to the north of the Station Road terrace such that they are already shaded on the March 21st by the neighbouring property at 23 Station Road to the south. Whilst this rear garden experiences a deviation from the BRE criteria, this is a minor deviation from the recommended target level of 50% at 43% sunlit. This minor reduction of 7% from the guidelines is unlikely to materially affect the use / enjoyment of the space across the year where sunlight levels will only improve from this date.

7.3.6 Whilst the rear garden of 28 Glebe Road is below the BRE targets, our sunlight exposure diagrams are useful in illustrating that a large portion of the rear garden at 28 Glebe Road is only marginally below the recommended 2-hour threshold between 1.6-2 hours where areas are graded yellow to orange (area 1 below).

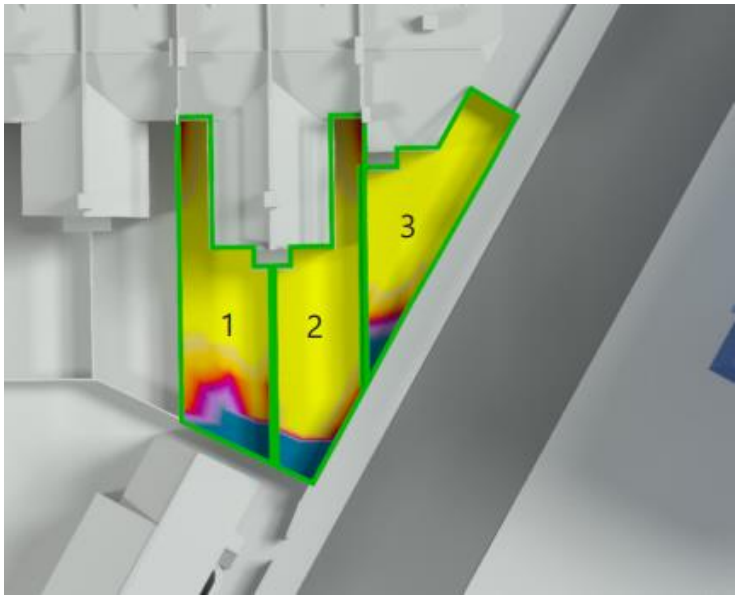


Image 10 - Sunlight exposure to gardens at 28-32 Glebe Road

7.3.7 To further supplement our assessments, we have undertaken an additional overshadowing assessment on the 21st June to understand sunlight condition during the summer months when the use of the spaces may be at their highest. Our assessment shows that in the summer months all three of the gardens would achieve good levels of direct sunlight well over 50% of the space receiving 2+ hours.

7.3.8 Given the overshadowing effects are limited to a minor transgression from the guidelines which is unlikely to have a significant impact on the amenity / use of the space across the year, the sunlight effects to the neighbouring gardens are considered fully acceptable and in line with the aspirations of the BRE guidelines.

7.4 Daylight and sunlight within the proposal

7.4.1 The daylight and sunlight amenity provided within the proposed residential accommodation has been assessed using the ADF and APSH tests following the methodology of the BRE 2011 guidance. This is consistent with the targets in use during design development and the pre-application stage. Given the very high level of compliance with these targets, the scheme is considered to be of very high quality.

7.4.2 Full results of the daylight and sunlight assessments within the proposed apartments, along with drawings to show the layout of rooms and windows, are attached within Appendix 3.

7.4.3 Given the neighbouring context is predominantly between 2-3 storeys, we have limited our internal daylight and sunlight assessments to the lowest 3 levels of the proposed accommodation. As outlook and sky visibility will only increase at the upper levels of the building, daylight / sunlight levels will only improve from our analysis of the lowest floor level.

7.4.4 As noted above, the neighbouring site at Bromley North Clinic received an approval decision in May 2017 for a 3-storey building and we have therefore included the consented massing within our assessment given the increased height from the existing building currently in place.

Daylight

Room Type	ADF Target	Total No. of Rooms	Rooms That Meet ADF Target
Living Kitchen Dining (LKD)	1.5%	36	36 (100%)
Bedroom	1%	58	58(100%)
Total		**94**	**94(100%)**

Table 2 - Summary ADF results for proposed accommodation

7.4.5 The results of the ADF assessment have shown that all 94(100%) of the habitable rooms in both blocks 1 and 2 across the ground, first and second floor level exceed the targets for their specific room use and therefore fully comply with the BRE guidelines and British Standard guidance criteria.

7.4.6 As daylight availability will only increase at the upper floors, the current proposals are considered fully compliant for internal daylight amenity under the BRE guidelines.

Sunlight

Room Type	Total No. of rooms	Rooms that meet APSH/WPSH criteria
living rooms	25	17 (68%)

Table 3 - Summary APSH results for proposed accommodation

7.4.7 The focus of the BRE sunlight guidelines is on main living rooms, rather than bedrooms and kitchens, which the guide views as less important: - "***3.1.2 In housing the main requirement for sunlight is in living rooms, where it is valued at any time of day but especially in the afternoon. Sunlight is also required in conservatories. It is viewed as less important in bedrooms and in kitchens***"

7.4.8 The results from our sunlight assessment have shown that 17 out of the 25 (c.68%) living spaces across the ground, first and second floor within 90 degrees of due south, comply with the BRE targets.

7.4.9 All 8 of the LKDs that fall below the APSH targets have windows that are situated beneath private balconies (B1 113 & 135; B2 209, 213-214 & 229, 233 & 234) and predominantly east / west facing such that sunlight availability will inevitably be lower. Although the presence of balconies reduces internal sunlight levels, the external space itself benefits from direct sunlight and, as such, there is a common

trade-off between the balcony provision and internal sunlight levels.

7.4.10 Whilst direct sunlight levels are slightly lower to these living spaces, total annual levels are between the mid-teens to low twenties (16-21%) with winter levels only marginally below the 5% target at between 3-4% for WPS. Such isolated transgressions are common in modern flatted developments and given the future residents will benefit from well-sunlit private amenity space, the APSH compliance is considered acceptable.

8 Conclusions

8.1.1 This practice has undertaken a detailed assessment of the potential daylight and sunlight effects of the proposed development at the Bromley North Station Road Car Park on the key neighbouring properties.

8.1.2 In addition to the potential daylight and sunlight effects to the neighbouring properties, we have also considered the provision of daylight and sunlight within the scheme and the potential sunlight / overshadowing effects of the proposed development.

8.2 Daylight and sunlight impact to neighbouring properties

8.2.1 Our assessments have been undertaken using the VSC and NSL (daylight) and APSH (sunlight) tests set out within the BRE guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (2011).

8.2.2 The scheme has been designed to optimise the land use of the site for housing delivery and given the underutilised existing position, a degree of change to the neighbouring properties is unavoidable if the site is to be fully optimised for housing delivery. Notwithstanding this, the effects to the majority of neighbouring windows and rooms fully meet the BRE targets.

8.2.3 Where there are changes beyond the BRE guidelines to neighbours across Station Road and Glebe Road, the retained daylight levels are considered good for a regeneration scheme in London. Broadly the effects are unlikely to significantly impact their pattern of use of the space sand good overall levels of amenity will be retained. The proposal demonstrates a clear design response to minimise the effects upon the closest properties by incorporating setbacks at the upper levels and allowing a degree of separation between the proposed blocks.

8.2.4 The NPPF 2021 makes it clear that efficient use of sites, particularly for housing delivery, should not be limited by technical constraints and the proposals are not considered to result in unacceptable levels of harm to the neighbours.

8.2.5 A flexible approach to the application of the BRE guidelines is appropriate in respect of a regeneration scheme to a previously open site. This is supported by the precedent identified in recent planning applications to the area where similar effects and retained daylight levels have been considered acceptable.

8.2.6 With regards to sunlight effects all of the neighbours either meet or exceed the BRE target levels for Annual Probable Sunlight Hours (APSH) or would be unaffected by the proposals.

8.2.7 Overall, the scheme design works hard to directly respond to the neighbours whilst maximising housing delivery and is considered acceptable in line with the aspirations of the BRE guidance, as well as both local and national planning policy.

8.3 Overshadowing impact to neighbouring properties

8.3.1 The assessment of sunlight amenity (overshadowing) to the rear gardens of 28-32 Glebe Road has shown 2 of the gardens situated closest to the development site will fully satisfy the BRE criteria for sunlight amenity with the scheme in place.

8.3.2 A single garden at no.28 experiences a reduction from the targets of just 7% which is considered minor localised transgression. The sunlight exposure analysis to the rear garden at no.28 demonstrates that the majority of the area falling below the 2-hour threshold will enjoy c.1.6-2 hours sunlight on the 21st March. Our additional assessments on the 21st June show that all of the neighbouring gardens will enjoy good levels of sunlight in the summer months when the space will be used most.

8.3.3 These effects are unlikely to have a material impact on the pattern of use or overall amenity of the space and are therefore considered acceptable in line with the design principles set by the BRE guidelines in terms of sunlight amenity.

8.1 Daylight and sunlight within the proposed residential units

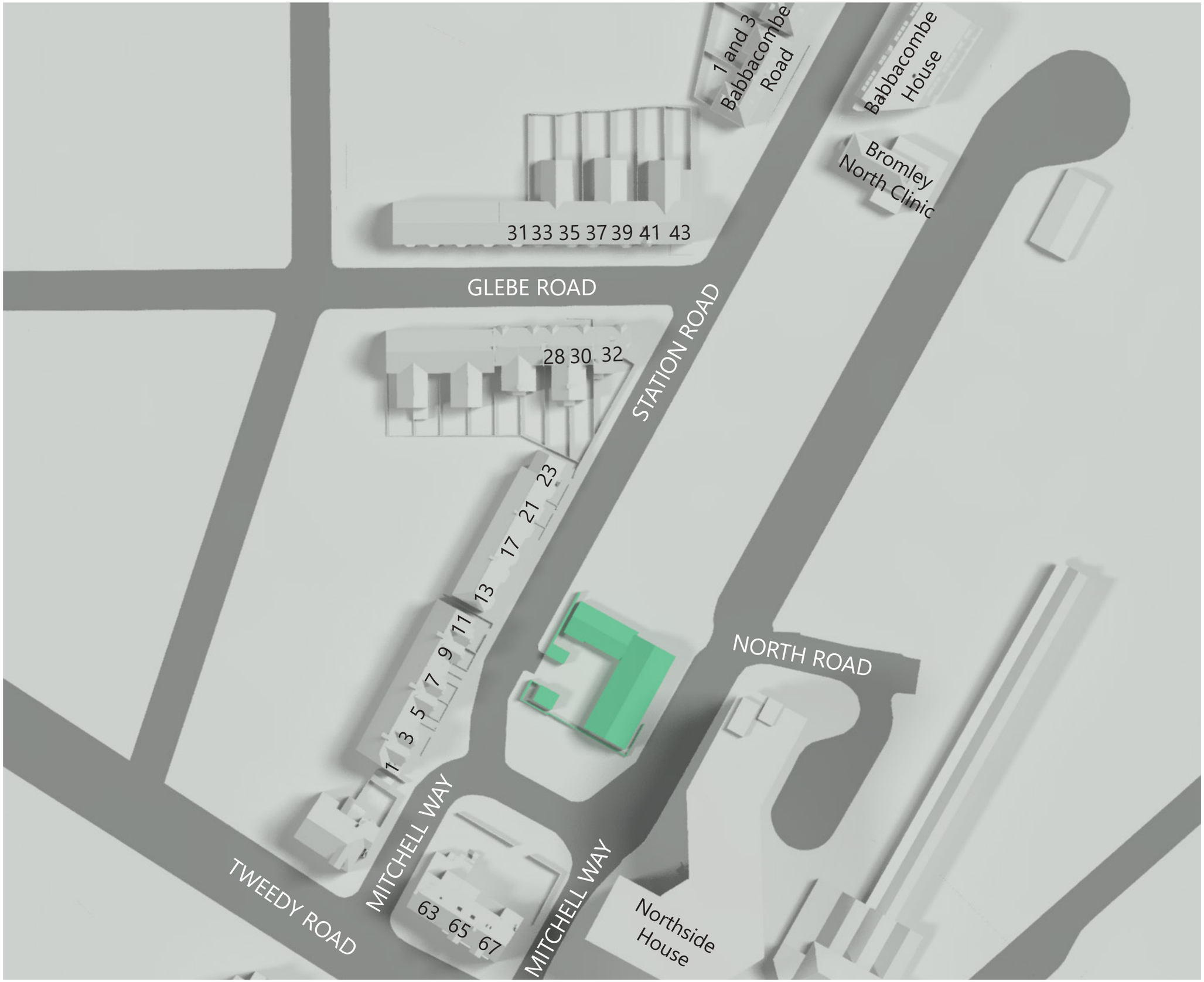
8.1.1 The assessment of daylight amenity within the proposed apartments has shown that all habitable rooms across the lowest 3 floors achieve ADF levels in excess of the BRE targets for their specific room use. The upper levels will enjoy even greater outlook such that amenity levels will only improve further.

8.1.2 In terms of direct sunlight, our assessments show a high level of APSH compliance where the majority of relevant main living spaces accord with the BRE criteria. In isolated instances where sunlight levels fall below BRE guidelines, this is a direct result of the provision of balconies providing valuable 'well-sunlit' private amenity areas, which further enhance the overall quality of the apartments. This is a common 'trade off' in modern flatted developments and the internal sunlight levels will only improve across the upper floors.

8.1.3 Overall, the proposed development is considered to respond appropriately to the nearby residential neighbours as well as providing a high-quality living environment for its future occupiers. As such, we consider the scheme to be in line with the design principles set by the BRE guidance and relevant planning policy, in respect of daylight and sunlight.

Appendix 1

Drawings of the existing site, proposed and surrounding buildings



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220811_2102_3D Model.3dm
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Key:

Existing

NORTH

Project: Bromley North Station Road Car Park

Title: Existing Condition Plan View

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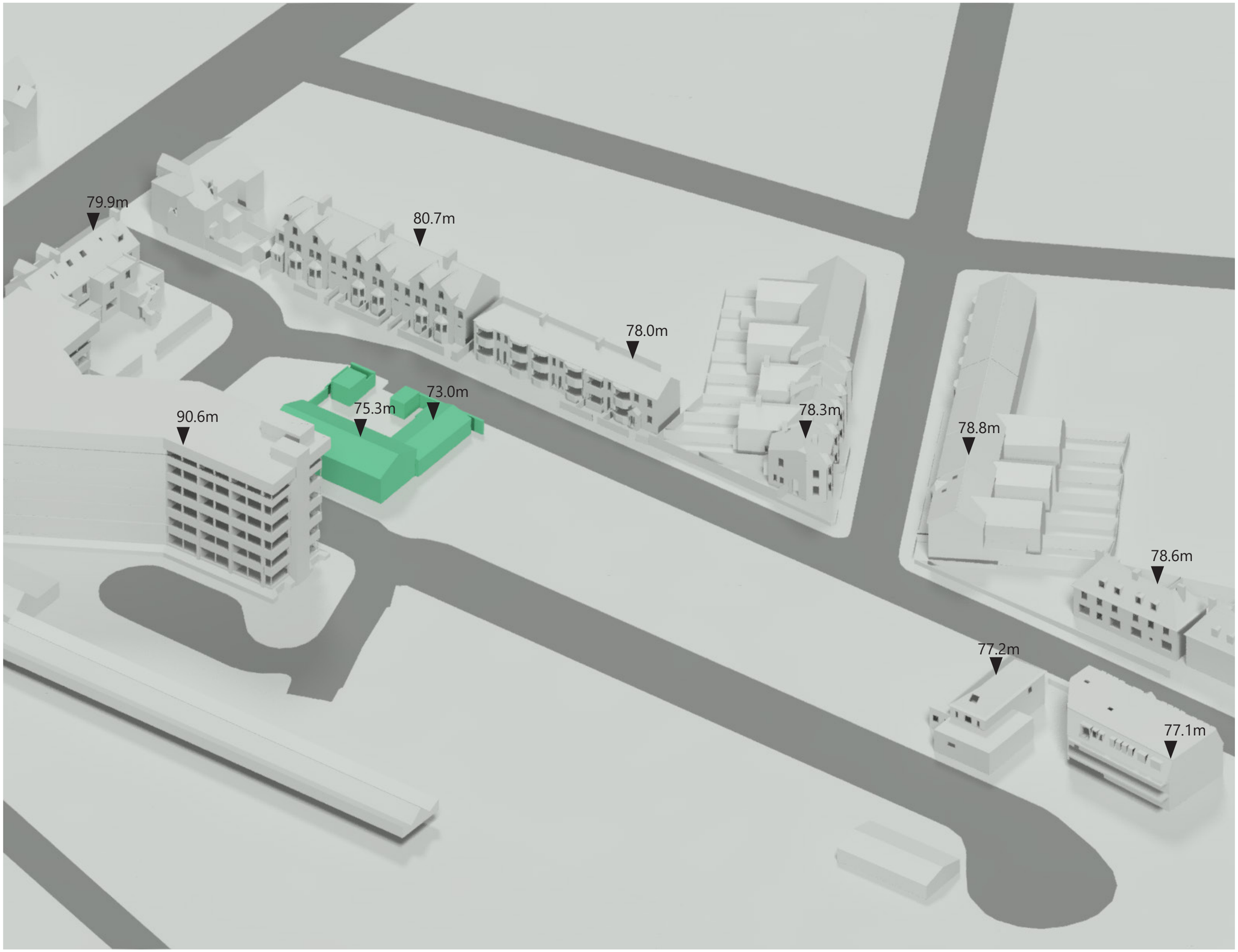

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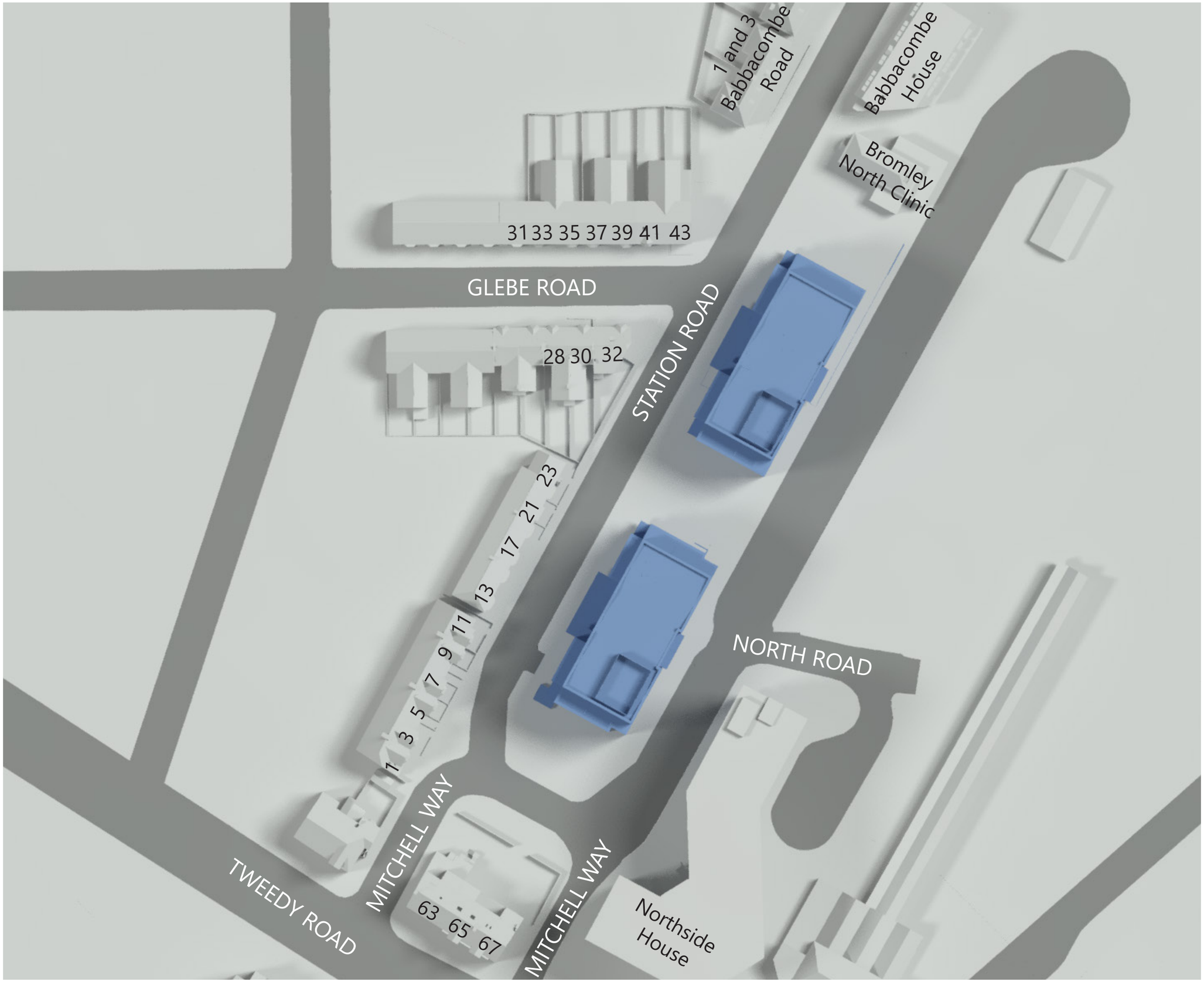

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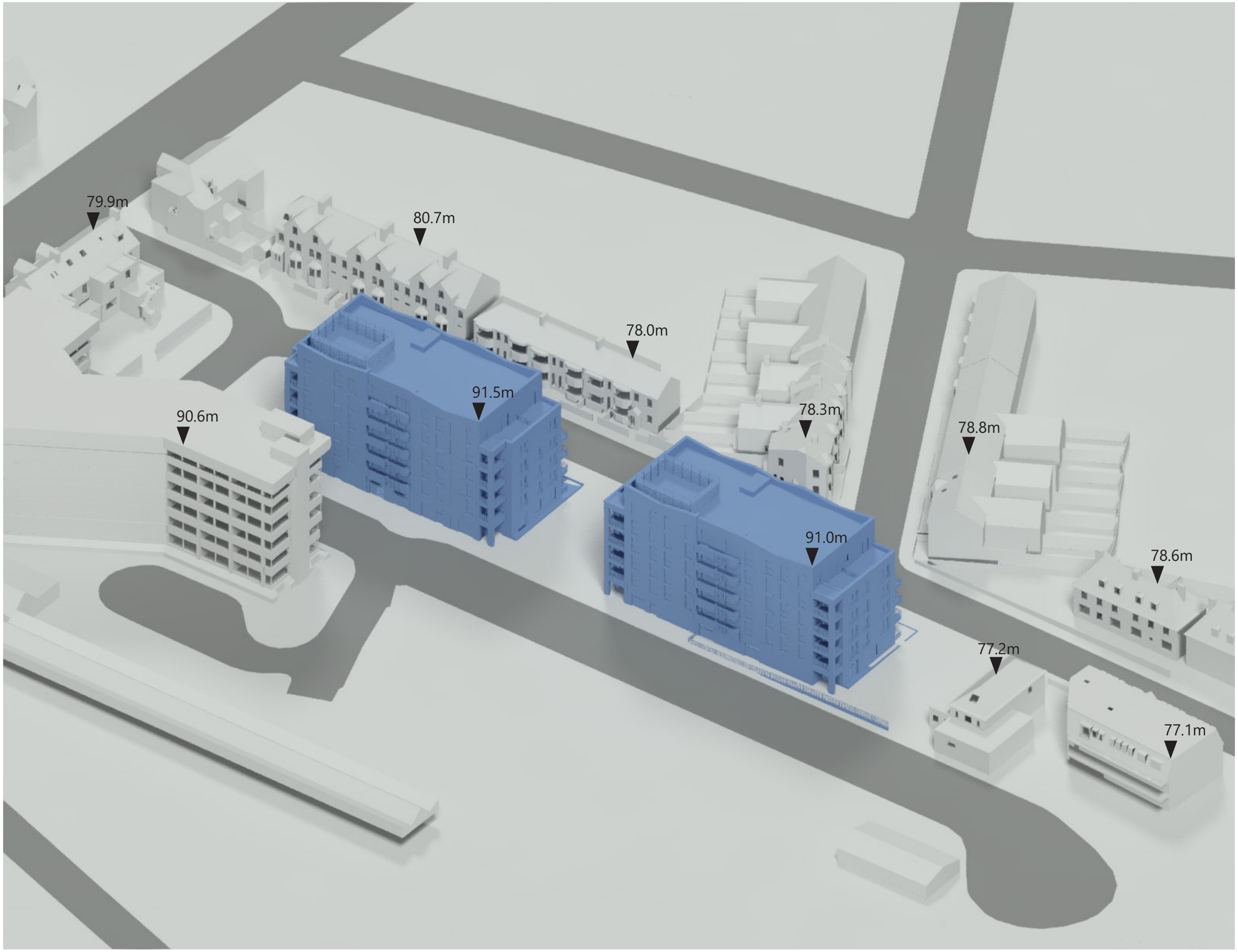

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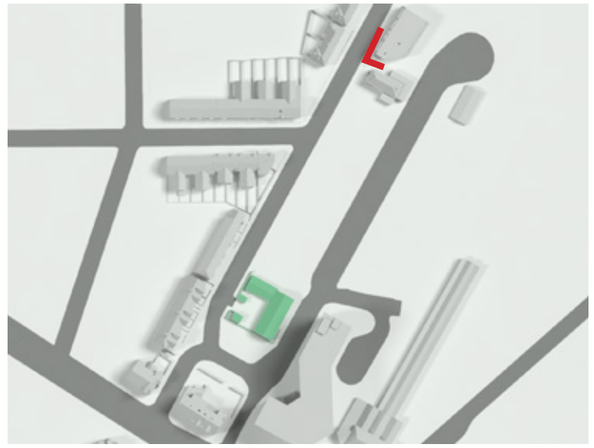

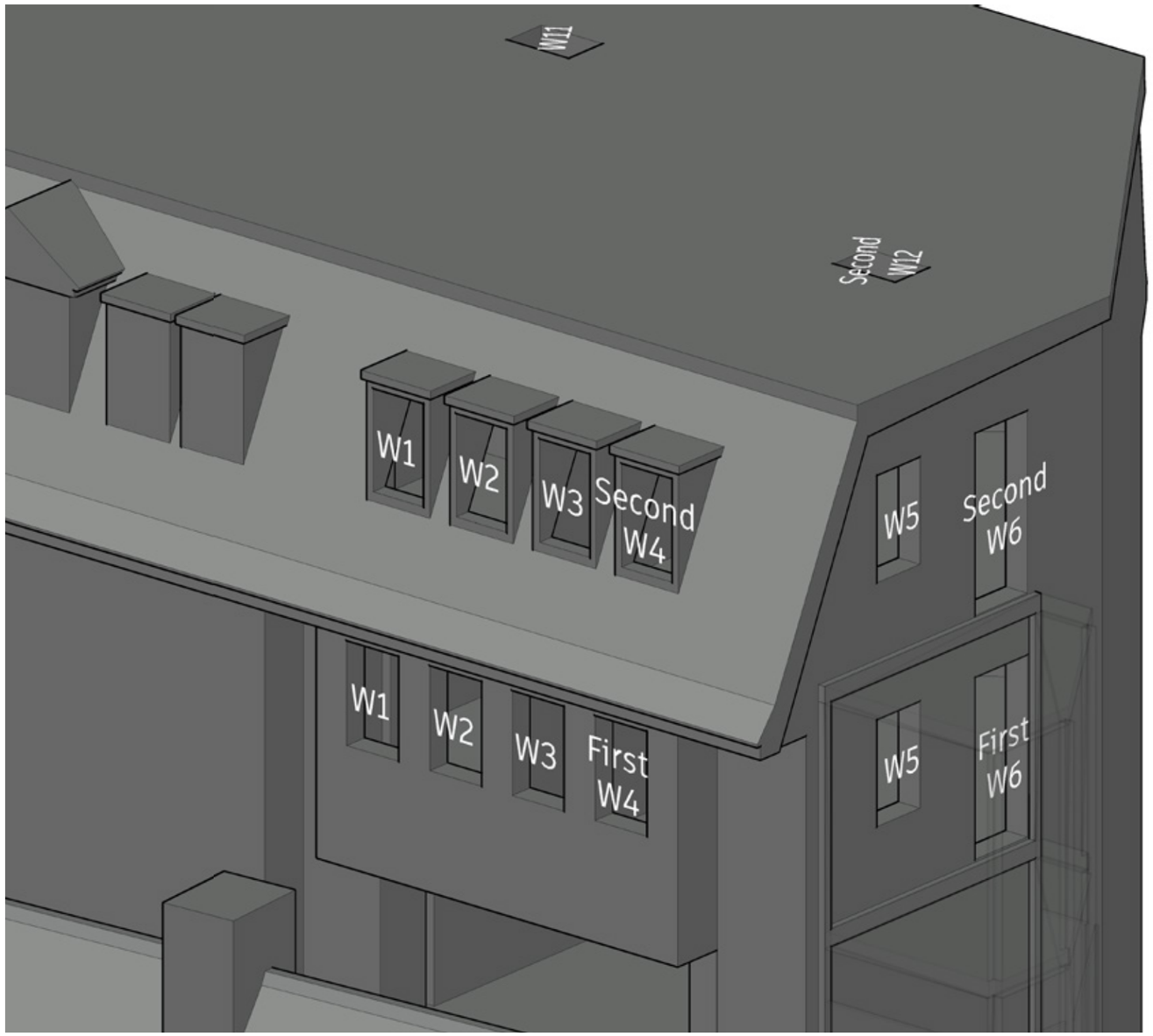

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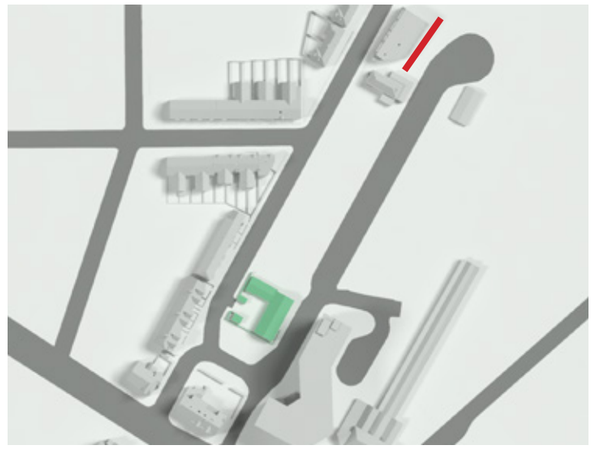

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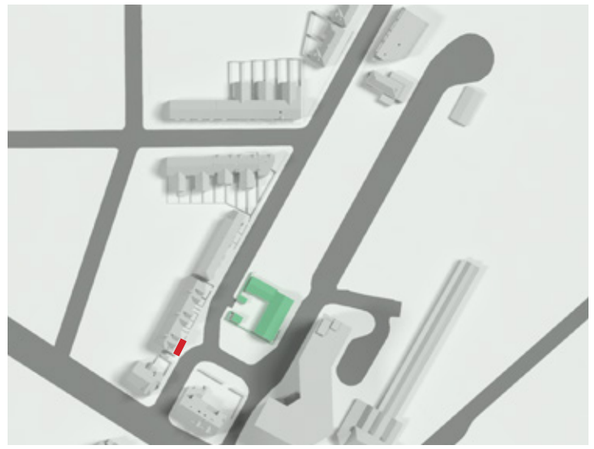

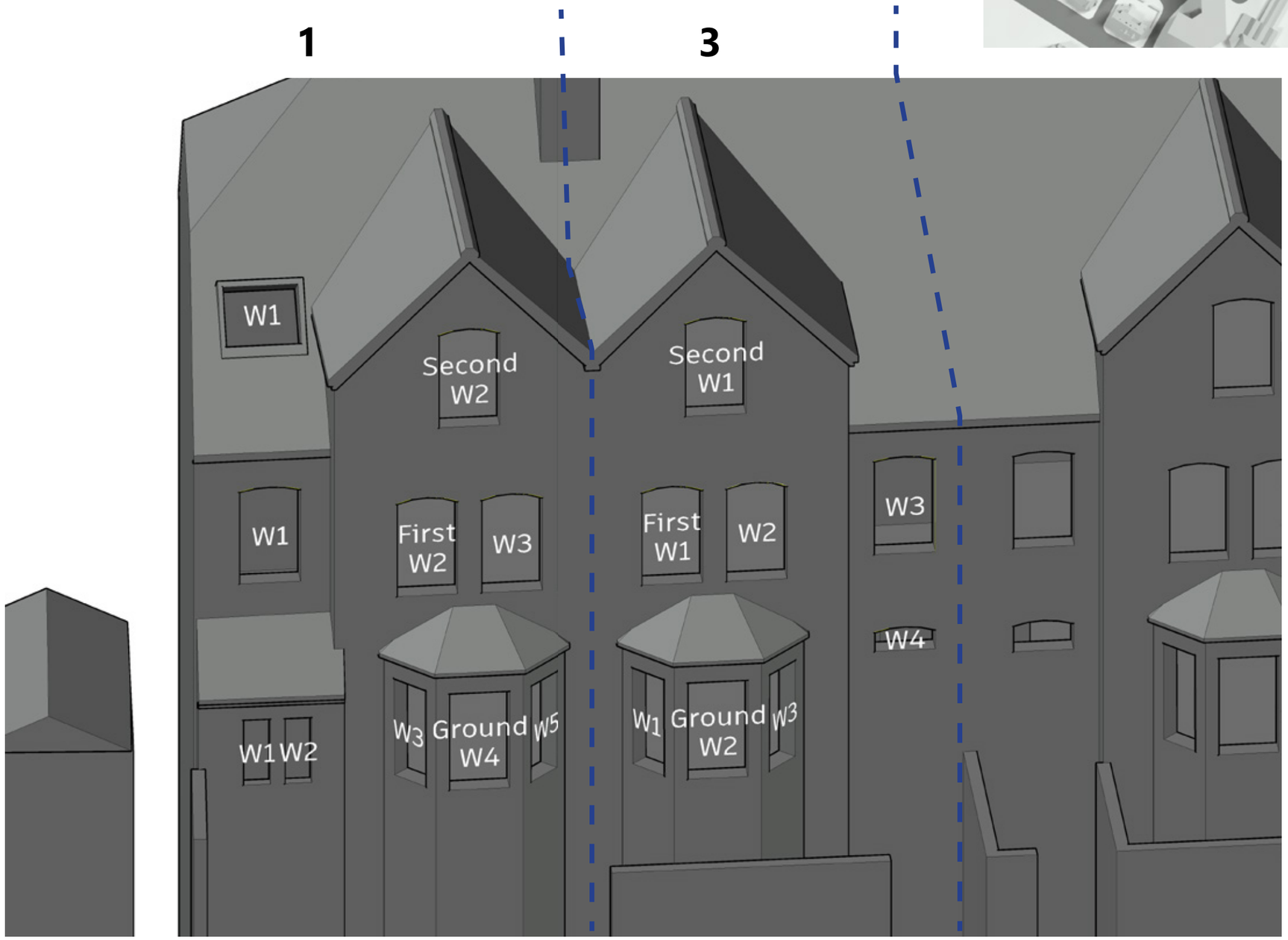

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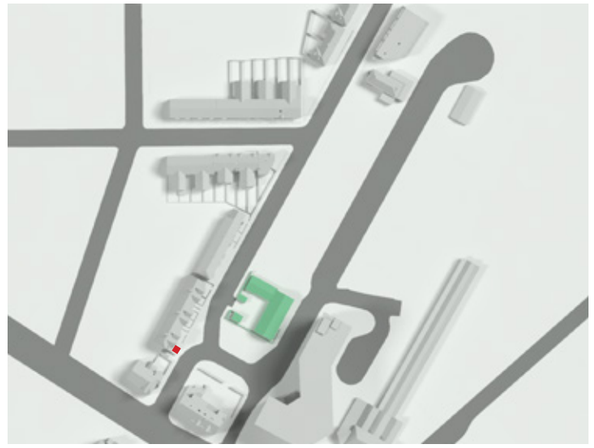

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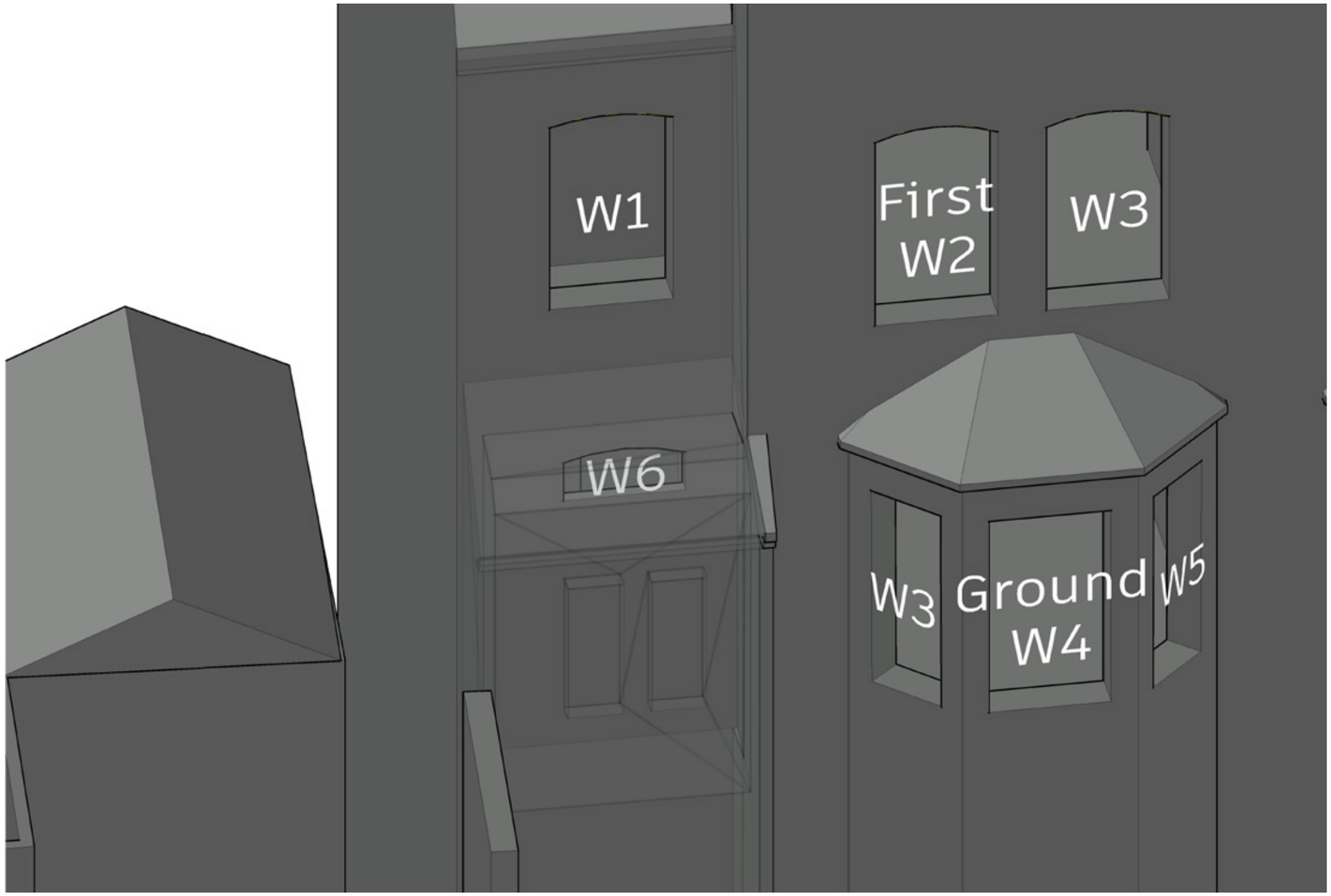

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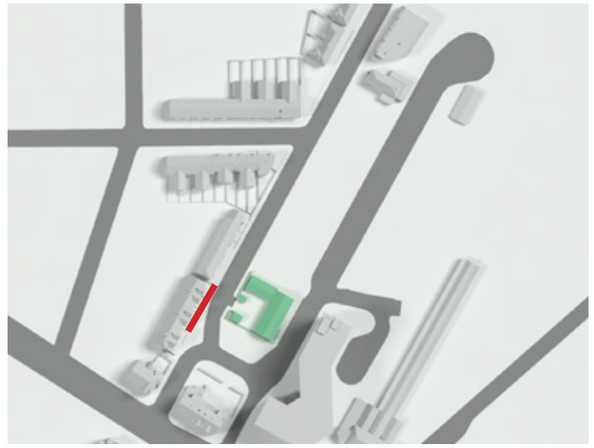

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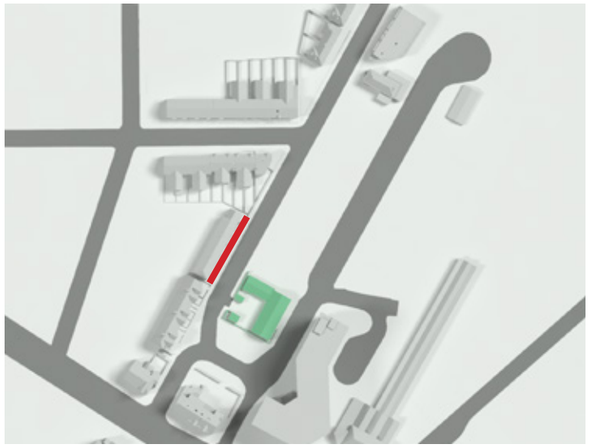

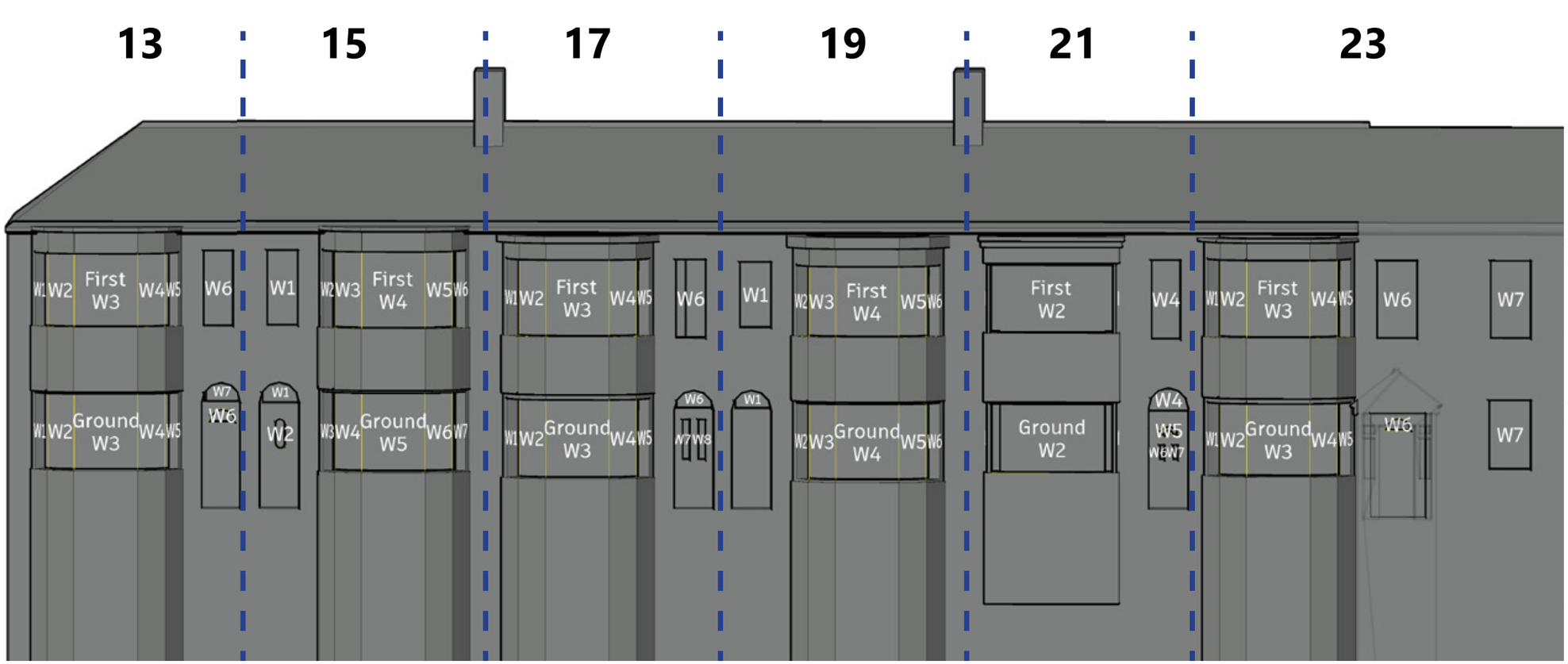

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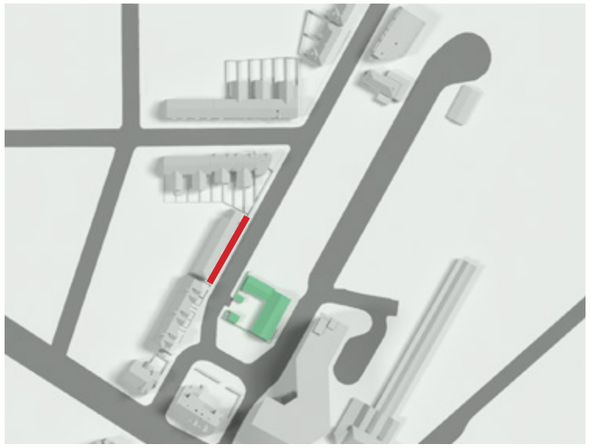

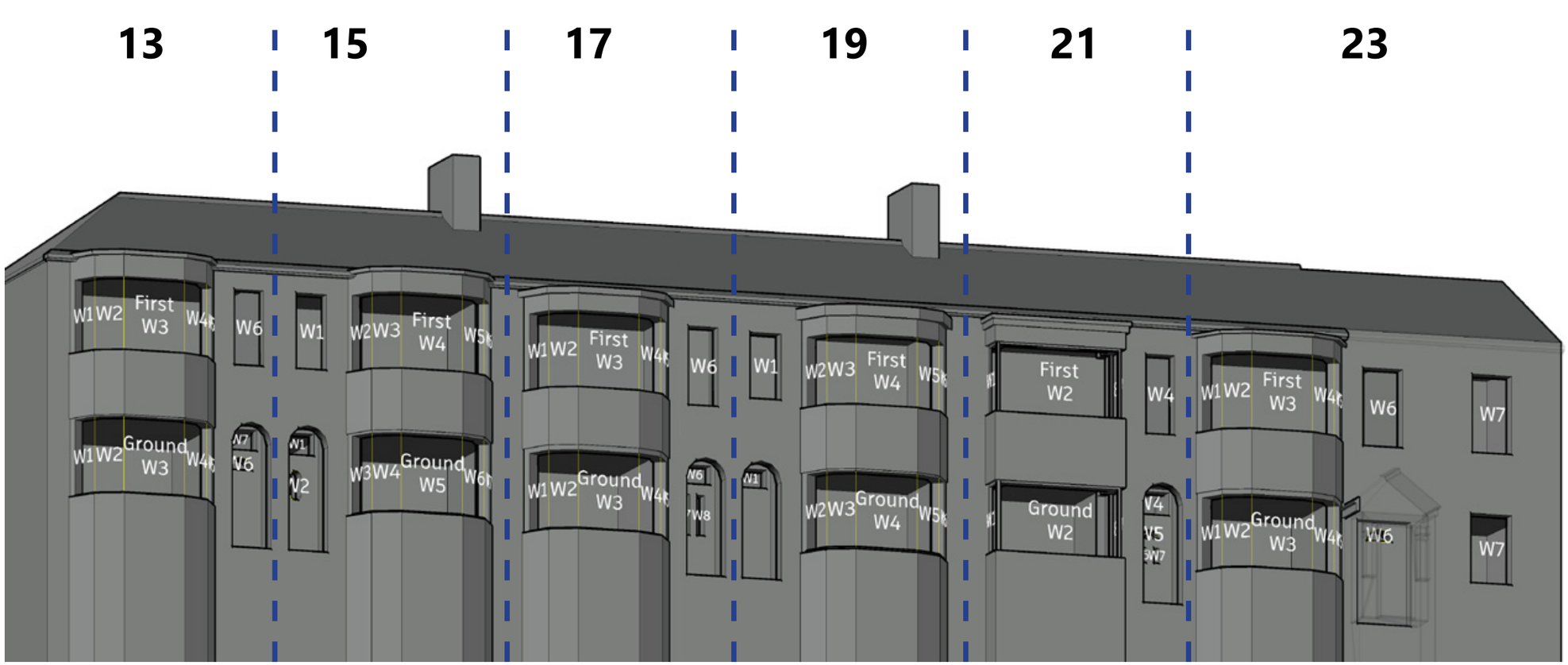

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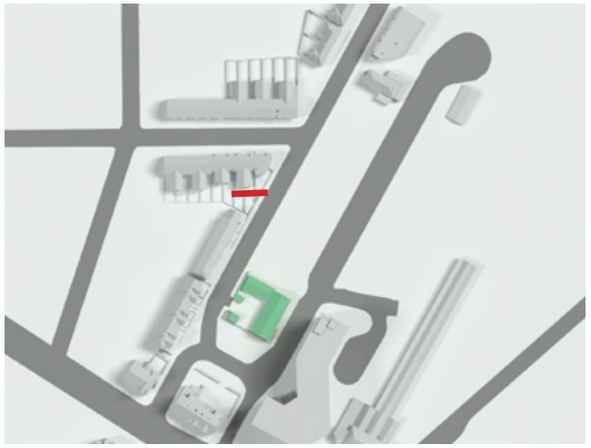

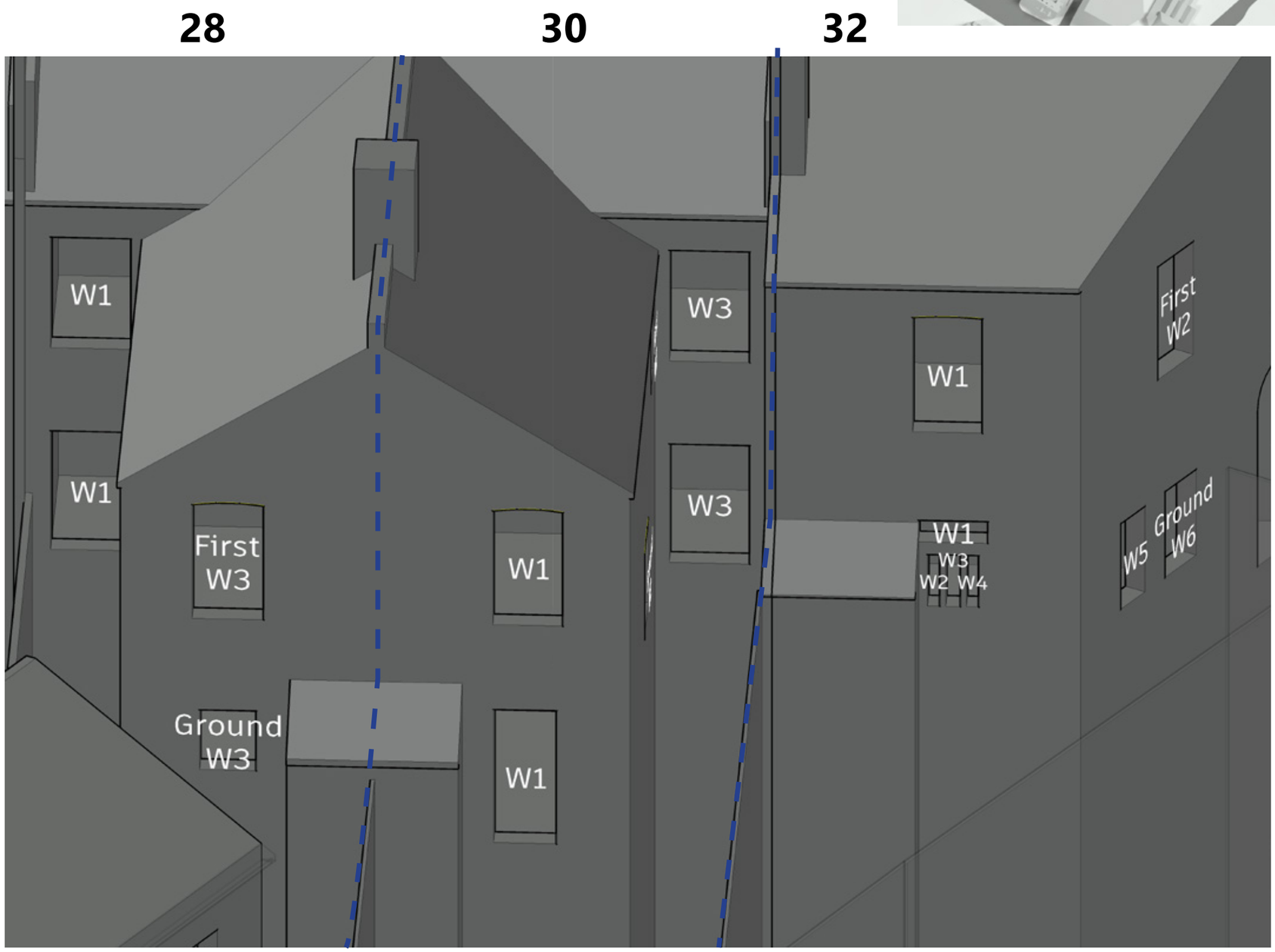

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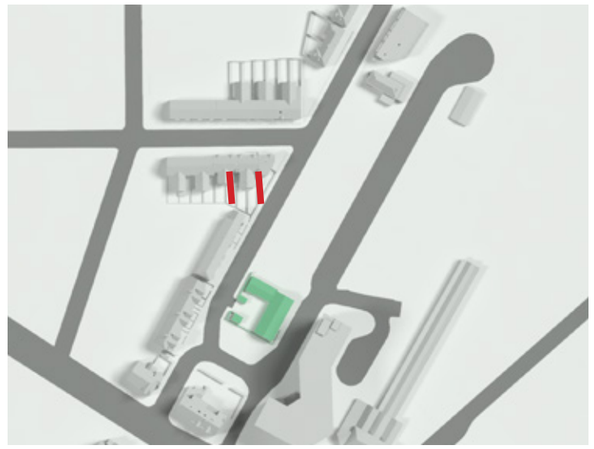

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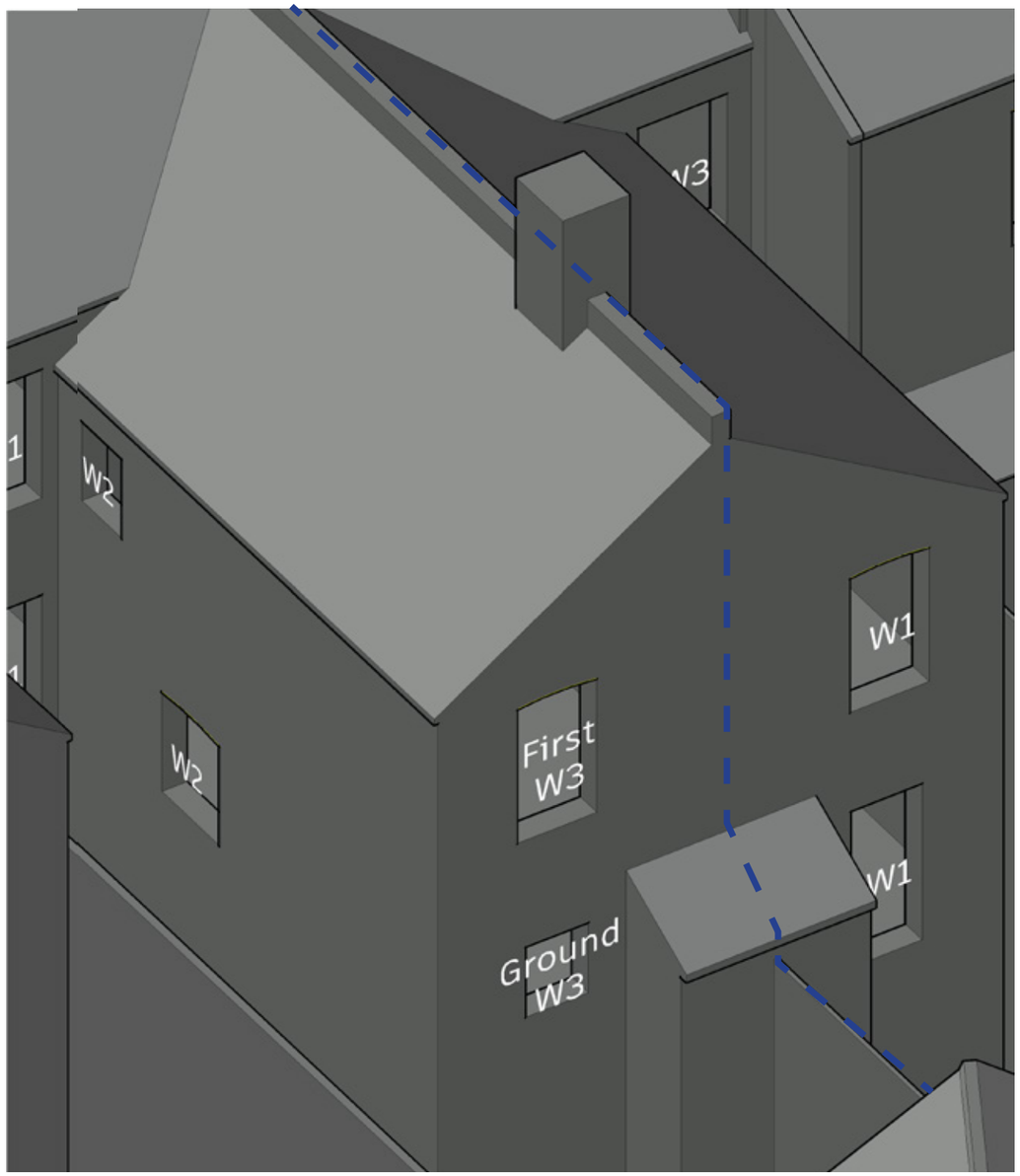

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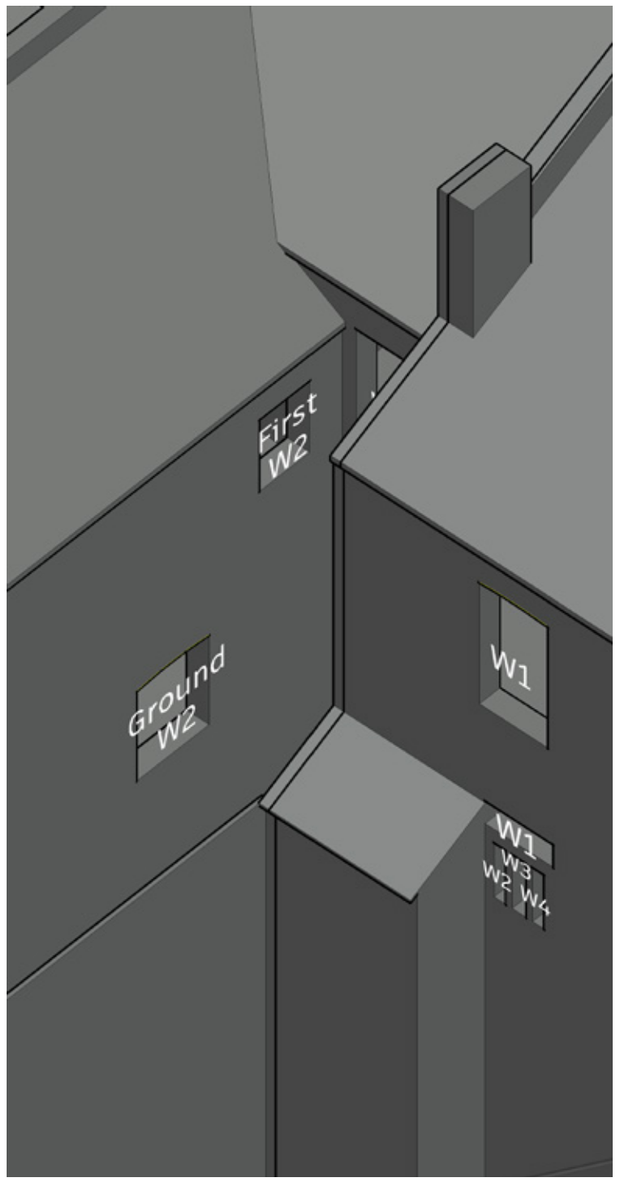

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Sources of information

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Project	Bromley North Station Road Car Park
Title	28 to 32 Glebe Road Window Map
Drawn	AP
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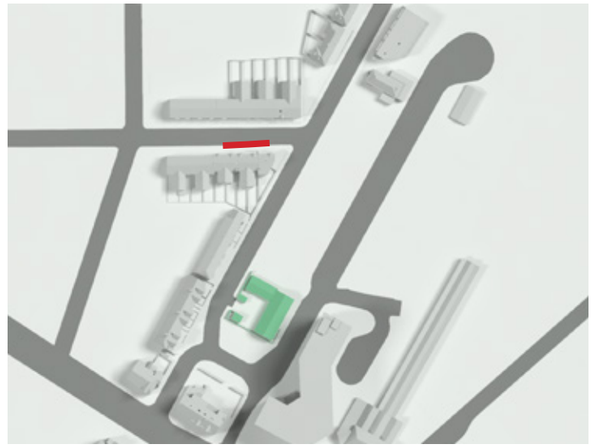

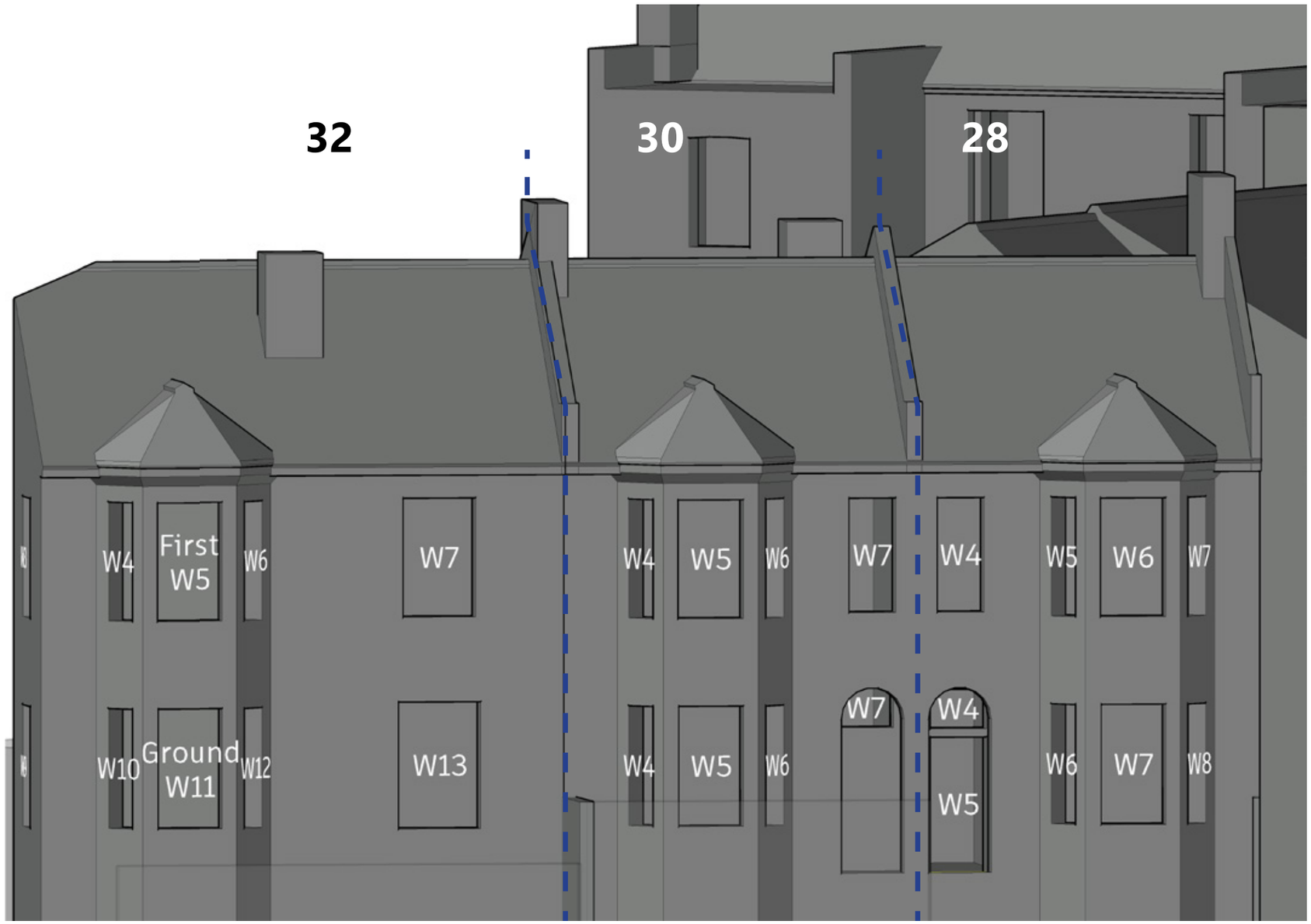

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Project	Bromley North Station Road Car Park
Title	28 to 32 Glebe Road Window Map
Drawn	AP
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Date	18/05/2022
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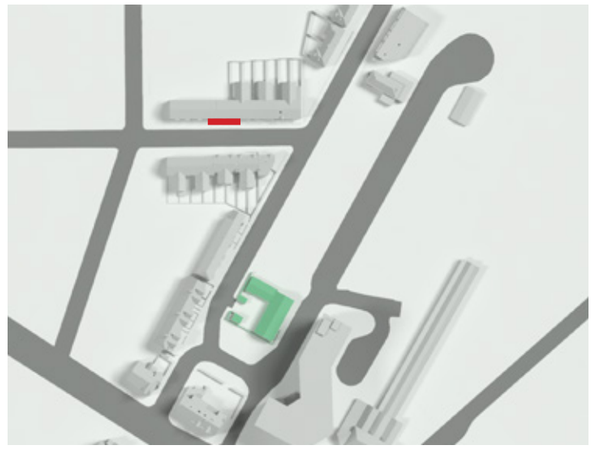

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Project	Bromley North Station Road Car Park		
Title	31 to 35 Glebe Road Window Map		
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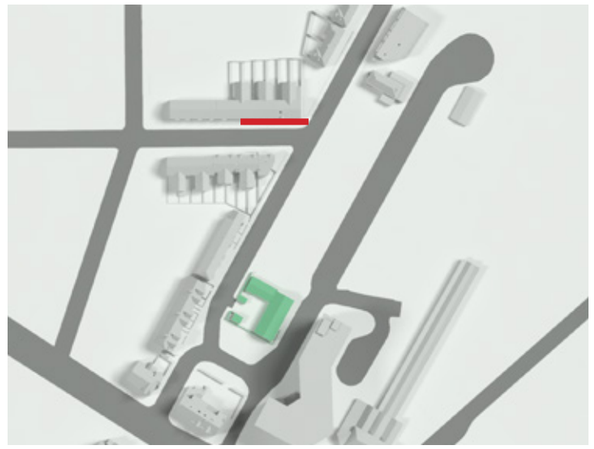

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Title	37 to 43 Glebe Road Window Map
Drawn	AP
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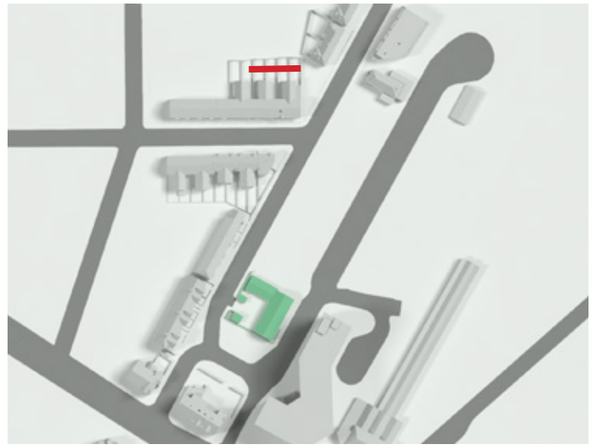

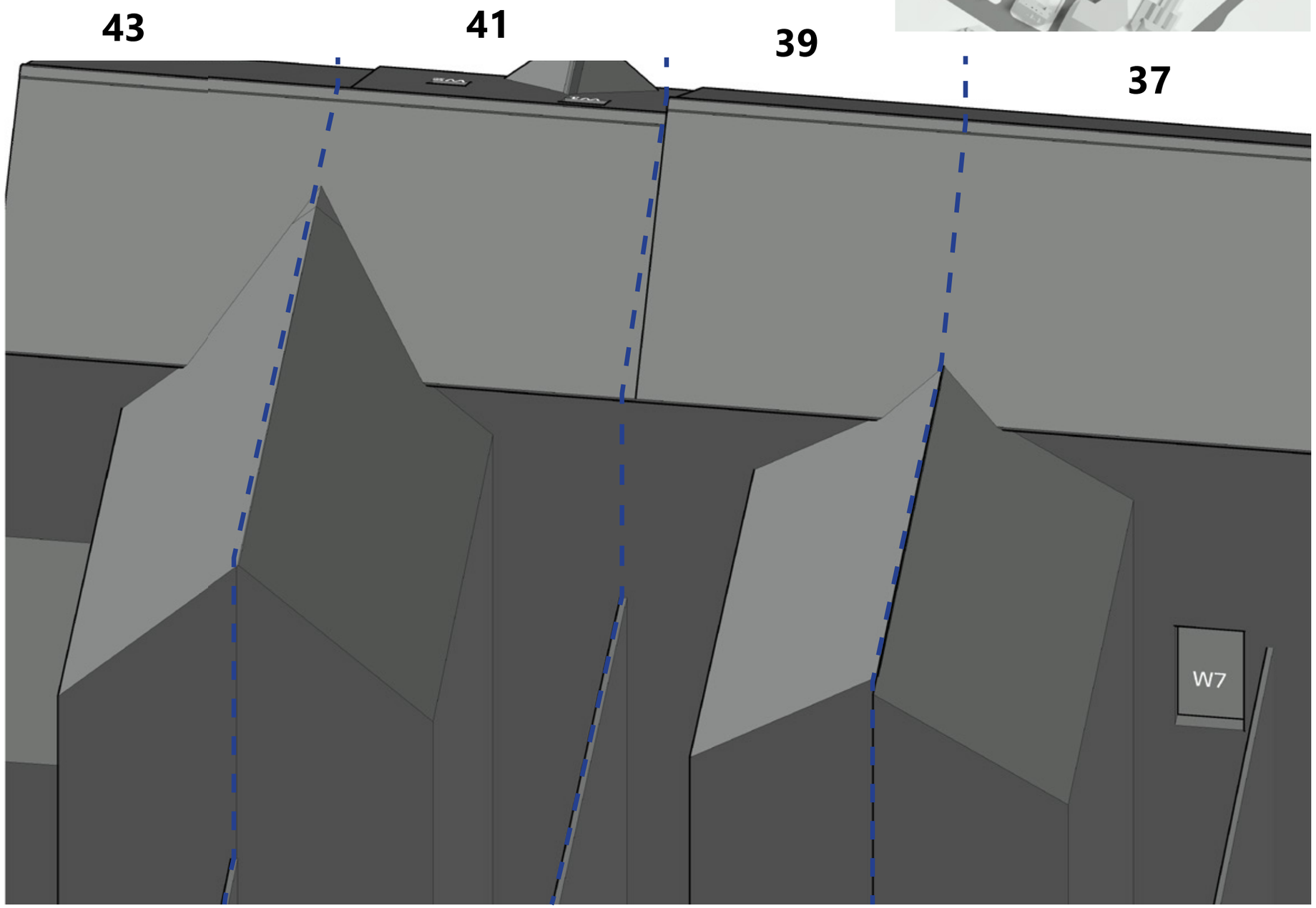

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Title	37 to 43 Glebe Road Window Map		
Drawn	AP	Checked	--
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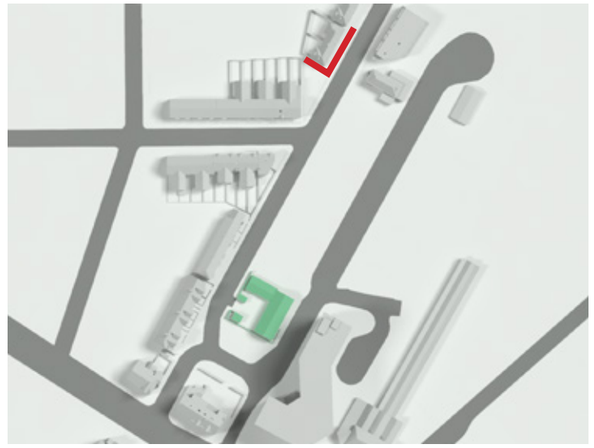

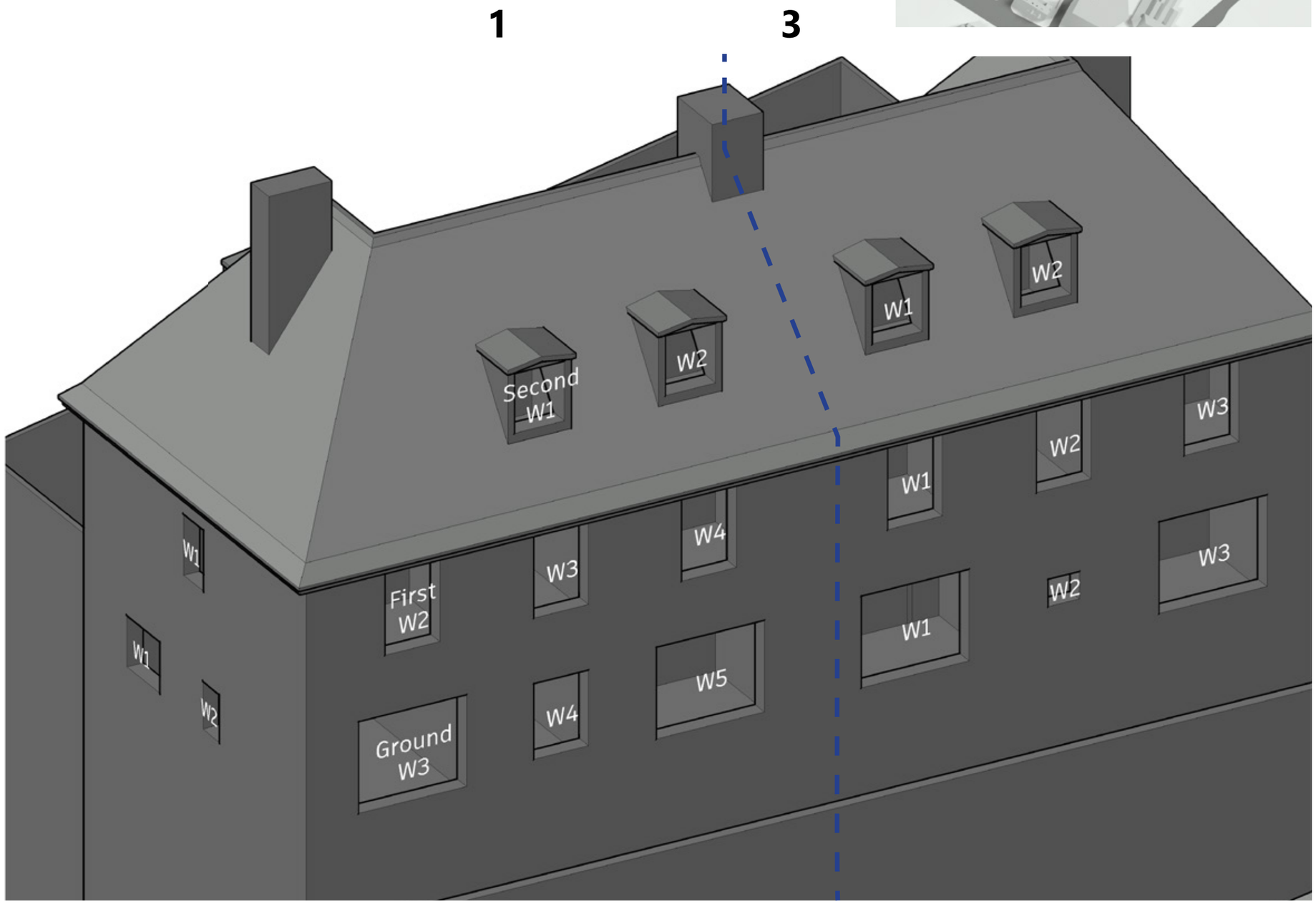

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Project	Bromley North Station Road Car Park
Title	1 and 3 Babbacombe Road Window Map
Drawn	AP
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Appendix 2

Results of the daylight and sunlight assessments within neighbouring properties

Address	Room	Window	Room use	Vertical Sky Component (VSC)				No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room							
				Existing VSC	Proposed VSC	Loss VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Loss m^2	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter	% Reduction Total	% Reduction Winter
Babbacombe House 2 Babbacombe Road																					
First	R1	W1	Bedroom	31.2	31.2	0.0	1.00														
		W2		31.2	31.2	0.0	1.00	13.3	12.5	94%	12.5	94%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
First	R2	W3	LKD	31.1	31.1	0.0	1.00														
		W4		31.0	31.0	0.0	1.00														
		W5		10.8	9.4	1.4	0.87														
		W6-L		18.5	18.3	0.2	0.99														
		W6-U						24.9	24.4	98%	24.4	98%	0.0	1.00	64	23	62	21	0.97	0.91	3%	9%
First	R3	W7-L	LKD	22.8	22.8	0.1	1.00														
		W7-U																			
		W8		13.6	13.6	0.0	1.00														
		W9		13.0	13.0	0.0	1.00	27.3	26.7	98%	26.7	98%	0.0	1.00	45	22	45	22	1.00	1.00	0%	0%
First	R4	W10	Bedroom	12.8	12.8	0.0	1.00														
		W11		12.8	12.8	0.0	1.00	9.9	9.7	97%	9.7	97%	0.0	1.00	15	9	15	9	1.00	1.00	0%	0%
Second	R1	W1	Bedroom	36.7	36.7	0.0	1.00														
		W2		36.6	36.6	0.0	1.00	13.4	12.6	93%	12.6	93%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
Second	R2	W3	LKD	36.6	36.6	0.0	1.00														
		W4		36.5	36.5	0.0	1.00														
		W5		37.0	34.8	2.2	0.94														
		W6-L		36.5	34.4	2.1	0.94														
		W6-U																			
		W12		99.9	99.6	0.4	1.00	25.1	25.0	100%	25.0	100%	0.0	1.00	100	30	98	28	0.98	0.93	2%	7%
Second	R3	W7-L	LKD	39.3	39.2	0.1	1.00														
		W7-U																			
		W8-L		39.3	39.2	0.1	1.00														
		W8-U																			
		W11		100.0	99.7	0.3	1.00	30.0	28.5	95%	28.5	95%	0.0	1.00	100	30	100	30	1.00	1.00	0%	0%
Second	R4	W9	Bedroom	39.2	39.1	0.1	1.00														
		W10		39.2	39.1	0.1	1.00	9.9	9.7	97%	9.7	97%	0.0	1.00	68	23	67	22	0.99	0.96	1%	4%
1 Mitchell Way																					
Ground	R1	W1-L	Hallway	30.4	28.3	2.1	0.93														
		W1-U																			
		W2-L		30.5	28.3	2.2	0.93														
		W2-U																			
		W6		0.0	0.0	0.0	0.00	1.8	1.7	97%	1.7	97%	0.0	1.00	56	18	53	18	0.95	1.00	5%	0%
Ground	R2	W3-L	Bedroom	26.5	26.5	0.0	1.00														
		W3-U																			
		W4-L		32.3	29.7	2.5	0.92														
		W4-U																			
		W5-L		27.4	22.8	4.6	0.83														
		W5-U						17.8	16.4	92%	16.4	92%	0.0	1.00	63	19	60	19	0.95	1.00	5%	0%
Ground	R3	W6	Hallway	0.0	0.0	0.0	0.00	3.6	0.0	0%	0.0	0%	0.0	0.00	0	0	0	0	0.00	0.00	0%	0%
First	R1	W1-L	Bathroom	31.1	29.8	1.3	0.96														
		W1-U						2.7	2.6	97%	2.6	97%	0.0	1.00	64	21	62	21	0.97	1.00	3%	0%
First	R2	W2-L	Bedroom	34.1	31.9	2.2	0.94														
		W2-U																			
		W3-L		34.1	31.7	2.4	0.93														
		W3-U						16.4	16.3	99%	16.3	99%	0.0	1.00	65	21	62	21	0.95	1.00	5%	0%
Second	R1	W1	Bathroom	63.0	63.0	0.0	1.00	2.9	2.5	84%	2.5	84%	0.0	1.00	72	22	72	22	1.00	1.00	0%	0%
Second	R2	W2-L	Bedroom	34.0	32.2	1.9	0.94														
		W2-U						16.4	15.8	96%	15.8	96%	0.0	1.00	57	18	54	18	0.95	1.00	5%	0%
3 Mitchell Way																					
Ground	R1	W1-L	Living Room	26.5	26.4	0.1	1.00														
		W1-U																			
		W2-L		32.4	29.4	3.0	0.91														
		W2-U																			
		W3-L		29.5	24.2	5.3	0.82														
		W3-U						16.9	15.5	92%	15.5	92%	0.0	1.00	64	20	59	20	0.92	1.00	8%	0%
Ground	R2	W4	Hallway	30.0	26.7	3.3	0.89	3.2	1.3	40%	1.3	40%	0.0	1.00	45	11	40	11	0.89	1.00	11%	0%
First	R1	W1-L	Residential	34.1	31.4	2.7	0.92														
		W1-U																			
		W2-L		34.1	31.3	2.8	0.92														
		W2-U						15.4	15.3	99%	15.3	99%	0.0	1.00	62	20	58	20	0.94	1.00	6%	0%
First	R2	W3-L	Residential	31.1	28.0	3.1	0.90														
		W3-U						4.2	4.1	98%	4.1	98%	0.0	1.00	47	12	42	12	0.89	1.00	11%	0%
Second	R1	W1-L	Residential	34.0	31.7	2.3	0.93														
		W1-U						15.4	14.9	97%	14.9	97%	0.0	1.00	57	18	52	18	0.91	1.00	9%	0%
5 Station Road																					
Ground	R1	W1	Hallway	29.4	26.5	2.9	0.90	7.2	5.4	75%	5.4	75%	0.0	1.00	54	16	50	16	0.93	1.00	7%	0%
Ground	R2	W2-L	Residential	28.6	28.2	0.4	0.99														
		W2-U																			
		W3-L		32.6	28.1	4.6	0.86														
		W3-U																			
		W4-L		27.7	20.6	7.1	0.74														
		W4-U						17.5	15.8	90%	15.1	87%	0.7	0.96	64	19	59	19	0.92	1.00	8%	0%
First	R1	W1-L	Residential	30.5	27.9	2.7	0.91														
		W1-U						8.5	8.4	98%	8.4	98%	0.0	1.00	59	17	55	17	0.93	1.00	7%	0%
First	R2	W2-L	Residential	34.2	30.2	3.9	0.88														
		W2-U																			
		W3-L		34.2	30.0	4.2	0.88														
		W3-U						16.1	15.9	99%	15.9	99%	0.0	1.00	64	19	59	19	0.92	1.00	8%	0%

Address	Room	Window	Room use	Vertical Sky Component (VSC)				No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room							
				Existing VSC	Proposed VSC	Loss VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Loss m^2	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter	% Reduction Total	% Reduction Winter
Second	R1	W1-L	Residential	34.1	30.7	3.4	0.90														
		W1-U						16.1	15.5	97%	15.5	97%	0.0	1.00	58	18	53	18	0.91	1.00	9%	0%
7 Station Road																					
Ground	R1	W1-L	Residential	26.6	25.9	0.7	0.97														
		W1-U																			
		W2-L		32.7	27.2	5.6	0.83														
		W2-U																			
		W3-L		30.0	21.9	8.1	0.73														
		W3-U						17.2	15.6	91%	15.0	88%	0.6	0.96	63	19	54	19	0.86	1.00	14%	0%
Ground	R2	W4	Hallway	30.3	24.2	6.1	0.80	3.2	1.1	33%	1.1	33%	0.0	1.00	43	10	34	10	0.79	1.00	21%	0%
First	R1	W1-L	Residential	34.2	29.5	4.8	0.86														
		W1-U																			
		W2-L		34.3	29.2	5.1	0.85														
		W2-U						15.7	15.6	99%	15.6	99%	0.0	1.00	62	19	55	19	0.89	1.00	11%	0%
First	R2	W3-L	Residential	31.2	25.6	5.6	0.82														
		W3-U						7.9	7.8	99%	7.8	98%	0.0	1.00	46	11	35	11	0.76	1.00	24%	0%
Second	R1	W1-L	Residential	34.1	30.0	4.1	0.88														
		W1-U						15.7	15.2	97%	14.8	94%	0.4	0.97	58	18	52	18	0.90	1.00	10%	0%
9 Station Road																					
Ground	R1	W1	Hallway	29.9	23.9	6.0	0.80	7.0	5.0	71%	5.0	71%	0.0	1.00	53	16	44	16	0.83	1.00	17%	0%
Ground	R2	W2-L	Residential	28.6	26.6	2.0	0.93														
		W2-U																			
		W3-L		33.1	24.7	8.3	0.75														
		W3-U																			
		W4-L		28.4	17.9	10.5	0.63														
		W4-U						17.5	16.2	93%	13.4	77%	2.8	0.83	64	20	52	20	0.81	1.00	19%	0%
First	R1	W1-L	Residential	30.9	25.4	5.6	0.82														
		W1-U						7.9	7.8	98%	7.7	97%	0.1	0.98	59	17	48	17	0.81	1.00	19%	0%
First	R2	W2-L	Residential	34.5	27.3	7.1	0.79														
		W2-U																			
		W3-L		34.5	27.0	7.6	0.78														
		W3-U						16.1	15.9	99%	14.3	89%	1.6	0.90	64	19	52	19	0.81	1.00	19%	0%
Second	R1	W1-L	Residential	34.2	28.1	6.2	0.82														
		W1-U						16.1	15.6	97%	12.6	78%	3.0	0.81	58	18	48	17	0.83	0.94	17%	6%
11 Station Road																					
Ground	R1	W1-L	Living Room	26.7	23.8	2.9	0.89														
		W1-U																			
		W2-L		33.3	23.3	9.9	0.70														
		W2-U																			
		W3-L		31.0	19.4	11.6	0.63														
		W3-U						16.8	15.8	94%	12.9	77%	3.0	0.81	64	20	47	20	0.73	1.00	27%	0%
Ground	R2	W4	Hallway	23.5	13.3	10.3	0.56	7.0	3.8	54%	0.7	11%	3.0	0.20	38	9	21	8	0.55	0.89	45%	11%
First	R1	W1-L	Bedroom	34.6	26.2	8.5	0.76														
		W1-U																			
		W2-L		34.7	25.7	9.0	0.74														
		W2-U						15.4	15.3	99%	13.1	85%	2.2	0.86	61	19	46	19	0.75	1.00	25%	0%
First	R2	W3-L	Bathroom	32.7	23.1	9.6	0.71														
		W3-U						3.4	3.3	97%	3.3	96%	0.0	1.00	46	12	30	11	0.65	0.92	35%	8%
Second	R1	W1-L	Bedroom	34.4	27.0	7.4	0.79														
		W1-U						15.4	14.9	97%	11.1	72%	3.8	0.75	57	18	46	17	0.81	0.94	19%	6%
13 Station Road																					
Ground	R1	W1	Living Room	25.4	22.0	3.4	0.87														
		W2		32.1	22.2	10.0	0.69														
		W3		33.7	20.0	13.7	0.59														
		W4		33.6	18.6	15.0	0.55														
		W5		26.2	14.7	11.5	0.56	14.7	14.7	100%	11.9	81%	2.8	0.81	65	19	41	16	0.63	0.84	37%	16%
Ground	R2	W6	Hallway	8.0	0.1	7.9	0.01														
		W7		0.7	0.0	0.7	0.00	7.9	2.1	27%	0.0	0%	2.1	0.00	18	3	0	0	0.00	0.00	100%	100%
First	R1	W1	Bedroom	27.9	24.7	3.2	0.89														
		W2		33.8	24.6	9.2	0.73														
		W3		34.9	22.4	12.5	0.64														
		W4		35.4	21.8	13.6	0.62														
		W5		28.8	18.6	10.3	0.64														
		W6		32.3	19.8	12.6	0.61	18.5	18.4	100%	17.2	93%	1.2	0.93	71	20	52	17	0.73	0.85	27%	15%
15 Station Road																					
Ground	R1	W1	Hallway	0.9	0.0	0.9	0.00														
		W2		11.7	2.6	9.0	0.23	3.0	2.3	78%	0.4	12%	1.9	0.16	24	3	4	0	0.17	0.00	83%	100%
Ground	R2	W3-L	Residential	23.4	18.2	5.2	0.78														
		W3-U																			
		W4-L		32.3	20.1	12.3	0.62														
		W4-U																			
		W5-L		34.5	18.8	15.6	0.55														
		W5-U																			
		W6-L		33.8	17.6	16.2	0.52														
		W6-U																			
		W7-L		23.5	12.1	11.4	0.52														
		W7-U						13.8	13.8	100%	10.1	73%	3.7	0.73	66	21	36	13	0.55	0.62	45%	38%
First	R1	W1	Residential	32.4	19.8	12.6	0.61														
		W2		26.4	21.7	4.7	0.82														
		W3		34.3	23.1	11.1	0.68														
		W4		35.4	21.3	14.1	0.60														
		W5		35.2	20.8	14.4	0.59														
		W6		25.4	15.5	10.0	0.61	18.1	18.1	100%	17.0	94%	1.1	0.94	72	22	49	16	0.68	0.73	32%	27%
17 Station Road																					

Address	Room	Window	Room use	Vertical Sky Component (VSC)				No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room							
				Existing VSC	Proposed VSC	Loss VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Loss m^2	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter	% Reduction Total	% Reduction Winter
Ground	R1	W1-L	Living Room	20.7	14.5	6.1	0.70														
		W1-U																			
		W2-L		32.2	18.9	13.3	0.59														
		W2-U																			
		W3-L		34.8	18.5	16.3	0.53														
		W3-U																			
		W4-L		34.7	18.4	16.3	0.53														
		W4-U																			
		W5-L		27.0	15.9	11.1	0.59														
		W5-U						13.3	13.2	99%	9.1	69%	4.1	0.69	65	20	36	13	0.55	0.65	45%	35%
Ground	R2	W6	Hallway	1.5	0.0	1.5	0.00														
		W7		12.4	2.3	10.1	0.19														
		W8		11.3	2.2	9.1	0.20	7.5	5.5	73%	0.7	9%	4.9	0.12	29	6	4	0	0.14	0.00	86%	100%
First	R1	W1-L	Bedroom	22.5	16.9	5.6	0.75														
		W1-U																			
		W2-L		33.7	21.7	12.0	0.64														
		W2-U																			
		W3-L		35.6	21.0	14.6	0.59														
		W3-U																			
		W4-L		36.1	21.6	14.5	0.60														
		W4-U																			
		W5-L		29.4	19.6	9.7	0.67														
		W5-U																			
		W6-L		33.1	19.2	14.0	0.58														
		W6-U						16.6	16.5	99%	14.4	87%	2.1	0.87	69	22	45	13	0.65	0.59	35%	41%
19 Station Road																					
Ground	R1	W1	Hallway	1.5	0.0	1.5	0.00	2.9	0.0	0%	0.0	0%	0.0	0.00	1	1	0	0	0.00	0.00	100%	100%
Ground	R2	W2-L	Residential	23.6	16.2	7.4	0.69														
		W2-U																			
		W3-L		33.1	19.1	14.0	0.58														
		W3-U																			
		W4-L		35.3	19.1	16.2	0.54														
		W4-U																			
		W5-L		35.1	19.7	15.4	0.56														
		W5-U																			
		W6-L		25.2	15.3	9.9	0.61														
		W6-U						14.4	14.4	100%	10.9	75%	3.5	0.75	67	22	37	11	0.55	0.50	45%	50%
First	R1	W1	Residential	33.1	19.6	13.5	0.59														
		W2-L		26.5	19.8	6.7	0.75														
		W2-U																			
		W3-L		34.8	22.1	12.6	0.64														
		W3-U																			
		W4-L		36.0	21.5	14.5	0.60														
		W4-U																			
		W5-L		36.0	22.3	13.7	0.62														
		W5-U																			
		W6-L		26.3	17.7	8.6	0.67														
		W6-U						18.7	18.6	100%	17.2	92%	1.4	0.92	73	23	51	12	0.70	0.52	30%	48%
21 Station Road																					
Ground	R1	W1-L	Residential	11.5	8.3	3.2	0.72														
		W1-U																			
		W2-L		35.4	20.2	15.3	0.57														
		W2-U																			
		W3-L		15.8	11.3	4.5	0.71														
		W3-U						13.0	13.0	100%	10.3	79%	2.6	0.80	62	20	33	9	0.53	0.45	47%	55%
Ground	R2	W4	Hallway	3.1	0.4	2.7	0.14														
		W5		12.2	4.1	8.0	0.34														
		W6		15.0	7.6	7.4	0.51														
		W7		13.9	5.0	8.9	0.36	2.7	2.3	85%	0.4	13%	2.0	0.16	29	6	12	0	0.41	0.00	59%	100%
First	R1	W1-L	Residential	13.2	10.3	2.9	0.78														
		W1-U																			
		W2-L		36.0	22.4	13.6	0.62														
		W2-U																			
		W3-L		18.0	14.2	3.8	0.79														
		W3-U																			
		W4-L		31.9	19.7	12.2	0.62														
		W4-U						17.0	17.0	100%	16.0	94%	0.9	0.95	63	21	44	9	0.70	0.43	30%	57%
23 Station Road																					
Ground	R1	W1	Residential	23.7	15.3	8.4	0.65														
		W2		33.8	20.9	12.9	0.62														
		W3		36.1	22.2	13.9	0.62														
		W4		33.5	21.0	12.5	0.63														
		W5		8.5	6.1	2.4	0.72	13.5	13.5	100%	12.1	90%	1.4	0.90	67	22	42	10	0.63	0.45	37%	55%
Ground	R2	W6	Hallway	0.0	0.0	0.0	0.67	4.7	0.0	0%	0.0	0%	0.0	0.00	0	0	0	0	0.00	0.00	0%	0%
Ground	R3	W7	Residential	35.2	23.7	11.5	0.67	9.1	8.9	97%	8.1	88%	0.8	0.91	57	15	39	6	0.68	0.40	32%	60%
First	R1	W1	Residential	26.2	18.7	7.5	0.71														
		W2		35.3	23.8	11.5	0.67														
		W3		36.7	24.4	12.3	0.67														
		W4		37.3	26.3	11.0	0.71														
		W5		30.7	24.0	6.8	0.78														
		W6-L		34.9	23.8	11.0	0.68														
		W6-U						18.9	18.9	100%	18.5	98%	0.4	0.98	73	23	54	12	0.74	0.52	26%	48%
First	R2	W7-L	Residential	36.5	26.1	10.4	0.72														
		W7-U						9.1	8.9	97%	8.3	91%	0.5	0.94	60	20	42	9	0.70	0.45	30%	55%
28 Glebe Road																					
Ground	R1	W1-L	Residential	12.3	12.3	0.0	1.00														
		W1-U						8.1	7.4	91%	7.4	91%	0.0	1.00	19	6	19	6	1.00	1.00	0%	0%
Ground	R2	W2	Residential	13.6	13.6	0.0	1.00	7.1	5.3	75%	5.3	75%	0.0	1.00	26	10	26	10	1.00	1.00	0%	0%
Ground	R3	W3	Residential	29.1	26.3	2.8	0.90	10.7	8.5	80%	6.5	61%	2.0	0.76	66	21	59	14	0.89	0.67	11%	33%
Ground	R4	W4	Residential	14.8	14.8	0.0	1.00														
		W5-L		24.6	24.6	0.0	1.00														

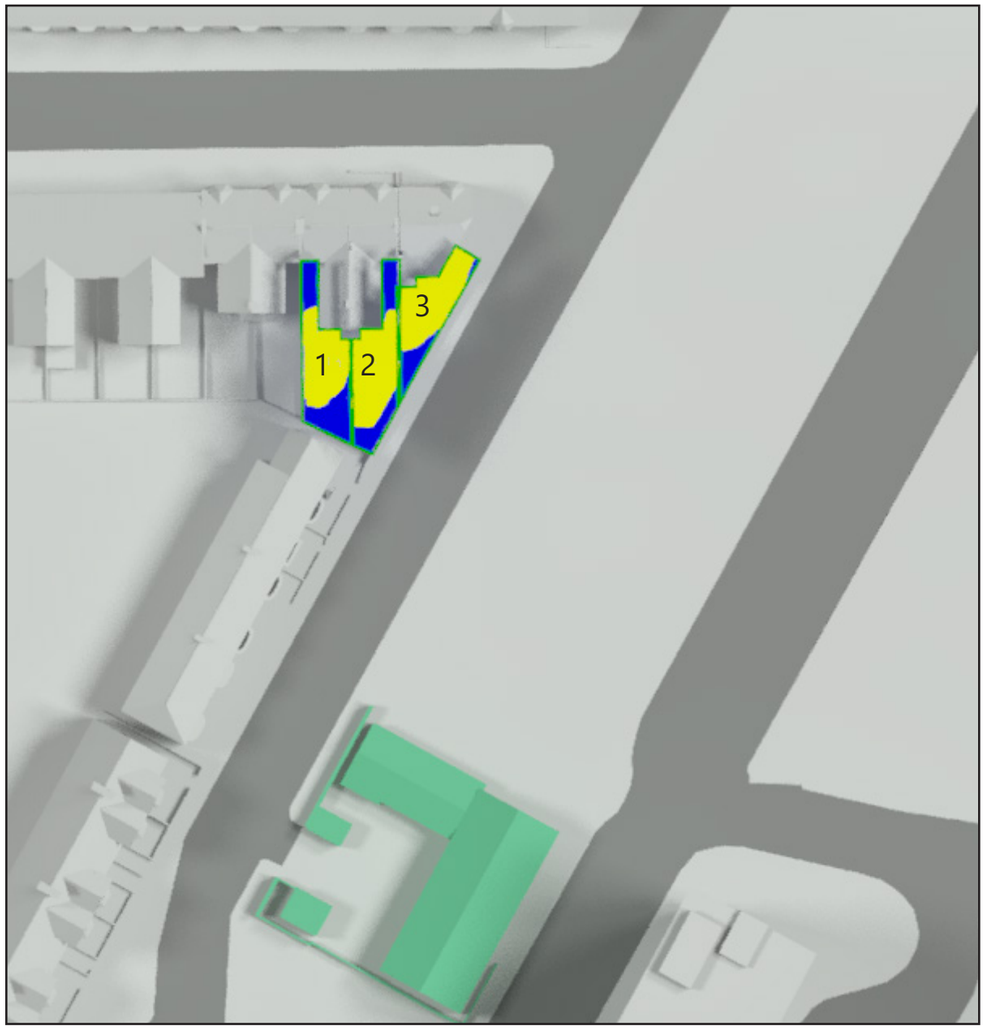
Address	Room	Window	Room use	Vertical Sky Component (VSC)				No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room							
				Existing VSC	Proposed VSC	Loss VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Loss m^2	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter	% Reduction Total	% Reduction Winter
		W5-U						3.8	3.8	100%	3.8	100%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R5	W6-L	Residential	25.9	24.7	1.3	0.95														
		W6-U																			
		W7-L		30.2	30.0	0.3	0.99														
		W7-U																			
		W8-L		24.7	24.7	0.0	1.00														
		W8-U						12.6	12.5	100%	12.5	100%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1-L	Residential	25.0	24.5	0.4	0.98														
		W1-U						8.1	7.8	96%	7.8	96%	0.0	1.00	52	17	51	16	0.98	0.94	2%	6%
First	R2	W2	Residential	17.6	17.6	0.0	1.00	5.7	4.0	70%	4.0	70%	0.0	1.00	37	12	37	12	1.00	1.00	0%	0%
First	R3	W3-L	Residential	35.4	32.0	3.4	0.90														
		W3-U						12.7	10.4	81%	10.3	81%	0.0	1.00	85	28	77	24	0.91	0.86	9%	14%
First	R4	W4-L	Residential	32.7	32.5	0.1	1.00														
		W4-U						4.1	4.1	99%	4.1	99%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
First	R5	W5-L	Residential	29.8	28.8	1.0	0.97														
		W5-U																			
		W6-L		34.0	33.8	0.2	0.99														
		W6-U																			
		W7-L		28.6	28.6	0.0	1.00														
		W7-U						12.6	12.5	100%	12.5	100%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
30 Glebe Road																						
Ground	R1	W1-L	Residential	27.1	22.7	4.5	0.84														
		W1-U						10.7	10.3	96%	7.8	73%	2.5	0.76	62	16	49	10	0.79	0.63	21%	38%
Ground	R2	W2	Residential	22.1	15.1	7.1	0.68	7.1	6.4	90%	6.0	85%	0.3	0.95	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3-L	Residential	10.1	7.7	2.3	0.77														
		W3-U						8.1	7.0	86%	6.7	83%	0.2	0.97	17	7	13	3	0.76	0.43	24%	57%
Ground	R4	W4-L	Residential	26.6	24.7	1.9	0.93														
		W4-U																			
		W5-L		30.3	29.9	0.4	0.99														
		W5-U																			
		W6-L		25.9	25.9	0.0	1.00														
		W6-U						13.3	13.2	100%	13.2	100%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R5	W7	Hallway	0.2	0.2	0.0	1.00	3.0	0.0	0%	0.0	0%	0.0	0.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1-L	Residential	35.9	31.7	4.2	0.88														
		W1-U						12.7	10.3	81%	9.4	73%	1.0	0.91	86	29	74	23	0.86	0.79	14%	21%
First	R2	W2	Residential	12.9	12.1	0.8	0.94	5.7	2.5	45%	2.4	42%	0.1	0.94	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
First	R3	W3-L	Residential	19.2	17.1	2.1	0.89														
		W3-U						8.1	7.5	93%	7.5	93%	0.0	1.00	34	12	32	10	0.94	0.83	6%	17%
First	R4	W4-L	Residential	30.2	28.5	1.8	0.94														
		W4-U																			
		W5-L		34.1	33.7	0.3	0.99														
		W5-U																			
		W6-L		29.7	29.7	0.0	1.00														
		W6-U						13.3	13.2	100%	13.2	100%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
First	R5	W7-L	Residential	32.7	32.7	0.0	1.00														
		W7-U						4.1	4.1	99%	4.1	99%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
32 Glebe Road																						
Ground	R1	W1	Residential	32.1	26.7	5.5	0.83														
		W2		23.5	18.0	5.5	0.77														
		W3		29.1	23.5	5.6	0.81														
		W4		31.3	25.7	5.6	0.82														
		W5-L		35.5	21.5	13.9	0.61														
		W5-U																			
		W6-L		34.6	20.8	13.8	0.60														
		W6-U						14.3	14.0	98%	11.9	84%	2.0	0.85	78	23	54	15	0.69	0.65	31%	35%
Ground	R2	W7	Hallway	3.2	0.0	3.2	0.00														
		W8		9.7	0.7	9.0	0.07	6.7	2.9	42%	0.1	2%	2.7	0.04	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W9-L	Residential	37.9	21.8	16.2	0.57														
		W9-U																			
		W10-L		31.4	25.6	5.8	0.82														
		W10-U																			
		W11-L		30.8	30.1	0.7	0.98														
		W11-U																			
		W12-L		26.1	26.1	0.0	1.00														
		W12-U						15.8	15.8	100%	15.5	98%	0.3	0.98	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R4	W13-L	Residential	30.0	29.7	0.3	0.99														
		W13-U						9.9	9.7	98%	9.7	98%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1-L	Residential	34.9	30.1	4.9	0.86														
		W1-U																			
		W2-L		38.4	24.2	14.1	0.63														
		W2-U						14.3	14.0	98%	13.4	94%	0.6	0.96	86	26	65	19	0.76	0.73	24%	27%
First	R2	W3-L	Residential	38.7	24.5	14.2	0.63														
		W3-U																			
		W4-L		33.4	28.5	5.0	0.85														
		W4-U																			
		W5-L		34.4	33.8	0.6	0.98														
		W5-U																			
		W6-L		29.9	29.9	0.0	1.00														
		W6-U						15.8	15.8	100%	15.5	98%	0.2	0.98	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
First	R3	W7-L	Residential	33.6	33.3	0.3	0.99														
		W7-U						9.9	9.7	98%	9.7	98%	0.0	1.00	N/F	N/F	N/F	N/F	N/F	N/F	N/F	N/F
31 Glebe Road																						
Ground	R1	W1	Hallway	1.5	1.5	0.0	0.99														
		W2		1.5	1.5	0.0	1.00	4.3	3.3	75%	3.3	75%	0.0	1.00	5	5	5	5	1.00	1.00	0%	0%

Address	Room	Window	Room use	Vertical Sky Component (VSC)				No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room							
				Existing VSC	Proposed VSC	Loss VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Loss m^2	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter	% Reduction Total	% Reduction Winter
Ground	R2	W3	Residential	27.1	27.1	0.0	1.00														
		W4		31.5	30.1	1.4	0.96														
		W5		27.5	24.0	3.5	0.87	16.0	15.8	99%	15.8	99%	0.0	1.00	82	24	77	21	0.94	0.88	6%	13%
First	R1	W1	Residential	33.0	31.8	1.2	0.96	6.2	6.1	99%	6.1	99%	0.0	1.00	76	30	73	27	0.96	0.90	4%	10%
First	R2	W2-L	Residential	31.4	31.3	0.1	1.00														
		W2-U																			
		W3-L		35.4	33.7	1.7	0.95														
		W3-U																			
		W4-L		32.1	28.4	3.8	0.88														
		W4-U						15.3	15.1	99%	15.1	99%	0.0	1.00	88	29	84	26	0.95	0.90	5%	10%
33 Glebe Road																						
Ground	R1	W1-L	Residential	25.7	25.7	0.0	1.00														
		W1-U																			
		W2-L		31.4	29.5	1.9	0.94														
		W2-U																			
		W3-L		28.4	23.8	4.6	0.84														
		W3-U						16.5	16.3	99%	16.3	99%	0.0	1.00	82	24	77	21	0.94	0.88	6%	13%
Ground	R2	W4	Hallway	0.0	0.0	0.0	0.00														
		W5		7.8	7.8	0.0	1.00														
		W6		7.9	7.9	0.0	1.00	3.8	3.2	85%	3.2	85%	0.0	1.00	20	13	20	13	1.00	1.00	0%	0%
First	R1	W1-L	Residential	34.1	32.0	2.1	0.94														
		W1-U																			
		W2-L		34.3	32.1	2.3	0.93														
		W2-U						13.9	13.6	98%	13.6	98%	0.0	1.00	85	29	81	26	0.95	0.90	5%	10%
First	R2	W3-L	Residential	34.5	31.9	2.5	0.93														
		W3-U						6.2	6.1	99%	6.1	99%	0.0	1.00	85	29	80	26	0.94	0.90	6%	10%
35 Glebe Road																						
Ground	R1	W1	Hallway	0.0	0.0	0.0	0.00														
		W2		7.5	7.5	0.0	1.00														
		W3		7.4	7.4	0.0	1.00	3.8	3.4	89%	3.4	89%	0.0	1.00	19	13	19	13	1.00	1.00	0%	0%
Ground	R2	W4-L	Residential	27.1	27.1	0.1	1.00														
		W4-U																			
		W5-L		31.7	28.6	3.2	0.90														
		W5-U																			
		W6-L		28.3	22.0	6.3	0.78														
		W6-U						16.0	15.7	98%	15.7	98%	0.0	1.00	82	24	75	19	0.91	0.79	9%	21%
First	R1	W1-L	Residential	34.5	31.8	2.7	0.92														
		W1-U						6.2	6.1	99%	6.1	99%	0.0	1.00	85	29	80	26	0.94	0.90	6%	10%
First	R2	W2-L	Residential	34.7	31.6	3.1	0.91														
		W2-U																			
		W3-L		34.7	31.5	3.2	0.91														
		W3-U						13.5	13.2	98%	13.2	98%	0.0	1.00	85	29	79	25	0.93	0.86	7%	14%
37 Glebe Road																						
Ground	R1	W1-L	Living Room	26.3	26.0	0.2	0.99														
		W1-U																			
		W2-L		32.3	28.0	4.3	0.87														
		W2-U																			
		W3-L		29.8	21.7	8.1	0.73														
		W3-U																			
		W7-L		17.4	17.4	0.0	1.00														
		W7-U						30.0	28.3	94%	28.3	94%	0.0	1.00	81	23	72	17	0.89	0.74	11%	26%
Ground	R2	W4	Hallway	0.2	0.1	0.1	0.38														
		W5		8.7	7.7	0.9	0.89														
		W6		7.9	7.9	0.0	1.00	7.5	4.9	66%	4.9	65%	0.1	0.99	21	14	20	13	0.95	0.93	5%	7%
First	R1	W1-L	Bedroom	34.9	31.0	3.9	0.89														
		W1-U																			
		W2-L		35.0	30.9	4.1	0.88														
		W2-U						15.6	15.2	98%	15.2	98%	0.0	1.00	85	29	77	23	0.91	0.79	9%	21%
First	R2	W3-L	Bathroom	35.0	30.4	4.6	0.87														
		W3-U						2.2	2.2	100%	2.2	100%	0.0	1.00	85	29	77	23	0.91	0.79	9%	21%
39 Glebe Road																						
Ground	R1	W1	Hallway	6.4	6.0	0.4	0.94														
		W2		0.2	0.0	0.1	0.20	3.4	2.2	64%	2.2	64%	0.0	1.00	10	10	10	10	1.00	1.00	0%	0%
Ground	R2	W3-L	Residential	27.5	26.7	0.8	0.97														
		W3-U																			
		W4-L		33.2	26.7	6.5	0.80														
		W4-U																			
		W5-L		28.9	18.2	10.7	0.63														
		W5-U						16.7	16.5	99%	16.4	98%	0.1	0.99	83	25	70	17	0.84	0.68	16%	32%
First	R1	W1	Residential	35.0	30.1	4.9	0.86	6.6	6.5	98%	6.5	98%	0.0	1.00	84	28	75	21	0.89	0.75	11%	25%
First	R2	W2	Residential	35.1	29.6	5.4	0.84														
		W3		35.0	29.4	5.6	0.84	13.0	12.8	98%	12.8	98%	0.0	1.00	84	29	76	22	0.90	0.76	10%	24%
41 Glebe Road																						
Ground	R1	W1-L	Residential	26.8	25.3	1.5	0.94														
		W1-U																			
		W2-L		34.5	26.1	8.4	0.76														
		W2-U																			
		W3-L		32.2	19.0	13.2	0.59														
		W3-U						16.8	16.6	99%	16.2	96%	0.4	0.97	84	26	68	18	0.81	0.69	19%	31%
Ground	R2	W4	Hallway	1.0	0.1	0.9	0.08	3.4	0.0	0%	0.0	0%	0.0	0.00	0	0	0	0	0.00	0.00	0%	0%
First	R1	W1-L	Residential	31.5	30.2	1.3	0.96														
		W1-U																			
		W2-L		36.6	29.4	7.2	0.80														
		W2-U																			
		W3-L		33.5	22.2	11.3	0.66														
		W3-U						15.1	15.0	99%	14.9	99%	0.0	1.00	88	29	76	21	0.86	0.72	14%	28%

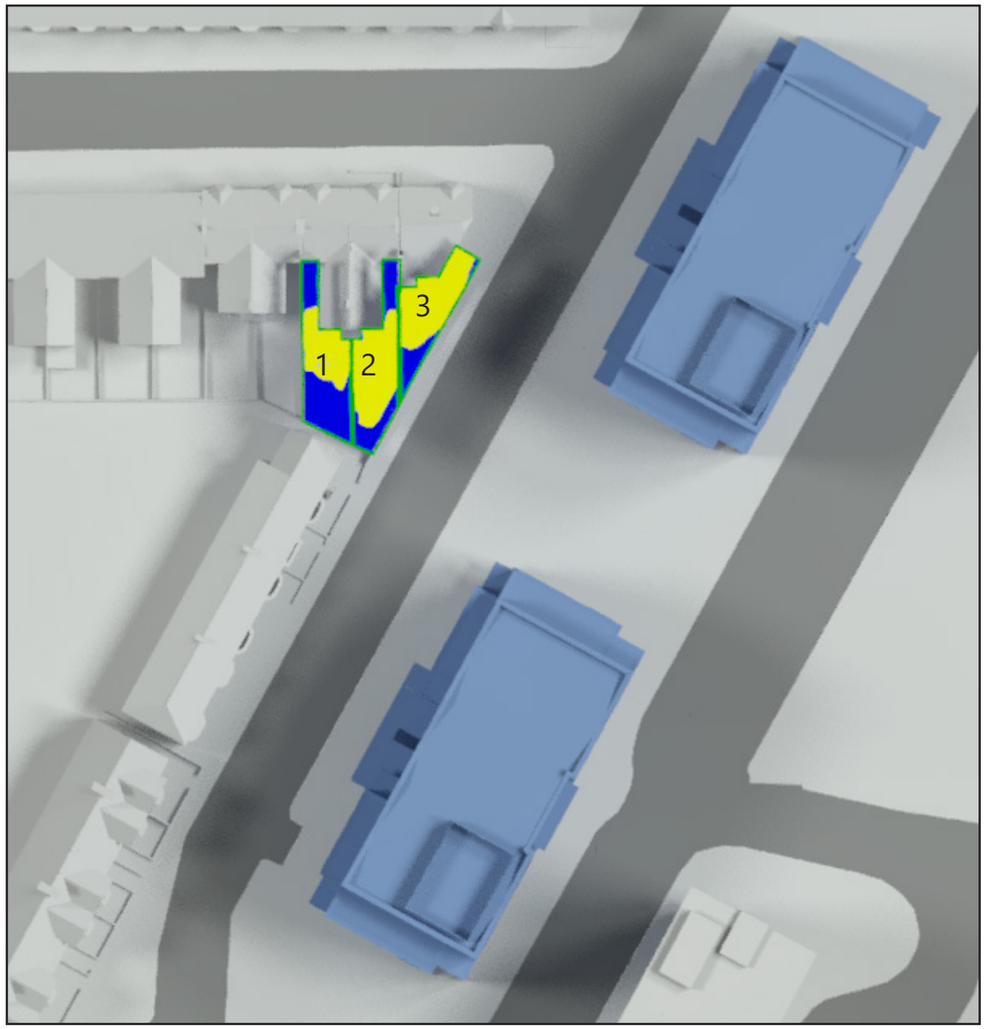
Address	Room	Window	Room use	Vertical Sky Component (VSC)				No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room							
				Existing VSC	Proposed VSC	Loss VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Loss m^2	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter	% Reduction Total	% Reduction Winter
First	R2	W4-L	Residential	34.9	26.8	8.0	0.77														
		W4-U						6.0	5.9	100%	5.9	100%	0.0	1.00	79	27	66	18	0.84	0.67	16%	33%
Second	R1	W1	Residential	88.9	84.7	4.2	0.95	8.9	7.2	81%	7.2	81%	0.0	1.00	96	30	88	23	0.92	0.77	8%	23%
Second	R2	W2	Residential	88.6	83.3	5.4	0.94	4.7	4.3	91%	3.7	78%	0.6	0.86	97	29	88	21	0.91	0.72	9%	28%
43 Glebe Road																						
Ground	R1	W1	Hallway	2.0	0.4	1.7	0.18	3.3	0.9	27%	0.9	27%	0.0	1.00	2	2	1	1	0.50	0.50	50%	50%
Ground	R2	W2-L	Residential	35.8	24.6	11.2	0.69															
		W2-U						15.5	15.4	100%	14.5	93%	1.0	0.94	83	26	54	13	0.65	0.50	35%	50%
First	R1	W1	Residential	35.6	26.9	8.6	0.76	6.7	6.4	97%	6.4	97%	0.0	1.00	82	28	66	18	0.80	0.64	20%	36%
First	R2	W2	Residential	36.2	26.5	9.7	0.73	13.0	12.9	100%	12.9	100%	0.0	1.00	84	28	64	16	0.76	0.57	24%	43%
1 Babbacombe Road																						
Ground	R1	W1	Residential	32.4	28.7	3.7	0.89	9.0	8.6	96%	8.6	96%	0.0	1.00	71	20	64	13	0.90	0.65	10%	35%
Ground	R2	W2	Residential	32.7	28.6	4.1	0.87															
		W3-L		36.1	32.2	3.9	0.89															
		W3-U						14.4	14.3	100%	14.3	100%	0.0	1.00	91	23	86	18	0.95	0.78	5%	22%
Ground	R3	W4	Residential	35.6	32.3	3.3	0.91	6.1	6.0	98%	6.0	98%	0.0	1.00	62	21	56	15	0.90	0.71	10%	29%
Ground	R4	W5-L	Residential	35.0	32.2	2.8	0.92															
		W5-U						9.3	9.3	99%	9.3	99%	0.0	1.00	60	19	55	14	0.92	0.74	8%	26%
First	R1	W1-L	Residential	33.8	30.2	3.5	0.90															
		W1-U						3.6	3.5	98%	3.5	98%	0.0	1.00	72	25	67	20	0.93	0.80	7%	20%
First	R2	W2-L	Residential	35.3	31.9	3.4	0.90															
		W2-U						9.1	8.8	96%	8.8	96%	0.0	1.00	59	21	53	15	0.90	0.71	10%	29%
First	R3	W3-L	Residential	35.1	32.2	2.9	0.92															
		W3-U						6.1	6.0	99%	6.0	99%	0.0	1.00	58	20	52	14	0.90	0.70	10%	30%
First	R4	W4-L	Residential	34.8	32.3	2.5	0.93															
		W4-U						9.3	8.9	96%	8.9	96%	0.0	1.00	58	20	53	15	0.91	0.75	9%	25%
Second	R1	W1	Residential	38.7	36.3	2.4	0.94	5.0	4.4	89%	4.4	89%	0.0	1.00	66	23	63	20	0.95	0.87	5%	13%
Second	R2	W2	Residential	38.7	36.6	2.0	0.95	7.6	6.4	84%	6.2	82%	0.2	0.98	66	23	64	21	0.97	0.91	3%	9%
3 Babbacombe Road																						
Ground	R1	W1-L	Residential	34.2	32.0	2.2	0.93															
		W1-U						10.8	10.7	99%	10.7	99%	0.0	1.00	60	20	55	15	0.92	0.75	8%	25%
Ground	R2	W2	Residential	33.7	31.8	1.9	0.94	3.3	2.9	90%	2.9	90%	0.0	1.00	60	19	56	15	0.93	0.79	7%	21%
Ground	R3	W3-L	Residential	33.1	31.4	1.6	0.95															
		W3-U						10.3	10.2	99%	10.2	99%	0.0	1.00	60	19	57	16	0.95	0.84	5%	16%
First	R1	W1-L	Residential	34.4	32.4	2.0	0.94															
		W1-U						9.1	8.8	96%	8.8	96%	0.0	1.00	59	21	55	17	0.93	0.81	7%	19%
First	R2	W2-L	Residential	34.0	32.3	1.7	0.95															
		W2-U						6.1	6.0	99%	6.0	99%	0.0	1.00	58	20	54	16	0.93	0.80	7%	20%
First	R3	W3-L	Residential	33.6	32.2	1.4	0.96															
		W3-U						9.1	8.8	96%	8.8	96%	0.0	1.00	58	20	55	17	0.95	0.85	5%	15%
Second	R1	W1	Residential	38.6	37.0	1.6	0.96	7.5	6.3	84%	6.2	84%	0.0	1.00	66	23	64	21	0.97	0.91	3%	9%
Second	R2	W2	Residential	38.5	37.1	1.4	0.96	5.0	4.4	89%	4.4	89%	0.0	1.00	66	23	65	22	0.98	0.96	2%	4%

Appendix 3

Results of the sunlight amenity assessment



Existing Scenario - March 21st



Proposed Scenario - March 21st

Area	Total Area (sq.m)	Existing Scenario Area recieving more than two hours of sun		Proposed Scenario Area recieving more than two hours of sun		Proportion Retained	Loss (%)
		(m^2)	%	(m^2)	%		
1 - 28 Glebe Road	61.0	35.7	59.0	26.0	43.0	0.73	27.0
2 - 30 Glebe Road	63.7	44.5	70.0	43.0	68.0	0.97	3.0
3 - 32 Glebe Road	51.4	41.3	80.0	40.9	80.0	0.99	1.0

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Sources of information

Cloud10
Bromley North 27-04-2022.dwg
Received 27/04/2022

Mae
220811_2102_3D Model.3dm
Received 12/07/2022

EB7 Ltd
Ordnance Survey

NORTH

Key:

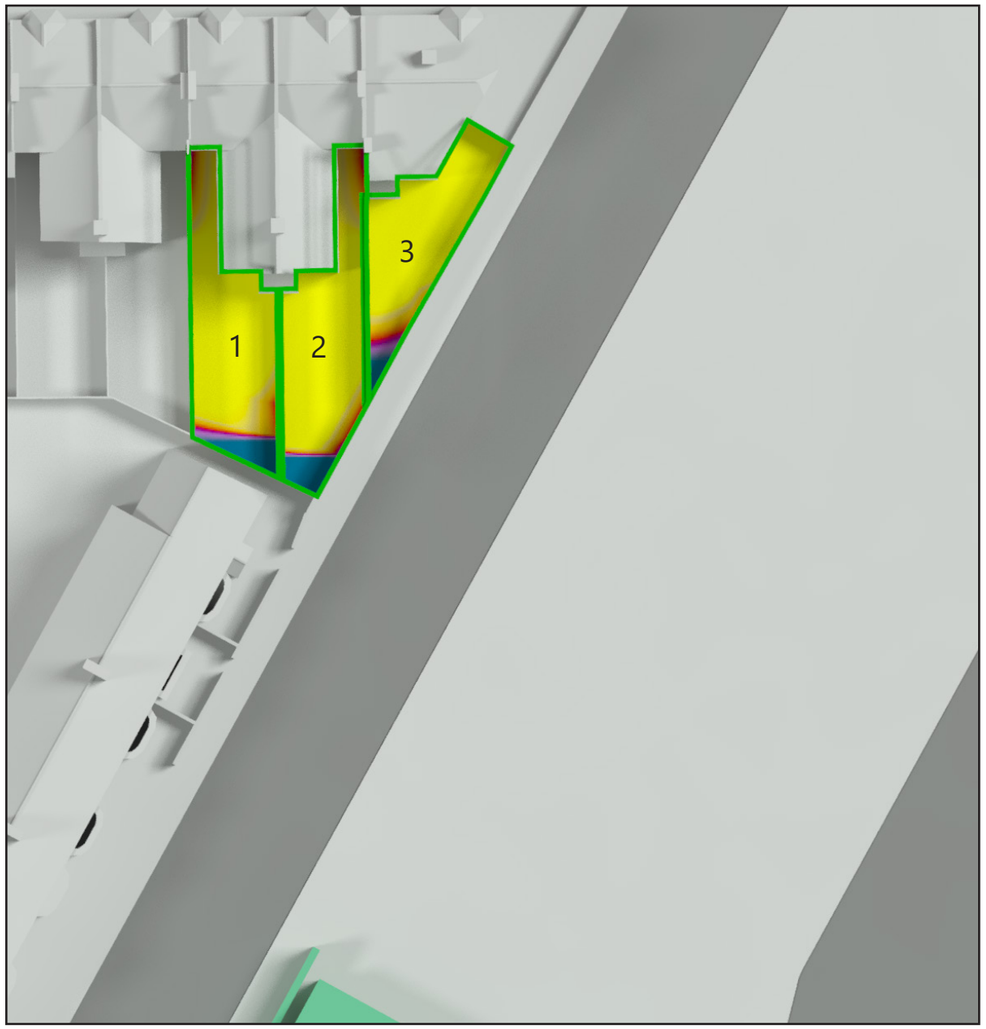
- Existing building
- Proposed development
- Area of assessment
- Area receiving more than two hours of sun on March 21st
- Area receiving less than two hours of sun on March 21st

Project: Bromley North Station Road Car Park

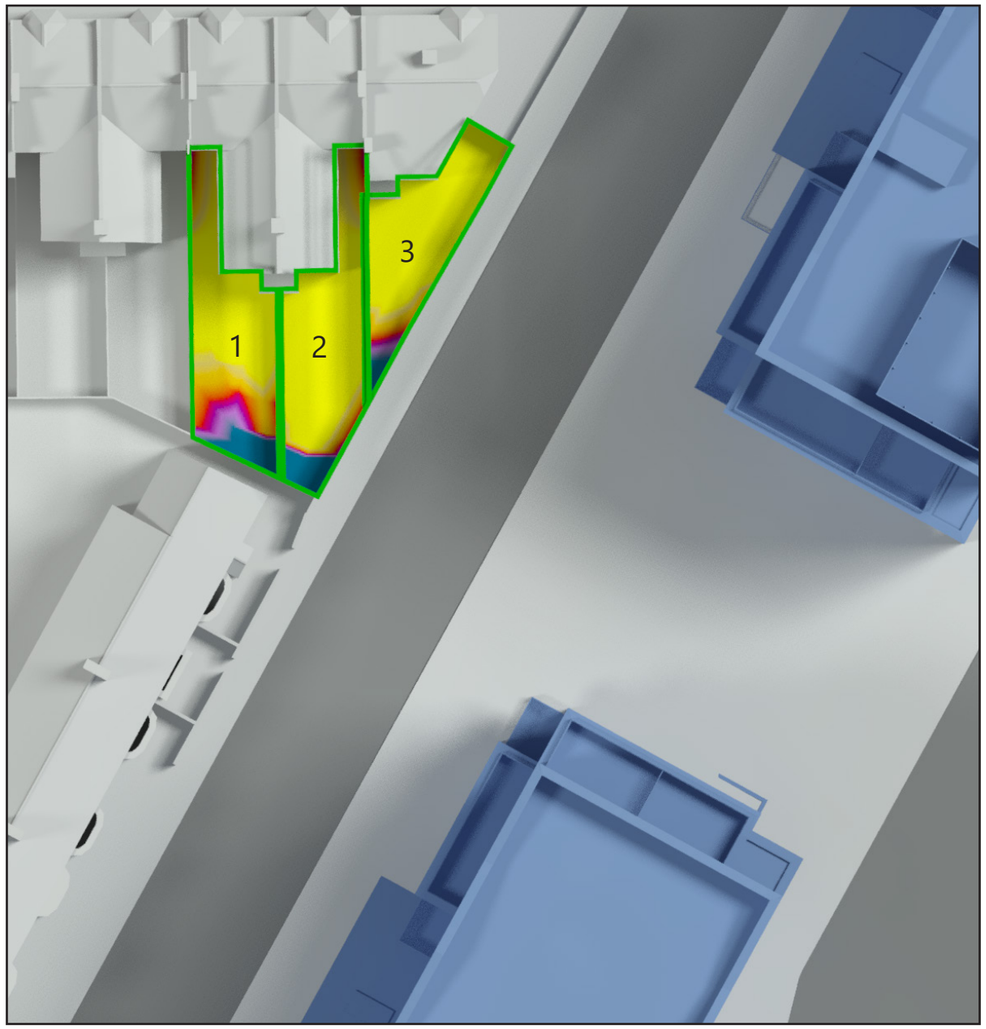
Title: Sunlight Amenity Study Existing vs Proposed 21st March

Drawn	JC	Checked	--
Date	12/07/2022	Project	5153

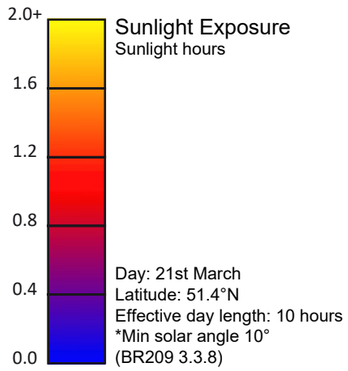
Rel no.	Prefix	Page no.
02	SA01	01



Existing Scenario



Proposed Scenario



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Sources of information

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Received 27/04/2022

Mae
220811_2102_3D Model.3dm
Received 12/07/2022

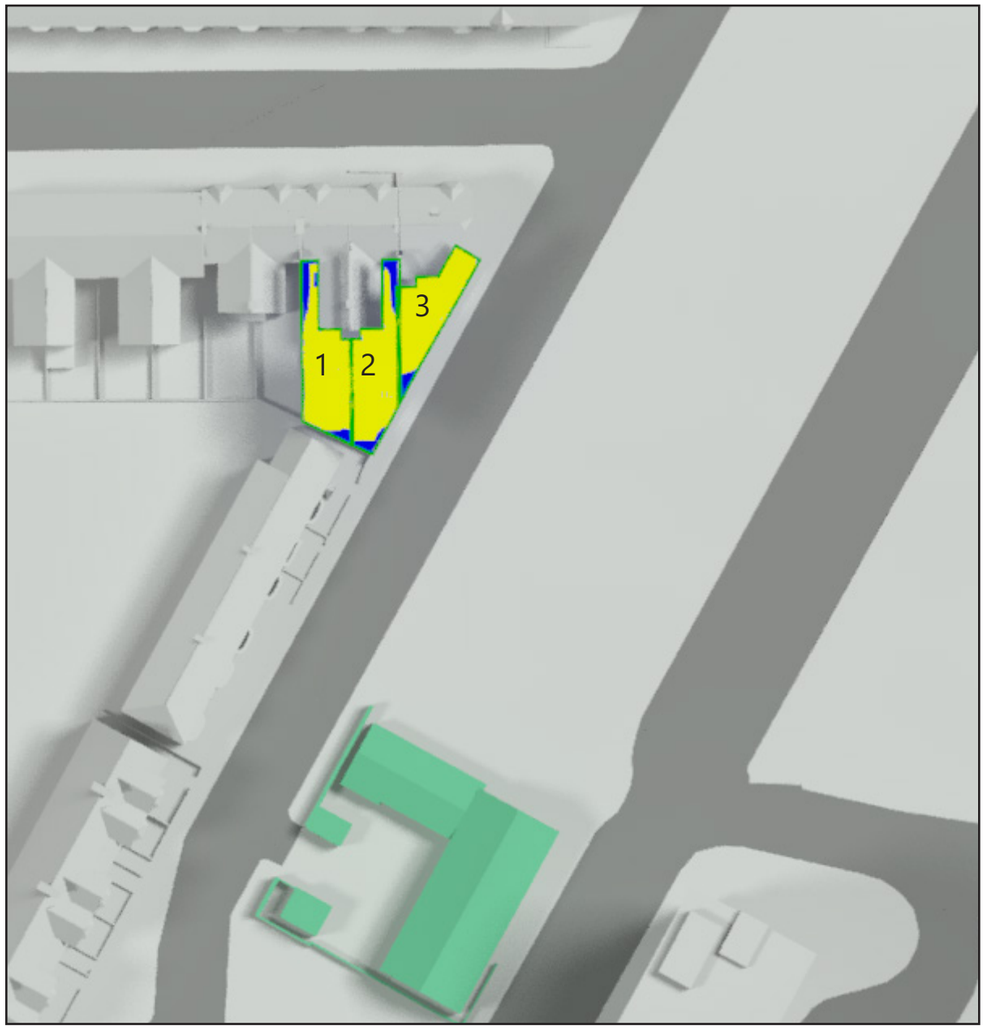
EB7 Ltd
Ordnance Survey

Key:

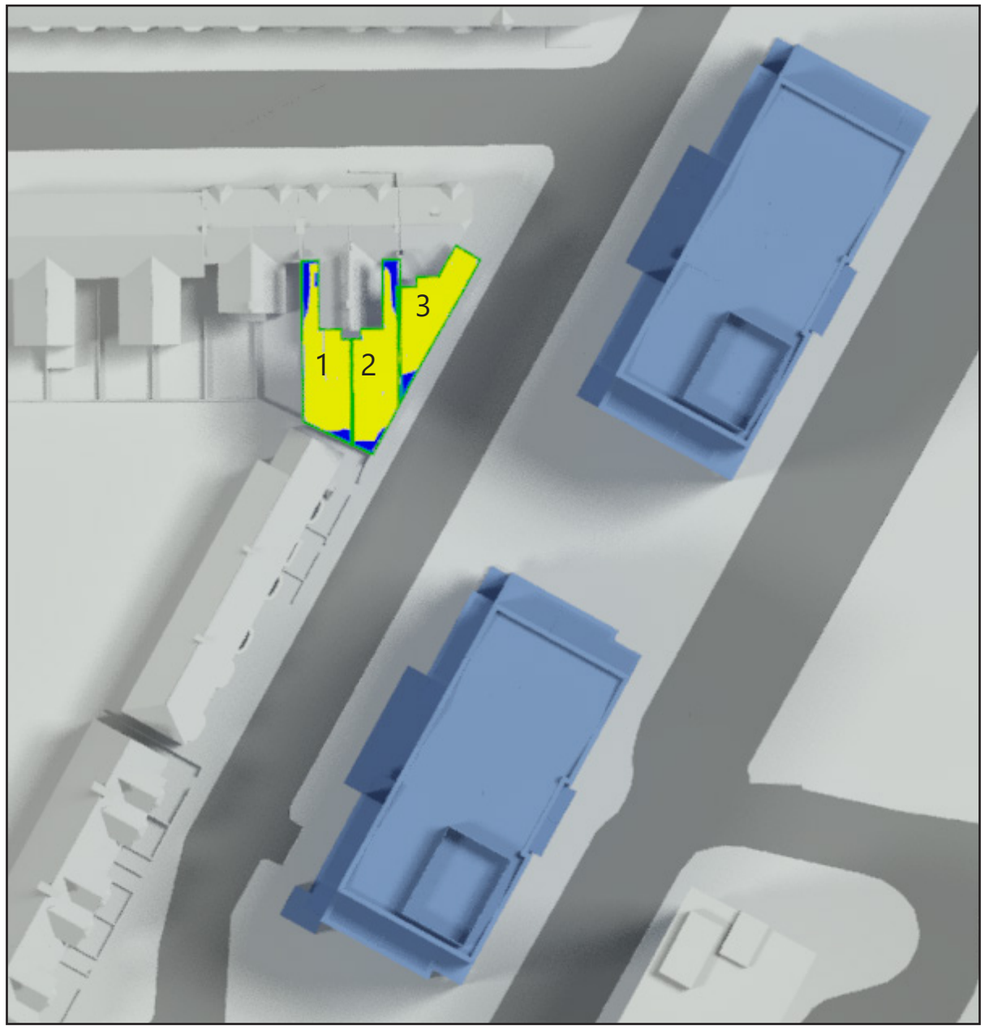
- Existing
- Proposed
- Area of assessment

NORTH

Project	Bromley North Station Road Car Park
Title	Sunlight Amenity Study Existing vs Proposed 21st March
Drawn	JC
Checked	--
Date	13/07/2022
Project	5153
Rel no.	02
Prefix	SA02
Page no.	01



Existing Scenario - June 21st



Proposed Scenario - June 21st

Area	Total Area (sq.m)	Existing Scenario Area recieving more than two hours of sun		Proposed Scenario Area recieving more than two hours of sun		Proportion Retained	Loss (%)
		(m^2)	%	(m^2)	%		
1 - 28 Glebe Road	61.0	54.0	89.0	53.9	88.0	1.0	0.0
2 - 30 Glebe Road	63.7	55.6	87.0	55.5	87.0	1.0	0.0
3 - 32 Glebe Road	51.4	48.9	95.0	48.8	95.0	1.0	0.0

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EB7 Ltd
Ordnance Survey

NORTH

Key:

- Existing building
- Proposed development
- Area of assessment
- Area receiving more than two hours of sun on June 21st
- Area receiving less than two hours of sun on June 21st

Project: Bromley North Station Road Car Park

Title: Sunlight Amenity Study Existing vs Proposed 21st June

Drawn	BA	Checked	--
Date	12/07/2022	Project	5153

Rel no.	Prefix	Page no.
02	SA03	01

Appendix 4

Results of the daylight and sunlight assessments within the proposed units

Fig. 1: Bird's Eye View

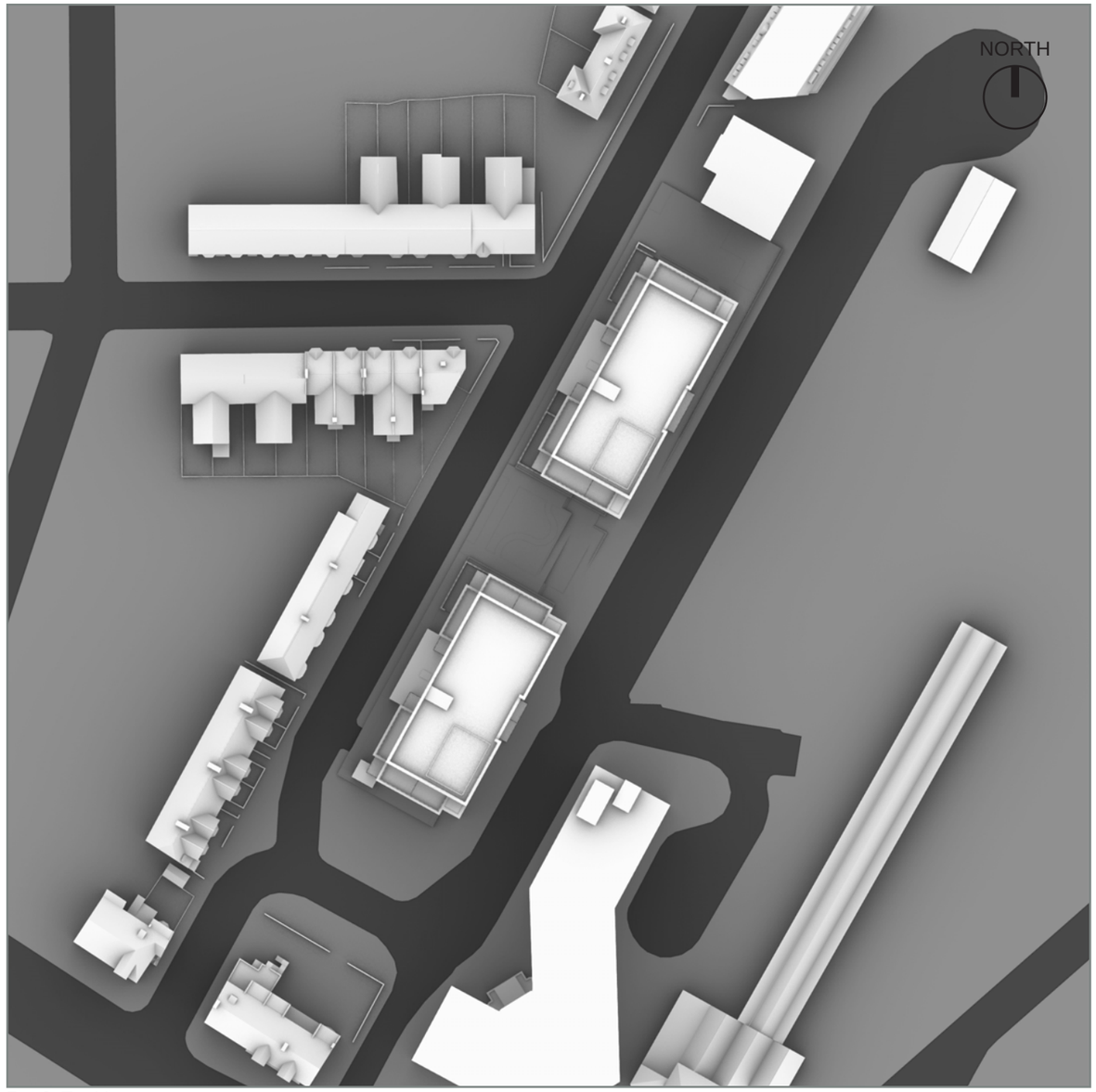


Fig. 2: Top View

Calculation assumptions	
Reflectivities (internal materials) Floors 0.4 Walls 0.80 Ceilings 0.80	Windows Normal Light Transmittance 0.61 Maintenance 0.92 Framing 0.80

Fig. 3: Floor Plan

Room ID	Room use	Daylight Quantum ADF	Sunlight Probability APSH Total	Sunlight Probability APSH Winter
B1 - Floor 0F				
101	LKD	2.6		
102	Bedroom	2.0		
103	LKD	3.5	60	14
104	Bedroom	2.8		
105	Bedroom	2.7		
106	LKD	2.6		
107	Bedroom	2.7		
109	LKD	3.2	30	6
128	LKD	3.2		

Table 1: Results

Fig. 4: Floor Plan

Room ID	Room use	Daylight Quantum ADF	Sunlight Probability APSH Total	Sunlight Probability APSH Winter
B1 - Floor 1F				
108	Bedroom	1.3		
110	Bedroom	2.6		
111	Bedroom	2.6		
112	LKD	3.1		
113	LKD	3.6	19	6
114	Bedroom	3.6		
115	Bedroom	4.0		
116	Bedroom	2.9		
117	Bedroom	2.8		
118	LKD	2.4	33	14
119	LKD	2.4	36	17
120	Bedroom	2.8		
121	Bedroom	2.9		
122	Bedroom	4.0		
123	Bedroom	3.4		
124	LKD	3.1	69	23
125	LKD	2.8	59	13
126	Bedroom	2.6		
127	Bedroom	2.6		
129	Bedroom	1.3		

Table 2: Results

Fig. 5: Floor Plan

Room ID	Room use	Daylight Quantum ADF	Sunlight Probability APSH Total	Sunlight Probability APSH Winter
B1 - Floor 2F				
130	Bedroom	1.4		
131	LKD	3.4	31	7
132	Bedroom	2.7		
133	Bedroom	2.8		
134	LKD	3.4		
135	LKD	3.9	19	6
136	Bedroom	3.7		
137	Bedroom	4.0		
138	Bedroom	2.9		
139	Bedroom	2.8		
140	LKD	2.4	33	14
141	LKD	2.5	36	17
142	Bedroom	2.8		
143	Bedroom	2.9		
144	Bedroom	4.0		
145	Bedroom	3.5		
146	LKD	3.3	71	24
147	LKD	3.0	64	18
148	Bedroom	2.7		
149	Bedroom	2.7		
150	LKD	3.3		
151	Bedroom	1.4		

Table 3: Results

Fig. 6: Floor Plan

Room ID	Room use	Daylight Quantum ADF	Sunlight Probability APSH Total	Sunlight Probability APSH Winter
B2 - Floor 0F				
201	Bedroom	2.4		
202	LKD	3.9		
203	Bedroom	2.4		

Table 4: Results

Fig. 7: Floor Plan

Room ID	Room use	Daylight Quantum ADF	Sunlight Probability APSH Total	Sunlight Probability APSH Winter
B2 - Floor 1F				
204	Bedroom	1.2		
205	LKD	3.1	28	5
206	Bedroom	2.6		
207	LKD	3.8		
208	Bedroom	2.2		
209	LKD	2.5	16	3
210	Bedroom	3.2		
211	Bedroom	2.7		
212	Bedroom	2.3		
213	LKD	1.8	21	3
214	LKD	1.6	17	2
215	Bedroom	1.8		
216	Bedroom	2.0		
217	Bedroom	2.2		
218	LKD	2.2	64	20
219	Bedroom	2.4		
220	LKD	3.9	63	20
221	Bedroom	2.5		
222	LKD	3.1		
223	Bedroom	1.2		

Table 5: Results

Fig. 8: Floor Plan

Room ID	Room use	Daylight Quantum ADF	Sunlight Probability APSH Total	Sunlight Probability APSH Winter
B2 - Floor 2F				
224	Bedroom	1.4		
225	LKD	3.3	31	7
226	Bedroom	2.8		
227	LKD	4.1		
228	Bedroom	2.3		
229	LKD	2.6	16	3
230	Bedroom	3.3		
231	Bedroom	2.8		
232	Bedroom	2.4		
233	LKD	1.8	22	4
234	LKD	1.6	18	3
235	Bedroom	2.0		
236	Bedroom	2.2		
237	Bedroom	2.5		
238	LKD	2.4	65	21
239	Bedroom	2.5		
240	LKD	4.2	69	23
241	Bedroom	2.7		
242	LKD	3.3		
243	Bedroom	1.4		

Table 6: Results

APPENDIX A.27 BROMLEY NORTH STATION COMMITTEE REPORT

Committee Date	5th October 2023	
Address	**Car Park Station Road Bromley**	
Application number	**23/01547/FULL1**	**Officer: Jessica Lai**
Ward	Bromley Town	
Proposal (Summary)	Demolition of a garage and associated buildings including a substation at No. 2 Station Road, redevelopment of the Bromley North Station Road car park to provide 75 residential units with 261sq.m(GIA) commercial floor space (Use Class Order Class E), provision of disabled parking spaces with electric vehicle charging points, cycle parking, a landscaped outdoor space and associated works.	

Applicant	**Agent**
Ms Alicia Munday London Borough of Bromley Civic Centre Stockwell Close Bromley BR1 3UH	Miss Elena Butterworth AECOM

Reason for referral to committee		**Councillor call in**
	Council's application and development over 21 residential units	No

RECOMMENDATION	**PERMISSION SUBJECT TO LEGAL AGREEMENT**

Bromley Town Centre
Biggin Hill Safeguarding Area
London City Airport Safeguarding
Smoke Control
Area of Open Space Deficiency

Existing and proposed use and floor area (approximate)			
Use	**Existing**	**Proposed**	**Difference (+ or -)**
Residential	N/A	6, 506sq.m	+ 6, 506sq.m
Non-residential	286	261s.qm	-25s.qm
TOTAL	286	6,751sq.m	N/A

Electric Vehicle charging point	2 active

Vehicle parking	**Existing number of spaces**	**Total proposed including spaces retained**	**Difference in spaces (+ or -)**
Standard car spaces	80	0	-80
Disabled car spaces	2	3	+1
Motor cycle bay	1	0	-1
Cycle	0	139	+139

Representation summary	Neighbour letters were sent on 2nd May 2023. Site notice was placed by the applicant on 9th May 2023. The application was also advertised in the press in the News Shopper on the 10th May 2023.
Total number of responses	37
Number of comment	1
Number of objections	36

Heads of Terms for Legal Agreement	**Amount**	**Agreed in Principle**
Carbon offset	£ 6, 613	Yes
Affordable housing	19 Social Rent 19 London Living Rent	Yes
Early Stage review mechanism	N/A	Yes
Affordable Wheelchair units (M4(3)(2)(b) and SELHP standards	4 affordable and 4 private	Yes
Child play	£14, 400	Yes
Loss of 3 on-street parking spaces	£11, 550	Yes
Street tree	TBC	TBC
Two year car club membership	N/A	Yes
Amendment of Traffic Order	N/A	Yes

Removal of rights to apply for residential parking permit	N/A	Yes
Obligation monitoring fee	£500 per Head of Term	TBC
Cost of Legal undertaking	TBC	TBC
Total	**£32, 563 (exclude street tree contribution to be confirmed, monitoring and legal fee)**	

SUMMARY OF KEY REASONS FOR RECOMMENDATION

- The redevelopment of this car park site to provide housing and commercial floor spaces would comply with the Site 2 Policy requirements of the Local Plan and the emerging draft Bromley Town Centre SPD. The site forms appropriate 9 percent of overall site area of Site 2.

- A Town Centre survey report indicates that there is a surplus provision of parking spaces and the capacity to meet the demand of park can be met across the Council's own car parks in the Town Centre. The proposal would result in loss of a garage and storage spaces. New commercial floor spaces would be created providing new employment opportunities.

- The proposal would provide 75 new residential units including 38 residential affordable housing, of which 19 units would be social rent and 19 units London Living Rent units. The proposal would positively contribute to the Council's Housing Supply and significant weight should be afforded to this. Three disabled parking spaces would be provided from the outset and is above the car free policy requirements from the outset. A total of 9 new trees would be provided to replace those removed. An on-site child play area and neighbourhood square would be provided.

- The proposal would make a positive contribution to the setting and has an appropriate relationship with the surrounding context. The main entrances to the buildings would be facing Station Road which follows the established pattern of development along the road. The scale of the proposal is compatible to the residential development on Tweedy Road, Sherman Road and Northside Road.

- The layout of the proposal would meet the relevant space standards and would provide private amenity space. The impact of the proposal is not considered to be significant to the neighbouring properties in terms of outlook, privacy, sunlight, and daylight.

- Subject to the planning conditions and required planning obligation to be secured by a legal agreement, it is considered that the proposal is

acceptable. Having considered the benefits and harm arising from the proposal and in the absence of a 5-year housing land supply, it is considered that planning permission should be granted as the presumption in favour of sustainable development is applied.

1. LOCATION

1.1 The application site measures approximately 2,829sq.m (0.28 ha) in area and is located on the eastern side of Station Road, Bromley. The site comprises of a Council's own car park (Station Road car park) with 83 parking spaces, including 2 disabled parking spaces and a motor cycle space, an electricity substation, a garage and a storage building. There is currently a temporary car wash facility in the car park which does not have the benefit of any planning permission but an application for retrospective permission is currently awaiting determination (see planning history, below)

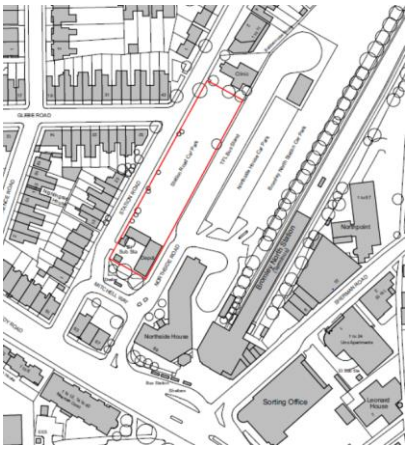


Image 1: Site location plan

Image 2: Bromley Local Plan Site 2 boundary

1.2 The site forms a part of an allocated site (Site 2 - Land adjacent to Bromley North Station) in the Bromley Local Plan for mixed use redevelopment. To the north of the site is a detached building, formerly occupied as a clinic. The ground floor is currently occupied by a charitable organisation -Bromley Mencap. To the east of the site is a Transport for London Bus Stand which can operate 24 hours a day and 7 days per week. A private open area car park associated to Northside House and a publicly accessible car park associated to Bromley North Railway Station are both located to the east of TfL bus stand. To the west of the site are residential houses on Station Road.

1.3 The site forms part of the designated Metropolitan Town Centre in the London Plan. Bromley Town Centre is designated as an Opportunity Area in the London Plan. Part of the site is designated as the Bromley Business Improvement Area in the Bromley Local Plan.

1.4 The site is located outside of Bromley Town Centre Conservation Area and not located within an archaeological interest area. Bromley North

Railway Station, to the east/south-east, is a Grade II Statutory Listed Building. There are no trees protected under Tree Preservation Order located within or adjacent to the site.

1.5 The site is located in Flood Zone 1 and is subjected to a very low risk of surface water flooding, as defined by the Environment Agency. There are no river or water bodies within or near to the site. There are no trees within or adjacent to the site subject to any tree preservation orders.

1.6 The public transport accessibility of the site is rated as 6a on a scale between 0 to 6b where 6b is the most accessible.

2. PROPOSAL

2.1 Full planning permission is sought for the redevelopment of the Bromley North Station Road car park, demolition of the existing garage, storage building and erection of two residential buildings to provide 75 residential units with 261sq.m(GIA) commercial floor space (Use Class Order Class E). The existing public car park would be removed.

2.2 The proposed buildings would be six storeys in height. A private car park with 3 disabled parking spaces would be provided from the outset. Should there be any further demand arising by the proposed development in the future, four additional disabled parking spaces can be provided within the proposed car park.

2.3. The proposal would provide 38 affordable units in Block 1 and 37 private units in Block 2. Two wheelchair units would be provided in Block 1 and a further two wheelchair units would be provided in Block 2. The proposed housing mix, size and tenure are as follows:

Tenure and size by unit (*Habitable room*)	**1 bed**	**2 bed**	**3 bed**	**Total**
Social rent	8 *(16)*	6 (18)	5 (20)	19 (54)
London living rent	9 (*18)*	5 (15)	5 (20)	19 (53)
Market	18 *(36)*	17 (51)	2 (8)	37 (95)
Total By Unit (Total By Habitable Room)	**35 (70)**	**28 (84)**	**12 (48)**	**75 (202)**

- Commercial floor spaces (Use Class Order Class E) would be provided in each building block, totalling 261sq.m.
- On-site child play and a neighbourhood square would be created between the proposed buildings. This outdoor area would be fully landscaped.
- A total of 13 streets including a street tree of moderate to poor qualities would be removed and replaced by 9 replacement trees.
- A total of 135 long-stay cycle parking spaces, including spaces for larger bicycles would be provided and located within the building. A further two

Sheffield stands providing 4 short-stay spaces would be provided next to the proposed building.

- External finishes of the building would be mainly made of red colour multiple facing and light buff brick. The balconies would be made of aluminium and powder coated grey in colour.
- The existing low boundary walls located to the rear of the site would be retained.

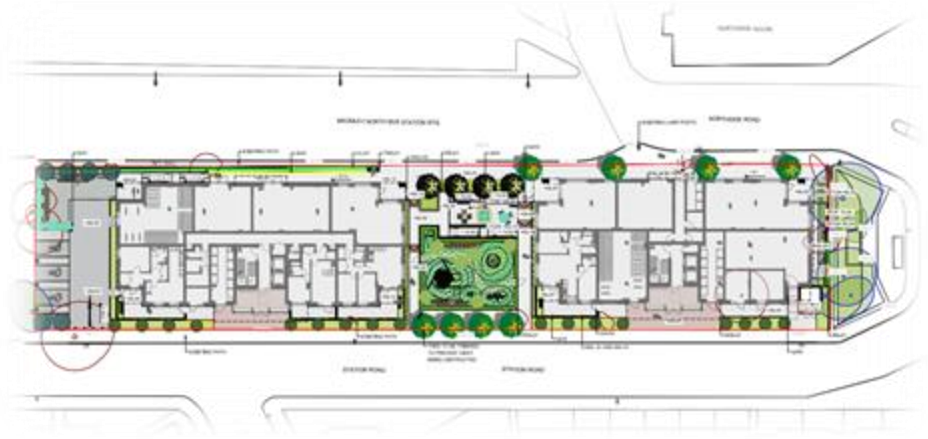


Image 3: Proposed landscaping layout

Image 4 Proposed West Elevation Plan

Image 5: Materiality and section plan

3. RELEVANT PLANNING HISTORY

- Bromley North Station Road car park

3.1 Ref: 22/03224/FULL2 - pending

Full planning permission for a temporary change of use of 12 car parking spaces to a car wash including a container for storage and staff office. This application remains under consideration (ref: 22/03224/FULL2).

3.2 Ref: 15/03266/DEMCON - granted on 8th March 2016

Prior notification for the demolition of boundary wall and fence between Northside Road and the bus park was approved on the 8th March 2016

3.3 Ref: 13/04224/DEMCON and 12/03836/DEMCON – granted on 29th April 2014 and 18th January 2013

Prior notification for the demolition of disused public toilets and boundary wall and associated works

Other recent planning applications within the wider allocated Site 2:

- 10A Sherman Road

3.4 Ref:18/00399/OUT- refused and planning appeal dismissed 23rd July 2019

Proposed outline application for the demolition of 10A Sherman Road and redevelopment with a mixed-use, 10-storey, scheme comprising 6no. one bed, 3no. two bed flats and B1 commercial space.

- Bromley North Railway Station

3.5 Ref: 10/02463/EIA – EIA not required 31st August 2010

Redevelopment of Bromley North Station, 6-10 Sherman Road, 63-67 Tweedy Road, car parks/bus terminal and car repair workshops (in Station Road), comprising retention of existing station booking hall building from retail/food and drink uses, new station booking hall building, replacement bus terminal, 500 dwellings with 650 car parking spaces including replacement 200 space station car park, 3000sqm retail/ commercial/community uses, with public square and pedestrian routes, in buildings between 5 and 13 storeys high (request for formal scoping opinion regarding the information to be provided in the Environmental Statement (under Regulation 10 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999

- No.63 Tweedy Road

3.6 Ref: 13/01141/FUL22 – granted on 26th July 2013

Change of use from offices (Use Class B1) to foreign language school (Use Class D1)

4. CONSULATION SUMMARY

a) Statutory

4.1 **Highway – No objection**

- Access

The two existing dropped kerbs will be removed and replaced by a new vehicular access to the car park. Two loading bays would also be provided. A total of 3 on-street parking spaces would be removed to accommodate these proposed changes. A planning obligation of £11, 550 should be secured by a legal agreement to address the loss of on-street parking revenue.

- Parking standard

The proposal will be car free with the exception of the blue badge parking spaces. Three blue badge spaces will be provided, and four further off-street disabled parking spaces can be provided within the car park, should there be demand associated to the proposed development. The level of provision would comply with the London Plan policy requirements and is acceptable.

- Cycle parking standard

The proposed level of cycle parking would meet the London Plan policy requirements. A total of 70 spaces and 65 spaces would be provided in Block 1 and Block 2. Two further Sheffield stands would also be provided.

- Trip generations

The trip generation modelling indicates that the proposal would generate 8 two-way car driver trips in the morning period hour and 6 two-way car driver trips in the afternoon peak hour. The modelling is reflective of the maximum of blue badge provisions at 7 spaces. The cycle and pedestrian modelling details are also provided. The proposal is not expected to result in significant impacts on the highway or public transport network, particularly when compared with the existing uses.

- Loss of car park

A town centre parking study which reviews the occupation of the existing parking provision in Bromley Town Centre has been submitted. This report indicates that the maximum level of Station Road car park before covid was approximately 90 percent. The submitted report demonstrates that the loss of parking spaces can be accommodated within the other Town Centre car park.

- Waste storage

No objection to the location and access to the proposed bin storage area for each residential block. With regards to the number, size and type of the waste and recycling bins, the following should be provided for each block, and these should be secured by a planning condition.

- 6 x 1100 litre bin non-recycle;
- 2 x11 00 litre bins for bottle;
- 2 x 1100 litre bin for paper; and,
- 1 x 140 litre food waste wheeled bin.

Should planning permission be forthcoming, the following details should be secured by planning conditions:

- Construction management, servicing and delivery plan
- Disabled parking space and management plan
- Refuse storage provision
- Cycle parking
- Lighting scheme
- Highway drainage

The provision of 2 years car club members and any required traffic works including amendment of traffic orders should be secured via a legal agreement. The applicant shall be reminded the cost for any changes to street furniture or statutory undertaker's apparatus associated to this development including drop kerb shall be met by the applicant.

Should planning permission be forthcoming, a servicing and delivery plan, and a construction management plan in line with the Council's Construction Council Code of Practice, London Construction logistics plan Guidance and London Construction Logistics and Community Safety documents should be secured by a planning condition.

4.2 **Drainage (Lead Local Flood Authority) – No objection**

Should planning permission be forthcoming, the detailed design measures as outlined in the submitted Surface Water and Foul Drainage Assessment report prepared by AECOM projection no. 60670531 dated 31/09/22 shall be submitted and approved by the Council, prior to commenced of any work.

4.3 **Transport for London (TfL) – Comment**

The TfL bus stand is owned by Network Rail. TfL has a long lease with Network Rail with no lift and shift provision. The bus stand operates 21 hours a day with a short non-operation window at night. This window could become zero if used by 24 hours bus routes in the future. The impact on current and future TfL bus operations is our primary concern due to is proximity. London Plan policy D13 Agent of changes polices applies. There is a low wall /crash barrier between the site and the bus stand. Any replacement fence should be suitable and in consultation with the TfL to avoid any potential accidents.

A bus stop clearway marking is required at the bus stand, and this should be secured by a legal agreement. A delivery and serving plan should be secured by condition/legal agreement.

TfL would expect no encroachment into the bus stand during construction period, A licence will be required for any uses of bus stand for construction purpose. A crash decking preventing any building materials falling into the bus stand should be used. An oversail license from TfL may be required. A construction management plan, in consultation with TfL will be required and should be secured by planning condition.

There are a number of noise sensitive windows facing the bus stand. The noise survey should cover the evening and night time hours to demonstrate the internal noise level would not exceed the predicted 45 dB in line with BS 4142 assessment. A high balcony screen is recommended to mitigate noise received from the balconies. The future occupants should be informed about the operational activities of the TfL bus stand and the mechanical ventilation system should be used as opposed to open windows. This should be secured in a legal agreement to notify all leaseholder.

A post completion and pre-occupation noise survey covering both internal and external noise would be beneficial to demonstrate the mitigation measures can be delivered. The future occupiers should be notified regarding noise and operational impact of the bus stand.

There is a risk of complaints regarding air quality from the operation of hybrid buses. TfL has a programme to roll out electric vehicles, which are quieter, there are more suited to shorter routes in less hilly areas. The timing of its roll out depends on funding.

TfL would suggest the applicant pays into a fund to compensate TfL for any loss arising from resident complaints. Your Environmental Health colleagues' assessment as to when and how they would react to complaints would assist us all in understanding the risks involved to efficient bus operations and indeed, based upon experience elsewhere, bus operations generally without expensive mitigation at TfL's cost, or

reduced operations compared with now and the potential for 24/7 operations in the future.

N.B The Council's Environment Health have reviewed the TfL comment above. The submitted noise assessment has assessed a Friday morning and applies the levels to night time assessment criteria as a worse-case scenario. This is a robust assessment unless TfL are of the opinion the noise levels at this time wouldn't be representative. I would also add that there could be a doubling in vehicle activities from what has been assessed, and the proposed mitigation would still be adequate which would suggest that the future expansion of the facility, and uncertain in the assessment process is effectively accounted for in the submitted assessment. With regards to the external amenity/balconies, the standard and assessment method used in the submitted report is acceptable for the proposed uses. The suggestion for a post completion stage noise assessment is reasonable and practical. This should be secured by a planning condition.

The requested details of Construction management plan, boundary treatment details, requirements for oversail licence and relevant should be secured by planning condition and informative attached. A post completion noise survey will also be secured by a planning condition.

b) Non-statutory

4.4 **Secured by design – No objection**

Should planning permission be forthcoming, a Secured by Design planning condition should be attached. The principles and details of the physical security requirements should be submitted and agreed prior to work commencing on site, the development shall achieve secured by design accreditation prior to occupation.

4.5 **Environmental health – No objection**

The submitted details are considered to be acceptable at planning application stage in terms of impact on air quality, land contamination and noise. Should planning permission be recommended, the following details should be secured by planning conditions:

- Site investigation and any required remediation works details;
- A scheme of mitigation covering façade, glazing and ventilation specifications demonstrate this noise levels would not exceed 30dB LAeq (night) and 45dB LAmax (measured with F time weighting) for bedrooms, 35dB LAeq (day) for other habitable rooms, with window shut and other means of ventilation provided;
- A noise assessment to confirm the residential units on the upper floors are protected from the ground floor commercial premises;
- An acoustic assessment covering all proposed noise-generating fixed plant in line with the methodology of BS 4142:2014+A1:2019.

- Details of any commercial kitchen extract systems be installed;
- Energy strategy confirming the equipment used to supply heat would meet the Building Emission Benchmark and can be considered as air quality neutral;
- Construction and Environmental Management Plan in accordance with the Control of Pollution and Noise from Demolition and Construction Sites Code of Practice;
- Non-Road Mobile Machinery (NRMM) to comply with the emission standards set out in chapter 7 of the GLA's supplementary planning guidance "Control of Dust and Emissions During Construction and Demolition" dated July 2014 (SPG).

4.6 **Historic England (Listed Building) - Comment**

No advice can be offered in this case and advice should be sought from the Council's heritage advisors. It is not necessary to consult Historic England again unless there are material changes to the proposal.

4.7 **Thames Water – No objection**

- Waste Comments

With regard to surface water drainage, Thames Water have no objection if the developer follows the sequential approach to disposal surface water. Prior approve is required to discharge surface water to a public sewer. The developer is expected to demonstrate measures will be undertaken to minimise groundwater discharges into the public sewer. Any discharge made without a permit is deemed illegal and may result in prosecution under the provisions of the Water Industry Act 1991. The following informative should be attached: *"A Groundwater Risk Management Permit from Thames Water will be required for discharging groundwater into a public sewer. Any discharge made without a permit is deemed illegal and may result in prosecution under the provisions of the Water Industry Act 1991. We would expect the developer to demonstrate what measures he will undertake to minimise groundwater discharges into the public sewer. Permit enquiries should be directed to Thames Water's Risk Management Team by telephoning 020 3577 9483 or by emailing trade.effluent@thameswater.co.uk"* .

A petrol / oil interceptors be fitted in all car parking/washing/repair facilities. Failure to enforce the effective use of petrol / oil interceptors could result in oil-polluted discharges entering local watercourses.

Based on the information provided, Thames Water have no objection regarding to the waste water network and sewage treatment works infrastructure capacity.

- Water Comments

There are water mains crossing or close to your development. Thames Water do NOT permit the building over or construction within 3m of water mains. If you're planning significant works near our mains (within 3m). Thames water will check the development would not reduce the water capacity, limit repair or maintenance activities during and after construction, or inhibit the services we provide in any other way.

Approval from Thames Water for any use of mains water for construction purposes is required or potential fines for improper usage.

Based on the information provided, Thames Water have no objection to water network and water treatment infrastructure capacity. The following informative should be attached: "*Thames Water will aim to provide customers with a minimum pressure of 10m head (approx 1 bar) and a flow rate of 9 litres/minute at the point where it leaves Thames Waters pipes. The developer should take account of this minimum pressure in the design of the proposed development*".

4.8 **NHS South East London Integrated Care System (ICS) - comment**

The ICS have advised that a health planning obligation should be paid towards the Primary and Community Healthcare provision.

N.B. This is currently covered under the Bromley Local CIL.

4.9 **UK Power Network – no objection**

The details of foundation design around of the substation should be provided. This should include risk and method statements in line with the UK Power Network guidance - Protection of Assets from Third Party Works. Consideration should be given to the outlet ventilation louver to the rear of the substation and any damp proof course that may be required. Any cost of relocation should be made by the applicant and the applicant is reminded that a party wall notice is also required.

4.10 **Housing Allocation (Occupational Therapist) - comment**

The disabled parking spaces shall comply with SELHPs standard. The criteria of disabled parking spaces allocation and the responsibility for provision the additional spaces in the future when required should be set out and agreed from the outset. These details should be secured planning condition, in consultation with the Council.

4.11 **Network Rail - comment**

The applicant / developer should engage with Network Rail's Asset Protection and Optimisation (ASPRO) team prior to works commencing. This will allow our ASPRO team to review the details of the proposal to ensure that the works can be completed without any risk to the operational railway. The applicant may be required to enter into an Asset

Protection Agreement to get the required resource and expertise on-board to enable approval of detailed works. Information regarding to Network Rail's Asset Protection is on the website. An informative shall be attached to remind the applicant the above.

4.12 **London Fire Brigade - Comment**

The proposal should achieve the recommendations outlined in ADB, Volume 1 & 2, B5 Access and Facilities will meet be prescriptively met. If there are any deviations from the guidance in ADB Volume 1 and 2: B5 Access and Facilities for the fire service in relation to water provisions, then this information needs to be provided to the Water Office (water@london-fire.gov.uk) to discuss the proposed provision. The proposal should also achieve the approved document B.

LFB have enquired road width, turning circle and road humps and projections from the building and the travel distance in communal corridors. The LFB have been advised that the car park is no more than 20m long and turning area is not required. There are no speed humps proposed and the car park is accessible by emergency vehicles. The dry riser inlet for fire fighter is located at the front façade. The LFB have also been advised that the building is designed to comply with clause 7.4 of BS9991 where the travel distance within the lobby can be 15m where there is a suppression system and smoke control system installed. No further comment has been received and based on the information submitted, it is considered that the proposal would meet the policy requirements.

c) Adjoining Occupiers/land owners

4.13 Thirty six (36) letters of objection including the owners of the neighbouring land have been received and the grounds are summarised as follows:

1. Design (Addressed in Section 6.3 and 6.4)

   - Does not complement the Victorian and Edwardian building in the immediate surroundings.
   - Excessive building height
   - Two storey houses would be more in keeping. Bromley North should not be turned into another high rise Croydon.
   - Impact to conservation area
   - Design of the proposed building is not in keeping with the area

2. Inadequate parking (Addressed in Section 6.5)

   - Car free development is unrealistic.
   - None of the officers carried out any consultation with residents in the local area and they do not know any local issues. The suggestion

that permits would not be allocated to the future resident is not convincing.
- Increase traffic and more parking pressure on surrounding roads. One way road is already congested.

3. Housing (Addressed in Section 6.2)

   - No information regarding to affordable housing

4. Loss of car park for visitor, garage storage and commercial lockers (Addressed in Section 6.1 and 6.5)

   - Car park is well used in the evening and weekend by children skateboarding, learning to ride bikes.
   - Closure of a 30 years garage and loss of 4 jobs
   - Loss of storage

5. Impact on residential amenities(Addressed in Section 6.10)

   - Loss of sunlight, outlook and privacy
   - noise and disturbance from servicing and delivering vehicles for commercial units.
   - Overshadowing neighbouring solar panels

6. Lack of infrastructure (Addressed in Section 6.10)

   - GP, hospital, dentist, school, green parks, train and bus services, water pressure and sewage pipe
   - Public transport to London is non-existent on Sunday with only a shuttle bus to Grove Park

7. Commercial floor space
   - No need for more commercial floor space

8. Others
   - Note more affordable housing is needed in Bromley.

4.14 One letter (1) of comment has been received and they have commented as follows (this is addressed in Section 6.3 and 6.4 of this report):

- Housing is needed in Bromley. This location is ideal and would encourage more development and more usage of Bromley north Station.
- Car free development is supported as current car park is mostly half full. The proposal would represent a better use of space. However, the on-street parking in the surrounding areas is at capacity.
- Resident parking permits should not be granted for the future residents**.**

4.15 Land owners of the wider Site 2 – Be Living - Bromley North Ltd and Network Rail Infrastructure Ltd.

Letters of objection have been received from the land owners of adjoining land (Be Living - Bromley North Ltd and Network Rail Infrastructure Ltd). This is supported by a letter from their sunlight and daylight consultant. It is considered that the proposal would prejudice the delivery of wider Site 2.. The grounds are:

- Single aspect east facing units;
- Balcony above a main living space result in reduction and further dependency of neighbouring land natural lights. There is a 10 percent difference in vertical sky components for habitable room with a balcony above.
- Main entrance facing the bus stand/ located on east elevation.
- Building too close to site boundary and rely on adjoining land for lights, more than may be considered reasonable in terms of its expectation of and access to daylight (as per BRE Report 209, Site Layout Planning for Daylight and Sunlight).
- Placing balconies directly above a main living space would further compound the dependency of the proposed scheme upon the adjacent land for natural lights.

N.B. Design workshops have been held between the applicant and the land ownership of the adjoining site. The last meeting was held in Feb 2023 and the massing of the Station Road scheme was shared with the adjoining owners.

- The grounds of objection have been considered by officers. Whilst there are some benefits to follow the suggested changes by the adjoining owners, it should be noted that the provision of main entrances facing the current bus stand would appear at odds, as the principal elevation of all existing buildings are facing Station Road (West facing).
- Having reviewed the proposed layout, the number of proposed units with dual aspects and its relative housing size, it is considered that the layout of the proposed buildings has been designed to optimise the potential of this site with no 2 or 3 bed single aspect unit.
- The request for planning officers to facilitate a meeting to effectively re-design the proposal is not considered appropriate at planning application stage.
- It is noted that the availability of lights for a room would be more when there is no balcony located above the relevant room. However, the use of balconies to provide private amenity space is not uncommon. There were no concerns raised regarding to the balconies on the west elevation of the proposal. Given that there are no details provided to outline how the proposal may compromise the future development of the adjoining site officers are unable to fully take into account the future development

in this instance. The current application is therefore assessed on its own merits as per any valid planning applications received by the Council.

- It is noted that the adjoining land owners had engaged with the Council regarding to their potential development. The proposal will need to take into account the draft Bromley Town Centre SPD and its guidance. Any major application referable to the GLA also requires design input from a design review panel.

- Officers are satisfied that adequate level of collaboration had been carried out by the applicant with the adjoining owners prior to the submission of this application. The objection raised by the adjoining owners are considered and set out in the assessment part of this report.

5. POLICIES AND GUIDANCE

Planning and Compulsory Purchase Act (2004)

5.1 Planning applications are required to be determined in accordance with the statutory development plan unless material considerations indicate otherwise (S38(6) Planning and Compulsory Purchase Act 2004 and S70 Town & Country Planning Act 1990).

National Planning Policy Framework 2023 (NPPF)

5.2 In accordance with Paragraph 47 of the Framework, planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise.

National Planning Practice Guidance 2014 onwards (NPPG)

5.3 Relevant paragraphs are referred to in the main assessment

5.4 **National Design Guidance 2019**

5.5 **The London Plan (March 2021)**

The relevant policies are:

Policy SD1	Opportunity areas
Policy SD6	Town Centres and high street
Policy SD7	Town centres: development principles and development plan documents
Policy SD8	Town centre network
Policy D1	London's form, character, and capacity for growth
Policy D3	Optimising site capacity through the design-led approach
Policy D4	Delivery good design
Policy D5	Inclusive design
Policy D6	Housing quality and standards

Policy D9	Tall buildings
Policy D11	Safety, security and resilience to emergency
Policy D12	Fire safety
Policy D13	Agent of change
Policy D14	Noise
Policy H1	Increasing Housing Supply
Policy H4	Delivering affordable housing
Policy H5	Threshold approach to application
Policy H6	Affordable housing tenure
Policy H7	Monitoring of affordable housing
Policy H10	Housing size mix
Policy S4	Play and informal recreation
Policy G5	Urban greening
Policy G6	Biodiversity and access to nature
Policy G7	Trees and woodlands
Policy G9	Geodiversity
Policy SI-1	Improving air quality
Policy SI-2	Minimising greenhouse gas emission
Policy SI-3	Energy infrastructure
Policy SI-4	Managing heat risk
Policy SI-5	Water infrastructure
Policy SI-8	Waste capacity and net waste self- sufficiency
Policy SI-12	Flood risk management
Policy SI-13	Sustainable drainage
Policy T4	Assessing and mitigating transport impacts
Policy T5	Cycling
Policy T6	Car parking
Policy T6.1	Residential parking
Policy T6.2	Office parking
Policy T6.3	Retail parking
Policy T6.5	Non-residential disabled persons parking
Policy T7	Deliveries, servicing and construction
PolicyDF1	Delivery of the Plan and Planning Obligations

5.6 **London Plan Guidance and Supplementary Planning Guidance**

- Accessible London: Achieving an Inclusive Environment (2014)
- Affordable Housing and Viability SPG (2017)
- Affordable Housing LPG (Draft – May 2023)
- Air quality neutral guidance (2023)
- Air quality positive guidance (2023)
- Be Seen energy monitoring guidance (2021)
- Character and Context SPG (2014)
- Energy planning Assessment guidance (2022)
- Fire Safety LPG (draft 2022)
- Housing Design Standards LPG (June 2023)
- Housing SPG (March 2016)
- Planning for Equality and Diversity in London SPG (2007)
- Play and Informal Recreation SPG (2012)
- Practice Note on contaminated land

- Shaping Neighbourhoods: Character and Context (2014)
- Sustainable Transport, Walking and Cycling LPG (2022)
- The Control of Dust and Emissions During Construction and Demolition (2014)
- Urban greening factor LPG (2023)

5.7 **Bromley Local Plan 2019**

The relevant policies are:

- Policy 1 Housing supply
- Policy 2 Provision of affordable housing
- Policy 4 Housing Design
- Policy 5 Parking of commercial vehicles
- Policy 30 Parking
- Policy 31 Relieving congestion
- Policy 32 Road safety
- Policy 33 Access for all
- Policy 37 General design of development
- Policy 38 Statutory listed buildings
- Policy 39 Locally listed buildings
- Policy 41 Development adjacent to a conservation area
- Policy 47 Tall building
- Policy 48 Skyline
- Policy 72 Protected species
- Policy 73 Development and trees
- Policy 79 Biodiversity and Access to Nature
- Policy 83 Non-designated employment land
- Policy 84 Business Improvement Area (BIAs)
- Policy 90 Bromley Town Centre Opportunity Area
- Policy 91 Proposals for Main Town Centre uses
- Policy 92 Metropolitan and Major Town Centres
- Policy 113 Waste Management in New Development
- Policy 115 Reducing Flood Risk
- Policy 116 Sustainable Urban Drainage Systems
- Policy 117 Water and Wastewater Infrastructure Capacity
- Policy 118 Contaminated Land
- Policy 119 Noise Pollution
- Policy 120 Air Quality
- Policy 121 Ventilation and Odour Control
- Policy 122 Light Pollution
- Policy 123 Sustainable Design and Construction
- Policy 124 Carbon reduction, decentralised energy networks and renewable energy
- Policy 125 Delivery and Implementation of the Local Plan

Bromley Supplementary Guidance

5.8 The relevant SPGs/SPDs are:

- Affordable Housing SPD (2008)
- Planning Obligations (2022)
- Draft Bromley Town Centre SPD (2023)
- Urban Design Guide SPD (2023)

6. ASSESSMENT

6.1 Land Use – Acceptable

- Loss of car park, garages and storage buildings

6.1.1 The Station Road car park site is located within Bromley Town Centre and forms part of the allocated site – Site 2 (Land adjacent to Bromley North Station) in the Bromley Local Plan. It occupies approximately 9.3 percent (0.28 ha) of the whole of Site 2. The site policy states:

Redevelopment for mixed use including 525 residential units, 2,000sq.m of office accommodation, space for community use, 230sq.m café/retail, transport interchange and parking. Proposals will be expected to:

- *Provide a sensitive and effect transition between the adjoining low rise residential areas and the higher density town centre.*
- *Respects and enhance the setting of the Grade II Listed Bromley North station building.*
- *Allow for the long term aspiration for improved rail connectivity to central and east London.*

6.1.2 The site currently comprises of an 83 space car park (including 2 disabled spaces and a motor cycle space), a temporary car wash, a garage and storage building. The redevelopment of this site would result in the loss of these uses and services. A car park survey is submitted which demonstrates there is a surplus parking capacity within the Council owned car parks in Bromley Town Centre. The details of this survey are outlined in the Highway section of this report.

6.1.3 The proposal would result in a loss of an existing garage business. BLP Policy 83 states Proposals for redevelopment of non-designated sites containing Class B uses for alternative employment generating uses will normally be allowed provided that the amenity of any nearby residential areas is not detrimentally affected. As part of this proposal, new commercial floor spaces would be provided and would meet the policy requirement. The nearest alternative garage is located on Sherman Road. There are also other garages located on Church Road, College Road and London Road. The applicant has also advised that the garage and the storage spaces are on short term lease (6 months rolling contract). Where requested and possible, the application side of the Council is committed to provide assistance for its relocation.

6.1.4 Given that the proposal would not result in a complete loss of services in the area, with alternative employment potential being created within the

site, it is considered that the proposal would not be contrary to BLP Policy 83.

6.1.5. The existing temporary car wash does not benefit from planning permission at the time of writing this report. The planning merits of this temporary use are currently being assessed under a separate planning application.

- Residential and commercial uses

6.1.6 The proposal would introduce new housing and commercial uses at this allocated site and would meet the Site Policy requirements, providing a transition from low rise development to higher density town centre development and respect the setting of the Grade II railway station building. The design and impact on heritage assets are set out in the relevant section of this report.

6.1.7 Site policy expects new proposals to allow for long term aspirations for improved rail connectivity. Officers note that was referenced in the dated Bromley Town Centre Area Action Plan (2010) to extend the DLR to Bromley. Transport for London, Network Rail and the Council's highway division have been consulted and have not raised any objections or concerns. Officers note that the extension of DLR has not been continued. As such, it is considered that the proposal would not be contrary to the Site Policy.

6.1.8 The site is adjoining to a bus stand which operates 24 hours a day and 7 days a week. A noise assessment including a noise survey and required mitigation measures have been submitted and reviewed by the Council's Environmental Health officers, which confirm the site is not unsuitable for the proposed uses. As such, it is considered that the introduction of housing is acceptable at this location, subject to planning conditions.

6.1.9 The proposal is designed to address the current relationship between the application site and its surrounding area. It is also designed to address the potential changes to the wider site in Site 2, should there be a formal submission in the future.

6.2 Housing – Acceptable

- Housing supply and five-year housing supply position (FYHLS)

6.2.1 The current FYHLS (covering the period 2021/22 to 2025/26) is 3,245 units or 3.99 years supply. This position was agreed at Development Control Committee on the 2nd of November 2021 and acknowledged as a significant undersupply. Subsequent to this, an appeal decision from August 2023 (appeal ref: APP/G5180/W/23/3315293) concluded that the Council had a supply of 3,235 units or 3.38 years. The Council has used

this appeal derived figure for the purposes of assessing this application. This is considered to be a significant level of undersupply.

6.2.2 For the purposes of assessing relevant planning applications this means that the presumption in favour of sustainable development may apply. It is noted that the appeal derived FYHLS figure assumes the new London Plan target of 774 units per annum applies from FY 2019/20 and factors in shortfall in delivery against past targets since 2019.

6.2.3 The NPPF (2019) sets out in paragraph 11 a presumption in favour of sustainable development. In terms of decision-making, the document states that where a development accords with an up to date local plan, applications should be approved without delay. Where a plan is out of date, permission should be granted unless the application of policies in the Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the Framework taken as a whole.

6.2.4 According to paragraph 11(d) of the NPPF in the absence of a 5 year Housing Land Supply the Council should regard the Development Plan Policies for the supply of housing including Policy 1 Housing Supply of the Bromley Local Plan as being 'out of date'. In accordance with paragraph 11(d), for decision taking this means where there are no relevant development plan policies or the policies which are most important for determining the application are out-of-date, granting permission unless:

i) the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

ii) any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

6.2.5 London Plan Policy H1 sets Bromley's housing target at 774 homes per annum. In order to deliver this target, boroughs are encouraged to optimise the potential for housing delivery on all suitable and available brownfield sites. This approach is consistent with Policy 1 of the Bromley Local Plan, particularly with regard to the types of locations where new housing delivery should be focused.

6.2.6 This application includes the provision of 75 additional dwellings and would represent a significant contribution to the supply of housing within the Borough. This will be considered in the overall planning balance set out in the conclusion of this report, having regard to the presumption in favour of sustainable development.

- Affordable Housing

6.2.7 Proposals on public sector land are required to deliver at least 50 percent affordable housing. The proposal would provide a total of 38 affordable units in Block 1 (107 by habitable room), achieving 50.7 percent by unit (or 53.8 percent by habitable room). The remaining 37 units would be provided and located in Block 2. As such, the proposed level of affordable housing would meet London plan Policy H4.A.(4).

6.2.8 London Plan Policy H6 set out the requirements for affordable housing tenure, a minimum of 30 percent social rent, a minimum of 30 percent of London living rent and the remaining 40 percent to be determined by the borough as rented or intermediate product. The proposal would provide 19 social rent units (54 habitable rooms) and 19 London living rent units (53 habitable rooms). The proposed tenure split would comply with the requirements of London plan Policy H6.A. The proposal is therefore considered under the "fast-track" route and no viability assessment is required. Should planning permission be forthcoming and in line with London Plan Policy H5.E, an Early-Stage Viability Review along with the quantum of the proposed affordable housing provision will be secured by a legal agreement.

- Unit Size Mix

6.2.9 LP Policy H10 promotes a range of unit sizes in new development, having regard to robust relevant evidence. Paragraph 2.1.17 of BLP states the 2014 SHMA highlights that the highest level of need across tenures within the Borough up to 2031 is for one bed unit (at 53%) followed by 2 bed unit (at 21%) and 3 bed units (at 20%). The proposal would provide 35 x 1 bed, 28x 2 bed and 12 x 1 bed. It is considered that the proposed housing mix and size are acceptable and would not be contrary to London Plan Policy H10.

- Living space standard

6.2.10 London Plan Policy D6 sets the minimum internal/living space standards for new dwellings, across all tenures. The required gross internal area (GIA) of all new dwellings depends on the number of occupancies, number of floors and housing size. It also sets out size requirements for bedrooms, storage and floor-to-ceiling heights. The standard seeks to ensure adequately sized rooms, functional and fit for purpose development can be provided and development to meet the changing needs of Londoners without differentiating between tenures. The above targets are reflected at the local level by Policy 4 of the Local Plan which seeks to ensure that all new residential units meet the minimum standards prescribed within the London Plan.

6.2.11 The proposed plans indicates that all new homes are designed to meet or exceed the national described space standards and thereby comply with the London Plan. All residential units will be provided with a private

amenity space, in the form of garden area on the ground floor, balcony or terrace on the upper floors. The proposed private amenity space, bedroom sizes, ceiling heights would comply with the requirements and an acceptable level of storage spaces would be provided for each unit. A further outdoor neighbourhood square and a child play area is also provided.

6.2.12 Standard 12 of the Housing Supplementary Planning Guidance states that each core should be accessible to generally no more than 8 units on each floor. Each of the buildings would be provided with two internal lifts accessible to all floors and each core is designed with no more than 8 units.

- Sunlight and daylight

6.2.13 The availability of daylight for the lowest 3 levels of the proposed buildings have been tested. The result indicates that 94 percent of the habitable rooms in Block 1 and 2 would exceed the target value in line with the BRE guidance.

6.2.14 With regards to sunlight, 17 out of 25 living would comply with the BRE targets. The remaining 8 would be below the recommended target mainly due to its orientation (east and west facing) and the presence of balconies. Whilst the presence of balconies would reduce the amount of sunlight, this provision is considered to be essential for residential use. It should be noted that the absence of private outdoor space would not be supported by officers. Overall, it is considered that the proposal layout would result in good quality accommodation for the prospective occupiers.

- Aspect, outlook and privacy

6.2.15 Policy D6.C of the London Plan states housing developments should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 'Optimising site capacity through the design-led approach' than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating.

6.2.16 The proposal layout indicates 55 units (73.3 percent) would be dual aspect. Whilst there are 20 single aspect units, the proposal layout is designed to maximise the number of dual aspect units with no single aspect north facing units or single aspect family units (2 or 3 beds). The proposed layout is well designed and welcoming with a residential lobby, with a dedicated and secured cycle and waste storage area in each building. The siting of the proposed building would be similar to the established pattern of development on Station Road and the massing of nearby modern developments. The design and layout indicate that

adequate passive ventilation, daylight and privacy and avoidance of overheating can be provided for each habitable room.

- Communal amenity space and play space

6.2.17 Policy S4 Play and Informal Recreation of the London Plan sets out in Clause B(2) that residential developments should incorporate good quality, accessible play provision for all ages and 10 square metres of playspace should be provided per child.

6.2.18 Based on the proposed unit numbers, mix and tenure, the required play space is 309sqm (30.9 child yield) using a higher bar under "Outer London Category". An area of on-site child play space with play equipment measuring approximately 160sqm would be provided and this would meet the requirements of those aged between 0 to 4 years old. The unmet provision for the remaining age group between year 5 to 11 and year 12 to 17 should be mitigated and a planning obligation of £14, 400 to enhance the existing park provision at Queens Garden Park, Bromley Park (Church House Gardens) and/or College Green should be secured by a legal agreement.

- Agent of change

6.2.19 London Plan Policy D13 states the agent of change principle places the responsibility for mitigating impacts from existing noise and other nuisance-generating activities or uses on the proposed new noise-sensitive development. Development should be designed to ensure that the established noise and other nuisance- generating uses remains viable and can continue or grow without unreasonable restrictions being placed on the existing uses/activities.

6.2.20 The site is adjoining to a bus stand which can operate 24 hours a day and 7 days a week. As part of this application, a noise assessment including a noise survey and mitigation measures have been submitted which confirm the site would not be unsuitable for residential use. The noise from bus movement has been assessed both in the daytime and night time period which confirm the proposal would meet the required standards. The report indicates that the proposed residential units will require glazing and a ventilation strategy to ensure the noise levels within habitable rooms will comply with the relevant environmental and living standards. Acoustic balconies and screens could also be used where they are facing the bus stand. The proposed glazing should either be double or triple glazed with at least one clearly comprising of acoustic laminated glass (e.g. 8mm glass; 12mm cavity; 8.8mm glass Stadip Silence or equivalent).

6.2.21 The Council's Environmental Health have reviewed the submitted noise survey details including the methodology used in the carried out noise survey. The noise assessment has assessed a Friday morning (daytime 11th November 2022) and applied the levels to night time assessment

criteria as a worse-case scenario. The submitted noise assessment is considered to be a robust assessment.

6.2.22 The Council's Environmental Health have considered the mitigation measures and no objection is raised. Should planning permission be forthcoming, the following details should be secured by planning conditions:

- A scheme of mitigation (covering façade, glazing and ventilation specifications) demonstrate the internal noise level would not exceed 30dB LAeq (night) and 45dB LAmax (measured with F time weighting) for bedrooms, 35dB LAeq (day) for other habitable rooms, with window shut and other means of ventilation provided;
- A scheme to the acceptability of noise impact upon the residential accommodations above and nearby; and
- A post completion stage noise assessment.

Overall, Officers consider that the proposal would provide a good standard of living environment for the future occupiers and would comply with the aforementioned policies and requirements.

- Wheelchair units

6.2.23 Policy D7 of the London Plan requires residential developments to provide at least 10% per cent of dwellings meet M4(3) (wheelchair user dwellings) and all other dwellings (90%) should meet requirement M4(2) (accessible and adaptable dwellings) of the Building Regulations Approved Document M: Access to and use of buildings.

6.2.24 A total of 8 wheelchair units (Building Regulation part M4(3) - wheelchair user dwellings) would be provided of which 4 affordable wheelchair units would be located in Block 1 and 4 private wheelchair units would be located in Block 2. The remaining units are designed to comply with accessible and adapted dwellings requirements (Building Regulation part M4(2) - wheelchair user dwellings).

6.2.25 The Council's Housing Allocations and Accommodation team have reviewed the submitted details and have advised the disabled parking spaces shall comply with the South East London Housing Partnership standard for the affordable wheelchair unit. Details confirming the responsible party providing the additional bays in the future and criteria for its allocation will be required. Should planning permission be recommended, a car park management plan setting out the requirements and details above would be attached. This approach is considered acceptable in principle and this aspect of the scheme would not undermine the objectives of the public sector equality duty.

6.3 Design

- Context

6.3.1 A detailed site analysis reviewing the historic development surrounding the allocated site within Bromley Town Centre was undertaken. The constraints and opportunities of the site and how the proposal will relate to and fits within its wider context have been provided. The site is surrounded by a range of building types, including domestic houses between 2 to 3 storeys in height on Station Road and Glebe Road, office and apartment blocks up to 10 storeys in height on Sherman Road, purpose built office and residential flats up to 10 storeys in height off Northside Road and on Tweedy North and Sherman Road.

- Layout

6.3.2 London Plan Policy D3 states all development must make the best use of land by following a design-led approach that optimises the capacity of the site and due consideration should be given to the form and layout, experience, quality, and character. This is in line with Bromley Local Plan Policy 37 which states new development will be expected to be of a high standard of design and layout and comply with the criteria a to criteria j.

6.3.3 Station Road is a one way road with a mixture of residential and commercial buildings. The proposed linear block is designed to echo the established features and pattern of development along Station Road. The existing terrace, semi-detached, detached, and purpose-built residential buildings are spaced out with a relatively consistent front building line with the main door facing Station Road. The proposed buildings are designed with a linear pattern with principal elevations facing Station Road. The proposed layout would enable an active frontage along Station Road at the street level to be maintained. The proposed layout would also offer a higher density than traditional housing stock, providing more housing.

6.3.4 The proposed layout is also designed to maximise the opportunities to improve the relationship with the street and enable a good level of permeable links between Station Road to the wider Site 2. A fully landscaped area is proposed between the proposed buildings blocks. A car park is proposed and provides disabled parking spaces to meet the imminent and future needs of the future occupiers. The private and public spaces of the proposed layout is well defined.

6.3.5 The proposed site layout accords with the key parameters outlined in the draft Bromley Town Centre SPD which include a requirement to provide publicly accessible (east- west) connections to and through the site with a view to improving pedestrian and cycling access. As such, the proposed layout is considered to be well designed and is supported subject to the landscaping and boundary treatments details.

- Scale & Massing

6.3.6 The design principles informing the proposed massing strategy which include the requirement for efficient floorplates (afforded by simple rectilinear building forms), and the need to maximise dual-aspect homes (with projecting bays and corner setbacks) which also introduce a domestic grain/feel in response to the low-rise properties to the west are acknowledged.

6.3.7 The maximum height of the proposed building would be 6 storeys and is considered to be an appropriate response to the existing context of a height comparable to Northside House, being located in a highly sustainable location.

6.3.8 The massing strategy creates a 4 storey datum fronting Station Road with upper floor setbacks to respond to the existing two and three storey buildings on the western side of Station Road. This approach would retain a human scale along the road and provide a good and proportionate transition. A separation distance of 18 metres from the existing 2 storey properties fronting Station Road and Glebe Road is considered to be acceptable in terms of safeguarding the amenities of existing neighbouring residents.

6.3.9 Whilst the proximity to the eastern boundary is noted, it is not considered that the siting and layout of the proposal would compromise the existing bus stand operations as there are no ground residential units facing Station Road, except cycle storage, a water plant room, a heating plant room and commercial floor spaces. The commercial floor spaces are designed with dual frontage potential ready to be integrated with the wider Site 2. As such, it is considered that the layout out of the proposal would not have an undue impact on the future development potential of the remaining Site 2.

- Appearance

6.3.10 External plants such as an air source heat pump are proposed and would be located at roof level. The proposed shallow pitched roofline would assist to screen the roof mounted plant and this will also help to mediate between the contemporary linear urban block typology and the traditional suburban pitched roof terraces fronting Station Road and Glebe Road.

6.3.11 The rationale for introducing a domestic scale to the street facing frontage (projecting bays) with a more civic appearance to the rear is supported. This architectural approach which seeks to delineate the base, middle and top of the buildings using contrasting brick tones is also supported. The proposed use of a lighter brick tone for the upper storey element, muted red brick tone for the main body, and a darker corbelled/recessed brick base is considered to be an appropriate

response to the immediate and surrounding context. The quality of all external materials should be secured by condition.

- Landscape

6.3.12 The key design drivers informing the landscape strategy and the siting of public and semi-private spaces appear well considered. The plaza space has been designed to fulfil several functions; accommodating a central play area and a separate seating area for residents and the wider community to use.

6.3.13 The use of suitably robust paving/materials alongside tree planting to soften the space is considered appropriate. The 'community area' to the north of the site will be particularly important, providing communal external amenity space for residents. The use of a Grasscrete surface treatment should be reconsidered as this has the potential to become an extension to the parking area, should there be any demand arising in the future.

6.3.14 The boundary treatment between the site and the bus stand should be visually permeable to avoid the application site appearing as a separate entity, being detached from the neighbouring parcel of land within Site 2. These details should be secured by condition.

6.3.15 Overall, the proposed architectural approach is considered to be acceptable, providing a good transition from suburban character to urban character. It is considered to positively integrate with the surrounding area. The layout, scale and massing of the buildings have taken into account the site context and its surrounding area being part of Site 2. Subject to the details outlined above, it is considered that the proposal is acceptable at this location.

- Design out crime

6.3.16 London Plan Policy D3 states that measures to design out crime should be integral to development proposals and be considered early in the design process. Development should reduce opportunities for anti-social behaviour, criminal activities, and terrorism, and contribute to a sense of safety without being overbearing or intimidating. Developments should ensure good natural surveillance, clear sight lines, appropriate lighting, logical and well-used routes and a lack of potential hiding places. This approach is supported by Local Plan Policy 37(h) (General Design).

6.3.17 The Designing out Crime Officer has raised no objection to the proposal and recommends a planning condition be attached requiring the development to achieve the Secure by Design accreditation, should the permission be granted.

- Fire Safety

6.3.18 London Plan Policy D12 requires all development proposals to achieve the highest standards of fire safety and requires all major proposals to be supported by a Fire Statement. Policy D5(B5) of the London Plan states that new development should be designed to incorporate safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building. The Mayor of London has also published pre-consultation draft London Plan Guidance on Fire Safety Policy D12(A) which supports Policy D12 and sets out what information that is required to be included and submitted as part of any planning application.

6.3.19 A fire statement is submitted which demonstrates the proposed development has been designed to comply with the fire safety standard, including means of escape for the building users and the future occupants, alarm system and fire suppression system.

6.3.20 The application is not referrable to the Health and Safety executive because it is below the height requirements to be referred to them. Health and Safety Executive (HSE) have advised that no comment can be provided as the proposal does not require to be referred to HSE.

6.3.21 The submitted Fire Strategy is prepared in line with the GLA guidance and adequately assesses the proposed fire safety measures relative to relevant London Plan policy, though as noted in the Strategy the proposal will ultimately be required to comply with the functional requirements of Building Regulations.

6.3.22 It is considered that the submitted details are acceptable at planning application stage. New development is also required to comply with Building Regulations.

6.4 **Heritage**

6.4.1 Section 16 of the NPPF entitled “Conserving and enhancing the historic environment” contains guidance in consideration of development proposals and their effect on the historic environment.

6.4.2 Paragraph 197 of the NPPF states that in determining planning applications local planning authorities need to take account of: a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and c) the desirability of new development making a positive contribution to local character and distinctiveness.

6.4.3 Paragraphs 201 to 204 set out the process for where a proposal leads to substantial or less than substantial harm to the significance of a heritage asset and the effect of an application on non-designated heritage assets.

6.4.4 London Plan Policy HC1 states that development proposals affecting heritage assets, and their settings, should conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings.

6.4.5 The site is located outside Bromley Town Centre Conservation Area and away from Bromley North railway station but these are the nearest identified heritage assets. The Railway public house is the nearest non-designated heritage asset as a locally listed building.

- Setting of Bromley Town Centre Conservation Area

6.4.6 BLP Policy 42 requires development adjacent to a conservation area will be expected to preserve or enhance its setting and not detract from views into or out of the area.

6.4.7 Setting of a heritage asset is defined in the NPPF as "*the surroundings in which a heritage asset is experience. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to apricate that significance or may be neutral*".

6.4.8 The Council's Conservation officer considers that the current open nature of the site is a positive contributor to the identified heritage assets. They consider that the proposal would dominate its surrounding area and have a negative and harmful impact due to its building height. They recommended its building height should be reduced.

6.4.9 The introduction of new buildings would inevitably result in a difference or have an impact on its current setting. However, it should be noted that the proposal is located approximately 60 metres from Tweedy Road and would be sited behind No. 67- 69 Tweedy Road. It is also located approximately 50 metres away from the railway line. Along Tweedy Road and Sherman Road, there are a number of existing buildings ranging between 6 to 10 storeys in height, such as Newman court (a 6 storey residential building), Northside house (a 6 storey office with roof additions) and North Point (a 10 storey residential building).

6.4.10 The scale and height of the proposed buildings is considered to be compatible to the modern developments both located outside or adjacent to the BTCCA. The typology of the proposal has taken into account the existing urban grain and pattern of development in the area.

6.4.11 Due to its siting and distance from the heritage assets, it is considered that the proposal would have a minimal impact the setting of the BTCCA and would constitute a less than substantial level of harm on the lesser end of the scale.

- Bromley North Railway Station

6.4.12 Bromley North Railway Station was first listed on the 31st August 1990. Historic England listing description states "*Railway Station Built in 1925 by the Southern Railway Company, replacing an earlier timber station. Neo-Classical style. Built of brown brick in English bond with stone dressings and hipped clay tiled roof. Central bay projects under a stone pediment with the words "SOUTHERN RAILWAY". Double height round-headed arched doorway, with bracket keystone and ornate fishscale pattern cast iron grille. Large tripartite sashes with stone surrounds. Dentilled eaves cornice and plinth. Roof has central copper domed cupola on 8 wooden Doric columns. Attached on the Sherman Road elevation is a parade of 6 1 storey shops, also in brown brick with stone cornice, ramped up in the centre to form a gable with large-round-headed opening below with iron twisted columns to fanlight. The shop fronts are divided by brick pilasters with stone capitals. The other side elevation has a sprayed gable and I storey offices with a series of sash windows. Classical style Booking Hall with Victorian scroll decoration and further iron grille 3 wooden gables to rear*".

6.4.13 The proposed building would be visible from the railway platform. However, the site is separated by two existing open area car parks and a bus stand (approximately 50 metres away). The proposed building scale and massing is considered to be compatible to its surrounding modern development.

6.4.14 Historic England have advised that no advice can be offered in this case. Given that the scale of the proposed building is compatible to its surrounding buildings, the distance between the site and the listed buildings, it is considered that proposal would have a minimal impact upon the setting of the listed building and would constitute a less than substantial level of harm on the lesser end of the scale.

- The Railway public house

6.4.16 The railway public house is a locally listed building located approximately 100 meters away from the application site and is screened by Northside House. It is considered that the proposal would not have an adverse impact on the setting of this non-designated heritage asset due to the distance.

6.5 Transport and Highways – Acceptable

- Loss of 83 parking spaces

6.5.1 There are five alternative Council operated public car parks and three major commercial privately operated public car parks near to the application site. The available car parks and spaces are as follows:

- Council car parks

a. Hill multi- storey car park (752 spaces)
b. Civic centre multi-storey car park (491 spaces)
c. St Blaise car park (120 spaces weekend only)
d. Palace Grove Car park (97 spaces)
e. Mitre Close car park (25 spaces)

- Other commercial car parks

f. The Glades (1, 500 spaces)
g. St Mark's Square (300 spaces)
h. NCP the Mall (255 spaces)

6.5.2 A Town Centre parking study is submitted which indicates that there is a reduction of annual usage of Station Road car park in 2019 (pre-covid) and 2020.

Year	**Total usage**	**Percent (+/-)**
2015	15,224	N/A
2016	17,545	15.3%
2017	18,337	4.5%
2018	18,621	1.6%
2019	18,343	-1.5%
2020	8,598	-53.1%

6.5.3 The car park study includes an occupancy assessment during the peak weekday and weekend use of the Council's car parks in December 2019 (pre-covid). The occupancy of the following car parks have been combined and assess for the peak month of December 2019.

Car park	Weekday Peak Use	Weekend Peak Use	Weekday Capacity	Weekend Capacity
The Hill	379	379	752	752
The Civic Centre	426	426	491	491
St. Blaise	N/A	47	N/A	120
Palace Grove	N/A	38	N/A	97
Station Road	95	71	83	83
Mitre Close	49	54	25	25
Total	949	1015	1351	1768
Occupancy	70.2%	57.4%		
Spare/surplus capacity	29.8%	42.6%		

6.5.4 The above assessment shows that during the peak month of 2019, for weekdays, the council operated car parks have 402 more/surplus spaces than required. During the weekend, there are 753 more spaces than required. The records indicate that the Hill car park had a 45% higher occupancy than the annual average and the average occupation is 246 compared to the reported 379 reported for December. For the Civic Centre car park usage is 20% higher than the annual average, with an average peak occupancy of 352, compared to the 426 reported above. In addition, on-street parking usage also indicates that there is surplus capacity in 2019 (pre-Covid).

6.5.5 Whilst information in 2020 is also provided, due to the Covid lockdown periods, Officers considered that the information above is more relevant in considering the usage and occupancy of council's car parks. The above information has been reviewed by the Council's highway officers and no objection is raised. It is considered that the loss of 83 parking spaces would not have an adverse impact on the availability of parking spaces in Bromley Town Centre.

- Access

6.5.6 A new vehicular access to the proposed car park would be created, via Station Road. The existing vehicular access would be removed. A Road Safety Audit (RSA) is submitted which indicates there are no significant impacts on highway safety. There is no further assessment required. The cost for any changes of vehicular access shall be met by the applicant.

- Parking standard

6.5.7 Table 10.3 of the London Plan sets a maximum residential parking standard. Development in Metropolitan and Major Town Centres in London, including sites with a PTAL rating of 5 to 6 should be car free, except disabled parking spaces. This proposal would be car free with disabled parking spaces and would meet the London Plan policy requirements.

6.5.8 The site is located within the inner area Controlled Parking Zone which has restrictions in place Monday to Saturday from 08:30 to 18:30 and Sunday from 10:00 to 17:00. In order to ensure the existing on-street parking capacity can be maintained on the surrounding roads and to ensure sustainable transport, it is considered that the right for the future residents to apply for a resident parking permit be removed and this should be secured by a legal agreement.

- Disabled parking space and Electric Vehicle charging point

6.5.9 London Plan Policy T6.1.G requires 3 percent of the disabled persons parking be provided from the outset and demonstrated as part of the parking design and management plan, further details of how the

additional 7 percent disabled parking spaces can be provided would form part of the management plan and details for any planning condition.

6.5.10 The proposed plan indicates that 3 disabled parking spaces would be provided from the outset. The remaining 4 additional spaces can be provided in the same car park by replacement of the planting to disabled spaces, if required.

6.5.11 The Council's highway officers have received the submitted plan and considered that this can be achieved. The Council's Housing Occupation Team have review the proposed plan and considered that the spaces should also meet the South East London Partnership parking standard. The allocation and management including the responsibility to provide the additional spaces should also be secured. Should planning permission be recommended, these details would be secured by planning conditions.

6.5.12 London Plan Policy T6.1.C requires a minimum of 20 percent of active charging facilities with the remaining being passive. The Transport Assessment states that all the spaces will have electric charging facilities, details of active and passive provision should be secured by a planning condition.

6.5.13 London Plan T6.5 sets a maximum level of commercial disabled parking provision in line with Table10.6 ensuring that non-residential elements should provide access to at least one on or off-street disabled persons parking bay. Officers note that no commercial disabled parking spaces would be provided. However, blue badge holders are benefited from on-street pay for spaces which are located adjacent to the site. Given the size of the proposed units, its location being located within the town centre, and the inclusive accessibility nature of public transport, it is considered that absence of non-residential commercial disabled parking would not be unacceptable in this instance and would not undermine the objectives of the public sector equality duty.

- Cycle parking

6.5.14 London plan Policy T5 states proposals should help remove barriers to cycling and create a healthy environment in which people choose to cycle. Appropriate levels of cycle parking should be secured and designed in line with the London Cycling design standards. Table 10.2 of the London Plan sets the minimum long stay and short stay cycle storage requirement for new development.

6.5.15 The proposed cycle parking provision is in line with the London Plan standards including the provision of non-standard cycle parking spaces for oversized bicycles. A total of 135 long stay spaces would be provided within buildings. A 4 further short stay outdoor Sheffield stand spaces would be provided next to the proposed building. The London cycle design standards have been considered in the design of the cycle

parking spaces. The non-standard cycle parking dimensions are proposed to be 2m in length and 0.9 metres in width each. The breakdown of the residential long-stay cycle parking as follows:

Residential block	**Double stacks spaces**	**Sheffield stands spaces**	**Non-standard spaces**	**Total cycle parking spaces**
Block 1 (North)	54	12	4	70
Block 2 (South)	50	12	3	65
Total	104	24	7	135

- Trip generations

6.5.16 BLP Policy 32 states the Council will consider the potential impact of any development on road safety and will ensure that it is not significantly adversely affected. The anticipated movements associated to the proposed uses by car, walking, cycle and pedestrian are tabled as follows:

	Mode	**AM Peak Two-Way**	**PM Peak Two Way**
Active Travel	Walk	16	14
	Cycle	1	1
Public Transport	Rail and underground/overground	8	7
	Bus	11	9
Vehicles	Taxi	0	0
	Motorcycle	1	1
	Car passenger	4	4
	Car Driver	8	6
	Total	50	42

6.5.17 The proposal is not considered to have a significant impact on the highway or public transport networks. No objection is raised by the Council's highway division.

- Waste Services

6.5.18 The access to the residential waste storage areas would be via Station Road. The refuse vehicles are expected to collect waste from Station Road. Three on-street parking spaces would be replaced by two loading bays that are proposed, and this would also ensure sufficient spaces can be provided for servicing and deliveries. The Council's Waste Services, and highway division have received the submitted details and considered the locations to be acceptable. The details of dropped kerbs and bin storage sizes would be secured by planning conditions.

6.6 Energy and Sustainability – Acceptable

6.6.1 Paragraph 157 of the NPPF states that in determining planning applications, LPAs should expect new developments to comply with policies and requirements for decentralised energy supply unless this is demonstrated to be unfeasible or unviable.

6.6.2 BLP Policy 124 and London Plan Policy SI 2 requires major development should be net zero- carbon, reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand in accordance with the energy hierarchy:

1) Be Lean: use less energy and manage demand during operation;
2) Be Clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly;
3) Be Green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site;
4) Be Seen: monitor, verify and report on energy performance.

6.6.3 London Plan requires a net zero-carbon target for all new major developments with at least a 35% on-site reduction beyond Part L 2013 of the Building Regulations. Under the Be Lean measures, residential development should achieve 10 per cent through energy efficiency measures. Where it is clearly demonstrated that the zero carbon target cannot be fully achieved on site, any short fall should be provided in agreement with the borough, either:

1) Through a cash in lieu contribution to the borough's carbon offset fund or
2) Off-site provided that an alternative proposal is identified, and delivery is certain.

6.6.4 An Energy Strategy following the GLA's energy hierarchy has been received. Under the "Be Lean" category, a range of passive design features would be employed to reduce the heat loss and demand for energy. The measures include building fabric performance and insulation to reduce heating demand, high efficiency lighting in all areas are proposed to reduce the carbon emission of the proposed development. These measures would meet the minimum requirements at 10 percent for domestic use and 15 percent for non-domestic use as outlined in the GLA energy guidance and this is considered acceptable.

6.6.5 No carbon reduction can be awarded under the "Be Clean" category as the inclusion of a Central Heat Power was not considered to be economically viable for the scale of this proposal. The closest existing district heat network is located approximately 700m from the site and not considered to be feasible for this proposal. However, a space for a heat exchanger within the plant room is provided and this will enable future connection to a district heating network.

6.6.6 Under “Be Green” category, a range of on-site renewable energy technologies have been considered. Air source heat pumps are considered to be most suitable and would be used to meet the on-site carbon reduction policy requirements.

6.6.7 This proposal would achieve a 76% percent (7.4 tonnes) onsite carbon saving against Part L 2013 of the Building Regulations Compliant Development. These proposed measures would result in a shortfall of 24 percent (2.3 tonnes) carbon reduction and a planning contribution of £6, 613 should be secured by a legal agreement.

- Overheating

6.6.8 London Plan Policy SI4 sets out expectations for developments to minimise adverse impacts on the urban heat island, reduce internal overheating and reduce the need for air conditioning through their design, layout, orientation, materials and the use of green infrastructure. Major developments should include information in their energy strategy as to how they propose to meet policy requirements in accordance with the cooling hierarchy in Policy SI 4.

6.6.9 The applicant has carried out a Thermal Comfort Assessment in line with the CIBSE TM59 methodology and results show that a 100 percent of the occupied and assessed area would meet the thermal confirm criteria requirements, including all the migration measures outlined below:

- glazing with a maximum g-value of 0.4 to all closed windows on the East elevation and 0.5 to openable windows on the south, west and north elevations
- Mechanical ventilation with heat recovery units to operate in summer by pass mode.
- Additional purge ventilation to the east elevation rooms to overcome the lack of natural ventilation from closed windows.
- Living and bedroom tilt and turn windows have a minimum opening angle of 45 degree during occupied hours to allow for further natural ventilation

6.6.10 Based on the information above, it is considered the proposal would meet the policy requirements and is acceptable.

6.7 Biodiversity and Green Infrastructure (Protected species, biodiversity net gain, urban greening factor and trees)

a) Protected Species

6.7.1 BLP Policy 72 states planning permission will not be granted for development that will have an adverse effect on protected species, unless mitigation measures can be secured to facilitate survival, reduce disturbance, or provide alternative habitats. London Plan Policy G6 states that development proposals should manage impacts on biodiversity and aim to secured net biodiversity gain.

6.7.2 The site is fully covered by concrete and is adjoining to a relatively busy traffic area and fully built-up area. There is no SSSI, ancient semi-natural woodland, or priority habitat near to the site. There are also no river or water features within or near to the application site. There were no features within the site considered to be suitable to support roosting bats.

6.7.3 The site is not considered to be of high ecological or biodiversity value. The site is also considered to be of negligible value for foraging or commuting bats. The rail corridor to the east of the site is linked to Sundridge Park Golf Club where there is suitable foraging habitats. The trees adjacent to the site were found to have negligible potential for roosting bat. The existing buildings were of constructed with single skin brick construction with roof sheets. The buildings are equipped with bright internal lights and constant vehicle movement in and out of the building and high level of noise.

6.7.4 The site is covered by hardstanding and the conditions of the existing occupied buildings are not considered to have any signs to support bat roosting. Due to the negligible value of the buildings, no further survey is considered to be required.

b) Biodiversity Net Gain (BNG)

6.7.5 Policy G1 of London Plan expects development proposals to incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network. Policy G5 of the London Plan requires major development proposals to contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage. The policy also recommends that predominately residential developments should achieve an Urban Greening Factor (UGF) target score of 0.4. Policy G6 of the London Plan requires developments to amongst other things, manage impacts on biodiversity and aim to secure net biodiversity gain.

6.7.6 The proposal is predicted to achieve a 225 percent for area-based habitable units and 100 percent for hedgerow units. The proposed therefore exceeds the minimum BNG target.

c) Urban Greening factor (UGF)

6.7.7 London Plan Policy G5 states major development should contribute to the greening of London including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping, green roofs, green walls and sustainable drainage. The London Plan recommends a target score of 0.4 for developments that are predominantly residential.

6.7.8 The proposal would achieve an urban greening factor of 0.4 which would accord with the recommended score as specified in the London Plan.

d) Trees

6.7.9 Trees play an important role within the urban environment. London Plan Policy G7 states development proposals should ensure that wherever possible, existing trees of value are retained. BLP Policy 73 states that new development will be required to take particular account of existing trees on the site and on adjoining land, which are in the interest of visual amenity and/or wildlife habitat.

6.7.10 An arboricultural report along with a tree protection plan is submitted to identify the likely impacts of the proposal. A total of 13 trees and a further street on Station Road (T13) would be removed and replaced with new planting. These existing trees are considered to be of low quality (Category C) or unsuitable for retention (category U – below 10 years remaining contribution). The list of trees to be removed are as follow:

1. T5 – cherry (Category U)
2. T6 – sycamore (Category U)
3. T8 – Ash (Category C)
4. G9 - Buddleja (Category C)
5. T10 – Apple (Category C)
6. T11 - Apple (Category C)
7. T12 - Apple (Category C)
8. T13 – Red oak (Category C)
9. T15 – Sycamore (Category C)
10. T16 – Elm (Category U)
11. T17 – Elm (Category U)
12. T18 - Ash (Category C)
13. T19 – Sycamore (Category U)
14. T20 – Buddleja (Category U)

6.7.11 The following retained street trees are located outside the application site and various minor crown reduction works are proposed.

15. T1 – Sliver Birch (Category C)
16. T2 – Sycamore (Category B)
17. T3 – Birch (Category C)
18. T4 - Italian Alder (Category B)
19. T7- Firethorn (Category C)
20. T14 – Cherry (Category C)

6.7.12 A street tree located on public pavement will be removed (T13 – Red Oak). It is noted that the submitted tree survey indicates that this tree is suffered from fungal brackets to south and north, likely Ganoderma and sounds partially hollow. The surface roof of this tree is severed/damaged 100mm. This tree does provide a degree of public amenity value. The Council's Street Tree officer has advised any tree that is lost would

attract a compensation amount based on the CAVAT calculation. This would be secured within a Legal Agreement, subject to planning permission being granted.

6.7.13 It is noted that a retained street tree (T4- Italian Alder) is located close to the site. Given that there is an existing building already located within its root protection area, it is considered that the proposed development would be unlikely to create any new impact.

6.7.14 Whilst the proposal would result in loss of trees, this would be replenished by new planting and associated landscaping works. A total of 9 trees would be replanted within the site. Given that the proposal would not result in loss of moderate or high-quality trees, it is considered that the proposal would meet the policy requirements.

6.7.15 The proposed would incorporate an open communal landscaped area. The proposed new trees would include species with modest size canopies planted in a landscaped garden. Overall, it is considered that the design, layout and allocation of gardens spaces are well designed. The proposal would contribute to the green infrastructure of the site and would not be contrary to the objective of the London Plan Policy G6. A condition requiring the submission and approval of the detailed landscaping design is recommended.

6.7.16 Should planning permission be forthcoming, details of tree protection measures and root protection plans, including the use of machinery, materials and all preparatory work should be secured by a planning condition.

6.8 Drainage and Flood Risk - Acceptable

6.8.1 The NPPF states that major development should incorporate sustainable drainage systems which should take account of advice from the lead flood authority; have appropriate proposed minimum operational standards; have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and where possible, provide multifunctional benefits. London Plan Policy SI-13 and BLP Policy 116 states development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible where should also be a preference for green over grey features, in line with the drainage hierarchy in policy SI 13 of the London Plan.

6.8.2 The application is accompanied by a surface and foul water drainage strategy and a surface water and foul drainage strategy. The report indicates that the site has a very low risk of surface water flooding and is located within Flood Zone 1 where the probability of river or sea flooding is less than 0.1% (1 in 1000) chance in any given year as defined by the Environment Agency.

6.8.3 The proposed surface water drainage strategy has been designed in line with the Environment Agency Climate Change Guidance to consider and manage the impact of a 1 in 100 year plus 40% climate change rainfall.

6.8.4 The proposed drainage strategy would also incorporate the following measures which demonstrates that the discharge rates of the site will be reduced to mimic the existing green field run-off rate for all storm events. The proposed measures include:

- Attenuation cellular storage tank (approximate 175 cubic metres); and;
- Blue roof (approximately 63 cubic metres for each building)

6.8.5 Foul water network generated from the site would be connected and discharged via the existing foul water network. The Council's drainage officer and Thames Water have raised no objection to the proposal and have recommended conditions for the details of the drainage strategy to be submitted and in line with the Surface & Foul Water Drainage Strategy. The applicant is reminded that any disposal of surface water into a Thames Water drain would not be acceptable without written approval from Thames Water. Subject to the conditions and informatives, it is considered that the proposal would be acceptable with regards to the surface water run-off and drainage.

6.9 Environmental Health (Air quality, Contamination and Noise) - Acceptable

a) Air Quality

6.9.1 Policy 120 of the Local Plan states that developments which are likely to have an impact on air quality or which are located in an area which will expose future occupiers to pollutant concentrations above air quality objective levels will be required to submit an Air Quality Assessment. Developments should aim to meet "air quality neutral" benchmarks in the GLA's Air Quality Neutral report.

- Operational Phase

6.9.2 The site lies within an Air Quality Management Area (AQMA) and also located an Air Quality Focus Area (AQFA) – Bromley Tweedy Road A21/High Street/ Widmore Road A222. An air quality assessment including an updated air quality neutral assessment and updated construction management plan has been submitted. The assessment has had regard to the potential impact of the proposed development on air quality at nearby receptors and the impacts of existing local air quality conditions on future occupiers. The Air quality neutral assessment has included the modelling details of vehicle emissions and traffic data. The results indicates that the trip generation of the proposal is mainly limited to disabled parking, servicing and deliveries. The proposed development is considered to be air quality neutral for both building related emissions

and transport related emissions. As such, no mitigation is therefore required.

- Construction Phase

6.9.3 The assessment indicates the site has a "medium risk" during demolition and construction activities. Should planning permission be recommended, a planning condition securing a construction management plan incorporating the Council's Control of Pollution and Noise from Demolition and Construction Site Code of Practice 2017 should be imposed. A planning condition to limit the size and the emissions of construction vehicles should also be attached.

b) Land contamination

6.9.4 In accordance with policy 118 of the BLP when new development of contaminated land, or land suspected of being contaminated is proposed, details of site investigation and remedial action should be submitted. A desk study report is submitted and has been reviewed by the Council's environmental health. The details of a site investigation strategy including all investigative works and sampling on site, the results of analysis, risk assessment, remediation strategy and a quality assurance scheme shall be submitted and approved by the council.

c) Noise

6.9.5 London Plan Policy D13 'agent of change principle' places the responsibility for mitigating impacts from existing noise and other nuisance- generating activities or uses on the proposed new noise-sensitive development. Development should be designed to ensure the established noise and other nuisance-generating uses remain viable and can continue or grow without unreasonable restrictions being placed on them.

- Operational phase

6.9.6 The submitted noise impact assessment, including a noise survey, indicates that the proposal can achieve the required standard for residential use. The Council's Environmental Health have considered the submitted details and recommends a scheme of noise mitigation covering façade, glazing and ventilation specifications and demonstrating the internal noise level would not exceed 30dB LAeq (night) and 45dB Lamax (measured with F time weighting) for bedrooms, 35dB Laeq (day) for other habitable rooms, with window shut and other means of ventilation and these details should be provided and secured by planning condition.

6.9.7 The proposed residential units would be located above commercial uses on the ground floor. A noise mitigation scheme is also required to ensure the residential units on the upper floors can be protected and maintained

from the activities generated by the proposed commercial units. A further acoustic assessing covering all noise generating fixed plant and a pre-occupation noise assessment should also be provided and secured by planning conditions.

- Construction phase

6.9.8 A construction management plan including details of noise mitigation during the construction stage, servicing and delivery hours shall be submitted and approved by the Council, prior to works being commenced on site.

6.10 Impact on neighbouring amenities – Acceptable

6.10.1 BLP Policy 37 (General Design and Development) criteria (e) states that the Council will expect all development to respect the amenity of occupiers of neighbouring buildings and ensure they are not harmed by noise and disturbance, inadequate daylight, sunlight, privacy or by overshadowing.

- Houses on No. 5 to No. 11 Station Road

6.10.2 A daylight analysis was carried out on the proposed development to ensure good daylight levels according to the BRE guidelines. No-Sky Line (NSL) analysis indicates that adequate daylights can be maintained for all rooms with an exception of one room that would fall below the BRE recommended targets, which is a very minor transgression with the retained NSL levels falling to 0.75 times its former level. Despite this, there remains good daylight penetration to this room with approximately 72% of the floor area maintaining direct sky visibility. With regards to sunlight, all habitable spaces with a southerly aspect will retain excellent level of direct sunlight well above the BRE criteria of 25% APSH and 5% during the winter months.

- Houses on No. 13 to No. 23 Station Road

6.10.3 All the habitable rooms would either retain daylight distribution levels in accordance with the BRE guidelines at 0.80 or are limited to modest deviations from the guidelines within 0.69-0.75 times their existing level. The proposal is not considered to have a significant change in daylight penetration to the neighbouring rooms. With regards to sunlight, all habitable spaces with a southerly aspect will retain excellent level of direct sunlight well above the BRE criteria of 25% APSH and 5% during the winter months.

- Houses on No. 28 to 32 Glebe Road

6.10.4 The NSL assessments for no.28-32 show that the neighbouring rooms retain daylight distribution levels in accordance with the BRE recommendations or are limited to minor shifts of only up to 0.76 times

the former value compared to the 0.80 target. The sunlight assessment demonstrates all habitable rooms with a southerly aspect will either have an annual reduction of no more than 4% or will maintain good levels of sunlight materially in excess of the BRE target of 25 % total APSH and 5% during the winter months.

6.10.5 The rear gardens of these houses would experiences a degree of overshadowing effect. The report indicates that a large portion of the rear garden at 28 Glebe Road is marginally below the recommended 2-hour threshold, between 1.6-2 hours. This impact is considered to be minor and unlikely to have a significant impact on the amenity / use of the space across the year.

- Houses on No. 31 to 43 Glebe Road

6.10.6 The report indicates that the central bay windows across 31-43 Glebe Road will retain VSC levels within 0.80 times their former value and therefore meet the BRE target. A first floor window would experience a very minor shift below the VSC target value but retain an absolute level of 26.8%. This is considered to be an unnoticeable shift from the recommended value. The assessment indicates adequate sunlight can be maintained in line with the BRE guidance.

- No. 1 to 3 Babbacombe Road, 1 to 3 Mitchell Road and Babbacombe House a clinic (Wider Site 2)

6.10.7 Due to the siting and distance to the proposed buildings, it is considered that the proposal would not have an adverse impact on daylight and sunlight.

6.10.8 Overall, the majority of neighbouring windows and gardens would meet the BRE recommended targets. Whilst there are areas below the suggested guidance, the retained daylight levels are considered to be good and is not considered to be unacceptable at this town centre location.

- Outlook and privacy

6.10.9 The front windows of the existing houses are facing an open area of car park. It is noted that the outlook and the perceived level of privacy would be affect by this proposal. However, it should be noted that the distance between the front walls of the proposed buildings and the front wall of the existing houses on Station Road is approximately 15 metres. An area of open space is proposed between the proposed building with new planting. Due to this distance and provision of an open space between the proposed building, it is considered that a good degree of privacy and outlook can be maintained at this Town Centre location.

6.11 Planning obligations and CIL

6.11.1 The London Borough of Bromley Community Infrastructure Levy (CIL) proposals were approved for adoption by the Council on 19 April 2021, with a date of effect on all relevant planning permissions determined on and after 15 June 2021. The Mayor of London's CIL is also a material consideration. The application is liable to both Mayoral and Local CIL

6.11.2 BLP Policy 125 and the Council's Planning Obligations SPD state that the Council will, where appropriate, enter into legal agreements with developers, and seek the attainment of planning obligations in accordance with Government Guidance.

6.11.3 Officers have identified a number of planning obligations which are considered necessary to mitigate the impacts of this development, the reasons for which have been set out in this report. The following planning obligations will need to be secured as part of a legal agreement.

- Affordable and wheelchair housing provision including nomination rights and early-stage review mechanism;
- Carbon offset: £ 6, 613
- Child play: £14, 400
- CAVAT: To be confirmed and agreed
- Loss of 3 on-street parking bay: £ 11,550
- Removal of permit right:
- Amendment of traffic order;
- Two years car club membership;
- Planning obligation monitoring: £500 per head of terms
- Cost of legal undertaking.

6.11.4 Officers consider that these obligations meet the statutory tests set out in Government guidance, i.e. they are necessary, directly related to the development and are fairly and reasonably related in scale and kind to the development.

7. CONCLUSION AND PLANNING BALANCE

7.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications are determined in accordance it the Development Plan unless material considerations indicate otherwise. The NPPF emphasises the need to deliver sustainable development. This concluding section of the report will examine the overall planning balance of the proposed scheme and consider the public benefits of the scheme against identified departure from relevant Development Plan policies.

7.2 The proposal would also contribute to the Council’s 5-year housing supply and significant weight should be afforded in considering the merits of this proposal.

7.3 This site forms part of the allocation site in the Bromley Local Plan (Site 2). It is surrounded by a mixture of residential and commercial buildings between 2 to 10 storey in height. The design and layout of the proposal has taken into account the established local context, site policy and development plan policies and would not have an unacceptable level of impact on the neighbouring properties. The proposal is supported by a detailed and fully landscaped plan and would positively improve the built and natural environments when compared with the existing conditions of this site.

7.4 Whilst the proposal would result in the loss of parking spaces, garage, and storage area, a Town Centre car park study is submitted which indicated that there is a surplus provision across the other council owned car parks. The proposal would include commercial floor spaces providing new job and employment opportunities.

7.5 The proposal would provide 75 new residential unit including 38 residential affordable housing, of which 19 units would be social rent and 19 units London Living Rent units. The proposal would positively contribute to the Council's Housing Supply and significant weight should be afforded to this. Three disabled parking spaces would be provided from the outset and is above the car free policy requirements from the outset. A total of 9 new trees would be provided to replace those removed. An on-site child play area and neighbourhood square would be provided.

7.6 The proposal would make a positive contribution to the setting and has an appropriate relationship with the surrounding context. The main entrances to the buildings would be facing Station Road which follows the established pattern of development along the road. The scale of the proposal is compatible to the residential development on Tweedy Road, Sherman Road and Northside Road. The layout of the proposal would meet the living space standard spaces with private amenity space. The impact of the proposal is not considered to be significant to the neighbouring properties in terms of outlook, privacy, sunlight, and daylight. The right for the future residents to apply for parking permits will be removed. A robust noise assessment taken into account the adjoining bus stand is submitted.

7.7 This planning application has been processed and assessed with due regard to the Public Sector Equality Duty and when considering the public sector equality duty, no protected groups would be disadvantaged by these proposals. Accordingly, the application is recommended for permission, subject to conditions and the prior completion of a legal agreement.

RECOMMENDATION **PERMISSION SUBJECT TO PLANNING CONDITION AND A LEGAL AGREEMENT**

SUMMARY OF CONDITIONS AND INFORMATIVES

Standard

- Time limit of 3 years
- Compliance with approved drawings and documents

Pre- commencement

- Land contamination
- Construction management plan and logistic plan, in consultation with TfL
- Tree Protection plan

Above ground level

- Noise assessment:
    - Specification of the proposed mitigation measures, all plant and equipment.
    - Mitigation scheme between the commercial and residential units
    - All plant and equipment
- Sub-station foundation design in consultation with UK Power Network
- Air quality assessment
- Drainage strategy and highway drainage
- Existing and proposed ground levels around buildings
- Secured by design
- External Materials / samples
- Detail of any relevant commercial kitchen extraction system to be installed
- Servicing and delivery plan
- Landscaping and boundary treatment details in consultation with TfL

Pre-occupation

- Car park management plan, including responsibility providing further disabled spaces and allocation criteria in consultation with the Council's Housing and Allocation Team
- Post completion noise survey and noise Assessment
- Cycle parking
- Waste storage management plan
- EVCP
- Serving and Delivery plan
- Landscaping plan and management plan
- External lighting
- Biodiversity enhancement, swift brick and bird boxes
- Updated energy assessment including Be Seen Measures

Compliance

- All Non-Road Mobile Machinery (NRMM)
- Wheelchair units
- Water usage

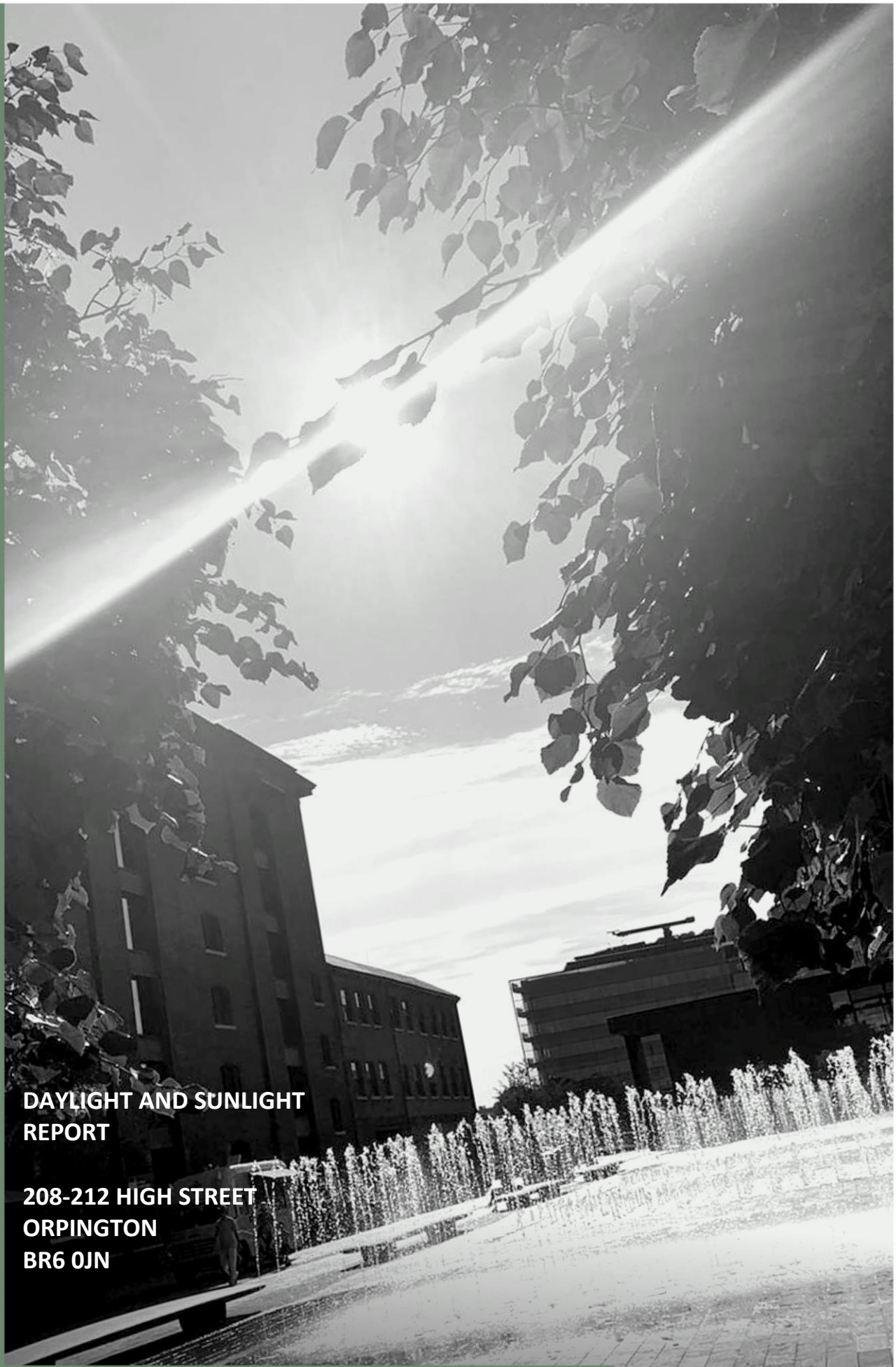
And delegated authority be given to the Assistant Director: Planning & Building Control to make variations to the conditions and to add any other planning condition(s) as considered necessary.

INFORMATIVE

- TfL oversail licence
- Network Rail Asset Protection agreement with Network rail's Asset protection and optimisation team
- Compliance with Building Regulation - Fire Statement
- Compliance with Building Regulation - Overheating
- Non-Road Mobile Machinery (NRMM)
- Thames Water
    - Use of main water for construction works
    - Groundwater risk management permit
    - Petrol/oil interceptor to be fitted in car park
    - Permits to carry out works within 3m from any Thames Water Assets
    - Maintenance of minimum water pressure
- CIL

APPENDIX A.28 208-212 HIGH STREET DAYLIGHT, SUNLIGHT AND OVERSHADOWING IMPACT ASSESSMENT

CONSIL



DAYLIGHT AND SUNLIGHT REPORT

208-212 HIGH STREET ORPINGTON BR6 0JN

Client Acklam Orpington Limited	Dated 12 July 2021
Prepared by Daniel Roberts	Version Final

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Appendices

Appendix A: Drawings

Appendix B: Results Spreadsheets

1 INSTRUCTIONS AND BRIEF

1.1 In accordance with instructions received from Acklam Orpington Limited, we have analysed the effect of the proposed development of 208-212 High Street, Orpington (the 'Development') on the daylight and sunlight amenity to the neighbouring properties.

1.2 We have also assessed the light levels received to the proposed residential accommodation within the Development.

1.3 We have received the following documents and used them in preparing this report:

- Darling Associates drawings received on 09 June 2021.
- 3D photogrammetry model from AccuCities Ltd received on 28 October 2020.

1.4 Our study has been undertaken by preparing a three-dimensional computer model of the site and surrounding buildings and analysing the effect of the extension on the daylight and sunlight levels received by the neighbouring buildings using our bespoke software. Our assessment is based on a visual inspection, the information detailed above and estimates of relevant distances, dimensions and levels which are as accurate as the circumstances allow.

2 THE DEVELOPMENT SITE

2.1 The development consists of the demolition of the existing building and erection of a part three, four and five storey building consisting of ground floor commercial retail and office/workshop floorspace (Class E), with 40 residential units (10 x one bed, 28 x two bed and 2 x three bed), together with ground level communal space, cycle parking, 2 x disabled off-street parking spaces at the rear (accessed via Vinson Close), communal gardens/landscaping and all associated ancillary development.

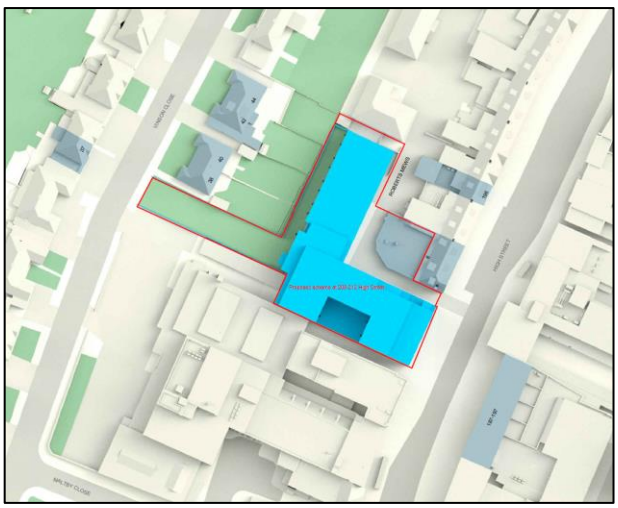

Image 01: Development in context

3 PLANNING POLICY

3.1 National Policy

3.1.1 The revised National Planning Policy Framework ('NPPF') 2019 addresses the need for the flexible application of guidance relating to daylight and sunlight under Section 11 'Making effective use of land'. Paragraph 123(c) under subsection "*Achieving appropriate densities"* states the following;

c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, 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).

3.2 Regional Policy – Greater London Authority

3.2.1 Paragraph D of Policy D6 'Housing Quality and Standard' of The London Plan (2021) states the following in respect of daylight and sunlight amenity:

"The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space."

3.2.2 This echo's The Mayor's 2016 Housing SPG with a move away from the rigid application of the standard numerical values provided in the BRE Report "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice" 2011. It is useful to further consider the guidance given in the Housing SPG which states the following:

"an appropriate degree of flexibility needs to be applied when using BRE Guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets"

"The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced, but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm."

3.2.3 The London Plan notes that the Mayor intends to produce a single guidance document which clearly sets out the standards which need to be met in order to implement Policy D6 Housing Quality and Standards for all housing tenures, as well as wider qualitative aspects of housing developments. This will include guidance on daylight and sunlight standards and will build on the guidance set out in the 2016 Housing SPG.

3.2.4 Policy at national or regional level does not provide further detail in relation to daylight and sunlight amenity, whereas Local policy is more specific, as detailed below.

3.3 *Local Policy – The London Borough of Bromley*

3.3.1 The Local Plan dated January 2019 states the following:

"Policy 37

General Design of Development.

D - The relationship with existing buildings should allow for adequate daylight and sunlight to penetrate in and between buildings;

E - Respect the amenity of occupiers of neighbouring buildings and those of future occupants, providing healthy environments and ensuring they are not harmed by noise and disturbance, inadequate daylight, sunlight, privacy or by overshadowing";

3.3.2 Bromley's Validation Guidance and Local Information Requirements for Planning Applications states the following:

"Daylight/Sunlight Assessment

Required for all major developments and any application where there is a potential adverse impact upon the current levels of sunlight/daylight enjoyed by adjoining properties or buildings, including associated gardens or amenity space, or in the vicinity of a river or open space.

The assessment should be carried out in accordance with the Building Research Establishment Document Site Layout Planning For Daylight And Sunlight - A Guide To Good Practice. A daylight, vertical sky components (sic), sunlight availability and shadow study should be undertaken and assessed against the criteria set out in the BRE document."

4 BRE REPORT "SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT: A GUIDE TO GOOD PRACTICE" SECOND EDITION (2011) ('THE REPORT')

4.1 Principles

4.1.1 It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict set of rules. It also suggests that it may be appropriate to adopt a flexible approach and alternative target values in dealing with "special circumstances" for example "in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings." This is amplified by the following extracts from the introduction (P1, para. 6) and Section 2.2:

"The advice given here is not mandatory and this document should not be seen as an instrument of planning policy; Its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design…" (P1, para. 1.6)

"In special circumstances the Developer or Planning Authority may wish to use different target values." (P1, para. 1.6)

"Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylighting in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light". (P7 para. 2.2.3)

4.1.2 The examples given in the Report can be applied to any part of the country: suburban, urban and rural areas. The inflexible application of the target values given in the Report may make reaching the BRE criteria difficult in a tight, urban environment where there is unlikely to be the same expectation of daylight and sunlight amenity as in a suburban or rural environment.

4.2 Daylight

4.2.1 In summary, the BRE Report states that:

"If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building from the centre of the lowest window, subtends an angle of more than 25 degrees to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:

- *the vertical sky component ['VSC'] measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value;*
- *the area of the working plane (0.85m above floor level in residential properties) in a room which can receive direct skylight is reduced to less than 0.8 times it former value.*

The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, store rooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic building where the occupants have a reasonable expectation of daylight; this would normally include, schools, hospitals, hotels and hostels, small workshops and some offices."

4.2.2 The Report also states that:

"Where room layouts are known, the impact on the daylighting distribution in the existing building can be found by plotting the 'no-sky line' in each of the main rooms. For houses this would include living rooms, dining rooms and kitchens; bedrooms should also be analysed, although they are less important. In non-domestic buildings each main room where daylight is expected should be investigated."

…Windows to bathrooms, toilets, store rooms, circulation areas and garages need not be analysed."

4.2.3 Guidance has been provided in the Second Edition of the report in relation to existing windows with balconies:

"Existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even a modest obstruction may result in a large relative impact on the VSC, and on the area receiving direct skylight. One way to demonstrate this would be to carry out an additional calculation of the VSC and area receiving direct skylight, for both the existing and proposed situations, without the balcony in place. For example, if the proposed VSC with the balcony was under 0.8 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of light." (2.2.11)

A larger relative reduction in VSC may also be unavoidable if the existing window has projecting wings on one or both sides of it, or is recessed into the building so that it is obstructed on both sides as well as above." (2.2.12)

4.2.4 Further guidance is provided in Appendix F on the types of tests to be applied when considering the loss of light to an existing building. F6 states the following:

"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. The average daylight factor (ADF) (Appendix C) also depends on the room and window dimensions, the reflectance of interior surfaces and the type of glass, as well as the obstruction outside. It is an appropriate measure to use in new buildings because most of these factors are within the developer's control."

"Use of the ADF for loss of light to existing buildings is not generally recommended. The use of the ADF as a criterion tends to penalise well-daylit existing buildings, because they can take a much bigger and closer obstruction and still remain above the minimum ADFs recommended in BS 8206-2. Because BS 8206-2 quotes a number of recommended ADF values for different qualities of daylight provision, such a reduction in light would still constitute a loss of amenity to the rooms. Conversely if the ADF in an existing building were only just over the recommended minimum, even a tiny reduction in light from a new development would cause it to go below the minimum, restricting what could be built nearby." (F6 and F7)

4.3 Sunlight

4.3.1 The BRE Report advises that new development should take care to safeguard access to sunlight for existing buildings and any non-domestic buildings where there is a particular requirement for sunlight. In summary, the report states:

"If a living room of an existing dwelling has a main window facing within 90 degrees of due south, and any part of a new development subtends an angle of more than 25 degrees to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely affected. This will be the case if the centre of the window:

- *receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and*
- *receives less than 0.8 times its former sunlight hours during either period and*
- *has a reduction in sunlight over the whole year greater than 4% of annual probable sunlight hours"*

4.3.2 The report also states that:

"…It is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within ninety-degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun. In non-domestic buildings any spaces which are deemed to have a special requirement for sunlight should be checked; they will normally face within ninety-degrees of due south anyway." (3.2.3)

4.3.3 Section 3.3 of the BRE Report gives guidelines for protecting the sunlight to open spaces where it will be required. This would normally include:

- Gardens, usually the main back garden of a house and allotments;
- Parks and playing fields;
- Children's playgrounds;
- Outdoor swimming pools and paddling pools;
- Sitting out areas such as those between non-domestic buildings and in public squares; and
- Focal points for views such as a group of monuments or fountains.

4.3.4 In summary, the Report states that:

"It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least 2 hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive 2 hours of sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable. If a detailed calculation cannot be carried out, it is recommended that the centre of the area should receive at least 2 hours of sunlight on 21 March."

5 DAYLIGHTING AND WINDOW DESIGN, LIGHTING GUIDE LG10: 2014

5.1 The publication is primarily intended to provide guidance to those responsible for the design, installation, commissioning, operation and maintenance of building services. Section 1.1 states:

“In modern buildings, good daylighting is a balancing act: on one side is the need for sufficient access to daylight and sunlight, and on the other is the need to control its unwanted effects. The design team need to work together to achieve this balance, exploring the options to arrive at a s satisfactory solution.”

5.2 Section 2.2.1 states that:

"A well daylit space needs both adequate lighting levels and light that is well distributed. In some rooms, the lighting level at the back falls dramatically below the level close to a window, to such an extent that occupants feel deprived even though their actual task illuminance is otherwise acceptable."

5.3 Section 3.4 provides detailed guidance on daylight calculation. Section 3.4.3 provides guidance on the use of Average Daylight Factor (ADF) calculations and states:

“Average daylight factor calculations can provide a quick overview of the overall level of daylight within a room, and can be useful when comparing different design solutions.”

5.4 The guide also states that:

"The BS 8206 code of practice (10) recommends average daylight factors of at least 1% in bedrooms, 1.5% in living rooms and 2% in kitchens, even if a predominantly daylit appearance is not required."

6 ASSESSMENT OF SURROUNDING PROPERTIES

6.1 We have analysed the effect of the development on the daylight and sunlight amenity to the properties with a reasonable expectation of daylight and sunlight amenity situated around the site. Properties further afield would satisfy the preliminary 25-degree line test recommended by the BRE Report, and therefore do not require further assessment.

6.2 Daylight amenity for the above properties has been assessed using the Vertical Sky Component (VSC) test, which is undertaken per window.

6.3 Whilst the BRE does not specify a set of characteristics to define the 'main window' within a habitable room, in our opinion the main window would be either;

a) Significantly larger than all other windows serving the room, or;

b) Providing the main source of daylight into the room.

6.4 To determine habitable rooms within a neighbouring property; floorplans are consulted, where available. Floorplans are obtained from publicly accessible sources such as London Borough of Bromley's online planning database, letting agent's websites or historic letting / sales particulars held on property market websites such as Zoopla and Rightmove. Whilst we cannot verify the accuracy of such floorplans, it is usually possible to confirm whether they are indicative of the interior through external observation. Particularly in the case of terraced houses or a block of flats; such floor plans can also be used to inform our assumptions as to the general internal layout of a neighbouring property for which floorplans were not available.

6.5 If no floorplans are available for a property or its immediate neighbours, it is usually possible to determine whether a window serves habitable space through external observation and our professional experience. If still unclear whether a window serves habitable space, it is included for the avoidance of doubt.

6.6 For properties where floorplans are obtained and deemed to be of a reasonable degree of accuracy (such as scaled drawings obtained from a planning application), Daylight Distribution (DD) assessment has also been undertaken within the habitable rooms in-line with BRE guidance.

6.7 For sunlight amenity, the BRE considers that sunlight obstruction may only become an issue if any part of a new development lies within 90 degrees due south in relation to an existing main window, when viewed in plan. Any property wholly south of the site therefore does not require further testing, in-line with BRE advice.

6.8 For those properties located wholly, or in-part to the north of the site, any main living-room windows that face within 90 degrees of due south have been assessed for sunlight amenity using the Annual Probable Sunlight Hours (APSH) test. If the main living-room window does not face within 90 degrees due south, any secondary windows with southerly aspect also serving this room have been assessed instead, in-line with BRE

guidance. The BRE considers bedrooms and kitchens to be less important but states that *"care should be taken not to block too much sun".*

6.9 When assessing a room with multiple windows for sunlight amenity; the BRE advises that the highest value should be taken from windows on the same or adjacent walls. If a room has windows on opposite walls, the values to each can be combined.

6.10 The results of our assessment are set out below on a property-by-property basis.

6.11 38 Vinson Close

6.11.1 This bungalow lies to the west of the main site, and would have also sat north of the gatehouse on the acquired strip of land at the rear, but this has now been removed from the scheme. We have obtained estate agent's details for other bungalows on this street with the same archetype. The agent's details illustrate that the flank windows in the west elevation of the bungalow serve a bathroom and toilet, neither of which have a requirement for daylight and sunlight amenity. The windows in the rear directly facing the main development serve a lounge and kitchen, and would comfortably meet the BRE criteria for VSC with both rooms also meeting the daylight distribution test.

6.11.2 All of the rooms and windows tested would also meet the sunlight criteria, confirming that the daylight and sunlight amenity to this property would not be materially affected by the proposals.

6.12 196 High Street

6.12.1 It appears that the two first-floor windows above the rear additions to the Costa coffee shop may serve residential accommodation. We have not been able to confirm this in our research. The two windows would be left with 0.75 and 0.63 of their original VSC values on completion of the Development. The residual VSC left to these windows would be 23.52% and 19.90% respectively, which, given the proximity of the overlooking windows to the Development and the fact that it is not conclusively established whether or not these properties are residential and would have a requirement for daylight and sunlight, we do not consider that the effect on this property would be material.

6.13 6 Roberts Mews

6.13.1 A commercial unit at ground floor with two floors of flats above. There are windows in the flank and rear overlooking the development. We have obtained estate agent's particulars and planning application documents for these properties and used them as the basis for the internal layouts.

6.13.2 Three of the windows in this property would have their VSC reduced to below the BRE target values, although only marginally. Two windows to the first-floor lounge kitchen diner, R1, are reduced from 34.64% to 26.19% and 33.75% to 23.49%. However, the daylight distribution to this room comfortably meets the BRE criteria

and, as such, the changes in VSC would be imperceptible to the occupant. The other slight reduction is to the second-floor bedroom R1, with window 2 reduced from 26.81% to 18.22%. Again, this room comfortably meets the BRE DD criteria and this minor VSC reduction would be imperceptible to the occupant.

6.13.3 Two windows to the first-floor bedroom R2 will also see marginal increases in VSC, from 12.04% to 13.10% and 18.12% to 19.36%, with the DD result unchanged. This results from the development introducing a setback on the upper floors opposite 6 Roberts Mews, where previously one did not exist.

6.14 187-197 High Street

6.14.1 A three-storey building with retail on the ground floor and two floors of residential above. All of the windows to the upper floors would comfortably meet the BRE criteria for daylight and sunlight amenity.

6.15 Permanent Overshadowing to Surrounding Amenity Spaces

6.15.1 By reference to our appended drawing 401, it can be seen that all of the gardens to the proximate Vinson Close properties would comfortably meet the BRE criteria.

7 LIGHT LEVELS TO RESIDENTIAL UNITS

7.1 We have analysed the daylight and sunlight amenity to all habitable rooms using the ADF and APSH assessments, in line with the BRE guidance.

7.2 The location of the tested rooms and window references are shown on the drawings appended to this report; the results are also included in the appendices and relevant spreadsheets.

7.3 Daylight

7.3.1 For the ADF calculation, the following surface reflectance values have been applied;

- Floor: Light veneer flooring = 0.40
- Walls: White paint = 0.80
- Ceiling: White paint = 0.80

7.3.2 The resultant average surface reflectance values are weighted according to the wall to floor / ceiling area ratio, and therefore differ per room.

7.3.3 A maintenance factor of 0.92 has been applied to allow for typical accumulation of dirt on external surfaces, to account for a good maintenance plan.

7.3.4 Most modern apartment buildings provide open-plan living rooms which are desirable to future occupants and meet the needs of modern living. These large, multi-use rooms, such as the proposed living/kitchen/dining rooms (LKDs) are predominantly deep rooms that have access to daylight from one external elevation. The rooms are designed to maximise the potential daylight and sunlight to the living area which is located adjacent to the window. The kitchens are generally situated towards the rear of the room and designed to be artificially lit.

7.3.5 In an urban location such as this, it is unrealistic to expect all rooms of this type to achieve an ADF value of 2%. The BRE have previously advised that *"Local authorities often accept the recommended minimum for living rooms of 1.5% where a kitchen and living room are located in the same room, as a small kitchen would not be considered a habitable room."* Therefore, we have considered a target value of 1.5% average daylight factor for the LKDs.

7.3.6 All the lounge kitchen dining rooms within the scheme would meet the 1.5% British target value for ADF, bar first-floor lounge kitchen diner R18, which receives an ADF marginally below this target (1.47%). Thirteen would achieve between 1.5% and 2%, and many more would receive significantly higher levels of *df* than the recommended levels. All the bedrooms would meet the British Standard.

7.4 Sunlight

7.4.1 In the main development building we have tested 218 windows serving 114 rooms. Overall, 45 rooms (63%) would meet the annual criteria in the south-facing rooms and 46 (65%) of the south-facing rooms would meet the winter target hours.

7.4.2 These figures are principally a result of the built-up environment to the east of the site and the limited number of directly south-facing windows and rooms, which is a direct consequence of the site orientation.

7.4.3 Turning to amenity, the residents garden / children play area would meet the BRE recommendations for permanent overshadowing in both March and June. While the resident's terrace, play zone and paved residents' amenity will receive below the BRE recommendations in March, they will all receive some afternoon / evening sun, and in June will receive a minimum two-hours sun on ground to at least 81% of their areas. The first-floor terrace would only meet the criteria in June, being overshadowed in March. However, as this space is a landscaped lightwell and will not be functionally accessible by residents, rather it will serve a visual amenity, we do not consider this to be a transgression of the BRE guidelines or policy.

8 CONCLUSION

8.1 Effect on Neighbouring Residential Properties

8.1.1 Our analysis demonstrates that the Development would not have a material effect on the daylight and sunlight amenity to the surrounding properties when assessed in accordance with the BRE guidelines and against the London Borough of Bromley's planning policies.

8.2 Light Received to Proposed Habitable Rooms and Amenity Spaces

8.2.1 The Mayor of London's SPG states: *"Where direct sunlight cannot be achieved in line with Standard 32, developers should demonstrate how the daylight standards proposed within a scheme and individual units will achieve good amenity for residents. They should also demonstrate how the design has sought to optimise the amount of daylight and amenity available to residents, for example, through the design, colour and landscaping of surrounding buildings and spaces within a development."*

8.2.2 Our analysis shows that almost all rooms assessed would meet or exceed the guideline values given in the British Standard for daylight amenity, when using the 1.5% target value for lounge kitchen diners, with only one lounge kitchen diner receiving just below the target value (1.47%).

8.2.3 Where BRE target-values for sunlight amenity are not achieved due to orientation and site constraints, the values achieved are commensurate with an urban location. And where the amenity spaces in the scheme do not meet the BRE recommendations in March, high levels of sunlight will be received in the summer months, when outdoor amenity is most enjoyed.

APPENDIX A

DRAWINGS

ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

N

KEY

- Existing building
- Analysed properties
- Surrounding buildings
- Red line boundary

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Existing plan view

SCALE	DATE
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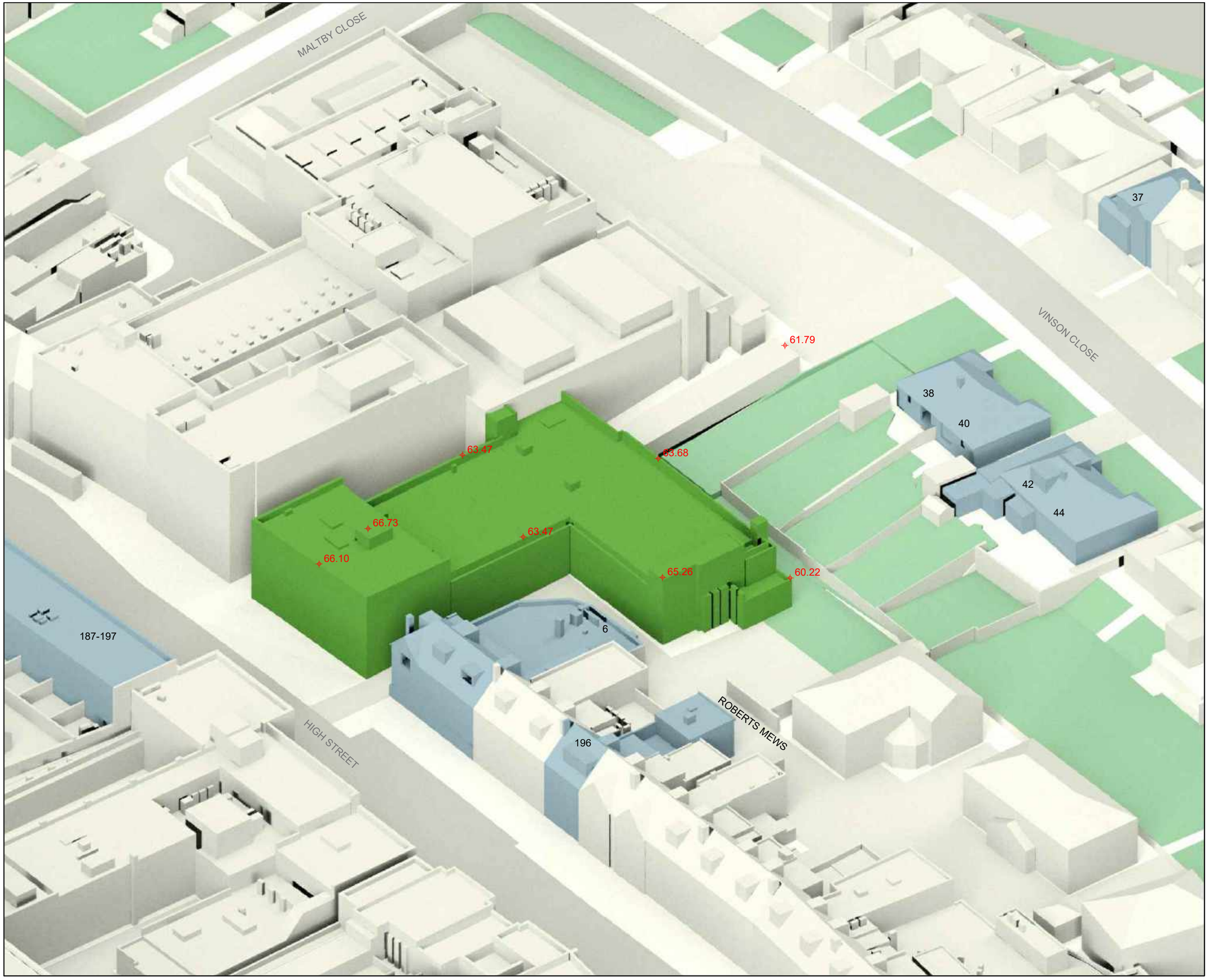

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DRAWING TITLE
Existing 3D view

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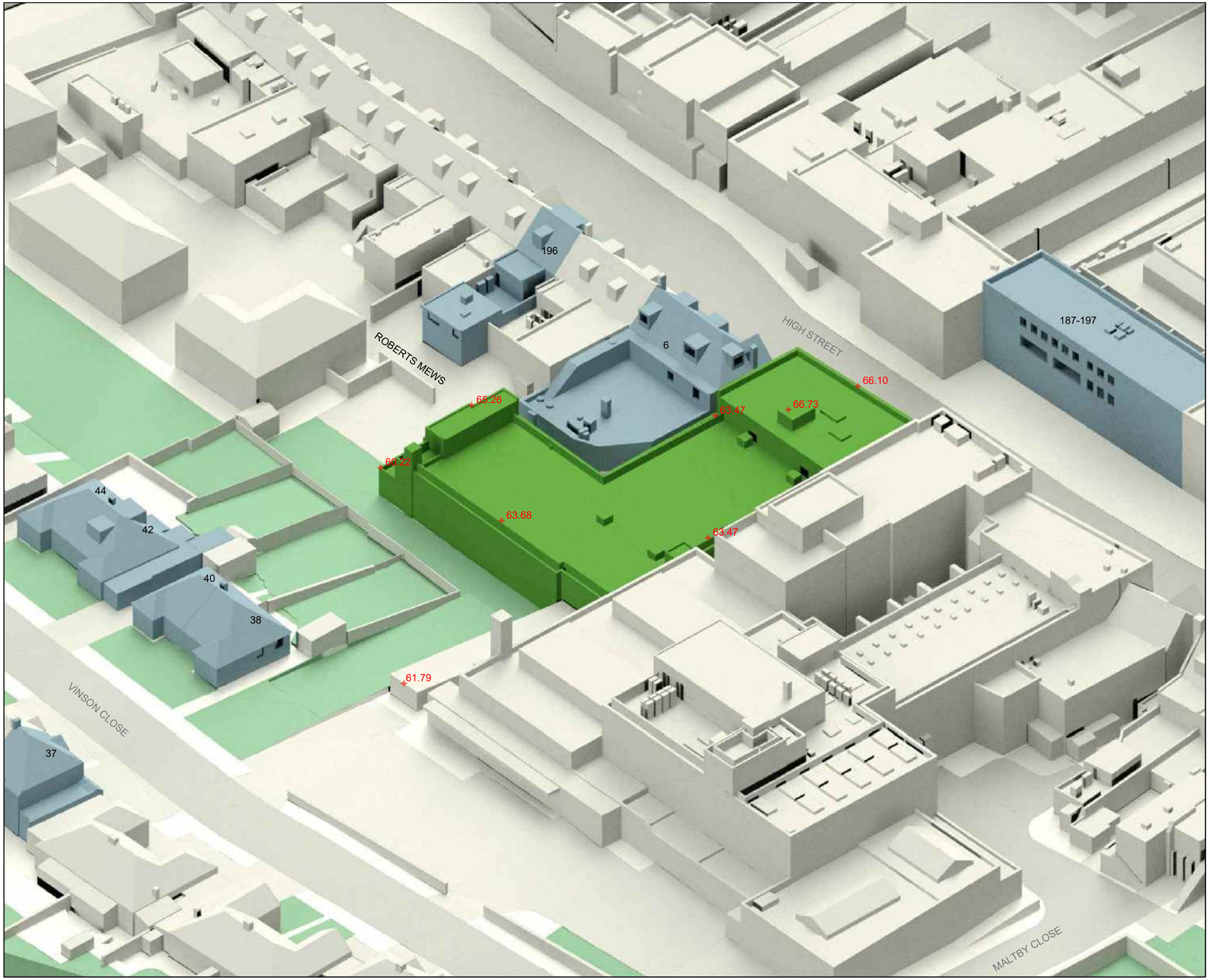

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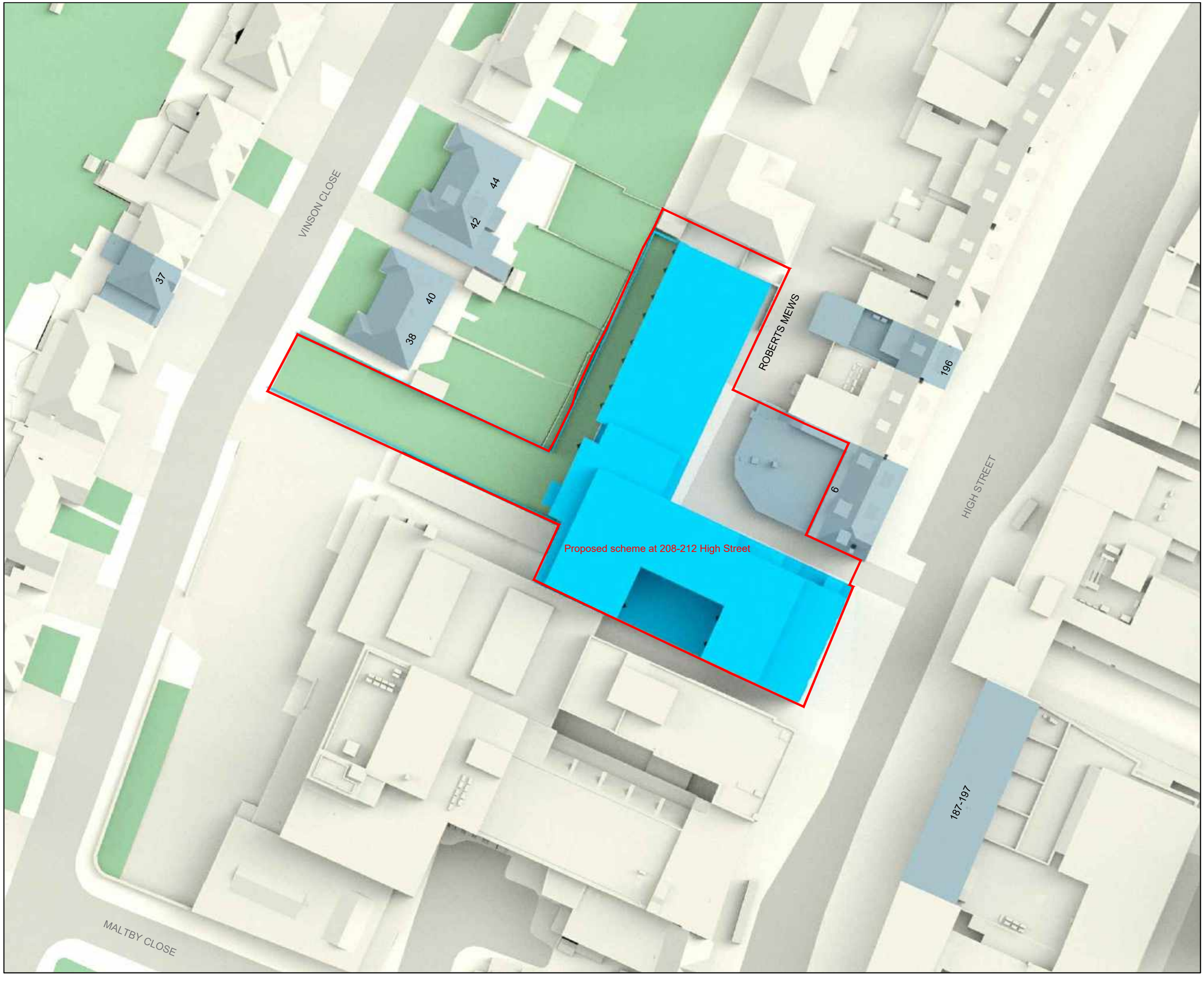

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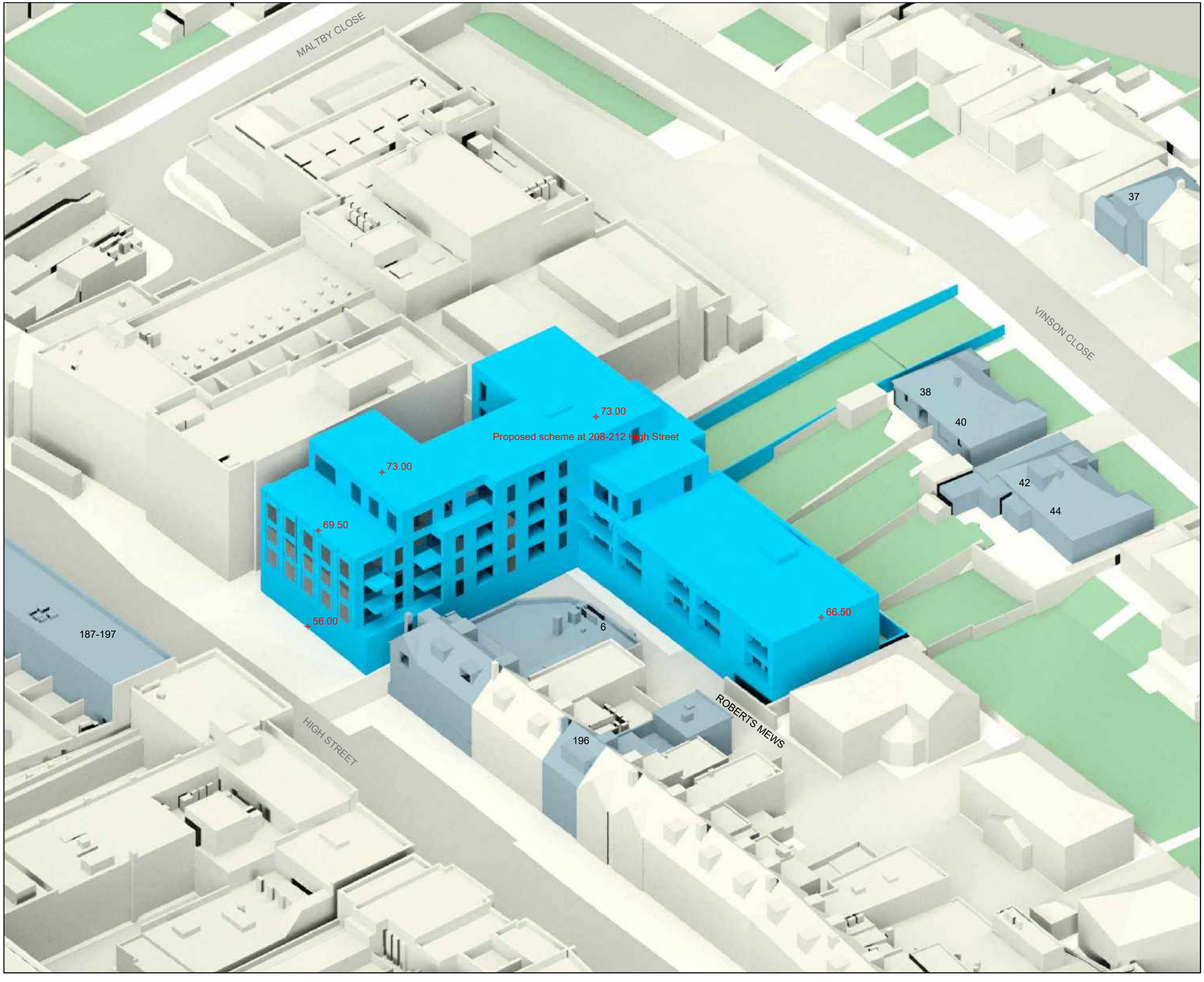

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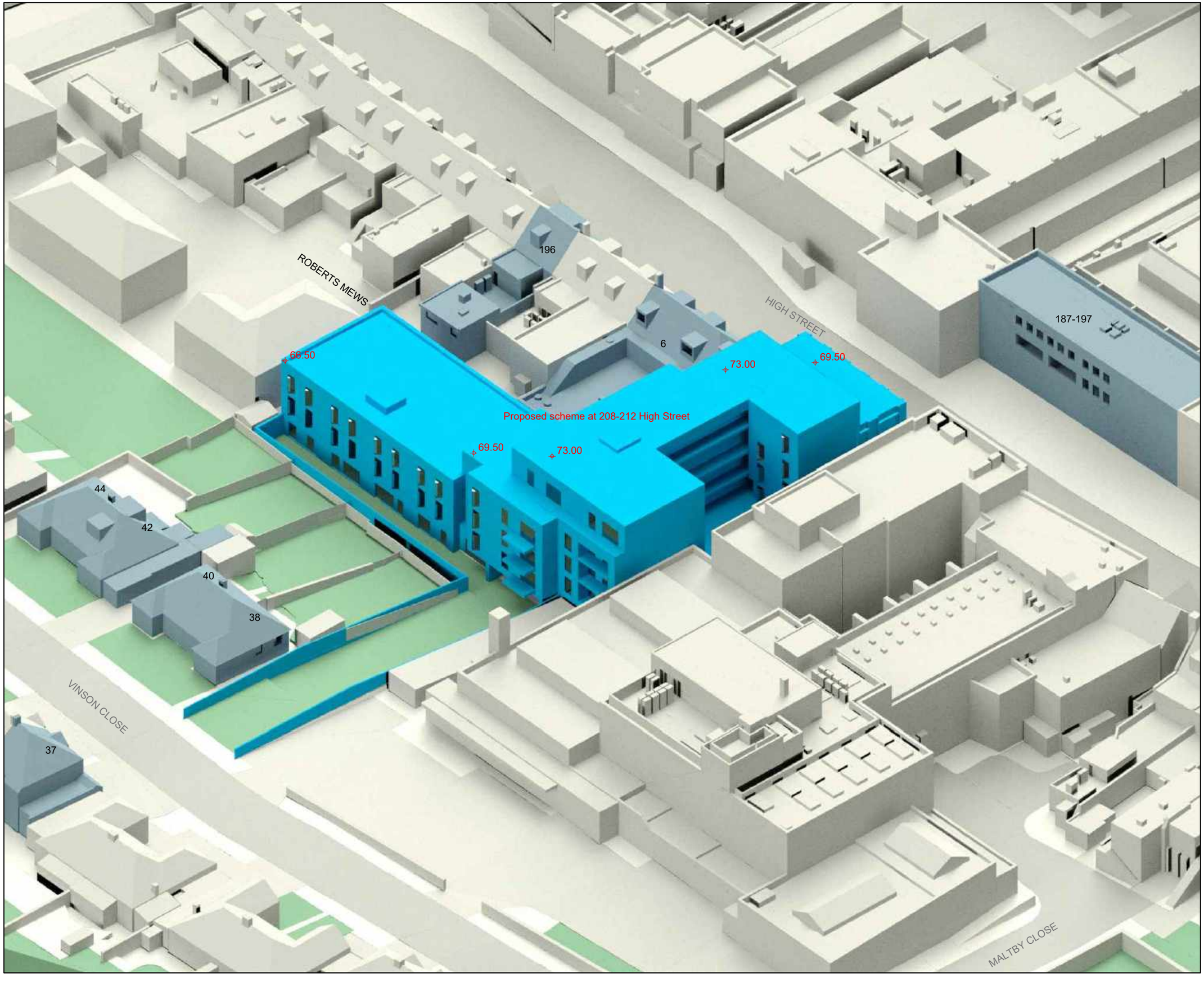

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DRAWING TITLE
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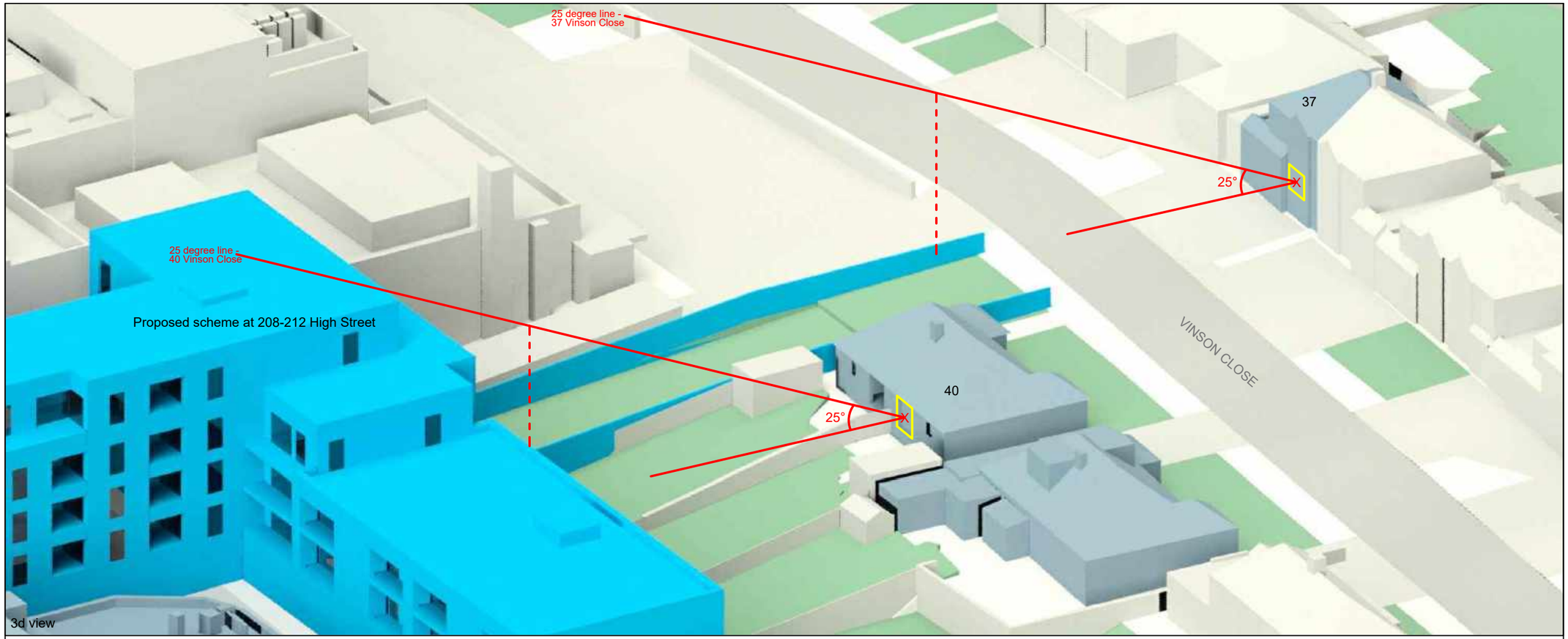
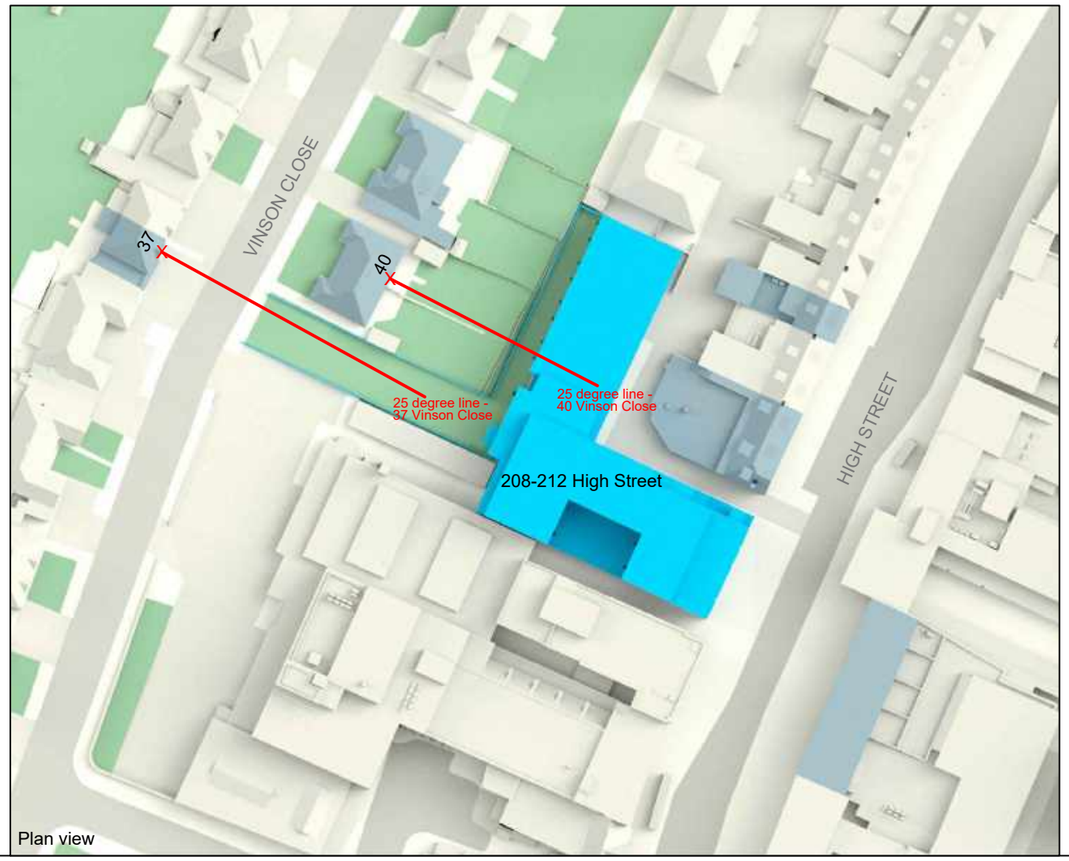




SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

- Analysed properties
- Proposed Buildings
- Surrounding buildings
- X Window / test location
- 25-degree line

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
25-degree line tests

37 and 40 Vinson Close

SCALE	DATE
Not to Scale	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 020	

CONSIL

Ground Floor

ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

N

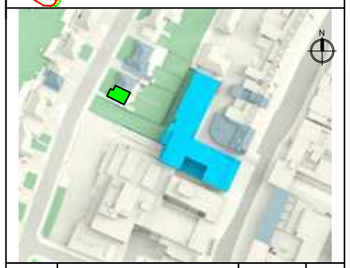
KEY

R1 Room area

Existing no-skyline

Proposed no-skyline

Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

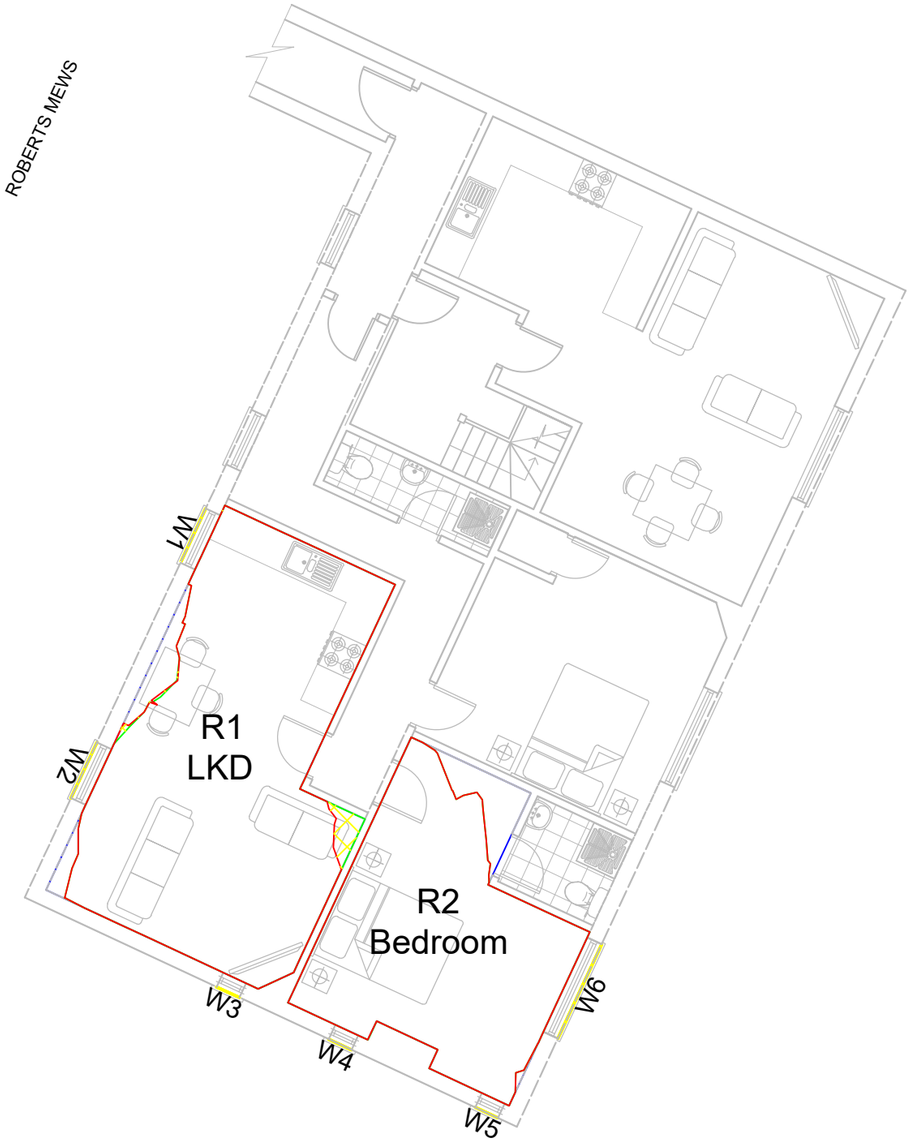
PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Daylight Distribution contours
38 Vinson Close

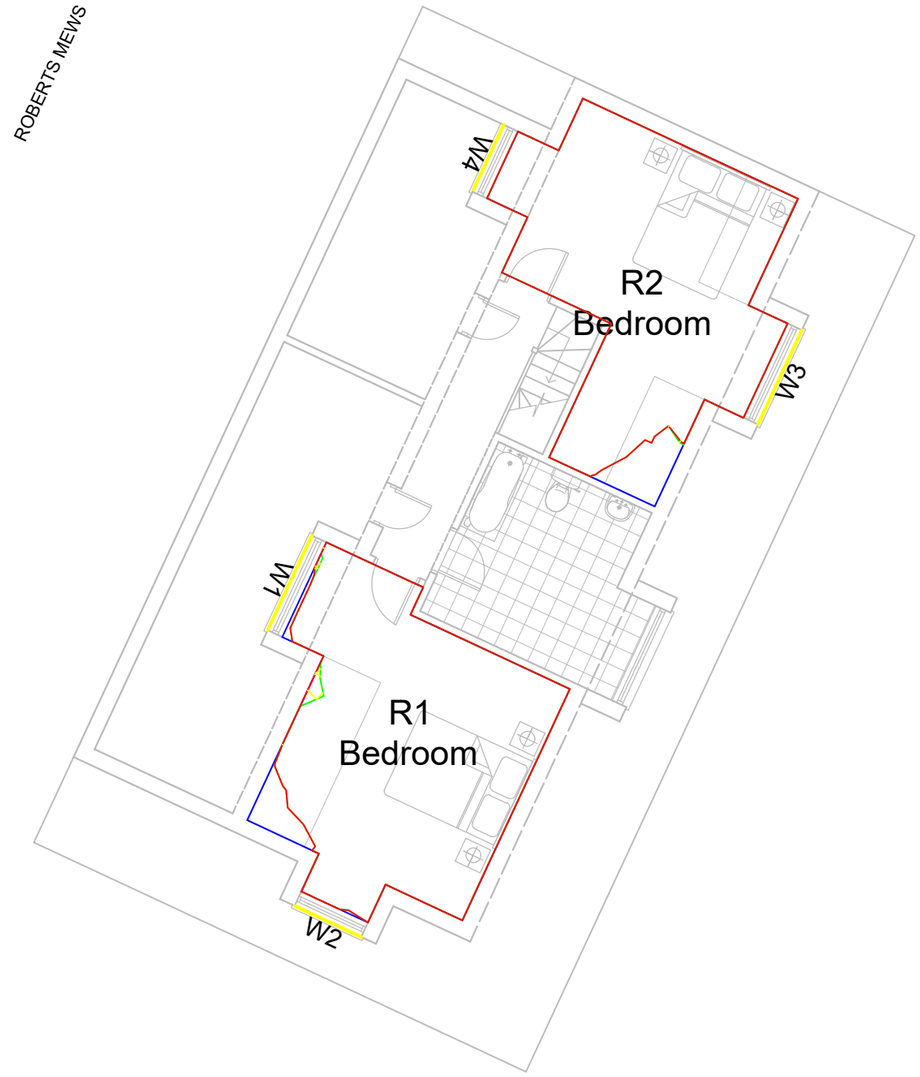
SCALE	DATE
1:100 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 201	

CONSIL



First Floor



Second Floor

ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

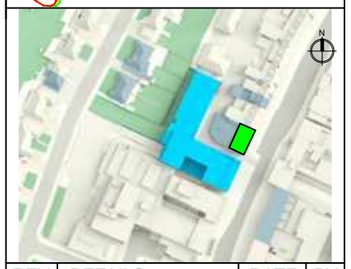
SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

PROJECT
208-212 High Street, Orpington, BR6 0JN

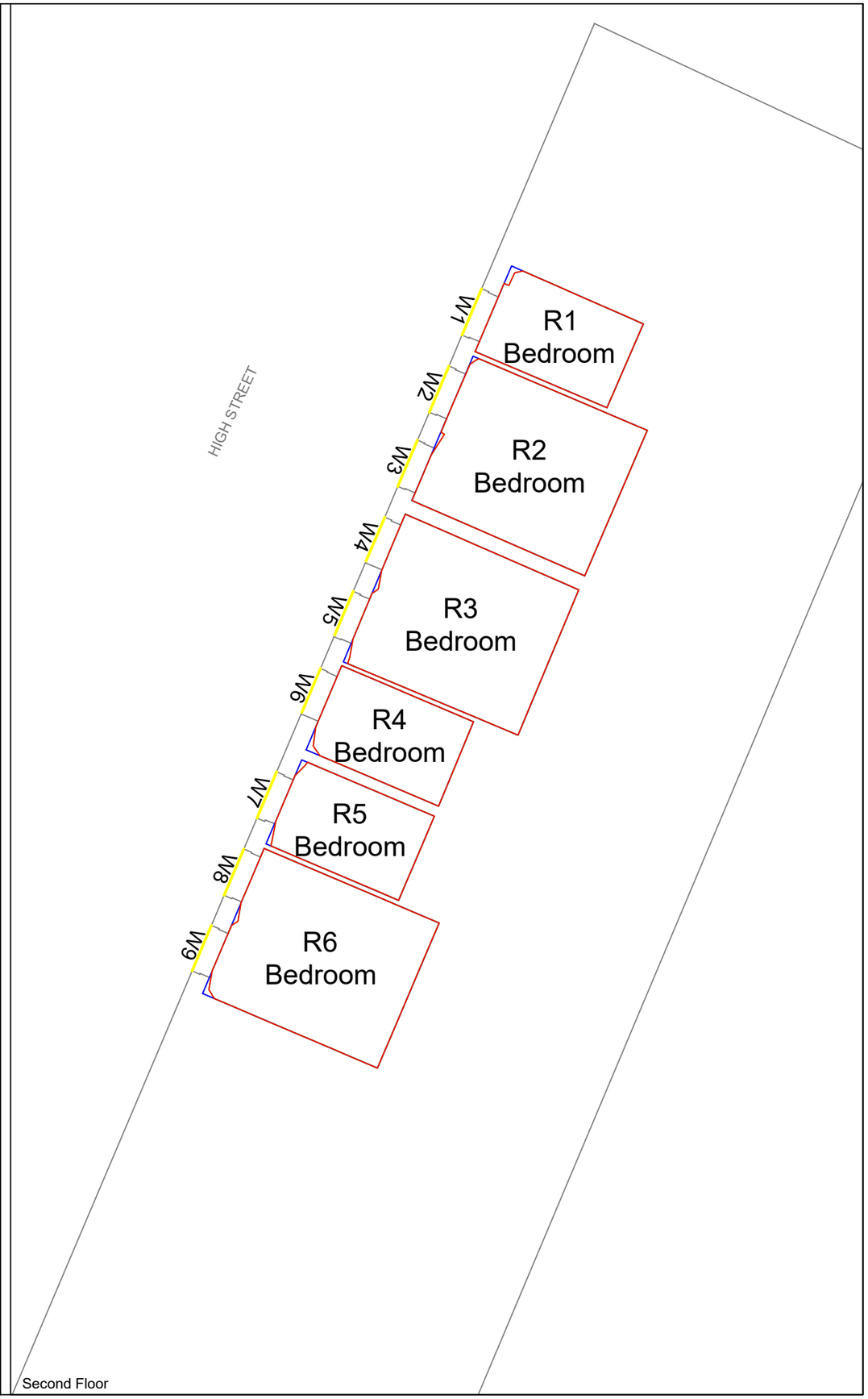
DRAWING TITLE
Daylight Distribution contours
6 Roberts Mews

SCALE	DATE
1:100 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 202	

CONSIL

First Floor



Second Floor

ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

N

KEY

R1 Room area

Existing no-skyline

Proposed no-skyline

Area of loss / gain

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Daylight Distribution contours
187-197 High Street

SCALE	DATE
1:100 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 203	

CONSIL

South-east elevation

ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

- Analysed properties
- Proposed buildings
- Surrounding buildings
- XXXXX WX — Window Location

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

PROJECT
208-212 High Street, Orpington, BR6 0JN

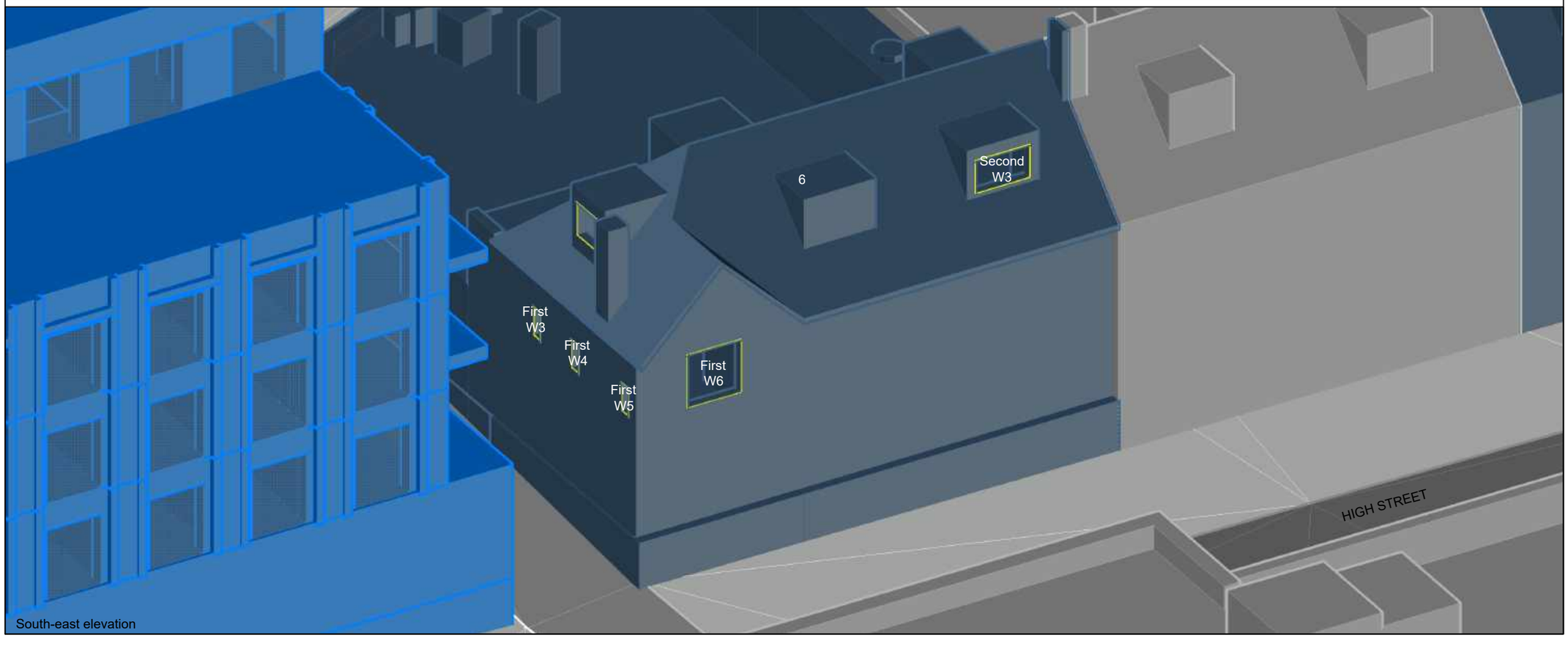
DRAWING TITLE
Window Maps
38 Vinson Close

SCALE	DATE
Not to Scale	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 301	

CONSIL

West elevation



South-east elevation

ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

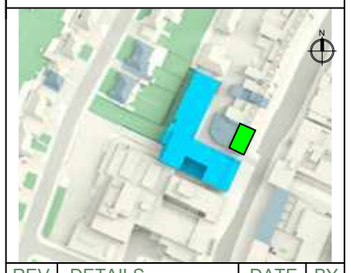
SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

- Analysed properties
- Proposed buildings
- Surrounding buildings
- XXXXX WX — Window Location



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

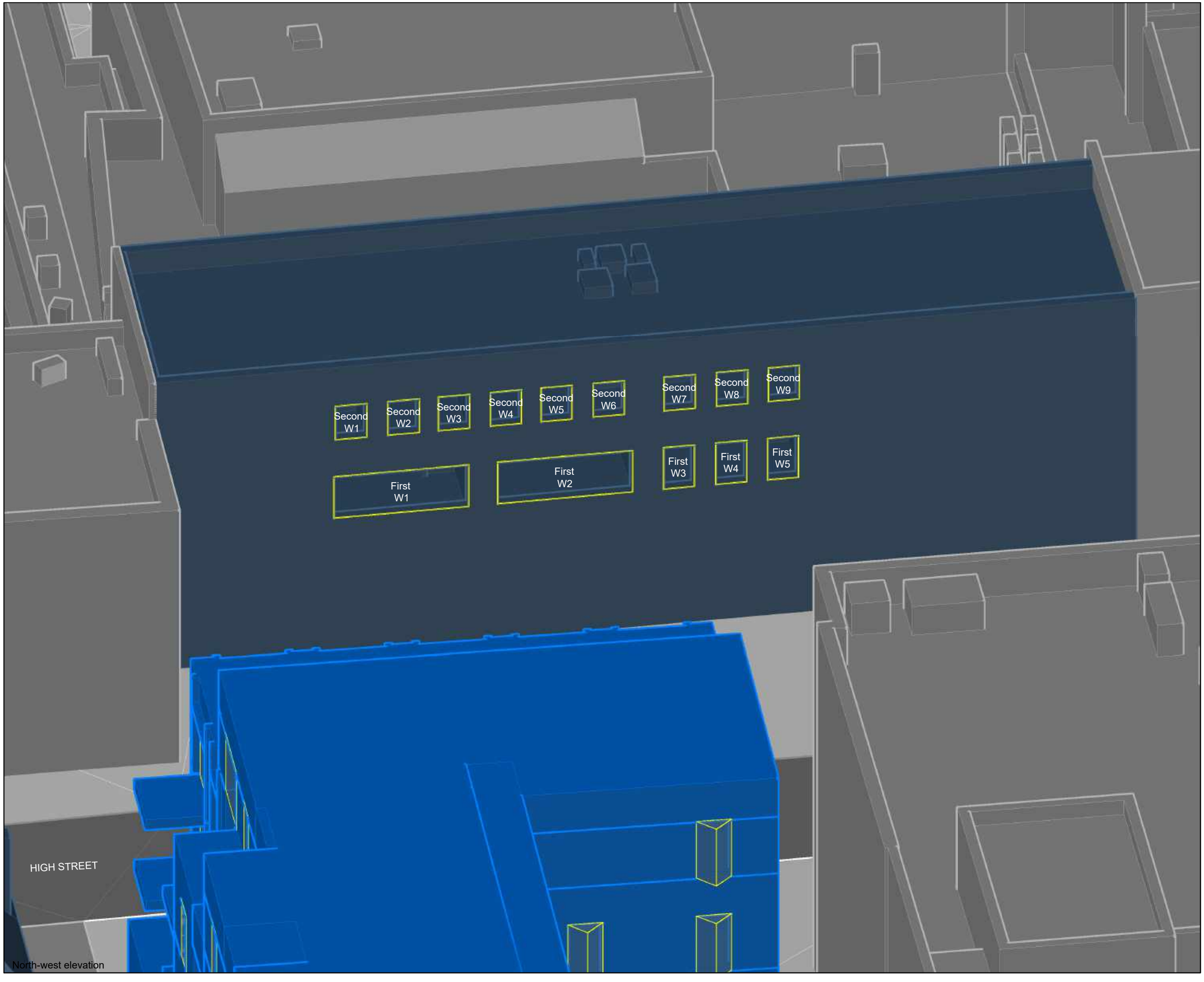
PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Window Maps
196 High Street, 6 Roberts Mews

SCALE	DATE
Not to Scale	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 302	

CONSIL



North-west elevation

ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

- Analysed properties
- Proposed buildings
- Surrounding buildings
- XXXXX WX Window Location

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

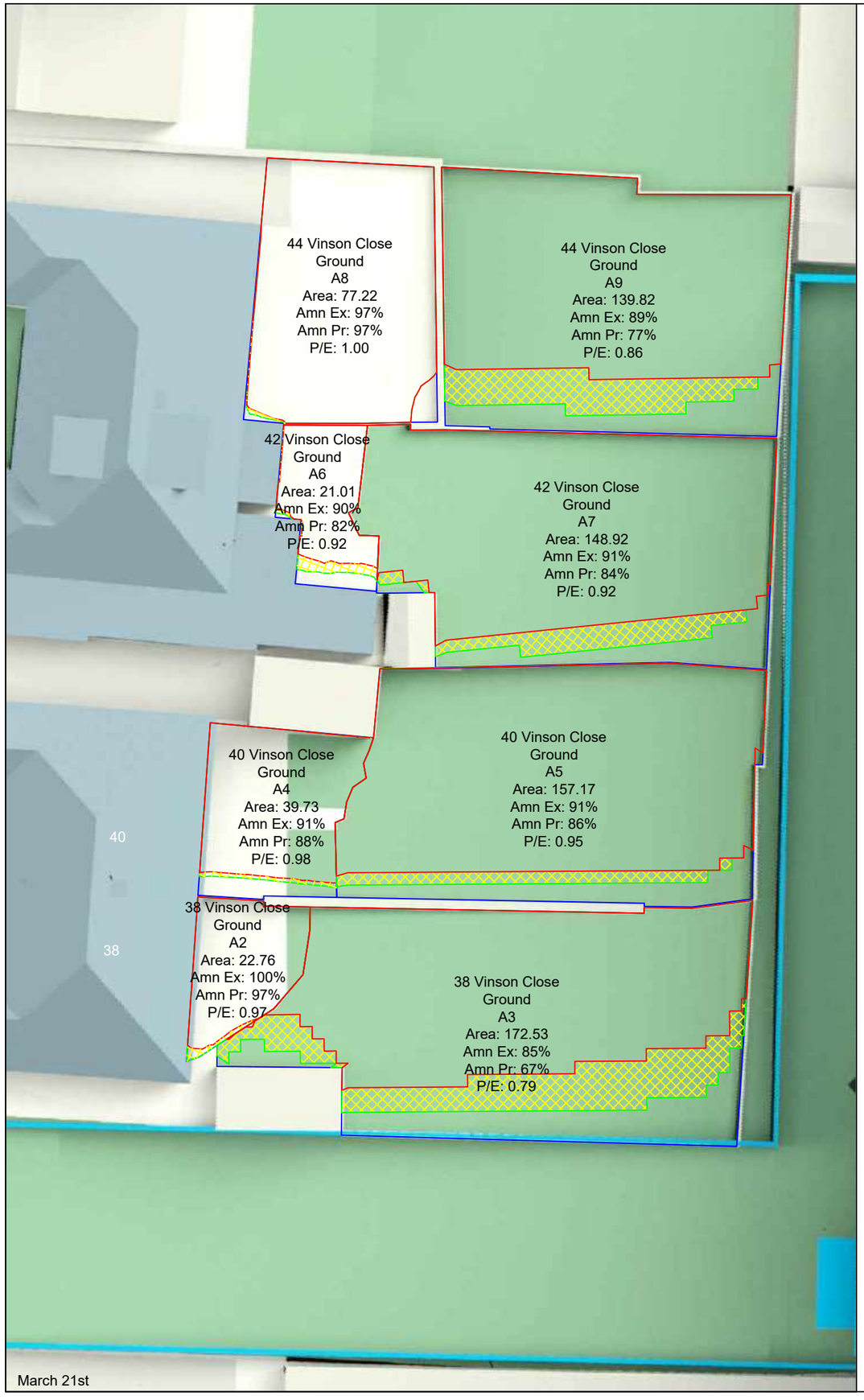
PROJECT
208-212 High Street, Orpington, BR6 0JN

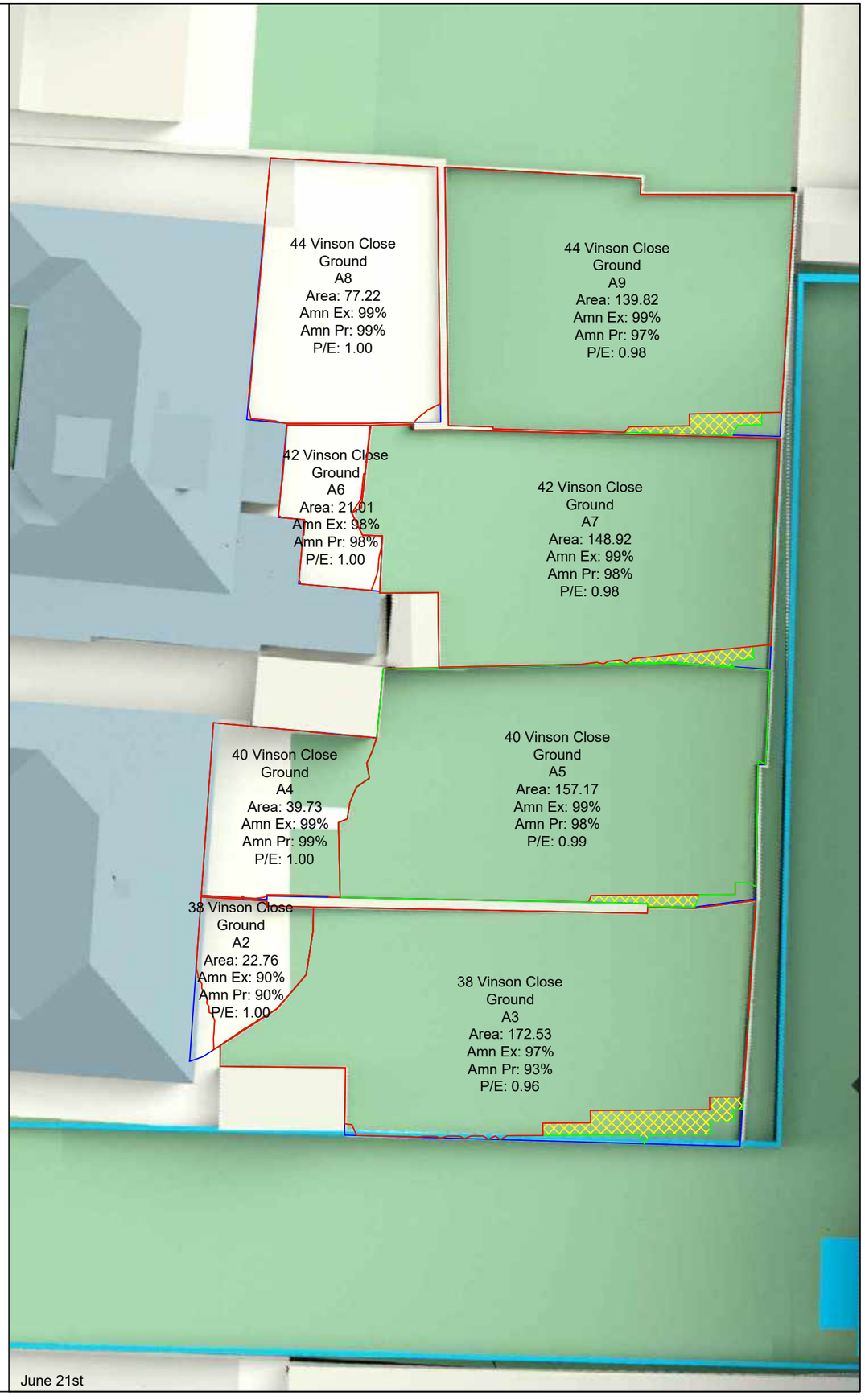
DRAWING TITLE
Window Maps
187-197 High Street

SCALE	DATE
Not to Scale	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 303	

CONSIL





ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

- Amenity area
- Existing area of direct sunlight
- Proposed area of direct sunlight
- Area of loss / gain

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

PROJECT
208-212 High Street, Orpington, BR6 0JN

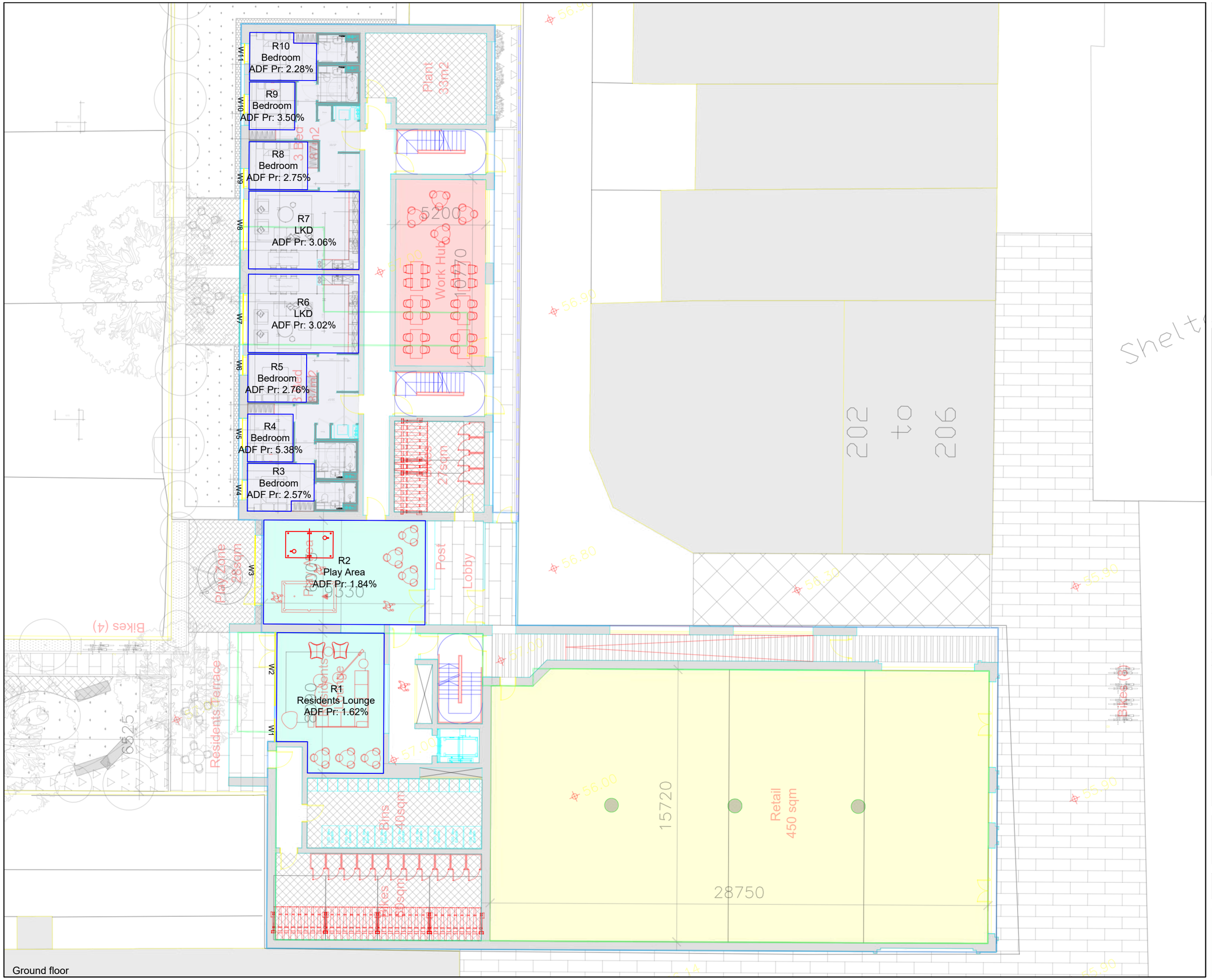
DRAWING TITLE
Permanent Overshadowing

38,40,42,44 Vinson Close

SCALE	DATE
1:200 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 401	

CONSIL



SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

R1 Room area

ADF Proposed value = x%

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

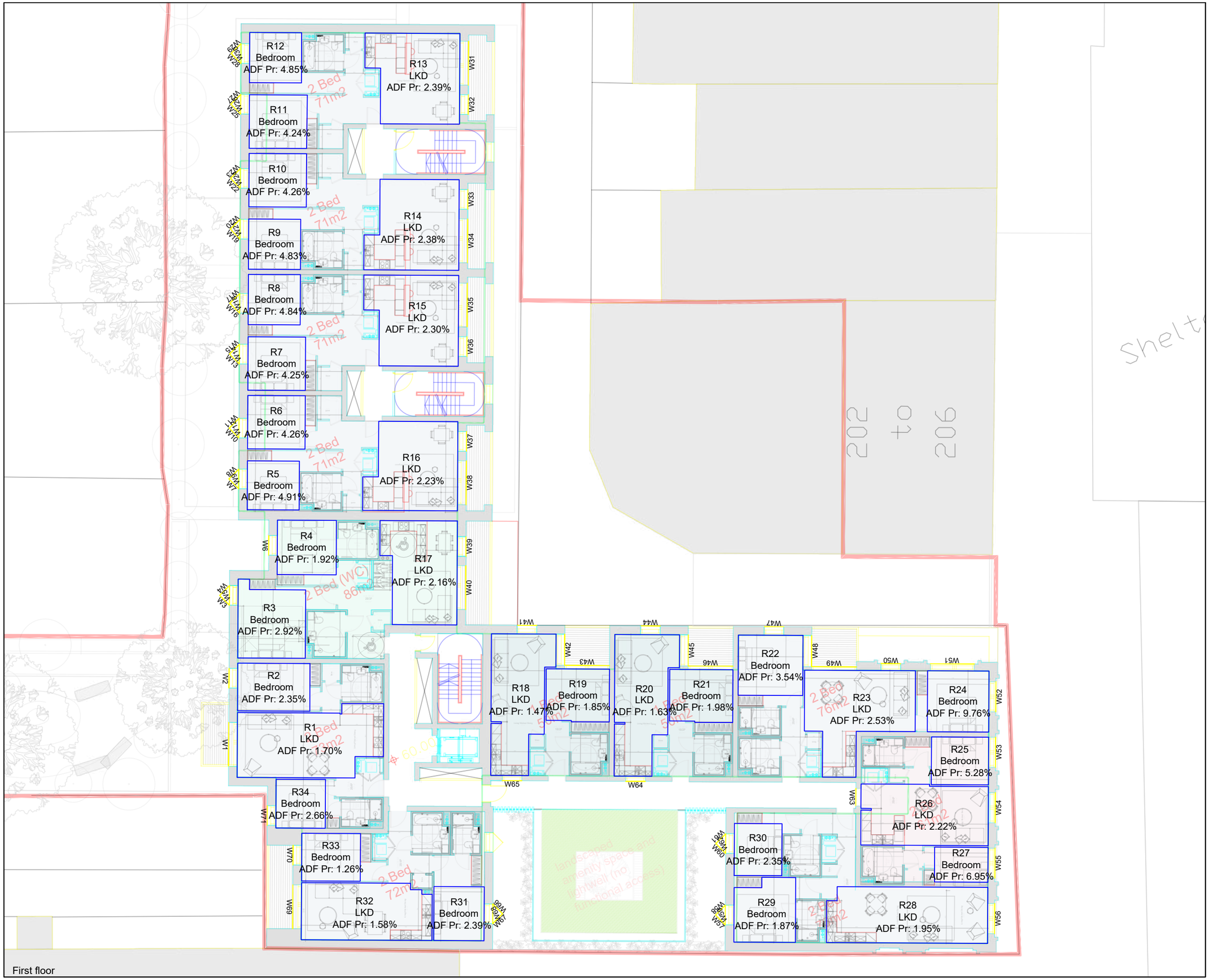
PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Average Daylight Factor (ADF) analysis
Proposed 208-212 High Street

SCALE	DATE
1:200 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 501	

CONSIL



SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

R1 Room area

ADF Proposed value = x%

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

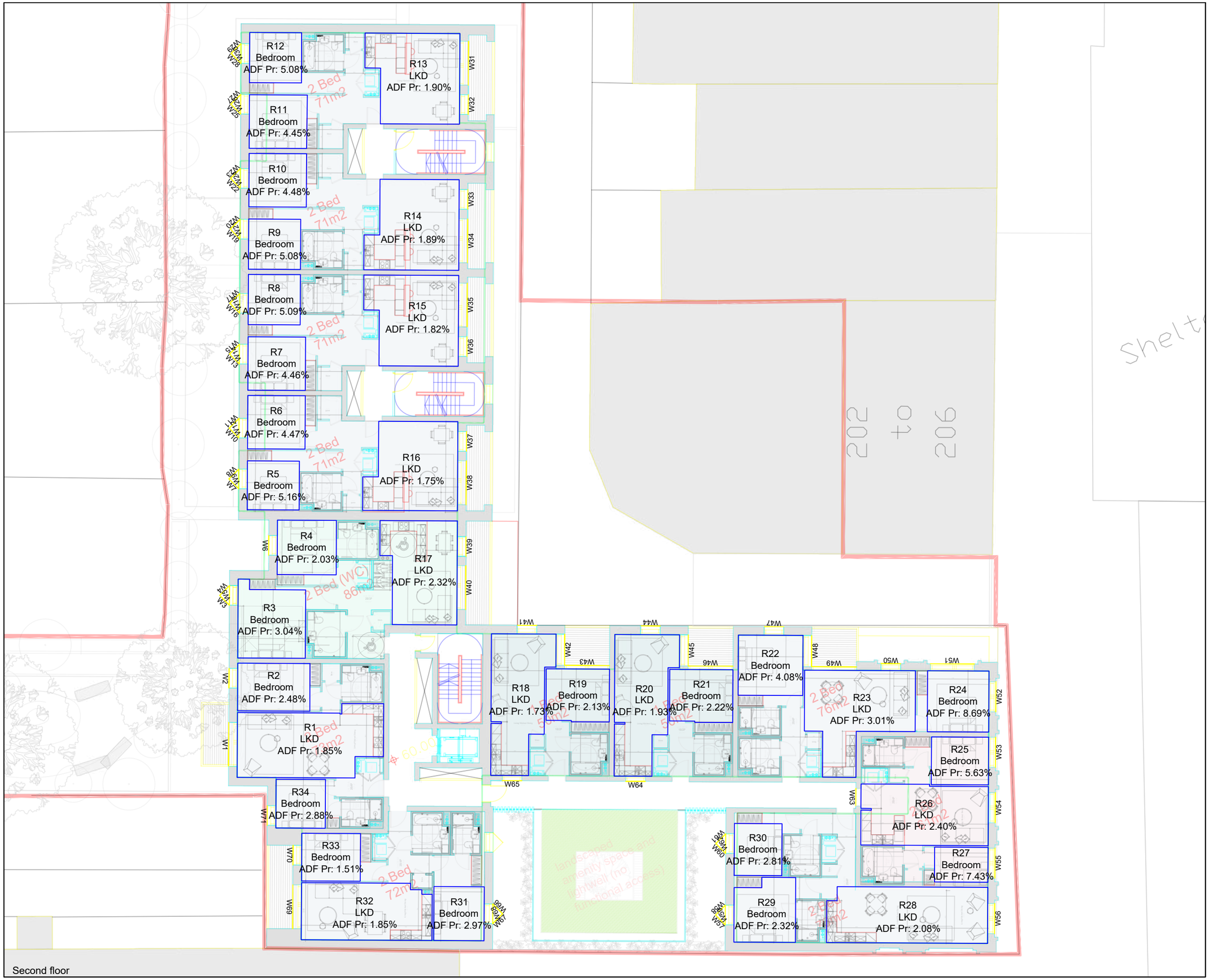
PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Average Daylight Factor (ADF) analysis
Proposed 208-212 High Street

SCALE	DATE
1:200 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 502	

CONSIL



ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

R1 Room area

ADF Proposed value = x%

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

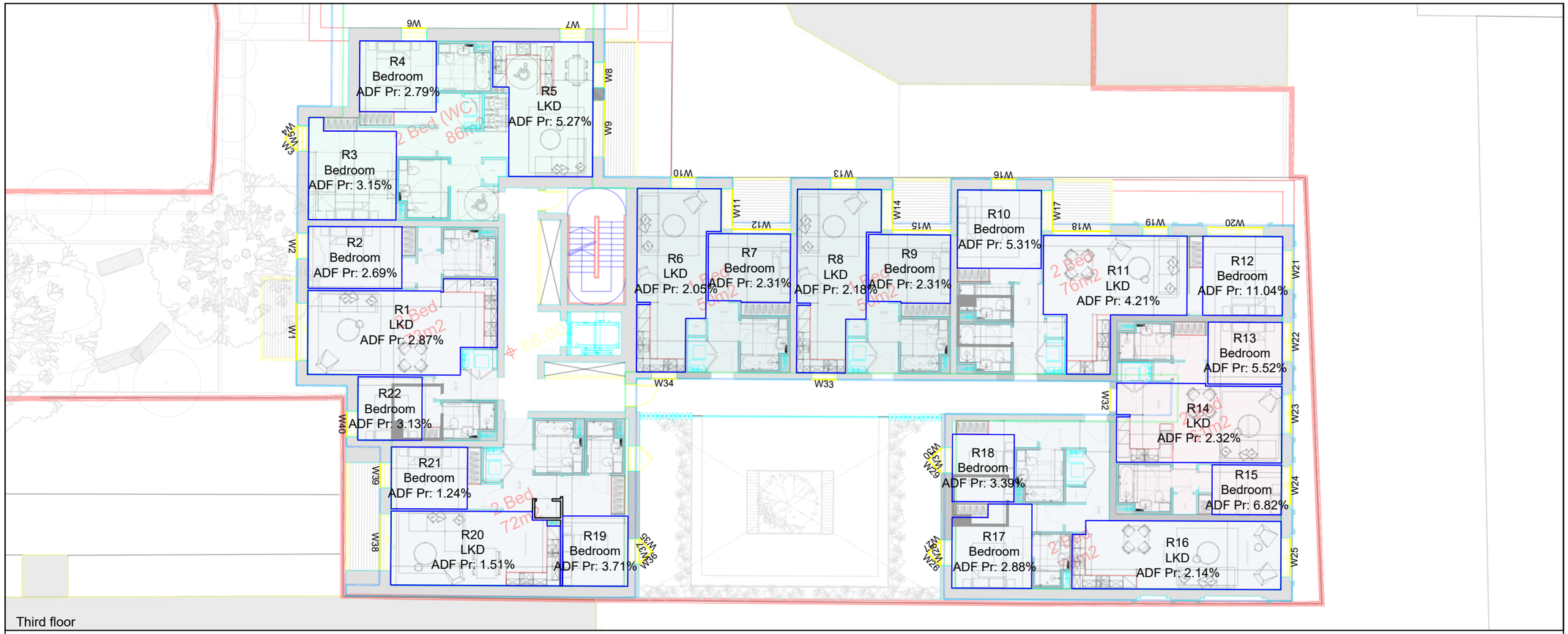
PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Average Daylight Factor (ADF) analysis
Proposed 208-212 High Street

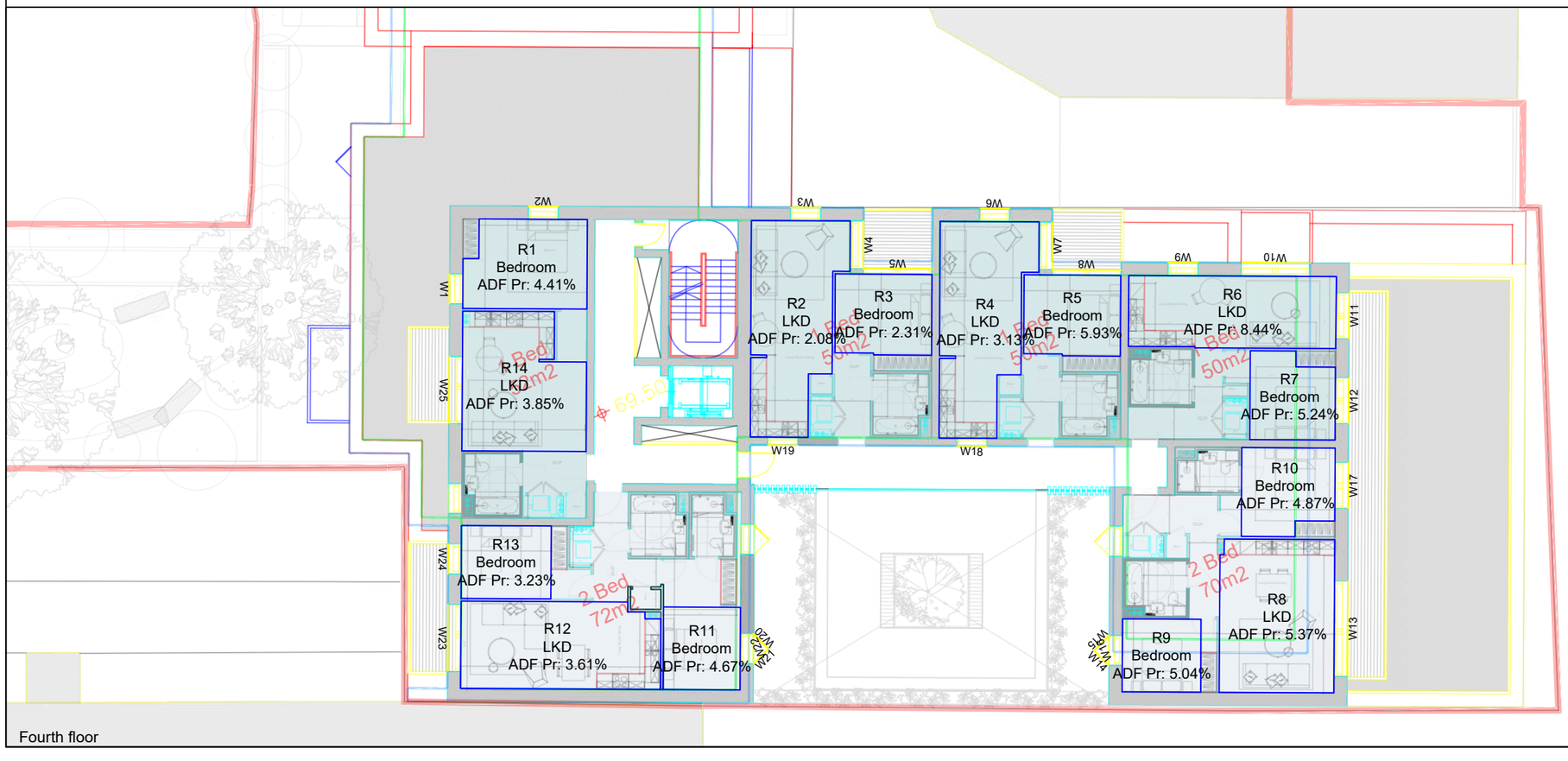
SCALE	DATE
1:200 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 503	

CONSIL



Third floor



Fourth floor

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

R1 Room area

ADF Proposed value = x%

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

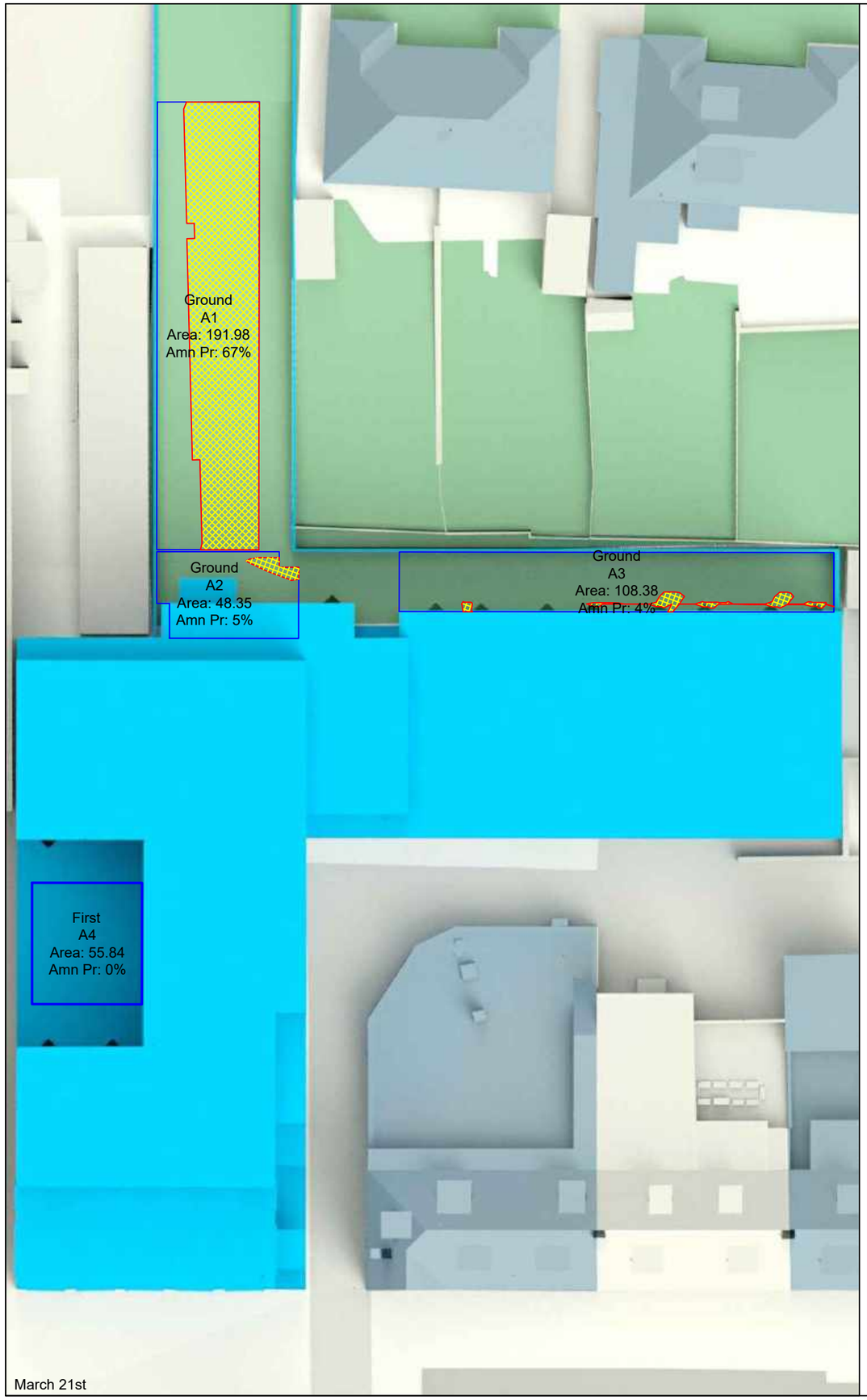
PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Average Daylight Factor (ADF) analysis
Proposed 208-212 High Street

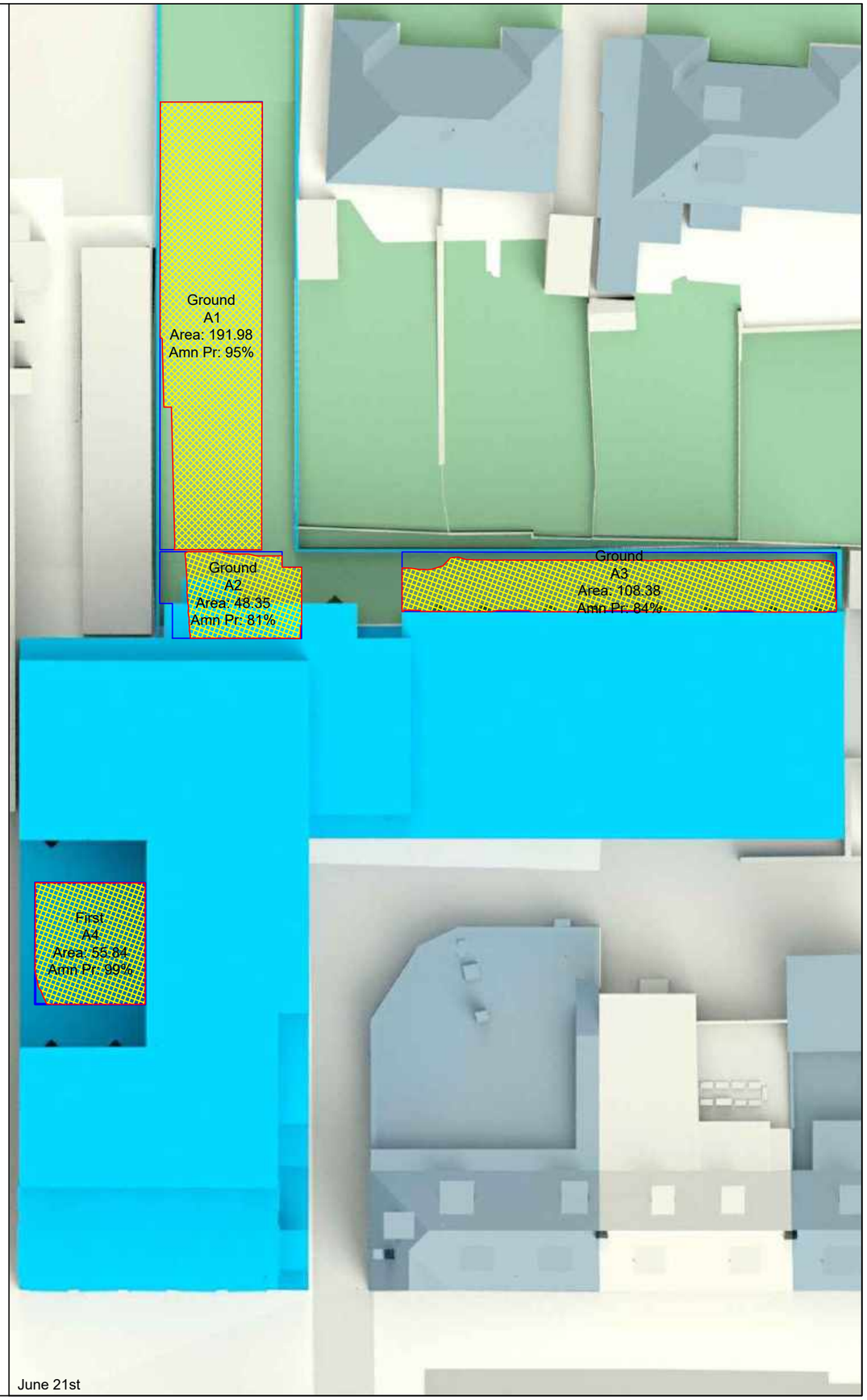
SCALE	DATE
1:200 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 504	

CONSIL



March 21st



June 21st

ALL INFORMATION DISPLAYED HAS BEEN PREPARED USING PHOTOGRAMMETRY AS THE THE BASIS FOR THE MODEL AND IS SUBJECT TO A COMPLETE VERIFIABLE SITE SURVEY BEING UNDERTAKEN AND OUR MODEL AND ANALYSIS BEING UPDATED ACCORDINGLY.

DO NOT SCALE

SOURCES OF INFORMATION:

Darling Associates Architects proposed scheme drawings received on 09/06/2021

3D photogrammetry model received from Accucities Limited on 28 October 2020

KEY

Amenity area

Proposed area of direct sunlight

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Acklam Orpington Limited

PROJECT
208-212 High Street, Orpington, BR6 0JN

DRAWING TITLE
Permanent Overshadowing

Proposed amenity areas

SCALE	DATE
1:200 @A3	09/07/2021
DRAWN BY	CHECKED BY
DR	PS

DWG No.	REV.
D+S /2/ 701	

CONSIL

APPENDIX B

RESULTS SPREADSHEETS

CONSIL

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.		VSC Results		APSH Results by Window				APSH Results by Room	
						VSC	Pr/Ex	Annual	Pr/Ex	Winter	Pr/Ex	Annual	Winter
38 Vinson Close													
Ground	R1	Residential	Kitchen	W1	Existing	33.91	0.99	72	0.99	26	0.96		
					Proposed	33.51		71		25			
				W2	Existing	34.33	0.91	58	0.97	20	0.90		
					Proposed	31.07		56		18			
												98	29
												96	27
	R2	Residential	Lounge	W3	Existing	34.21	0.91	58	0.98	20	0.95		
					Proposed	31.13		57		19			
												58	20
												57	19
196 High Street													
First	-	Residential assumed	Unknown	W1	Existing	31.33	0.75		*North		*North		
					Proposed	23.52							
	-	Residential assumed	Unknown	W2	Existing	31.54	0.63		*North		*North		
					Proposed	19.90							
6 Roberts Mews													
First	R1	Residential	LKD	W1	Existing	34.64	0.76		*North		*North		
					Proposed	26.19							
				W2	Existing	33.75	0.70		*North		*North		
					Proposed	23.49							
				W3	Existing	10.89	0.93	25	1.00	3	2.33		
					Proposed	10.09		25		7			
												51	8
												33	7
	R2	Residential	Bedroom	W4	Existing	12.04	1.09	30	1.03	6	1.83		
					Proposed	13.10		31		11			
				W5	Existing	18.12	1.07	43	0.98	15	1.13		
					Proposed	19.36		42		17			
				W6	Existing	34.30	1.00	58	1.00	18	1.00		
					Proposed	34.30		58		18			
												65	18
												59	18
Second	R1	Residential	Bedroom	W1	Existing	37.64	0.82		*North		*North		
					Proposed	30.76							
				W2	Existing	26.81	0.68	62	0.65	12	0.75		
					Proposed	18.22		40		9			
												67	15
												52	9
	R2	Residential	Bedroom	W3	Existing	37.48	1.00	64	0.98	21	0.95		
					Proposed	37.47		63		20			
				W4	Existing	37.95	0.89		*North		*North		
					Proposed	33.92							
												99	29
												91	23
187-197 High Street													
First	R1	Residential	LD	W1	Existing	31.99	0.94		*North		*North		
					Proposed	30.18							
												*North	
	R2	Residential	LD	W2	Existing	32.26	0.95		*North		*North		
					Proposed	30.66							
												*North	
	R3	Residential	LD	W3	Existing	32.21	0.95		*North		*North		
					Proposed	30.69							
				W4	Existing	32.10	0.95		*North		*North		
					Proposed	30.57							
				W5	Existing	31.97	0.95		*North		*North		
					Proposed	30.45							
												*North	
Second	R1	Residential	Bedroom	W1	Existing	35.89	0.94		*North		*North		
					Proposed	33.86							
												*North	
	R2	Residential	Bedroom	W2	Existing	35.87	0.94		*North		*North		
					Proposed	33.81							
				W3	Existing	35.79	0.94		*North		*North		
					Proposed	33.76							
												*North	
	R3	Residential	Bedroom	W4	Existing	35.69	0.94		*North		*North		
					Proposed	33.71							
				W5	Existing	35.60	0.95		*North		*North		
					Proposed	33.71							
												*North	
	R4	Residential	Bedroom	W6	Existing	35.53	0.95		*North		*North		
					Proposed	33.76							
												*North	
	R5	Residential	Bedroom	W7	Existing	35.41	0.95		*North		*North		
					Proposed	33.68							
												*North	
	R6	Residential	Bedroom	W8	Existing	35.30	0.95		*North		*North		
					Proposed	33.59							
				W9	Existing	35.17	0.95		*North		*North		
					Proposed	33.51							
												*North	

CONSIL

Floor Ref.	Room Ref.	Property Type	Room Use.		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
38 Vinson Close								
Ground	R1	Residential	Kitchen	Area m2	7.93	7.90	7.90	
				% of room		99.60%	99.60%	1.00
Ground	R2	Residential	Lounge	Area m2	17.07	17.00	16.73	
				% of room		99.59%	97.98%	0.98
6 Roberts Mews								
First	R1	Residential	LKD	Area m2	24.86	23.90	23.63	
				% of room		96.15%	95.05%	0.99
First	R2	Residential	Bedroom	Area m2	15.59	14.50	14.50	
				% of room		93.04%	93.04%	1.00
Second	R1	Residential	Bedroom	Area m2	18.66	17.85	17.97	
				% of room		95.66%	96.29%	1.01
Second	R2	Residential	Bedroom	Area m2	18.74	17.84	17.84	
				% of room		95.19%	95.16%	1.00
187-197 High Street								
First	R1	Residential	LD	Area m2	19.56	19.53	19.53	
				% of room		99.87%	99.87%	1.00
First	R2	Residential	LD	Area m2	19.08	19.08	19.08	
				% of room		99.99%	99.99%	1.00
First	R3	Residential	LD	Area m2	19.53	19.42	19.42	
				% of room		99.45%	99.45%	1.00
Second	R1	Residential	Bedroom	Area m2	5.42	5.37	5.37	
				% of room		99.08%	99.08%	1.00
Second	R2	Residential	Bedroom	Area m2	12.18	12.14	12.14	
				% of room		99.72%	99.72%	1.00
Second	R3	Residential	Bedroom	Area m2	12.30	12.25	12.25	
				% of room		99.60%	99.60%	1.00
Second	R4	Residential	Bedroom	Area m2	5.37	5.32	5.32	
				% of room		99.13%	99.13%	1.00
Second	R5	Residential	Bedroom	Area m2	5.39	5.34	5.34	
				% of room		99.06%	99.06%	1.00
Second	R6	Residential	Bedroom	Area m2	12.26	12.20	12.20	
				% of room		99.50%	99.50%	1.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
Darling Associates Architects Proposed Scheme at 208-212 High Street						
Ground	R1	Residential	Residents Lounge	W1-L	0.10	
			Residents Lounge	W1-U	0.27	
			Residents Lounge	W2-L	0.35	
			Residents Lounge	W2-U	0.90	
					1.62	1.50
Ground	R2	Residential	Play Area	W3-L	0.41	
			Play Area	W3-U	1.43	
					1.84	1.50
Ground	R3	Residential	Bedroom	W4-L	0.50	
			Bedroom	W4-U	2.07	
					2.57	1.00
Ground	R4	Residential	Bedroom	W5-L	1.06	
			Bedroom	W5-U	4.33	
					5.38	1.00
Ground	R5	Residential	Bedroom	W6-L	0.54	
			Bedroom	W6-U	2.22	
					2.76	1.00
Ground	R6	Residential	LKD	W7-L	0.59	
			LKD	W7-U	2.42	
					3.02	2.00
Ground	R7	Residential	LKD	W8-L	0.60	
			LKD	W8-U	2.46	
					3.06	2.00
Ground	R8	Residential	Bedroom	W9-L	0.53	
			Bedroom	W9-U	2.21	
					2.75	1.00
Ground	R9	Residential	Bedroom	W10-L	0.68	
			Bedroom	W10-U	2.82	
					3.50	1.00
Ground	R10	Residential	Bedroom	W11-L	0.43	
			Bedroom	W11-U	1.85	
					2.28	1.00
First	R1	Residential	LKD	W1-L	0.46	
			LKD	W1-U	1.24	
					1.70	2.00
First	R2	Residential	Bedroom	W2-L	0.52	
			Bedroom	W2-U	1.83	
					2.35	1.00
First	R3	Residential	Bedroom	W3-L	0.33	
			Bedroom	W3-U	0.86	
			Bedroom	W4-L	0.27	
			Bedroom	W4-U	1.00	
			Bedroom	W5	0.90	
					3.37	1.00
First	R4	Residential	Bedroom	W6-L	0.42	
			Bedroom	W6-U	1.51	
					1.92	1.00
First	R5	Residential	Bedroom	W7-L	0.61	
			Bedroom	W7-U	1.48	
			Bedroom	W8-L	0.45	
			Bedroom	W8-U	1.64	
			Bedroom	W9	1.46	
					5.64	1.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
First	R6	Residential	Bedroom	W10-L	0.51	
			Bedroom	W10-U	1.27	
			Bedroom	W11-L	0.39	
			Bedroom	W11-U	1.44	
			Bedroom	W12	1.28	
					4.90	1.00
First	R7	Residential	Bedroom	W13-L	0.52	
			Bedroom	W13-U	1.29	
			Bedroom	W14	1.27	
			Bedroom	W15-L	0.38	
			Bedroom	W15-U	1.42	
					4.88	1.00
First	R8	Residential	Bedroom	W16-L	0.60	
			Bedroom	W16-U	1.45	
			Bedroom	W17-L	0.44	
			Bedroom	W17-U	1.63	
			Bedroom	W18	1.44	
					5.56	1.00
First	R9	Residential	Bedroom	W19-L	0.60	
			Bedroom	W19-U	1.47	
			Bedroom	W20-L	0.43	
			Bedroom	W20-U	1.60	
			Bedroom	W21	1.45	
					5.56	1.00
First	R10	Residential	Bedroom	W22-L	0.52	
			Bedroom	W22-U	1.28	
			Bedroom	W23-L	0.39	
			Bedroom	W23-U	1.43	
			Bedroom	W24	1.28	
					4.90	1.00
First	R11	Residential	Bedroom	W25-L	0.52	
			Bedroom	W25-U	1.29	
			Bedroom	W26	1.27	
			Bedroom	W27-L	0.38	
			Bedroom	W27-U	1.41	
					4.87	1.00
First	R12	Residential	Bedroom	W28-L	0.60	
			Bedroom	W28-U	1.45	
			Bedroom	W29-L	0.44	
			Bedroom	W29-U	1.62	
			Bedroom	W30	1.48	
					5.59	1.00
First	R13	Residential	LKD	W31-L	0.46	
			LKD	W31-U	1.27	
			LKD	W32-L	0.18	
			LKD	W32-U	0.49	
					2.39	2.00
First	R14	Residential	LKD	W33-L	0.17	
			LKD	W33-U	0.47	
			LKD	W34-L	0.46	
			LKD	W34-U	1.28	
					2.38	2.00
First	R15	Residential	LKD	W35-L	0.44	
			LKD	W35-U	1.20	
			LKD	W36-L	0.18	
			LKD	W36-U	0.49	
					2.30	2.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
First	R16	Residential	LKD	W37-L	0.15	
			LKD	W37-U	0.42	
			LKD	W38-L	0.45	
			LKD	W38-U	1.22	
					2.23	2.00
First	R17	Residential	LKD	W39-L	0.16	
			LKD	W39-U	0.46	
			LKD	W40-L	0.41	
			LKD	W40-U	1.13	
					2.16	2.00
First	R18	Residential	LKD	W41-L	0.21	
			LKD	W41-U	0.77	
			LKD	W42-L	0.16	
			LKD	W42-U	0.33	
			LKD	W65	0.00	
					1.47	2.00
First	R19	Residential	Bedroom	W43-L	0.63	
			Bedroom	W43-U	1.22	
					1.85	1.00
First	R20	Residential	LKD	W44-L	0.26	
			LKD	W44-U	0.93	
			LKD	W45-L	0.15	
			LKD	W45-U	0.27	
			LKD	W64	0.01	
					1.63	2.00
First	R21	Residential	Bedroom	W46-L	0.66	
			Bedroom	W46-U	1.32	
					1.98	1.00
First	R22	Residential	Bedroom	W47-L	0.47	
			Bedroom	W47-U	1.71	
			Bedroom	W48-L	0.37	
			Bedroom	W48-U	0.99	
					3.54	1.00
First	R23	Residential	LKD	W49-L	0.38	
			LKD	W49-U	1.04	
			LKD	W50-L	0.21	
			LKD	W50-U	0.89	
					2.53	2.00
First	R24	Residential	Bedroom	W50-L	0.43	
			Bedroom	W50-U	1.81	
			Bedroom	W51-L	0.88	
			Bedroom	W51-U	2.51	
			Bedroom	W52-L	0.82	
			Bedroom	W52-U	3.32	
					9.76	1.00
First	R25	Residential	Bedroom	W53-L	1.05	
			Bedroom	W53-U	4.23	
					5.28	1.00
First	R26	Residential	LKD	W54-L	0.44	
			LKD	W54-U	1.78	
			LKD	W63-L	0.00	
			LKD	W63-U	0.00	
					2.22	2.00
First	R27	Residential	Bedroom	W55-L	1.38	
			Bedroom	W55-U	5.57	
					6.95	1.00
First	R28	Residential	LKD	W56-L	0.39	
			LKD	W56-U	1.56	
					1.95	2.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
First	R29	Residential	Bedroom	W57-L	0.16	
			Bedroom	W57-U	0.63	
			Bedroom	W58-L	0.15	
			Bedroom	W58-U	0.57	
			Bedroom	W59	0.70	
					2.22	1.00
First	R30	Residential	Bedroom	W60-L	0.26	
			Bedroom	W60-U	0.97	
			Bedroom	W61-L	0.14	
			Bedroom	W61-U	0.55	
			Bedroom	W62	0.85	
					2.78	1.00
First	R31	Residential	Bedroom	W66-L	0.19	
			Bedroom	W66-U	0.73	
			Bedroom	W67-L	0.21	
			Bedroom	W67-U	0.80	
			Bedroom	W68	0.91	
					2.84	1.00
First	R32	Residential	LKD	W69-L	0.43	
			LKD	W69-U	1.15	
					1.58	2.00
First	R33	Residential	Bedroom	W70-L	0.34	
			Bedroom	W70-U	0.92	
					1.26	1.00
First	R34	Residential	Bedroom	W71-L	0.58	
			Bedroom	W71-U	2.09	
					2.66	1.00
Second	R1	Residential	LKD	W1-L	0.50	
			LKD	W1-U	1.35	
					1.85	2.00
Second	R2	Residential	Bedroom	W2-L	0.55	
			Bedroom	W2-U	1.93	
					2.48	1.00
Second	R3	Residential	Bedroom	W3-L	0.35	
			Bedroom	W3-U	0.91	
			Bedroom	W4-L	0.28	
			Bedroom	W4-U	1.03	
			Bedroom	W5	0.92	
					3.50	1.00
Second	R4	Residential	Bedroom	W6-L	0.44	
			Bedroom	W6-U	1.59	
					2.03	1.00
Second	R5	Residential	Bedroom	W7-L	0.64	
			Bedroom	W7-U	1.54	
			Bedroom	W8-L	0.47	
			Bedroom	W8-U	1.71	
			Bedroom	W9	1.62	
					5.98	1.00
Second	R6	Residential	Bedroom	W10-L	0.53	
			Bedroom	W10-U	1.33	
			Bedroom	W11-L	0.41	
			Bedroom	W11-U	1.49	
			Bedroom	W12	1.42	
					5.18	1.00
Second	R7	Residential	Bedroom	W13-L	0.54	
			Bedroom	W13-U	1.34	
			Bedroom	W14	1.42	
			Bedroom	W15-L	0.40	
			Bedroom	W15-U	1.48	
					5.17	1.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
Second	R8	Residential	Bedroom	W16-L	0.62	
			Bedroom	W16-U	1.52	
			Bedroom	W17-L	0.46	
			Bedroom	W17-U	1.68	
			Bedroom	W18	1.61	
					5.89	1.00
Second	R9	Residential	Bedroom	W19-L	0.63	
			Bedroom	W19-U	1.52	
			Bedroom	W20-L	0.45	
			Bedroom	W20-U	1.67	
			Bedroom	W21	1.61	
					5.88	1.00
Second	R10	Residential	Bedroom	W22-L	0.54	
			Bedroom	W22-U	1.34	
			Bedroom	W23-L	0.41	
			Bedroom	W23-U	1.48	
			Bedroom	W24	1.42	
					5.19	1.00
Second	R11	Residential	Bedroom	W25-L	0.54	
			Bedroom	W25-U	1.34	
			Bedroom	W26	1.41	
			Bedroom	W27-L	0.40	
			Bedroom	W27-U	1.47	
					5.16	1.00
Second	R12	Residential	Bedroom	W28-L	0.62	
			Bedroom	W28-U	1.52	
			Bedroom	W29-L	0.46	
			Bedroom	W29-U	1.68	
			Bedroom	W30	1.61	
					5.89	1.00
Second	R13	Residential	LKD	W31-L	0.44	
			LKD	W31-U	0.93	
			LKD	W32-L	0.17	
			LKD	W32-U	0.36	
					1.90	2.00
Second	R14	Residential	LKD	W33-L	0.16	
			LKD	W33-U	0.34	
			LKD	W34-L	0.44	
			LKD	W34-U	0.95	
					1.89	2.00
Second	R15	Residential	LKD	W35-L	0.42	
			LKD	W35-U	0.87	
			LKD	W36-L	0.17	
			LKD	W36-U	0.36	
					1.82	2.00
Second	R16	Residential	LKD	W37-L	0.15	
			LKD	W37-U	0.30	
			LKD	W38-L	0.43	
			LKD	W38-U	0.88	
					1.75	2.00
Second	R17	Residential	LKD	W39-L	0.18	
			LKD	W39-U	0.50	
			LKD	W40-L	0.43	
			LKD	W40-U	1.21	
					2.32	2.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
Second	R18	Residential	LKD	W41-L	0.24	
			LKD	W41-U	0.87	
			LKD	W42-L	0.17	
			LKD	W42-U	0.39	
			LKD	W65	0.06	
					1.73	2.00
Second	R19	Residential	Bedroom	W43-L	0.68	
			Bedroom	W43-U	1.44	
					2.13	1.00
Second	R20	Residential	LKD	W44-L	0.29	
			LKD	W44-U	1.02	
			LKD	W45-L	0.17	
			LKD	W45-U	0.38	
			LKD	W64	0.07	
					1.93	2.00
Second	R21	Residential	Bedroom	W46-L	0.70	
			Bedroom	W46-U	1.52	
					2.22	1.00
Second	R22	Residential	Bedroom	W47-L	0.53	
			Bedroom	W47-U	1.88	
			Bedroom	W48-L	0.44	
			Bedroom	W48-U	1.23	
					4.08	1.00
Second	R23	Residential	LKD	W49-L	0.45	
			LKD	W49-U	1.25	
			LKD	W50-L	0.26	
			LKD	W50-U	1.05	
					3.01	2.00
Second	R24	Residential	Bedroom	W51-L	1.07	
			Bedroom	W51-U	3.20	
			Bedroom	W52-L	0.89	
			Bedroom	W52-U	3.53	
					8.69	1.00
Second	R25	Residential	Bedroom	W53-L	1.13	
			Bedroom	W53-U	4.50	
					5.63	1.00
Second	R26	Residential	LKD	W54-L	0.48	
			LKD	W54-U	1.89	
			LKD	W63-L	0.00	
			LKD	W63-U	0.02	
					2.40	2.00
Second	R27	Residential	Bedroom	W55-L	1.49	
			Bedroom	W55-U	5.94	
					7.43	1.00
Second	R28	Residential	LKD	W56-L	0.42	
			LKD	W56-U	1.66	
					2.08	2.00
Second	R29	Residential	Bedroom	W57-L	0.21	
			Bedroom	W57-U	0.80	
			Bedroom	W58-L	0.18	
			Bedroom	W58-U	0.71	
			Bedroom	W59	0.85	
					2.74	1.00
Second	R30	Residential	Bedroom	W60-L	0.31	
			Bedroom	W60-U	1.17	
			Bedroom	W61-L	0.17	
			Bedroom	W61-U	0.67	
			Bedroom	W62	0.98	
					3.30	1.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
Second	R31	Residential	Bedroom	W66-L	0.23	
			Bedroom	W66-U	0.90	
			Bedroom	W67-L	0.26	
			Bedroom	W67-U	1.02	
			Bedroom	W68	1.11	
					3.53	1.00
Second	R32	Residential	LKD	W69-L	0.48	
			LKD	W69-U	1.37	
					1.85	2.00
Second	R33	Residential	Bedroom	W70-L	0.39	
			Bedroom	W70-U	1.12	
					1.51	1.00
Second	R34	Residential	Bedroom	W71-L	0.63	
			Bedroom	W71-U	2.25	
					2.88	1.00
Third	R1	Residential	LKD	W1-L	0.65	
			LKD	W1-U	2.22	
					2.87	2.00
Third	R2	Residential	Bedroom	W2-L	0.60	
			Bedroom	W2-U	2.09	
					2.69	1.00
Third	R3	Residential	Bedroom	W3-L	0.37	
			Bedroom	W3-U	0.94	
			Bedroom	W4-L	0.29	
			Bedroom	W4-U	1.05	
			Bedroom	W5	0.99	
					3.64	1.00
Third	R4	Residential	Bedroom	W6-L	0.63	
			Bedroom	W6-U	2.16	
					2.79	1.00
Third	R5	Residential	LKD	W7-L	0.32	
			LKD	W7-U	1.11	
			LKD	W8-L	0.27	
			LKD	W8-U	0.95	
			LKD	W9-L	0.58	
			LKD	W9-U	2.04	
					5.27	2.00
Third	R6	Residential	LKD	W10-L	0.28	
			LKD	W10-U	0.99	
			LKD	W11-L	0.18	
			LKD	W11-U	0.41	
			LKD	W34	0.18	
					2.05	2.00
Third	R7	Residential	Bedroom	W12-L	0.72	
			Bedroom	W12-U	1.58	
					2.31	1.00
Third	R8	Residential	LKD	W13-L	0.31	
			LKD	W13-U	1.07	
			LKD	W14-L	0.18	
			LKD	W14-U	0.41	
			LKD	W33	0.22	
					2.18	2.00
Third	R9	Residential	Bedroom	W15-L	0.73	
			Bedroom	W15-U	1.58	
					2.31	1.00
Third	R10	Residential	Bedroom	W16-L	0.56	
			Bedroom	W16-U	1.94	
			Bedroom	W17-L	0.62	
			Bedroom	W17-U	2.19	
					5.31	1.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
Third	R11	Residential	LKD	W18-L	0.59	
			LKD	W18-U	2.25	
			LKD	W19-L	0.29	
			LKD	W19-U	1.08	
					4.21	2.00
Third	R12	Residential	Bedroom	W20-L	1.43	
			Bedroom	W20-U	5.29	
			Bedroom	W21-L	0.91	
			Bedroom	W21-U	3.41	
					11.04	1.00
Third	R13	Residential	Bedroom	W22-L	1.16	
			Bedroom	W22-U	4.35	
					5.52	1.00
Third	R14	Residential	LKD	W23-L	0.49	
			LKD	W23-U	1.83	
			LKD	W32-L	0.00	
			LKD	W32-U	0.00	
					2.32	2.00
Third	R15	Residential	Bedroom	W24-L	1.44	
			Bedroom	W24-U	5.38	
					6.82	1.00
Third	R16	Residential	LKD	W25-L	0.45	
			LKD	W25-U	1.69	
					2.14	2.00
Third	R17	Residential	Bedroom	W26-L	0.26	
			Bedroom	W26-U	1.00	
			Bedroom	W27-L	0.23	
			Bedroom	W27-U	0.88	
			Bedroom	W28	1.01	
					3.39	1.00
Third	R18	Residential	Bedroom	W29-L	0.37	
			Bedroom	W29-U	1.40	
			Bedroom	W30-L	0.21	
			Bedroom	W30-U	0.84	
			Bedroom	W31	1.15	
					3.96	1.00
Third	R19	Residential	Bedroom	W35-L	0.29	
			Bedroom	W35-U	1.13	
			Bedroom	W36-L	0.33	
			Bedroom	W36-U	1.30	
			Bedroom	W37	1.32	
					4.37	1.00
Third	R20	Residential	LKD	W38-L	0.47	
			LKD	W38-U	1.03	
					1.51	2.00
Third	R21	Residential	Bedroom	W39-L	0.39	
			Bedroom	W39-U	0.85	
					1.24	1.00
Third	R22	Residential	Bedroom	W40-L	0.68	
			Bedroom	W40-U	2.45	
					3.13	1.00
Fourth	R1	Residential	Bedroom	W1-L	0.49	
			Bedroom	W1-U	1.71	
			Bedroom	W2-L	0.49	
			Bedroom	W2-U	1.71	
					4.41	1.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	ADF Proposed	Req'd Value
Fourth	R2	Residential	LKD	W3-L	0.31	
			LKD	W3-U	1.07	
			LKD	W4-L	0.18	
			LKD	W4-U	0.42	
			LKD	W19	0.10	
					2.08	2.00
Fourth	R3	Residential	Bedroom	W5-L	0.73	
			Bedroom	W5-U	1.58	
					2.31	1.00
Fourth	R4	Residential	LKD	W6-L	0.31	
			LKD	W6-U	1.07	
			LKD	W7-L	0.36	
			LKD	W7-U	1.28	
			LKD	W18	0.11	
					3.13	2.00
Fourth	R5	Residential	Bedroom	W8-L	1.31	
			Bedroom	W8-U	4.62	
					5.93	1.00
Fourth	R6	Residential	LKD	W9-L	0.36	
			LKD	W9-U	1.24	
			LKD	W10-L	0.93	
			LKD	W10-U	3.14	
			LKD	W11-L	0.59	
			LKD	W11-U	2.19	
					8.44	2.00
Fourth	R7	Residential	Bedroom	W12-L	1.11	
			Bedroom	W12-U	4.14	
					5.24	1.00
Fourth	R8	Residential	LKD	W13-L	1.14	
			LKD	W13-U	4.23	
					5.37	2.00
Fourth	R9	Residential	Bedroom	W14-L	0.45	
			Bedroom	W14-U	1.72	
			Bedroom	W15-L	0.41	
			Bedroom	W15-U	1.61	
			Bedroom	W16	1.68	
					5.88	1.00
Fourth	R10	Residential	Bedroom	W17-L	1.03	
			Bedroom	W17-U	3.84	
					4.87	1.00
Fourth	R11	Residential	Bedroom	W20-L	0.38	
			Bedroom	W20-U	1.49	
			Bedroom	W21-L	0.42	
			Bedroom	W21-U	1.60	
			Bedroom	W22	1.56	
					5.45	1.00
Fourth	R12	Residential	LKD	W23-L	0.82	
			LKD	W23-U	2.79	
					3.61	2.00
Fourth	R13	Residential	Bedroom	W24-L	0.72	
			Bedroom	W24-U	2.51	
					3.23	1.00
Fourth	R14	Residential	LKD	W25-L	0.88	
			LKD	W25-U	2.98	
					3.85	2.00

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	APSH by window			APSH by room		
					Annual	Winter	North Facing?	Annual	Winter	North Facing?
Proposed at 208-212 High Street										
Ground	R1	Residential	Residents Lounge	W1	4	0	*North			
	R1			W2	3	0	*North	4	0	*North
	R2	Residential	Play Area	W3	4	0	*North	4	0	*North
	R3	Residential	Bedroom	W4	10	1	*North	10	1	*North
	R4	Residential	Bedroom	W5	10	1	*North	10	1	*North
	R5	Residential	Bedroom	W6	10	1	*North	10	1	*North
	R6	Residential	LKD	W7	9	1	*North	9	1	*North
	R7	Residential	LKD	W8	10	1	*North	10	1	*North
	R8	Residential	Bedroom	W9	10	1	*North	10	1	*North
	R9	Residential	Bedroom	W10	10	1	*North	10	1	*North
	R10	Residential	Bedroom	W11	10	1	*North	10	1	*North
First	R1	Residential	LKD	W1	9	0	*North	9	0	*North
	R2	Residential	Bedroom	W2	9	0	*North	9	0	*North
	R3	Residential	Bedroom	W3	13	1				
	R3	Residential	Bedroom	W4	1	0	*North			
	R3	Residential	Bedroom	W5	30	4		31	4	
	R4	Residential	Bedroom	W6	8	0	*North	8	0	*North
	R5	Residential	Bedroom	W7	14	2				
	R5	Residential	Bedroom	W8	0	0	*North			
	R5	Residential	Bedroom	W9	29	4		31	5	
	R6	Residential	Bedroom	W10	14	2				
	R6	Residential	Bedroom	W11	1	0	*North			
	R6	Residential	Bedroom	W12	28	4		30	5	
	R7	Residential	Bedroom	W13	14	2				
	R7	Residential	Bedroom	W14	32	5				
	R7	Residential	Bedroom	W15	1	0	*North	33	5	
	R8	Residential	Bedroom	W16	15	3				
	R8	Residential	Bedroom	W17	1	0	*North			
	R8	Residential	Bedroom	W18	29	5		31	6	
	R9	Residential	Bedroom	W19	15	3				
	R9	Residential	Bedroom	W20	1	0	*North			
	R9	Residential	Bedroom	W21	33	6		35	7	
	R10	Residential	Bedroom	W22	15	3				
	R10	Residential	Bedroom	W23	1	0	*North			
	R10	Residential	Bedroom	W24	31	7		32	7	
	R11	Residential	Bedroom	W25	15	3				
	R11	Residential	Bedroom	W26	34	7				
	R11	Residential	Bedroom	W27	1	0	*North	35	7	
	R12	Residential	Bedroom	W28	15	3				
	R12	Residential	Bedroom	W29	1	0	*North			
	R12	Residential	Bedroom	W30	30	6		32	7	
	R13	Residential	LKD	W31	11	8				
	R13	Residential	LKD	W32	9	2		15	8	
	R14	Residential	LKD	W33	9	7				
	R14	Residential	LKD	W34	12	5		14	7	

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	APSH by window			APSH by room		
					Annual	Winter	North Facing?	Annual	Winter	North Facing?
First	R15	Residential	LKD	W35	8	5				
	R15	Residential	LKD	W36	9	2		13	6	
	R16	Residential	LKD	W37	6	4				
	R16	Residential	LKD	W38	12	5		12	5	
	R17	Residential	LKD	W39	7	2				
	R17	Residential	LKD	W40	10	2		10	2	
	R18	Residential	LKD	W41	1	0	*North			
	R18	Residential	LKD	W42	0	0				
	R18	Residential	LKD	W65	0	0		1	0	
	R19	Residential	Bedroom	W43	0	0	*North	0	0	*North
	R20	Residential	LKD	W44	0	0	*North			
	R20	Residential	LKD	W45	0	0				
	R20	Residential	LKD	W64	0	0		0	0	
	R21	Residential	Bedroom	W46	0	0	*North	0	0	*North
	R22	Residential	Bedroom	W47	0	0	*North			
	R22	Residential	Bedroom	W48	3	1		3	1	
	R23	Residential	LKD	W49	5	0	*North			
	R23	Residential	LKD	W50	0	0	*North	5	0	*North
	R24	Residential	Bedroom	W50	0	0	*North			
	R24	Residential	Bedroom	W51	6	0	*North			
	R24	Residential	Bedroom	W52	42	12		42	12	
	R25	Residential	Bedroom	W53	42	12		42	12	
	R26	Residential	LKD	W54	42	12				
	R26	Residential	LKD	W63	0	0	*North	42	12	
	R27	Residential	Bedroom	W55	42	12		42	12	
	R28	Residential	LKD	W56	42	12		42	12	
	R29	Residential	Bedroom	W57	4	0				
	R29	Residential	Bedroom	W58	0	0	*North			
	R29	Residential	Bedroom	W59	4	0		5	0	
	R30	Residential	Bedroom	W60	2	0				
	R30	Residential	Bedroom	W61	0	0	*North			
	R30	Residential	Bedroom	W62	13	0		13	0	
	R31	Residential	Bedroom	W66	2	0	*North			
	R31	Residential	Bedroom	W67	7	1				
	R31	Residential	Bedroom	W68	19	1		19	1	
	R32	Residential	LKD	W69	2	0	*North	2	0	*North
	R33	Residential	Bedroom	W70	2	0	*North	2	0	*North
	R34	Residential	Bedroom	W71	10	0	*North	10	0	*North
Second	R1	Residential	LKD	W1	10	1	*North	10	1	*North
	R2	Residential	Bedroom	W2	10	0	*North	10	0	*North
	R3	Residential	Bedroom	W3	15	3				
	R3	Residential	Bedroom	W4	1	0	*North			
	R3	Residential	Bedroom	W5	34	7		36	8	
	R4	Residential	Bedroom	W6	8	0	*North	8	0	*North

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	APSH by window			APSH by room		
					Annual	Winter	North Facing?	Annual	Winter	North Facing?
Second	R5	Residential	Bedroom	W7	15	3				
	R5	Residential	Bedroom	W8	1	0	*North			
	R5	Residential	Bedroom	W9	34	6				
								35	6	
	R6	Residential	Bedroom	W10	14	2				
	R6	Residential	Bedroom	W11	1	0	*North			
	R6	Residential	Bedroom	W12	36	7				
								37	7	
	R7	Residential	Bedroom	W13	15	3				
	R7	Residential	Bedroom	W14	38	9				
	R7	Residential	Bedroom	W15	1	0	*North			
								39	9	
	R8	Residential	Bedroom	W16	15	3				
	R8	Residential	Bedroom	W17	1	0	*North			
	R8	Residential	Bedroom	W18	38	9				
								39	9	
	R9	Residential	Bedroom	W19	15	3				
	R9	Residential	Bedroom	W20	1	0	*North			
	R9	Residential	Bedroom	W21	38	9				
								39	9	
	R10	Residential	Bedroom	W22	15	3				
	R10	Residential	Bedroom	W23	1	0	*North			
	R10	Residential	Bedroom	W24	38	9				
								39	9	
	R11	Residential	Bedroom	W25	15	3				
	R11	Residential	Bedroom	W26	38	9				
	R11	Residential	Bedroom	W27	1	0	*North			
								39	9	
	R12	Residential	Bedroom	W28	15	3				
	R12	Residential	Bedroom	W29	1	0	*North			
	R12	Residential	Bedroom	W30	38	9				
								39	9	
	R13	Residential	LKD	W31	2	2				
	R13	Residential	LKD	W32	2	2				
								2	2	
	R14	Residential	LKD	W33	2	2				
	R14	Residential	LKD	W34	2	2				
								2	2	
	R15	Residential	LKD	W35	2	2				
	R15	Residential	LKD	W36	2	2				
								2	2	
	R16	Residential	LKD	W37	2	2				
	R16	Residential	LKD	W38	2	2				
								2	2	
	R17	Residential	LKD	W39	9	4				
	R17	Residential	LKD	W40	10	2				
								12	4	
	R18	Residential	LKD	W41	1	0	*North			
	R18	Residential	LKD	W42	1	0				
	R18	Residential	LKD	W65	0	0				
								1	0	
	R19	Residential	Bedroom	W43	0	0	*North			
								0	0	*North
	R20	Residential	LKD	W44	1	0	*North			
	R20	Residential	LKD	W45	1	0				
	R20	Residential	LKD	W64	1	1				
								2	1	
	R21	Residential	Bedroom	W46	0	0	*North			
								0	0	*North
	R22	Residential	Bedroom	W47	1	0	*North			
	R22	Residential	Bedroom	W48	7	1				
								7	1	
	R23	Residential	LKD	W49	6	0	*North			
	R23	Residential	LKD	W50	1	0	*North			
								6	0	*North
	R24	Residential	Bedroom	W51	6	0	*North			
	R24	Residential	Bedroom	W52	44	14				
								44	14	
	R25	Residential	Bedroom	W53	44	14				
								44	14	

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	APSH by window			APSH by room		
					Annual	Winter	North Facing?	Annual	Winter	North Facing?
Second	R26	Residential	LKD	W54	44	14				
	R26	Residential	LKD	W63	0	0	*North	44	14	
	R27	Residential	Bedroom	W55	44	14		44	14	
	R28	Residential	LKD	W56	44	14		44	14	
	R29	Residential	Bedroom	W57	6	0				
	R29	Residential	Bedroom	W58	0	0	*North			
	R29	Residential	Bedroom	W59	17	0		18	0	
	R30	Residential	Bedroom	W60	4	0				
	R30	Residential	Bedroom	W61	0	0	*North			
	R30	Residential	Bedroom	W62	18	0		19	0	
	R31	Residential	Bedroom	W66	8	0	*North			
	R31	Residential	Bedroom	W67	13	3				
	R31	Residential	Bedroom	W68	37	3		37	3	
	R32	Residential	LKD	W69	4	0	*North	4	0	*North
	R33	Residential	Bedroom	W70	7	1	*North	7	1	*North
	R34	Residential	Bedroom	W71	12	1	*North	12	1	*North
Third	R1	Residential	LKD	W1	15	3	*North	15	3	*North
	R2	Residential	Bedroom	W2	13	1	*North	13	1	*North
	R3	Residential	Bedroom	W3	15	3				
	R3	Residential	Bedroom	W4	1	0	*North			
	R3	Residential	Bedroom	W5	38	9		39	9	
	R4	Residential	Bedroom	W6	1	0	*North	1	0	*North
	R5	Residential	LKD	W7	1	0	*North			
	R5	Residential	LKD	W8	27	4				
	R5	Residential	LKD	W9	23	2		28	4	
	R6	Residential	LKD	W10	1	0	*North			
	R6	Residential	LKD	W11	1	0				
	R6	Residential	LKD	W34	13	13		14	13	
	R7	Residential	Bedroom	W12	0	0	*North	0	0	*North
	R8	Residential	LKD	W13	1	0	*North			
	R8	Residential	LKD	W14	1	0				
	R8	Residential	LKD	W33	14	11		15	11	
	R9	Residential	Bedroom	W15	0	0	*North	0	0	*North
	R10	Residential	Bedroom	W16	1	0	*North			
	R10	Residential	Bedroom	W17	20	2		20	2	
	R11	Residential	LKD	W18	6	0	*North			
	R11	Residential	LKD	W19	3	0	*North	6	0	*North
	R12	Residential	Bedroom	W20	5	0	*North			
	R12	Residential	Bedroom	W21	42	14		42	14	
	R13	Residential	Bedroom	W22	42	14		42	14	
	R14	Residential	LKD	W23	42	14				
	R14	Residential	LKD	W32	0	0	*North	42	14	
	R15	Residential	Bedroom	W24	42	14		42	14	
	R16	Residential	LKD	W25	42	14		42	14	
	R17	Residential	Bedroom	W26	9	0				
	R17	Residential	Bedroom	W27	0	0	*North			

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	APSH by window			APSH by room		
					Annual	Winter	North Facing?	Annual	Winter	North Facing?
Third	R17	Residential	Bedroom	W28	29	3		30	3	
	R18	Residential	Bedroom	W29	8	1				
	R18	Residential	Bedroom	W30	0	0	*North			
	R18	Residential	Bedroom	W31	24	3		25	3	
	R19	Residential	Bedroom	W35	12	0	*North			
	R19	Residential	Bedroom	W36	17	6				
	R19	Residential	Bedroom	W37	52	13		52	13	
	R20	Residential	LKD	W38	2	0	*North	2	0	*North
	R21	Residential	Bedroom	W39	3	1	*North	3	1	*North
	R22	Residential	Bedroom	W40	14	2	*North	14	2	*North
Fourth	R1	Residential	Bedroom	W1	14	2	*North			
	R1	Residential	Bedroom	W2	1	0	*North	15	2	*North
	R2	Residential	LKD	W3	1	0	*North			
	R2	Residential	LKD	W4	1	0				
	R2	Residential	LKD	W19	0	0		1	0	
	R3	Residential	Bedroom	W5	0	0	*North	0	0	*North
	R4	Residential	LKD	W6	1	0	*North			
	R4	Residential	LKD	W7	23	2				
	R4	Residential	LKD	W18	1	1		24	3	
	R5	Residential	Bedroom	W8	5	0	*North	5	0	*North
	R6	Residential	LKD	W9	1	0	*North			
	R6	Residential	LKD	W10	5	0	*North			
	R6	Residential	LKD	W11	40	14		40	14	
	R7	Residential	Bedroom	W12	40	14		40	14	
	R8	Residential	LKD	W13	42	16		42	16	
	R9	Residential	Bedroom	W14	15	3				
	R9	Residential	Bedroom	W15	1	0	*North			
	R9	Residential	Bedroom	W16	39	10		40	10	
	R10	Residential	Bedroom	W17	40	14		40	14	
	R11	Residential	Bedroom	W20	19	2	*North			
	R11	Residential	Bedroom	W21	24	12				
	R11	Residential	Bedroom	W22	68	23		68	23	
	R12	Residential	LKD	W23	15	3	*North	15	3	*North
	R13	Residential	Bedroom	W24	14	2	*North	14	2	*North
	R14	Residential	LKD	W25	15	3	*North	15	3	*North

Darling Associates Architects proposed scheme drawings received on 09/06/2021

Floor Ref.	Amenity Ref.		Amenity Area	Lit Area Existing	Lit Area Proposed	Ratio Reduction
Darling Associates Architects Proposed scheme at 208-212 High Street						
Ground	A1	Area m2 Percentage	191.98	N/R N/A	128.15 67%	N/A
Ground	A2	Area m2 Percentage	48.35	N/R N/A	2.43 5%	N/A
Ground	A3	Area m2 Percentage	108.38	N/R N/A	4.21 4%	N/A
First	A4	Area m2 Percentage	55.84	N/R N/A	0.00 0%	N/A
38 Vinson Close						
Ground	A1	Area m2 Percentage	45.84	43.16 94%	43.16 94%	1.00
Ground	A2	Area m2 Percentage	22.76	22.75 100%	22.12 97%	0.97
Ground	A3	Area m2 Percentage	172.53	146.57 85%	116.36 67%	0.79
40 Vinson Close						
Ground	A4	Area m2 Percentage	39.73	36.01 91%	35.13 88%	0.98
Ground	A5	Area m2 Percentage	157.17	143.39 91%	135.52 86%	0.95
42 Vinson Close						
Ground	A6	Area m2 Percentage	21.01	18.88 90%	17.30 82%	0.92
Ground	A7	Area m2 Percentage	148.92	135.64 91%	124.59 84%	0.92
44 Vinson Close						
Ground	A8	Area m2 Percentage	77.22	75.16 97%	74.96 97%	1.00
Ground	A9	Area m2 Percentage	139.82	124.90 89%	107.88 77%	0.86

Darling Associates Architects proposed scheme drawings received on 09/06/2021

Floor Ref.	Amenity Ref.		Amenity Area	Lit Area Existing	Lit Area Proposed	Ratio Reduction
Darling Associates Architects Proposed scheme at 208-212 High Street						
Ground	A1	Area m2 Percentage	191.98	N/R N/A	183.01 95%	N/A
Ground	A2	Area m2 Percentage	48.35	N/R N/A	39.26 81%	N/A
Ground	A3	Area m2 Percentage	108.38	N/R N/A	91.57 84%	N/A
First	A4	Area m2 Percentage	55.84	N/R N/A	55.18 99%	N/A
38 Vinson Close						
Ground	A1	Area m2 Percentage	45.84	44.88 98%	44.88 98%	1.00
Ground	A2	Area m2 Percentage	22.76	20.46 90%	20.46 90%	1.00
Ground	A3	Area m2 Percentage	172.53	168.21 97%	161.09 93%	0.96
40 Vinson Close						
Ground	A4	Area m2 Percentage	39.73	39.53 99%	39.53 99%	1.00
Ground	A5	Area m2 Percentage	157.17	156.05 99%	154.48 98%	0.99
42 Vinson Close						
Ground	A6	Area m2 Percentage	21.01	20.52 98%	20.52 98%	1.00
Ground	A7	Area m2 Percentage	148.92	147.97 99%	145.70 98%	0.98
44 Vinson Close						
Ground	A8	Area m2 Percentage	77.22	76.48 99%	76.48 99%	1.00
Ground	A9	Area m2 Percentage	139.82	138.62 99%	135.79 97%	0.98

APPENDIX A.29 KEELEY ROAD COMMITTEE REPORT

1 APPLICATION DETAILS

Ref: 22/04309/FUL
Location: 32-44 Keeley Road and 31-57 Drummond Road, Croydon, CR0 1TH
Ward: Fairfield
Description: Comprehensive redevelopment of the site comprising the demolition of the existing buildings and structures; site preparation works; and the phased development of two new buildings containing residential uses, basement, private and communal amenity space, associated car parking, cycle parking, refuse storage, plant and other associated works
Drawing Nos: See Appendix 1
Applicant: BDW Trading Limited
Agent: Mr Ewan Grunwald (Quod)
Case Officer: James White / Ross Gentry

	1 bed (2 person)	**2 bed** (3 & 4 person)	**3 bed** (4 & 5 person)	**TOTAL**
Existing	18	73	5	95
Proposed (market housing)	69	44	9	122
Proposed (affordable rent)	0	6	0	6
Proposed (shared ownership)	9	7	0	16
TOTAL (Proposed)	78	57	9	144

Vehicle and Cycle Parking (London Plan Standards)	
PTAL: 6b	
Car Parking maximum standard	**Proposed**
Car free other than Blue badge. 3% of dwellings (4 spaces) provided as blue badge parking from the outset	4 blue badge spaces
Long Stay Cycle Storage minimum	**Proposed**
78 (at 1.5 space requirement) plus 66 (at 2 space requirement) = 249	250
Short Stay Cycle Storage minimum	**Proposed**
4	4

1.1 This application is being reported to committee because:

- It is for the erection of a building or buildings with a gross floor space of 10,000 square metres or more.

2 RECOMMENDATION

2.1 That the Committee resolve to GRANT planning permission

2.2 That the Director of Planning Sustainable Regeneration is delegated authority to issue the planning permission subject to:

A. Any direction by the London Mayor pursuant to the Mayor of London Order

B. The prior completion of a legal agreement to secure the following planning obligations:

Affordable housing

a. 16% affordable housing (by habitable room) with 32% at London Affordable Rent and 68% Shared Ownership
b. Affordable housing review mechanisms (early and late stage review)

Transport

c. TfL financial contribution of £53,670 towards improvements and upgrades to the local public transport network
d. Croydon Council financial contribution of £180,000 for sustainable transport initiatives
e. Financial contribution to off-site car club space with EVCP of £31,000
f. Membership to car club for residents for 3 years for each unit
g. Travel Plan and monitoring for 5 years
h. Remove access for future residents to CPZ permits and season tickets for Council car parks

Design

i. Retention of scheme architects
j. Contribution of £4,309 towards child play space provision

Public Realm

a. Enter into a S.278 agreement – to include, but not limited to, repaving of the pavements around the building on all street frontages, changes to yellow lines, parking restrictions and parking bay removals, as well as active travel zone key route improvements
b. Potential to enter into a S.38 agreement for the adoption by the Council of the Drummond Road widened footway

Environmental

c. Air quality financial contribution of £14,400
d. Carbon offsetting contribution of £156,708 (subject to review if the energy performance improves during the detailed design stages)
e. 'Be Seen' monitoring clause
f. Television mitigation

Employment and training

g. Local Employment and Training strategy (LETS)
h. LETS contributions of £90,000 for construction phase

Other

i. Relevant monitoring fees (per £1,500 per obligation above)

j. Any other planning obligation(s) considered necessary by the Director of Planning and Sustainable Regeneration

2.3 That the Director of Planning and Sustainable Regeneration is delegated authority to negotiate the legal agreement indicated above.

2.4 That the Director of Planning and Sustainable Regeneration is delegated authority to issue the planning permission and impose conditions and informatives to secure the following matters:

Conditions

1) Commencement time limit of 3 years
2) Carried out in accordance with the approved drawings
3) Development to have 144 homes (Use Class C3) across two buildings at heights of 5 and 16/25 storeys.

Pre-commencement (pre-demolition)

4) Demolition and Construction Logistics Plan (discharged in consultation with TfL and London Trams).
5) Demolition and Construction Environment Management Plan
6) Contaminated land - intrusive site investigation

Pre-commencement (post-demolition)

7) Public Art strategy, designs and implementation (brief and commissioned pieces for elevations including physical samples)
8) Wind mitigation in relation to Tower B entrance area
9) Sustainable urban drainage strategy

Prior to above ground floor slab level

10) Typical façade materials and detailing 1:1 mock-up's, with 1:5/1:10 details to confirm following approval
11) 1:1 mock-up's of the crown, showing interface, and of the amenity levels and window/sill details
12) External facing materials, including physical samples and detailed drawings of design elements 1:5/1:10
13) Building lighting scheme, to include night-time illumination and wildlife sensitive lighting design
14) Achieve Secured By Design accreditation
15) Vehicle Dynamics Assessment with hostile vehicle mitigation and anti-terrorist measures
16) Sufficient ducting space for full fibre connectivity infrastructure
17) Wind mitigation (other than in relation to Tower B entrance)
18) Whole Life Cycle assessment - actual whole life cycle emissions and post construction monitoring.
19) Air Quality and Dust Management Plan
20) Petrol / oil interceptors be fitted in car park facilities
21) Final details of cycle parking

Pre-occupation

22) Hard and soft landscaping (including planting / boundary treatment, furniture and structures / play space / equipment and rooftop amenity)

23) Urban Greening Factor minimum 0.35 compliance with further exploration of options to try and secure 0.4
24) Communal area management plan stipulating access to all communal areas (rooms and outside space) for all residents within both blocks.
25) Detailed Delivery and Servicing Plan
26) Refuse collection management plan
27) Building maintenance strategy including window cleaning
28) Parking Design and Management Plan (including details of the maintenance and repair of the electronic gates and traffic light system utilised)
29) Post-construction assessment to review WLC emissions against submitted report
30) Post-construction assessment to review circular economy against submitted report
31) Travel Plan
32) Building fully accessible to all with step free access and evacuation lifts provided

Compliance

33) 10% of units M4(3) and 90% M4(2)
34) Compliance with measures in Noise and Vibration Assessment October 2022
35) Securing biodiversity mitigation and enhancement measures within Biodiversity Net Gain Report October 2022
36) Minimum 35% CO2 reduction secured on site
37) Compliance with Air Quality Assessment October 2022
38) Compliance with Overheating Assessment September 2022
39) 110 litre/person/day water consumption target
40) All spaces equipped with electric vehicle charging infrastructure
41) Compliance with fire statement, detailed design of fire strategy
42) All features and materials must comply with Part B of the Building Regulations in relation to fire safety
43) Access for all residents (and all tenures) across both blocks provided and maintained in perpetuity to 2 communal rooms at base of Block B
44) Noise from air and plant units should not increase background noise
45) Any other planning condition(s) considered necessary by the Director of Planning and Sustainable Regeneration

Informatives

1) Granted subject to a Section 106 Agreement
2) Community Infrastructure Levy
3) Material/detailing conditions information
4) Code of practise for Construction Sites
5) Site notice removal
6) Thames Water guidance related to working near or diverting assets
7) Thames Water Groundwater Risk Management permit info
8) Thames Water Minimum pressure and flow rates
9) Obstacle lighting (Aviation)
10) CAA Crane Notification (Aviation)
11) Any other informative(s) considered necessary by the Director of Planning and Sustainable Regeneration

2.5 That the Committee confirms that it has had special regard to the desirability of preserving the settings of listed buildings and features of special architectural or historic interest as required by Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990.

2.6 That the Committee confirms that it has paid special attention to the desirability of preserving or enhancing the character and appearance of the Central Croydon and Church Street Conservation Areas as required by Section 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990.

2.7 That the Committee confirms that adequate provision has been made, by the imposition of conditions, for the preservation or planting of trees as required by Section 197 of the Town and Country Planning Act 1990.

2.8 That, if by 22nd September the legal agreement has not been completed, the Director of Planning and Sustainable Regeneration is delegated authority to refuse planning permission.

3 PROPOSAL AND LOCATION DETAILS

Proposal

3.1 The proposal is for full planning permission for the demolition of the existing building (which ranges between 4 to 11 storey in height) and the subsequent erection of two residential buildings, forthwith known as Block A (fronting Frith Road) and Block B (fronting Drummond Road).

Figure 1: ground floor layout plan

Block A

- The lower block fronting Frith Road, Block A, extends up to 5 storey in height (ground plus 4 storey) and comprises 27 units.
- All the units within Block A are single level, other than six new duplex homes with individual front doors and gardens to Frith Road. The flats within Block A have a communal entrance off Keeley Road. An internal refuse store is also accessed off Keeley Road and from the lobby area.
- Block A has 1 lift and stair core.

Block B

- The taller building, Block B, extends along the frontage of Drummond Road and steps in height from part-16 (ground plus 15 storey) to part-25 storey (ground plus 24 storey) plus roof top plant and comprises 117 units.
- The ground floor of Block B incorporates a communal entrance off the corner of Drummond Road and Keeley Road, two communal rooms (for resident use across the whole development) and plant. An internal refuse store is also accessed off Keeley Road and from the lobby area.
- Block B has 2 lifts (within one core) and 2 stair cores.

- Basement accommodation is provided for 4 blue badge spaces, plant and cycle storage.
- Between the blocks, stretching between Keeley Road and Drummond Road, is an outdoor communal area. Additional outdoor spaces are proposed on the 5th floor of Building A and the 16th floor of Building B.
- Both buildings are primarily finished in brick and metal work.

Figure 2: CGI of proposed scheme

Amendments

3.2 The following documents were updated during the course of the application:

- Design and Access Statement Addendum
- Revised Daylight and Sunlight Report
- Microclimate Technical Note
- Tree Technical Note
- Biodiversity Net Gain Report
- Health Impact Assessment
- Updates in relation to Energy and Circular Economy
- LBC Highways Response Note

3.3 The following plans were updated during the course of the application:

- Proposed site plan
- Proposed basement floor plan
- Proposed ground floor plan

3.4 These amendments have sought to address consultee and objector concerns where relevant. Given they were largely clarifying the position already shown in earlier documents and are minor amendments in their nature, a further re-consultation was not necessary.

Background

3.5 The existing building was built by Barratt between 2000 and 2003. All the apartments within the scheme were sold to individual occupiers between 2001 and 2003, whilst the site freehold was sold to an investor in 2003.

3.6 Although having no legal interest in the site or legal duty in relation to the building, fire safety checks were carried out by Barratt in 2017. It was discovered that the existing cladding was potentially unsafe and Barratt voluntarily agreed to pay for its replacement.

3.7 Works to remove the cladding identified structural concerns and, after review and further works, residents were moved out of the building in 2019, with Barratt funding temporary accommodation. The works required to make the concrete frame of the building safe were eventually found to be significant, and of a time-consuming and intrusive nature.

3.8 In 2020 it was decided that the best outcome for residents would be for Barratt to offer to purchase their homes at full market value. Barratt would then remediate or redevelop the site.

3.9 The site has been vacant since early 2019 and is currently covered in scaffolding and screening.

Site and Surroundings

- The site has an area of approximately 0.2 ha and is located within a block bounded by Drummond road and Keeley Road.

Figure 3: red edge location plan

- The site is currently occupied by Citiscape, a residential building varying in height from 4 to 11 storeys and comprising 95 flats with a two level basement containing 72 car parking spaces (ground and lower levels accessed from the north east and south east of the site respectively) .

Figures 4 and 5: birds eye views of the existing building

- The surrounding area contains a wide variety of building types and scale, with the rear part of the Centrale shopping centre and its car park surrounding the site to the north, east and south, with two storey terraced housing on the opposite side of Frith Road.
- Keeley House is a relatively modern three-storey development which backs on to the site and contains a children's nursery on the ground floor with flats above.
- There are some commercial uses located on the opposite side of Drummond Road and Keeley Road to the site.

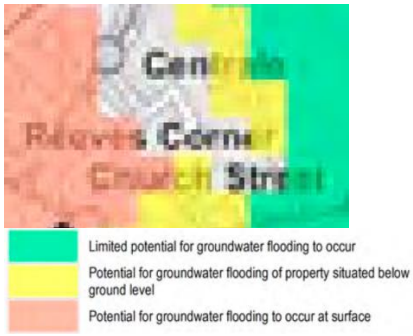
Planning Designations and Constraints

3.10 The site is subject to the following formal planning constraints and designations:

Site

- Croydon Metropolitan Centre
- Croydon Opportunity Area (within the 'Edge Area' for tall buildings) *(See Figures 9 and 10: Extracts from Croydon Local Plan 2018)*.
- Archaeological Priority Area
- Old Town Masterplan (2014) area, specifically components OT3 (Frith Road and Keeley Road) and OT12 (Drummond Road).
- The site is within Flood Zone 1 'low risk of flooding from rivers and the sea', the majority of the site is also at 'very low' risk from surface water flooding, however, an area in the centre of the site is shown to be at 'medium' to 'high' risk and the site is within a critical drainage area. In terms of ground water there is no data available for the site itself, however, directly to the southwest an area with the potential of groundwater flooding at the surface. To the northeast is an area considered to have a potential for groundwater flooding to property located below ground level.

Ground

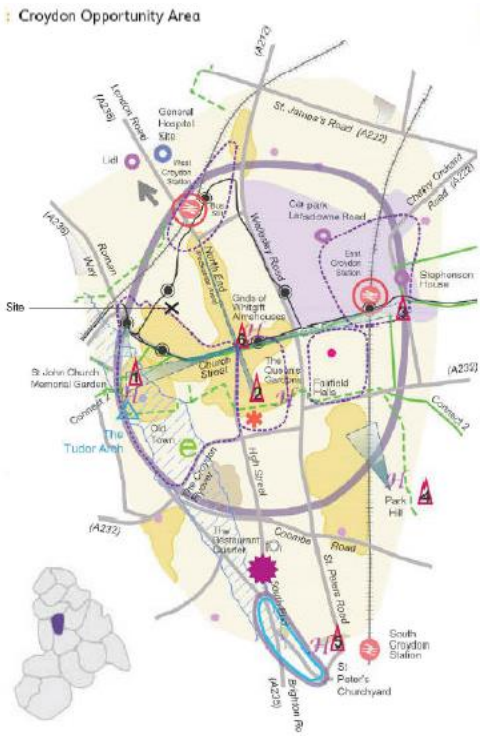


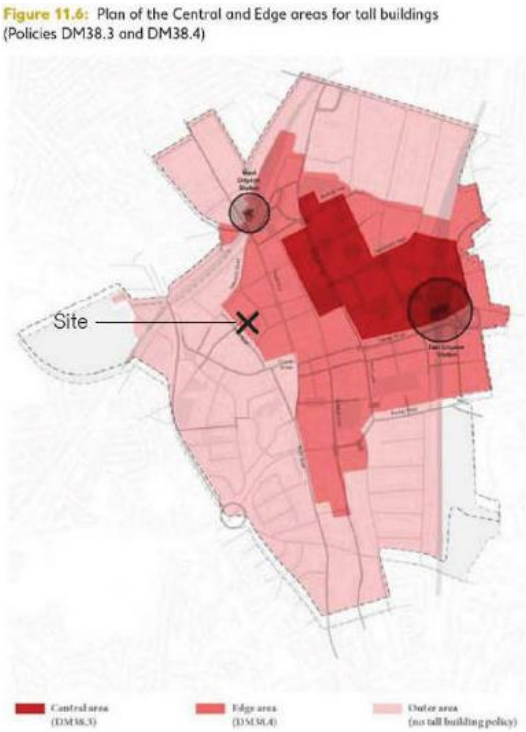
Surface

Fluvial

Figures 6, 7 and 8: flooding maps

- The site has a Public Transport Accessibility Level (PTAL) of 6b, the highest level possible. There are a number of Tram stops within easy walking distance of the site. West Croydon Station is less than 400 metres from the site and East Croydon Station is also a relatively short walk away.

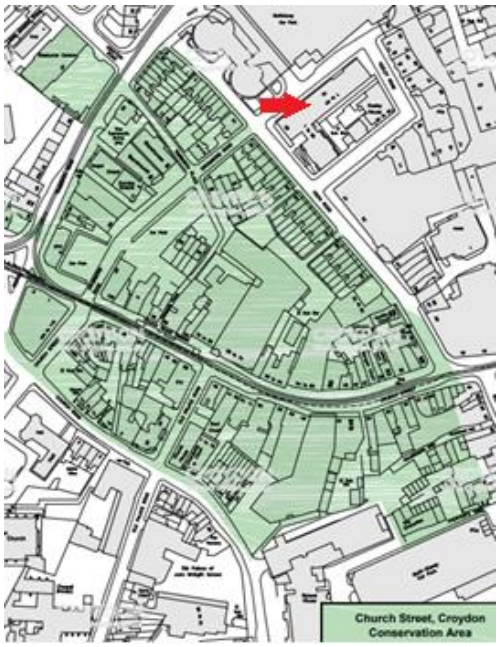


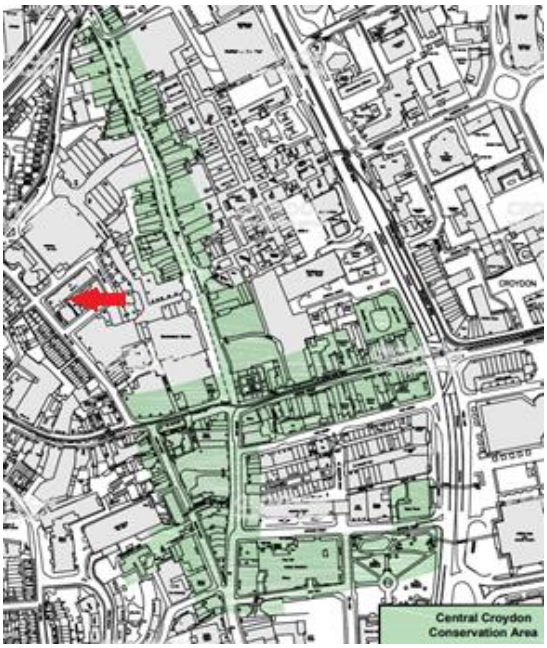


Figures 9 and 10: extracts from Croydon Local Plan 2018

Surroundings

- The site is adjacent to the Church Street Conservation Area *(see figure 11)*, the boundary of which runs along the opposite side of Frith Road to the site and close to the Central Croydon Conservation Area *(see figure 12)*.
- All the roads around the site are within the Central Croydon Controlled Parking Zone.





Figures 11 and 12: Church Street (left) and Central Croydon (right) Conservation Area Maps

Planning History

3.11 The following planning decisions are relevant to the application:

32-44 Keeley Road and 31-57 Drummond Road Croydon

97/00263/P Outline planning permission for the demolition of existing buildings and the erection of building comprising 3 to 10 floors to accommodate 74 two bedroom, 17 one bedroom and 4 three bedroom flats.
Approved 09.10.1997.

99/03007/P Demolition of existing buildings; erection of building comprising 3 to 10 floors to accommodate 74 two bedroom, 17 one bedroom and 4 three bedroom flats; formation of vehicular accesses and provision of 76 parking spaces (Approval of reserved matters attached to planning permission 97/002630/P).
Approved 28.07.2000.

01/02845/RE Amendment to approved scheme (99/03007/P) reducing the number of parking spaces to 73, reducing the number of 2-bedroom flats by one and increasing the number of 1-bedroom flats by one.
Approved 20.02.2002

21/5646/ENVS Environmental Impact Assessment (EIA) Screening Opinion Request for the demolition of the existing building and structures and the construction of two replacement buildings up to 18 storey in height comprising up to 131 residential units (use class C3) including a basement car park for up to 10 vehicles and other associated works.
Environmental Impact Assessment Not required. 25.11.2022

21/01997/PRE Pre-application for demolition of existing buildings; redevelopment of site to deliver a new residential building and provision of car parking.

<u>22-30 Keeley Road Croydon, CR9 1TE</u>

83/02920/P Erection of three storey building comprising flats (x2), shops and offices
Permission Granted. 04.05.1984. Implemented.

04/04754/P Alterations; conversion of upper floors to provide an additional 5 one bedroom and 5 two bedroom flats and refurbishment of the existing 2 flats.
Permission Granted. 12.05.2005. Implemented.

07/02826/P Use of ground floor for purposes within class D1 (non-residential institution)
Permission Granted. 29.08.2007. Implemented.

19/0850/CONR Relaxation of Condition 1 of planning permission 07/02826/P to allow continued use of ground floor as a nursery.
Permission Granted. 17.05.2019. Implemented

22/05184/PRE Pre-application for demolition of existing building and its replacement with an up to 24 storey building, plus roof garden, comprising nursery on ground and first floor and 97 residential units above. Under consideration.

<u>21/001997/PRE background</u>

3.12 An early iteration of the scheme was presented to the Council's Place Review Panel (PRP) on 16 September 2021. Key images and a summary of comments and key recommendations are given below.

Figures 13 and 14: proposed layout (left) and Drummond Road elevation (right)

- The height could be acceptable, provided it is an exceptionally high quality building.
- Important long range views should be fully rendered to better understand how the development appears in the background.
- The Panel do not think that the Victorian roofscape needs to be referenced in the crown of the tower. They recommend having a stronger, more distinct "Base" "Middle" and "Top".
- The courtyard requires a strong landscape strategy and active frontages to ensure it is successful and to overcome any issues with daylight/sunlight.
- The Panel strongly advocate internal resident's amenity spaces and other community uses.
- The Panel strongly recommend grouping the entrances. This would encourage interaction between residents of different blocks and will help build a stronger sense of community. The entrances should be generous enough to facilitate these interactions.
- The Panel stated that there should be no single aspect units in a new build development. They also emphasized the benefits of making the lower block a dual-aspect gallery arrangement.
- Furthermore, the Panel stressed that all new build schemes should comply with the standard social housing mix.
- At present, the elevations appear generic. Further work is needed to ensure the scheme has architectural interest and is contextually appropriate at both short and long range scales.

3.13 The scheme was revised and taken to a further PRP on 18 November 2021. The same scheme was also taken to Planning Committee on the same day. The proposal was for the demolition of the existing building and the erection of 5 and 18 storey buildings, comprising 129 flats.

Figures 15, 16 and 17: CGI's from Drummond / Frith Road junction (left and middle) and proposed layout (right)

3.14 A summary of feedback and main issues raised at PRP and Planning Committee are provided below.

PRP feedback

- They agreed that the proposal is moving in the right direction but it is missing the next layer of detail on the landscaping, mix, tenure and expression.
  Officer response: further details have been provided as part of application.

Massing

- Overall massing and building heights are the same as the last PRP, however the treatment of the taller element and crown have been worked through in more detail.
  Officer response: none required.

- Comfortable with the mass in the historically sensitive views.
  Officer response: none required.

- Raised some concerns over the parapet detail and roofscape of Block A, noting that the geometry does not turn the corner well as normally the side elevation would be flat like in the typical Victorian terraces – where the "butterfly roof" terrace detail would only be front and back elevations.
  Officer response: the parapet has been updated to avoid this detail and is such that the pitch is limited to the front and back of the building and the sides remain flat to pick up the approach found of a single pitched roof.

- Further work is needed on the resolution of the roofscape and "saw tooth" parapet detailing.
  Officer response: the saw-tooth approach has been simplified as per the response above. The parapet provides a screened edge to the rooftop amenity and incorporates a hidden angled pergola structure echoing the line of the pitch and giving the impression of a more traditional pitched roof when viewed from street level.

- Could become a case study for how to articulate elevations in building “height”, opposite a conservation area in a contemporary way.
  Officer response: none required.

Site Layout

- Changes around the ground floor entrances were positive. An entrance off Keeley Road was supported and both blocks can now be accessed from the communal courtyard.
  Officer response: none required.

- Welcomed the introduction of a community room and felt that this was in the correct location, having a frontage onto Drummond Road and activating the street. However, the Panel felt it was probably undersized given the number of occupants.
  Officer response: the proposals were adjusted following PRP to increase the size and frontage of the communal room onto the communal garden. The proposals include two dedicated residents' rooms for residents to dwell, interact and hold events and communal activities. The resident room has been located adjacent to the central courtyard at ground floor level to provide an attractive outlook and ensure a link between the external courtyard and the internalised facilities.

- The plant spaces still occupy the best positions on the site and this feels like a missed opportunity and could be reassessed.
  Officer response: the plant room has been set back within the envelope of Block B, and no longer has a large frontage onto the courtyard which is now restricted to double door service access. In its place is the dedicated resident's room.

- Rather than having the corridor of Block B exit off the side by the refuse store, the Panel recommended having the corridor adjacent to the community room. This would provide a more direct access to the communal garden, with a clearer visual connection.
  Officer response: residents are now able to move directly from the Block B lobby to the courtyard garden via a single straight corridor without passing through other rooms.

- Do not support the community room itself becoming part of the circulation space as this will be problematic when it is being hired privately.
  Officer response: the community room is now self-contained to facilitate private hire within direct access from the central corridor of Block B or via the amenity courtyard.

- Community room could wrapped the entire courtyard frontage of Block B (with the plant behind or to the edge of the site) should be explored.
  Officer response: this change has been made with the community room benefitting from dual aspect overlooking the courtyard.

- Developer can set their own floor to ceiling heights. This should remove the need for double height plant spaces or voids facing the courtyard which create blank frontages.
  Officer response: the plant spaces are not double height. The area indicated as void over basement plant is necessary to accommodate the change in level across the site. This space does not occupy the full ground floor height onto the

courtyard. It effects the first floor of Block A which provides a raised active floor frontage on to the garden.

Landscape

- Too complicated, the landscape concept should be realistic about what useable space is leftover once defensible planting offsets are taken into account.
  Officer response: the proposed landscaping arrangement to the ground floor courtyard have been simplified to optimise the availability of useable communal amenity space for residents.

- External cycle store was very problematic as it takes up a prime area of the site. If has to remain should be simplified and a recessive element of the landscape design.
  Officer response: the external cycle store is necessary in order to meet the London Plan cycle parking standards for long and short stay parking. The store has been designed to minimise its size and land take, whilst integrating positively with the wider landscape through provision of a green roof.

- Stronger relationship between the courtyard and the communal room. A flat, hardscape area directly outside the communal room could be considered as an extension of that space.
  Officer response: the proposals include a hardstanding terrace outside of the community room to facilitate and encourage movement between the two spaces and aid future events and communal activities.

- Sweeping route through the courtyard currently feels unresolved. Slope offers opportunities e.g. raised terraced planting beds with seating.
  Officer response: raised planting beds feature throughout the proposed development.

- Concerns over the fragmentation of play - consolidated in one area would be ideal. Play on roof top gardens needs to be looked at in more detail.
  Officer response: the development's play provision has been consolidated to the roof terraces of Block's A and B. The development is able to fully meet its play provision for 0-11 year old children. Due to the limitations of the site, it has not been possible to provide older child play space, so a contribution has been secured in lieu of this.

- Generally supportive of play features which can be integrated within the landscape and furniture. Highlighted need for bespoke play, rather than off-the shelf products.
  Officer response: the play features details shall be secured via planning condition.

- Landscaping to the top of Block A are a bit underwhelming. Visualizations for Block B roof terrace look great, but questioned how realistic this was at 18 storeys.
  Officer response: the roof terrace landscaping arrangement for Block A were simplified in response to the feedback and now provide a range of play features and seating set within high-quality planted gardens for the enjoyment of residents. The proposed landscaping for the Block B roof terrace is broadly similar to that presented to PRP. It should however be noted that the Block B roof terrace has been relocated to level 16, and is now less exposed from the elements on account of the additional massing that the terrace adjoins (up to 25 storeys).

Boundary Treatments

- Not convinced by the heavy railing and gate treatment to Keeley Road. Suggested to use softer treatments and low level planting etc.
  Officer response: gates remain, particularly from a security perspective and are considered, on balance, acceptable.

- Low brick walls to Frith Road could be acceptable, provided the brick is consistent with the building.
  Officer response: the brick wall is shown to match the brick used on Block A and can be secured by condition.

Design

- Too many single aspect units for a new build. However, they think that the repositioning of entrances and cores, and addition of extra windows on the side flanks of Block A does go some way towards addressing their concerns and could be a reasonable compromise.
  Officer response: the design has evolved and now contains 72% homes with a dual aspect which is a significant uplift on the existing building.

- Further work on the single aspect duplex flats facing onto Frith Road.
  Officer response: these are six 2 bed duplex comes, of which two now have dual aspect.

- Ensure any 3 bed units have a secondary aspect to improve their overall quality.
  Officer response: dual aspect to the 3 bed homes has been maximised with 6 of the 9 units achieving dual aspect.

- Would it be possible to get some duplexes to step up and over the plant void which is less than 1m in height in Block A to resolve this awkward condition and then step down into the shared courtyard.
  Officer response: given the change in level across the site, the change in level of the garden and the depth of the building this has not been possible to accommodate.

- Unsure about the usability and comfort of projecting balconies at 18 storey.
  Officer response: the balcony approach has evolved to accommodate projecting balconies at the higher heights only where they are recessed in a corner and semi-recessed balconies in other locations.

- All flats must meet the Mayor's standards.
  Officer response: all homes comply.

Architectural Expression

- Broadly supportive of the materials and metalwork.
  Officer response: whilst the materials are the same, primarily brick and metalwork, the colour palette has evolved, to become warmer across both blocks.

- Although still looks too grey and highlighted that samples will need to be provided.
  Officer response: the grey palette is no longer proposed, whilst the final material will be subject of planning condition.

- Asked if alternative materials (i.e terracotta) has been explored as an alternative to a fully brick building.
  Officer response: brick has remained the principle material, but the palette has been amended to a warmer red multi brick to compliment the character of the Conservation Area.

- Distinction between the brown and white tones is acceptable, but not supportive of the use of white panelling to first floor windows in Block B. Suggested to use the rustic brick infill here instead.
  Officer response: the approach to the ground and first floor has evolved and no longer include white panelling to the first floor.

- More interest could be added to the side flanks of Block A, particularly around the plant room.
  Officer response: the approach to the flank walls of Block A has evolved with the integration of soldier course brick detailing, additional windows, and space for public art/signage provided.

- Requested more playfulness in the articulation of the façade. The canopy could also be developed to be more of a feature of the design. It was suggested that some public artwork might help.
  Officer response: opportunities for public art on the side façade of Block A have been included and would be the subject of a planning condition.

  <u>Sustainability</u>
- Sceptical that roof top heat source pumps will function over these distances. More detail will be needed.
  Officer response: in line with policy requirement to supply clean energy, an energy centre using Air Source Heat Pumps (ASHP) is proposed, with a proportion of back up energy from high efficiency gas boilers. ASHP typically include roof-mounted units with associated equipment located within a ground floor plant room. These systems incorporate dedicated insulated heating risers to optimise efficiency and avoid overheating.

- Investigate how zero carbon could be achieved and be clear on targets and go above and beyond the minimum measures.
  Officer response: the development is able to achieve a site wide 56% reduction with a financial contribution making up the shortfall.

  Planning Committee feedback

  <u>Residential redevelopment of site</u>
- Noted the history and welcomed there were proposals to redevelop the site.
  Officer response: none required.

  <u>Height</u>
- Mixed response. Some Members were concerned with the height of the building, other Members encouraged the applicant to build the development furthest away from the conservation area higher, and this would help to improve viability and so provide a greater affordable housing offer.
  Officer response: although PRP were comfortable with the massing given these comments (and officers) the massing of the development was amended with an

increase height to northern part of site, with Block B split into a taller and lower element, which also allowed the scheme to respond better in key views (such as from the CA within Surrey Street looking north).

- Expressed some concern regarding the character of the Drummond Road site as they felt as though the appearance was bland and they had a desire to make the site look more attractive. More detailing would be required to enable the building to appear more interesting.
  Officer response: see PRP response comment on this matter.

Design

- Suggested that the balconies should be inset rather than overhang the highways.
  Officer response: see PRP response comment on this matter.
- Would prefer more distance between the tower and the smaller block.
  Officer response: there has been no change in this regard, however, the distance between the blocks is not considered to harm the amenities of future occupiers or the general townscape.

Affordable housing provision

- Incorrect for the applicant to act as though the building should be considered as vacant rather than being unfit for purpose.
  Officer response: none required.
- Not persuaded that the affordable housing should apply solely to the uplift.
  Officer response: whilst the submitted viability appraisal and commentary does include vacant building credit, the affordable housing is not applied solely on the uplift, but on the whole of the new development.
- Encouraged the applicant to achieve policy compliance with the Council's affordable housing proposal.
  Officer response: the affordable housing offer is policy compliant.
- If there was a viability issue Members encouraged the applicant to build the development furthest away from the conservation area higher, and this would help to improve viability and so provide a greater affordable housing offer.
  Officer response: this suggestion was followed and the scheme is now policy compliant in terms of affordable housing.

Other

- Concerns regarding the impact of the development on the heritage assets, highlighting the fact that there was a similar sized tower located close by.
  Officer response: officers consider the heritage impacts to be less than substantial in their nature, with a review of heritage matters provided in more detail within Section 8 of this report.
- When the application comes before committee they would like to see the cumulative impact of the development on heritage assets and would like to test any potential wind tumbling effects caused by the development.
  Officer response: a full heritage, townscape and visual impact appraisal has been submitted as well as a microclimate report, covered later in section 8. Subject to conditions no concern is raised.
- Welcomed the introduction of a green roof and wanted to see more effort made in regards to sourcing materials, as well as an approach to construction that would endeavour to reduce the carbon footprint of the development as much as possible.
  Officer response: Circular Economy and Whole Life Cycle Carbon principles have been adopted and incorporated by the development including the eventual choice

of building materials, which where practical are to be locally sourced and selected having regard to their environmental impact.

3.15 A number of key changes have been made to the scheme following PRP and Planning Committee feedback, as well as ongoing dialogue with officers, summarised below:

Layouts

- Increase in communal resident space.
- Review of plant, bin and bike locations within the building.
- Incorporation of second stair into core of taller building Block B.
- Reduction in car parking spaces.
- Review of Block B layout to integrate semi-recessed balconies.
- Layout amendments to Block B to pick up height split of 16 and 25 storeys within building.
- Uplift in dual aspect homes.
- Increase in accommodation from 129 to 144 homes.

Scale and massing

- Block B height adjusted from single 18 storeys to split 16 and 25 storeys, to ensure the building appeared more slender in townscape and heritage views, particularly views along Surrey Street.

Appearance

- General amendments to appearance to pick up layout and massing changes.
- Alterations to Block A parapet pitch.
- Further detail given to both blocks including façade depth, brick and metalwork details.
- Change to material palette and colour to a warmer tone of brick.

4 SUMMARY OF KEY REASONS FOR RECOMMENDATION

- The principle of two blocks (5 and 16/25 storeys) comprising residential accommodation is supported and aligns with the desire for growth in the Croydon Opportunity Area.
- The proposed development would provide 16% affordable housing by habitable room, which amounts to 22 homes, at a 32 to 68 split between London Affordable Rented (LAR) homes and intermediate shared ownership (SO) homes. This offer has been independently scrutinised and is the maximum reasonable affordable housing policy compliant provision.
- The mix of units is supported by a Registered Provider and includes a portion of family accommodation.
- The application site is situated within an appropriate location for a tall building; the height and mass of the two blocks has been assessed in relation to its impact from a wide range of viewpoints and found acceptable, including in relation to its impact on heritage assets near and far.
- The design, appearance and detailed façade treatment of the development is of high quality as required for tall buildings and would significantly improve the quality of public realm, particularly given the state of the existing building.
- Officers have sought to limit any heritage harm, with less than substantial harm on heritages assets identified, however, the impact is outweighed by the public benefits.

- Whilst there would be some harm to the amenities of surrounding occupiers, particularly in relation to daylight impacts to the flats above Keeley House, these would not be so unduly harmful as to refuse planning permission on this ground.
- The standard of residential accommodation would be acceptable, as all homes would meet the Nationally Described Space Standards and would have sufficient private amenity space. All homes would have acceptable outlook, with the majority receiving good lighting levels.
- The proposed development is located in a highly sustainable well connected location which makes it suitable to be car free, with exception of disabled parking provision. The proposed development would not have an adverse impact on the operation of the highway generally, and could potentially help to facilitate future (cycle and footpath) highway improvements.
- The environmental impacts, including wind, noise, light, air quality, biodiversity, land contamination and flooding, are acceptable subject to mitigation proposed through a combination of conditions and s.106 agreement.
- Sustainability aspects have been properly assessed and their delivery can be controlled through planning obligations and planning conditions.
- There are no aviation or archaeological impacts. Television mitigation, delivering employment opportunities and crime prevention through design can be secured through conditions and s.106 agreement.

4.1 The following sections of this report summarise the officer assessment and the reason for the recommendation.

5 CONSULTATION RESPONSE

5.1 The views of the Planning Service are expressed in the MATERIAL PLANNING CONSIDERATIONS section below.

5.2 The following were consulted regarding the application:

Historic England – Listed Buildings (Statutory Consultee)

5.3 Historic England provides advice when engagement can add most value. They responded stating they have no advice in this case.

Historic England – Archaeology (Statutory Consultee)

5.4 No archaeological requirement or conditions

Health and Safety Executive – Gateway (Statutory Consultee)

5.5 Satisfied with the information provided with the application (including the fire statement). Headline response is ‘content’.

LLFA (Statutory Consultee)

5.6 No objection. A pre-commencement (but post-demolition) condition is recommended.

Environment Agency (Statutory Consultee)

5.7 No comment (no consultation required).

GLA (Statutory Consultee)

5.8 Land use principles

- The principle of the redevelopment of the site for the re-provision and uplift of residential floorspace is acceptable.
  [Officer comment: the recommendation endorses this position].

5.9 Housing

Housing Mix

- Supportive of the housing mix from a strategic perspective, subject to Croydon confirming it meets local need.

Affordable housing

- The scheme proposes 16% affordable housing with a tenure slit of 32% London Affordable Rent to 68% Shared Ownership. Further discussions with the Council and GLA are necessary to confirm whether the proposed tenure split is appropriate in this instance, based on identified need.
- This provision fails to meet the Fast Track Route threshold and at this stage, the applicant has not demonstrated that the proposed 16% affordable housing represents the maximum viable amount of affordable housing. A viability assessment has been provided to GLA Officers for scrutiny and interrogation. Early and late-stage reviews, and affordability/eligibility requirements must be secured.
- The use of grant funding to increase the affordable housing provision and engage with a Registered Provider as investigated as appropriate.

[Officer comment: The mix accords with policy. Further correspondence has been received by officers from the GLA viability team challenging the amount of affordable housing, particularly in relation to Benchmark Land Value and profit levels. The viability assessment submitted has been independently reviewed and LBC officers are satisfied the scheme secures the maximum reasonable quantum and mix of affordable homes. Early and late stage reviews would be secured. The applicant has confirmed they have explored opportunities of grant funding but it has not been found feasible].

5.10 Urban design and heritage

Tall buildings, scale and massing

- Heights of the proposal are consistent with the wider and immediate townscape in scale and character.
- Massing approach generally responds successfully to the immediate urban context through articulated massing of different heights.
- Due to the slim nature of the site, the top eight storeys of the tallest building include an inefficient layout of only three units per floor. Due to the resulting impacts on the scheme's viability, the applicant should consider reducing or redistribution this massing.

Development layout and access

- The provision of front doors responds to the existing context of Frith Road and activates the streetscape. While the proposed tall building responds to the existing townscape.

- Due to gates there is a missed opportunity to create a more socially inclusive development and improve north-south permeability through the land within the site.
- Access to the two communal rooms at the bottom of Block B should be secured for all residents (including the LAR residents).
- A comprehensively master planned development that incorporates this neighbouring site, Keeley House, would be supported and the applicant and the Council are accordingly encouraged to pursue this option as this would achieve better place making outcomes.

Residential Quality

- Further information to be provided to GLA Energy Officers in relation to the overheating assessment.
- It is noted that the proposed cores serve between 3 units and six units per floor across the scheme, however, the provision of natural light within the stairwell of Block A should be considered, as well as demonstrate that adequate ventilation is provided within cores.

Architectural quality

- CGIs provided with the application generally present a high-quality scheme.
- Use of brick as the predominant material for Block A is supported, and the pitched roof parapet of this building responds to Victorian Terraces located to the south-west of the site along Frith Road.
- Applicant has demonstrated consideration to articulation detail for the Block B tower elements of the scheme.
- Success of the architectural approach will be dependent on the use of the highest quality materials.

Play space

- Falls short, notably due to a lack of play space provision for the 11+ age group. Off-site contribution should satisfy the needs of the development whilst continuing to meet the needs of existing residents in the surrounding areas.

Fire safety

- Satisfied that the fire statement has been prepared by a suitably qualified assessor.
- Evacuation lifts should be secured by condition.

Inclusive access

- 26 wheelchair units are proposed, within one bedroom intermediate and market housing tenures.
- Should work to provide wheelchair units provided across all tenures, including low cost rented housing tenures, and across a range of unit sizes.

[Officer comment: the matters in support are noted and covered in detail in the main body of this report. The top eight floors have three units per core and whilst it is noted this would impact on viability, LBC officers have sought slenderness to the upper floors to limit impact on the Central Croydon Conservation Area to the south. The landscaping between the Blocks is for the residents – this was explored as public space but would have compromised future occupier external space, could have led to security issues and is challenging given the land level

changes and the retained portion of the basement on the Drummond Road side, meaning steps would have been required down. Keeley House have been contacted by the applicant and whilst officers accept a comprehensive redevelopment would be the preferred option, we have this application before us to determine and do not consider there would be grounds for refusal on this basis. Ongoing dialogue is taking place between the application and GLA officers in relation to overheating. In terms of the play space, a contribution is recommended to off-set the deficiency in on-site provision].

5.11 Heritage

- The proposals result in less than substantial harm to the significance of designated heritage assets. Further consideration to public benefits is required prior to Stage II.

[Officer comment: LBC officers agree with this conclusion – see Heritage section below].

5.12 Sustainable development

Energy

- The proposal is estimated to achieve a 56% reduction in CO2 emissions compared to 2013 Building Regulations. This falls short of the net zero-carbon target, although it meets the minimum 35% reduction on site. A carbon offset payment is required to be secured. The energy strategy should be further refined to fully comply with requirements.

Whole life-cycle carbon (WLC)

- A WLC assessment template in full should be submitted and condition suggested to report on the development's actual WLC emissions.

Circular economy

- Whilst the fire safety issues associated with the existing cladding are acknowledged, further information should be provided regarding the structural issues of the existing building. Further evidence should also be provided to demonstrate that alternatives to demolition have been explored (including partial retention), and that the potential benefits of demolition and rebuilding of homes should be balanced against the wider social and environmental impacts.
- Revised circular economy statement (including a redevelopment audit and pre-demolition audit) required.
- A condition should be secured requiring the applicant to submit a post-construction report.

Digital connectivity

- Sufficient ducting space for full fibre connectivity infrastructure should be secured by condition.

[Officer comment: an updated energy strategy has been provided alongside an obligation for payment of the carbon offset contribution. A WLC assessment template and circular economy statement template have also been submitted, with conditions recommended. LBC officers are content that demolition is the preferred option given the condition of the current building].

5.13 Environmental issues

Flooding

- The Flood Risk Assessment provided for the proposed development generally complies with Policy SI.12 of the London Plan

Sustainable drainage

- Drainage strategy should be re-visited to incorporate the attenuation volume above ground where possible, or robust justification should be provided as to why pumping cannot be avoided. Rainwater harvesting should be included within the proposals, and hydraulic calculations to back up the proposed attenuation volume should be provided to include a range of return periods and storm durations.

Water efficiency

- Water efficient fittings, and water metering are proposed, which are supported and the proposal generally meets the requirements of the relevant policy.

Open space

- Consideration of access to open space across the site, including a new courtyard garden and roof gardens for residents is demonstrated.
- Should review opportunities for publicly accessible space, green where possible, for public use rather than just users of the site.

Biodiversity

- Recommendations in the Preliminary Ecological Appraisal should be implemented.
- Ecological Management Plan (EMP) to support long-term maintenance and habitat creation should be secured by condition.

Green infrastructure and urban greening

- Well-considered approach to integrating green infrastructure and urban greening.
- Urban Greening Factor (UGF) score of the proposed development as 0.35, which is below the target set by Policy G5 of the London Plan (0.4 for residential proposals)
- Should review the urban greening proposed, seeking to improve the quality or quantity, to increase the application's UGF and the surface cover type drawing should be updated to show permeable paving.

Trees

- Confirmation required that no trees are to be removed as part of the application. If trees are to be lost set out how this has been accounted for through replacement tree planting.

Air quality

- Further information is required to determine whether the proposed development is compliant with London Plan air quality policies. Conditions are suggested in relation to on-site plant / Air Quality and Dust Management Plan).

[Officer comment: the LLFA raise no objection to the drainage strategy, the green space between the buildings is for public use and not for the public, conditions secure the biodiversity enhancements, the UGF score of only 0.35 does count

against the scheme and only one poor quality tree is for removal and would be replaced].

5.14 Transport

- (See TfL comment below).

5.15 Conclusion

- The principle of demolition the existing homes and rebuilding new homes on the site could be accepted, subject to the addressing the circular economy requirements in respect of demolition of the existing building. However, in the absence of a verified viability position, the affordable housing provision falls short of policy expectations and is wholly unacceptable.

[Officer comment: updated circular economy information has been provided. In terms of affordable housing the viability assessment submitted has been independently reviewed and LBC officers are satisfied the scheme secures the maximum reasonable quantum and mix of affordable homes. Early and late stage reviews would be secured].

Transport for London (TfL) (Consultee)

5.16 Healthy Streets

- Significant reduction in car parking plus street greening is welcomed, however, reliance upon on-street servicing undermines the healthy streets benefits unless suitable locations can be identified.

  [Officer comment: the scheme reuses the existing basement which is supported and given the ramp down and space requirements for blue badge spaces, would not allow servicing to from within the site. The proposal seeks on-street servicing to both blocks, with loading bays suggested outside the bin stores to both blocks. These would be secured through s278 highways agreement. The Drummond Road pavement would be increased in width and would not be impacted by the servicing which would enhance the east-west connection through the Centrale shopping Centre from North End for pedestrians].

5.17 Cycle Parking

- Cycle parking spaces meets the minimum standards.
- Dimensions of the cycle parking should be confirmed in line with the London Cycling Design Standards (LCDS).
- Dedicated ramp to basement is welcomed. The ramp gradient should be confirmed to ensure suitability for all users.

  [Officer comment: noted and conditions recommended. The ramp gradient would be 1:17].

5.18 Car Parking

- 4 car parking spaces for disabled persons, access will have a signal-controlled gate and will require the removal of existing on-street parking, which will require agreement with Croydon Council.

- The amount of car parking proposed is compliant with the London Plan and should be accompanied by a Parking Design and Management Plan.
- All spaces equipped with electric vehicle charging infrastructure which should be secured by condition.

[Officer comment: noted and conditions recommended].

5.19 Trip Generation and Impact

- Trip generation is generally accepted.
- Contribution of £53,670 to account for the scale of development is requested to support the necessary public transport enhancements.

[Officer comment: noted and contributed secured in the heads of terms].

5.20 Construction and Deliveries

- All servicing and deliveries are proposed to take place on-street. Delivery and Servicing Plan (DSP) should be secured by condition.
- Construction Logistics Plan (CLP) should be secured by condition and discharged in consultation with TfL and London Trams.

[Officer comment: conditions recommended].

Crime prevention (Consultee)

5.21 The Crime Prevention Officer has been in dialogue with the applicant and has confirmed that many of their concerns have been taken into account and measures incorporated. Subject to a planning condition to achieve Secured By Design accreditation, no objection is raised. The below comments are included for completeness.

5.22 Perimeter and Basement

- Good defensible space to protect the front of the properties, other than side windows on end units.
- Site is secured by a gate which is preferred, as this will prevent unwanted access into the private communal residents' areas.
- Basement access should be secured.
- Cycle store being split up is welcomed.
- All storage needs to be robustly secured.

5.23 Amenity

- Doors need to be certified security doors.
- Management strategy should be adopted over the use of amenity spaces, including roof garden which should be locked out of hours.

5.24 Compartmentation, glazing and access control

- Block B will need to be security compartmentalised, whereby residents can only access the floor on which they live and any communal amenity space (can be

done by lobbying the stair core and either lobbying the lift access areas or using a destination control lift).
- Audio visual call panel should be available on each level.
- Air lock should be created at the communal entrances to ensure the secure delivery of post and to prevent tailgating into the buildings.
- Ground floor glazing, private entrance doors and access control to accredited standards.

[Officer comment: a Secured By Design accreditation condition is recommended]

Thames water (Consultee)

5.25 Raised no objection with the following comments:

- Highlights requirements under Building regulations (part H) that protection to the property to prevent sewage flooding should be incorporate and a Groundwater Risk Management Permit from.
- Advises applicant to read Thames Water guidance related to working near or diverting pipes / waste water assets
- No objection if follows the London Plan sequential approach to the disposal of surface water.
- Requests a Groundwater Risk Management informative.
- No objection raised with regard to waste water network and sewage treatment works infrastructure capacity.
- Recommends an informative relating to minimum pressure and flow rate available.
- Recommend that petrol / oil interceptors be fitted in all car parking/washing/repair facilities. (condition)
- Thames Water should be informed if using mains water for construction purposes.

[Officer comment: informatives and conditions are recommended].

Gatwick (Consultee)

5.26 No objection.

Heathrow (Consultee)

5.27 No safeguarding objections.

NATS (Consultee)

5.28 No safeguarding objection.

London Fire Brigade (Consultee)

5.29 No response.

6 LOCAL REPRESENTATION

6.1 A total of 40 neighbouring properties were notified about the application and invited to comment. The application has been publicised by way of one or more site notices displayed in the vicinity of the application site. The application has also been publicised

in the local press. The number of representations received from neighbours, local groups etc in response to notification and publicity of the application were as follows:

No of individual responses: 5 Objecting: 4 Supporting: 1 Commenting: 1

No of petitions received: 0

6.2 The following local groups/societies made representations:

- Mid-Croydon Conservation Area Advisory Panel (objecting)

6.3 No Councillor, London Assembly Member, MP or MEP made representations.

6.4 The following issues were raised in representations that are material to the determination of the application, and they are addressed in substance in the next section of this report:

Objection	**Officer comment**
Character and design	
Should be bigger (creating a more affordable housing).	The scheme increased during pre-application discussions and is now policy compliant in terms of affordable housing.
Conservation area to the south side of the site, with nothing of any real architectural or cultural relevance, closest building of significance would be the Church (St. Johns) and a tall building would act as a counter point to this. Very detrimental to the conservation area.	The tall building has been assessed in the context of surrounding townscape and heritage aspects. This is covered in the 'design and impact on character of the area' and 'heritage' sections below.
Should not be brick so not indistinguishable, but a statement building. Very little architectural merit and not in keeping with area. Overdevelopment. Out of scale, proportion and character with immediate neighbour. Obtrusive by design	Officers consider that the architectural approach is of exceptional quality. The townscape merits are covered in the 'design and impact on character of the area' sections below.
Limited detail of relationship with Keeley House – proposal will exacerbate this poor relationship Should not prejudice development opportunities at neighbouring property and optimum use of sustainable brownfield sites should be achieved. A draft concept scheme for the neighbouring property is submitted so	There are a number of supporting documents that considered the surrounding context, including Keeley House. The impact on Keeley House is addressed in the 'impact on neighbouring amenity' section below. This matters is covered in paragraphs 8.137 and 8.138.

the application site can be addressed in this context.	
Neighbouring amenity	
Overbearing and dominant (could have been addressed through redevelopment of whole island). Loss of daylight / sunlight (breach of BRE guidelines). Overshadowing. Loss of privacy. Create a sense of enclosure / overbearing presence. Noise. Important to ensure ongoing symbiotic relationship with nursery. Use of outdoor nursery space should not be curtailed by development.	These matters are addressed in the 'impact on neighbouring amenity' sections below.
Quality of accommodation	
1 and 2 bedroom unit's not suitable living spaces for families.	The housing mix complies with the policy requirement, covered in the 'housing mix and affordable housing' sections below.
Transport	
Traffic and highways.	These matters are addressed in the 'access, parking and highway impacts' sections below.
Other	
No confidence in the wind analysis. Infrastructure in the area (nurseries, doctors, schools, etc) already oversubscribed.	A thorough and detailed microclimate report has been produced by consultants that have a broad range of experience with tall buildings, including within London. Additionally the testing process included Wind tunnelling testing. Conditions will ensure that required mitigation will be included within the final build. This is covered in the 'environmental impact' section below. The development will be subject to a significant CIL payment which contributes to infrastructure. The site is in a highly sustainable location in walking distance of multiple transport links and the Town Centre.
Non-material matters	
Little communication / engagement with neighbours. Unfortunate as sites would form a readily identifiable island site.	This is not a material consideration and representation has carried out by the council in accordance with procedure.

Support	Officer comment
Houses and greens spaces welcomed.	Noted.
Allowing the application will enable the removal of the current building which is now an eyesore with its temporary structure supporting it as well as providing both private and affordable housing in a design that is much more fitting to its surroundings.	Noted.
Once the structural and cladding issues had been identified, Barratt Developments PLC acted in an exemplary manner by buying back all the 96 leasehold flat interests at market value as well as the freehold. This was a decision supported by all the leaseholders. Barratt Developments PLC no longer owned the freehold or leasehold interests in Citiscape but proceeded anyway. This course of action prevented both the emotional and financial distress that residents of other developments of this nature have had to face.	Noted.

7 RELEVANT PLANNING POLICIES AND GUIDANCE

Development Plan

7.1 The Council's adopted Development Plan consists of the London Plan (2021), the Croydon Local Plan (2018) and the South London Waste Plan (2022). Although not an exhaustive list, the policies which are most relevant to the application are:

London Plan (2021)

- GG2 Making best use of land
- GG4 Delivering homes Londoners need
- SD1 Opportunity Areas
- SD6 Town centres and high streets
- D2 Infrastructure requirements for sustainable densities
- D3 Optimising site capacity through the design-led approach
- D4 Delivering good design
- D5 Inclusive design
- D6 Housing quality and standards
- D7 Accessible housing
- D8 Public realm
- D9 Tall buildings
- D11 Safety, security and resilience to emergency
- D12 Fire safety
- D13 Agent of Change
- D14 Noise
- H1 Increasing housing supply
- H4 Delivering affordable housing
- H5 Threshold approach to applications
- H6 Affordable housing tenure

- H8 Loss of existing housing and estate redevelopment
- H10 Housing size mix
- S4 Play and informal recreation
- HC1 Heritage conservation and growth
- G5 Urban greening
- G6 Biodiversity and access to nature
- G7 Trees and woodlands
- SI1 Improving air quality
- SI2 Minimising greenhouse gas emissions
- SI3 Energy Infrastructure
- SI4 Managing Heat Risk
- SI5 Water infrastructure
- SI6 Digital connectivity infrastructure
- SI7 Reducing waste and supporting the circular economy
- SI12 Flood risk management
- SI13 Sustainable drainage
- T1 Strategic approach to transport
- T2 Healthy Streets
- T4 Assessing and mitigating transport impacts
- T5 Cycling
- T6 Car parking
- T6.1 Residential parking
- T7 Deliveries, servicing and construction
- T9 Funding transport infrastructure through planning
- DF1 Delivery of the Plan and Planning Obligations

Croydon Local Plan (2018)

- SP2 Homes
- SP4 Urban design and local character
- SP5 Community facilities
- SP6 Environment and climate change
- SP8 Transport and communication
- DM1 Housing choice for sustainable communities
- DM10 Design and character
- DM13 Refuse and recycling
- DM14 Public art
- DM15 Tall and large buildings
- DM16 Promoting healthy communities
- DM17 Views and landmarks
- DM18 Heritage assets and conservation
- DM19 Promoting and protecting community facilities
- DM23 Development and construction
- DM24 Land contamination
- DM25 Sustainable drainage systems
- DM27 Protection and enhancing biodiversity
- DM28 Trees
- DM29 Promoting sustainable travel and reducing congestion
- DM30 Car and cycle parking in new development
- DM38 Croydon Opportunity Area

7.2 The Development Plan should be read as a whole, and where policies conflict with each other, the conflict must be resolved in favour of the policy contained in the last document to be adopted, approved or published as part of the development plan, (in accordance with s38(5) of the Planning and Compulsory Purchase Act 2004).

Planning Guidance

National Planning Policy Framework (NPPF)

7.3 Government Guidance is contained in the NPPF, updated on 20 July 2021, and accompanied by the online Planning Practice Guidance (PPG). The NPPF sets out a presumption in favour of sustainable development, requiring that development which accords with an up-to-date local plan should be approved without delay. The NPPF identifies a number of key issues for the delivery of sustainable development, those most relevant to this case are:

- Achieving sustainable development (Chap 2)
- Delivering a sufficient supply of homes (Chap 5)
- Promoting sustainable transport (Chap 9)
- Making effective use of land (Chap 11)
- Achieving well designed places (Chap 12)
- Meeting the challenge of climate change, flooding and coastal change (Chap14).
- Conserving and enhancing natural environment (Chap 15)

SPDs and SPGs

7.4 There are also several Supplementary Planning Documents (SPD) and Supplementary Planning Guidance (SPG) documents (including London Planning Guidance) which are material considerations. Although not an exhaustive list, the most relevant to the application are:

- Croydon Opportunity Area Planning Framework (2010)
- Conservation Area General Guidance SPD (2013)
- Central Croydon Conservation Area Appraisal and Management Plan (2014)
- Church Street Conservation Area Appraisal and Management Plan (2014)
- Old Town Masterplan SPD (2014)
- Waste and Recycling in Planning Policy Document (October 2018)
- Section 106 Planning Obligations in Croydon and their relationship to the Community Infrastructure Levy (2019)

- London Housing SPG (March 2016)
- London Mayoral Affordable Housing SPG: Homes for Londoners (August 2017)
- Sustainable Transport, Walking and Cycling guidance (2022)
- Housing Design Standards LPG (2023)

- Technical Housing Standards: Nationally Described Space Standard (2015)
- National Design Guide (2021)
- National Model Design Code (2021)

8 MATERIAL PLANNING CONSIDERATIONS

8.1 The main planning issues raised by the application that the committee must consider are:

1. Principle of development
2. Design and impact on character of the area
3. Heritage
4. Housing mix and affordable housing
5. Quality of residential accommodation
6. Impact on neighbouring amenity
7. Access, parking and highway impacts
8. Environmental impact
9. Sustainable Design
10. Other Planning Issues
11. Conclusions

Principle of development

8.2 The Croydon Local Plan sets out a housing target of 32,890 homes over a 20-year period from 2016-2036 (1,645 homes per year). The London Plan requires 20,790 of those homes to be delivered within a shorter 10 year period (2019-2029), resulting in a higher target of 2,079 homes per year.

8.3 The Croydon Local Plan also sets out a target for development on Windfall sites of 10,060 homes (approximately 503 per year). The London Plan requires 6,410 net completions on small sites (below 0.25 hectares in size) over 10 years, with an small-sites housing target of 641 per year.

8.4 The principle of residential use had already been established with the existing development and the site is therefore one in which intensification and increased housing delivery in line with policy, should be encouraged. However, whilst the above policies seek to maximise the re-use of previously developed land and buildings a balance must be struck between developing land for more efficient housing use and protecting character/heritage/neighbouring amenity etc. Therefore the principle of intensifying residential use in this location is acceptable, subject to satisfying the criteria of other relevant policies, which are addressed within the rest of this report.

Design and impact on character of the area

8.5 London Plan Policy D9 requires locations appropriate for tall buildings to be identified through the development plan (see below) and requires assessment of impacts from a visual, functional and environmental impact. All these aspects are considered throughout the various sections of this report. Policy SP4.5 of the Croydon Local Plan relating to tall buildings states that they will be encouraged only in the Croydon Opportunity Area, areas in District Centres and locations where it is in an area around well-connected public transport interchanges and where there are direct physical connections to the Croydon Opportunity Area, Croydon Metropolitan Centre or District Centres. The application site lies within the Croydon Opportunity Area and Croydon Metropolitan Centre and has an excellent PTAL, as such it is a site acceptable as a location for a tall building.

8.6 CLP Policy SP4.6 (and supported by DM15) states four criteria for tall buildings in order for them to be acceptable in these locations:

a. Respect and enhance local character and heritage assets;
b. Minimise the environmental impacts and respond sensitively to topography;
c. Make a positive contribution to the skyline and image of Croydon; and
d. Include high quality public realm in their proposals to provide a setting appropriate to the scale and significance of the building and the context of the surrounding area.

8.7 CLP Policy DM15 requires their location in PTAL4 and above, to be of exceptional quality, respond positively to nearby heritage assets and include active ground floor and inclusive public realm.

8.8 The Croydon Local Plan 2018 has a place specific policy DM38, Croydon Opportunity Area Framework, which is relevant to this site. The site lies within the defined Edge area of the Croydon Opportunity Area. The policies seek to enable development opportunities, including public realm improvements, to be undertaken in a cohesive and coordinated manner complemented by masterplans. Policy DM38.4 (edge area) states a tall building may be acceptable where it can be demonstrated that there will be limited negative impact on sensitive locations and that the form, height, design and treatment of a building are high quality.

8.9 It is considered that the proposal building does comply with the above criteria, discussed in detail in the design and environmental impact sections of this report.

Height and Massing

8.10 The massing of the building has been rigorously tested in terms of its townscape impact. During pre-application discussions the massing and height was generally supported, however, officers did have some concerns about the slab like nature of Block B, especially when viewed from some of the mid length views e.g. Surrey Street. In response to this the mass of Block B was split resulting in the proposed scheme of two buildings, a 5 storey block fronting Keeley Road and a part 16, part 25 storey building in a stepped form that extends along Drummond Road. The approach to utilising the eastern half of the site for the higher element is considered appropriate, providing more relief from surrounding lower level buildings to the west. This also fits with the general upward gradient in the heights of buildings from east to west, from residential to commercial buildings, albeit at a lower level (see image below).

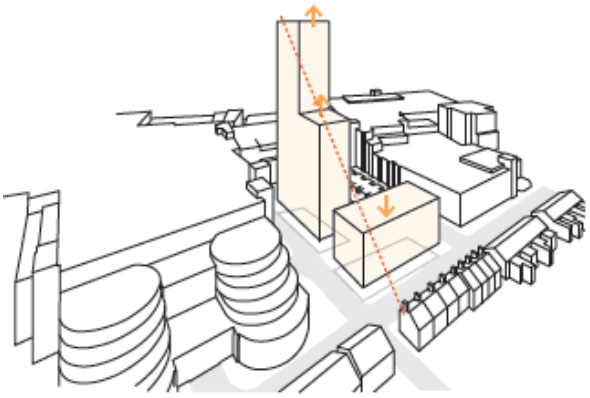
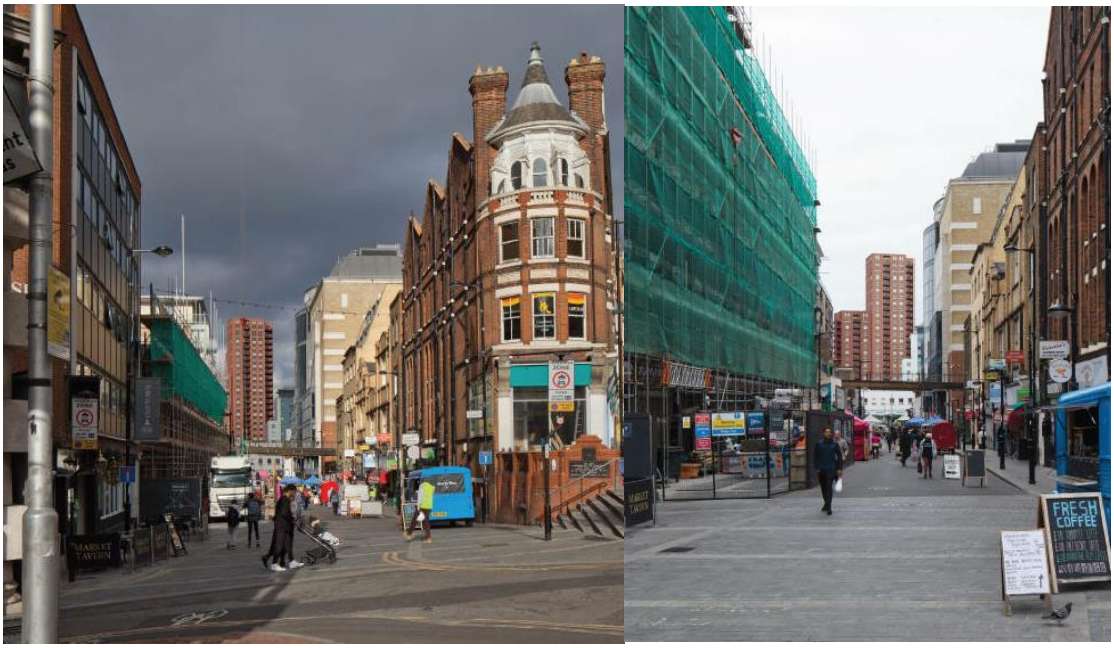


Figure 18: sketch showing massing transition

8.11 Block A, at 5 storey, respects the opposing built form and again reflects the character of increasing height from west to east, as evident in the image below.

Figures 19 and 20: CGI from Tamworth Road (left image) and Frith Road (right image)

8.12 Officers are supportive of the 25 storey taller element of Block B. Whilst a reduced shoulder of 14/15 storeys may improve the step change in height the current 16 storeys is considered to acceptably mediate this. This includes the view along Surrey Street and the impact upon the conservation area (see images below), particularly as there is a good amount of 'sky space' either side of the taller element so that an unacceptable level coalescing is avoided. Overall officers are supportive of the massing across the site, with a suitably slender form to Block B that provides a more sensitive response to the townscape context.



Figures 21 and 22: views towards site from Surrey Street

8.13 Equally the height and massing would not be out of keeping with the wider trend of building heights found across Croydon centre, as demonstrated by the section below

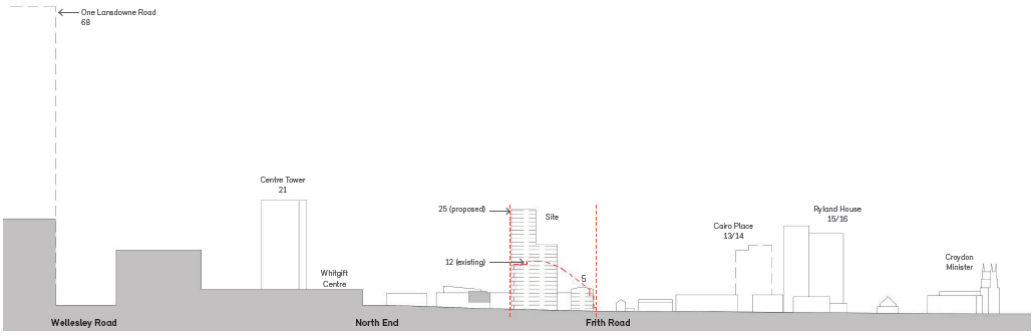


Figure 23: section drawing showing wider Croydon context

Layout and Public Realm

8.14 The use of two separate blocks, allows for a generously sized communal area between the buildings and the stepping in height as discussed above. Accordingly the layout across the site works well, particularly at ground floor level where a significant extent of active frontage is created (see image below). Removing the existing basement plinth and ventilation ducts from along the Frith Road frontage and replacing a blank and unattractive wall at street level with an active frontage is a significant positive aspect. This is a requirement of Local Plan policy DM15.

Figure 24: ground floor site layout

Figures 25 and 26: existing (left) and proposed view (right) of Frith Road elevation

8.15 In addition to this the pavement on this side of Drummond Road is to be widened, by up to 0.7m. This is enabled by the removal of the current basement wall along Drummond Road. This is a benefit of the scheme and will enhance the east/west connection through the shopping centre which is promoted in the Old Town Masterplan

(see details below). A S.278 highways agreement would secure funding from the developer to resurface all of the pavements around the building.

8.16 The Council have been working on public realm improvements in this area that would include upgrading the public highway from North End down to the Frith Road / Drummond Road junction and across to the Frith Road / Keeley Road junction, including the creation of contraflow cycle lanes (note the developer would fund the works to the southern side pavement of Drummond Road and eastern side of Frith Road outside their site). A contribution towards sustainable transport measures of £180,000 has also been secured to mitigate the scheme and promote alternative sustainable modes of travel. This contribution could be put towards these highway improvements.

8.17 These aspects align with the relevant intentions of the Old Town Masterplan components OT3 and OT12 in this location, which seek to:

OT3

- Increase footfall;
- Activate blank frontages;
- Improved pedestrian connections to the area to increase the level of passing trade (particularly from North End)
- Improve north-south cycle movement through the area.

OT12

- Enhance the east-west connection through the Centrale shopping Centre from North End for pedestrians and cyclists.
- Increase tree planting and greenery along Drummond Road.
- Encourage activation of street frontages along Drummond Road.
- Traffic calming.

8.18 The internal layout at ground floor includes the placing of generous sized entrance lobbies in two prominent corners of the development. With the addition of an area for public art on the Block A Drummond Road return the scheme allows for a much greater level of activation along Drummond Road, which is welcomed. Officers recommend that the public art piece is embedded within the brickwork of the façade (rather than a piece that is ‘tacked on’) and therefore will need to be developed as early as possible, and a condition could secure this.

8.19 These entrance spaces also connect well with the interior of the site, particularly the Keeley Road entrance which allows views through to the communal landscape areas, as can be seen in the images below.

Figures 27 and 28: plan showing entrances shaded blue (left) and Block B entrance (right)

Figures 29 and 30: Block A entrance – outside (left) and inside (right)

8.20 Overall officers are supportive of the site layout, which has been rigorously reviewed throughout pre-application and which is now considered to provide a good level of space between the two blocks, whilst allowing for a design that both improves and engages with the wider street scene.

Appearance

8.21 The local area surrounding the site is distinguished by two distinct urban character areas. The historic Old Town to the south and the mid-20th century central area to the north, including the Centrale and Whitgift shopping centres along North End. Frith Road along the south-western edge of the site, forms the boundary between these distinct areas. Block A sits opposite this threshold and the design of this building incorporates a level of design that demonstrates a good relationship with the surroundings buildings. A significant amount of analysis in relation to the contextual and character of this area underpins the design of block A, with notable features such as the Ground floor living room windows have been enlarged and framed to reflect the house bay windows, there is a consistent building line, upper floor apartments have been arranged to pair balconies and windows to create a consistent rhythm along the façade, a soldier course band of bricks runs around the building at first floor level picking up on the red brick band detailing of the terrace and rain water pipes have been located within the facade such that they aid in the subdivision of the facade to read as six sections, similar to the plot width of houses, as can be seen in the image below.

Figure 31: street view of Block A

8.22 Whilst the opposing properties tend to be finished in a yellow stock brick or rendered, there is a large amount of red brick buildings within the Conservation Area, so that the choice of a red brick as a base material would not be out of keeping.

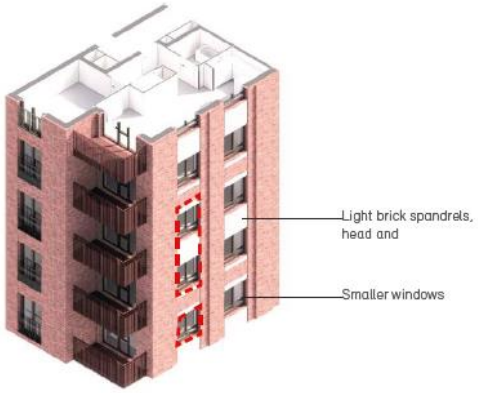
8.23 The challenge for Block B is to make a transition away from the smaller domestic scale and context of the Frith Road and the Church Street Conservation Area, whilst respecting the wider Croydon context and adding interest and detail throughout. As such the composition of the elevations and their materiality play an essential role in breaking up the massing and providing relief, design interest and contributing positively towards local character. Pre-application designs drew heavily on the mid-20th century influences from central Croydon and had a rather flat grey appearance. As such a greater similarity between the blocks was suggested with a preference for the block B tonal material palette to follow that of block A, along with greater depth and interest.

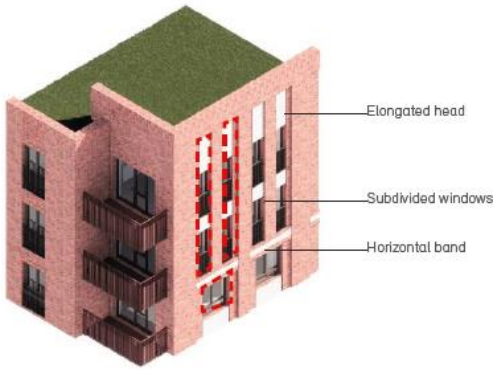
8.24 The material palette consists two main bricks of differing tones (a lighter red/ pink multi brick) to the façades, complimented by an off-white brick to window surrounds linking the floors. Two mortar types are also proposed to differentiate between the lower (shoulder) and higher sections of block B - darker mortar to match the brick on the 16 storey element, and a lighter contrasting mortar on the 25 storey element. There are shared metalwork details to balconies, canopies, screens and gates across both blocks. The reddish metalwork colour would complement all the selection of bricks. The quality of the bricks and metalwork is paramount and would be secured by condition, subject to this the materials would provide sufficient depth and variation to create a successful appearance without over complicating the design.

8.25 Block B now has a very deep shadow gap (1m x 1.2m) between the two main elements of the building and projecting brick piers which create vertical subdivision and the perception of greater slenderness across the block. Horizontally the block has a clear distinction between the base, middle and top. At the base larger window openings are provided and align with the height of Block A (see images below). The middle floors are grouped using material tone and detailing above and below window openings. The top of both parts of the building are expressed as a taller element - single and double

storeys plus the roof parapet. The fenestration on these upper floors is further subdivided to pair narrower fully opening windows and Juliet balconies to each larger window below.

Figures 32 and 33: base of Block A (left) and Base section with Block A context (right)





Figures 34 and 35: middle segment of Block A (left) and Crown of Block A (right)

8.26 There are good reveal depths across both blocks (Block A and B are proposed as 185mm and 285mm (100mm brick pier plus 185mm window reveal respectively). Overall the design, detailing and materials are of a high quality finish, but would need to be secured by a robust condition.

8.27 Policy D4 of the London Plan promotes ongoing involvement of the original design team to monitor design quality of a development through to completion; given the importance of the architects in this matter their retention is proposed to be secured through the S106.

Landscaping

8.28 There is one tree on site (Keeley Road / Frith Road junction), which is in a poor condition, and therefore no objection to its removal. In terms of proposed landscaping there are three main areas where Residents can enjoy communal outdoor space. These are in the form of the garden courtyard at ground level, and, the two roof gardens provided for each building (all residents can access these spaces).

Figure 36: site wide landscaping locations

8.29 The ground floor space is more functional, and somewhat split, due to the ramp providing a route down to the basement, short stay cycle storage and the need to provide a route in from Keeley Road (and both buildings having doors into the courtyard). However, the area does provide excellent spill out space from the communal resident's rooms at the base of Block B.

Figures 37 and 38: area outside indoor communal area of Block B (left) and landscaping area between blocks (right)

8.30 The shared amenity spaces on top of both blocks are well considered, provided areas for rest, play and large areas of soft landscaping. The provision of landscaping throughout the development is acceptable.

Figures 39, 40 and 41: roof level amenity spaces (upper left), CGI of Block A roof level landscaping (lower left) and CGI of Block B roof level landscaping (upper right)

8.31 London Plan policy G5 requires major development to contribute to greening, setting a target score of 0.4. Urban greening calculations have been carried out, demonstrating the site achieves a score of 0.35 made up of the landscaping proposed at ground floor, terrace and roof levels. This includes biodiverse and intensive green roofs, as well as trees, shrubbery, climbing plants and ground flora. The policy recommends a target score of 0.4 for developments that are predominantly residential, which the scheme would fall just short of. The submission identifies potential options to increase the UGF score, including increasing areas of extensive green roof and increasing areas of green walls. However, both were discounted as extensive green roofs could not be used as amenity for residents (so would reduce the communal space) and there are fire safety concerns in relation to green walls. On balance this position is accepted by officers, subject to a condition requiring the minimum 0.35 score to be achieved, but also with further exploration of options to try and secure 0.4.

8.32 London Plan policy G6 requires that any development seeks to provide biodiversity net gain. The Biodiversity Net Gain Assessment identifies a net increase in ecological value of 1,836%. Considered there is a significant improvement over the existing site and that most parts that could be soft landscaped have been this aspect of the scheme

is acceptable. In addition the ecological appraisal has been independently assessed and no objection were raised subject to securing biodiversity mitigation and enhancement measures, which can be secured by condition.

Heritage

8.33 As outlined above, the proposed height, massing and layout successfully integrates with the general townscape and although Historic England have raised no specific comment about the proposed scheme, the impact on heritage assets needs to be given particular consideration.

8.34 The Planning (Listed Buildings and Conservation Areas) Act 1990 requires (at section 66) with respect to listed buildings, that special regard is paid to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possess. With regard to conservation areas (at section 72), it requires special attention to be paid to the desirability of preserving or enhancing their character or appearance.

8.35 The NPPF places strong emphasis on the desirability of sustaining and enhancing the significance of heritage assets, and affords great weight to the asset's conservation. It states that:

"great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be)… irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm"

8.36 Any harm to a designated heritage asset, including from development within its setting requires "clear and convincing justification", with less than substantial harm weighed against the public benefits delivered by the proposed development.

8.37 With regard to non-designated heritage assets, paragraph 203 of the NPPF states that:

"the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing…applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

8.38 Policy DM18 of the Local Plan permits development affecting heritage assets where the significance of the asset is preserved or enhanced. Policy SP4 requires developments to respect and enhance heritage assets, and Policy DM15 permits tall buildings which relate positively to nearby heritage assets. London Plan Policy HC1 states that developments should conserve historic significance by being sympathetic of the assets' significance and setting along with HC3 that protects strategic and local views. This policy goes on to state that new development can make a positive contribution to the views, and this should be encouraged.

8.39 The setting of a building is defined as 'the surroundings in which a heritage asset is experienced' in the glossary to the NPPF *"It's extent is not fixed and may change as the asset and its surrounding evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance of may be neutral."*

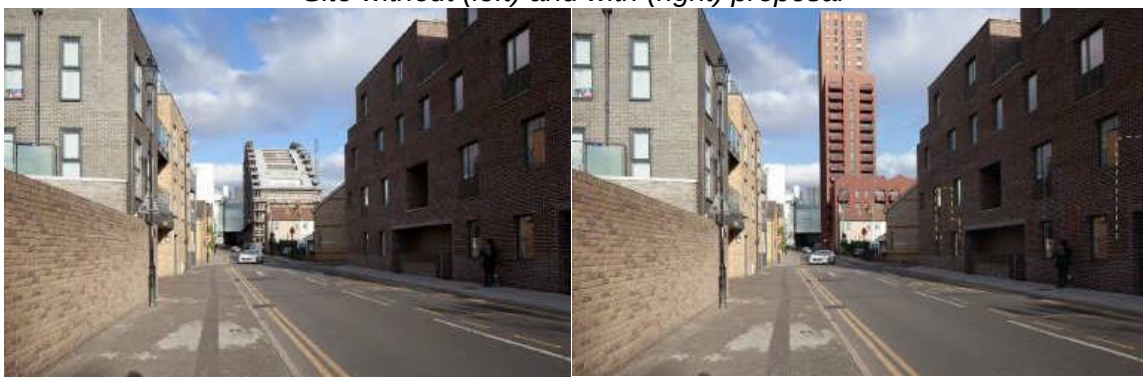
8.40 The site is not within a Conservation Area, however, the site lies immediately adjacent to the Church Street Conservation Area and the Central Croydon Conservation Area is located to the east and south, just beyond Centrale, approximately 55m away. There are no statutorily designated heritage assets on the site, but a number of listed and locally listed buildings within the wider area. The development will be visible in the setting of the Conservation Areas and some other nearby heritage assets due to its height and form.

8.41 A detailed Townscape, Heritage and Visual Impact Assessment was submitted as part of the application. This assesses the impacts of the proposal on a range of nearby heritage assets, accompanied by views. The analysis of the views used the Zone of Theoretical Visibility approach (ZTV) to assess where views may be impacts. From this study it can be seen the key heritage impacts are a) the setting of the Church Street Conservation and longer-range views from Surrey Street within the Central Croydon Conservation Area.

8.42 Whilst the existing building rises from 5 to 11 storey, the proposal would significantly increase this height and at a quicker transition from the predominately 2 storey Victorian residential housing within the Church Street Conservation Area, as visible in the images below. As such the Church Street Conservation Area is the most affected designated heritage asset, as the proposed development is in close proximity and prominent in a number of the views of this asset. The massing and consequent articulation of volumes (stepping up in height away from the Conservation Area) have been designed to mediate the relationship between the houses and the height of Block A and Block B beyond, which has helped to limit the harm being caused to the setting of this Conservation Area. A reinstatement of a street frontage to Frith Road is a welcome improvement, along with public realm upgrade works, nevertheless, the height of the development adjacent to the Church Street Conservation Area would impact the setting in short and medium length views. Whilst this element of the development is considered to cause some harm, in terms of the setting of the designated heritage asset, officers have concluded that the harm caused would be less than substantial.

Figures 42 and 43: view from Frith Road, facing north west towards the Site without (left) and with (right) proposal

Figures 44 and 45: view from Tamworth Road at the junction with Frith Road towards the Site without (left) and with (right) proposal



Figures 46 and 47: view from the north-western pavement of Drummond Road, opposite Maclean House towards the Site without (left) and with (right) proposal

8.43 Likewise, the building would be visible at the end of views north from Surrey Street leading to some harm to the setting of the Central Croydon Conservation Area, which can also be placed at "less than substantial" as understood by the NPPF. This harm has been reduced and mitigated by the design which still allows for side sky space between the buildings either side of Surrey Street (it is worth noting that there is not a designated or local view along Surrey Street).

Figures 48 and 49: view from Surrey Street, close to junction with High Street facing northwest towards Croydon's Town Centre towards the Site without (left) and with (right) proposal

8.44 The proposed building, given its height, would have the potential to impact on important listed buildings within the town centre. Views of the Grade I listed Minster were tested but it can be seen from analysis that whilst the building can be seen from the area around the Minster, it would not directly compete with the Minster tower and would tend to sit within a backdrop of other taller buildings on the skyline, such similar impacts occur from other viewpoints within the Minster Conservation Area and overall, the impact is considered as relatively low and the lower end of less than substantial.

Figures 50 and 51: view from St Johns Road looking towards Croydon Minister and the Site without (left) and with (right) proposal

8.45 A number of views from within the courtyard of the Grade I Whitgift Almshouses, and one outside, were tested. One view (view point 18) shows that from a certain area in that courtyard the proposal would be visible over the ridge (see image below). A degree of harm exists but the proposal's mass would merge with other structures and the impacts could be seen as being towards the lower end of the scale.

Figures 52 and 53: view from south-east corner of Almshouses courtyard towards the Site without (left) and with (right) proposal

8.46 The taller element of the scheme would be visible from within the Croydon Minster Conservation Area. Whilst this would clearly be understood and experienced as part of the diverse urban townscape context beyond the boundaries of the conservation area, due to the strong and important connection between the Minster itself and the Conservation Area it sits within, and that a less than substantial impact on the Minster has been established above, the setting of the Conservation Area would also be impacted to the same degree, that being the lower end of less than substantial.

8.47 There are a number of heritage assets within the wider area where the proposed scheme could be seen within the setting, however, the impact is neutral as discussed below.

8.48 The taller element would also be visible within the setting of a group of Grade II Listed Buildings, namely No. 120 Church Street, Elis David Almshouses and the Rose and Crown Public House. However, there is a significant distance between these buildings and the proposed scheme, and as with the Croydon Minster Conservation Area the proposed building would be understood and experienced as part of the diverse urban townscape context that defines the shared setting of these Listed Buildings and would not there would not detract from an appreciation of them individually of as a group.

8.49 Wandle Park is a Locally Listed Historic Park and Garden and therefore classified as a non-designated heritage asset. There would be limited visibility of the taller element of the Proposed Development and given the built up and varied townscape character of central Croydon in this location no harm is identified.

8.50 No direct harm to the fabric of any designated heritage assets would occur as a result of the proposal. It is considered the proposed development would have a less than substantial impact on the setting of the Church Street and Central Croydon Conservation Areas. In addition to this the impact on both the Grade I buildings, Whitgift Almshouses and Croydon Minster, would be at the lower end of less than substantial. There is no harm identified to further surrounding heritage assets.

8.51 It is also important to draw member's attention to the recent 103-111 High Street appeal decision (reference 20/03841/FUL), which forms a material consideration. This site is visible in views south along Surrey Street and, like this application site, sits outside the Conservation Area. The scheme was refused on two grounds, one of which was adverse impact on the heritage assets, including the Central Croydon Conservation Area. Whilst the Planning Inspector did agree there would be less than substantial harm (at the lower end) caused from the 29 storey building, this heritage refusal reason was not upheld by the Planning Inspector. He concluded that the harm would be outweighed by the public benefits of the scheme, in that case delivery of homes, affordable units and employment provisions, as is the case for this scheme.

Balance

8.52 As harm has been identified to heritage assets the provision of paragraph 202 of the NPPF to weigh any harm against the public benefits of the scheme is enacted. When weighing the proposed harm to designated heritage assets against public benefits of the scheme - any harm is given considerable importance and weight. A balanced judgement toward harm caused to non-designated heritage assets is also required. Public benefits can include heritage benefits and great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

8.53 No direct harm to the fabric of any designated heritage assets would occur as a result of the proposal, however, harm has been identified to Central Croydon Conservation Area, Church Street Conservation Area, Croydon Minster Conservation Area, Croydon Minster (grade I listed) and Whitgift Almshouses (grade I listed) and therefore the statutory presumption toward preservation or enhancement has not been met. The level of harm is in each case less than substantial, and the lower end in relation to the latter three heritage assets. The number of assets affected adds further weight to the overall harm caused.

8.54 Public benefits…"could be anything that delivers economic, social or environmental progress as described in the 2021 NPPF" The NPPG continues stating that…"public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and should not just be a private benefit". The development does deliver a number of public benefits, including housing provision, a quantity of which would be for affordable housing delivered on site including wheelchair accessible homes, an improved public realm, including the replacement of the existing building with a high quality scheme (which includes reinstatement of a street frontage to Frith Road), a contribution towards wider transport network

improvements (particularly pedestrian and cyclist) and short-term employment derived from the construction of the development.

8.55 It is considered that these public benefit are sufficient to outweigh the less than substantial harm identified to the heritage assets outlined above and therefore as per requirements of the NPPF, making a balanced judgement as to the scale of harm and the significance of the asset, the impact is considered to be acceptable. Notwithstanding this, it is essential that the development provides an exceptionally high design quality in relation to materials and other detailed matters at planning conditions stage. This is to ensure that the building, which is visible in the setting of heritage assets, is one of which is perceived as being of excellent contemporary design which responds appropriately to its historic context.

Housing Mix and Affordable Housing

Housing Mix

8.56 Croydon Local Plan 2018 (adopted February 2018) policy SP2.7 sets a strategic target for 30% of all new homes up to 2036 to have three or more bedrooms. Policy DM1.1 allows for setting preferred mixes on individual sites via table 4.1. Applying table 4.1 to this site (Central setting with a PTAL of 4, 5, 6a or 6b within Retail Core area) shows a requirement of 5% 3+ bedrooms units unless there is agreement from an affordable housing provider (that these are not viable or needed). 6% (9) of the homes would be three beds, thereby meeting the policy standard.

Affordable Housing

8.57 Policy SP2.4 of the Croydon Local Plan 2018 seeks to negotiate to achieve up to 50% affordable housing, subject to viability. Part b) of the policy seeks a 60:40 ratio between affordable rented homes and intermediate (including starter) homes unless there is agreement that a different tenure split is justified (a minimum of three Registered Providers should be approached before the Council will consider applying this policy). The policy also requires a minimum provision of affordable housing as set out in policy SP2.5, which requires a minimum provision of affordable housing to be provided either:

a) Preferably as a minimum level of 30% affordable housing on the same site as the proposed development or, if 30% on site provision is not viable;

b) If the site is in the Croydon Opportunity Area or a District Centre, as a minimum level of 15% affordable housing on the same site as the proposed development plus the simultaneous delivery of the equivalent of 15% affordable housing on a donor site with a prior planning permission in addition to that site's own requirement. If the site is in the Croydon Opportunity Area, the donor site must be located within either the Croydon Opportunity Area or one of the neighbouring Places of Addiscombe, Broad Green & Selhurst, South Croydon or Waddon. If the site is in a District Centre, the donor site must be located within the same Place as the District Centre; or

c) As a minimum level of 15% affordable housing on the same site as the proposed development, plus a Review Mechanism entered into for the remaining affordable housing (up to the equivalent of 50% overall provision through a commuted sum based on a review of actual sales values and build costs of completed units) provided 30% on-site provision is not viable, construction costs

are not in the upper quartile and, in the case of developments in the Croydon Opportunity Area or District Centres, there is no suitable donor site.

8.58 The London Plan (2021) sets a strategic target of 50%, but allows lower provision to be provided dependent on whether it meets/exceeds certain thresholds, or when it has been viability tested. It should be noted as the London Plan (2021) was adopted after the Croydon Local Plan (2018), where there is a policy difference, then the most recently adopted policy should take precedent.

8.59 Policy H6 of the London Plan (2021) requires developments to provide 30% as low cost rented homes, either as London Affordable Rent or Social rent, allocated according to need and for Londoners on low incomes, 30% as intermediate products which includes London Living Rent and London Shared Ownership, with the remaining 40% to be determined by the borough.

8.60 The proposed development would provide 16% affordable housing by habitable room, which amounts to 22 homes. The tenure split would be 32% London Affordable Rent (6 x 2 bed 4 person – the duplex units located in Block A) to 68% Shared Ownership (9 x 1 bed 2 person and 7 x 2 bed 3 person – three 2 bed 3 person units are located in Block A with the rest within Block B) by habitable room, which translates to 6 London Affordable Rent units and 16 shared ownership units.

8.61 The application was subject to a financial viability appraisal (FVA), which has been scrutinised independently by Gerald Eve (GE). Furthermore, the GLA viability team have sent a report further to their Stage 1. This challenges a number of the FVA inputs as well as GE's review. This is particularly in relation to the Benchmark land value (BLV). The applicant has come to a BLV through two Alternative Use Value (AUV) approaches, namely a refurbishment of the existing building and redevelopment with an office building. In officers view both the AUV approaches adopted by the applicant should be discounted. The first is for the existing building being to be refurbished to provide 95 private residential units for either private sale or Build to Rent, however, minimal information to support this case has been provided and appears to have disregarded the fact that for the existing building to be fully refurbished with key structural changes taking place, a new planning permission would be required, which would require a policy compliant provision of affordable housing. No affordable housing is included, and as a result this approach is disregarded as it is not a realistic alternative use for the site. The second is for an office scheme, however, this would not be acceptable on the site due to the requirement for there to be no loss of residential accommodation. The evidence presented by GE to come to the BLV is supported by officers.

8.62 Additionally sensitivity tests also show that the proposed scheme is currently unviable and cannot afford further affordable housing. The conclusion (for both the applicant and GEs review) is that the scheme is in deficit. The applicant indicates a £8,656,376 deficit, whilst the Council's independent review suggests £3,542,135. The difference is mainly due to GE adopting higher values, some reduced costs and the different approach taken on BLV. Officers acknowledge the extent of deficit, but weight needs to be given to the uniqueness of this case. Despite being unviable, the applicant needs to recoup some of the costs incurred by repurchasing the building due its structural faults which made it unsafe and not fit for occupation. In addition to this the applicant is also looking to re-provide residential units in Croydon, along with a portion of affordable housing that was not previously provided previously but for which there is great need. This acts as a unique example of best practice in relation to the

management and resolution of historic fire safety issues in light of the Grenfell tragedy, which is strongly welcomed.

8.63 With 30% on-site provision established as not viable, Policy SP2.5 (b) is engaged, but there are no 'donor sites' available. Part (c) of SP2.5 requires an absolute minimum on site delivery of 15%, with a review mechanism up to equivalent 50% overall provision, provided 30% is not viable and construction costs are not in the upper quartile. The applicant proposes 16% affordable housing by habitable room that has been independently reviewed as the maximum reasonable, which exceeds the minimum policy requirement, the legal agreement would secure a review mechanism (more in the paragraph below) and construction costs are not in the upper quartile (as confirmed by GE). Therefore the offer meets the minimum provision of affordable housing as required by Policy 2.5 of the Croydon Local Plan 2018.

8.64 The Mayor of London's Affordable Housing and Viability SPG states that where developments meet or exceed 35% affordable housing without public subsidy (subject to the tenure mix being to the satisfaction of both the LPA and GLA), such schemes can follow the 'fast track route', whereby they are not required to submit viability information and will only be subject to an early viability review. The proposal does not meet 35% and is therefore public subsidy is not available, nor can the scheme follow the 'fast track' route. Schemes that do not qualify for the 'fast track' route, must follow the 'viability tested' route which this application has done. London Policy H5 (f) states that (non-phased) viability schemes will be subject to early and late stage review mechanisms, which are recommended. This would capture any changes (for example increase in home prices/reduction in construction costs) which may result in increased affordable housing provision and/or contribution. For clarity, officers adopt the deficit provided in the GE independent review for the purposes of the affordable housing review mechanisms.

8.65 In terms of the tenure split, SP2.4 b) permits a variance from 60:40 (affordable rented to intermediate) if a Registered Provider agrees a different tenure split is justified. Evidence from three Registered Providers has been submitted and confirms that a mixed tenure block comprising rented and shared ownership units within Block B would be challenging in terms of future management and keeping service charges affordable for the rented properties. Block A works because the LAR homes are the duplexes accessed from Frith Road, so they have independent access thus avoiding the no need for certain service charge elements (such as internal cleaning or hared corridors), with 3 shared ownership homes on the first floor and private for sale above. Block B than contains 13 shared ownership homes with the remainder private for sale. Therefore Policy SP2.4 is met and the 32:68 split is supported. This also meets London Plan policy H6 on affordable housing tenure, as the minimum 30% is secured as London Affordable Rent.

8.66 The applicant's planning statement states that as well as the minimum site requirement compliance, the affordable housing offer could be made via vacant building credit (VBC). Croydon Local Plan Policy DM3 deals with VBC, promoting redevelopment by applying a vacant building credit such that affordable housing requirements will only apply to the net increase in floor space. The scheme would achieve an uplift of 62% affordable housing by habitable room on the uplift only. However, the FVA states the following "*The existing building is considered to meet the relevant tests for application of the Vacant Building Credit (VBC). This approach would effectively adjust the policy target for affordable homes to a proportion of the net uplift in area compared to the existing building. However, given GLA policy requiring viability testing for VBC*

schemes and the outcomes of this testing (indicating the proposal is substantially in excess of what would usually be considered to be the maximum reasonable level), the VBC approach has not been considered further". On this basis the policy test for whether VBC is applicable or not has not be undertaken as part of report.

8.67 The GLA has suggested that the scheme's viability could be improved if the layout of three flats per floor on the tallest part of the site was made more efficient. The only way to do this would be to raise the shoulder, however, given the importance of the side sky space (as indicated above in the heritage and Design and impact on character of the area sections) this would have negative townscape and heritage impacts so exploring this option has not been suggested. Officers feel the appropriate balance has been struck between delivery of affordable housing and heritage impacts, and have this scheme before us to determine.

Quality of residential accommodation

8.68 London Plan 2021 policies D5 inclusive design, D6 housing quality and D7 accessible housing seek the highest standards of accommodation for future occupiers. Policy sets out quantative and qualitative standards, including minimum floor space and amenity standards for new builds in order to promote high quality living accommodation.

8.69 Croydon Local Plan policy SP2.8 relates to quality and standards, requiring all new homes to meet the standards set out in the Mayor of London's Housing SPG (now covered in D6 identified above) and the National Technical Standards 2015. Croydon Local Plan policy DM10.4 has a number of requirements in relation to providing private amenity space for new residential development. The relevant policy points seek a high quality design; a functional space, a minimum amount (5sq m per one/two person unit and extra 1m2 per person after that), minimum of 10m2 per child of new play space. Croydon Local Plan policy DM10.5 requires the inclusion of high quality communal outdoor amenity space that is designed to be flexible, multifunctional, accessible and inclusive.

8.70 The Department for Local Government and Communities Technical Housing Standards 2015 is also relevant.

Size and layout

8.71 All of the proposed residential homes meet and many exceed the minimum floor space standards set out in the London Plan (2021). All homes would have private amenity space that meets or exceeds policy standards.

8.72 London Plan (2021) states that developments should maximise the provision of dual aspect units, with single aspect units only provided where it considered to be a more appropriate design solution in order to optimise capacity, and where it can be demonstrated they will have adequate passive ventilation, daylight, privacy and avoid overheating. The layout of the scheme has helped to maximise the amount of dual aspect units, at 72% and there are no single aspect north facing units, which is welcomed. An overheating assessment was submitted which demonstrates the proposal maximise passive and active design measures, reducing the risk of overheating as far as practical.

Daylight and sunlight

8.73 The applicant has submitted a sunlight and daylight report that has been carried out in accordance with 2022 BRE guidance. In terms of daylight, the assessment considers

the spatial daylight autonomy (sDA) - see Appendix 2. 90% (326) of the total rooms tested (363) meet or exceed the sDA levels recommended for dwellings. Of those falling short, 16 (4.4%) of these are open plan Living/Kitchen/Dining (LKDs) fall short of the level recommended level for rooms including a kitchen (200 lux), but do comply with a slightly lower level recommended for living areas (150 lux) so can be considered acceptably daylit rooms. A further five LKDs (1.4%) and four bedrooms (1.1%) fall short only marginally (achieving over 40% or more of their area, instead the required 50%). The remaining rooms that fail are eight LKDs (2.2%) and four bedrooms (1.1%). These are all found at the lower levels, up to third floor. In addition to their location, the LKDs have balconies, which reduces the daylight ingress, but the trade-off is accepted, given the importance for private outdoor space. The four bedrooms are all at first floor, two located to the rear elevation of Block A directly opposite Block B and the other two facing the Central car park. Given the challenging nature of the site and the very high proportion of compliance, this is acceptable.

8.74 In terms of sunlight, of the proposed dwellings 96% of them (138) would meet or exceed BRE guidance. The majority of these units (119) would achieve the recommended sunlight exposure to the main living space which is preferable. Six units do not achieve the 1.5 hours of sunlight on 21 March. The only unit falling short in Block A is located on the first floor, behind the rear elevation. It falls short by only two minutes and so it is still considered to provide adequate levels of sunlight throughout the year. The remaining five units are located at the north corner of Block B, on first to fifth floor. Having a northerly aspect, these units have an inherently lower expectation for sunlight. Given the challenging nature of the site and the very high proportion of compliance, this is acceptable.

8.75 Outdoor amenity spaces have also been tested and shows that the three communal outside areas all exceed the BRE's minimum recommendation.

8.76 Overall an acceptable level of sun and day light is achieved. Officers are also satisfied that where BRE standards have not been achieved that this is due to a combination of factors including site optimisation, site characteristics and design considerations.

Outlook and privacy

8.77 Paragraph 6.80 of the Croydon Local Plan states *"A minimum separation of 18-21m between directly facing habitable room windows on main rear elevations is a best practice 'yardstick' in common usage and should be applied flexibly, dependent on the context of the development to ensure that development is provided at an acceptable density in the local context"*.

8.78 The ground floor units on Frith Road have an area of defensible space and are duplexed so retain a good level of privacy. The units at the rear of Block A (at the lowest level) are both raised and protected by defensible space from any overlooking from the communal outdoor space. The flank elevation of Keeley House closest to Block A does not have any flank windows so would not result in any loss of privacy to future occupiers. Block A has good levels of outlook and privacy from neighbouring buildings.

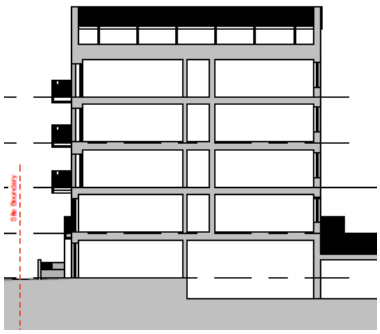
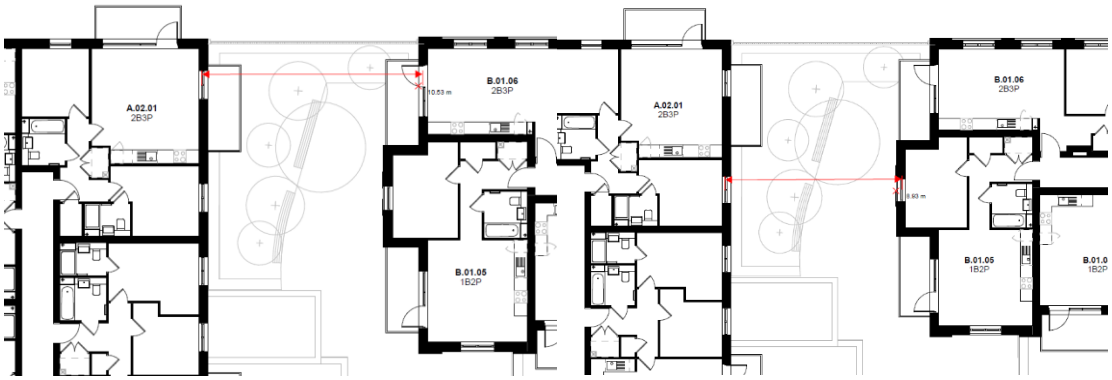


Figure 54: section drawing of Block A (Frith road to the right and landscape area to the left)

8.79 The closest distance between habitable windows on Blocks A and B is approximately 9m with the majority of units separated by 10.5m. Whilst these distances are relatively limited, the units that are subject to this proximity have other windows within the units that are not directly overlooked. On this basis the relationship, in terms of outlook and privacy between the units in Tower A and B is, on balance, considered acceptable.



Figures 55 and 56: window to window distances between Block A and Block B

8.80 There is sufficient separation between the proposed units and the commercial properties (where clear windows are evident on the upper two floors above the shops on the ground floor) on the opposing side of Keeley Road for there to be no detrimental impact on the future occupiers privacy or outlook.

8.81 Keeley House is located to the south east of Block B. The Keeley House elevation (see image below) facing Block B is staggered, with no flank windows on the closest element, two windows (first and second floor both serving a bedroom) on the middle part and a number of neighbouring windows on the furthest element (in terms of habitable rooms, they serve bedrooms and living rooms). The proposed development has moved approximately 1m closer to the south east boundary and therefore towards Keeley House than the existing building.

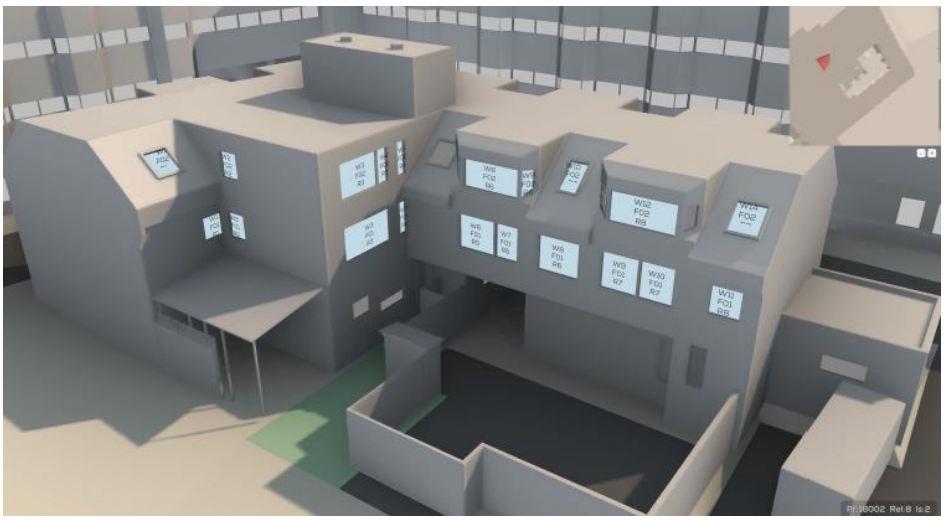
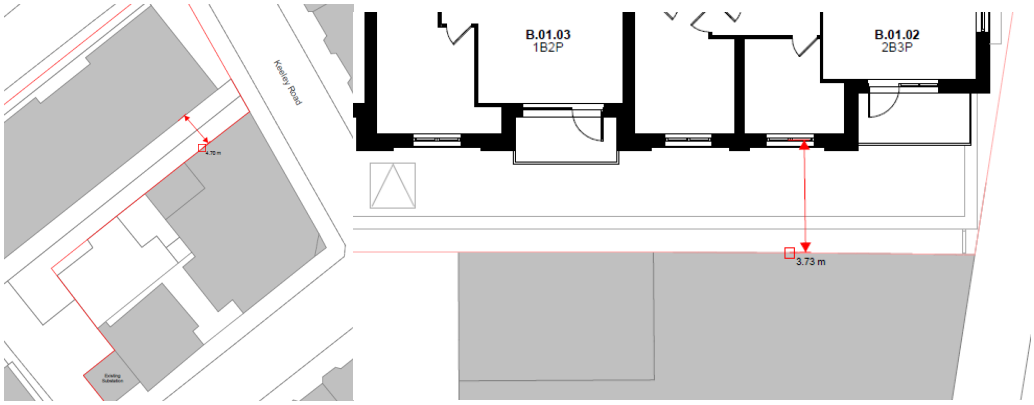


Figure 57: window map of Keeley House

8.82 Proposed units B.01.02 and B.02.02 are located on the 1st and 2nd floor by the blank part of the Keeley House elevation. They are sited at a distance of approximately 3.7m and there are no neighbouring windows in direct alignment. These units are dual aspect with the living rooms fronting Keeley Road, on that basis the outlook and privacy of these units is acceptable. It is worth noting there are existing flats (albeit currently unoccupied) within existing building that have a similar relationship.

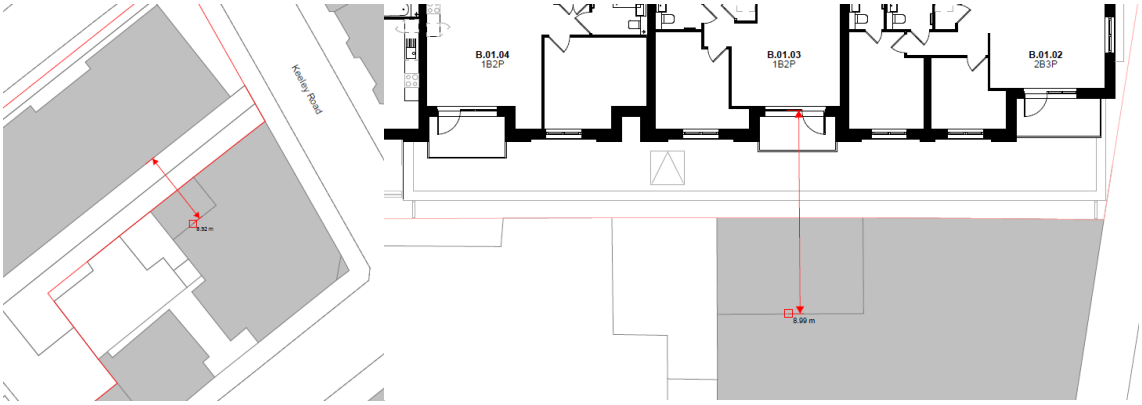
Figures 58 and 59: Keeley Road elevation of Block A showing relationship with Keeley House (left) and location of unit B.01.02 (right)



Figures 60 and 61: existing with 4.7m separation (left) and proposed (right) 3.7m separation distances between Block B and Keeley House

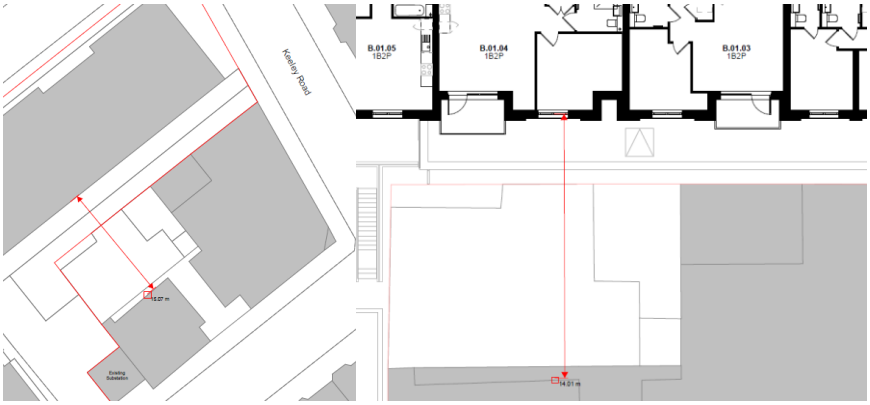
8.83 The closest window relationship between Block B and Keeley House is at the middle part of the Keeley House elevation. The current separation is 8.9m with a balcony attached beyond this. As the most directly aligned windows in the proposed scheme are set back in this position the proposed distance, window to window is 8.9m, with a balcony beyond. On that basis the relationship is very similar. Whilst the separation distance is not ideal, given the existing relationship and the built up town centre context (where a certain level of mutual overlooking is not uncommon) it is not considered to be so harmful as to warrant a refusal reason.

Figures 62 and 63: relationship between existing building and Keeley House close up (left) and at a distance (right)



Figures 64 and 65: existing 8.9m separation (left) and proposed (right) 8.9m separation distances between Block B and Keeley House

8.84 The widest area between the Block B and Keeley House would be 14m (a decrease in 1m from the current separation). There would be a number of habitable room windows facing each other at this distance, however, given the existing relationship this separation would still provide adequate levels of privacy and outlook for future occupiers, especially given the built up town centre context



Figures 66 and 67: existing 15m separation (left) and proposed (right) 14m separation distances between Block B and Keeley House

8.85 Block B is 12.75m (at its closest point) from the Central Shopping Centre to the north, which is consistent with the established relation with the existing building.

8.86 In conclusion on outlook and privacy, whilst officers acknowledge the separation distances in a number of instances are well below the 'yardstick' of 18-21m, that distance should be applied flexibly, dependant on the context. In this case, the context of the existing building on site and its established relationship for the occupiers of those units (when they were occupied) forms a consideration that should be given considerable weight.

Wind

8.87 The submitted wind study (which utilised wind tunnel testing) indicates that all of the balconies and ground floor shared outdoor space would achieve wind conditions that are suitable for their intended external amenity use without mitigation. Subject to mitigation (screening and a roof to the garden pergola with porosity no greater than 50%), which can be secured by condition, the upper level shared terrace would also be suitable for their intended uses.

Noise

8.88 The agent of change policy (D13 of the London Plan) puts the responsibility for mitigating impacts from existing noise generating uses (in this case a nursery at Keeley House) on the proposed noise-sensitive development.

8.89 The Environmental Health officer has reviewed the submitted noise and vibration assessment, and raises no objections, stating that the recommendations (namely the provision of enhance glazing and ventilation of appropriate specification as detailed with the assessment and limits on plant noise) are appropriate and should be secured by condition.

Private/Communal Amenity Space and Child Play Space Provision

8.90 London Plan policy SP4 play and informal recreation seeks, for residential developments, good-quality, accessible play provision for all ages and at least 10sqm of playspace should be provided per child. Croydon Local Plan policy DM10.4 and DM10.5 set minimum requirements for the provision of communal amenity space and children's play areas that will be required in new flatted development. This scheme must provide a minimum of 10m2 per child of new play space, calculated using the Mayor of London's population yield calculator.

8.91 All homes would have access to private amenity space in the form of a balcony which meets policy standards.

8.92 Communal amenity space has been designed to provide places for resting, socialising and play, whilst also increasing biodiversity. The images of benches, tables and play equipment are welcomed and alongside other features, providing a range of different spatial experiences and cater for multiple users. Detailed plans and specifications for play equipment, along with the soft and hard landscaping, will need to be secured by condition (given the changes possibly required by microclimate mitigation) and the requirement to understand density of planting.

8.93 A total of 1,018sqm (306sqm (courtyard), 519sqm (Block A roof), 193sqm (Block B roof)) of landscaped communal amenity space would be provided across the development, which is a significant amount and supported.

8.94 The proposal identifies 244sqm of play space across the two roof terraces, which would cover the need for age groups 0-4 and 5-11 and exactly meets the requirement for these age groups. Play space for all pre-secondary school children is accommodated on site.

Figure 68: location of play space within development

8.95 Although there is space within the overall landscaping areas the proposal does not provide play space for the 12-15 and 16-17 year age ranges (with a requirement for 31sqm), highlighting that due to the sites constraints to provide meaningful play for older children these children will be encouraged to visit Wandle Park, which is within close proximity. Whilst this position is accepted the scheme stills needs to mitigate against the shortfall of older children play space. A financial contribution of £4,309 will be secured in lieu of this shortfall based on the costs of equipping an area of approximately 31sqm with suitable equipment and including an allowance for future maintenance.

8.96 The noise impact assessment additionally found the outdoor spaces within the scheme to be suitable without mitigation, as confirmed by the environmental health officer.

Fire safety and accessibility

8.97 Although fire safety is predominantly a building regulations issue, policy D12 of the London Plan 2021 requires developments to achieve the highest standards of fire safety for all building users. The policy sets out a number of requirements, with the submission of a Fire Statement (an independent fire strategy produced by a third party suitably qualified assessor) setting out how the development has been designed and will function to minimise fire risk.

8.98 Policy D5 B 5) of the London Plan requires that in all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building.

8.99 The fire statement has been drafted by a Director of MSC Fire Engineering Ltd who is registered with the Institute of Fire Engineers as a Member of the Institute. The report has been checked by an Associate Director of MSC Fire Engineering Ltd who holds a BEng (Fire), is a chartered engineer (CEng) and is registered with the Institution of Fire Engineers as a Member of the Institute. The statement has therefore been prepared by a suitably qualified assessor. The GLA have confirmed they are satisfied with the submission in relation to fire.

8.100 The Health and Safety Executive (HSE) have reviewed the submission and are satisfied with the information provided, raising no substantive objections. Block A contains a single stair that represents the only route for evacuation and firefighting operations. Building B contains two stairs that serve all the upper floors. One of the stairs stops at the ground floor and only one serves the basement, which the HSE confirm as the correct solution for this development.

8.101 Both blocks will be provided with an evacuation lift, with Block B also being provided with a fire fighting lift as it is over 18m. This will ensure safe and dignified emergency evacuation for all users in line with London Plan (2021) policy D5 and can be secured by condition.

8.102 Supplementary comments have been provided by the HSE (which do not form part of the substantive response) highlighting that the single stair in Block A connects with the refuse store by way of a protected corridor and that the refuse area also has direct access to the outside. Connecting any ancillary area to a stair is only suitable for a small building (under 11 m in height, whereas Block A is 12m) or a building that contains at least two stairs serving all upper floors. The HSE state that some internal alterations may be required which are unlikely to affect land use planning considerations. This has been raised with the applicant's fire engineer, who has confirmed in their view these matters can be overcome. Given that this element would not materially impact planning matters, no objection has been raised from the HSE and that separate regulation (Building Control) will be required for these elements, the scheme is considered acceptable in terms of fire.

8.103 10% (14 units) would meet Building Regulation requirement M4(3) 'wheelchair user dwellings' and the remaining units would meet Building Regulation requirement M4(2) 'accessible and adaptable dwellings' and therefore satisfy Policy D7 of the London Plan and can be secured by condition. It is important to note that all of the M4(3) units are contained within Block B, which is logical as the blue badge parking is all located within the basement accessed via the lift core of this Block. This does mean that there are no M4(3) units within the London Affordable Rented homes, but the 6 units are all duplexes where M4(3) compliance is more challenging. This is on balance accepted.

8.104 Overall, the proposed development would provide well-designed homes that would provide a high standard of residential accommodation.

Impact on neighbouring amenity

8.105 Policy DM10.6 states that the Council will not support development proposals which would have adverse effects on the amenities of adjoining or nearby properties or have an unacceptable impact on the surrounding area. This can include a loss of privacy, daylight, sunlight, outlook or an increased sense of enclosure. There are a number of buildings surrounding the site requiring consideration in terms of

daylight/sunlight impact. This aligns with the requirements of Policy D9 of the London Plan in relation to tall buildings.

8.106 Paragraph 6.80 of the Croydon Local Plan states *"A minimum separation of 18-21m between directly facing habitable room windows on main rear elevations is a best practice 'yardstick' in common usage and should be applied flexibly, dependent on the context of the development to ensure that development is provided at an acceptable density in the local context"*.

8.107 There are a number of commercial units to the north east, east and south east of the site all within Centrale shopping centre and the ground floor of Keeley House (nursery). Given the nature of these units and the existing built form on the site it is not considered that there would be any harm sufficient to warrant a refusal reason. It is considered that the most critical relationships to consider are the residential units on the opposing side of Frith Road and the flats within Keeley House.

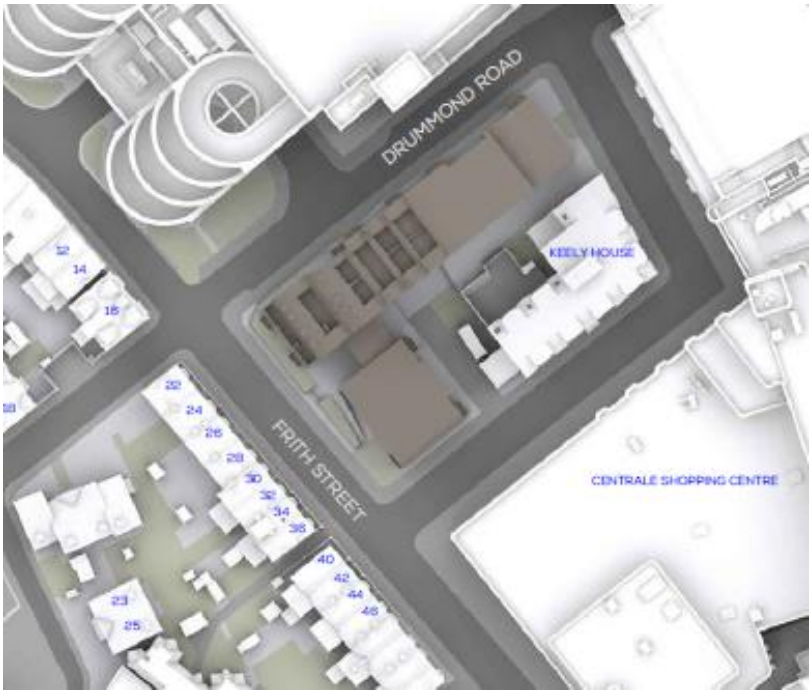


Figure 69: surrounding neighbouring properties

Outlook and Privacy

Frith Road

8.108 Numbers 22-36 are two storey buildings opposite the site and separated from the existing Citiscape building by approximately 17.5m - 19m (going from No.22 to 36). Block A would be slightly closer to some of these properties, resulting in separations of approximately 17.5m - 16.5m (going from No.22 to 36) and taller across the whole Frith Road frontage, increased from 4 to 5 storeys (with gable frontages above). Although the proposed building is slightly closer to these neighbours, and there would be more windows, the distances are considered sufficient to prevent against any harmful overlooking. Properties No.16 (and northwards) and No.40 (and southwards) are not in direct alignment and further removed, and as such no harmful loss of privacy would occur. Although Block A is taller and within closer proximity (in part) the opposing buildings are dual aspect; this internal layout and the distances mentioned above is sufficient to preclude any harmful loss of outlook.

Keeley House

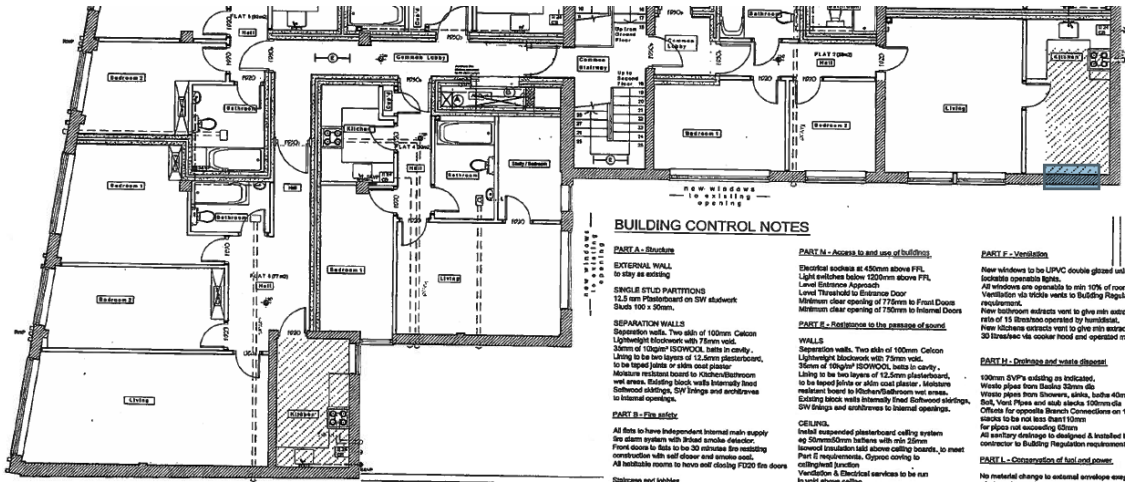


Figure 70: Keeley House First floor layout

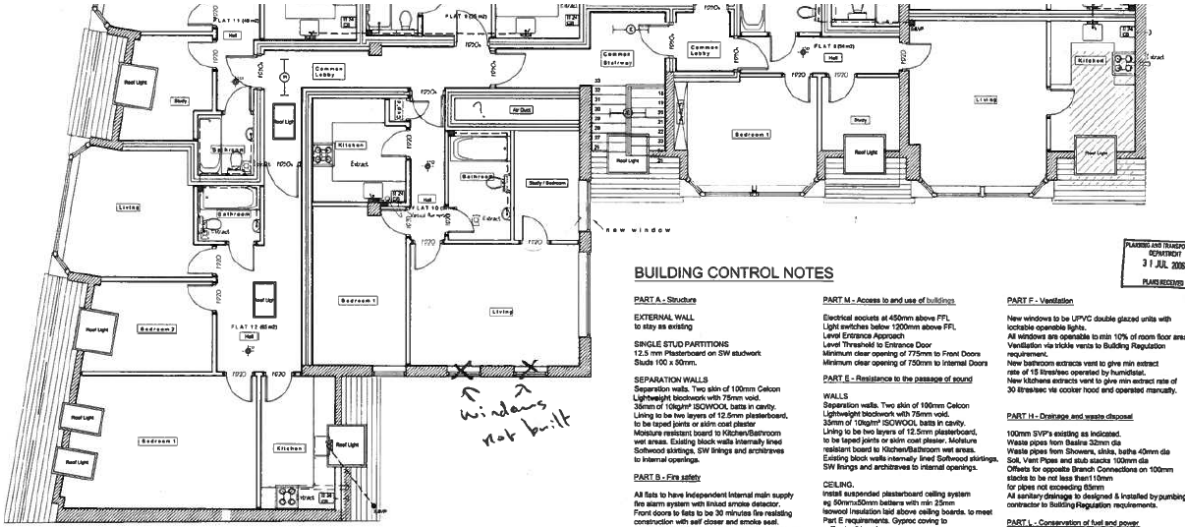


Figure 71: Keeley House Second floor layout

8.109 Flats 6 and 12 (bottom left flat within figures 70 and 71 above) have no windows facing towards the site and are not considered to have their outlook or privacy materially harmed by the proposal.

8.110 Flats 4 and 10 have the same layout, with the living room and bedroom/study room facing towards Block A. The distance from Block A and angle of orientation from Block B would mean that any overlooking would be from an oblique or far distance to such an extent that it would not result in harmful overlooking, especially above and beyond the existing arrangement. There is a bedroom window within each of these flats that faces towards the application site with a separation distance of between approximately 7.9m (to edge of balcony) to 8.9m (to the inset areas). This distance is very similar to the existing situation of approximately 8.9m and the existing building also has balconies facing Keeley House. Given the existing situation, the fact these flats are dual aspect with habitable rooms facing Block A which has a greater separation and the rooms facing Block B are bedrooms whereby the main use is for sleeping the relationship is considered, on balance, to be acceptable.

8.111 Flats 2 and 8 have all rooms facing towards Block B at a distance of 14m, which is only 1m less than the existing arrangement. Given this and the built up nature of the area, where a certain level of overlooking and intrusion is not uncommon, no significant additional harm to the occupier's amenities beyond that which currently exists on site from the existing building is envisaged.

8.112 Overall, given the existing situation, density of the surrounding built form and closely related development in a central location it is expected that there will be a degree of mutual overlooking and visual impact for occupiers, so is on balance acceptable.

Daylight and Sunlight

8.113 Paragraph 125 of the NPPF staes, in part c) that *"local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, 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)".*

8.114 The Mayor of London's Housing SPG also endorses a flexible approach to daylight and sunlight, stating:

"An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets. This should take into account local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time.

The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm."

8.115 Furthermore, the OAPF notes that *"It is recognised that in heavily built up areas such as the Croydon Opportunity Area, new development will inevitably result in some level of overshadowing and overlooking of neighbouring properties and amenity spaces. It should be noted that the existing pattern of development in the central part of the COA is not conducive to the application of normal planning guidelines for sunlight and daylight. As such, as part of new development proposals, there will need to be a flexible approach to the protection of natural light for existing properties."*

8.116 Officers consider that, given the central Croydon location and the fact a tall building already exists on site, this it is a site where flexibility to BRE standards can be applied.

8.117 The daylight and sunlight report covers the potential impacts of the proposed scheme on neighbouring buildings. A series of residential properties were considered (including those in Tamworth Place and North End) but only those that did not adhere to the numerical values set out in BRE are discussed below. The buildings that have been assessed are as follows and can be located in figure 69 above:

- 22 to 36 Frith Road
- Flats within Keeley House

22 to 36 Frith Road

8.118 22 to 36 Frith Road are a row of terraced houses located directly opposite to the west of the scheme.

8.119 In terms of daylight, 42 windows and 18 rooms were assessed using the Vertical Sky Component (VSC) test – see Appendix 2. Of the 42 windows tested, 11 (26%) remain BRE compliant. Of the 31 windows that do not meet, three remain compliant against the VSC to room assessment.

8.120 Of the remaining 28 windows, 20 would experience minor adverse changes, with six of these 20 windows retaining in excess of 20% VSC and a further 10 retaining a mid-teen value in excess of 15% VSC which has been established as acceptable on appeal decision where tall buildings are located and flexibility should be applied. The remaining four windows are all located on ground floors and are return windows on the front bays, limiting daylight receipt. These windows form part of the a bay window, with the room benefiting from two further window panes and the rooms themselves will retain in excess of 15% VSC. The final eight windows will experience a moderate adverse impact, but will retain a mid-teen value in excess of 15% VSC.

8.121 In terms of daylight distribution, 18 rooms were assessed using the No Sky-Line test (NSL) – see Appendix 2. Of the 18 rooms assessed, seven (39%) would experience no noticeable alteration in daylight distribution. Of the 11 rooms that do not comply, 10 rooms would experience minor and moderate adverse impacts. The final room, a bedroom to no. 30 Frith Road, would experience a major adverse impact (a 46% reduction).

8.122 In terms of sunlight, 8 windows have been assessed (as they are orientated within 90 degrees due south) using the Annual Probable Sunlight Hours test (APSH) – see Appendix 2. Of the 8 windows assessed, six (75%) remain BRE compliant. The two windows which do not meet serve 24 and 26 Frith Road, experiencing minor adverse reductions of 30% and 26% respectively. These windows are oriented at 84 and 82 degrees from due south and as a result they will only have an oblique access to sunlight and it would be difficult for these windows to meet the target values.

8.123 Whilst there are breaches of the BRE guidelines as identified above, generally good levels of daylight and sunlight are retained for 22 to 36 Frith Road. Whilst moderate and major adverse impacts are not ideal, taking into account the context of a relatively dense urban environment in the CMC, OAPF and 'edge area' (where tall buildings may be acceptable) and the fact a number of the failures are to a certain extent due to the self-limiting form of the bay windows, no objection is raised by officers.

Keeley House

8.124 Keeley House is a mixed use building with commercial use at ground floor and flats above.

8.125 It would appear that the Keeley House permission from 04/04754/P (conversion of upper floors to provide an additional 5 one bedroom and 5 two bedroom flats and refurbishment of the existing 2 flats) was not built out exactly as per the approved plans, particularly in terms of window positions. It would appear to be more in accordance with the subsequently approved Building Control plans (this has confirmed to be the case by an agent representing Keeley House). The daylight and sunlight

report was updated during the course of the application so that the window mapping diagram does reflect the as built window positions on this building.

Figures 72 and 73: Keeley House rear elevation (left) and window mapping (right)

8.126 The 04/04754/P planning permission was granted with the existing Citiscape building in place. This permission accepted the homes within Keeley House would experience relatively low levels of daylight. Consequently, any change in massing on the application site will inevitably result in larger proportional reductions.

8.127 In terms of daylight, 22 windows and 16 rooms were assessed using the Vertical Sky Component (VSC) test. Of the 22 windows tested, 11 (50%) remain BRE compliant. Of the 11 windows that do not meet, one remains compliant against the VSC to room assessment.

8.128 Of the remaining 10 windows, four would experience minor adverse changes, four experiencing moderate adverse changes, with the final two windows experiencing major adverse impact (63% reduction for a bedroom in Flat 4 and 45% for a bedroom in Flat 10). All of these, with the exception of one window, have existing low levels of VSC between 2-11%, so a relatively modest absolute change of between 1.5-3.6% causes a disproportionate large percentage change. The final window that would fail would see an absolute change in VSC of 4%, which is unlikely to give rise to a noticeable change, whilst the room has a lower absolute change of 2.6%.

8.129 In terms of daylight distribution, 16 rooms were assessed using the No Sky-Line test (NSL). Of the 16 rooms assessed, 14 (88%) experience no noticeable alteration in daylight distribution. The two rooms that do not comply experience major adverse impact in excess of 40% reduction (98% reduction for a bedroom in Flat 4 and 85% for a bedroom in Flat 10). Both of these rooms are bedrooms, with absolute changes of 3.9% and 4.4% meaning it is unlikely to be a noticeable change. Furthermore, the BRE acknowledges that bedrooms are less important than other habitable uses. It is also important to note that these two bedrooms that receive a major adverse impact appear to have been created without planning permission (albeit now exempt from enforcement action given the length of time that has passed). It is also worth noting seven windows will see an improvement in sky visibility, ranging from 21-209% improvements.

8.130 In terms of sunlight, 7 windows have been assessed (as they are orientated within 90 degrees due south) using the Annual Probable Sunlight Hours test (APSH). Of the 7 windows assessed, all remain BRE compliant.

8.131 Overall the loss of daylight to Keeley House outlined above is regrettable and this has to be balanced against some improvements. Weight is given to the 04/04754/P

planning permission accepting relatively low levels of daylight for homes within Keeley House, meaning any change in massing will result in larger proportional reductions. Taking this into account, combined with the opportunity area location, the relatively dense urban environment, the fact the brownfield site contains a vacant building and the policy steer to apply application of the BRE guidance flexibly (noting sunlight compliance), when balancing the benefits of the scheme against the harm of these impacts, officers raise no objection.

Microclimate

8.132 Paragraph 6.71 of the Croydon OAPF states that new buildings, in particular tall buildings, will need to demonstrate how they successfully mitigate impacts from microclimate conditions on new and existing amenity spaces. In particular, new tall buildings in the COA will need to show how their designs do not have a negative impact on wind (downdrafts and wind tunnelling). This is endorsed in DM38.4 of the Croydon Local Plan and D9 of the London Plan.

8.133 A wind report has been submitted in support of the application that reviews the impact of the proposal on nearby and surrounding land. The land to the rear of Keeley House has been included within this assessment and shows that there would be no wind safety concerns and that the area is suitable for sitting and standing which is suitable for the current use of this area.

Noise and disturbance

8.134 London Plan policy D13 Agent of change is relevant in relation to some neighbouring commercial businesses. Croydon Local Plan policy DM23 seeks to limit noise disturbance through high standards of development and construction.

8.135 Whilst population density would increase, the development is not considered to result in a harmful increase in noise and disturbance. A new outside space would be created at ground floor between the two blocks, but is not considered to harm amenity from noise given the adjoining neighbouring outdoor spaces serve a car park and nursery space. Moreover, this is a built up urban area and a degree of noise and disturbance is not uncommon.

8.136 During construction there would undoubtedly be an impact on neighbouring occupiers, including the nursery. A construction logistics plan would ensure the build-phase is managed appropriately, minimising disturbance towards neighbouring properties, and can be secured by condition. Furthermore, disruption due to construction is only temporary, limited to the site and is of medium-term duration.

Other

8.137 Interested parties have raised a concern that the proposed development would prejudice the development potential of Keeley House. Firstly, there is currently no consent to develop this site, nor a planning application under consideration. Secondly, the existing context cannot be ignored when considering whether the development of the application site (to such an extent as proposed) prejudices the development potential of the Keeley House site. The application site has an existing flank elevation of habitable room windows and balconies facing across the whole Keeley House plot (and up to a level significantly higher level than Keeley House), and as such, it is unlikely that any meaningfully taller development than the existing Keeley House could be developed on the neighbouring site without serious impacts on the existing (albeit now vacant) building. Despite the Keeley House pre-application submitted, officers consider there is currently very limited potential to develop the Keeley House site and

its development potential is therefore not materially harmed by this proposal. It is noted that the scheme for consideration does include habitable room windows facing Keeley House that are closer in footprint by 1m and this is covered in detail above.

8.138 The GLA (and representative of the Keeley House site) have stated that a comprehensively master planned development that incorporates the neighbouring site, Keeley House, would achieve better place making outcomes and the applicant and the Council are encouraged to pursue this option. Whilst this position is noted, the applicant has confirmed that they have met with and exchanged correspondence with the owner of Keeley House and their representatives on multiple occasions, yet no joint movement of sites has been made. It is also noted that the owners of Keeley House have submitted a pre-application which only proposes a scheme on their site. Given this the co-working of these two sites appears unlikely to happen in the immediate future and there is no demonstrable evidence received to delay the determination of this application for this reason.

8.139 Additionally, the scheme would not compromise the development potential of the Centrale Shopping Centre to north of the site in the future, given the proposed building would have a very similar separation distance with windows in the northern elevation as the existing building.

Access, parking and highway impacts

8.140 The site has a Public Transport Accessibility Level (PTAL) of 6b, on a scale of 0-6b, where 6b is the most accessible, so has an excellent level of accessibility to public transport links.

8.141 The site has existing vehicular access points from Keeley Road from the north east and the south east, which has not been in operation for a number of years. The Council have since located parking bays in front of this access point. Drummond Road has a restriction in place with no waiting and no loading at any time. Frith Road and Keeley Road have no waiting restrictions between 8am to midnight 7 days a week. The car parking bays on street are for permit holders only or pay and display (for a maximum of two hours).

<u>Access: Vehicular</u>

8.142 The existing vacant building had 95 units with 73 on-site car parking spaces within a basement accessed via Keeley Road. The proposal comprises 144 residential units, including 4 blue badge car parking and 250 cycle parking spaces at basement level.

8.143 When the site was operational vehicles accessing the basement from Keeley Road would wait on-street whilst the gates were opened. The proposal would continue to be accessed via Keeley Road on the northeast side, with some modification, including the removal of the parking bays on street. Only one vehicular access point will remain given the reduction in parking.

8.144 The basement would have a signal-controlled system to allow for the safe transit of vehicles. The gates have been pushed back to 5m from the footway to allow for cars to pull in and not wait on the road. This is welcomed and is a more desirable outcome than waiting on Keeley Road. LBC Transport Officers note that the ramp would not be 90 degrees to Keeley Road and have recommended that the access is re-aligned. However, the access to the basement is not being altered in the proposed scheme.

Given further examination of the existing condition and the orientation of the building, it is considered in this instance, a grounds for refusal would not be substantiated and the departure from this requirement would be acceptable given the access and egress arrangement identified on drawing 21-082-T-011-A.

It has been noted by LBC Transport Officers that two cars may find passing each other difficult and that there is a pinch point at the bottom of the ramp, where the width is 2.4m. The minimum distance is 2.6m for two cars to pass together. This is acknowledged, however given the small number or cars operating in the basement, it is considered unlikely that this situation would arise frequently. Although the arrangement and constrained space is not ideal, no objection is raised by officers.

Access: Pedestrian

8.145 Pedestrian access is proposed on Frith Road and Keeley Road allowing access to Blocks A and B respectively with access to the internal courtyard accessed via a secure gate on Keeley Road. The maisonettes would have direct access from Frith Road with the communal entrances located on both sides of Keeley Road. LBC Transport Officers noted that the sightlines for the vehicle access point on Keeley Road should be revised to be located within the red line boundary in order to maintain safe passage for pedestrians taking this route. The applicant has since adjusted the sightlines, improving vehicle visibility and pedestrian safety.

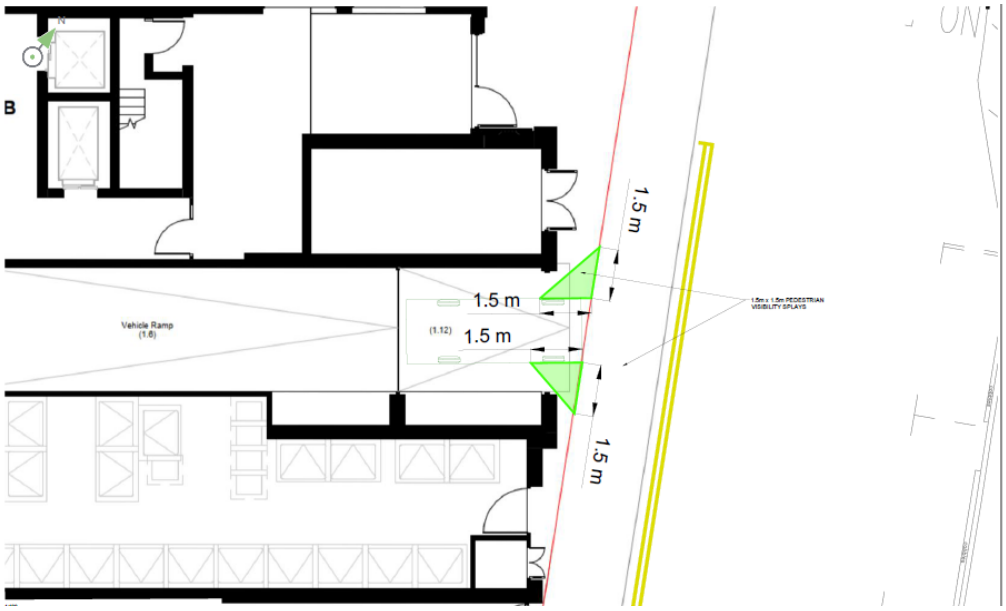


Figure 74: Keeley Road access with visibility splays

Car Parking

8.146 As noted above, it is proposed that there will be a substantial decrease in car parking within the site given it would be a car-free development, with the exception of 4 blue badge spaces at basement level. The proposal aims to decrease the usage of vehicles to minimise its contribution to air pollution and to encourage sustainable modes of travel. Given the PTAL of this location, aligning with London Plan Policy T6 and SP8 of the Croydon Local Plan, a car free development is supported. The Croydon Local Plan states that there is an on-going climate emergency and active and sustainable travel, in order to reduce congestion and air pollution, will be encouraged in order to improve quality life and quality of place.

8.147 Policy T6.1 of the London Plan requires disabled persons parking to be provided for new residential developments, ensuring as a minimum 3% of dwellings at least one designated disabled persons parking bay per dwelling is available from the outset. The proposed scheme would provide 3% blue badge, which equates to 4 parking bays. The applicant has provided amended plans following LBC Transport Officer comment on the location of the disabled bays, in relation to the columns in the basement. The updated plans show that the bays and the hatched area around will now not be impeded by columns and allow ease of access for the residents.

8.148 Policy T6.1 of the London Plan 2021 states that all residential car parking spaces must provide infrastructure for electric or Ultra-Low Emission vehicles. At least 20% of the spaces should have active charging facilities, with passive provision for all remaining spaces. The proposed scheme proposes 100% of the spaces provided would have active electric charging points from first occupation, exceeding the minimum standard.

Cycle parking

8.149 The proposed development would be dedicating the majority of the basement space to cycle parking, encouraging a more sustainable mode of travel. The minimum requirement, as set out in the London Plan, is for 249 long stay spaces and 4 short stay spaces. It is proposed that the development would provide 250 long stay spaces as 16 accessible spaces (8 enlarged Sheffield Stands), 28 Sheffield Stands, and 206 two tier stands.

8.150 The London Cycle Design Standards sites that lifts should have minimum dimensions of 1.2m by 2.3m, with a door opening of 0.9m. This is important for access to locations such as cycle parking areas, which has been provided. The proposed lift would be 1.1m by 2.1m which is marginally smaller than the minimum requirement. This minor size shortfall is regrettable, but this is not the sole entrance/exit for cycles; the cycle store is also accessible via a ramp between the two blocks (to the rear of Block A). Whilst LBC Transport Officers raise concern about the size of the lift, given the additional choice of the ramp, no objection is raised.

8.151 Residents from Block A would be required to walk 30m across the communal outdoor area to the entrance of Block B to access their cycles. It is important to note that an earlier iteration of the scheme had cycle parking within the ground floor of Block A, but PRP commented that it would limit activation to the frontage and encouraged the applicant to relocate to within the basement. Therefore a balance has been struck between ease of access for cycle users and activation of the frontage, which officers support.

Waste

8.152 The applicant has submitted an Operational Waste Management Strategy that outlines the proposed strategy. The applicant has estimated the weekly waste generation for the development and the number of containers required would fit within the waste stores. The metrics that have been used are in accordance with LBC's Waste and Recycling in Planning Policy Document. Each unit will have integrated waste bins for residual waste, recyclables and food waste and each block will have a residential waste store at ground floor level as indicated below.

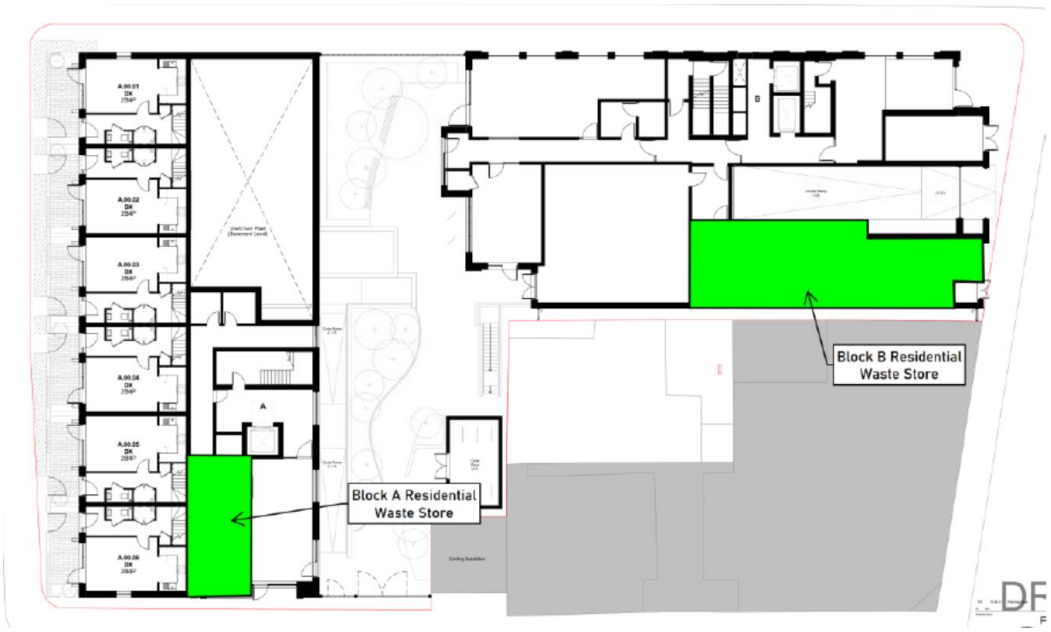


Figure 75: location of the bin stores for Block A and Block B

8.153 It is noted that the drag distance for Block B exceeds the maximum limit of 20m, as it would be approximately 25m to the rear of the store from a refuse lorry. This would require an alternate waste management plan. It is expected that full details of the proposed collection arrangements, including agreement on the operator who will be carrying it out, will be specified within a condition in a detailed refuse collection management strategy. This strategy must also detail how refuse collection will be managed within the building by the facilities management team.

Delivery and servicing

8.154 An Outline Delivery and Servicing Plan (DSP) has been submitted as part of the application. Deliveries and servicing trips are proposed to remain as when the site was operational and will occur on street on Frith Road and Keeley Road. It is expected that the most frequent deliveries will be from small vehicles with occasional heavy good vehicles.

8.155 All servicing and deliveries are proposed to take place on-street. London Plan Policy T7 requires the provision of space off-street to facilitate servicing with on-street loading bays used only when it is not possible. It is acknowledged that the site constraints do not allow for on-site servicing given the basement being retained and so, in this instance, it is accepted. A final DSP will be conditioned to demonstrate that there are suitable locations that are safe and limit their potential impact. TfL have noted that a total of 42 vehicle trips are proposed in the Transport Assessment which appears to be low, therefore further scrutiny should be included within the DSP when this condition is submitted for discharge.

8.156 The applicant has agreed to fund a S.278 agreement for highway works around the site to include removal of parking bays, servicing bays and dropped kerbs where necessary for refuse and servicing, as well as resurfacing the highway.

Construction logistics

8.157 An outline Construction Logistics Plan has been submitted. Given the scale of the development, a tailored condition requiring the submission of a detailed CLP is recommended to ensure that the construction phase of development does not result in

undue impacts upon the surrounding highway network and adjoining occupiers, such as the nursery.

Sustainable Transport

8.158 Sustainable travel is a key policy consideration within policies SP8, DM29 and DM30 of the Croydon Local Plan. Given that the development would be car-free (aside from blue badge spaces) and considering the nature of the development, increased walking, cycling and public transport use is expected. To mitigate against this and improve connections for all transport modes, improvements to the highway network immediately surrounding the site in line with the Council's future vision for the area are to be secured. This would be secured through both a S.106 financial contribution of £180,000 and a S.278 highway works agreement. A contribution of £53,670, as requested by TfL, will also be secured via the S.106 legal agreement.

8.159 A financial contribution of £31,000 will also be secured for the provision of an off-site car club space within the town centre, as well as membership for future residents of the scheme for 3 years and removing access for future residents to Controlled Parking Zone permits and season tickets for Council car parks.

Active Travel Zone (ATZ)

8.160 The applicant has identified some potential upgrades to the local highways network as part of their Active Travel Zone assessment to support the development. The improvements have been identified in 5 key routes between the site and several key destinations. The improvements that have been outlined within the ATZ assessment will be funded by the applicant through a S.278 agreement.

Travel Plan

8.161 In order to ensure that the identified modal shift is adequately supported, and barriers to uptake of more sustainable transport modes can be addressed, a Travel Plan and monitoring for five years along with a financial contribution to allow this is to be secured through the S.106 legal agreement.

Environmental impact

Air quality

8.162 The whole of Croydon Borough has been designated as an Air Quality Management Area and therefore a contribution is required towards local initiatives and projects in the air quality action plan which will improve air quality targets helping to improve air quality concentrations for existing and proposed sensitive receptors.

8.163 The Councils Environment Consultant has raised no objection to this aspect of the proposal subject to securing a contribution (£14,400) and the recommendations within the air quality assessment being followed. These can be secured by S106 and condition.

Contamination

8.164 Croydon Local Plan policies DM24.1 to DM24.3 relate to land contamination and development proposals located on or near potentially contaminated sites. Such sites need to be subjected to assessments and any issues of contamination discovered should be addressed appropriately e.g. through conditions.

8.165 The majority of the site is covered by built form of a residential nature and the proposal includes amenity areas that are effectively raised from the current

arrangement, and as such no significant issues of environmental concern are envisaged. However, it would be prudent to require an intrusive site investigation, which can be secured by condition.

Flooding and drainage

8.166 The site is within Flood Zone 1 (low risk) and an area of surface water flood risk. The majority of the site has a low level risk of surface water flooding, but there is a localised area (where an existing ramp / basement is) that shows a medium and high risk of surface water flooding when viewing the EA's flood mapping. However, the site specific flood report demonstrates that the site is at an actual low level of surface water flooding due to the limited flow depths of around 150mm and the existing built environment, which would prevent flows being conveyed towards the site from the wider catchment. In terms of ground water there is no data available for the site itself, however, due to presence of an existing basement and the smaller size of that incorporated into the proposal, it is not anticipated that there would be any obstruction (or greater risk) to groundwater flows beneath the site.

8.167 The applicant has provided a Flood Risk Assessment and Drainage Strategy. It is proposed to attenuate surface water using a combination of green and blue roofs, filter drains, pervious hardstanding and attenuation tank located between adjacent to the external stair access from the courtyard to the basement. The Lead Local Flood Authority have reviewed and assessed this information and raise no objection to this aspect of the scheme. Additionally Thames Water have reviewed the information and raise no objection, but do recommend a condition and informatives, which are included within the recommendation.

Construction Impacts

8.168 A Construction Environmental Management Plan is to be secured by a condition, to ensure adequate control of noise, dust and pollution from construction and demolition activities, and to minimise highway impacts during the construction phase.

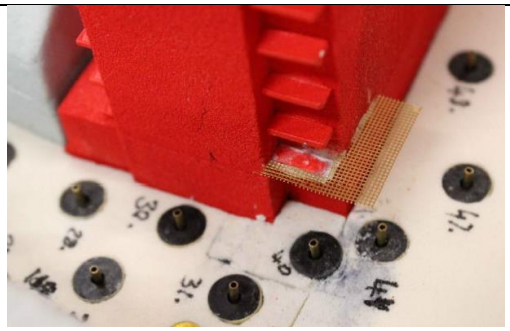
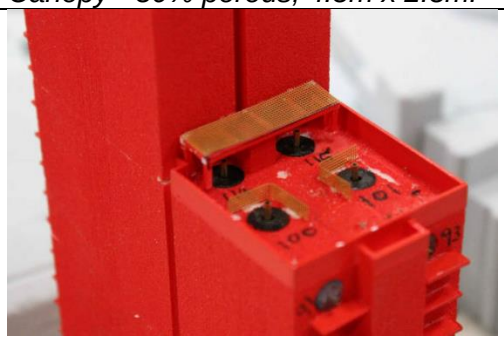
Light pollution

8.169 External lighting is proposed around the development, but a final scheme has not been developed. Whilst the principle of this is acceptable light from the proposed illuminations can cause a nuisance to local residents and as such further details indicating proposed light specifications, spread and lux levels is required, these details can be secured by condition.

Microclimate

8.170 Croydon Local Plan policy SP4.6 states that tall buildings will be required to minimise their environmental impacts. Paragraph 6.71 of the Croydon OAPF states that new buildings, in particular tall buildings, will need to demonstrate how they successfully mitigate impacts from microclimate conditions on new and existing amenity spaces. In particular, new tall buildings in the COA will need to show how their designs do not have a negative impact on wind (downdrafts and wind tunnelling). This is endorsed in D9 of the London Plan 2021.

8.171 The wind report identifies that the majority of the site would have wind conditions suitable for the intended uses. However, there are a few locations within and around the development where resultant wind speed requires mitigation due to either not being suitable for the intended purpose or a safety concern. These areas and the mitigation proposed are summarised in the table below.

Location	Concern	Mitigation required
North eastern corner of Block B (probe location 40)	Strong winds which would be a safety concern to more vulnerable pedestrians	 *Canopy - 50% porous, 2.5m deep on north-western side, 1m deep on north-eastern side*
Southern corner of Block B (probe location 79)	Strong winds which would be a safety concern to more vulnerable pedestrians	 *Canopy - 50% porous, 4.5m x 2.5m.*
Mid-level terrace of the Block B (probe locations 100 and 101)	Strong winds which would be a safety concern to more vulnerable pedestrians And Unsuitable for the intended uses	 *Addition of more solid elements to the rooftop pergola to ensure porosity no greater than 50% and rotated so it is parallel with the southern façade of Block B;* *and* *L-shaped screening to the mid-level terrace (~50% porous, 1.5m tall, 3.5m x 3.5m).*
Entrance to the existing building on Keeley Road (probe location 27)	Unsuitable for the intended uses	Mitigation same as that shown in probe location 40 above.

8.172 The mitigation measures are yet to be fully designed, however, given the prominent location of the Block B entrance and the possible townscape implications of the required canopy mitigation, officers requested the architects undertake a study to show potential options and provide the comfort needed that wind mitigation could be designed to complement the building and not appear has a retrofit bolt on. Six potential

options were submitted, see images below, which have been reduced in size to ensure they fit within the application site.

Figures 76, 77 and 78: Options 1, 2 and 3 (left, middle and right respectively)

Figures 79, 80 and 81: Options 4, 5 and 6 (left, middle and right respectively)

8.173 A technical note from the microclimate consultants has also been submitted to supplement this exercise. It is understood that mitigation in the form of just a canopy – now reduced in size to fit within the site (options 1 and 2) may marginally exceed safety criteria for more vulnerable pedestrians. As such additional mitigation measures would be required to compliment a canopy (options 3-6). Although option 3 would not work from a future amenity perspective and options 5 and 6 relies on planting, which is notoriously difficult to manage and maintain for the lifetime of the building (especially if within a planter), option 4 does show that a canopy with additional features can be designed to a visually acceptable level. Officers are sufficiently comforted that appropriate mitigation on this corner can be suitably designed, however, it would be prudent to make sure that the final design of the future mitigation in this corner is wind tunnel testing to show compliance, as well as having an acceptable final design. This can be secured by condition prior to any construction taking place. It is also noted that the technical note suggests further wind tunnel testing should be carried out prior to commencement of above ground works, which is agreed and the condition can be worded accordingly.

Sustainable Design

Carbon emissions

8.174 Policy SP6.3 requires new development to minimise carbon dioxide emissions and seeks high standards of design and construction in terms of sustainability in accordance with local and national carbon dioxide reduction targets. This requires new build residential development over 10 units to achieve the London Plan requirements or National Technical Standards (2015) for energy performance (whichever is higher). In line with the London Plan (2021), new dwellings in major development should be Zero Carbon with a minimum on-site reduction of at least 35% beyond Building Regulations Part L (2013), with any shortfall to be offset through a financial contribution. Policy also requires the development to incorporate a site wide communal heating system and to be enabled for district energy connection.

8.175 A 12.3% carbon emission reduction would be achieved through the use of passive and energy efficiency measure, exceeding the 10% minimum required by the GLA. Air Source Heat Pump working in tandem with a high efficiency, ultra-low NOx

boiler would achieve a further 43.6% carbon emission reduction. In total for residential areas the development would achieve a 56% reduction compared over Part L 2013. The remaining regulated CO2 emissions shortfall would be covered by a carbon offset payment (£156,708) which would be secured through the s.106 agreement along with a 'Be Seen' monitoring clause.

8.176 Sustainable design and construction measures have been designed in where feasible, including measures to address overheating within the units. An overheating analysis has also been undertaken, with some mitigation measures proposed. These matters are to be secured by condition. In addition to the prevention of overheating, high energy efficiency and fabric performance, the dwellings will also have a water consumption limit of 110 litres/person/day using water efficiency fittings and secured by condition

8.177 A whole-life cycle carbon assessment and circular economy statement has been provided to capture the developments carbon impact, demonstrating how waste will be minimised and which actions will be taken to reduce life-cycle carbon emissions, in accordance with Policy SI 2 and SI 7 of the London Plan (2021). The GLA is seeking further information with respect to these matters, and discussions between the GLA and the applicant are on-going and can feed into the GLA stage 2 response. Additional documents in relation to whole-life cycle and circular economy have been provided.

8.178 In terms of whole-life cycle a condition is recommended to report on actual whole life cycle emissions and post construction monitoring. The same is recommended in relation to circular economy. It is noted that the GLA are seeking further information to be provided regarding the structural issues of the existing building, to demonstrate that alternatives to demolition have been explored (including partial retention) and that the potential benefits of demolition and rebuilding of homes should be balanced against the wider social and environmental impacts. However, it is documented that the applicants re-purchased the building due its structural faults which made it unsafe and not fit for occupation. As indicated above the applicant is effectively carrying this out at a loss, whilst still providing much needed housing (including affordable units) and stands as a unique example of best practice in relation to the management and resolution of historic fire safety issues and supported by officers.

8.179 The Council's Sustainable Development and Energy officer has reviewed the application and raises no concerns.

Other Planning Issues

Archaeological Desk Based Assessment

8.180 The application site is located within an Archaeological Priority Area. London Plan Policy H1 and Croydon Local Plan Policy DM18 concerns development proposals on Archaeological Sites. An archaeological desk-based assessment has been submitted. Historic England reviewed this and conclude that the proposal is unlikely to have a significant effect on heritage assets of archaeological interest, and as such no further assessment or conditions are therefore necessary.

Telecommunications and aircraft

8.181 A TV and Radio signal impact assessment was submitted, which identified the potential for very localised disruption to the reception of digital satellite television services to the immediate northwest of the site within 125m from the base of Block B (properties adjacent to the Site on Frith Road and Tamworth Place in terms of Freeview

and buildings off Tamworth Road, Ruskin Road and along Frith Road in terms of Freesat and Sky). This could be mitigated by antenna betterment and repositioned satellite dishes, to be secured by the s.106 agreement. The development is not expected to affect the reception of radio and phone reception.

8.182 Tall buildings also have the potential to pose hazards to aircraft, and for this reason aviation bodies within this region have been consulted. None have raised concerns, subject to informatives and the development is therefore considered acceptable in this regard.

Designing Out Crime

8.183 A number of comments are made (as summarised in the consultation section of this report), but no objection has been raised by the Designing out crime officer and they do suggest a 'Secured by Design' related conditions. On this basis a condition is recommended to ensure that the final development secures secure by design accreditation.

Employment and training

8.184 Croydon Local Plan policy SP3.14 and the Planning policy including the adopted Section 106 Planning Obligations in Croydon and their Relationship to the Community Infrastructure Levy-– Review 2017 sets out the Councils' approach to delivering local employment for development proposal. The applicant has agreed to a contribution (£90,000) and an employment and skills strategy.

8.185 Policy DM16 of the Croydon Local Plan seeks to ensure promotion of healthy communities through the planning system. A health impact assessment was submitted which confirms potential health gains (such as dual aspect units, M4(2) and M34(3) units), access to open spaces (such as the 244sqm of playspace for children), promotion of pedestrian and cycling infrastructure (such as the increased width of Drummond Road pavement to promote walking and the sustainable transport contribution which can be used to provide the cycle lane on Drummond Road), spaces for social interaction (such as the variety of spaces throughout the development including the shared gardens and community rooms) and mitigating pollutants (such as the air quality contribution and construction logistics plan condition). This accords with policy.

EIA

8.186 An EIA Screening Opinion (22/03472/ENVS) was issued prior to the submission of the planning application. The development was not considered to require an EIA, taking account of its location, nature, scale and characteristics.

Conclusions

8.187 The application scheme and submission has been born out of managing the best way to overcome fire cladding issues discovered by the applicant on the existing building. As mentioned above this acts as a unique example of best practice in resolving these issues and is strongly supported.

8.188 The proposed development would introduce a significant amount of new housing, including affordable residential units, and in an area appropriate for a tall building. The proposed development would be well designed, provide active frontage where one does not exist and would deliver improvements to the public realm, regenerating an existing site. There would be a good standard of accommodation for new residents.

Wind conditions would be safeguarded with mitigation, to be secured by condition. With conditions and mitigation, the proposal would be sustainable and acceptable in terms of its impact on the highway network. Residual planning impacts would be adequately mitigated by the recommended s.106 obligations and planning conditions. Employment and training opportunities would be secured for residents of the Borough through the S.106 legal agreement.

8.189 There would be some harm to adjoining occupiers in relation to daylight in particular, which weighs against the scheme. There would also be some harm (less than substantial) to designated heritage assets, but that harm is considered acceptable given the benefits being delivered by the scheme.

8.190 All other relevant policies and considerations, including the statutory duties set out in the Equalities Act 2010, the Human Rights Act, the Planning and Compulsory Purchase Act, and the Town and Country Planning Act, have been taken into account. Given the consistency of the scheme with the Development Plan and weighing this against all other material planning considerations, the proposal is considered to be acceptable in planning terms subject to the detailed recommendation set out in section 2 (RECOMMENDATION).

APPENDIX 1: Drawing numbers

Drawing Number	Title	Rev
CIS-PTE-ZZ-XX-DR-A-10001	Location Plan	P01
CIS-PTE-ZZ-XX-DR-A-10001	Site Plan	P02
CIS-PTE-ZZ-XX-DR-A-10002	Site Plan - Existing	P01
CIS-PTE-ZZ-XX-DR-A-10100	Block A / B Level 00 Floor Plan	P02
CIS-PTE-ZZ-XX-DR-A-10101	Block A Level 01 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10102	Block A Level 02 / Block B Level 01 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10103	Block A Level 03 / Block B Level 02 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10104	Block A Level 04 / Block B Level 03 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10105	Block B Level 04 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10106	Block B Level 05 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10107	Block B Level 06 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10108	Block B Level 07 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10109	Block B Level 08 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10110	Block B Level 09 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10111	Block B Level 10 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10112	Block B Level 11 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10113	Block B Level 12 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10114	Block B Level 13 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10115	Block B Level 14 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10116	Block B Level 15 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10117	Block B Level 16 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10118	Block B Level 17 Floor Plan	P01
CIS-PTE-ZZ-XX-DR-A-10119	Block B Level 18 Floor Plan	-
CIS-PTE-ZZ-XX-DR-A-10120	Block B Level 19 Floor Plan	-
CIS-PTE-ZZ-XX-DR-A-10121	Block B Level 20 Floor Plan	-
CIS-PTE-ZZ-XX-DR-A-10122	Block B Level 21 Floor Plan	-
CIS-PTE-ZZ-XX-DR-A-10123	Block B Level 22 Floor Plan	-
CIS-PTE-ZZ-XX-DR-A-10124	Block B Level 23 Floor Plan	-
CIS-PTE-ZZ-XX-DR-A-10125	Block B Level 24 Floor Plan	-
CIS-PTE-ZZ-XX-DR-A-10126	Roof Plan	P01
CIS-PTE-ZZ-XX-DR-A-10199	Basement Floor Plan	P02
CIS-PTE-ZZ-ZZ-DR-A-10200	Sections 01	P01
CIS-PTE-ZZ-ZZ-DR-A-10201	Sections 02	P01
CIS-PTE-ZZ-ZZ-DR-A-10300	Elevations 01	P01
CIS-PTE-ZZ-ZZ-DR-A-10301	Elevations 02	P01
CIS-PTE-ZZ-ZZ-DR-A-10302	Elevations 03	P01
CIS-PTE-ZZ-ZZ-DR-A-10303	Elevations 04	P01

APPENDIX 2: BRE 2022 Guidance

Daylight to existing buildings

The BRE Guidelines stipulate that the diffuse daylighting of the existing building may be adversely affected if either:

- the vertical sky component (VSC) measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value (or reduced by more than 20%), known as the “VSC test” or

- the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value known as the “NSL test” (no sky line).

Sunlight to existing buildings

The BRE Guidelines stipulate that the sunlight of an existing window may be adversely affected if the centre of the window:

- receives less than 25% of annual probable sunlight hours (APSH), or less than 5% of annual winter probable sunlight hours between 21 September and 21 March (WPSH); and
- receives less than 0.8 times its former sunlight hours (or a 20% reduction) during either period; and
- has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

If one of the above tests is met, the dwelling is not considered to be adversely affected.

Daylight to new buildings

The vertical sky component (see above) may be used to calculate daylight into new buildings.

For daylight provision in buildings, BS EN 17037 provides two methodologies. One is based on target illuminances from daylight to be achieved over specified fractions of the reference plane for at least half of the daylight hours in a typical year. One of the methodologies that can be used to interrogate this data is Spatial Daylight Autonomy (sDA).

The Spatial Daylight Autonomy (sDA) seeks to establish how often each point of a room’s task area sees illuminance levels at or above a specific threshold. BS EN 17037 sets out minimum illuminance levels (300lx) that should be exceeded over 50% of the space for more than half of the daylight hours in the year. The National Annex suggest targets comparable with the previous recommendations for Average Daylight Factor (ADF). The targets considered relevant for this application are:

- 100 lux for bedrooms
- 150 lux for living rooms
- 200 lux for living/kitchen/diners, kitchens, and studios.

Paragraph C17 of the BRE states that *“Where a room has a shared use, the highest target should apply. For example in a bed sitting room in student accommodation, the value for a living room should be used if students would often spend time in their rooms during the day.*

Local authorities could use discretion here. For example, the target for a living room could be used for a combined living/dining/kitchen area if the kitchens are not treated as habitable spaces, as it may avoid small separate kitchens in a design".

Sunlight to new buildings

The BRE guidelines state that in general, a dwelling or non-domestic building which has a particular requirement for sunlight, will appear reasonably sunlit provided that:

- At least one main window faces within 90 degrees of due south, and
- a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March. This is assessed at the inside centre of the window(s); sunlight received by different windows can be added provided they occur at different times and sunlight hours are not double counted.

Sunlight to gardens and outdoor spaces

The BRE guidelines look at the proportion of an amenity area that received at least 2 hours of sun on 21st March. For amenity to be considered well sunlight through the year, it stipulates that at least 50% of the space should enjoy these 2 hours of direct sunlight on 21st March.