APPENDIX A.19 2-4 LODGE PLACE APPEAL DECISION

Appeal Decision

Hearing held on 23 & 30 March 2021

Site visits made on 22 March & 16 April 2021

by Matthew Nunn BA BPI LLB LLM BCL MRTPI

an Inspector appointed by the Secretary of State

Decision date: 9th August 2021

Appeal Ref: APP/P5870/W/20/3261627

2-4 Lodge Place, Sutton, SM1 4AU

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by The Rachel Charitable Trust against the decision of the Council of the London Borough of Sutton.
- The application Ref DM2019/01977, dated 21 November 2019, was refused by notice dated 29 May 2020.
- The development proposed was originally described as 'demolition of existing buildings and redevelopment of the site for a mixed-use development with 1,311 sqm (GIA) of commercial space (flexible A1 or A3 or B1 use) on the ground floor with 48 Class C3 residential units on (up to) six upper floors with associated communal amenity space, cycle parking and refuse and recycling storage facilities'.

Decision

1. The appeal is allowed and planning permission granted for the demolition of existing buildings and redevelopment of the site for a mixed-use development comprising commercial space (Class E: Commercial, Business and Service) on the ground floor with 48 residential units (Class C3) above, with associated communal amenity space, cycle parking, refuse and recycling facilities at 2-4 Lodge Place, Sutton, SM1 4AU, in accordance with the terms of the application Ref DM2019/01977, dated 21 November 2019, subject to the conditions in the attached schedule.

Procedural Matters

- 2. A new version of the London Plan¹ has been adopted since the application was originally refused by the Council. The Council has produced a schedule indicating the relevant new policies from that document which was discussed at the Hearing. I have assessed the appeal in relation to the new policies.
- 3. At the Hearing, the parties agreed an amendment to the description of the development was necessary to take account of recent revisions to the Use Classes Order to include reference to flexible 'Class E' use.
- 4. A planning obligation dated 13 April 2021 has been completed between the parties. The Council has since confirmed² that refusal ground No 6 relating to the lack of mechanism to **ensure a 'car free' development** and refusal ground

¹ Adopted March 2021

² Email from the Council dated 29 April 2021

- No 7 relating the absence of a carbon offsetting contribution have now fallen away as a result of the completion of the planning obligation.
- 5. A new version of the National Planning Framework ('The Framework') was published on 20 July 2021³. The views of the parties were sought and the comments received have been taken into account in my decision.

Main Issues

- 6. The main issues are:
 - (i) the provision of affordable housing, including the viability and deliverability of the scheme;
 - (ii) the effect of the proposal on the character and appearance of the area;
 - (iii) the effect of the proposal on the living conditions at neighbouring properties in terms of daylight, privacy and noise; and
 - (iv) whether the proposal would comply with policies relating to air quality.

Reasons

Affordable Housing, Viability and Deliverability

- 7. Policy 8 of the Sutton Local **Plan ('the Local Plan')** states that the Council will seek a minimum of 35% of all dwellings to be affordable on a site when negotiating on individual and mixed-use schemes on all sites capable of delivering 11 units or more. In applying this policy, the Council will have regard to the following: individual site costs, economic viability, availability of public subsidy and any other scheme requirements. Policy H5 of the London Plan re-iterates that for proposals of this type, the threshold level for affordable housing is also set at a minimum of 35%.
- 8. The appellant has submitted a Viability Study⁴ indicating that the scheme shows a deficit and could not support an affordable housing contribution. The Council, after analysing the appellant's Viability Study, has accepted that even though not all the development appraisal inputs are agreed, no affordable housing could be viably provided in the scheme⁵. Based on a notional developer's profit of 20% and with no affordable housing contribution, the appellant says the proposal would be in deficit against the Benchmark Land Value. This is not disputed by the Council, although its calculation shows a smaller deficit than the appellant's figures. Therefore, and importantly, the absence of affordable housing within the proposal is not in dispute. Rather, the Council's sole concern relates to what it perceives as a lack of justification of the 'deliverability' of the scheme.
- 9. **The appellant's viability evidence** mentions that arguably a development could be considered unlikely to be delivered unless it can achieve a profit margin of

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³ Replacing the version published in February 2019

⁴ Turner Morum Report, January 2020

⁵ Aspinall Verdi Report, January 2021; and Council's Closing Statement which records the parties are 'in agreement that no affordable housing can be provided on the site'.

around 20%⁶. However, the **appellant's** evidence also acknowledges that developers sometimes **can take a 'commercial decision' to proceed** at lower levels, based on an individual site basis⁷. At the Hearing, the appellant stated that it was content to proceed on a reduced level of profit. The appellant's submissions were that, **with developer's profit** adjusted downwards to 11.2%, the scheme would still be viable, albeit with a lower profit, and therefore deliverable. In other words, whilst **the appellant's viability evidence shows a** deficit, the proposal could be delivered without making a loss but with a lower **level of profit than the objectively 'reasonable' level specified in the viability** study.

- 10. I accept the Council's point that little detailed written evidence has been provided by the appellant in respect of the lower profit figure. However, at the Hearing, I heard that the appellant is a well-funded Charity with substantial assets, including local property holdings, with the ability to raise the necessary finance. I was also advised that the appellant has owned the site for a considerable time and therefore has not acquired it for purely speculative purposes. The appellant currently sees it as a declining asset and is keen to see an improved return on the property, thus benefiting its charitable activities. Delivering the scheme would achieve that aim. These submissions were not challenged or disputed by the Council at the Hearing.
- 11. My attention has been drawn to **Sutton's Affordable Housing and Viability** Supplementary Planning Document (SPD) 2020⁸ **and the Mayor's Affordable** Housing and Viability Supplementary Planning Guidance (SPG) 2017⁹. Both documents advise applicants to demonstrate deliverability where a viability appraisal shows a deficit. The appellant highlights a previous appeal decision that found that both **these documents were not 'policy' and should not be** construed as such¹⁰. Whilst I accept that the Sutton SPD and **Mayor's** SPG may not have the status of development plan policy, they nevertheless provide guidance and are clearly a material consideration in planning decisions and cannot be ignored.
- 12. However, there is no single approach to assessing deliverability and arriving at a 'correct' answer on the matter is far from an exact science. There is a danger that the process becomes a purely abstract theoretical exercise rather than one grounded in reality. The references to deliverability in the Sutton SPD and Mayor's SPG relate to information that may be of relevance in development appraisals, but neither document directs that planning permission should be refused on the basis of deliverability. Moreover, neither Local Plan Policy 8 or London Plan Policy H5 specifically refer to 'deliverability', nor do those policies direct refusal on that basis. Similarly, there is nothing within the Framework that advocates such an approach.
- 13. I acknowledge that the deliverability concept has been introduced to establish that a target profit and benchmark land value can be achieved with the required level of planning obligations to be provided on a site, and to prevent a situation arising where viability may improve in the future and any 'betterment' not being able to be captured. In this case, however, it is of some relevance

⁹ Paragraph 3.10

⁶ Turner Morum Report, Paragraph 2.16

⁷ Ibid, Paragraph 7.3

⁸ Paragraph 5.40

¹⁰ APP/P5870/20/3249085

- that the Council has accepted no affordable housing can be provided as part of the proposal. Therefore, and unusually, no dispute arises on the often potentially contentious issue of the quantum of affordable housing provision. Thus, it is hard to see why the deliverability of the scheme should assume any central importance. In any event, the completed planning obligation includes early and late stage viability reviews that potentially would require the provision of affordable housing should it become viable to do so.
- 14. In pursuing this appeal, there is no reason to assume that the appellant is not prepared to accept a lower profit in this case. I see no advantage in doubting that the appellant is content to bring forward the scheme on that basis. Moreover, given the clear aim of the Government Policy is to significantly boost the supply of homes¹¹, make effective use of land to meet the need for homes¹² and to promote and support the development of under-utilised land and buildings¹³, I find no sound policy reason to withhold permission on the basis of deliverability.

Character and Appearance

- 15. The appeal site comprises an irregularly shaped site on the southern side of Lodge Place within Sutton Town Centre. The site is currently occupied by an undistinguished single storey building comprising two retail units and includes expanses of parking either side. To the west, fronting the High Street, are three storey terraced parades with retail units at ground floor level, of varying styles, a number dating from the late 19th / early 20th century period. Immediately to the north is a relatively modern redbrick three storey terrace of flats, and on the corner of Lodge Place and Throwley Way is 'Windsor House', a contemporary styled building with a white finish rising to six storeys. Thus, there is a wide range of buildings in the locality, of different ages, sizes, designs and uses, including residential and commercial, with no single style predominant.
- 16. The Council's objection to the scheme relates to the massing and bulk of the eastern elevation, described as excessive, resulting in a dominant and imposing development, and the lack of high quality detailing. The building would comprise a building of three stepped elements: a lower three storey section on the western section closest to the High Street; an intermediate five storey section, and a seven storey part wrapping around the corner of the site fronting on to Throwley Way. To my mind, this stepped approach would successfully break up the mass and bulk of the building and mediate effectively between the lower three storey buildings fronting the High Street and the more substantial structures fronting Throwley Way.
- 17. In addition, the elevations would include recessed sections, and inset balconies, as well as protruding glass boxes, providing interest, articulation and visual punctuation to the facades. The eastern elevation itself is articulated in separate parts, inset at the southernmost end, and at the northern end curving around to a recessed element. An 'active' commercial frontage would be created at ground floor level. The scheme would employ a varied palette of materials, including a combination of multi-grey and darker grey brick, glazed tiles, as well as render and other finishes that would create diversity and

¹¹ Paragraph 60 of the Framework

¹² Paragraph 119 of the Framework

¹³ Paragraph 120 of the Framework

- articulation, thereby avoiding a bland appearance. All these design features would enliven the elevations, avoiding a monolithic look.
- 18. The proposal would rise significantly higher than the existing building. Importantly, however, the site is identified within the Local Plan as an allocation under Policy STC6 ('South of Lodge Place'). This identifies the site for a 'mixed use' comprising residential and retail. The policy also says, amongst other things, that any buildings should be between 1-7 storeys in height and provide active frontages on the ground floor along Lodge Place. Furthermore, Policy 28 advises that within Appendix 7 of the Local Plan, the area falls within an 'Area of Taller Buildings Potential' where, in respect of the appeal site, buildings of 7-10 storeys may be acceptable. These policies establish the principle of a taller building in this location. The proposal would be consistent with both policies in terms of its height, and it is notable that the Council's delegated report records that the 'height and scale of the development is acceptable'¹⁴.
- 19. I note that the Council has recently resolved to grant permission¹⁵ for a tall building of some twenty storeys on a site in the locality to the rear of Times Square Shopping Centre¹⁶ fronting on to Throwley Way. Whilst there are clear differences in the urban context of that site, it does nevertheless establish that the Council itself is content to allow taller developments in the locality. It also reinforces my view that the appeal proposal, of significantly less scale, would not appear alien or out of place, especially given the varied character of the area.
- 20. The site lies adjacent to, but outside, the Sutton Town Centre Conservation Area. Its significance largely derives from Sutton's historical status as an important highway route and stopping point, and the range of commercial architecture, much from the mid-19th century onwards¹⁷. In the immediate vicinity, No 166 High Street to the north of the site, and Nos 152 to 164 to the west form part of the Conservation Area. As the Council notes, the scheme would not be readily visible from the High Street, although the building would be seen, rising in scale in views towards Throwley Way, when looking eastwards down Lodge Place. From here, the building would undoubtedly create a greater sense of enclosure. However, the varied character of the locality means that the appeal scheme would be appropriately assimilated in the area without causing harm or appearing incongruous. The Council has not raised any objections in relation to any harmful impact on the adjacent Conservation Area. I am also satisfied that the proposal would preserve its setting.
- 21. The Council have alleged that the proposal would not improve the public realm. I understand that the appellant offered to fund some public realm improvements via the planning obligation, although this was not taken forward by the Council. The Council has suggested a **greater 'set back' of the building** fronting on to Lodge Place. In fact, I note that the new scheme would be marginally set back from the existing building line, resulting in a wider footpath. I see no advantage in any significantly greater setback, as advocated by the Council, and do not consider it would radically alter the appearance of

¹⁴ Paragraph 5.30

¹⁵ Subject to the completion of a legal agreement and 'Stage 2' referral to the Greater London Authority

¹⁶ DM2020/01573

¹⁷ Sutton Town Centre Conservation Appraisal and Management Plan 2019

- the building or public realm. The Council has described the appeal site as of 'poor character'. I consider the new proposal would improve the area's overall appearance, including the public realm.
- 22. Overall, I am satisfied that the proposal would comply with Policy 28 of the Local Plan which requires new development to be of the highest standard, especially in terms of architectural detailing, respecting local context and responding to local character and heritage assets. It would also comply with Policy D3 and D4 of the London Plan. Together, these policies seek to make the best use of land through a design led approach that optimises site capacity, whilst delivering high quality design and an appropriate form of development.

Living Conditions

- 23. <u>Daylight</u>: The Council has expressed concerns in terms of the effect on living conditions at neighbouring properties, especially in terms of daylight and privacy. The nearest residential properties that would be affected are the flats above Nos 152 to 164 High Street, the residential properties to the rear of 166 High Street (Lodge Place), and the flats within Windsor House. Clearly, the scheme would create a building of greater bulk which would significantly alter the outlook and views from various properties in the vicinity.
- 24. The appellant's Daylight and Sunlight Report¹⁸ uses the methodology set out in the BRE Guidelines¹⁹. In essence, the BRE Guidance says that if, following construction of the proposed development, the Vertical Sky Component (VSC)²⁰ is less than 27% and it is less than 0.8 times its former value, then the reduction in daylight could be noticeable, and the proposed development can be seen to have an adverse impact.
- 25. Although the BRE Guidelines provide an established metric for the assessment of impacts, they do not explicitly give guidance on what would be acceptable in specific circumstances. Indeed, it is made clear that numeric values should be interpreted flexibly and sensibly, especially in more built-up areas where higher degrees of obstruction may be unavoidable. The Mayor's Housing SPG also advises that an appropriate degree of flexibility needs to be applied when using the BRE Guidelines, taking into account local circumstances and the need to optimise housing capacity²¹. It continues that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced, but which still achieve satisfactory living conditions and avoid unacceptable harm.
- 26. The appellant's Daylight and Sunlight Report notes that a number of surrounding properties will see a reduction in daylight and breach the BRE Guidelines. In particular, the majority of the rear windows to 152-164 High Street would fall below the 27% VSC figure as set out in the BRE Guidelines, but most windows achieve a lower VSC figure of 20%. In fact, in a number of cases the windows only fall marginally below 27% figure. At No 166 High Street (Lodge Place), again a number of windows would fail the 27% VSC, but the majority would achieve 20%. At Windsor House, a number of windows fall below the 20% threshold but it should be noted that some windows are recessed because of balconies and daylight levels are already lower.

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¹⁸ Daylight and Sunlight Assessment, MLM Consulting Engineers Ltd

¹⁹ Site Layout Planning for Daylight and Sunlight - A Guide to Good Practice (2011)

 $^{^{\}rm 20}$ This relates to the amount of light entering a room

²¹ Housing Supplementary Planning Guidance, March 2016, Paragraph 1.3.46

- 27. Of considerable relevance is that the principle and acceptability of a building of larger scale and bulk of up to 7 storeys has already been established on this site by virtue of Policy STC6 of the Local Plan, as well as the site's inclusion within an Area of Taller Buildings Potential. This being so, it is inevitable that a more urbanised and enclosed feeling will be created at certain properties in the vicinity. The BRE Guidelines are an aid to analysing effects and they can assist in quantifying effects of development in terms of whether a room would become more gloomy, but they are not standards that, if not complied with, must dictate a scheme must fail. What is acceptable in a particular context remains a matter of judgement. The overall conclusions of the appellant's Report is that 'some of the surrounding properties will see minor reductions in daylight...in particular those which are closer to the proposed development'22. In my judgement, notwithstanding some breaches of the BRE Guidelines, I am satisfied that daylight levels for the most part would be acceptable in nearby properties, and no conflict would arise with Policy 29 of the Local Plan concerned with protecting amenity.
- 28. <u>Privacy</u>: The Council is concerned that the separation distances between the western elevation of the proposal and the existing properties would be insufficient and would result in overlooking and loss of privacy. The separation distances when measured from the edge of balconies would fall below 10 metres. However, the design of the west elevation proposes heavily 'inset' or recessed balconies. This means that the outside walls of the flats would be set back some distance from the outer 'skin' of the western elevation, thereby increasing the actual distance between the external windows/doors of the new flats and the existing properties. In addition, not all the windows at 154-164 High Street serve habitable rooms. The greater impact arising therefore would potentially be overlooking from the balconies themselves. To mitigate any loss of privacy, the appellant proposes the use of opaque glass in the screens which could be secured by condition.
- 29. I acknowledge that some existing residents would undoubtedly experience a significant change in outlook, but it must be remembered that the Council has already accepted the principle of a taller, more substantial building on the site by virtue of Policy STC6. The Council mentions the possibility of a 'slightly increased' ²³ separation on the western elevation in order to improve the situation. However, I am not convinced this would significantly alter the relationship between the new and existing buildings. Some degree of mutual overlooking is inevitable in urban locations such as this. Overall, I am satisfied that no unacceptably harmful loss of privacy or overlooking would result, and there would be no conflict with Policy 29 of the Local Plan.
- 30. <u>Noise</u>: The Council's Hearing Statement²⁴ records that it 'is satisfied with the **appellant's** methodology and conclusions with regard to the protection of future occupiers against environmental noise sources (principally road traffic noise)'. The Council's main concern, re-emphasised at the Hearing, is that the **appellant's** Noise Impact Assessment²⁵ is not sufficiently comprehensive to enable a clear understanding of the degree of the **scheme's** impact, nor to establish the necessary mitigation measures in respect of the adjacent Marks and Spencer's (M&S) service yard. The Council highlights that there are no

²² Daylight and Sunlight Assessment, MLM Consulting Engineers Ltd, Conclusions

²³ Paragraph 7.23, Council's Hearing Statement

²⁴ Paragraph 7.30, Council's Hearing Statement

²⁵ Noise and Air Quality Assessment, Rev A (October 2019) and Rev B (February 2020) M-EC Acoustic Air

existing planning restrictions on the operation of the M&S service yard, and this could potentially cause problems in respect of future residents. The Council also draws attention to a 'Retiming Deliveries Project in 2019' ²⁶ which identified 'extremely noisy' activities with HGVs arriving and reversing (using 'beep-beep' alarms) at the M&S service yard²⁷.

- 31. I am aware that the Framework²⁸ states that existing businesses should not have unreasonable restrictions placed on them as a result of development permitted after they were established. The Framework is clear that where the operation of an existing business could have a significant adverse effect on new development, the applicant (or 'agent of change) should be required to provide suitable mitigation before the development has been completed.
- 32. I accept that the appellant's noise surveys in respect of the M&S Yard were rather limited in scope in terms of understanding the extent of potential noise sources arising in respect of the M&S Yard. Importantly, however, the Council accepted at the Hearing that any noise impacts could be capable of adequate mitigation using orthodox measures, after the appropriate surveys had been undertaken and this could secured by condition²⁹. Again, it is important to remember that Policy STC6 envisages residential development on this site, so the principle of such a land use in proximity to other commercial uses cannot be in dispute. Overall, I am satisfied that an appropriately worded condition would adequately protect future residents from adverse noise impacts, thereby avoiding conflict with Policy 29 of the Local Plan.
- 33. <u>Air Quality</u>: Policy 34 (d-f) of the Local Plan requires development to seek to contribute towards the achievement of national air quality objectives as far as possible and support the objectives of the Council's Air Quality Action Plan. The Policy also says that all development proposals should be at least 'air quality neutral' with respect to particulates and nitrogen oxides. The refusal ground states the Council is not satisfied that the proposal would be 'air quality neutral'.
- 34. The appeal site lies within a Borough-wide Air Quality Management Plan (AQMA) which was designated in 2013. The development proposes no parking for residents and so essentially would be 'car free'. Indeed, the appellant's Air Quality Assessment records that it is unlikely to generate any significant traffic movements and that the impact of the development on ambient air quality would be negligible in that regard³⁰. The appellant's Assessment also states that the Council's air quality reviews do not indicate that existing residences in the vicinity of the appeal site experience adverse levels of pollution, and so the same would apply to new residences. It is also stated that the ambient concentrations of local traffic emissions are below the air quality objectives. The Assessment also states that effects arising during demolition, earthworks and construction phase would present a medium risk of dust annoyance but this could be addressed through mitigation measures secured by condition. The Council has not presented any specific data to contradict these conclusions.
- 35. At the Hearing, the Council's case on air quality appeared to relate more narrowly and specifically to emissions arising from any heating and hot water

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²⁶ This related to the alteration of the existing Traffic Management Order regarding times of deliveries

²⁷ Noise Abatement Society Qualitative Survey, October 2019

²⁸ Paragraph 187

²⁹ The Council confirmed at the Hearing that a condition was acceptable

³⁰ Using Environmental Protection UK (EPUK) & Institute of Air Quality Management (IAQM) Guidance

system within the development³¹. The **Council's** criticism is that scant detail has been provided by the appellant on this issue for it to make a proper or robust assessment, and that such information should be provided 'up front'. However, I am satisfied that different technologies are available that seek to achieve air quality neutrality in terms of heating and hot water provision. I see no reason why such matters could not satisfactorily be resolved by way of suitably worded conditions to ensure full compliance with Policy 34 of the Local Plan regarding 'air quality neutrality'. As such, I do not consider that this is a reasonable basis for withholding planning permission.

Planning Obligation

- 36. A planning obligation has been completed by the parties dated 13 April 2021. This would secure a 'carbon offset' contribution (£68,040); a clause to ensure a 'car free' development by restricting future occupiers (other than blue badge holders) from applying for parking permits within the Sutton Town Centre Controlled Parking Zone; a requirement to submit for approval a 'Travel Plan Statement' (to include measures to encourage the use of sustainable modes of transport) and the payment of a travel management monitoring fee (£2,000). Although the Council has accepted the proposal cannot currently viably provide affordable housing, the obligation also contains provisions that in certain circumstances require 'early stage' and/or 'late stage' viability reviews that would potentially require the provision of affordable housing should it become viable to do so in the future.
- 37. I have no reason to believe that the formulas and charges used by the Council to calculate the various contributions and provisions of the obligation are other than soundly based. I am satisfied that the provisions of the obligation are necessary to make the development acceptable in planning terms, that they directly relate to the development, and fairly and reasonably relate in scale and kind to the development, thereby meeting the relevant tests in the Framework³² and Community Infrastructure Levy Regulations³³. I have taken the planning obligation into account in my deliberations.

Planning Balance and Overall Conclusions

- 38. The relevant legislation requires that the appeal be determined in accordance with the statutory development plan unless material considerations indicate otherwise³⁴. The Framework also requires that proposals should be considered in the context of the presumption in favour of sustainable development, which is defined by economic, social and environmental dimensions and the interrelated roles they perform.
- 39. The scheme would secure a high quality, modern housing and commercial development for which there is a clear need, in a highly sustainable location. The Framework is clear that proposals should promote the effective use of land in meeting the need for homes and other uses; make as much use as possible of previously-developed or 'brownfield' land; promote and support the development of under-utilised land and buildings; and boost the supply of housing. The scheme would achieve all these Framework aims.

33 Regulation 122

³¹ Council's Hearing Statement (Paragraphs 7.56-7.58) and Closing Statement

³² Paragraph 57

³⁴ Section 38(6) of the Planning and Compulsory Purchase Act 2004 & Section 70(2) of the Town and Country Planning Act 1990

- 40. The proposal would be architecturally of high quality and employ a varied and attractive palette of materials. It would significantly improve an area that the Council itself describes as poor character. It would also preserve the character of the adjacent Conservation Area. The proposal would accord with the allocation within the Local Plan as envisaged by Policy STC6. This policy specifically envisages a building up to 7 storeys in height, with active ground floor frontages, and which would contribute to a residential neighbourhood in the north of the town centre.
- 41. The Council has accepted the scheme cannot support affordable housing and I see no sound reasons to withhold permission on grounds of deliverability. I have considered the effect on living conditions of occupiers of adjacent buildings in terms of daylight and privacy and do not consider that **the Council's** objections are sufficiently well founded to cause the appeal to fail on these grounds. In terms of noise impacts, the Council has accepted that a condition would address its concerns. Similarly, a condition could be imposed to ensure appropriate technological solutions are employed to secure air quality neutrality.
- 42. The Framework states that proposals which accord with an up-to-date development plan should be approved without delay. I am satisfied the proposals would accord with the development plan as a whole, including Policies 8, 28, 29, 34 and STC6 of the Local Plan; and Policies D3, D4, D13, D14 and S1 1 of the London Plan. There are no material considerations to indicate that permission should be withheld. Accordingly, I conclude the appeal should be allowed, subject to the conditions set out below.

Conditions

- 43. I have reviewed the agreed list of suggested conditions set out in the Statement of Common Ground in the light of the discussion at the Hearing and advice in the Planning Practice Guidance. The Framework is clear that conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and the development to be permitted, enforceable, precise and reasonable in all other respects³⁵. Where necessary I have reworded the conditions for simplicity and have amalgamated some to avoid duplication. The numbers in brackets relate to the conditions in the schedule.
- 44. A commencement condition is necessary to comply with the relevant legislation (1). A condition requiring compliance with the approved plans is necessary for certainty (2). A condition requiring approval of external materials, including details of balcony screens, is necessary to ensure a high quality scheme and to protect the privacy of existing residents (3).
- 45. Conditions requiring a Construction Logistics and Management Plan, and registration of the site on the Non-Road Mobile Machinery (NRMM) database are necessary to minimise disturbance to local residents, to ensure efficient traffic flow and to mitigate air pollution during the construction phase (4, 5). Conditions relating to landscaping, biodiversity and habitat provision, including ongoing management, are necessary to ensure high quality landscaping and to enhance the biodiversity of the site (6, 7, 8, 9, 10). Conditions relating to

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³⁵ Paragraph 56

- potential site contamination are necessary to protect the health of future occupiers (11, 12, 13).
- 46. As the site is located over a principal aquifer and groundwater source protection zone, conditions are necessary to protect these features (14, 15). Conditions are necessary to ensure adequate drainage of the scheme and to prevent flooding (16, 17). A condition is necessary to ensure that the development is 'air quality neutral' (including its heating and hot water provision) to protect environmental health and to control air pollution (18). Conditions relating to any restaurant / café use requiring details of the extract ventilation system, hours of operation and sound transmission reduction measures are necessary to protect the living conditions of nearby residents (19, 20). For similar reasons a delivery and servicing plan is necessary in respect of the commercial floorspace (21).
- 47. Conditions are required to ensure a sustainable and energy efficient form of development (22, 23). A condition requiring measures to achieve 'Secure by Design' status is necessary to minimise crime (24). A condition is necessary to ensure adequate accessibility for future occupiers of the residential units, including wheelchair users, and their changing needs over time (25). A condition is necessary to ensure items of archaeological interest are adequately dealt with (26). Conditions are necessary relating to noise mitigation to protect the living conditions of future residents (27, 28, 29). Conditions relating to waste management provision and cycle storage are necessary to ensure these matters are appropriately addressed (30, 31). A condition requiring removal of all redundant accesses and crossover is necessary in the interest of highway safety and good design (32).
- 48. A number of the conditions relate to pre-commencement activities. In each case, the requirement of the condition is fundamental to make the scheme acceptable in planning terms. Subject to the imposition of these conditions, I conclude that the appeal should be allowed.

Matthew Nunn

INSPECTOR

APPEARANCES

FOR THE APPELLANT

Matthew Henderson of Counsel, Landmark Chambers

Maurice Fitzgerald Capreon Asset Managers for the

Rachel Charitable Trust

Gary Thomas Planning Works Ltd

Graeme Rowe Stanley Bragg

Vesal Tebyanian Stanley Bragg

Nick Bignall Turner Morum

Chris Neeves MLM Group

Daniel Newbery M-EC Acoustic Air

Michael Forsdyke M-EC Acoustic Air

FOR THE COUNCIL

Iain Williams LB Sutton, Senior Planning Officer

James Bullough Aspinall Verdi

Stuart Cook Aspinall Verdi

Richard Odell LB Sutton

Gavin Chinniah LB Sutton (Observing only)

HEARING DOCUMENTS

- 1. Schedule of London Plan 2021 Policies relevant to the appeal
- 2. Documents relating to development at r/o Times Square Shopping Centre, High Street, Sutton
- 3. Information relating to Sutton Air Quality Management Area
- 4. Closing Statement of the Council
- 5. Closing Statement of the appellant
- 6. Planning Obligation dated 13 April 2021

Schedule of Conditions

- 1) The development hereby permitted shall begin not later than three years from the date of this decision.
- 2) The development hereby permitted shall be carried out in accordance with the following approved plans: 6710-1101-P1, 6710-1201-P1, 6710-1202-P1, 6710-1203-P1, 6710-1204-P1, 6710-1205-P1, 6710-1206-P1, 6710-1207-P1, 6710-1208-P1, 6710-1209-P1, 6710-1210-P1, 6710-1211-P1, 6710-1212-P1, 6710-1213-P1, 6710-1214-P1, 6710-1250, 6710-1301-P2, 6710-1302-P2, 6710-1303-P1, 6710-1304-P1, 6710-1305-P1, 6710-1306-P1, 6710-1401-P1, 6710-1601-, 6710-1602-P1.
- 3) Prior to the commencement of the superstructure of the building, details of the materials (including samples where appropriate) to be used on the external surfaces of the building (including bricks, cladding, windows, doors, and full details of balcony/privacy screens) shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried in accordance with the approved details and permanently retained thereafter.
- 4) No development shall take place, including demolition and site clearance, until a Construction Logistics and Management Plan (CLMP) has been submitted to and approved in writing by the Local Planning Authority. The CLMP shall include: details of loading and unloading of plant and materials; details of storage of plant and materials; measures for traffic management (including routing) so as to minimise the impacts of construction traffic on the highway; means to prevent deposition of mud or other substances on the highway; details of boundary hoardings to be provided; provisions to ensure that works during the demolition / construction phase that generate noise beyond the site boundary shall be only carried out between the hours of 0800 hrs and 1800 hrs Mondays to Fridays, and between 0800 hrs and 1300 hrs on Saturdays and at no time on Sundays and Bank Holidays; means to control dust and emissions to air; means to control noise and vibration. The CLMP should be in accordance with the Greater London Authority's Supplementary Planning Guidance 'Control of Dust and Emissions during Demolition and Construction'. The approved CLMP shall be adhered to throughout the demolition and construction period.
- 5) No development shall take place until the site has been registered on the Non-Road Mobile Machinery (NRMM) database. Details of any non-road mobile machinery to be used on site during construction of the development with net power between 37kW and 560kW shall demonstrate compliance with the standards of the Low Emission Zone for NRMM.
- 6) Prior to the occupation of the development hereby permitted, details of hard and soft landscaping for the communal gardens on the plinth and roof terraces (and any other landscaped areas within the scheme) shall be submitted to and approved in writing by the Local Planning Authority. All hard and soft landscaping and tree planting shall be implemented in accordance with the approved details, and in accordance with a timetable agreed with the Local Planning Authority, and shall be permanently

retained thereafter. Any trees or plants which within a period of five years after planting die, are removed or are seriously damaged or defective shall be replaced in the next planting season with others of a similar size and species, unless the Local Planning Authority gives written approval to any variation.

- 7) No development shall take place until documentary evidence has been submitted to and approved in writing by the Local Planning Authority to show that the development will achieve an improved Green Space Factor (GSF) score of at least +0.2 compared to the baseline GSF score for the site prior to redevelopment. The development shall be carried out in accordance with the approved details and permanently retained thereafter.
- 8) Prior to the development rising above the damp proof course, a Biodiversity Enhancement Plan (BEP) shall be submitted to and approved in writing by the Local Planning Authority. This should take the form of a 'No Net Loss' and 'Net Gain evaluation', working to the provided methodology and in accordance with BS 42020: 2013. Full details of habitat creation, aftercare, management and monitoring of enhancements shall be included in the BEP. It shall include: details of substrate-based biodiverse/bio-solar roofs; a scheme for nesting features on the building including multi-chamber boxes or integrated bricks suitable for a variety of bird species; and numbers and details of each box / brick type, and locations including height above ground and the nearest external lighting. The development shall be built in accordance with the approved scheme and thereafter retained for the lifetime of the development.
- 9) On completion of all landscaping and green infrastructure, a 'Statement of Conformity' shall be submitted to and approved in writing by the Local Planning Authority. The Statement of Conformity will be signed by a suitably qualified ecologist and include evidence to certify that the details for each habitat / feature are in accordance with the previously submitted information.
- 10) Prior to the occupation of the development hereby approved, a management plan for the communal amenity space within the scheme shall be submitted to and approved in writing by the Local Planning Authority. It shall be implemented as approved.
- 11) No development shall take place until a scheme to deal with the risks associated with contamination of the site has been submitted to and approved in writing by the local planning authority. The scheme shall include: (a) A site investigation scheme based on the Phase 1 Report to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site; (b) The results of the site investigation and detailed risk assessment referred to in (a) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken; (c) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (b) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action. The scheme shall be implemented as approved.

- 12) If during the course of construction, contamination not previously identified is found to be present at the site, then no further works shall be carried out until a remediation strategy detailing how this unsuspected contamination shall be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be implemented as approved, verified and reported to the satisfaction of the Local Planning Authority before works resume.
- 13) Prior to occupation of the development hereby permitted, a Verification Report demonstrating the completion of the works set out in the approved remediation strategy, and the effectiveness of the remediation, shall be submitted to and approved in writing by the local planning authority. The Report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include a 'long-term monitoring and maintenance plan' for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan, if appropriate, and for the reporting of this to the Local Planning Authority. Any 'long-term monitoring and maintenance plan' shall be implemented as approved.
- 14) No drainage systems for the infiltration of surface water drainage into the ground shall take place unless approved in writing by the Local Planning Authority. Consent may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to 'Controlled Waters'. The development shall be carried out in accordance with the approved details.
- 15) No piling or any other foundation designs using penetrative methods shall take place unless approved in writing by the Local Planning Authority. Consent may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.
- 16) Subject to the provisions of Condition 14, no development shall take place until a scheme for the management of surface water runoff has been submitted to and approved in writing by the Local Planning Authority. The scheme shall identify appropriate site drainage and flood risk management measures, including sustainable drainage systems, in order to manage surface water runoff as close to its source as possible in accordance with the Mayor of London's drainage hierarchy. The development shall be carried out in accordance with the approved scheme and be permanently retained thereafter.
- 17) Prior to the occupation of the development hereby approved, a drainage management and maintenance plan shall be submitted to and approved in writing by the Local Planning Authority. The approved drainage system, including all its components, shall be managed and maintained thereafter in accordance with the agreed management and maintenance plan.

- 18) Notwithstanding the provision of previous reports and submitted evidence, no development shall take place until an Air Quality Assessment to include measures ensuring the development is 'Air Quality Neutral' has been submitted to and approved in writing by the Local Planning Authority. This shall include details of energy use, including heating and hot water provision within the scheme. All agreed measures shall be fully implemented before the development is occupied. The assessment shall have regard to the most recent air quality predictions and monitoring results from the Council's Review and Assessment process, the London Air Quality Network and the London Atmospheric Emissions Inventory. The assessment shall include all calculations/baseline data and be set out so that the Local Planning Authority can fully audit the report and critically analyse the content and recommendations. In the event development is found to fail its 'Air Quality Neutral' assessment, a scheme for air pollution mitigation measures shall be submitted to and approved by the Local Planning Authority prior to development starting. This shall include mitigation for where air quality neutral transport and building assessments do not meet the relevant benchmarks. Any approved mitigation scheme shall be fully implemented in accordance with details approved under this condition before any part of the development is first occupied.
- 19) Should any part of the ground commercial floorspace be occupied by a restaurant or café use, details of the proposed extract ventilation systems shall be submitted to and approved in writing by the Local Planning Authority. Details shall include specifications of extraction hood, internal fan, flexible couplings, three-stage filtration (grease filters, pre-filters and activated carbon filters) ducting and anti-vibration mountings. The approved scheme shall be installed in accordance with agreed details prior to the commencement of any such use and permanently retained and maintained for its duration. Any restaurant or café use shall not be occupied until details of the operational hours have been submitted to and agreed in writing by the Local Planning Authority. The uses shall not operate outside the agreed operational hours.
- 20) Prior to any use of the ground floor commercial unit as a restaurant/café, a scheme detailing sound transmission reduction measures to be installed between the ground floor use and the residential units immediately above shall be submitted to and approved in writing by the Local Planning Authority. The approved details shall be installed prior to the development being occupied and permanently retained thereafter.
- 21) Prior to the occupation of the commercial floorspace hereby permitted, a full Delivery and Servicing Plan (DSP) for that floorspace shall be submitted to and approved in writing by the Local Planning Authority. The approved DSP shall be adhered to for the duration of the use.
- 22) The commercial floorspace of the development hereby permitted shall achieve a BREEAM rating of 'Excellent'. Appropriate certification / documentation issued by the BRE (or equivalent authorising body) must be submitted to the Local Planning Authority prior to occupation of the commercial floorspace to show the 'Excellent' rating has been achieved. All measures shall be retained for the duration of the development's existence.

- 23) Prior to first occupation of the development hereby permitted, a completed Water Efficiency Calculator for the residential units must be submitted to and approved in writing by the Local Planning Authority to show that internal potable water consumption for each residential unit will be limited to 110 litres per person per day based on the Government's national calculation method for water efficiency for the purposes of Part G of the Building Regulations.
- 24) No development shall take place until details to show how the development complies with the 'Secured by Design' scheme have been submitted to and approved in writing by the Local Planning Authority. The approved details shall be carried out as agreed prior to the occupation of the building and shall be permanently retained thereafter.
- 25) Forty-three (90%) of the residential units hereby permitted shall be designed and constructed in accordance with Building Regulations Part M4(2) ('accessible and adaptable dwellings'). Five (10%) of the residential units hereby permitted shall be designed and constructed in accordance with Building Regulations Part M4(3) ('wheelchair user dwellings'). Evidence from an approved building control inspector demonstrating compliance with these requirements should be submitted to and approved in writing by the Local Planning Authority prior to occupation. The development shall be retained in accordance with these requirements permanently thereafter.
- 26) No development shall take place within the site until the implementation of a programme of archaeological work has been secured in accordance with a written scheme of investigation (WSI) which has been submitted to and approved by the Local Planning Authority. This shall include the methodology of site evaluation, recording, post investigation assessment / analysis / dissemination and the nomination of a competent person or organisation to undertake the agreed works. No development shall take place other than in accordance with the agreed WSI.
- 27) No development shall take place until an Acoustic Report has been submitted to and approved in writing by the Local Planning Authority. The report shall assess the existing acoustic climate at the site and in particular, commercial plant surrounding the site and activity in the adjoining service bay and its potential to affect future occupiers of the development. If the assessment indicates that noise from these sources is likely to adversely affect occupiers, the report shall set out detailed mitigation measures to avoid any adverse impact. The report shall be undertaken by a suitably qualified acoustic consultant/engineer and shall take into account the provisions of BS 8233: 2014 Guidance on sound insulation and noise reduction for buildings and BS 4142: 2014 Methods for Rating Industrial and Commercial Sound. Where the guidance levels under BS 8233: 2014 cannot be met and/or the BS 4142: 2104 assessment shows an indication of adverse impact with windows open, appropriate acoustic ventilation should be provided so that the room can be sufficiently ventilated. The acoustic performance of any passive vent, variable speed mechanical air supply unit or whole house ventilation must be sufficient to ensure that the noise level standards given above are not compromised.

- The approved noise mitigation measures shall be implemented in accordance with the agreed details prior to occupation of the development and be permanently retained thereafter.
- 28) No development shall take place until measures to ensure that the rating level of any plant will be at least 5dBA lower than the existing background noise level at any given time of operation. The noise levels shall be measured or predicted 1m externally to any window at the nearest residential facade. Measurements and assessment shall be made in accordance with BS 4142:2014. The development shall be carried out as approved.
- 29) Details of a 'Welcome Pack' to be provided to all residential units shall be submitted to and agreed in writing by the Local Planning Authority prior to their first occupation. The 'Welcome Pack' shall include details of the noise attenuation measures installed, and guidance on the proper and effective use of the provided measures, including details regarding any servicing and maintenance.
- 30) Prior to occupation of the development, a waste management plan shall be submitted to and approved in writing by the Local Planning Authority. The plan shall demonstrate how refuse and recycling collection shall operate on site. The measures contained within the approved management plan shall be implemented on site prior to occupation and be permanently retained thereafter.
- 31) Prior to the occupation of the development hereby permitted, cycle storage shall be provided in accordance with a scheme previously submitted to and approved in writing by the Local Planning Authority. The approved scheme shall be implemented and retained permanently for the life of the development.
- 32) Prior to the occupation of the development hereby approved, all redundant accesses and crossovers shall be reinstated and returned to a raised kerb in accordance with a scheme to be approved in writing by the Local Planning Authority.

APPENDIX A.20 2-4 LODGE PLACE DAYLIGHT, SUNLIGHT AND OVERSHADOWING IMPACT ASSESSMENT

Daylight and Sunlight Assessment For Capreon, Lodge Place, Sutton



Notice

This document and its contents have been prepared and intended solely for Stanley Bragg Architects information and use in relation to Capreon, Lodge Place, Sutton.

MLM Consulting Engineers Limited assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

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Appendix A - Daylight and Sunlight Analysis

Appendix B - Representation Hearing Report

1 Introduction

MLM Consulting Engineers Ltd have been appointed on behalf of Stanley Bragg Architects to undertake a daylight and sunlight assessment with regards to the proposed development known as Capreon, Lodge Place, Sutton.

This report will assess the potential daylight and sunlight impacts to the surrounding residential properties and in addition assess the anticipated daylight and sunlight levels, available to the proposed residential habitable rooms and amenity spaces. The Daylight and Sunlight Assessment, presented in this report, has been carried out in accordance with the following:

- The Building Research Establishment (BRE) Guide 'Site Layout Planning for Sunlight and Daylight: A Guide to Good Practice (2011)1'.
- The British Standard 'BS8206-2:2008 Lighting for Buildings Part 2: Code of Practice for Daylighting 2'.

The calculations in this report have been based on the Architects Drawings, Site Photographs and Ordnance Survey Information submitted by the design team. In addition, Google Earth Maps and Street Views of the site and surrounding area have been utilised. Where survey information was not available and/or it has not been possible to gain access to the surrounding properties, the location and size of the surrounding windows and details of the internal layouts and floor level heights have been estimated from site photographs and the external appearance of surrounding buildings.

¹ Paul Littlefair (2011), Site Layout Planning for Sunlight and Daylight: A Guide to Good Practice

² BSi British Standard (2008), BS8206-2:2008 Lighting for Buildings – Part 2: Code of Practice for Daylighting

2 Planning Policy and Guidance

The proposed development known as Capreon, Lodge Place, Sutton is within the London Borough of Sutton and the proposals have therefore been considered against National Planning Policy Framework 2018 and the Building Research Establishment (BRE) entitled 'Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice' (Second Edition published September 2011). This document is referred to as the 'BRE guidelines'.

The guide is intended for building Designers and their Clients, Consultants and Planning Officials. The advice given is not mandatory and the report should not be seen as part of the Planning Policy. The aim of the report is to assist rather than constrain the Designer.

The BRE Guidelines also refer to British Standards BS: 8206-02:2008, "Lighting for Buildings – Part 2 Code of Practice for Daylighting" and CIBSE Publication "Lighting Guide: Daylighting and Window Design".

3 Methodology

The Daylight assessments have been undertaken with reference to the Building Research Establishment (BRE) guidelines "Site Layout Planning for Daylight and Sunlight. A Guide to Good Practice". When assessing any potential effects on the surrounding properties, the BRE Guidelines suggest that only those windows that have a reasonable expectation of daylight and/or sunlight need be assessed. In particular the BRE Guidelines at paragraph 2.2.2 state:

"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. 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."

If a property is considered to have a reasonable expectation of daylight and/or sunlight, the following methodology to assess the impacts has been used. However, it is important to understand that in inner-city locations, where townscape issues and urban design dictate the design considerations, a balance needs to be found between the planning issues and the daylight and sunlight impacts. It is therefore considered sometimes necessary to apply different criteria or recognize that the recommendations in the BRE Guidelines should not be strictly applied. This is recognised by the BRE Guidelines themselves, which state at paragraph 2.2.3 of the guidelines:

"Note that numerical values given here are purely advisory. Different criteria may be used based on 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. Appendix F gives further guidance."

3.1 Overshadowing to Existing and Proposed Amenity Spaces

Part 3.3 of the BRE Guidelines provides guidance for assessing the effect of overshadowing of gardens and amenity areas for both existing and new spaces.

The BRE Guidelines suggest that the availability of sunlight should be checked for all open spaces where it is required. These include:

- 'Gardens, usually the main back garden of a house;
- 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;
- Focal points for views such as groups of monuments or fountains'.

Where there is an expectation of sunlight the BRE Guidelines state:

"It is suggested that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21 March. If as a result of a new development an existing garden or amenity area does not meet the above, and the area that can receive two 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 two hours of sunlight on 21 March."

A visual assessment needs to be undertaken of the hourly images to establish whether each amenity area receives at least two hours of sunlight on 21 March. This is considered to be the case if:

- Three consecutive hourly images clearly show that the amenity space will receive sunlight to over half of
 its area, e.g. the images for 11am, 12pm, 1pm and 2pm show more than half of the area is in direct
 sunlight; or
- Two sets of two consecutive hourly images show the amenity space will receive sunlight to over half of
 its area, e.g. the images for 10am, 11am and 2pm, 3pm show more than half of the area is in direct
 sunlight.

If an amenity area will not meet the criteria, a second visual assessment is undertaken comparing the existing and proposed overshadowing images. If it is clear that any additional overshadowing effects will meet the above criteria, no further assessments are considered necessary.

3.2 Daylighting Assessments to Existing Buildings

The BRE Guidelines sets out various methods for assessing the daylight impacts on neighbouring properties. These methods are summarised below.

The first method advises that loss of light to existing windows need not be analysed if the distance of each part of the new development from the existing window is three or more times its height above the centre of the existing window. In these cases the loss of light will be small. Thus if the new development were 10 m tall and a typical existing ground floor window would be 1.5 m above the ground, the effect on existing building more than $3 \times (10-1.5) = 25.5$ m away need not be analysed.

If the proposed development is taller or closer than this then the second test needs to be applied.

The second method is to strike a line at an angle of 25° from the centre of the lowest existing windows. If the profile of the proposed development sits beneath the 25° angle line then the development is unlikely to have a substantial effect on the daylight enjoyed by the existing building. This test is known as the 25° angle test.

If the proposed development protrudes past the 25° angle line then the third test needs to be applied.

The third method calculates the Vertical Sky Component (VSC) at the centre point of each affected window on the outside face of the wall. The VSC is an external daylighting calculation that measures the amount of direct daylight to a specific window point on the outside of a property. The calculations fundamentally assess the amount of blue sky that you will see, converting results into a percentage. A window looking into an empty field will achieve a maximum value of 40%. However, the BRE suggests that 27% VSC is a good level of daylight. If a window does not achieve 27% VSC in the proposed scenario, then the fourth test is used. VSC levels are classified as follows:

VSC Thresholds				
At least 27%	Conventional window design will usually give reasonable results.			
Between 15% and 27%	Special measures (larger windows, changes to room layout) are usually needed.			
Between 5% and 15%	It is very difficult to provide adequate daylight unless very large windows are used.			
Less than 5%	It is often impossible to achieve reasonable daylight, even if the whole window wall is glazed.			

The fourth method involves calculating the VSC at the window in the existing situation, i.e. before redevelopment. If the reduction of VSC is less than 0.8 times its former value, then the occupants of the adjoining building are likely to notice the reduction in daylight.

In conjunction with the VSC tests, the BRE Guidelines and British Standard 8206-2:2008 suggest that the distribution of daylight is assessed using the No Sky Line (NSL) test. This test separates those areas of the working plane that can receive direct skylight and those that cannot.

The BRE Guidelines suggest that the daylight distribution test is undertaken to existing surrounding properties when the internal arrangements are known. To assess the impact of any reduction the BRE Guidelines suggest:

"If, following construction of a new development, the no sky line moves so that the area of the existing room, which does receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit."

The method chosen for the purpose of this assessment is the third method, which involves calculation of the Vertical Sky Component

Daylighting Assessments to Proposed Buildings

A further daylighting method, which is used for the internal daylighting levels of all the new residential construction, is the Average Daylight Factor (ADF) calculation. This calculation takes into account the size and shape of the room and window, the reflectance of the room's surfaces and diffuse transmittance of the glazing as well as the amount of blue sky calculated in the VSC calculation.

The BRE Guidelines set out the ADF test at Appendix C and further guidance, such as the reflectance of certain materials, is given within the British Standard BS8206-2:2008.

The BRE Guidelines and British Standard 8206-2:2008 suggest that the following ADF values should be achieved for the following room types:

- Bedrooms 1%;
- Living Rooms 1.5%;
- Kitchens 2%.

The ADF results are obtained for each room individually and expressed as a percentage. Where there are two or more windows serving one room the ADF is found separately for each window, and the results summed.

Using the guidelines set out in the British Standard, a target of 2% should be applied for living/dining/kitchen areas as it is recommended that the highest target for the various room uses is adopted. This is however not considered to be appropriate where the kitchen is at the back of a deep room behind the living room and/or dining area, where it is clearly not designed to rely on natural daylight but electric lighting.

To overcome the above issue and to increase the number of rooms meeting the criteria would be to create internal kitchens that would decrease the size of the living/dining space and reduce the ADF target to 1.5%. The BRE Guidelines however recommend that internal kitchens should be avoided and state at paragraph 2.1.14:

"Non-day-lit internal kitchens should be avoided wherever possible, especially if the kitchen is used as a dining area too. If the layout means that a small internal galley-type kitchen is inevitable, it should be directly linked to a well day-lit living room."

As suggested by the BRE Guidelines, and where deep living/dining/kitchen areas are proposed, if the results show an ADF above 1.5%, the statement at paragraph 2.1.14 is considered to be met.

For new developments the British Standard 8206-2:2008 suggests that the uniformity of daylight within a room will be poor if a significant area of the working plane lies beyond the no sky line. The British Standard BS8206-2:2008 also suggests that 'a significant area' is more than 20% i.e. 80% of the room area should be in front of the no sky line. This level of daylight distribution however is not considered practical for urban areas and large rooms over 4 m deep.

3.3 Position of No-Sky Line

A measure to assess the distribution of daylight in a space is the percentage of area that lies beyond the no-sky line i.e. the area that receives no direct skylight. This is important as it indicates how good the distribution of daylight is in a room. If more than 20% of the working plane lies beyond the no-sky line, poor daylight levels are expected within the space.

3.4 Sun lighting Assessments to Existing Buildings (Annual & Winter Probable Sunlight Hours)

The amount of direct sunlight a window can enjoy is dependent on its orientation and the extent of any external obstructions. For example, a window that faces directly north, no matter what external obstructions are present, will not be able to enjoy good levels of sunlight throughout the year. However, a window that faces directly south with no obstructions will enjoy very high levels of sunlight throughout the year. As the potential to receive sunlight is dependent on a window's orientation, the BRE Guidelines state:

"To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun."

To assess the potential effect of sunlight on existing windows the BRE Guidelines set out three methods. These methods are summarised below.

The first test is to apply the 25° angle test as detailed above. If the profile of the proposed development sits beneath the 25° angle line then the development is unlikely to have a substantial effect on the sunlight enjoyed by the existing building. If the proposed development protrudes past the 25° angle line then the second test needs to be applied.

For the second sun lighting test the BRE Guidelines suggest calculating the Annual Probable Sunlight Hours (APSH) at the centre of each window on the outside face of the window wall. The BRE Guidelines suggest that:

"If this window point can receive more than one quarter of APSH (see section 3.1), including at least 5% of APSH in the winter months between 21 September and 21 March, then the room should still receive enough sunlight."

The third method involves calculating the APSH at the window in the existing situation, i.e. before redevelopment. If the reduction of APSH between the existing and proposed situations is less than 0.8 times its former value for either the total APSH or in the winter months; and greater than 4% for the total APSH, then the occupants of the adjoining building are likely to notice the reduction in sunlight.

The methodology chosen to assess is the third method, which involves calculation of APSH for the existing developments facing south.

4 Scope of the Assessment

The site is currently occupied by single storey commercial units facing Lodge Place road and a two-storey commercial block behind it. The proposal comprises demolishing the existing commercial units and the development of a seven-storey staggering block of residential units.

The site is located in a largely commercial area of Sutton, very close to the High Street. Access to the site is via Lodge Place and Throwley Way.

For the purpose of this assessment, the potential daylight and sunlight impacts of the proposed development will be assessed on the surrounding residential properties towards the north, west and northwest of the site, which are accessed through Lodge place.



Figure 1 - Site Plan/Location

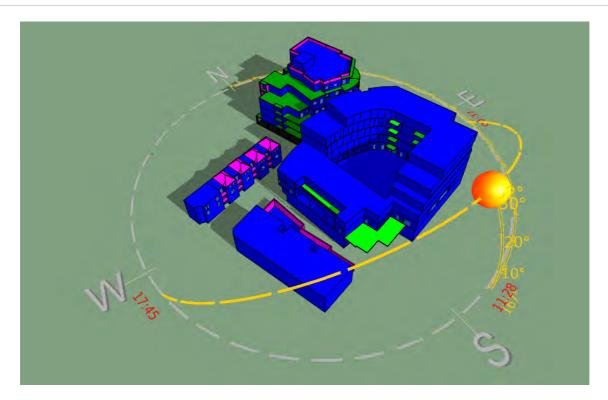


Figure 2 Proposed Development with immediate context

In relation to Annual & Winter Probable Sunlight hours (APSH/WPSH) and Vertical Sky Component (VSC), the existing dwellings alongside Lodge Place and that to the west of the site have been assessed.

The Appendices in this report illustrates the Visual Sky Component values for the neighbouring properties' windows, sunlight hours received for each relevant neighbouring amenity spaces and average daylight factor in every assessed room of the proposed development.

The sunlight hours on amenities and average daylight factor for the proposed development have not been included on the report as the project is still under development.

5 Results

5.1 Daylight and Sunlight to Surrounding Properties

The surrounding residential properties are located to the East and North of the proposed development and understood to be set-out as individual houses and apartments. The summary of the daylight and sunlight assessment is given below.

5.2 Daylight (VSC)

Full results of the daylight assessment can be found in Appendix A and Table 1 below.

A summary of the assessments is given below.

As described in the 'Methodology' section, there are various methods set out by BRE for assessing the daylight impacts on neighbouring properties. For the purposes of this assessment, the third method (VSC analysis) has been applied to calculate the impact on daylight on the building to the west of the proposed development (back of Sutton High Street), that to the north-west (along Lodge Place) and that to the north (Windsor House) due to proximity to the proposed development.

BRE recommends that if the VSC at the centre of each main window assessed is greater than 27% then enough daylight should still be reaching the windows of the existing buildings. A complete façade simulation analysis for the surrounding buildings was carried out. In addition, a second simulation was performed in order to retrieve the tangible numerical results. The VSC results in Appendix demonstrates that most of the windows assessed for the building at the back of Sutton High Street do not meet the required percentage and hence fail to comply with the BRE guidelines recommended criteria. However, most of windows achieve VSC of 20%. Please refer to Appendix B – Representational hearing report.

5.2.1 Back of Sutton High Street

A total of 17 windows have been assessed, of which 12 fail to achieve the reduction of 0.80. However all the VSC values are between 15% and 27%. There only two windows that fail the threshold of VSC 20% as per as representational hearing report - applicable for developments in London (Appendix B).

5.2.2 Lodge Place

A total of 25 windows have been assessed, of which seven fail to achieve the reduction of 0.80. There are two windows, which were previously failing due to overshadow from balcony. From the VSC failures, there are only five windows which do not achieve VSC of 20%, from which four of them, are failing from current situation.

5.2.3 Windsor House

A total of 77 windows have been assessed, of which 30 fail to achieve reduction of 0.80. From the 77 windows assessed, 37 windows are currently failing the VSC threshold of 27% due to the building configuration (balconies for example).

Table 1 - Vertical Sky Component					
	Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)
	W1	35.78	25.82	0.72	FAIL
	W2	36.08	23.94	0.66	FAIL
	W3	37.96	29.24	0.77	PASS
	W4	38.07	28.76	0.76	PASS
reet	W5	38.09	28.7	0.75	PASS
gh St	W6	38.03	28.33	0.74	PASS
H.	W7	35.48	21.53	0.61	FAIL
Back of Sutton High Street	W8	35.02	20.57	0.59	FAIL
c of S	W9	37.9	27.33	0.72	PASS
Back	W10	37.77	26.39	0.70	FAIL
	W11	37.44	26.45	0.71	FAIL
	W12	37.31	25.8	0.69	FAIL
	W13	34.01	18.22	0.54	FAIL
	W14	33.52	17.28	0.52	FAIL

Table 1 - Vertical Sky Component					
	Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)
	W15	36.88	24.12	0.65	FAIL
	W16	36.39	23.23	0.64	FAIL
	W17	36.51	22.91	0.63	FAIL
	W1	35.68	33.96	0.95	PASS
	W2	35.01	32.66	0.93	PASS
	W3	38.5	36.35	0.94	PASS
	W4	38.45	36.23	0.94	PASS
Φ	W5	38.17	35.59	0.93	PASS
Lodge Place	W6	16.1	14.83	0.92	PASS
odge	W7	28.87	27.34	0.95	PASS
ĭ	W8	36.26	32.44	0.89	PASS
	W9	38.77	35.8	0.92	PASS
	W10	38.75	35.55	0.92	PASS
	W11	18.39	14.85	0.81	PASS
	W12	29.77	27.32	0.92	PASS

Table 1 - Vertical Sky Component					
	Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)
	W13	36.55	30.47	0.83	PASS
	W14	38.83	34.06	0.88	PASS
	W15	39.01	34.4	0.88	PASS
	W16	14.09	10.78	0.77	FAIL
	W17	27.01	24.41	0.90	PASS
	W18	36.94	26.26	0.71	FAIL
	W19	38.99	30.86	0.79	PASS
	W20	39.02	30.27	0.78	PASS
	W21	16.23	6.17	0.38	FAIL
	W22	27.73	19.24	0.69	FAIL
	W23	37.28	21.75	0.58	FAIL
	W24	38.76	26.3	0.68	FAIL
	W25	38.77	25.48	0.66	FAIL

		Table	1 - Vertical Sky Componen	t	
	Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)
	W1	31.42	31.11	0.99	PASS
	W2	39.12	38.93	1.00	PASS
	W3	29.81	29.46	0.99	PASS
	W4	36.29	36.19	1.00	PASS
	W5	38.22	37.61	0.98	PASS
	W6	38.84	38.6	0.99	PASS
Windsor House	W7	39.05	38.72	0.99	PASS
Sor H	W8	39.37	31.37	0.80	PASS
Vinds	W9	39.3	30.26	0.77	PASS
>	W10	22.08	14.54	0.66	FAIL
	W11	22.44	14.67	0.65	FAIL
	W12	39.64	28.67	0.72	PASS
	W13	39.9	32.07	0.80	PASS
	W14	39.32	34.31	0.87	PASS
	W15	39.29	34.02	0.87	PASS

Table 1 - Vertical Sky Component									
Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)					
W16	32.19	27.08	0.84	PASS					
W17	39.9	39.66	0.99	PASS					
W18	39.76	39.51	0.99	PASS					
W19	26.42	26.16	0.99	PASS					
W20	29.64	28.71	0.97	PASS					
W21	39.67	26.55	0.67	FAIL					
W22	28.89	21.92	0.76	FAIL					
W24	39.43	21.87	0.55	FAIL					
W25	39.54	21.56	0.55	FAIL					
W26	11.45	2.71	0.24	FAIL					
W27	14.25	3.7	0.26	FAIL					
W28	39.56	25.59	0.65	FAIL					
W29	39.69	30.45	0.77	PASS					
W30	39.41	38.92	0.99	PASS					
W31	39.32	38.62	0.98	PASS					

Table 1 - Vertical Sky Component									
Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)					
W32	26.2	25.32	0.97	PASS					
W33	14.19	12.56	0.89	PASS					
W34	18.52	5.46	0.29	FAIL					
W35	11.36	2.4	0.21	FAIL					
W36	8.32	6.27	0.75	FAIL					
W38	38.61	21.56	0.56	FAIL					
W39	10.85	1.6	0.15	FAIL					
W40	13.74	1.62	0.12	FAIL					
W41	39.09	23.39	0.60	FAIL					
W42	39.43	29.08	0.74	FAIL					
W43	38.06	37.26	0.98	PASS					
W44	37.59	36.64	0.97	PASS					
W45	24.02	23.15	0.96	PASS					
W46	11.92	9.32	0.78	FAIL					
W47	12.99	1.96	0.15	FAIL					

Table 1 - Vertical Sky Component									
	Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)				
	W48	9.00	5.58	0.62	FAIL				
	W49	37.84	19.03	0.50	FAIL				
	W50	8.33	5.04	0.61	FAIL				
	W51	11.38	2.28	0.20	FAIL				
	W52	7.83	3.99	0.51	FAIL				
	W53	38.12	21.61	0.57	FAIL				
	W54	38.6	26.14	0.68	FAIL				
	W55	38.92	30.46	0.78	PASS				
	W56	11.87	11.39	0.96	PASS				
	W57	11.51	10.48	0.91	PASS				
	W58	11.44	10.02	0.88	PASS				
	W59	10.3	8.46	0.82	PASS				
	W60	11.49	3.03	0.26	FAIL				
	W61	11.46	2.91	0.25	FAIL				
	W62	12.07	4.24	0.35	FAIL				

Table 1 - Vertical Sky Component									
Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)					
W63	15.1	8.14	0.54	FAIL					
W64	17.5	14.93	0.85	PASS					
W65	19.93	18.79	0.94	PASS					
W66	33.57	33.67	1.00	PASS					
W67	39.94	40.03	1.00	PASS					
W68	9.50	9.7	1.02	PASS					
W69	14.76	13.96	0.95	PASS					
W70	13.76	13.83	1.01	PASS					
W71	25.36	24.49	0.97	PASS					
W72	13.83	13.89	1.00	PASS					
W73	25.58	24.44	0.96	PASS					
W74	13.57	13.77	1.01	PASS					
W75	25.77	24.72	0.96	PASS					
W76	32.76	30.32	0.93	PASS					
W77	33.90	32.27	0.95	PASS					

	No. of windows analysed	No. windows passing the BRE threshold (VSC above 27% or VSC below 27% but reduction ratio of more than 0.8)	No. of windows failing BRE threshold (VSC <27% and reduction ratio <0.80)	% windows failing BRE threshold (VSC <27% and reduction <0.80)	No. of windows failing BRE threshold (VSC <27% and reduction ratio <0.8) but are above 20% VSC value	% of the failed windows under BRE threshold above 20% VSC value
Back of Sutton High Street	17	5	12	29.41%	2	16.67%
Lodge Place	25	18	7	72.00%	3	42.86%
Windsor House	77	45	32	58.44%	20	62.50%
Total	119	68	51	42.86%	25	49.02%

Table (i) – Summary of Results – Vertical Sky Component (VSC)

Essential data has been extracted and tabulated in the summary table above. An impact is seen on the surrounding buildings however the VSC threshold is seen to rarely go below 20% due to the proposed development. Many context fenestrations are failing in the existing scenario, therefore the proposed development cannot be attributed in those scenarios. A total of 119 windows have been analysed.

51 windows (42.68%) of the windows are seen to go below 27% VSC threshold value. However out of which 25 windows are below 20% VSC threshold value and a reduction ratio of less than 0.8. As the west and the north side windows are close to the proposed development therefore an impact is perceived on the fenestrations. However, the National Planning Policy does state that in certain scenarios it is difficult to avoid the surrounding buildings being impacted because of the proximity of the site and land location. The guide also makes clear that, 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 the existing buildings in the area.

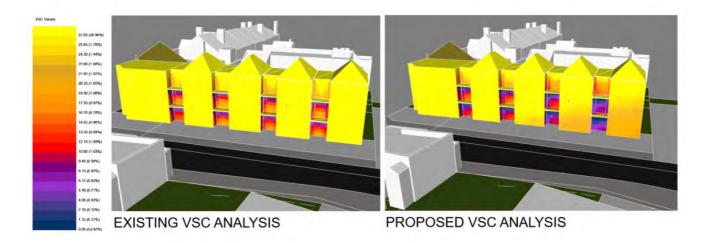


Figure 3 VSC Comparison for Lodge Place in context to the proposed development

An example of the surrounding building, Lodge Place, is highlighted in the VSC analysis above. It can be noted that areas of the façade under the balconies receive less daylight in the existing scenario. The proposed building affects the Eastern side of the existing development. The western side receives negligible impact.

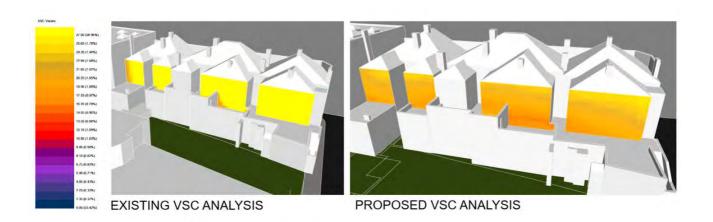


Figure 4 VSC Comparison of VSC at the Back of Sutton High Street in proximity to the proposed development

Similarly, the back of Sutton high street is also analysed to reveal the direct impact on VSC being received by the facades of the dwelling in closer proximity to the site. The façade has an impact however, none of the specific windows receive negative impacts. The façade receiving lesser than 27% Vertical Sky Component is still seen to be well above 20% values. Hence, the windows being impacted can be considered to still receive a considerable amount of daylight. Please refer to Table 1 for the exact incident values of VSC striking the windows.

5.3 Annual & Winter Probable Sunlight Hours (APSH & WPSH) – Neighbouring Properties

Full results of the daylight assessment can be found in Table 2. A summary of the assessments is given below.

As described in the 'Methodology' section, there are various methods set out by BRE for assessing the sunlight impacts on neighbouring properties. For the purposes of this assessment, the second method (APSH analysis) has been applied to calculate the impact on sunlight on Lodge Place Road properties due to the proposed development.

BRE guidelines recommends that if the centre of each window on the outside face of the window wall can receive more than 25% of APSH, including at least 5% of APSH in the winter months between 21 September and 21 March, then the existing rooms should still receive enough sunlight.

South facing windows were assessed for the neighbouring properties, which includes all 25 windows on the building along Lodge Place and 39 windows of Windsor House.

Of the 25 windows on Lodge Place, the following failed to meet the BRE guidelines:

- Four windows on Annual Probable Sunlight hours of which 3 already failed in the existing state.
- One window on Winter Probable Sunlight hours, which represents 0.04% of the assessed windows. Of the 39 windows on Windsor House, the following failed to meet the BRE guidelines:
- 22 windows on Annual Probable Sunlight hours of which 16 already failed in the existing state.
- Eight windows on Winter Probable Sunlight hours, which represents 12% of the assessed windows.

Full results are plotted in table 2 below. It is important to note that most of the windows which do not achieve the reduction ratio were already achieving low values for both Annual Probable Sunlight Hours in the existing situation. This is mainly due to the location of those windows, which are recessed within balconies, and therefore overshadowed by the building itself. These recessed windows can be seen in Figure 3 and Figure 4.

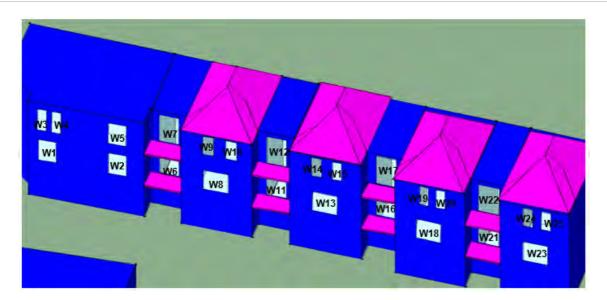


Figure 5 – Figure illustrating windows that have been assessed in Lodge Place

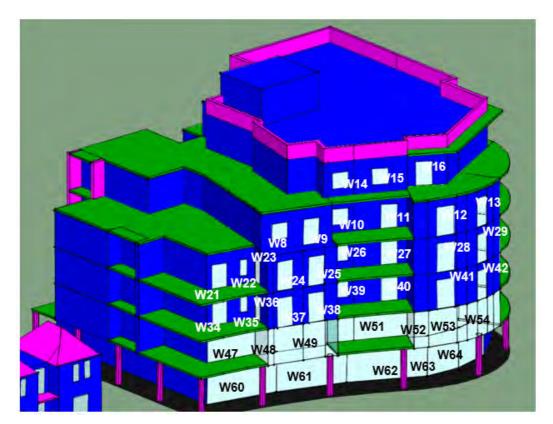


Figure 6 – Figure illustrating windows that have been assessed in Windsor House

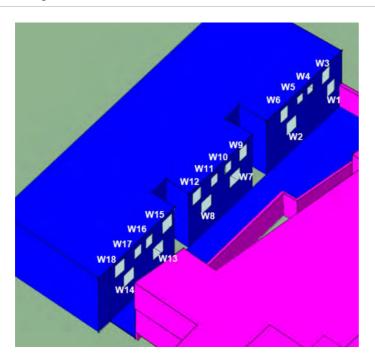


Figure 7 – Figure illustrating windows that have been assessed at the back of Sutton High Street

I	Table 02 - Annual and Winter Probable Sunlight Hours - Neighbouring properties									
		Exis Situa			Proposed Situation		ction tio	Annual Threshold Compliance	Winter Threshold	
Building Name	Window	Annual	Winter	Annual	Winter	Annual	Winter	(>25% Annual)	Compliance (>5%)	
	W1	74.97	32.61	67.12	27.16	0.90	0.83	PASS	PASS	
	W2	75.03	32.66	65.46	26.17	0.87	0.80	PASS	PASS	
	W3	80.43	38.07	73.61	31.94	0.92	0.84	PASS	PASS	
	W4	80.43	38.07	73.55	31.94	0.91	0.84	PASS	PASS	
	W5	80.44	38.07	72.55	31.42	0.90	0.83	PASS	PASS	
	W6	21.79	16.77	19.26	13.66	0.88	0.81	FAIL	PASS	
Place	W7	45.34	23.12	41.95	19.5	0.93	0.84	PASS	PASS	
ge P	W8	75.15	33.23	65.99	27.45	0.88	0.83	PASS	PASS	
Lodge	W9	80.53	38.17	72.14	30.72	0.90	0.80	PASS	PASS	
_	W10	80.51	38.15	71.52	30.56	0.89	0.80	PASS	PASS	
	W11	25.06	18.83	19.87	13.14	0.79	0.70	FAIL	PASS	
	W12	46.53	24.33	40.99	18.6	0.88	0.76	PASS	PASS	
	W13	74.16	33.81	62.61	24.59	0.84	0.73	PASS	PASS	
	W14	79.72	37.64	67.94	28.55	0.85	0.76	PASS	PASS	
	W15	79.13	37.66	66.8	27.75	0.84	0.74	PASS	PASS	

	Table 02 - Annual and Winter Probable Sunlight Hours - Neighbouring properties									
			Existing Proposed Reduction ituation Situation Ratio				Annual Threshold Compliance	Winter Threshold		
Building Name	Window	Annual	Winter	Annual	Winter	Annual	Winter	(>25% Annual)	Compliance (>5%)	
	W16	19.3	15.29	12.75	8.67	0.66	0.57	FAIL	PASS	
	W17	41.97	20.5	36.43	15.21	0.87	0.74	PASS	PASS	
	W18	73.63	33.36	56.21	18.96	0.76	0.57	PASS	PASS	
	W19	77.97	37	63.6	25.4	0.82	0.69	PASS	PASS	
	W20	77.78	37.01	62.57	24.38	0.80	0.66	PASS	PASS	
	W21	22.32	18.11	7.98	4.37	0.36	0.24	FAIL	FAIL	
	W22	42.12	21.75	28.77	8.79	0.68	0.40	PASS	PASS	
	W23	73.59	33.8	49.26	14.14	0.67	0.42	PASS	PASS	
	W24	76.65	36.51	57.28	19.45	0.75	0.53	PASS	PASS	
	W25	75.4	35.82	55.68	18.24	0.74	0.51	PASS	PASS	
	W8	79.8	36.75	68.55	26.14	0.86	0.71	PASS	PASS	
	W9	78.05	35.71	65.44	24.21	0.84	0.68	PASS	PASS	
	W10	34.12	27.07	21.46	15.36	0.63	0.57	FAIL	PASS	
	W11	35.15	18.47	21.23	9.89	0.60	0.54	FAIL	PASS	
	W12	80.56	37.5	62.83	20.16	0.78	0.54	PASS	PASS	
	W13	81.25	38.19	63.34	21.24	0.78	0.56	PASS	PASS	
	W14	77.55	36.18	73.46	32.09	0.95	0.89	PASS	PASS	
	W15	76.4	36.11	73.35	32.3	0.96	0.89	PASS	PASS	
Φ	W16	54.25	32.58	47.59	27.38	0.88	0.84	PASS	PASS	
louse	W21	61.88	28.42	49.47	17.5	0.80	0.62	PASS	PASS	
or F	W22	50.91	21.71	42.83	15.88	0.84	0.73	PASS	PASS	
Windsor H	W23	38.19	14.83	32.95	11.69	0.86	0.79	PASS	PASS	
>	W24	78.66	36.63	55.24	15.55	0.70	0.42	PASS	PASS	
	W25	78.4	36.63	54.58	15.79	0.70	0.43	PASS	PASS	
	W26	17.64	17.4	5.38	5.32	0.30	0.31	FAIL	PASS	
	W27	20.66	16.72	5.28	3.81	0.26	0.23	FAIL	FAIL	
	W28	80.56	37.5	58.39	16.47	0.72	0.44	PASS	PASS	
	W29	81.25	38.19	59.36	18.26	0.73	0.48	PASS	PASS	
	W34	31.89	25.01	13.82	9.5	0.43	0.38	FAIL	PASS	
	W35	22.12	19.15	8.16	7	0.37	0.37	FAIL	PASS	
	W36	21.44	14.23	10.49	6.58	0.49	0.46	FAIL	PASS	

	Table 02 - Annual and Winter Probable Sunlight Hours - Neighbouring properties									
		Exis Situa		Prop Situa		Redu Ra		Annual Threshold Compliance	Winter Threshold	
Building Name	Window	Annual	Winter	Annual	Winter	Annual	Winter	(>25% Annual)	Compliance (>5%)	
	W37	77.27	36.5	49.47	11.51	0.64	0.32	PASS	PASS	
	W38	76.55	36.36	47.86	12.02	0.63	0.33	PASS	PASS	
	W39	17.64	17.4	4.56	4.5	0.26	0.26	FAIL	FAIL	
	W40	20.66	16.72	3.63	2.28	0.18	0.14	FAIL	FAIL	
	W41	80.24	37.18	54.51	15.22	0.68	0.41	PASS	PASS	
	W42	80.38	37.32	55.93	16.75	0.70	0.45	PASS	PASS	
	W47	18.78	15.38	4.94	3.45	0.26	0.22	FAIL	FAIL	
	W48	21.14	11.28	10.02	3.41	0.47	0.30	FAIL	FAIL	
	W49	73.82	34.51	43.94	10.09	0.60	0.29	PASS	PASS	
	W51	14.12	11.84	2.48	2.01	0.18	0.17	FAIL	FAIL	
	W52	17.99	7.2	7.77	0.99	0.43	0.14	FAIL	FAIL	
	W53	72.51	31.54	47.52	12.57	0.66	0.40	PASS	PASS	
	W54	77.45	34.4	51.57	14.46	0.67	0.42	PASS	PASS	
	W60	19.99	16.46	7.23	5.7	0.36	0.35	FAIL	PASS	
	W61	18.79	15.51	7.47	6.61	0.40	0.43	FAIL	PASS	
	W62	20.93	16.5	11.34	9.67	0.54	0.59	FAIL	PASS	
	W63	25.71	19.94	17.01	10.26	0.66	0.51	FAIL	PASS	
	W64	30.73	21.05	24.81	12.87	0.81	0.61	FAIL	PASS	

5.4 Sunlight Hours on Amenities

The amenity areas in the context of the site and inside the proposed development were assessed to determine the number of average sunlight hours being received at the

Equinox. The amenity area of the dwellings in the west and the courtyard of the proposed building block was analysed. It was revealed that the amenity area of west dwelling at the back of Sutton High Street will receive more than 2 hours of sunlight on the Equinox. The central courtyard of the proposed development revealed slight overshadowing on the southern side of the analysed space. However, this approximately accounts for 20% of the space and the rest of the space received more than 2 hours of sunlight on the Equinox.

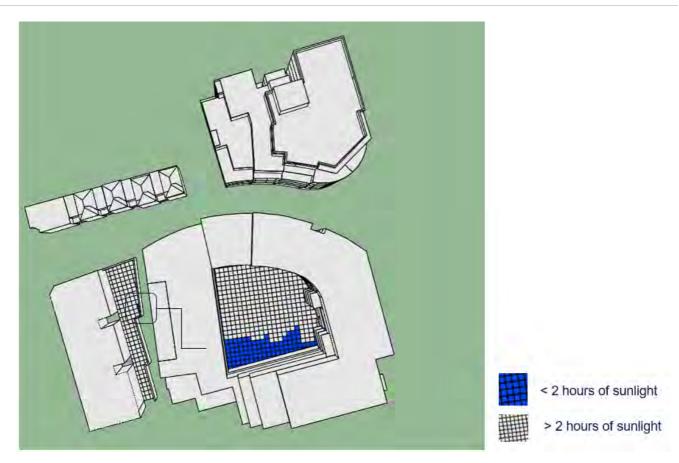


Figure 8 - Sunlight hours on amenity areas (Existing and proposed areas)

5.5 Internal Daylighting Analysis (Average Daylight Factor)

Full results of the daylight assessments are shown within Appendix A and Table 3. The appendix A shows the outputs of the first floor daylighting analysis as representatives of every apartment.

A Summary of the results is given below.

A total of 20 rooms have been assessed. All of them comply with ADF and NSL numerical thresholds, which confirms that habitable rooms are very well lit.

For the purpose of this assessment, the simulations have been carried out for the First floor as it represents the worse case scenario. In addition, the apartments above follows the same design principle.

Most of the units have an open plan style with their living, dining and kitchen as one linked space. In this instance, these Living room/kitchens ADF threshold of 1.5% should be accepted.

Table 3- Average Daylight Factor - First Floor Plan - Proposed Development							
Room Name	AD	F (%)	1	NSL			
ROOM Name	Target	Achieved	Target	Achieved			
1F-101-Bedroom 1	1.00%	2.20%	≥0.8	0.98			
1F-101-Bedroom 2	1.00%	2.20%	≥0.8	1			
1F-101-Living/Kitchen	1.50%	2.20%	≥0.8	1			
1F-102-Bedroom 1	1.00%	2.20%	≥0.8	1			
1F-102-Bedroom 2	1.00%	1.00%	≥0.8	1			
1F-102-Bedroom 3	1.00%	1.50%	≥0.8	0.94			
1F-102-Living/Kitchen	1.50%	1.80%	≥0.8	0.98			
1F-103-Bedroom 1	1.00%	2.20%	≥0.8	1			
1F-103-Living/Kitchen	1.50%	1.90%	≥0.8	1			
1F-104-Living/Kitchen	1.50%	3.70%	≥0.8	1			
1F-104-Bedroom 1	1.00%	2.50%	≥0.8	1			
1F-104-Bedroom 2	1.00%	2.70%	≥0.8	1			
1F-105-Kitchen/Living	1.50%	2.70%	≥0.8	1			
1F-105-Bedroom 1	1.00%	3.00%	≥0.8	1			
1F-106-Bedroom 1	1.00%	3.60%	≥0.8	1			
1F-106-Living/Kitchen	1.50%	2.40%	≥0.8	1			
1F-107-Bedroom 1	1.00%	1.10%	≥0.8	1			
1F-107-Living/Kitchen	1.50%	2.30%	≥0.8	1			
1F-108-Bedroom 1	1.00%	1.20%	≥0.8	1			
1F-108-Living/Kitchen	1.50%	2.50%	≥0.8	1			

6 Conclusions

The quality of daylight and sunlight amenity within the surround residential properties and within the proposed development has been assessed using VSC, ADF and ASPH/WSPH and Sunlight hours assessments as recommended within the BRE Document "Site Layout Planning" (BR 209) and the British Standard Document BS 8206 Part 2.

The results of these assessments have shown that some of the surrounding properties will see minor reduction in daylight or sunlight beyond levels recommended within the relevant guidance. In particular the properties which are closer to the proposed development. The sunlight hours assessed on the amenity areas were also seen to meet the threshold of receiving more than 2 hours sunlight more than 50% of the region being evaluated.

It is important to note that the VSC is a 'spot' measure of the skylight reaching the mid-point of a window from an overcast sky. Please refer to Appendix B – Representation Hearing Report (D&P/3067/03), which also acknowledges VSC of 20% for projects located in London due to some dense urban fabric environment.

The BRE guide also acknowledges that numerical values are purely advisory and should be interpreted flexibly, since natural light is only one of many factors in the site layout design. The guide also makes clear that, 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 the existing buildings in the area.

The National Planning Policy Framework 2018 highlights that local authorities should take flexible approach in applying policies or guidance relating to daylight and sunlight when applications make efficient use of the land as long as the resulting scheme would provide acceptable living standards, which is the case of proposed development.



Daylight & Sunlight Appendix A



Site and Context

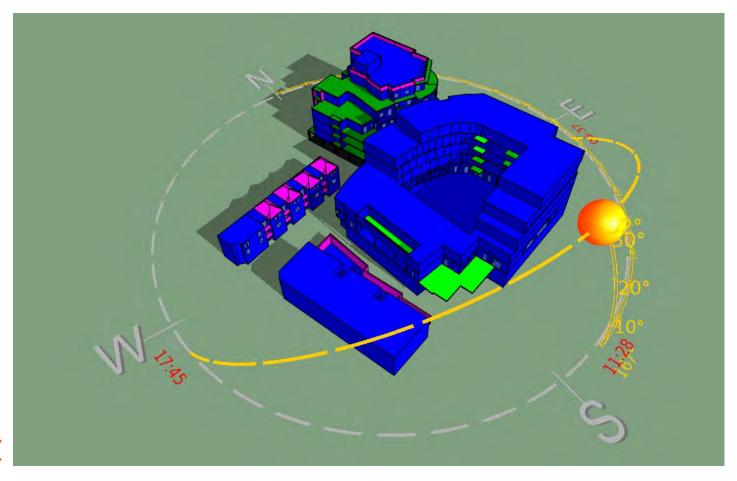


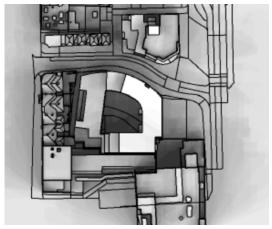
Prone areas of impact



Google Earth 3d imagery

Proposed Development





Merged diffused shadows sunrise – sunset – 22nd Sept.

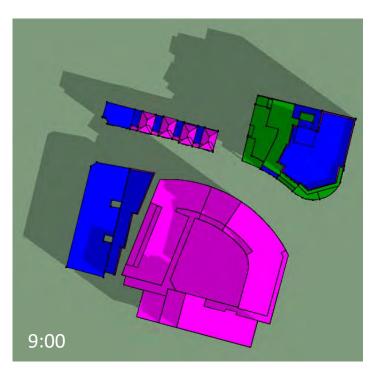


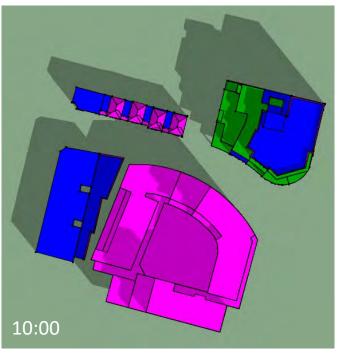
Overshadowing pattern

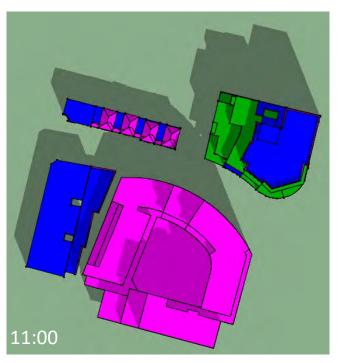
Hourly overshadowing pattern on the Equinox from 9:00 to 16:00



Hourly Overshadowing – Proposed

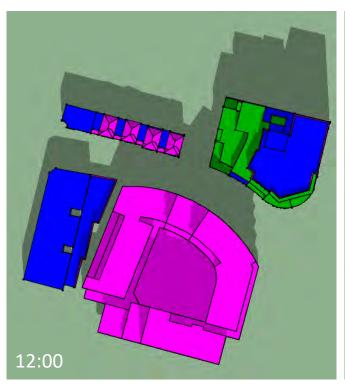


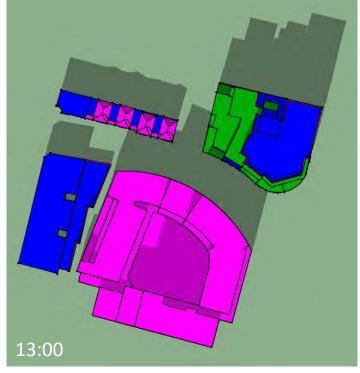


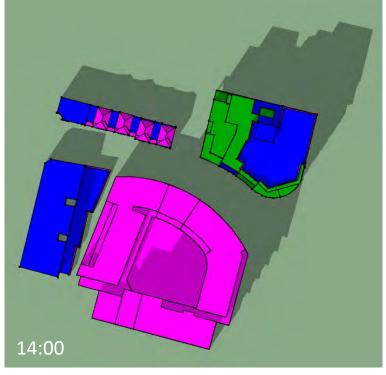




Hourly Overshadowing – Proposed

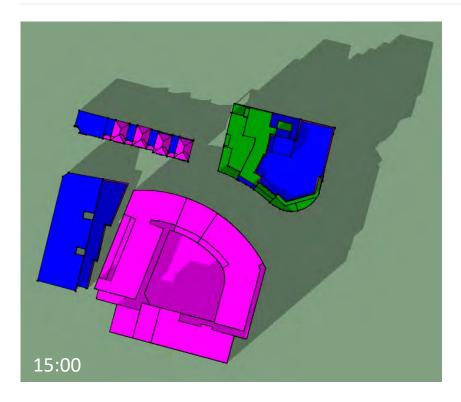


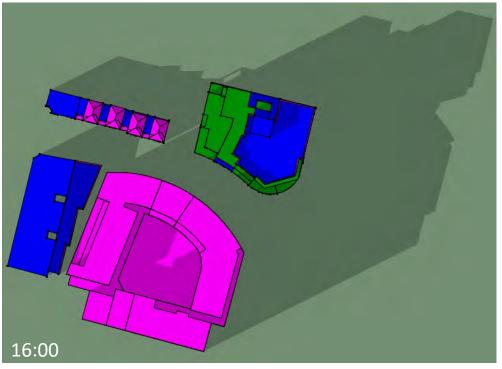






Hourly Overshadowing – Proposed







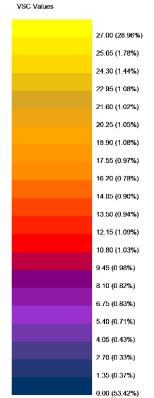
Vertical Sky Component (VSC)

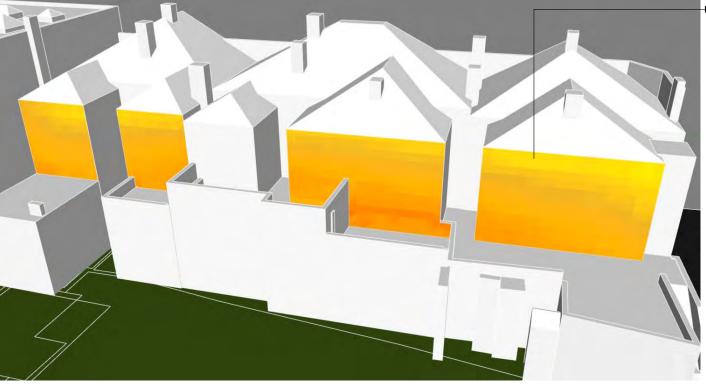
Threshold: Window should achieve at least 27% and no reduction less than 0.80 from the existing value



Vertical Sky Component (Back of Sutton High Street)







An analysis of the façades at the back of the proposed building (Back of Sutton high street) is shown. The building simulation demonstrates a quick understanding of the impact of proposed development on the windows contained in the façade. The numerical results of individual windows are tabulated on the next page.





Vertical Sky Component (Back of Sutton High Street)

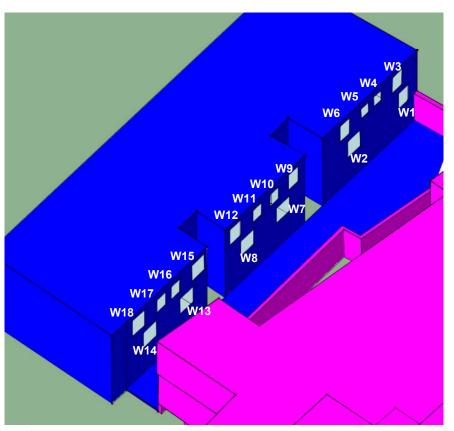
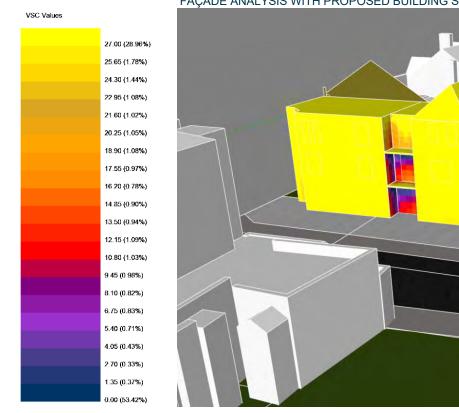


	Table 1 - Vertical Sky Component										
	Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)	Proposed VSC Below 20%					
	W1	35.78	20.5	0.57	FAIL	>20%					
	W2	36.08	20.65	0.57	FAIL	>20%					
	W3	37.96	25.99	0.68	FAIL	>20%					
	W4	38.07	26.06	0.68	FAIL	>20%					
*	W5	38.09	25.42	0.67	FAIL	>20%					
Back of Sutton High Street	W6	38.03	25.15	0.66	FAIL	>20%					
ЬS	W7	35.48	22.65	0.64	FAIL	>20%					
H.g	W8	35.02	22.01	0.63	FAIL	>20%					
ton	W9	37.9	27.06	N/A	PASS	>20%					
Sut	W10	37.77	26.86	0.71	FAIL	>20%					
f o	W11	37.44	27.01	N/A	PASS	>20%					
ack	W12	37.31	26.4	0.71	FAIL	>20%					
ä	W13	34.01	20.5	0.60	FAIL	>20%					
	W14	33.52	20.65	0.62	FAIL	>20%					
	W15	36.88	25.99	0.70	FAIL	>20%					
	W16	36.39	26.06	0.72	FAIL	>20%					
	W17	36.51	25.15	0.69	FAIL	>20%					

Total number of windows	17
Number of non-compliance	15
Number of windows below VSC 20%	None



Vertical Sky Component (Lodge Place)





The lodge place façade analysis reveals comprehensive overview of the development under impact. Some areas like the windows under the balconies are already seen to be not receive a considerable amount of VSC component. The proposed development however further impacts the façade creating an issue for some façade windows.



Vertical Sky Component (Lodge Place)

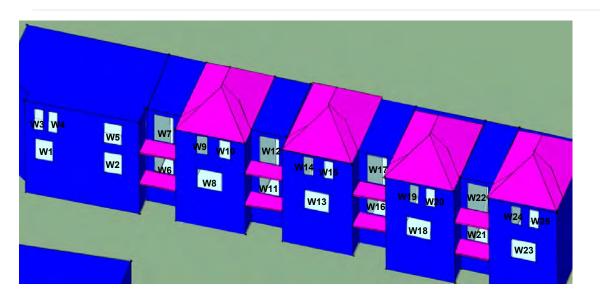
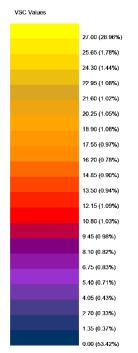


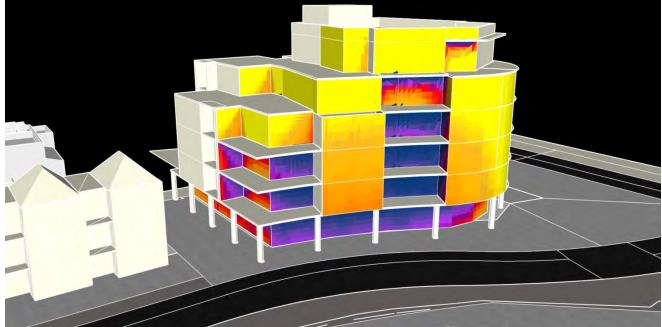
	Table 1 -Vertical Sky Component									
	Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)	Proposed VSC Below 20%				
	W1	35.68	34.06	0.95	PASS	>20%				
	W2	35.01	32.54	0.93	PASS	>20%				
	W3	38.5	36.47	0.95	PASS	>20%				
	W4	38.45	36.33	0.94	PASS	>20%				
	W5	38.17	35.83	0.94	PASS	>20%				
	W6	16.1	14.32	0.89	PASS	<20%				
	W7	28.87	27.52	0.95	PASS	>20%				
	W8	36.26	32.3	0.89	PASS	>20%				
	W9	38.77	35.59	0.92	PASS	>20%				
	W10	38.75	35.25	0.91	PASS	>20%				
	W11	18.39	14.95	0.81	PASS	<20%				
ace	W12	29.77	27.4	0.92	PASS	>20%				
Ф	W13	36.55	30.14	0.82	PASS	>20%				
Lodge Place	W14	38.83	33.43	0.86	PASS	>20%				
	W15	39.01	34.18	0.88	PASS	>20%				
	W16	14.09	14.95	1.06	PASS	<20%				
	W17	27.01	27.4	1.01	PASS	>20%				
	W18	36.94	25.36	0.69	FAIL	>20%				
	W19	38.99	30.41	N/A	PASS	>20%				
	W20	39.02	29.92	N/A	PASS	>20%				
	W21	16.23	6.65	0.41	FAIL	<20%				
	W22	27.73	19.97	0.72	FAIL	<20%				
	W23	37.28	21.92	0.59	FAIL	>20%				
	W24	38.76	27.46	N/A	PASS	>20%				
	W25	38.77	26.46	0.68	FAIL	>20%				

Total number of windows	25
Number of non-compliance	5
Number of windows below VSC 20%	5

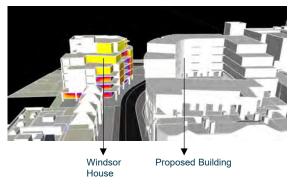


Vertical Sky Component (Windsor House)



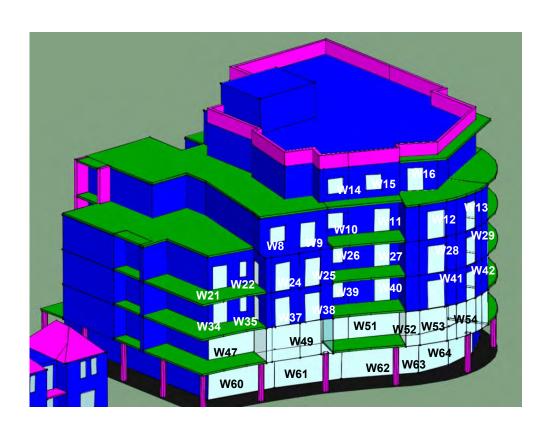


Being in direct proximity to the site the Windsor house was analysed to investigate possible impact from the proposed development of Sutton Lodge towards the Windsor House. The analysis illustrates the façade with the simulation accounting for the proposed development impact. The following table shall compare the numerical data in terms of VSC component values, before and after.





Vertical Sky Component (Windsor House)





		1000 1 1010	al Sky Componer		
Window	Before Proposed Development VSC	After Proposed Development VSC	Reduction	Compliance (>0.8 & 27% VSC for Proposed Development)	Proposed VSC Below 20%
W8	39.37	29.47	N/A	PASS	>20%
W9	39.3	27.44	N/A	PASS	>20%
W10	22.08	12.11	0.55	FAIL	<20%
W11	22.44	12	0.53	FAIL	<20%
W12	39.64	30.06	N/A	PASS	>20%
W13	39.9	32.09	N/A	PASS	>20%
W14	39.32	32.46	N/A	PASS	>20%
W15	39.29	32.48	N/A	PASS	>20%
W16	32.19	31.77	N/A	PASS	>20%
W21	39.67	24.85	0.63	FAIL	>20%
W22	28.89	20.83	0.72	FAIL	>20%
W24	39.43	29.47	0.75	FAIL	>20%
W25	39.54	27.44	0.69	FAIL	>20%
W26	11.45	12.11	1.06	PASS	<20%
W27	14.25	12.09	0.85	PASS	<20%
W28	39.56	25.59	0.65	FAIL	>20%
W29	39.69	30.45	N/A	PASS	>20%
W34	18.52	4.62	0.25	FAIL	<20%
W35	11.36	2.24	0.20	FAIL	<20%
W37	8.32	20.41	2.45	PASS	>20%
W38	38.61	19.48	0.50	FAIL	<20%
W39	10.85	2.63	0.24	FAIL	<20%
W40	13.74	2.06	0.15	FAIL	>20%
W41	39.09	24.11	0.62	FAIL	>20%
W42	39.43	29.19	N/A	PASS	>20%
W47	12.99	2.16	0.17	FAIL	<20%
W49	37.84	20.41	0.54	FAIL	>20%
W51	11.38	2.06	0.18	FAIL	<20%
W52	7.83	3.84	0.49	FAIL	>20%
W53	38.12	21.92	0.58	FAIL	>20%
W54	38.6	29.4	N/A	PASS	>20%
W61	11.46	3.11	0.27	FAIL	<20%
W62	12.07	3.03	0.25	FAIL	<20%
W63	15.1	4.41	0.29	FAIL	<20%
W64	17.5	18.56	1.06	PASS	<20%

Total number of windows	35
Number of non-compliance	21
Number of windows below VSC 20%	14

Vertical Sky Component (Summary)

Table (i)

Table (I)	No. of windows analyzed	No. windows passing the BRE threshold (VSC above 27% or VSC below 27% but reduction ratio of	No. of windows failing BRE threshold (VSC <27% and reduction ratio	% windows failing BRE threshold (VSC <27% and reduction <0.80)	reduction ratio <0.8) but are above 20%	% of the failed windows under BRE threshold above 20% VSC value
		more than 0.8)	<0.80)		VSC value	
Back of Sutton High Street	17	5	12	29.41%	2	16.67%
Lodge Place	25	18	7	72.00%	3	42.86%
Windsor House	77	45	32	58.44%	20	62.50%
TOTAL	119	68	51	42.86%	25	49.02%

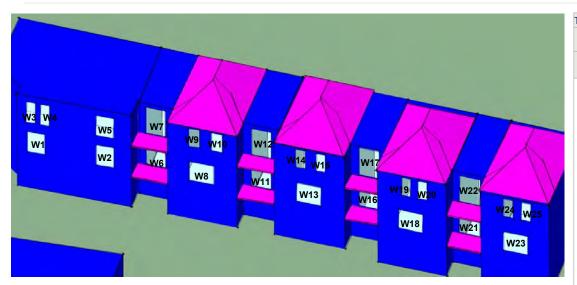


Annual Probable Sunlight Hour (APSH)

APSH Threshold 25% Annual and 5% Winter



Annual Probable Sunlight Hours (Lodge Place)

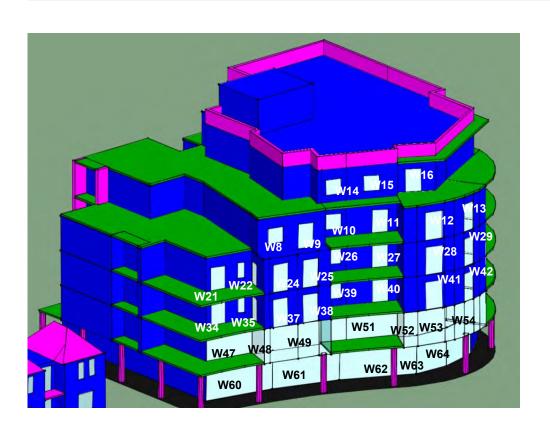


		Proposed	Situation	Existing	Situation	Reducti	on Ratio	APSH Threshold Compliance
Building Name	Window	Annual	Winter	Annual	Winter	Annual	Winter	(>25% Annual and >5% Winter)
	W1	67.12	27.16	74.97	32.61	0.90	0.83	PASS
	W2	65.46	26.17	75.03	32.66	0.87	0.80	PASS
	W3	73.61	31.94	80.43	38.07	0.92	0.84	PASS
	W4	73.55	31.94	80.43	38.07	0.91	0.84	PASS
	W5	72.55	31.42	80.44	38.07	0.90	0.83	PASS
	W6	19.26	13.66	21.79	16.77	0.88	0.81	FAIL
	W7	41.95	19.5	45.34	23.12	0.93	0.84	PASS
	W8	65.99	27.45	75.15	33.23	0.88	0.83	PASS
	W9	72.14	30.72	80.53	38.17	0.90	0.80	PASS
	W10	71.52	30.56	80.51	38.15	0.89	0.80	PASS
Φ	W11	19.87	13.14	25.06	18.83	0.79	0.70	FAIL
Lodge Place	W12	40.99	18.6	46.53	24.33	0.88	0.76	PASS
е Б	W13	62.61	24.59	74.16	33.81	0.84	0.73	PASS
_o pc	W14	67.94	28.55	79.72	37.64	0.85	0.76	PASS
ĭ	W15	66.8	27.75	79.13	37.66	0.84	0.74	PASS
	W16	12.75	8.67	19.3	15.29	0.66	0.57	FAIL
	W17	36.43	15.21	41.97	20.5	0.87	0.74	PASS
	W18	56.21	18.96	73.63	33.36	0.76	0.57	PASS
	W19	63.6	25.4	77.97	37	0.82	0.69	PASS
	W20	62.57	24.38	77.78	37.01	0.80	0.66	PASS
	W21	7.98	4.37	22.32	18.11	0.36	0.24	FAIL
	W22	28.77	8.79	42.12	21.75	0.68	0.40	PASS
	W23	49.26	14.14	73.59	33.8	0.67	0.42	PASS
	W24	57.28	19.45	76.65	36.51	0.75	0.53	PASS
	W25	55.68	18.24	75.4	35.82	0.74	0.51	PASS



Lodge place	number of windows	n. of annual	n. of winter	
Summary	assessed	failures	failures	
	25	4	4	

Annual Probable Sunlight Hours (Windsor House)

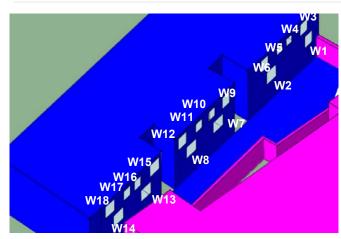




	Window	Proposed Situation		Existing	Existing Situation		on Ratio	APSH Threshold Compliance (>25%
uilding Name		Annual	Winter	Annual	Winter	Annual	Winter	Annual and >5% Winter)
	W8	68.55	26.14	79.8	36.75	0.86	0.71	PASS
	W9	65.44	24.21	78.05	35.71	0.84	0.68	PASS
	W10	21.46	15.36	34.12	27.07	0.63	0.57	FAIL
	W11	21.23	9.89	35.15	18.47	0.60	0.54	FAIL
	W12	62.83	20.16	80.56	37.5	0.78	0.54	PASS
	W13	63.34	21.24	81.25	38.19	0.78	0.56	PASS
	W14	73.46	32.09	77.55	36.18	0.95	0.89	PASS
	W15	73.35	32.3	76.4	36.11	0.96	0.89	PASS
	W16	47.59	27.38	54.25	32.58	0.88	0.84	PASS
	W21	49.47	17.5	61.88	28.42	0.80	0.62	PASS
	W22	42.83	15.88	50.91	21.71	0.84	0.73	PASS
	W23	32.95	11.69	38.19	14.83	0.86	0.79	PASS
	W24	55.24	15.55	78.66	36.63	0.70	0.42	PASS
	W25	54.58	15.79	78.4	36.63	0.70	0.43	PASS
	W26	5.38	5.32	17.64	17.4	0.30	0.31	FAIL
-	W27	5.28	3.81	20.66	16.72	0.26	0.23	FAIL
	W28	58.39	16.47	80.56	37.5	0.72	0.44	PASS
Se	W29	59.36	18.26	81.25	38.19	0.73	0.48	PASS
Windsor House	W34	13.82	9.5	31.89	25.01	0.43	0.38	FAIL
Ę I	W35	8.16	7	22.12	19.15	0.37	0.37	FAIL
gsc	W36	10.49	6.58	21.44	14.23	0.49	0.46	FAIL
j.	W37	49.47	11.51	77.27	36.5	0.64	0.32	PASS
>	W38	47.86	12.02	76.55	36.36	0.63	0.33	PASS
	W39	4.56	4.5	17.64	17.4	0.26	0.26	FAIL
	W40	3.63	2.28	20.66	16.72	0.18	0.14	FAIL
	W41	54.51	15.22	80.24	37.18	0.68	0.41	PASS
	W42	55.93	16.75	80.38	37.32	0.70	0.45	PASS
	W47	4.94	3.45	18.78	15.38	0.26	0.22	FAIL
	W48	10.02	3.41	21.14	11.28	0.47	0.30	FAIL
	W49	43.94	10.09	73.82	34.51	0.60	0.29	PASS
	W51	2.48	2.01	14.12	11.84	0.18	0.17	FAIL
	W52	7.77	0.99	17.99	7.2	0.43	0.17	FAIL
	W53	47.52	12.57	72.51	31.54	0.66	0.40	PASS
	W54	51.57	14.46	77.45	34.4	0.67	0.42	PASS
	W60	7.23	5.7	19.99	16.46	0.36	0.35	FAIL
	W61	7.47	6.61	18.79	15.51	0.40	0.43	FAIL
	W62	11.34	9.67	20.93	16.5	0.54	0.59	FAIL
	W63	17.01	10.26	25.71	19.94	0.66	0.51	FAIL
	W64	24.81	12.87	30.73	21.05	0.81	0.61	FAIL

Windsor House	number of	n. of annual	n. of winter failures	
Summary	windows assessed	failures		
	36	12	15	

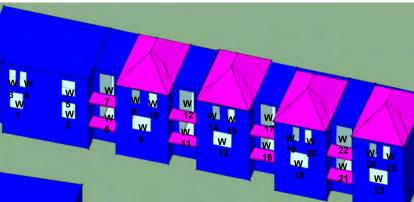
Summary



Back of Sutton High Street: There are many VSC numerical failures in relation to the proposed development.

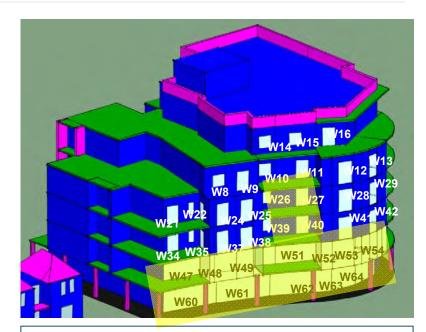
However, it is noted that there are no VSC lower than 20%.

There are no South orientated windows, therefore Annual and Winter Probable Sunlight Hours assessments are not applicable.



Lodge Sutton: There are minor VSC, APSH/WPSH failures, which usually occur on openings with overhang (Balconies) on existing and proposed situations.





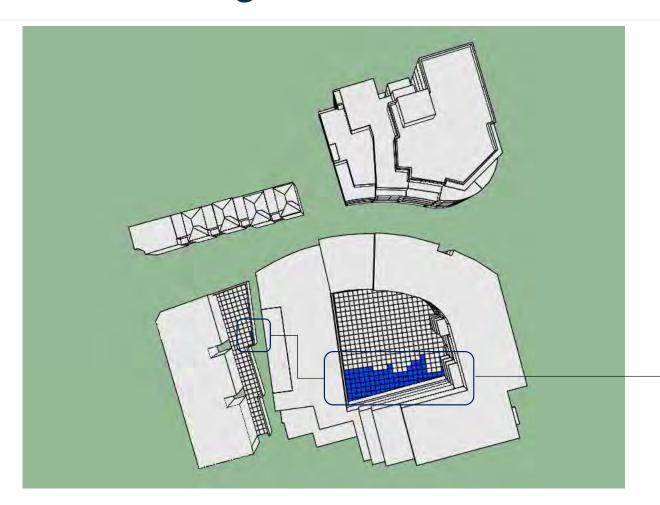
Windsor House: Most of windows which present VSC, APSH/WPSH failures are usually recessed from the façade with balcony overhang and/or located on lower floor levels. Examples of these windows are highlighted above in yellow.

Lower floor levels (Ground and first floor) need further investigation in relation to space usage (commercial or residential).

Sunlight Hours - Amenities Threshold: 50% or more space > 2 hours of sunlight



Number of sunlight hours < 2 Equinox 22nd September





< 2 hours of sunlight



> 2 hours of sunlight

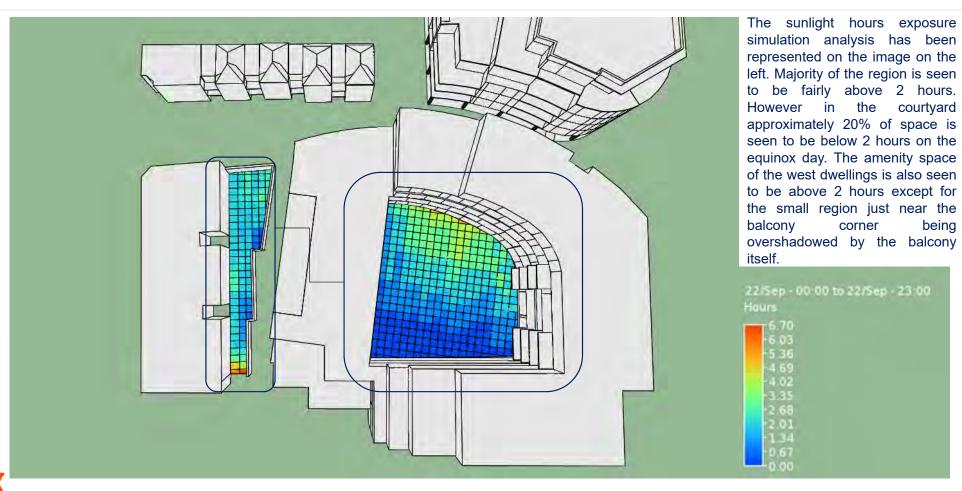
The region shows the space where the sunlight hours on the equinox (22nd September) are lesser than 2 from sunrise till sunset.

The central courtyard of the proposed development was tested for number of sunlight hours. It was noted that majority of the region was receiving more than 2 hours of sunlight.

A small region on the amenity space of the dwellings on the west is seen to be below 2 hours as well. However, it the affected area is not significant.



Sunlight hours — Equinox 22nd September



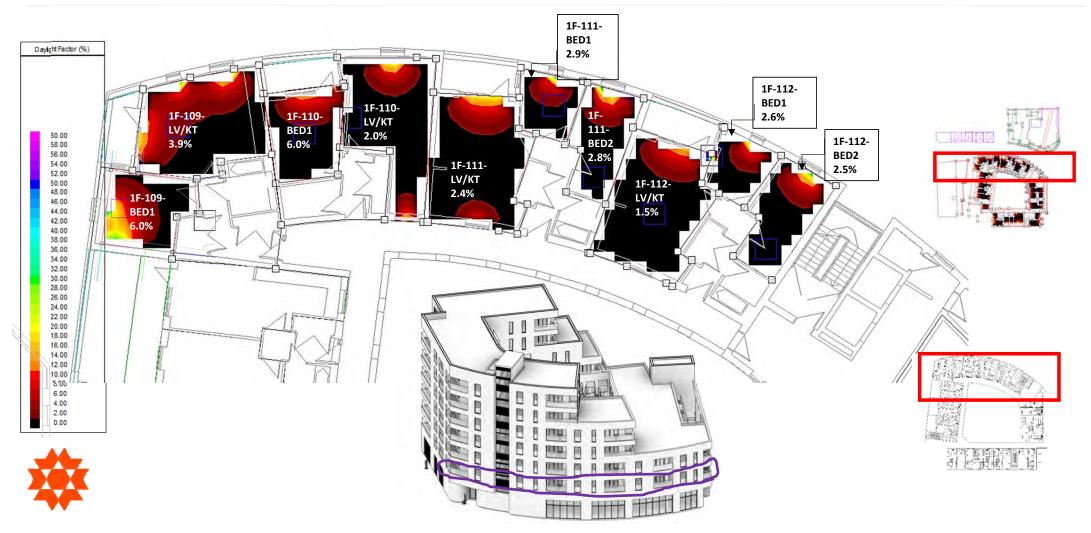


Average Daylight Factor (ADF)

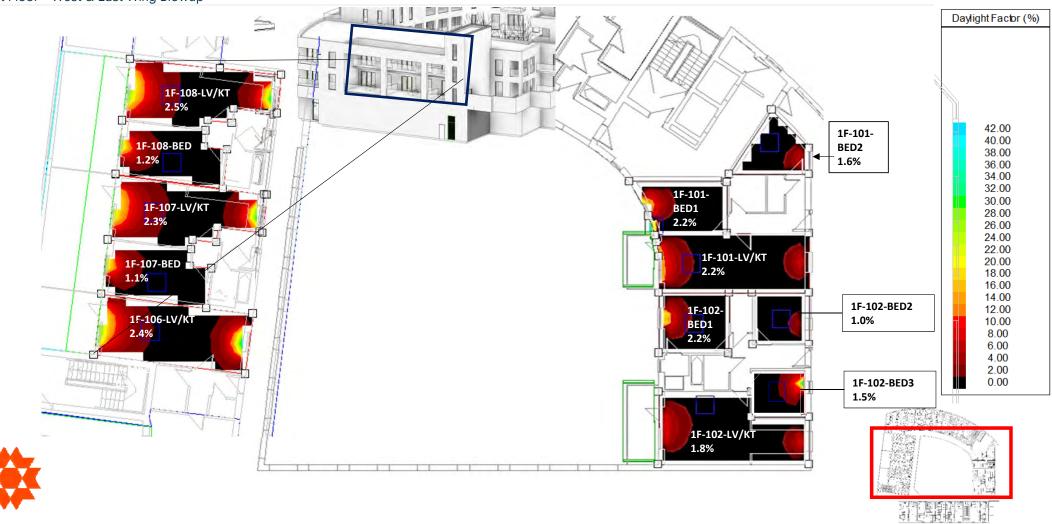
Threshold: Kitchen/Living: 1.5%; Bedrooms: 1%



Average Daylight Factor

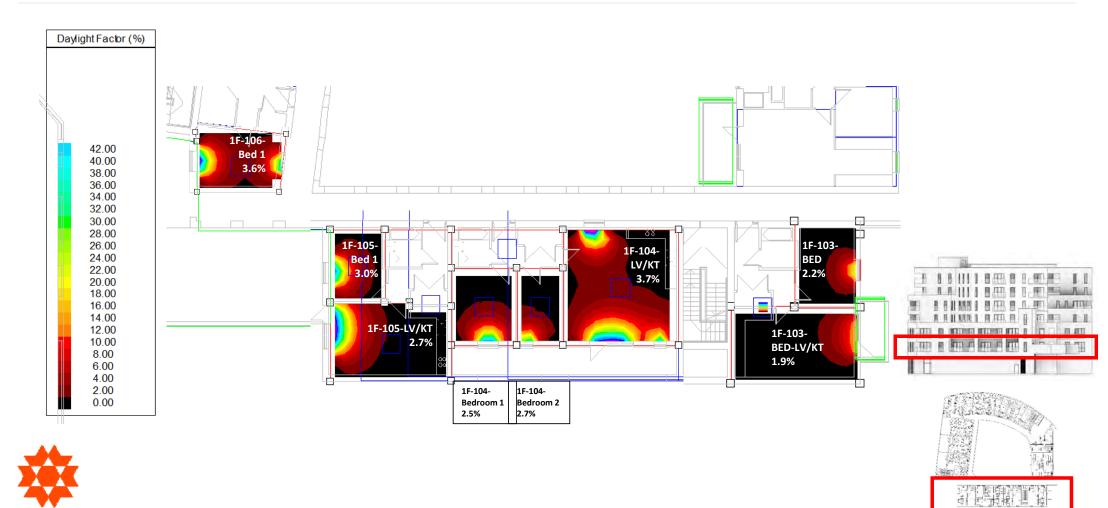


Average Daylight Factor First Floor - West & East Wing Blowup



Average Daylight Factor

First Floor – South Wing Blow Up



Average Daylight Factor Tabulated Results - First Floor - Sutton Lodge

	tor - First Floor Plan - Proposed Developm ADF(%)		NSL		Compliant rooms Bedroom>1%	
Room Name	Target	Achieved	Target	Achieved	Living/Kitchen >1.5%	
F-101-Bedroom 1	1.0%	2.2%	≥0.8	0.98	PASS	
IF-101-Bedroom 2	1.0%	2.2%	≥0.8	1	PASS	
IF-101-Living/Kitchen	1.5%	2.2%	≥0.8	1	PASS	
IF-102-Bedroom 1	1.0%	2.2%	≥0.8	1	PASS	
F-102-Bedroom 2	1.0%	1.0%	≥0.8	1	PASS	
F-102-Bedroom 3	1.0%	1.5%	≥0.8	0.94	PASS	
F-102-Living/Kitchen	1.5%	1.8%	≥0.8	0.98	PASS	
F-103-Bedroom 1	1.0%	2.2%	≥0.8	1	PASS	
F-103-Living/Kitchen	1.5%	1.9%	≥0.8	1	PASS	
F-104-Living/Kitchen	1.5%	3.7%	≥0.8	1	PASS	
F-104-Bedroom 1	1.0%	2.5%	≥0.8	1	PASS	
F-104-Bedroom 2	1.0%	2.7%	≥0.8	1	PASS	
F-105-Kitchen/Living	1.5%	2.7%	≥0.8	1	PASS	
F-105-Bedroom 1	1.0%	3.0%	≥0.8	1	PASS	
F-106-Bedroom 1	1.0%	3.6%	≥0.8	1	PASS	
F-106-Living/Kitchen	1.5%	2.4%	≥0.8	1	PASS	
F-107-Bedroom 1	1.0%	1.1%	≥0.8	1	PASS	
F-107-Living/Kitchen	1.5%	2.3%	≥0.8	1	PASS	
F-108-Bedroom 1	1.0%	1.2%	≥0.8	1	PASS	
F-108-Living/Kitchen	1.5%	2.5%	≥0.8	1	PASS	





GREATER LONDON AUTHORITY

representation hearing report D&P/3067/03 - Appendix 1

18 November 2013

Daylight and sunlight assessment tests

Purpose of this appendix

- This appendix is intended to provide a factual explanation of the measures of diffuse daylight and sunlight used within the applicant's daylight and sunlight report setting out the margins for establishing material impacts in this case, based on relevant assessment thresholds, and informed by an independent review of the applicant's daylight and sunlight report.
- The applicant has used three measures of diffuse daylight (vertical sky component; average daylight factor; and, no-sky line), and one measure of sunlight (annual probable sunlight hours). An explanation of the methodology behind these assessments is set out under the corresponding sections below.

Diffuse daylight

Vertical sky component

Vertical sky component (VSC) is a 'spot' measure of the skylight reaching the mid-point of a window from an overcast sky. It represents the amount of visible sky that can be seen from that reference point, from over and around an obstruction in front of the window. That area of visible sky is expressed as a percentage of an unobstructed hemisphere of sky, and, therefore, represents the amount of daylight available for that particular window. As it is a 'spot' measurement taken on the outside face of the window, its shortcoming is that it takes no account of the size or number of the windows serving a room, or the size and layout of the room itself.

Determining a material impact

- For existing buildings, the Building Research Establishment (BRE) guideline is based on the loss of VSC at a point at the centre of a window, on the outer plane of the wall. The BRE guidelines state that if the VSC at the centre of a window is more than 27% (or if not, then it is more than 80% of its former value), then the diffuse daylighting of the existing building will not be adversely affected.
- It should, nevertheless, be noted that the 27% VSC target value is derived from a low density suburban housing model. The independent daylight and sunlight review states that in an inner city urban environment, VSC values in excess of 20% should be considered as reasonably good, and that VSC in the mid-teens should be acceptable. However, where the VSC value falls below 10% (so as to be in single figures), the availability of direct light from the sky will be poor.
- With respect to the reduction factor, it should also be noted that whilst BRE guidelines state that a 20% reduction is the threshold for a materially noticeable change, the independent daylight and sunlight review sets out that given the underdeveloped nature of the site relative to its context, this percentage reduction should be increased to 30%, with and upper threshold of 40%.

Average daylight factor

Average daylight factor (ADF) is a measure of the adequacy of diffuse daylight within a room, and accounts for factors such as the size of a window in relation to the size of the room; the reflectance of the walls; and, the nature of the glazing and number of windows. Clearly a small room with a large window will be better illuminated by daylight than a large room with a small window, and the ADF measure accounts for this.

Determining a material impact

BRE guidelines confirm that the acceptable minimum ADF target value depends on the room use. That is 1% for a bedroom, 1.5% for a living room and 2% for a family kitchen. In cases where one room serves more than one purpose, the minimum ADF should be that for the room type with the higher value. Notwithstanding this, the independent daylight and sunlight review states that, in practice, the principal use of rooms designed as a 'living room/kitchen/dining room' is as a living room. Accordingly, it would be reasonable to apply a target of 1.5% to such rooms.

No-sky line

- 9 No-sky line (NSL) is a measure of the distribution of diffuse daylight within a room. The NSL simply follows the division between those parts of a room that can receive some direct skylight from those that cannot. If from a point in a room on the working plane (a plane 850mm above the floor) it is possible to see some sky then that point will lie inside the NSL contour. Conversely, if no sky is visible from that point then it would lie outside the contour.
- Where large parts of the working plane lie beyond the NSL, the internal natural lighting conditions will be poor regardless of the VSC value, and where there is significant movement in the position of the NSL contour following a development, the impact on internal amenity can be significant.

Determining a material impact

When comparing the NSL for existing buildings against that proposed following development, BRE guidelines state that if the no-sky line moves so that the area of the existing room which does receive direct skylight is reduced to less than 0.8 times its former value, then this will be noticeable to the occupants, and more of the room will appear poorly lit.

Sunlight

Annual probable sunlight hours

Annual probable sunlight hours (APSH) is a measure of sunlight that a given window may expect over a year period. The BRE guidance recognises that sunlight is less important than daylight in the amenity of a room and is heavily influenced by orientation. North facing windows may receive sunlight on only a handful of occasions in a year, and windows facing eastwards or westwards will only receive sunlight for some of the day. Therefore, BRE guidance states that only windows with an orientation within 90 degrees of south need be assessed.

Determining a material impact

BRE guidance recommends that the APSH received at a given window in the proposed case should be at least 25% of the total available, including at least 5% in winter. Where the proposed values fall short of these, and the loss is greater than 4%, then the proposed values should not be less than 0.8 times their previous value in each period.



APPENDIX A.21 469 BETHNAL GREEN APPEAL DECISION

Appeal Decision

Inquiry held on 9 August 2021 to 13 August 2021

Site visit made on 17 August 2021

by Mark Philpott BA(Hons) MA MRTPI

an Inspector appointed by the Secretary of State

Decision date: 8 September 2021

Appeal Ref: APP/E5900/W/21/3271874 469 Bethnal Green Road, London, E2 9QH

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by DAO Estate Ltd against the decision of the Council of the London Borough of Tower Hamlets.
- The application Ref PA/20/02392, dated 9 November 2020, was refused by notice dated 29 January 2021.
- The development proposed was originally described as 'retention and refurbishment of existing building and the erection of a three storey extension to provide office floorspace with retail floorspace at ground floor (Use Class E)'.

Decision

1. The appeal is allowed and planning permission is granted for the retention, refurbishment, rear extension and change of use of the existing three storey warehouse building (Use Class B8) and the erection of a three storey extension to accommodate retail floorspace at ground floor level (Use Class E) and office floorspace on the upper levels (Use Class E), together with ancillary servicing and cycle parking at 469 Bethnal Green Road, London, E2 9QH in accordance with the terms of the application, Ref PA/20/02392, dated 9 November 2020, subject to the conditions set out in the attached schedule.

Preliminary Matters

- 2. The description of the development in the heading is taken from the planning application form. However, the appellant and the Council agreed to a revised description during the planning application process. I have determined the appeal based on the development as set out in the revised description. This is reflected in the formal decision above.
- 3. The London Plan 2021 (LP) was published on 2 March 2021 and the National Planning Policy Framework (Framework) was revised on 20 July 2021. These have replaced the versions of the documents that the Council took into account when it determined the application. During the appeal process the appellant, Council and interested parties have been able to consider the implications of the current versions of the documents and identify the policies most relevant to the issues in dispute.
- 4. The appellant submitted updated proposed elevation drawings of the building during the Inquiry¹. The drawings identify the materials that would be used for

¹ Identified at the end of this letter

the external surfaces of the building and amend the extent of metal fins that would project from its eastern façade. The materials identified are consistent with those proposed throughout the application and appeal processes and the alterations to the fins are minor. I have taken the updated drawings into account in making a decision as this would not prejudice any party.

- 5. The Inquiry was adjourned on 13 August 2021 to allow for a bat assessment and survey of the building to be undertaken and a Section 106 legal agreement (S106) to be completed. These were duly submitted. In addition, photographs of a galvanised metal building at Gormley Studios were submitted following the adjournment, as I was unable to gain access to view that building as arranged at the event.
- 6. The Inquiry was closed in writing on 27 August 2021.

Main Issues

- 7. The main issues are:
 - the effect of the proposal on the character and appearance of the appeal building and the surrounding area;
 - the effect of the proposal on the setting and significance of 465 Bethnal Green Road, which is a non-designated heritage asset;
 - the effect of the proposal on the living conditions of the occupiers of properties at Nos 465 and 471-473 Bethnal Green Road, with particular regard to daylight; and
 - whether or not the proposal would prejudice the development of adjacent land, with particular regard to its window arrangement.

Reasons

Character and appearance

- 8. The site includes a 3 storey brick and concrete framed building containing warehouse and office accommodation. The building is located on the corner of Bethnal Green Road and Hollybush Gardens, with a much narrower frontage onto the former than the latter. It forms part of a block of development that is near to a railway viaduct.
- 9. On its Bethnal Green Road side, the appeal building forms part of a terrace that includes an adjacent 3 storey building at Nos 471-473 and single storey shopfronts nearer to the viaduct. 10-14 Hollybush Gardens is a 4 storey building that is also adjacent to the site. The main parties agree that Hollybush Gardens is predominantly residential, comprising converted industrial buildings and post-war flats, and that Bethnal Green Road consists of a mixture of retail uses at ground floor with office and residential units above, which accords with my observations on site.
- 10. Bethnal Green Road and the roads spurring from it, including Hollybush Gardens, are characterised by buildings of varying ages, heights, lengths, widths, architectural styles and materials. There is a prevailing fine grain to the buildings fronting Bethnal Green Road, including the terrace that hosts the appeal building. However, larger buildings are also evident on both sides of Bethnal Green Road near the site and individual ones stand out.

- 11. A bank with a top floor flat forms a 4 storey building opposite the site at No 465. Beyond that is a 5 to 8 storey formerly industrial and now residential building at Nos 455-463 (City View House) that also extends along **Punderson's** Gardens for a considerable distance. Although the Council states that City View House is an anomaly in the area, it is nevertheless prominent and forms part of **the area's** character. In addition, 5 storey buildings are evident at Nos 431 and 464. Taller buildings tend to adjoin smaller ones and thus there are significant height differences between buildings along the road. Taller buildings also occasionally occupy corner plots next to the roads connecting to Bethnal Green Road. The townscape benefits from this diversity.
- 12. Planning permission has been granted at 10-14 Hollybush Gardens for 6 storeys of flexible retail and office development² and an application seeking to confirm that it has commenced lawfully is pending determination. A builders' merchants is located beyond that at 5 Hollybush Place. An approved scheme for 5 to 7 storeys of residential and commercial development³ can be implemented there up until October 2022. Whilst the proposal's effect on the existing character and appearance of the area must be considered, I must also have regard to its potential future context.
- 13. The proposal principally involves an upward extension that would accentuate the appeal **building's** narrow frontage to Bethnal Green Road and its wide frontage Hollybush Gardens. As a result, the building would be long, slim and distinctly taller than the adjoining properties. However, it would be seen in the context of and in keeping with the varied building sizes in Bethnal Green Road and contribute to the diversity of the townscape. It would also sit comfortably next to the long continuous form that faces the road at 10-14 Hollybush Gardens and be compatible with the larger scale of the consented development there and at 5 Hollybush Place. The proposal would not result in an undue sense of enclosure to Hollybush Gardens.
- 14. Although the extension would include a short projection to the rear of the existing building, which would be visible behind the terrace fronting Bethnal Green Road on approach from the viaduct, this would appear set back significantly. Further, the uppermost parts of the consented development at 10-14 Hollybush Gardens would be visible from such a perspective and both additions would be seen together. The width of the appeal building would be largely unchanged and the fine grain of the terrace would remain evident from Bethnal Green Road.
- 15. Nevertheless, the extension would be a substantial one which would be set back from the **appeal building's** existing brick elevations to a very limited extent. It would feature projecting metal fins that may provide shadowing across the elevations and have larger window openings than those at first and second floor level. It would not be a subordinate addition in these respects.
- 16. However, **the extension's** design clearly reflects the structural grid of the existing building and the **appellant's** design and architecture and townscape and heritage witnesses both contend that it would create elegant and satisfying proportions to the building overall. Its proposed galvanised metal finish, which the appellant considers would provide it with a refined and lightweight appearance, is an important consideration in this regard. The Council accepts

² Council reference: PA/17/01732/A1 ³ Council reference: PA/16/02713/A1

- that a contemporary extension and the use of galvanised metal may be appropriate at the site, albeit not for an extension of the proposed scale and design.
- 17. Examples contained within the evidence indicate that galvanised metal can have several different qualities and that glazed and metal framed extensions to brick buildings can be designed successfully. I acknowledge that the proposal is not directly comparable to the examples identified in terms of its specific context or the extent of the application of galvanised metal. However, I am satisfied that the material would create a sense of lightness to the extension and provide balance to the upper and lower parts of the building and thus its overall appearance. Additionally, galvanised metal surrounds to the fenestration at the building's base would provide cohesion between its lower and upper elements.
- 18. Although galvanised metal is not a commonly used surfacing material in the area, there is capacity for it to be used given the townscape's diversity. Furthermore, the finish would complement the appearance of the viaduct and the industrial qualities of the appeal building and other buildings in the vicinity, including City View House. It would also complement the existing industrial aesthetic of 10-14 Hollybush Gardens, and the contemporary design and glazed and metal surfaced elements of the development consented there.
- 19. A condition to require the approval of comprehensive details of all the development's external materials, including sample panels and the particulars of joining and fixing methods, would ensure that an appropriate finish is achieved. It would also prevent the quality of the development from being materially diminished between permission and completion in accordance with paragraph 134 of the Framework.
- 20. The appeal building currently lacks an active frontage onto Hollybush Gardens. The proposed insertion of windows to serve the retail floorspace at ground floor level would enliven the streetscape and provide a more attractive environment for those travelling along the road. Whilst the proposed roller shutters may be closed when the retail space is not in active use, the aforementioned condition would ensure that the shutters and other security measures would be designed appropriately and ensure cohesion between the **building's** base and the extension.
- 21. The Council contends that the proposed junction between the extension and 10-14 Hollybush Gardens is unclear and may appear crude. However, the relationship between the properties is explored in the Design and Access Statement. Whilst the extension would be immediately adjacent to the roof and chimney of the neighbouring building as it currently stands, and its consented additions, there would be a suitable relationship between the buildings.
- 22. Interested parties contend that equipment on the roof, such as the photovoltaic panels, would be unsightly. However, many of the **roof's** features would not be visible from public vantage points. Further, the lift overrun and plant area would be enclosed and the condition to require details of all external materials would ensure that the appearance of such features would be appropriate.
- 23. The Council has advanced that the development is not genuinely design led and that its pre-application advice has not been taken into account. It has also been put forward that alternative development at the site may address the

- concerns raised. However, the appellant is not necessarily bound to follow the **Council's** recommendations and, fundamentally, I must make a decision based on the proposal and evidence before me.
- 24. It has not been argued that the retention of the existing building is inappropriate in principle. The appellant has undertaken a detailed assessment of the site's current and historic local context and clearly explained the design process and approach adopted. The evidence shows that 3 to 5 storey extensions of varying forms were assessed. In addition, while none are evidenced, the appellant's design and architecture witness stated that 1 and 2 storey options were also considered. Reasons for discounting the alternatives have been provided.
- 25. Whilst changes have been made to the proposal at appeal, and amended plans have been provided, this does not equate to evidence indicating that a design led approach has not been followed. On the contrary, based on what I have seen and heard, alternative options have been thoroughly appraised and clear justification for the proposed design exists. Overall, I consider that the scheme follows a design led approach and optimises the **site's capacity**.
- 26. I consider that the proposal is based on a sound understanding of and responds to the site's features and context, and its potential future context, and is well designed. It would not cause harm to the character or appearance of the appeal building or the surrounding area. It accords with Policy S.DH1 of the Tower Hamlets Local Plan 2031 (THLP), which includes a requirement that development meets the highest standards of design and respects and positively responds to context. It also accords with LP Policies GG2 and D3 which, amongst other matters, set out that to create successful sustainable mixed-use places and make the best use of land, a design led approach must be applied to determine optimum development capacity.
- 27. The proposal also accords with the National Design Guide and National Model Design Code. Alongside other points, these set out the importance of understanding the contexts and features of sites, the integration of development with its surroundings and that development should be sympathetic to existing grain and relate to the architectural character and materials of the surrounding area. It also complies with Section 12 of the Framework. Amongst other things, it sets out that development should reflect local design policies and government guidance on design, be visually attractive as a result of good architecture, be sympathetic to local character, and optimise the potential of sites.

Non-designated heritage asset

28. The bank at 465 Bethnal Green Road is an attractive red brick building with a stucco base and a slate clad, mansard style roof. It has primary elevations facing both Bethnal Green Road and Hollybush Gardens. It derives significance from features of architectural interest such as an ornamented arch over a corner entrance, with bay windows with stone pediments and surrounds above. It also benefits from features including arched windows at ground floor level, pedimented first floor windows, similarly ornamented dormers separated by balustrades, and elegant chimney stacks at roof level. It was built around the start of the twentieth century by Thomas Bostock Winney, who was the chief architect of the London City and Midland Bank, and therefore also has historic significance.

- 29. The bank was clearly designed to have prominence in the high street, inspire confidence and create a sense of security. It has maintained its high street function and thus Bethnal Green Road forms part of its setting and contributes positively to its significance. Hollybush Gardens and the buildings adjacent to the bank, including the appeal site, also form part of its setting. However, the existing building on the appeal site was built post war and makes no contribution to **the bank's** significance.
- 30. The Council contends that No 465 satisfies criteria for local listing and intends to add the building to the local list in the future. However, there can be no certainty that it will be added to the list, particularly as public consultation would need to be undertaken beforehand. Whilst I have had regard to the Council's intentions, I must take the current status of the building into account.
- 31. The **bank's** significance is best appreciated in short distance views on approach on Bethnal Green Road from the direction of the railway viaduct, from where the architectural features of its corner entrance, both elevations and roof are visible. From these perspectives, the appeal building currently blocks views of **much of the bank's elevation to Hollybush** Gardens and part of its roof. The **extension would block slightly more of the roof from view. However, the bank's** features, including those at roof level, would still be readily apparent. The extension would not obstruct visibility of the bank in any other short distance views from Bethnal Green Road or Hollybush Gardens.
- 32. The bank's roof can also be seen from Roman Road on the other side of the viaduct. However, the evidence indicates that the viaduct was constructed before the bank and so the visual relationship between the bank and the area on the other side of the viaduct is an incidental rather than a meaningful one. In any case, the lower parts of the building are largely obscured from view by the viaduct and street furniture. In addition, its roof is set against the backdrop of City View House and views from Roman Road tend to be occupied by buildings in the foreground, such as a 4 storey public house adjacent to the viaduct. The bank's interest features are largely unnoticeable from there as a result. For these reasons, the obscuring of views of the bank by the development would not affect the bank's significance.
- 33. The appeal building as proposed would have a greater presence in both Bethnal Green Road and Hollybush Gardens than is currently the case due to its scale, design and materials. However, in comparison with the bank, the development would have a simpler form, far less detailing and a less noticeable entrance. The base of the appeal building would contrast positively with the bank's detailed entrance and elevations. The bank's interest features would continue to afford it with prominence and stature, and its presence in the high street would be maintained. Indeed, the bank is currently apparent in short distance views even though it is located next to the much larger City View House. I therefore consider that the setting and significance of the bank will be preserved in respect of this matter.
- 34. Moreover, I have already identified that the streetscape would be enhanced by the development's active frontages. These would reinforce Bethnal Green Road's high street character and imbue the entrance to Hollybush Gardens with similar characteristics. In this regard, the contribution that the bank's high street setting makes to its significance would be enhanced, albeit to a very limited extent.

35. The proposal would not harm the setting or significance of 465 Bethnal Green Road. It accords with THLP Policy S.DH3 and LP Policy HC1, which require that development preserves the settings and significance of heritage assets. Additionally, I find no conflict with the Framework in respect of this matter, which sets out that the significance of non-designated heritage assets should be taken into account in determining applications at paragraph 202.

Living conditions

- 36. An assessment of the effect of the proposal on daylight and sunlight receipt to residential properties in the vicinity of the site was undertaken by the appellant for the application. The cumulative impacts of the development and the nearby consented schemes have also been considered. It is undisputed that the **appellant's** assessment methodology follows Building Research Establishment (BRE) guidance⁴ on the loss of daylight to buildings, as encouraged at paragraph 8.89 of the THLP. Additionally, the daylight values that the appellant reports are largely uncontested. Whilst the Council suggests that some windows may have been incorrectly modelled, no assessments to counter the **appellant's** data have been presented.
- 37. The BRE guidance set out that an impact will be significant if the vertical sky component (VSC) of a window after development is less than 27 percent and less than 0.8 times its former value, or if daylight distribution to the area of the working plane of a room that can receive direct daylight is less than 0.8 times its former value. Average VSC values can be relied upon where more than one window of equal size serves the same room. It also states that living spaces and kitchens need more daylight than bedrooms. In addition, it is common ground between the main parties that kitchens need more light than bedrooms.
- 38. The BRE guidance sets out that it should be used flexibly and not be interpreted as planning policy. THLP Policy D.DH8 requires that development must not result in an unacceptable material deterioration of the daylight and sunlight conditions of surrounding development or result in unacceptable levels of overshadowing. Consequently, a significant impact in the terms of the BRE guidance does not necessarily equate to an unacceptable impact on the sunlight or daylight conditions of a property in conflict with the policy.
- 39. The flat above the bank at 465 Bethnal Green Road has windows that are of the same size. Taking into account the average values for the rooms that benefit from more than one window, there would be no significant impacts in VSC terms. However, daylight distribution to a bedroom and an open plan kitchen and dining room in the flat would be significantly affected. The appellant's daylight and sunlight assessment categorises the daylight distribution impacts as major adverse ones.
- 40. The kitchen and dining room benefits from a window that was not considered in the appellant's original assessment. It was evident from my visit that the window contributes to daylight distribution. Moreover, the window would not be significantly affected by the scheme due to its position. The Council's daylight expert accepted that this may improve the daylight conditions of the room. It is likely that more than 34 percent of the room, as reported in the original assessment, would continue to receive direct daylight. Around a quarter of the bedroom would receive direct daylight.

⁴ Site layout planning for daylight and sunlight: a guide to good practice, second edition, 2011

- 41. The flat above the bank features 2 rooms that can reasonably be called living rooms. These have windows facing Bethnal Green Road that would have relatively high daylight values and the effects of the proposal on these rooms would be modest. Whilst a tree is adjacent to one of those windows, the Council's daylight expert confirmed that trees are not typically factored into assessments. Furthermore, it would not be in leaf in winter when daylight is at its scarcest. For the reasons given and having regard to the purposes of the most affected rooms, the deterioration in the daylight conditions of the property from the development directly would not be unacceptable.
- 42. Notwithstanding this, there is a limited separation distance between the proposed extension and the flat and, without mitigation, its fifth and sixth floor windows would facilitate overlooking. This would lead to indirect light loss as blinds or curtains would need to be closed to provide satisfactory levels of privacy for the flat's occupiers. However, a condition to require that the relevant windows are fixed shut and obscure glazed to a height of 1.8m would prevent overlooking and further losses of light. The living conditions of the occupiers of the flat would thus be acceptable with the development in place.
- 43. Flat 1 at 471-473 Bethnal Green Road features an open plan kitchen, dining and living room that has a window with adjacent glass bricks that face the site, a narrow skylight, and full length glazed patio doors from which a private patio is accessed.
- 44. The VSC for the window facing the site is currently limited at 7.60 percent and this would be reduced substantially. However, the evidence suggests that the patio doors have more than twice that VSC value and the reduction in daylight to the patio doors would be limited. Moreover, kitchen fixtures such as the sink and countertops are positioned such that the area nearer the patio doors is more readily usable as living space than the area adjacent to the window facing the site. The evidence demonstrates that daylight distribution impacts on the room would be insignificant. **Flat 1's** other rooms would be largely unaffected. I find that the deterioration in daylight to the property would not be unacceptable. Furthermore, sunlight provision to the patio would accord with the BRE guidance. It would not be significantly affected.
- 45. One bedroom each at Flat 2 and Flat 4 at Nos 471-473 would be significantly affected by the development in both VSC and daylight distribution terms, with major adverse impacts reported for the latter metric. However, they both have another bedroom and a living room facing Bethnal Green Road that would not be significantly adversely impacted. Having regard to this and the purposes of the rooms most affected, the losses of daylight to the properties would not be unacceptable.
- 46. Flat 3 at Nos 471-473 is located on the second floor. The daylight and sunlight assessment suggests that there would be a minor adverse impact to one room. However, the **flat's floorplans** suggest that it is a small galley style kitchen. I note that the supporting text to THLP Policy D.DH8 states that kitchens which provide space for dining will be considered habitable rooms. **The kitchen's** usability for purposes beyond food preparation is limited. The fla**t's** bedroom and living room would be largely unaffected. Consequently, the deterioration of the daylight conditions to this property would not be unacceptable.
- 47. The occupiers of the flats at Nos 471-473 have access to a communal roof terrace. The extension would be immediately adjacent to it. The Council

- accepts that the terrace would continue to receive levels of sunlight in accordance with the BRE guidance. Although the Council does not allege any conflicts with planning policy in respect of this matter, there would nevertheless be an adverse impact on the terrace as sunlight to it in the afternoon would be reduced. However, the adverse impact carries limited weight given that it would not be significant in the terms of the BRE guidance and complies with policy.
- 48. Due to the proximity of the proposed windows facing the roof terrace and to prevent overlooking, a condition is needed to obscure glaze and fix shut those windows to a height of 1.8m; however, fully obscured or fixed shut windows would be unnecessary. Outlook towards the viaduct and across Benthal Green Road would be unaffected by the development and therefore the scheme would not have an overbearing effect on the terrace.
- 49. Whilst the proposal would have adverse impacts to some rooms in nearby properties, for the reasons given the development would not result in unacceptable material deteriorations of the daylight conditions of Nos 465 and 471-473 Bethnal Green Road. In addition, it would not create unacceptable levels of overshadowing of the roof terrace at Nos 471-473. Accordingly, the proposal would not have an unacceptable effect on the living conditions of the occupiers of the properties. It accords with THLP Policy D.DH8.
- 50. Although not specified on the decision notice, the Council also argues that the proposal fails to adopt a design-led approach in relation to consideration of living conditions impacts. It is alleged that the proposal conflicts with LP Policy D3 in respect of this matter. However, the policy states that development should deliver appropriate outlook, privacy and amenity. The proposal achieves this and thus I find no conflict with the policy.

Development of adjacent land

- 51. The appellant has provided examples of ways in which development of the land between the site and the railway viaduct could come forward with the appeal scheme in place. The **Council's planning witness confirmed** at the Inquiry that it would be physically possible for the adjacent land to be redeveloped following the completion of the appeal scheme. Although the appeal building would need to be carefully considered when any adjacent development proposal is being designed, there is no evidence indicating that the appeal scheme would prevent the delivery of a policy compliant proposal on the adjacent land.
- 52. It has been put forward that an adjacent scheme could reduce daylight to the proposed offices, especially if the floorspace is subdivided to create single aspect units facing 471-473 Bethnal Green Road. However, there is nothing before me which suggests that an adjacent scheme must extend up to the site's boundaries. In addition, no compelling reasons have been presented which indicate that it is likely that single aspect office units would be created. Moreover, I have not been referred to any daylight standards that must be met for offices specifically. For these reasons, even if an adjacent proposal was to reduce daylight to parts of the appeal building, it is highly likely that the accommodation would remain adequate, with the majority of the floorspace continuing to be served by windows facing Bethnal Green Road and Hollybush Gardens that are some distance from neighbouring buildings.

- 53. Similarly, the obscure glazing and fixing shut of part of the windows oriented towards the adjacent roof terrace or 465 Bethnal Green Road does not lead me to conclude that there would be unacceptable levels of daylight to the proposed floorspace. In addition, there is little to indicate that adequate cross ventilation would be unachievable, that high levels of energy consumption from artificial lighting would occur as a result of restrictions to the windows or the construction of an adjacent scheme, or that the appeal building would otherwise fail to function well.
- 54. The Council's daylight expert explained that adjacent landowners could serve light obstruction notices to prevent the windows facing 471-473 Bethnal Green Road from acquiring rights to light. Furthermore, it has not been demonstrated that adjacent development would not be achievable if those rights existed. The Council has also referred to Regulation 8 of the Workplace Health, Safety and Welfare Regulation 1992, which sets out that every workplace shall have suitable and sufficient lighting and that this should be natural lighting so far as is reasonably practicable. However, there is nothing compelling before me which suggests that owners or tenants of the appeal building would be in breach of the regulations if the adjacent land was redeveloped.
- 55. I conclude that the appeal scheme would not prejudice the development of adjacent land. I find no conflict with LP Policies GG2 or D3, the purposes of which I have already summarised. I also find no conflict with paragraph 130 of the Framework, which explains that development should function well and add to the overall quality of an area over its lifetime.

Other Matters

- 56. The main parties agree that the development would not adversely affect the settings or significance of any designated heritage assets, the nearest of which are located on the other side of the viaduct to the site. Historic England has no objections to the proposal. Given the degree of separation and the presence of the intervening viaduct between the site and the assets, I have no compelling reasons for find otherwise.
- 57. The bat survey indicates that the appeal building has low potential for roosting bats, that no bats are roosting there currently, and that there are low levels of bat activity in the area. As such, bats are not a constraint to the development.
- 58. The Council has also identified that there would be daylight impacts on 4 Hollybush Place. It does not argue that the deterioration in daylight would be unacceptable or thus conflict with policy, but it considers that this nevertheless indicates against the development. I agree that there would be daylight impacts, but these attract limited weight given that they are not unacceptable material deteriorations for the purposes of THLP Policy D.DH8. Interested parties have also put forward that there would be light loss and outlook to the flats at City View House. However, the separation distance between the buildings would be sufficient to prevent harm in these respects.
- 59. Interested parties highlight that the patio and roof terrace at 471-473 Bethnal Green Road provide habitats for wildlife and that the use of those outdoor spaces contributes to the health and wellbeing of the **building's** occupiers. However, substantive evidence which indicates that biodiversity would be harmed has not been submitted and the condition to restrict the windows

- facing the outdoor spaces would ensure that an appropriate level of privacy is afforded to those using them.
- 60. It has also been put forward that the proposal would result in parking problems. The development would be car free; however, the site is located in a PTAL⁵ 6a area and as such it benefits from high levels of accessibility via sustainable transport modes. Additionally, an accessible parking bay for blue badge holders is proposed near the site and cycle parking facilities would be present within it. For these reasons there would be no significant parking issues.
- 61. It is put forward that there is already sufficient office space in the area and the retail space may adversely affect businesses in the area. However, the site is in an area designated by the THLP as a district centre and Bethnal Green Road is identified as primary shopping frontage Employment space is supported in such areas by THLP Policy D.EMP2 and S.TC1. Further, THLP Policy D.TC2 encourages retail and other uses that contribute to town centre activity and vitality along primary shopping frontages. As such, there is policy support for additional employment and retail space at the site.
- 62. There is a Transport for London (TFL) vent shaft immediately adjacent and London Underground infrastructure located beneath the site. Amongst other things, TFL recommends that noise and vibration emanating from both the development and the vent shaft should be mitigated. Interested parties also raise concerns regarding the potential for the development to reverberate noise and heat from the vent shaft and affect the release and distribution of fumes from the shaft.
- 63. However, transport infrastructure has evidently operated near the existing building for a considerable length of time. Substantive evidence indicating that there are, or will be, issues arising from the building's proximity to the infrastructure have not been provided. No concerns from the Council's environmental health department have been raised regarding these issues. These matters do not indicate that the proposal is unacceptable and conditions relating to them are not required.

Planning Obligations

- 64. The S106 includes several planning obligations that would come into effect if permission is granted. I have considered these having regard to the statutory tests contained in Regulation 122 of the CIL Regulations⁶ in addition to the tests set out at paragraph 57 of the Framework.
- 65. The S106 secures a financial contribution towards carbon offsetting to ensure that the development produces no net carbon dioxide emissions in accordance with THLP Policy D.ES7 and LP Policy S12. The methodology for calculating the contribution is set out in the Council's Planning Obligations Supplementary Planning Document (SPD). The obligation is directly related to the development, fairly and reasonably related to the development in scale and kind and needed to make the development acceptable. It thus accords with the tests for planning obligations.

⁵ Public Transport Accessibility Level

⁶ The Community Infrastructure Levy Regulations 2010

- 66. Obligations relating to employment, skills, enterprise and training contributions and initiatives during the construction and end-user stages of the development are also included. These are underpinned by THLP Policy S.SG2 and the SPD, which identify a need to address **Tower Hamlet's above average unemployment** levels and low proportions of residents finding employment within the borough. These obligations meet the tests for planning obligations.
- 67. The S106 also requires that a highway works agreement is completed and that carriageway and footway works to the parts of Bethnal Green Road and Hollybush Gardens that will be affected by the development are restored. These are needed to ensure that the highway in the vicinity will be safe to use and therefore satisfy the tests for planning obligations. The provision of the accessible parking bay is also secured by the S106. This meets the tests as the space is needed for occupiers of the development.
- 68. A fee towards the Council's costs of monitoring the S106 is also included. Regulation 122(2A) of the CIL Regulations enables such fees to be sought. The SPD sets out a methodology for calculating fees. I am satisfied that the monitoring fee satisfies the CIL Regulations.
- 69. In conclusion, the planning obligations specified above comply with the tests set out in the CIL Regulations and the Framework, and I have taken them into account in deciding the appeal.

Conditions

- 70. The appellant and the Council agreed to a schedule of conditions during the Inquiry. Additionally, the appellant has agreed to the wording of conditions with pre-commencement requirements. I have considered whether the proposed conditions meet the tests set out at paragraph 56 of the Framework. In order to satisfy those tests, minor editing of some of the conditions is necessary.
- 71. Further to the conditions that I have already identified to be necessary, a condition to require that the development is carried out in accordance with the approved plans is needed in the interests of certainty. A condition to require that cycle parking is provided prior to first occupation of the development is necessary to ensure that the occupiers benefit from timely provision of such facilities and to encourage the use of sustainable travel modes. To reduce the risk of flooding, a condition to ensure that the development is carried out in accordance with the flood risk assessment and sustainable drainage report is required.
- 72. Although the loss of employment space is constrained by THLP Policy D.EMP3, the Council's planning witness explained that there have been significant losses in office floorspace in recent years. This reconciles with the Employment Land Review⁷. A condition to require that the proposed office floorspace is retained for office purposes is clearly justified. The main parties agree that the ground floor should be restricted to uses within sub-paragraphs (a) to (c) of Class E of Schedule 2 of the Use Classes Order (UCO)⁸, which principally include retail, financial and professional, and food and drink related uses, in order to maintain the building's active frontages. Whilst THLP paragraph 11.21 indicates that gyms are appropriate on upper floors, there are not clear reasons for restricting uses within Class E(d) of the UCO such as this, which often also

_

⁷ London Borough of Tower Hamlets Employment Land Review, September 2017

⁸ The Town and Country Planning (Use Classes) Order 1987

- maintain active frontages. A condition limiting the ground floor to uses within sub-paragraphs (a) to (d) of Class E is therefore necessary.
- 73. Conditions to control the construction process, including a pre-commencement one to require the approval of a construction environmental management and logistics plan, are needed in the interests of highway safety and to safeguard the amenity of the occupiers of properties near the site. Noise and vibration from any proposed mechanical plant and equipment must also be controlled by condition for the latter reason. Further, TFL recommends that design and method statements are required specifically to ensure that the development does not adversely affect underground service tunnels and the adjacent vent shaft. Another pre-commencement condition is needed for this purpose.
- 74. Conditions to ensure that any land contamination identified during the construction process is remediated and require the approval of extract ventilation systems are needed in the interests of human health and amenity.
- 75. Based on the findings of the bat survey, a condition is needed to require that a further survey and any subsequently necessary mitigation is undertaken if the development is not commenced by the end of March 2023. This is to ensure that bats continue to remain absent from the building. Another one to require the implementation of biodiversity mitigation and enhancements is necessary to protect and enhance biodiversity of the site in accordance with Policy D.ES3 of the THLP.
- 76. To make sure that the delivery and servicing arrangements do not have an unacceptable adverse impact on highway safety and traffic flows on Bethnal Green Road and Hollybush Gardens, a condition to require adherence to an approved delivery and servicing management plan is needed. A condition to require the approval of refuse storage details to be submitted is necessary so that adequate provision is made. To ensure that the development achieves the highest levels of sustainable design and construction and maximises energy efficiency in accordance with THLP Policy D.ES7, a condition is needed to ensure that the development has achieved a BREEAM Excellent rating. A condition to require the approval of security measures is needed to make sure that the development contributes to community safety effectively.
- 77. It has been suggested that a condition should require that it be demonstrated that the building could be accessed without entering TFL land. However, I am not convinced that this is a matter related to planning or necessary. TFL also recommends that the windows near the vent shaft are fixed shut to prevent items being dropped into it. However, the aforementioned restrictions to those windows would mitigate this potential issue sufficiently.
- 78. Having regard to my findings in respect of the capacity for the adjacent land to be redeveloped, a condition to prevent any single aspect units with windows oriented towards 471-473 Bethnal Green Road is unnecessary. Additionally, as I have found that the relationship between the development and 10-14 Hollybush Gardens would be acceptable, a condition to require more details of the junction between the buildings is not required.

Conclusion

79. I have found that the proposal would not have harmful effects on the character or appearance of the appeal building or the surrounding area, or the setting or

significance of 465 Bethnal Green Road. Furthermore, it would not prejudice the development of adjacent land. Although there would be adverse impacts due to loss of daylight to Nos 465 and 471-473 Bethnal Green Road and 4 Hollybush Place, and loss of sunlight to the roof terrace at Nos 471-473, the development would not have unacceptable effects on the living conditions of the occupiers of the properties in the vicinity of the site, and the proposal complies with the development plan in respect of these matters. Moreover, the proposal accords with the development plan when it is taken as a whole.

- 80. Whilst I have carefully considered the Council's case and the views of all interested parties, material considerations do not indicate that a decision should be taken other than in accordance with the development plan.
- 81. For the reasons given above, I conclude that the appeal is allowed.

Mark Philpott

INSPECTOR

APPEARANCES at the Inquiry

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Local resident

Local resident

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Senior Planning Officer, the Council

Planning Lawyer, the Council

INTERESTED PARTIES:

Oliver Collier Daren Firminger Robert Fraser

DOCUMENTS submitted during the Inquiry

- 1. Daylight presentation for evidence-in-chief, by Dr Paul Littlefriar
- 2. Opening statement on behalf of the appellant
- 3. Opening statement on behalf of the Council
- 4. Consultation response from Historic England, 9 August 2021
- 5. Natural England Standing Advice Bats: surveys and mitigation for development projects
- 6. Email from appellant confirming qualifications of Mr Lukas Barry, 10 August 2021
- 7. Consultation response from Transport for London, 11 August 2021
- 8. Schedule of suggested planning conditions, 11 August 2021
- 9. Draft Section 106 legal agreement, Ref LBTH Amends 11.8.21_ draft s106 Agreement 469 BGR (V3) (002)
- 10. Draft Section 106 legal agreement, Ref 11627824_1
- 11. Summary of Section 106 legal agreement
- 12. Schedule of suggested planning conditions, 13 August 2021
- 13. Closing statement on behalf of the Council
- 14. Closing statement on behalf of the appellant
- 15. Schedule of suggested planning conditions, 13 August 2021, version 3
- 16. Bat Roost Assessment Statement of Common Ground and associated appendices
- 17. Photographs of galvanised metal building at Gormley Studios, received via email 18 August 2021
- 18. Draft Section 106 legal agreement, Ref 106_BethnalGnRoad_engrossment
- 19. Email from appellant confirming agreement to pre-commencement conditions, 25 August 2021
- 20. Counterpart Section 106 legal agreements, dated 25 August 2021

DRAWINGS submitted during the Inquiry

- 1. Proposed South Elevation: 303_P_40_01 P2
- 2. Proposed West Elevation: 303_P_40_02 P2
- 3. Proposed East Elevation: 303 P 40 04 P2
- 4. Indicative Proposed Window Section

Schedule of Conditions

- 1) The development hereby permitted shall begin not later than 3 years from the date of this decision.
- 2) The development hereby permitted shall be carried out in accordance with the following approved plans:

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303_X_10_01_P1; 303_X_10_02_P1; 303_X_20_01_P1; 303_X_20_02_P1; 303_X_20_03_P1; 303_X_20_04_P1; 303_X_30_01_P1; 303_X_30_02_P1; 303_X_40_01_P1; 303_X_40_02_P1; 303_X_40_03_P1; 303_X_40_04_P1; 303_P_20_01_P2; 303_P_20_02_P1; 303_P_20_03_P1; 303_P_20_04_P1; 303_P_20_05_P1; 303_P_20_06_P1; 303_P_20_07_P1; 303_P_30_01_P1; 303_P_30_02_P1; 303_P_40_01_P2; 303_P_40_02_P2; 303_P_40_03_P1; 303_P_40_04_P2.
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- 3) Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) (England) Order 2015 (or any order revoking and reenacting that Order with or without modification), a minimum of 2036 square metres of floorspace within the building shall be used for office purposes falling within Class E(g)(i) of Schedule 2 of the Town and Country Planning (Use Classes) Order 1987 (or in any provision equivalent to that Class in any statutory instrument revoking and re-enacting that Order with or without modification) and for no other purposes.
- 4) Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) (England) Order 2015 (or any order revoking and reenacting that Order with or without modification), the retail/showroom floorspace identified on Drawing No 303_P_20_01_P2 shall be used for a use or combination of uses falling within sub-paragraphs (a) to (d) of Class E of Schedule 2 of the Town and Country Planning (Use Classes) Order 1987 (or in any provision equivalent to those sub-paragraphs within Class E in any statutory instrument revoking and re-enacting that Order with or without modification) and for no other purposes.
- 5) The development hereby permitted shall be carried out in accordance with the details and the 'Proposed Drainage Arrangements' set out within the Flood Risk Assessment & SuDS Report (Ref 2218 Rev 2, dated November 2020).
- 6) The cycle storage facilities shall be provided in accordance with the approved plans prior to the first occupation of the development and thereafter be maintained and made available to the occupiers in operational condition for the lifetime of the development.
- 7) Prior to commencement of the development, including demolition works, a Construction Environmental Management & Logistics Plan shall be submitted to and approved in writing by the local planning authority. The plan shall include details of:
 - a) the telephone, email and postal addresses of the site manager and details of complaints procedures for members of the public;
 - a Dust Management Strategy to minimise the emission of dust and dirt during construction including but not restricted to spraying of materials with water, wheel washing facilities, street cleaning and monitoring of dust emissions;

- c) measures to maintain the site in a tidy condition in terms of disposal/storage of waste and storage of construction plant and materials;
- d) a scheme for recycling/disposition of waste resulting from demolition and construction works;
- e) ingress and egress to and from the site for vehicles;
- f) the numbers and timings of vehicle movements to and from the site and details of the access routes, delivery scheduling, use of holding areas, logistics and consolidation centres;
- g) parking of vehicles for site operatives and visitors;
- h) a Travel Plan for construction workers;
- i) the locations and sizes of site offices and welfare and toilet facilities;
- the erection and maintenance of security hoardings including decorative displays and facilities for public viewing;
- k) measures to ensure that pedestrian access past the site is safe and not obstructed; and
- measures to minimise risks to pedestrians and cyclists, including but not restricted to accreditation of the Fleet Operator Recognition Scheme (FORS) and use of banksmen for supervision of vehicular ingress and egress.

The development shall be carried out in accordance with the approved details.

- 8) Prior to commencement of the development, including demolition works, design and method statements shall be submitted to and approved in writing by the local planning authority which shall include but are not restricted to:
 - details on construction methods for the development;
 - details on the use of tall plant and scaffolding;
 - Risk Assessment and Method Statements (RAMS); and
 - details which demonstrate that increased loading from the development on the site will not have a negative effect on existing London Underground infrastructure.

The development shall be carried out in accordance with the approved details.

- 9) If the development has not commenced by the end of March 2023, an updated bat survey shall be undertaken by a licensed bat worker prior to commencement of the development. Evidence that the survey has been undertaken shall be submitted to and approved in writing by the local planning authority prior to the commencement of the development. If evidence of bat roosting is found, mitigation measures shall be implemented in accordance with details that shall have been submitted to and approved in writing by the local planning authority.
- 10) Unless otherwise specified by a S61 Consent granted under the Control of Pollution Act 1974, demolition, building, engineering or other operations associated with the construction of the development (including the arrival, departure and loading and unloading of construction vehicles):

- a) shall be carried out in accordance with the Tower Hamlets Code of Construction Practice (or successor documents);
- b) shall only be carried out within the hours of 08:00 and 18:00 Monday to Friday and 08:00 to 13:00 on Saturdays and no works shall take place on Sundays and Public Holidays;
- c) shall not generate ground-borne vibration that exceeds 1.0mm/s Peak Particle Velocity (PPV) at residential properties and 3.0mm/s PPV at commercial properties neighbouring the site.
- d) shall not generate noise levels that exceed 75dB(A) measured 1 metre from the façade of any occupied building neighbouring the site; and
- e) any Non Road Mobile Machinery (NRMM) of net power between 37kW and 560kW used during the course of the demolition, site preparation and construction phases shall not exceed the emission standards set out in the Mayor of London's 'Control of Dust and Emissions During Construction and Demolition' Supplementary Planning Guidance 2014. Unless it complies with those standards, no NRMM shall be on site, whether in use or not, without the prior written consent of the local planning authority. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register at https://nrmm.london/.
- 11) a) If during the construction works any potential land contamination or unusual or odorous ground conditions are encountered, all construction works shall cease immediately and not resume until either: (i) the potential contamination has been assessed and a remediation scheme has been submitted to and approved in writing by the local planning authority; or (ii) the timescales for submission of a remediation scheme and details of works which may be carried out in the interim have been submitted to and approved in writing by the local planning authority.
 - b) If land contamination is identified pursuant to part (a) of this condition, the development shall not be occupied until the contaminated land has been fully remediated in accordance with an approved remediation scheme and a post completion report that verifies that the site has been remediated has been submitted to and approved in writing by the local planning authority.
- 12) Notwithstanding the approved plans, no superstructure works shall take place until samples and full particulars of all external facing materials to be used in the construction of the development have been submitted to and approved in writing by the local planning authority. These shall include but are not restricted to:
 - a) A sample of limewashed brickwork of no less than 1 metre by 1 metre and a sample of a galvanised metal panel.
 - b) Details at a scale of no less than 1:10 of external cladding, including the colour and finish of the galvanised metal, and details of joints, panel sizes and fixing methods, together with details of junctions with the brickwork and windows of the building. If an off-site manufactured cladding system is to be used, details of the system and a mock-up sample panel that includes at least one junction between preassembled panels and other adjoining materials including brickwork and windows shall be provided.

- c) Samples and drawings of fenestration including details of reveals, sills and lintels. Drawings shall be at a scale of no less than 1:20.
- d) Drawings and details of entrances and shopfronts including doors, glazing, reveals, stallrisers, canopies, signage zones, post boxes, lighting, soffits and security measures. Drawings shall be at a scale of no less than 1:20.
- e) Details and samples of roofing.
- f) Details of any external rainwater goods, flues, grilles, louvres and vents.
- g) Details of any external plant, plant enclosures and safety balustrades.
- h) Details of the vertical and horizontal fins at a scale of no less than 1:10.

The development shall not be carried out other than in accordance with the approved details.

- 13) No superstructure works shall take place until details of security measures have been submitted to and approved in writing by the local planning authority. The details shall demonstrate that Secured by Design security standards, including counter terrorism advice, have been included in the final build specifications. The approved security measures shall be implemented in full prior to first occupation and retained for the lifetime of the development.
- 14) No superstructure works shall take place until details of biodiversity mitigation and enhancements to be provided within the site have been submitted to and approved in writing by the local planning authority. The approved details shall be implemented in full prior to first occupation of the development.
- 15) The development hereby permitted shall not be occupied until a Delivery and Servicing Management Plan has been submitted to and approved in writing by the local planning authority. Deliveries and servicing shall be carried out in accordance with the approved details for the lifetime of the development.
- 16) The development hereby permitted shall not be occupied until details of refuse storage have been submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details.
- 17) Notwithstanding the approved plans, the development hereby permitted shall not be occupied until the windows installed in the eastern elevation of the extension and the part of the southern elevation of the extension facing the Transport for London vent shaft as identified on Drawing No 303_X_20_01_P1 have been glazed with obscured glazing and fixed shut so as to be incapable of being opened to a height of 1.8 metres above the floors of the rooms in which those windows are installed. Details and samples of the obscured glazing shall be submitted to and approved in writing by the local planning authority before the windows are installed. The windows shall be installed as approved and retained in that form thereafter.
- 18) Notwithstanding the approved plans, the development hereby permitted shall not be occupied until the windows identified as obscure glazed on Drawing No 303_P_40_02_P2 have been glazed with obscured glazing and fixed shut so as to be incapable of being opened to a height of 1.8 metres above the floors of the rooms in which those windows are installed. Details and samples of the obscured glazing shall be submitted to and approved in writing by the local

- planning authority before the windows are installed. The windows shall be installed as approved and retained in that form thereafter.
- 19) Any mechanical plant and equipment within the site shall be designed and maintained for the lifetime of the development so that the rating level of noise from the plant and equipment does not exceed the typical measured background noise level (LA90,T) without the plant or equipment in operation as measured one metre from the window of the nearest habitable room of the nearest residential property. The rating level of the plant and the background noise level shall be determined using the methods from the version of BS 4142 current at the time of this decision. Vibration from plant in the centre of any habitable room shall be **no higher than the value equivalent to "low probability of adverse comment"** when assessed in accordance with the version of BS 6472 current at the time of this decision. No mechanical plant or equipment shall be operated within the site until a post installation verification report that includes acoustic test results has been submitted to and approved in writing by the local planning authority.
- 20) Prior to installing an extract ventilation system, details of the system including any extraction hood, internal fan, flexible couplings, three-stage filtration (grease filters, pre-filters and activated carbon filters), the height of the extract duct above eaves level and anti-vibration mountings shall be submitted to and approved in writing by the local planning authority. The system shall be installed as approved before coming into use and maintained as such thereafter.
- 21) The development shall achieve a BREEAM Excellent rating accordance with the requirements of the relevant BREEAM scheme. Within 3 months of first occupation of the development a Final BREEAM Certificate shall be issued for it and produced to the local planning authority certifying that a BREEAM Excellent rating has been achieved.

End of schedule

APPENDIX A.22 469 BETHNAL GREEN DAYLIGHT, SUNLIGHT AND OVERSHADOWING IMPACT ASSESSMENT

469 BETHNAL GREEN ROAD, LONDON, E2 9QH

DAYLIGHT & SUNLIGHT REPORT

NOVEMBER 2020

REF. 19144

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1.0 Introduction

Delva Patman Redler LLP have been instructed by DAO Estate Ltd. to assess the potential effects of the proposed re-development at 469 Bethnal Green Road on daylight and sunlight to existing neighbouring properties.

The site is located at 469 Bethnal Green Road, East London and is shown in the aerial photo in Figure 1 below.

The proposed development comprises the addition of 3 storeys.

It is noted that there are three neighbouring consented schemes which have been granted consent which are 1) 10-14 Hollybush Gardens (PA/17/01732) 2) 5 Hollybush Place (PA/16/02713) 3) 1-4 Hollybush Place (PA/16/03212). These are yet to be constructed however we have therefore considered an alternative future baseline with these in place and assessed the proposed scheme against this.

The daylight and sunlight study has been carried out using the assessment methodology recommended in the Building Research Establishment (BRE) Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice (second edition, 2011)* ("the BRE guide") and the Professional Guidance Note, *'Daylighting and sunlighting'* (1st edition, 2012), published by the Royal Institution of Chartered Surveyors.

A location drawing of the site and surrounding properties that have been assessed is attached at Appendix A. Our analysis results are attached in the remaining appendices.

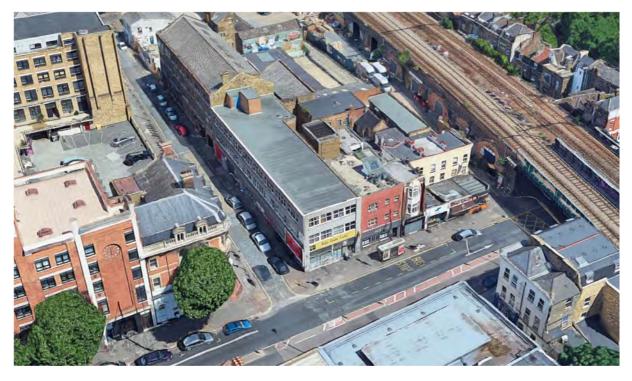


Figure 1 - Aerial photo of the site and surrounding buildings (© Google)

2.0 PLANNING POLICY & GUIDELINES

2.1 National Planning Policy and Guidance

National Planning Policy Framework (February 2019)

The National Planning Policy Framework (NPPF) (revised February 2019) sets out the Government's planning policies and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced. The NPPF was revised in July 2018 and February 2019 with an emphasis on sustainable development and delivery of housing.

BRE Report 209, Site Layout Planning for Daylight and Sunlight: A guide to good practice

The BRE guide gives advice on site layout planning of development to retain good daylighting and sunlighting in existing surrounding buildings and to achieve it in new buildings. The guide states:

"(Its) main aim is ... to help to ensure good conditions in the local environment, considered broadly, with enough sunlight and daylight on or between buildings for good interior and exterior conditions."

"The guide is intended for building designers and their clients, consultants and planning officials. The advice given is not mandatory and the report should not be seen as a part 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 the 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... The calculation methods ... are entirely flexible in this respect."

2.2 Regional planning policy

The London Plan (March 2016)

'The London Plan – The Spatial Strategy for London Consolidated with Alterations since 2011' sets out the Mayor of London's spatial development strategy for London. It forms part of the development plan for Greater London, along with local plans of the London boroughs.

Policy 7.6, Architecture, states:

"Buildings and structures should ... not cause unacceptable harm to the amenity of surrounding land and buildings, particularly residential buildings, in relation to privacy, overshadowing, wind and microclimate. This is particularly important for tall buildings."

Policy 7.7, Location and design of tall and large buildings, states:

"Tall and large buildings should not have an unacceptably harmful impact on their surroundings."

and

"Tall buildings ...should not affect their surroundings adversely in terms of microclimate, wind turbulence, overshadowing, noise, reflected glare, aviation, navigation and telecommunication interference."

Mayor of London's Draft New London Plan (Intend to publish December 2019)

The Mayor of London's Draft New London Plan (Intend to publish December 2019) highlights intensification of land use as a means to support additional homes and workspaces in London.



Draft Policy GG2 'Making the best use of land' states:

"To create successful sustainable mixed-use places that make the best use of land, those involved in planning and development must:

- AA prioritise sites which are well-connected by existing or planned public transport.
- B proactively explore the potential to intensify the use of land to support additional homes and workspaces, promoting higher density development, particularly in locations that are well-connected to jobs, services, infrastructure and amenities by public transport, walking and cycling
- BA applying a design-led approach to determine the optimum development capacity of sites."

Clearly, the guidelines and recommendations given in the BRE guide should be applied with an appropriate degree of flexibility and sensitivity to higher-density housing development, especially in opportunity areas, town centres, large sites and accessible locations. Account should be taken of local circumstances, the need to optimise housing capacity and scope for the character and form of an area to change over time.

2.3 Local planning policy

The development site is located within London Borough of Tower Hamlets. It is understood that the Council's local planning policy seeks to reasonably safeguard daylight and sunlight amenity to existing surrounding properties.

3.0 ASSESSMENT METHODOLOGY

The technical assessments that underpin this daylight and sunlight study have been carried out in accordance with the assessment methodology recommended in the abovementioned BRE guide. The methodology is described below.

3.1 Daylight to existing buildings

The BRE guide states:

"In designing a new development or extension to a building, it is important to safeguard the daylight to nearby buildings.

The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms.

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

To determine which buildings may need to be assessed, it states:

"If, for any part of the new development, the angle from the centre of the lowest affected window to the head of the new development is more than 25°, then a more detailed check is needed to find the loss of skylight to the existing buildings."

To quantify the available daylight to existing neighbouring buildings, the BRE guide proposes two principal methods of measurement, neither of which carries more importance than the other, The tests involve:

- i) calculating the vertical sky component (VSC) at the centre of each main window on the outside plane of the window wall, which measures the total amount of skylight available to that window; and
- ii) plotting the no-sky line (NSL) on the working plane inside a room and measuring the area that can receive direct skylight, which assesses the distribution of daylight around the room.

The VSC is defined as:

"The amount of skylight falling on a vertical wall or window ... This is the ratio of the direct sky illuminance falling on the vertical wall at a reference point (usually the centre of the window), to the simultaneous horizontal illuminance under an unobstructed sky. The standard CIE ... overcast sky is used, and the ratio is usually expressed as a percentage. The maximum value is almost 40% for a completely unobstructed vertical wall.

The VSC therefore measures the daylight available at the window, but as it does not take account of the size or number of windows serving it, it does not measure light inside the room. The guide states:

"Any reduction in the total amount of skylight can be calculated by finding the VSC at the centre of each main window ... For a bay window, the centre window facing directly outwards can be taken as the main window. If a room has two or more windows of equal size, the mean of their VSCs may be taken. The reference point is in the external plane of the window wall. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed."

The NSL test is described thus:

"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. The no sky line divides points on the working plane which can and cannot see the sky."

3.2 Sunlight to existing buildings

The BRE guide states:

"In designing a new development or extension to a building, care should be taken to safeguard the access to sunlight both for existing dwellings, and for any nearby non-domestic buildings where there is a particular requirement for sunlight.

Obstruction to sunlight may become an issue if:

- some part of a new development is situated within 90° of due south of a main window wall of an existing building, and
- in the section drawn perpendicular to this existing window wall, the new development subtends an angle greater than 25° to the horizontal measured from the centre of the lowest window to a main living room.

To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun.

A point at the centre of the window on the outside face of the window wall may be taken [as the calculation point]."

To quantify the available sunlight, the BRE guide advises measuring the percentage of annual probable sunlight hours (APSH), which is defined as follows:

"'probable sunlight hours' means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question".

Probable sunlight hours is the long-term average of the total number of hours during a year in which direct sunlight reaches the unobstructed ground when clouds are taken into account.

The BRE publishes APSH indicators for three latitudes in the UK: London (51.5°N, 1486 unobstructed hours), Manchester (53.5°N, 1392 unobstructed hours) and Edinburgh (56°N, 1267 unobstructed hours). The assessment uses whichever indicator is nearest to the latitude of the proposed development.

The assessment calculates the percentage of APSH over the whole year (annual sunlight) and between 21 September and 21 March (winter sunlight).

3.3 Scope of assessment

Surrounding properties

We have scoped our assessment of the impact of the proposed development on daylight and sunlight to existing surrounding properties having regard to the recommendations in the BRE guide, including the above-mentioned preliminary 25° angle test and 90° orientation tests, and using professional judgement.

In theory, the BRE guidelines may be applied to non-domestic buildings where occupants have a reasonable expectation of daylight (including schools, hospitals, hotels and hostels, small workshops and some offices) and any with a specific requirement for sunlight. However, it is common practice for studies for planning applications to assess residential properties only, unless the neighbouring buildings are sensitive receptors with a greater requirement for daylight or sunlight, such as residential care homes, schools or patient wards in hospitals.



We have therefore assessed the potential impacts on the existing surrounding residential properties and a neighbouring photography studio.

For neighbouring residential properties, the BRE guide regards bedrooms as less important for daylight and both kitchens and bedrooms as less important for sunlight. Bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.

3.4 Method of assessment

We have used 3D computer modelling and specialist software to run the assessments recommended in the BRE guide.

Drawings of our 3D computer model used in our assessment are attached at Appendix A including the following:

- Site location plan showing the neighbouring properties assessed
- Two key building heights drawing showing a 3D view in the existing and proposed conditions within the surrounding context
- Window location drawings show the neighbouring windows that have been assessed

The numerical results of our daylight and sunlight calculations are tabulated and appended to this report. For the assessment of impact on surrounding properties the calculations have been run in both the existing and proposed conditions, so that the potential loss or gain in light is quantified. This is then presented, both on an absolute scale and a comparative scale, measuring the percentage loss of light or factor of former value for the light that will be retained.

3.5 Sunlight to gardens and amenity spaces

Sunlight should be assessed on the equinox (21 March) to main back gardens of houses, allotments, parks and playing fields, children's playgrounds, outdoor swimming pools, sitting-out areas, such as in public squares and focal points for views, such as a group of monuments or fountains.

The assessment measures the percentage of each area that can receive at least two hours of sunlight on 21 March - the two-hours sun-on-ground test. Sunlight at an altitude of 10° or less is ignored, because it is likely to be blocked by planting, and fences or walls less than 1.5 metres high can also be ignored. Front gardens, driveways and hard standing for cars are usually omitted. Normally, trees and shrubs need not be included, partly because their shapes are almost impossible to predict, and partly because the dappled shade of a tree is more pleasant than a deep shadow of a building.

Where a large building is proposed which may affect a number of gardens or open spaces, it can be illustrative to plot shadow plans showing the location of shadows at different times of day and year. The equinox (21 March) is the best assessment date as it shows the average level of shadowing. Midsummer (21 June) is an optional addition date.

4.0 RESEARCH UNDERTAKEN AND ASSUMPTIONS MADE

To aid accuracy of the assessment and interpretation of the results, we have carried out online searches to try to obtain floor plans for the neighbouring buildings, including from online planning application records, registered lease plan information and general estate agency websites. This is the approach recommended in the Professional Guidance Note, 'Daylighting and sunlighting' (1st edition, 2012), published by the Royal Institution of Chartered Surveyors, which states:

"As a minimum, and subject to any limitations relating to a client instruction, surveyors should undertake searches of the local authority's planning portal to establish existing or proposed room layouts of neighbouring properties if they are available. This will ensure a robust approach and enable the surveyor to produce reliable information for daylight distribution analysis, or if average daylight factor (ADF) tests are appropriate ... Surveyors should also use the internet to search for other relevant information, including estate agent details, which commonly include plans of properties that can also be useful in determining a room layout or use."

Properties where we were able to find floor plans showing the internal layouts are listed in Table 1. The property reference numbers cross-refer to the location drawing at Appendix A.

Table 1 - Information sources for neighbouring buildings

Ref	Address	Information obtained
1	465 Bethnal Green Road	Plans from registered lease information
2	4a Hollybush Place	Plans from planning archive
3	4 Hollybush Place	Plans from planning archive
4	471-473 Bethnal Green Road	Partial plans from planning archive

Where we have found drawings, we have based the room layouts and, where possible, the floor levels in our assessment model on the drawings, both for that building and any similar neighbouring buildings.

Where we were been unable to obtain drawings, we have made reasonable assumptions as to room layouts, room uses and floor levels within the neighbouring properties. Typically, that involves adopting a generic 4m-deep room for residential premises, unless the style of building suggests otherwise. In the absence of suitable plans, estimation is a conventional approach.

We have built up the three neighbouring consented schemes as referenced on page 1 of the report from drawings obtained from the relevant planning applications. Due to the proposed rooms uses and aspect of the neighbouring developments there are no rooms that qualify for assessment for either daylight or sunlight.

5.0 SIGNIFICANCE CRITERIA

5.1 BRE standard numerical guidelines

Surrounding properties

The BRE guide sets out numerical guidelines against which the potential effects of proposed development on daylight and sunlight to surrounding properties may be assessed. The default numerical guidelines are summarised in Table 2 below.

Table 2 - BRE numerical criteria for neighbouring properties

Issue	BRE Default Criteria
Daylight to neighbouring buildings	 Daylight will be adversely affected if either: the vertical sky component (VSC) measured at the centre of the window is reduced to less than 27% and less than 0.8 times its former value, or the area of the working plane in a room which can receive direct skylight, i.e. is within no-sky line (NSL), is reduced to less than 0.8 times its former value.
Sunlight to neighbouring buildings	Sunlight will be adversely affected if the centre of the window will: • receive less than 25% of annual probable sunlight hours (APSH) or less than 5% APSH during the winter months (21 September to 21 March) and • less than 0.8 times its former sunlight hours during either period and • the reduction in sunlight over the whole year will be greater than 4% APSH.

In short, the BRE guidelines work on the general principle that, except where certain minimum values are retained (i.e. 27% VSC, 25% APSH annually, 5% APSH in winter), a reduction in light to less than 0.8 times its former value (i.e. more than 20% reduction) will be noticeable to the occupiers.

5.2 Categorisation of magnitudes and significance of effects

We have sought to categorise the magnitude of any impacts that exceed the BRE guidelines. There is no industry-standard categorisation, but this study adopts the approach in Table 3 below.

Table 3 – Categorisation of magnitudes of effect

E"	Effect does not satisfy the BRE guidelines									
Effect satisfies the BRE guidelines	21% to 30% loss (0.70-0.79 times former value)	31% to 40% loss (0.60-0.69 times former value)	> 40% loss (<0.60 times former value)							
Negligible impact	Minor adverse impact	Moderate adverse impact	Major adverse impact							

It must be noted that there could be instances where magnitudes of effect to rooms or windows when measured against the above criteria are deemed to be moderate or major impacts even though the magnitude of change is small. For example, a percentage reduction of 40% from an existing VSC or NSL figure of 10% equates to only a 4% absolute change which is not considered material. Care must therefore be taken to interrogate the technical results fully.



6.0 BASELINE CONDITION FOR NEIGHBOURING PROPERTIES

An analysis has been undertaken of the daylight and sunlight levels in the neighbouring buildings and amenity spaces in the baseline condition with the existing site massing in place. The existing site massing is shown coloured grey on the key building heights drawing at Appendix A.

The existing buildings on the site comprises of a rectangular footprint three-storey building.

The daylight and sunlight levels in the baseline condition are shown in the results tables in Appendix B under the 'Existing' column headings.

It is against this baseline condition that the effects of the proposed development have been assessed.

The future baseline incorporates the three consented neighbouring schemes in the baseline on the assumption they are built out as an alternative scenario. These consented schemes are shown in blue within our key building heights drawing in Appendix C. Due to the proposed rooms uses and aspect of the neighbouring developments there are no rooms that qualify for assessment for either daylight or sunlight.

7.0 EFFECTS OF PROPOSED DEVELOPMENT ON NEIGHBOURING PROPERTIES

7.1 Daylight to neighbouring properties (Existing v Proposed)

VSC and NSL

The results of the VSC and NSL analysis are tabulated in Appendix B and summarised, on a room basis, in Table 4 below.

Table 4 - Summary of VSC and NSL effects on rooms in existing neighbouring properties

Address	Total no. of rooms tested	No. of rooms meeting VSC guidelines	No. of rooms with impacts outside VSC guidelines	No. of rooms meeting NSL guidelines	No. of rooms with impacts outside NSL guidelines	No. of rooms with impacts outside VSC or NSL guidelines
465 Bethnal Green Road	4	4	0	2	2	2
4a Hollybush Place	2	2	0	2	0	0
4 Hollybush Place	2	2	0	2	0	0
471-473 Bethnal Green Road	8	5	3	4	4	5
488 Bethnal Green Road	2	2	0	2	0	0
474 Bethnal Green Road	4	4	0	4	0	0
Total	22	19	3	16	6	7

Table 4 shows that of the total 22 habitable rooms assessed in the 6 neighbouring properties, 19 (86%) would satisfy the VSC guidelines and 16 (72%) would satisfy the NSL guidelines (daylight distribution) - see criteria in Table 2.

Therefore, the effects to 4 of the 6 properties is negligible. It is necessary to consider the results of the other 2 properties in more detail.

In VSC terms, a total of 3 rooms within 471-473 Bethnal Green Road would not satisfy the VSC guidelines. The transgressions occur to a kitchen and two bedrooms, however as the bedrooms are mainly occupied at night-time, the BRE guide regards bedrooms as less important for daylight. In real terms the absolute reduction in VSC to the kitchen windows is no more than a 7% reduction from existing values. It is as a result of the low existing VSC levels which artificially magnify the impact.

Looking at the detailed results for NSL, a total of 6 rooms within 471-473 and 465 Bethnal Green Road will not satisfy the NSL guidelines. 2 of these rooms are located within 465 Bethnal Green Road. The reductions are considered major however when considering the mean retained VSC values for these rooms, these remain above 27%. 471-473 Bethnal Green Road has two bedrooms with reductions to NSL levels which may be considered major, however as the bedrooms are predominately occupied at night time, the BRE guide regards bedrooms as less important for daylight. Furthermore, the kitchen and study have reductions which may be termed as minor with the retained values for these two rooms being 44% and 72% respectively.

Overall, the daylight transgressions are isolated to only 2 neighbouring properties where the effect is considered moderate, however these properties generally retain levels of visible sky that are consistent with an urban location.

7.2 Sunlight to neighbouring properties

The results of the annual and winter sunlight analyses are tabulated in Appendix B and summarised Table 5 below.



Table 5 - Number of rooms experiencing APSH effects as a result of the proposed development

Address	Total number of rooms tested	Number of rooms meeting APSH guidelines	Number of rooms with impacts beyond APSH guidelines
465 Bethnal Green Road	2	2	0
4a Hollybush Place	2	2	0
4 Hollybush Place	2	2	0
488 Bethnal Green Road	2	2	0
Total	8	8	0

Table 5 shows that of the 8 rooms assessed in 4 neighbouring properties, 8 (100%) would satisfy the BRE guidelines for both annual and winter APSH.

Overall, the effect on sunlight is considered to be negligible.

7.3 Cumulative Scenario

We have run an additional assessment with the 3 neighbouring consented schemes built out in the existing as an alternative future baseline to see how the impacts to daylight and sunlight to the neighbours overall compare to the current situation on the ground.

The 3 consented schemes are 1) 10-14 Hollybush Gardens (PA/17/01732) 2) 5 Hollybush Place (PA/16/02713) 3) 1-4 Hollybush Place (PA/16/03212). Due to the proposed rooms uses and aspect of the neighbouring developments there are no rooms that qualify for assessment for either daylight or sunlight.

Table 6 - Summary of VSC and NSL effects on rooms in existing neighbouring properties

Address	Total no. of rooms tested		No. of rooms with impacts outside VSC guidelines	No. of rooms meeting NSL guidelines		No. of rooms with impacts outside VSC or NSL guidelines
465 Bethnal Green Road	4	4	0	2	2	2
4a Hollybush Place	2	2	0	2	0	0
4 Hollybush Place	2	1	1	2	0	1
471-473 Bethnal Green Road	8	4	4	4	4	5
488 Bethnal Green Road	2	2	0	2	0	0
474 Bethnal Green Road	4	4	0	4	0	0
Total	22	17	5	16	6	8

Table 6 shows that of the total 22 habitable rooms assessed in the 6 neighbouring properties, 17 (77%) would satisfy the VSC guidelines and 16 (72%) would satisfy the NSL guidelines (daylight distribution).

This demonstrates that there would only be an additional 2 VSC transgressions and these 2 rooms experience percentage reductions of just over 21% which is considered a minor impact.

Overall, there would be a minor additional impact on daylight to the neighbouring residential properties in the alternative future baseline scenario.

The results of the annual and winter sunlight analyses are tabulated in Appendix C and summarised in Table 7 below.



Table 7 - Number of rooms experiencing APSH effects as a result of the proposed development

Address	Total number of rooms tested	Number of rooms meeting APSH guidelines	Number of rooms with impacts beyond APSH guidelines
465 Bethnal Green Road	2	2	0
4a Hollybush Place	2	2	0
4 Hollybush Place	2	2	0
488 Bethnal Green Road	2	2	0
Total	8	8	0

Table 7 shows that of the 8 rooms assessed in 4 neighbouring properties, 8 (100%) would satisfy the BRE guidelines for both annual and winter APSH.

Overall, the effect on sunlight is considered to be negligible in the alternative future baseline scenario.

7.4 Sunlight to gardens and amenity spaces

From our review of the adjoining properties, there appears to be limited amenity spaces given the built-up nature. It is noted that there is a sunken courtyard recently built into 471-473 Bethnal Green Road and in addition, it appears that the main roof of the building is also used as an amenity space. Given the scheme proposals are situated to the west of the amenity spaces, they would only experience potential shadow from the proposal from mid-afternoon due to the orientation of the sun. It is considered that the 2 hour criteria would already be met for the main roof amenity before this shadowing occurs. Due to the sunken nature of the courtyard, the distance from the proposal and the angle of the sun on March 21st, it is considered that this space would not be materially affected by the proposals.

8.0 CONCLUSIONS

The site is in an urban location in east London located to the north of Bethnal Green Road and sits on the corner plot directly to the east of Hollybush Gardens. The existing building on the site comprises of a rectangular footprint three-storey building and the surrounding properties have a mixed-use of mainly commercial and some residential use buildings.

The proposed development comprises the addition of 3 storeys.

We have assessed the potential effects of the proposed development on daylight and sunlight to surrounding residential properties, main back gardens and amenity spaces using the methodology recommended in the BRE guidelines, *Site Layout Planning for Daylight and Sunlight: A guide to good practice (second edition, 2011).* The assessment has been run in the existing baseline and proposed development conditions and the potential effects of the proposed development have been quantified.

The daylight transgressions are isolated to only 2 neighbouring properties where the effect is considered moderate, however these properties generally retain levels of visible sky that are consistent with an urban location.

The sunlight effects are negligible and comfortably compliant with the BRE guidelines.

The additional cumulative scenario demonstrates that there are only 2 small additional VSC transgressions. However, the reductions to the 2 respective rooms are 21% which is considered to be a minor impact and just shy of the 20% threshold.

The cumulative scenario sunlight effects are negligible and comfortably compliant with the BRE guidelines.

From our review of the adjoining properties, there appears to be limited amenity spaces given the built-up nature. It is noted that there is a sunken courtyard recently built into 471-473 Bethnal Green Road and in addition, it appears that the main roof of the building is also used as an amenity space. Given the scheme proposals are situated to the west of the amenity spaces, they would only experience potential shadow from the proposal from mid-afternoon due to the orientation of the sun. It is considered that the 2 hour criteria would already be met for the main roof amenity before this shadowing occurs. Due to the sunken nature of the courtyard, the distance from the proposal and the angle of the sun on March 21st, it is considered that this space would not be materially affected by the proposals.

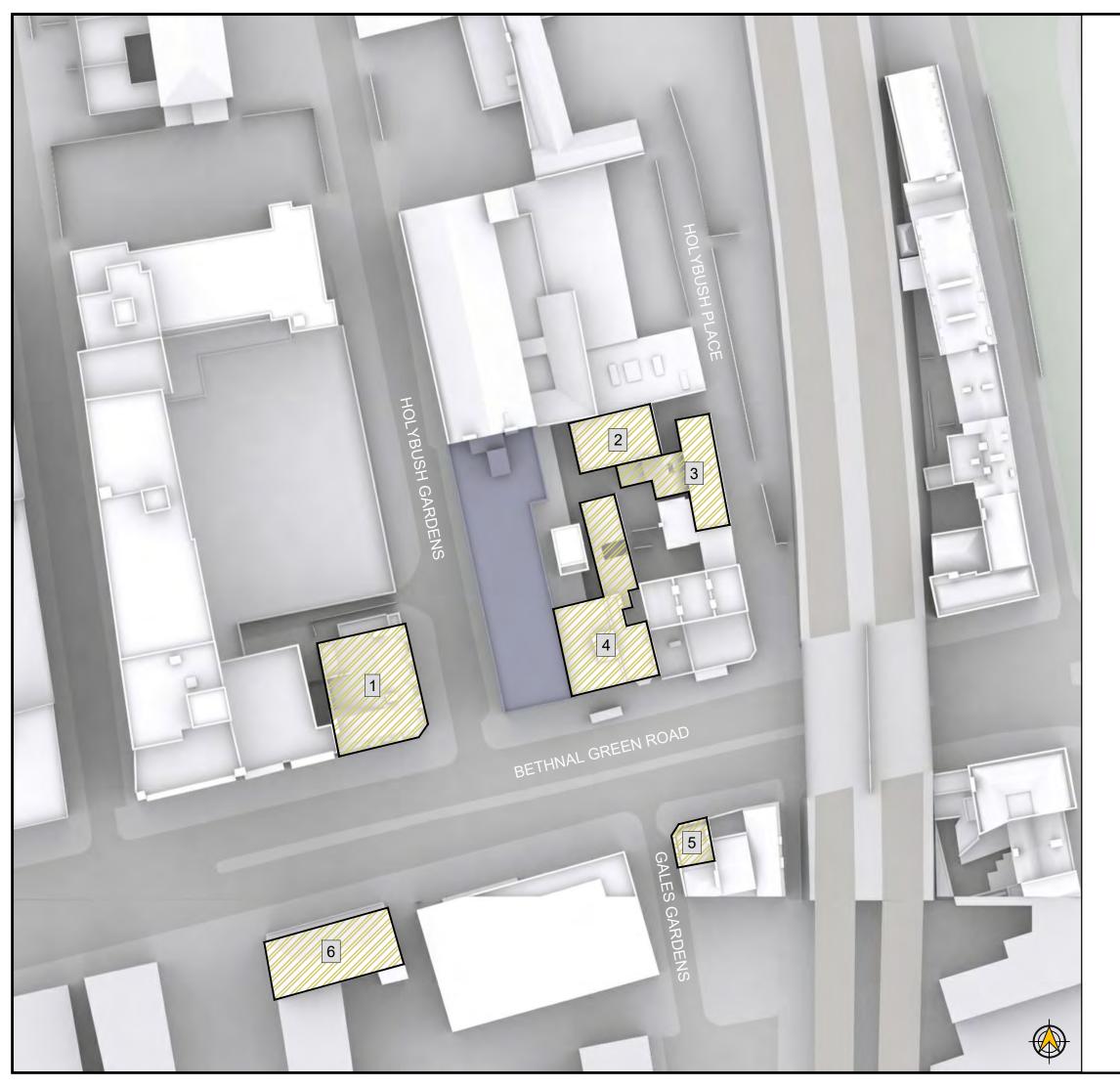
In conclusion, it is submitted that the layout of the proposed development demonstrates a good level of adherence when compared with the Council's local planning policy in daylight and sunlight terms.

Delva Patman Redler LLP Chartered Surveyors



APPENDIX A

LOCATION DRAWINGS



NEIGHBOURING PROPERTIES CONSIDERED FOR ANALYSIS

1: 465 Bethnal Green Road: Dwg No: 19144-LOC-001

2: <u>4a Hollybush Place:</u> Dwg No: 19144-LOC-002

3: <u>4 Hollybush Place:</u> Dwg No: 19144-LOC-002

4: 471-473 Bethnal Green Road: Dwg No: 19144-LOC-003

5: 488 Bethnal Green Road: Dwg No: Job-LOC-004

6: 474 Bethnal Green Road: Dwg No: Job-LOC-005

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

Neighboring Property

SOURCE DATA:
Existing and proposed buildings:
ZMapping - 3D context model
Museum Service Station, 319 Cambridge
Heath Rd_171017_Solids.dwg
Cadplan - 2D survey
Drwg no's: 11104-05-A1, 11104-07-A0,
11104-08

DELVA PATMAN REDLER

TITLE:

469 BETHNAL GREEN ROAD LONDON, E2 9QH

DRAWING: LOCATION PLAN

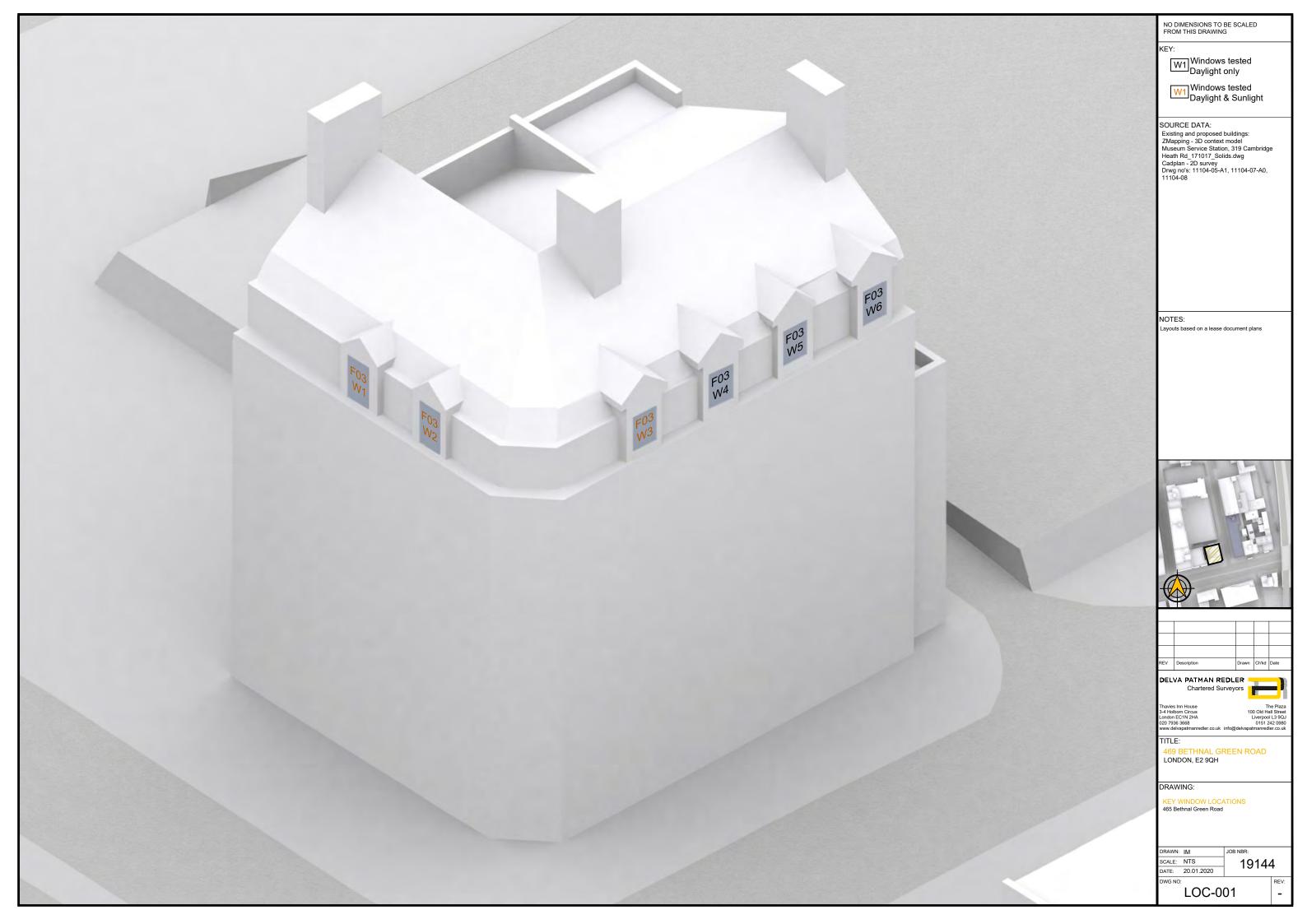
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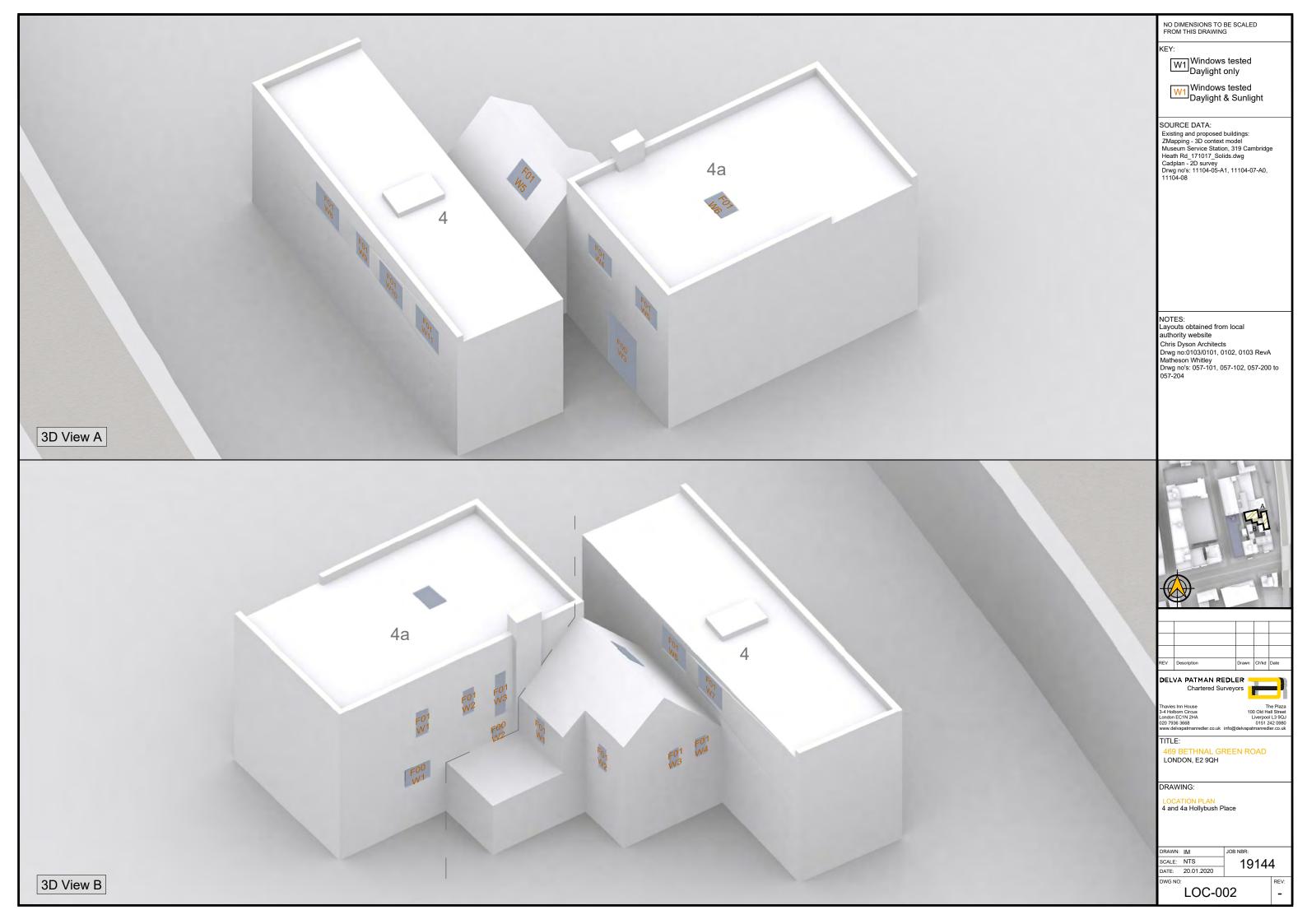
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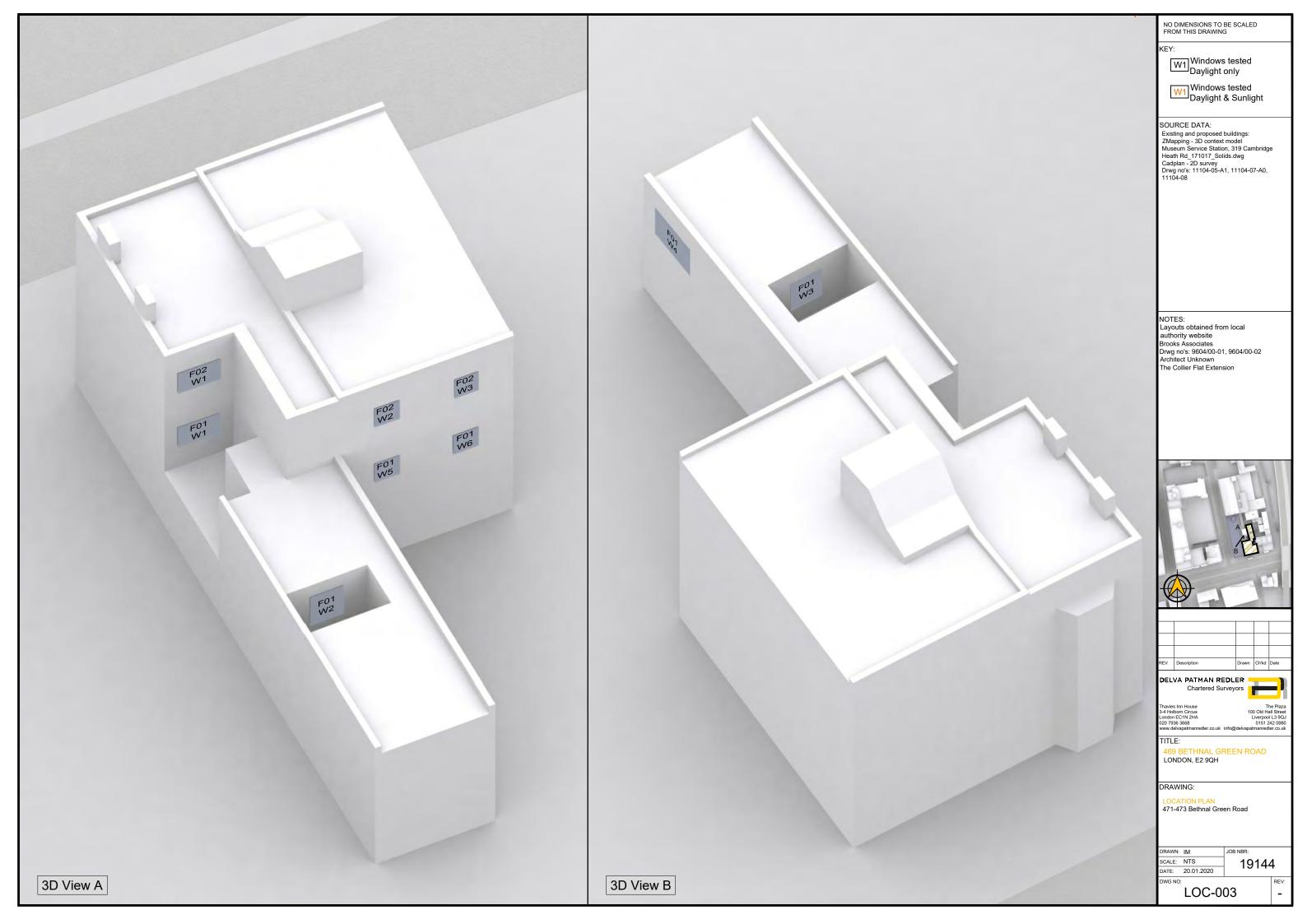
19144

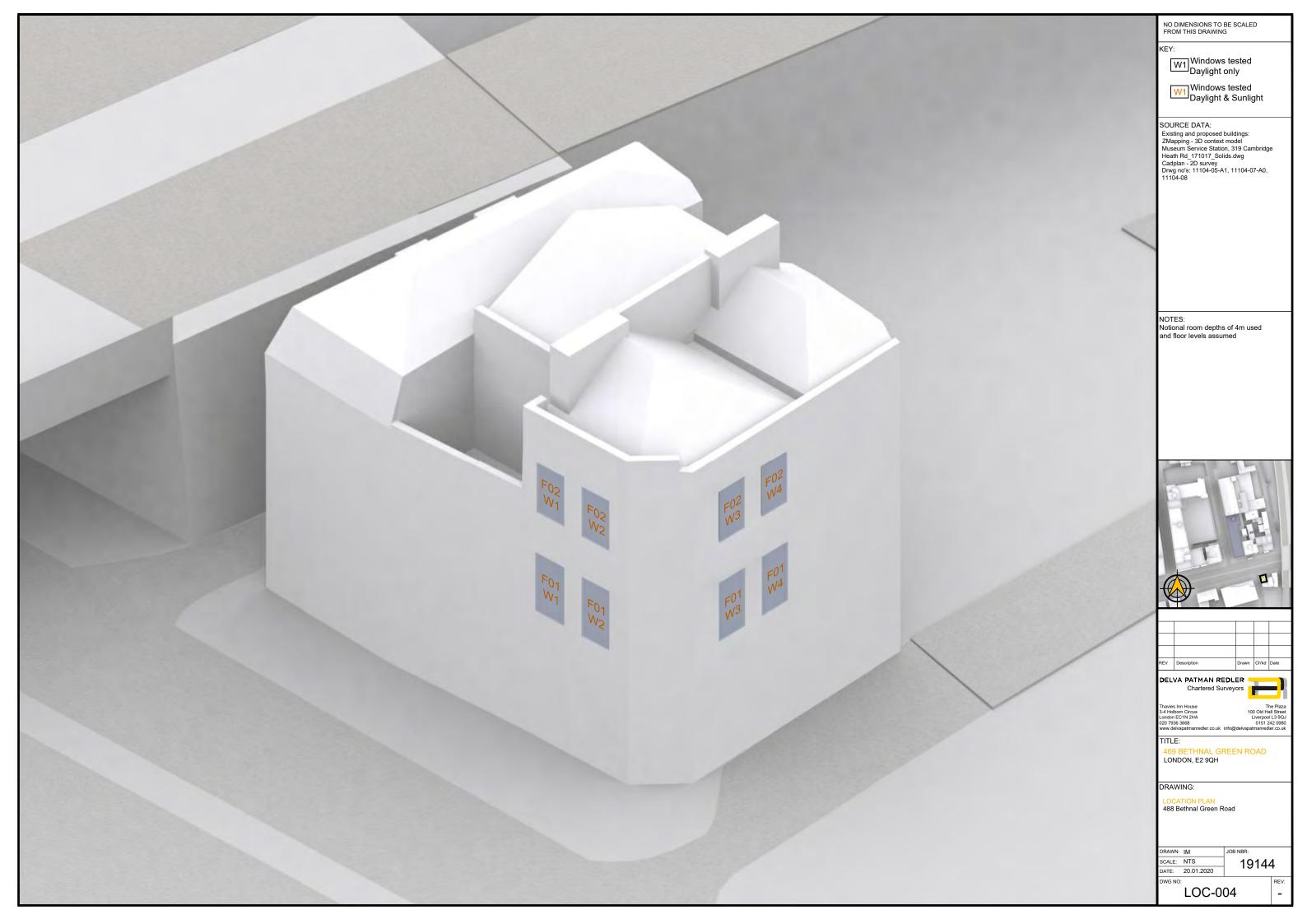


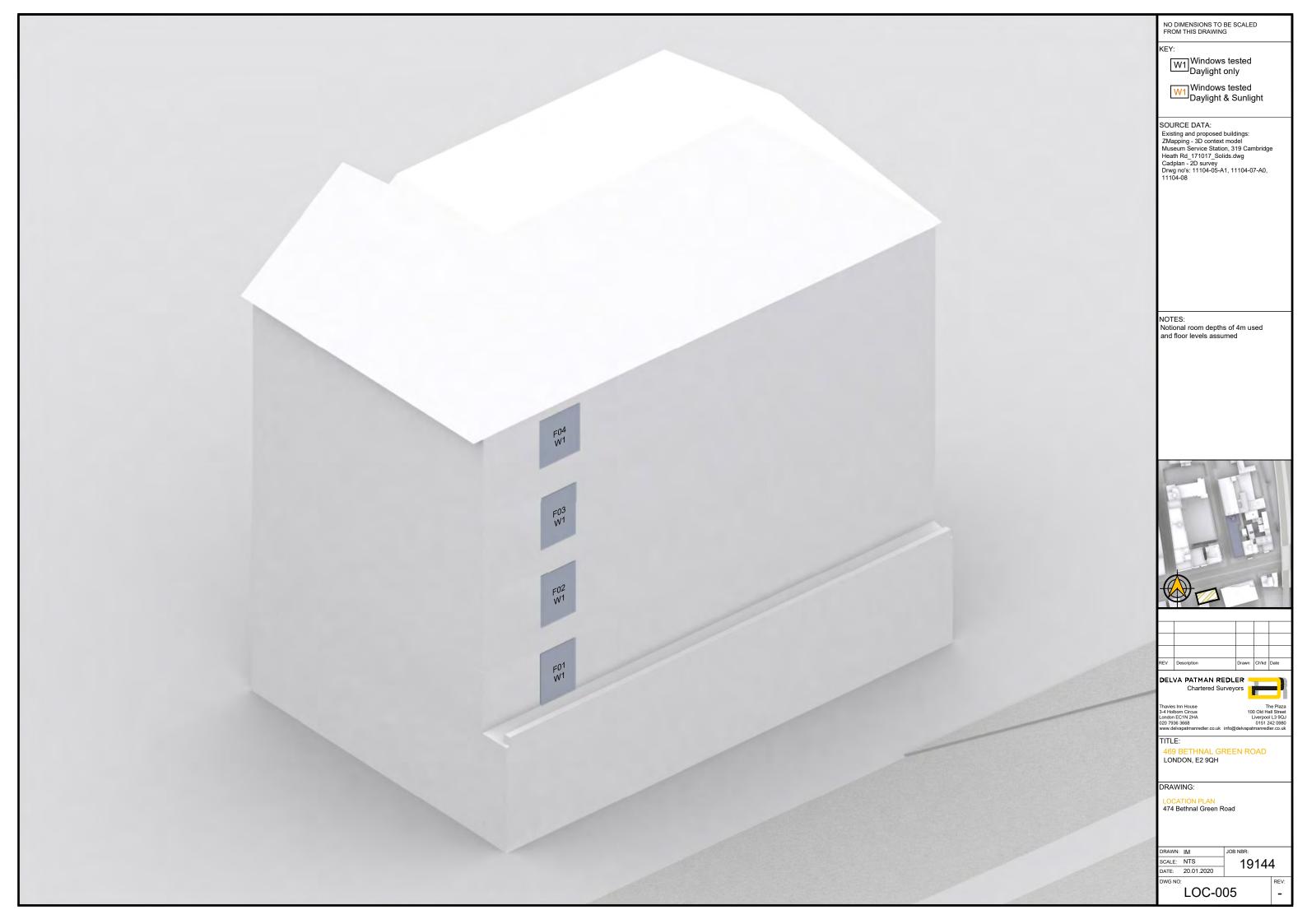












APPENDIX B

DAYLIGHT & SUNLIGHT ANALYSIS RESULTS - NEIGHBOURING PROPERTIES

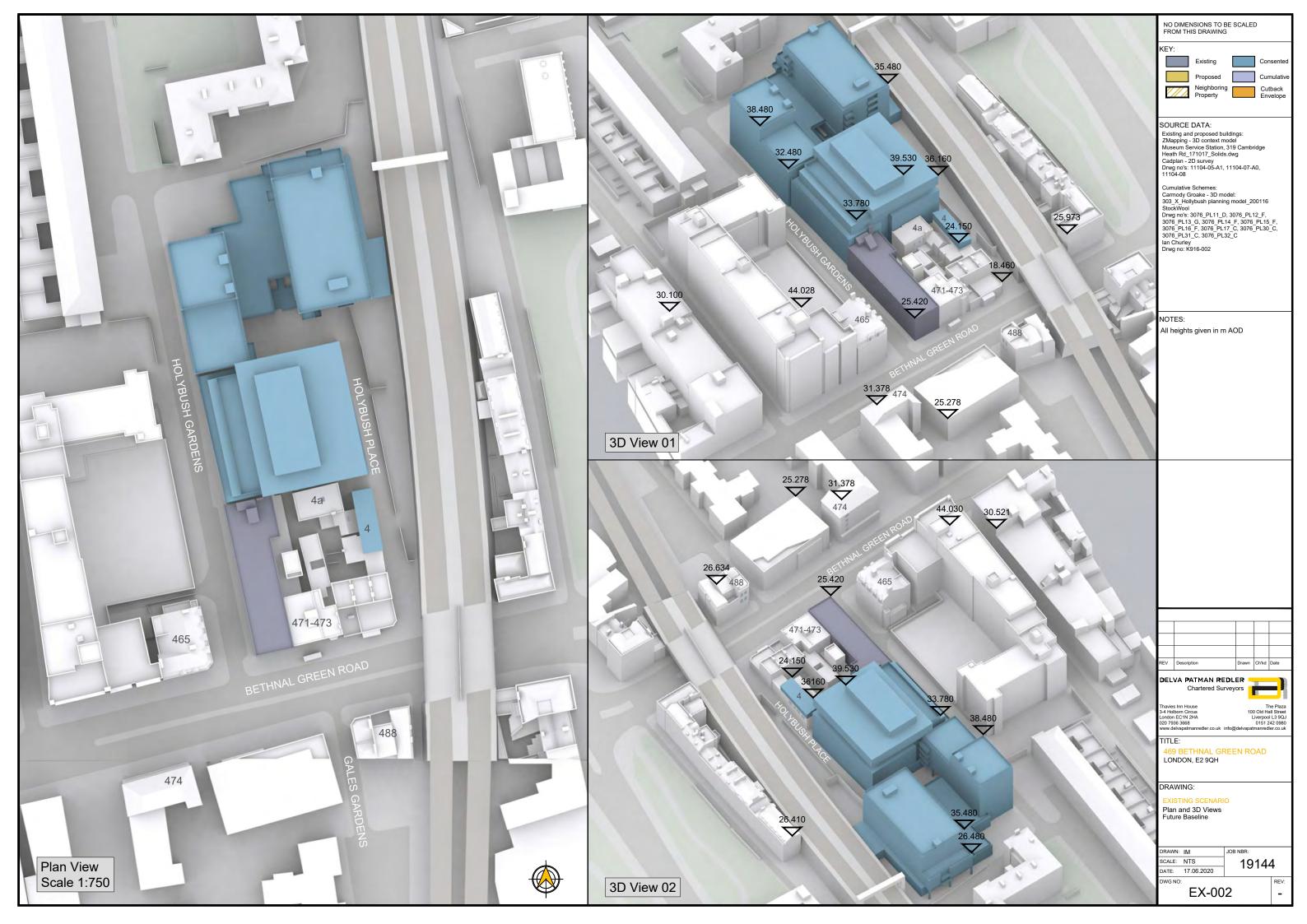
	Room In	formation			vsc					Daylight Distributio	n	APSH						
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Mean Window %age Diff	Proposed Average	Existing	Proposed	%age Diff	Room APSH Existing	Room APSH Proposed	%age Diff	Room Winter Existing	Room Winter Proposed	&age Diff	
		Unknown/R1	W1	38.68	38.68	0.00%	0.00%	38.68	78.51%	78.51%	0.00%	88	88	0.00%	30	30	0.00%	
			W2	38.80	38.80	0.00%												
465 Bethnal Green		Unknown/R2	W3	39.41	29.70	-24.64%	-12.42%	34.25	91.30%	89.61%	-1.85%	90	88	-2.22%	30	30	0.00%	
Road	F03	Unknown/R3	W4	39.34	28.18	-28.38%	-28.38%	28.18	90.57%	25.72%	-71.60%	N/A	N/A	N/A	N/A	N/A	N/A	
		=.	W5	39.30	27.42	-30.22%											N/A	
		Unknown/R4	W6	39.33	26.90	-31.60%	-30.91%	27.16	96.32%	34.74%	-63.93%	N/A	N/A	N/A	N/A	N/A	N/A	
			W1	18.90	17.09	-9.57%												
	F00	Photography Studio/R1	W2	18.80	17.51	-6.86%	-6.33%	15.29	89.42%	89.42%	0.00%	58	49	-15.52%	9	9	0.00%	
			W3	11.27	11.27	0.00%											1	
			W1	28.45	25.64	-9.86%												
4a Hollybush Place			W2	29.28	26.77	-8.55%											l l	
	F01	Photography	W3	27.38	25.02	-8.59%	-7.50%	37.53	98.57%	98.08%	-0.50%	89	72	-19.10%	26	21	-19.23%	
	101	Studio/R1	W4	30.86	30.86	0.00%	-7.30%	37.53	30.37 /0	80.0076	-0.3076	00	12	-18.1076	20	21	-10.2370	
			W5	30.49	30.49	0.00%											ı	
			W6	96.95	86.36	-10.92%												
	F01	Unknown/R1 LKD/R2	W1	16.02	8.85	-44.76%											1	
			W2	20.71	12.32	-40.52%			I	87.85%	0.00%	79	71				l l	
			W3	2.35	2.27	-3.68%	-13.51%	20.15	87.85%					-10.13%	19	18	-5.26%	
			W4	2.71	2.63	-2.98%											ı	
			W5	74.66	74.66	0.00%											1	
4 Hollybush Place			W6	23.92	20.13	-15.86%	-4.57%										ı	
			W7	25.68	20.86	-18.79%				99.48%	-0.06%						ı	
			W8	34.72	34.72	0.00%		30.00	99.54%			84	78	-7.14%	25	22	-12.00%	
			W9	34.74	34.74	0.00%											1	
			W10	34.76	34.76	0.00%											ı	
			W11	34.79	34.79	0.00%											1	
		Bedroom/R1	W1	8.96	8.68	-3.10%	-3.10%	8.68	88.32%	88.00%	-0.36%	N/A	N/A	N/A	N/A	N/A	N/A	
		Study/R2	W2	14.17	11.51	-18.82%	-18.82%	11.51	95.59%	72.50%	-24.16%	N/A	N/A	N/A	N/A	N/A	N/A	
	F01	Kitchen/R3	W3	15.56	14.46	-7.06%	-31.59% 7.92	7.92	74.12%	74.12% 62.60%	0% -15.54%	N/A	N/A	N/A	N/A	N/A	N/A	
471-473 Bethnal			W4	7.60	1.38	-81.79%												
Green Road		Bedroom/R4	W5	13.00	11.10	-14.58%	-14.58%	11.10	68.85%	57.28%	-16.81%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R5	W6	10.32	7.48	-27.59%	-27.59%	7.48	52.75%	25.30%	-52.04%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R1	W1	23.09	21.52	-6.83%	-6.83%	21.52	98.83%	98.39%	-0.45%	N/A	N/A	N/A	N/A	N/A	N/A	
	F02	Kitchen/R2	W2	26.41	21.58	-18.27%	-18.27%	21.58	63.92%	44.79%	-29.93%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R3	W3	19.35	13.04	-32.59%	-32.59%	13.04	73.87%	34.73%	-52.99%	N/A	N/A	N/A	N/A	N/A	N/A	
			W1	34.09	31.87	-6.51%												
	F01	Unknown/R1	W2	33.87	31.49	-7.02%	-5.76%	26.80	99.92%	99.92%	0.00%	38	38	0.00%	9	9	0.00%	
			W3	24.09	23.04	-4.36%											1	
488 Bethnal Green Road			W4	21.72	20.81	-4.20%												
11000			W1	36.57	34.57	-5.45%											1	
	F02	Unknown/R1	W2 W3	36.46 32.34	34.29 31.47	-5.97% -2.68%	-4.22%	32.79	100.00%	100.00%	0.00%	52	52	0.00%	15	15	0.00%	
				1 1														
	F04		W4	31.60	30.85	-2.36%	4.500/	00.04	50.40%	50 400	0.000					21/2		
	F01	Unknown/R1	W1	24.43	23.31	-4.56%	-4.56%	23.31	56.49%	56.49%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	
474 Bethnal Green Road	F02	Unknown/R1	W1 W1	26.99 29.64	25.89 28.58	-4.09% -3.60%	-4.09% -3.60%	25.89 28.58	67.79% 76.74%	67.79% 76.74%	0.00%	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
	F04	Unknown/R1 Unknown/R1	W1 W1	29.64 32.11	28.58 31.28	-3.60% -2.59%	-3.60% -2.59%	28.58 31.28	76.74% 87.53%	76.74% 87.53%	0.00%	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
	FU4	UNKNOWN/K1	VV 1	32.11	31.28	-2.59%	-2.59%	31.28	87.53%	87.53%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	

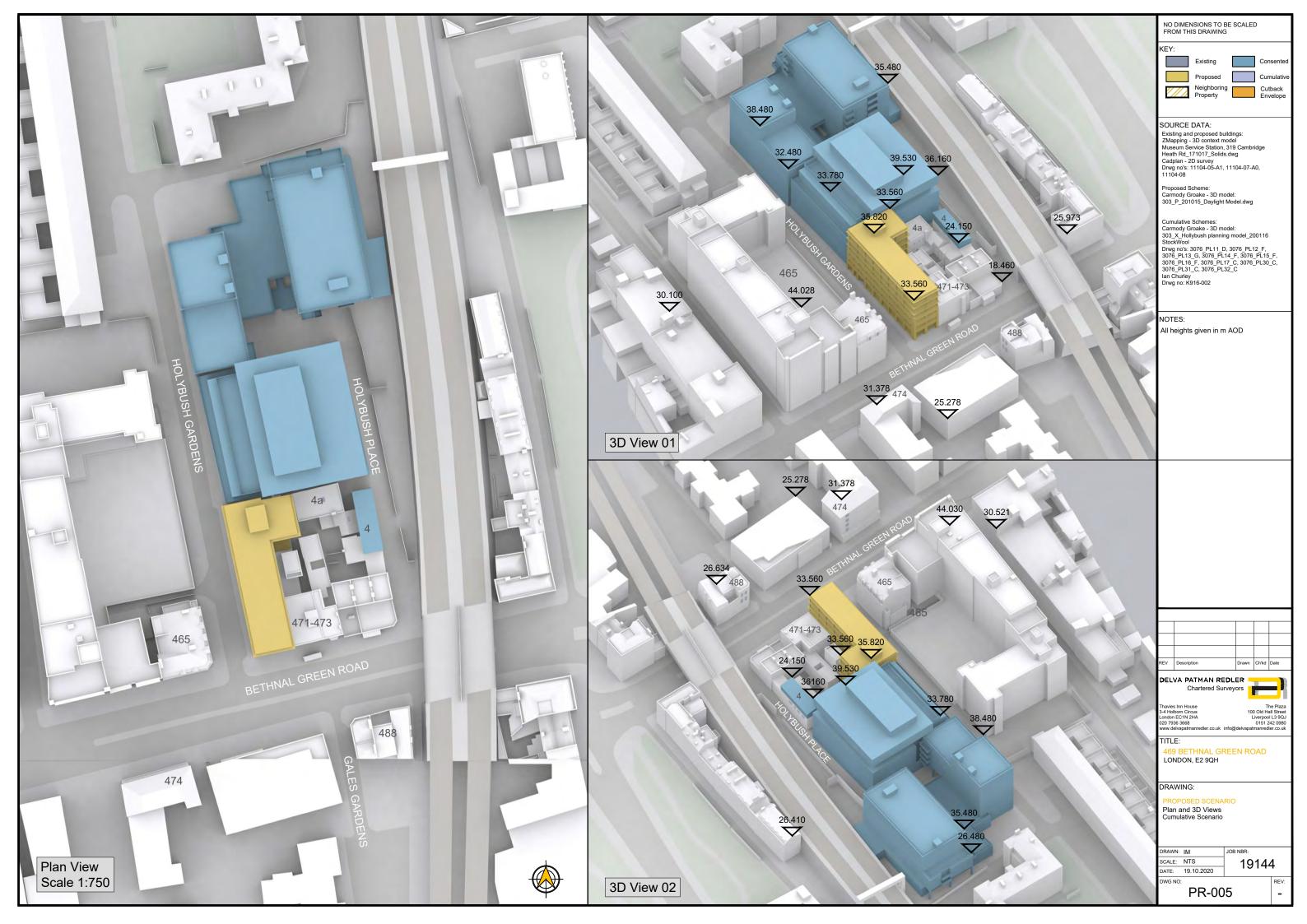
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APPENDIX C

CUMULATIVE SCENARIO

DAYLIGHT & SUNLIGHT ANALYSIS RESULTS - NEIGHBOURING PROPERTIES





	Room In	formation				VSC			Daylight Distribution			APSH						
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Mean Window %age Diff	Proposed Average	Existing	Proposed	%age Diff	Room APSH Existing	Room APSH Proposed	%age Diff	Room Winter Existing	Room Winter Proposed	&age Diff	
		Unknown/R1	W1	38.68	38.68	0.00%	0.00%	38.68	78.51%	78.51%	0.00%	88	88	0.00%	30	30	0.00%	
		Halanana (DO	W2	38.80	38.80	0.00%	44.000/	04.00	00.770/	00.049/	4.070/		00	0.000/	00	00	0.000/	
465 Bethnal Green	500	Unknown/R2	W3	38.33	29.64	-22.68%	-11.28%	34.22	90.77%	89.61%	-1.27%	90	88	-2.22%	30	30	0.00%	
Road	F03	Unknown/R3	W4	38.10	28.10	-26.24%	-26.24%	28.10	90.53%	25.72%	-71.59%	N/A	N/A	N/A	N/A	N/A	N/A	
			W5	37.87	27.32	-27.85%	00.40%	07.05	00.00%	04.749/	00.00%	N//A	N//A	NI/A	N1/A	N1/A	N/A	
		Unknown/R4	W6	37.68	26.77	-28.95%	-28.40%	27.05	96.30%	34.74%	-63.92%	N/A	N/A	N/A	N/A	N/A	N/A	
			W1	18.18	16.37	-9.95%												
	F00	Photography Studio/R1	W2	18.80	17.51	-6.86%	-7.11%	13.50	86.62%	86.62%	0.00%	55	46	-16.36%	9	9	0.00%	
			W3	6.61	6.61	0.00%	1										l	
			W1	27.23	24.42	-10.30%												
4a Holybush Place			W2	27.73	25.23	-9.03%											l	
	F01	Photography	W3	26.21	23.86	-8.97%	40.779/	24.26	04.00%	00.070/	2.470/	00	66	20.400/	22	10	24.740/	
	FUT	Studio/R1	W4	5.95	5.95	0.00%	-10.77%	24.26	91.89%	88.97%	-3.17%	83	66	-20.48%	23	18	-21.74%	
			W5	12.88	12.88	0.00%	1										l	
			W6	63.12	53.21	-15.70%	1										l	
	F01	Unknown/R1	W1	16.02	8.85	-44.76%												
			W2	19.09	11.49	-39.79%		10.93									l	
			W3	1.87	1.79	-4.62%	-21.46%		71.02%	63.84%	-10.11%	50	42	-16.00%	13	12	-7.69%	
			W4	1.84	1.76	-4.40%											l	
			W5	30.75	30.75	0.00%											l	
4 Holybush Place		LKD/R2	W6	19.03	15.62	-17.89%	-4.33%	28.43	99.53%	99.47%	-0.06%	81		-7.41%	24			
			W7	21.27	16.94	-20.32%							75				l	
			W8	34.49	34.49	0.00%										24	-12.50%	
			W9	34.49	34.49	0.00%										21	-12.50%	
			W10	34.50	34.50	0.00%											l	
			W11	34.52	34.52	0.00%												
		Bedroom/R1	W1	7.83	7.55	-3.55%	-3.55%	7.55	47.95%	47.12%	-1.73%	N/A	N/A	N/A	N/A	N/A	N/A	
		Study/R2	W2	12.48	10.29	-17.60%	-17.60%	10.29	54.89%	42.09%	-23.32%	N/A	N/A	N/A	N/A	N/A	N/A	
	F01	Kitchen/R3	W3	15.56	14.46	-7.06%	-29.41%	7.92	74.05%	05% 62.60%	-15.46%	N/A	N/A	N/A	N/A	N/A	N/A	
474 470 7 11 1	101		W4	6.89	1.38	-79.89%	-23.4170	1.92	74.0570	02.0070	-13.40 %	IV/A	IN/A	IN/A	IN/A	IV/A	IN/A	
471-473 Bethnal Green Road		Bedroom/R4	W5	11.12	9.24	-16.92%	-16.92%	9.24	40.65%	32.58%	-19.85%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R5	W6	10.00	7.41	-25.90%	-25.90%	7.41	41.07%	24.40%	-40.57%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R1	W1	18.75	18.31	-2.35%	-2.35%	18.31	74.57%	72.26%	-3.10%	N/A	N/A	N/A	N/A	N/A	N/A	
	F02	Kitchen/R2	W2	22.26	17.46	-21.60%	-21.60%	17.46	63.92%	44.79%	-29.93%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R3	W3	18.63	12.83	-31.11%	-31.11%	12.83	69.98%	34.61%	-50.54%	N/A	N/A	N/A	N/A	N/A	N/A	
			W1	33.05	30.98	-6.27%]										ĺ	
	F01	Unknown/R1	W2	32.92	30.68	-6.79%	-5.57%	26.37	99.92%	99.92%	0.00%	38	38	0.00%	9	9	0.00%	
			W3	24.06	23.03	-4.27%												
488 Bethnal Green			W4	21.68	20.79	-4.10%												
Road			W1	35.06	33.42	-4.65%]										i	
	F02	Unknown/R1	W2	34.98	33.17	-5.19%	-3.72%	32.22	100.00%	100.00%	0.00%	52	52	0.00%	15	15	0.00%	
			W3	32.28	31.45	-2.56%											1	
			W4	31.54	30.83	-2.25%											<u> </u>	
	F01	Unknown/R1	W1	24.16	23.31	-3.50%	-3.50%	23.31	56.49%	56.49%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	
474 Bethnal Green	F02	Unknown/R1	W1	26.62	25.89	-2.77%	-2.77%	25.89	67.79%	67.79%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	
Road	F03	Unknown/R1	W1	29.18	28.57	-2.09%	-2.09%	28.57	76.74%	76.74%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	
	F04	Unknown/R1	W1	31.63	31.23	-1.29%	-1.29%	31.23	87.53%	87.53%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	

APPENDIX A.23 MAIDENHEAD SPIRITUALIST CHURCH APPEAL DECISION

Appeal Decision

Hearing held on 1 August 2023

Site visit made on 1 August 2023

by R Sabu BA(Hons), MA, BArch, PgDip, RIBA, ARB

an Inspector appointed by the Secretary of State

Decision date: 24 August 2023

Appeal Ref: APP/T0355/W/22/3313643

Maidenhead Spiritualist Church, York Road, Maidenhead SL6 1SH

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
- The appeal is made by Shanly Homes Limited against the decision of Royal Borough of Windsor and Maidenhead.
- The application Ref 20/03149, dated 19 November 2020, was refused by notice dated 21 July 2022.
- The development proposed is the construction of 49 No. apartments with associated parking and landscaping following demolition of existing building.

Decision

1. The appeal is allowed and planning permission is granted for the construction of 49 No. apartments with associated parking and landscaping following demolition of existing building at Maidenhead Spiritualist Church, York Road, Maidenhead SL6 1SH in accordance with the terms of the application, Ref 20/03149, dated 19 November 2020, subject to the attached schedule of conditions.

Application for costs

2. An application for costs was made by Shanly Homes Ltd against Royal Borough of Windsor and Maidenhead. This is the subject of a separate decision.

Preliminary Matters

- 3. The application was made in outline with only landscape reserved as a matter for future consideration. I have therefore had regard to the submitted drawings on an indicative basis insofar as they relate to landscape.
- 4. I have amended the description of development to exclude wording that are not acts of development in the interests of clarity.

Main Issues

- 5. During the appeal the Council confirmed that it no longer contests the reason for refusal relating to affordable housing. Therefore, the main issues are:
 - the effect of the proposal on the nearby waterway;
 - the effect of the proposal on the character and appearance of the area; and
 - the effect of the proposal on the living conditions of neighbouring occupiers with regard to light and privacy.

Reasons

Waterway

- 6. The site lies adjacent to the York Stream, a statutory main river. Policy NR1 of the Borough Local Plan 2013 2033 (BLP) states, among other things, that development proposals near rivers (including culverted rivers) should retain or provide an undeveloped 8 metre buffer zone alongside main rivers.
- 7. The proposal would provide a buffer zone of approximately 4m and would therefore conflict with this Policy.
- 8. The Maidenhead Waterways Framework June 2009 (MWF) provides a framework for future planning decisions along the waterway corridor. Its purpose is to aid the restoration of the waterway including the achievement of the emerging Maidenhead Waterway Project.
- 9. The objective of the Maidenhead Waterway Project is restoring the waterway into a valuable amenity. The MWF also states that the buffer strip enables access for maintenance and promotes the ecological and landscape value of the watercourse. It goes on to say that in line with the objectives of enhancing the waterway setting and allowing for continuous walking and cycling, the council will generally oppose any reduction in this buffer strip.
- 10. The Council confirmed during the hearing that its concerns with respect to the lack of an 8m buffer zone relate to the ecological effects on the waterway.
- 11. The York Stream is a Local Wildlife Site which is locally designated. BLP Policy NR2 states, among other things, that development proposals that either individually or in combination with other developments, are likely to have a detrimental impact on sites of local importance, including Local Wildlife Sites, will not be permitted unless it can be demonstrated that the benefits clearly outweigh the need to safeguard the nature conservation value of the site.
- 12. The site is dominated by a tarmac surface. There is a small area of modified grassland at the northern side of the site and the boundary of the site with the river consists of overgrown vegetation with a mix of native and non-native species. The site therefore has low ecological value.
- 13. The proposed block of flats would be located closer to the river than the existing building, thereby reducing the width of the existing buffer and the amount of space available to create a high quality habitat. Landscaping is a matter reserved for future consideration. However, given the existing low ecological value of the site, and that the proposal would provide a reasonable buffer zone for planting that would include the removal of non-native species, I am satisfied that a scheme for landscaping at the proposed buffer would provide an ecological enhancement of the site.
- 14. The proposed building would be eight storeys high and would lie to the west of York Stream. It would therefore increase shading on the river at certain times of day. As discussed during the hearing this would be likely to affect riparian and aquatic vegetation. It would also have effects on the ecology of the river in particular on the habitat for wildlife and opportunities for foraging and sheltering.

- 15. As stated in the Water Framework Directive Assessment, the proposed scheme will increase shading on the adjacent river particularly during midsummer. However, the total hours of full sun on the river during peak summer would decrease by a few hours. Therefore, the increase in shading of the canal would be unlikely to have a significant effect on the river as a whole.
- 16. In terms of preventing good ecological potential by not providing an 8m wide buffer zone, promoting ecological and landscape value is one of a number of the objectives of the requirement for an 8m buffer.
- 17. As stated in the MWF, habitats associated with buildings can act as steppingstones in a wider network of green spaces and allow the movement of wildlife along the length of the river. The proposed width of buffer at around 4m, would result in the river achieving less ecological and landscape value compared with an 8m wide buffer. However, given the approved developments to the north of the site which do not provide an 8m buffer zone, any ecological benefit to the river as a whole in providing such a buffer zone at the appeal site would be limited.
- 18. Accordingly, although the proposal would be contrary to the objectives of the MWF, the associated harm in terms of ecology would be limited.
- 19. The proposal would provide 49 dwellings to the local housing supply and there would be associated economic and social benefits. As the ecological harm to the waterway would be limited, and the ecological value of the site is negligible, the benefits would outweigh the need to safeguard the nature conservation value of the site. Therefore, the proposal would not conflict with BLP Policy NR2.
- 20. The Appellant had not carried out feasibility or viability studies to assess whether a scheme with an 8m wide buffer zone would be viable. However, given the limited size of the site and the surrounding development including railway line to the south, the provision of an 8m buffer would be likely to result in a smaller scheme. In addition, given the conclusions of the numerous viability assessments for the proposal, it is unlikely that a smaller scheme would be viable.
- 21. Consequently, the proposal would result in harm to the waterway. Therefore, it would conflict with BLP Policy NR1 which seeks, among other things, an 8m buffer zone alongside main rivers.
- 22. However, since the proposed buffer zone would be likely to result in ecological enhancement of the site and given the insignificant decrease in total hours of full sun on the river, the harm that would result from conflict with this Policy would be limited.

Character and appearance

23. The site lies at the southern end of an allocation area. As such the wider area, as I observed during my site visit, is undergoing significant change. The land to the north of the site benefits from planning permission for a seven storey block of flats. From the evidence I see no reason why that development along with the other approved schemes in the allocation area would not be implemented. As such, the emerging character of the area to the north of the site is primarily that of flatted development between four and eight storeys high.

- 24. To the south of the site lies a railway embankment that is raised some distance above the ground level of the site. While there are two storey dwellings to the east of the site, these are clearly separated from the site by the river. As such, the site has a closer relationship to the area to the west of the river than the east. To the west of the site lies a football ground with limited built development above ground. To two sides of the football ground would be flatted development and the railway embankment lies to the south. Accordingly, the emerging character of the area to the west of the river is largely that of flatted development notwithstanding the presence of the football ground.
- 25. The proposed block of flats would be eight storeys high and 1m taller than the approved development to the north of the site. In terms of height the proposed difference in height would not appear abrupt or out of keeping with the development to the north. In addition, the 1m difference in height would provide some variation such that the buildings when viewed together would not appear homogenous. The height of the proposal would therefore have a similar relationship to the football ground and two storey dwellings to the east as the approved schemes to the north. As the site has a closer relationship to the area to the west of the river, any lack of transition in terms of height between the east and west sides of the river would not harm the character of the area.
- 26. The site lies at the southern end of the allocation area. The railway embankment lies at a significantly higher ground level than the site and the primary public approach to the site from the south is via the public footpath that passes through a tunnel under the railway line. Therefore, there are very limited views to the site from the south of the railway line. As such, any lack of transition in scale from south to north would not appear noticeable in wider views and would not adversely affect the character of the area.
- 27. The footprint of the building would have a shorter length compared with the approved scheme to the north. However, the building would nonetheless have a rectangular footprint such that this element would appear in keeping with the approved scheme to the north and with the emerging character of the allocation area.
- 28. The west elevation would be articulated with setback portions dividing the massing into thirds and dark brick detailing around the windows. In addition, the balconies on the elevation facing the river would be connected vertically thereby visually breaking up the massing of the building when viewed from the public footpath. Overall, the proposed building would have an architectural style, height, massing, and materials that would be in keeping the approved developments in the wider allocation area. It would therefore appear in keeping with the character of the area.
- 29. Consequently, the proposal would not harm the character and appearance of the area. Therefore, it would not conflict BLP Policy QP3 which seeks, among other things, development that respects and enhances the local character of the environment.

Living conditions

30. A Daylight and Sunlight Impact Assessment was submitted as part of the application which concluded that over 80% of the assessed windows meet the

- BRE recommendations for the Vertical Sky Component (VSC), No-Sky Line (NSL) and Annual Probable Sunlight Hours (APSH).
- 31. A number of properties in Fotherby Court would fall short of the BRE requirement of a less than 20% reduction in VSC. The windows that fail to meet the recommendations would generally have a reduction of between 20% and 30% resulting in a minor adverse effect. Of the rooms that fail to meet the recommendations for NSL, the majority either fall marginally below the requirement or have an NSL of more than 50% and therefore retain adequate levels of daylight.
- 32. The southern elevation of the consented scheme to the north of the site would also have some windows that would fail to meet the BRE recommendations for VSC and NSL. However, a number of these windows would serve dual aspect spaces. The remaining windows that would fail to meet the guidelines would be located near the centre of the south elevation and would serve bedroom spaces. The future occupiers of these spaces would be unlikely to spend significant amounts of time in these spaces. The spaces would also achieve more than 50% NSL and would therefore experience adequate levels of daylight.
- 33. In terms of sunlight, the properties of Fotherby Court which do not meet the APSH recommendations generally either fall marginally below the requirements, would meet the VSC and NSL requirements, or serve spaces with more than one window where the other window would meet BRE guidance. All the windows of the consented scheme to the north of the site would meet the recommendations for APSH. As such the proposal would not have an unacceptable effect on the amount of sunlight experienced by neighbouring occupiers.
- 34. For the foregoing reasons, the proposal would not have an unacceptable effect on the living conditions of neighbouring occupiers with regard to light.
- 35. Turning to privacy, the distance from the proposed building to the dwellings at Fotherby Court would be over 25m. This would exceed the separation distances recommended in the Design Guide SPD. Moreover, given the proposed height of the building, views from the upper floors to Fotherby Court would be at an angle and the separation distance would greater than that of the lower floors.
- 36. As such, while there may be some views from the proposed flats to areas of the dwellings and gardens at Fotherby Court, given the significant separation distances proposed, neighbouring occupiers would not experience undue adverse effects in terms of privacy.
- 37. Consequently, the proposed development would not unacceptably affect the living conditions of neighbouring occupiers with regard to light and privacy. Therefore, it would not conflict with BLP Policy QP3 in this regard which seeks, among other things, development that would have no unacceptable effect on the amenities enjoyed by the occupants of adjoining properties in terms of privacy, light and access to sunlight and daylight.

Other Matters

38. I note local concerns including those regarding parking provision, highway safety and traffic. Given the accessibility of services and facilities and the number of dwellings proposed, the proposed parking provision would be

- sufficient and there would not be severe residual cumulative impacts on the road network. Given the turning space within the site and that the proposal would use an existing access, there would not be an unacceptable impact on highway safety. Furthermore, the Highway Authority has not objected to the proposal and for the foregoing reasons I see no reason to disagree.
- 39. I also acknowledge local concerns regarding drainage and flooding. The Lead Local Flood Authority did not object to the proposal subject to a number of conditions. From the evidence before me I see no reason to disagree.

Planning Balance

- 40. The Council are unable to demonstrate roughly a 4.8 year housing land supply. Therefore, the tilted balance in the terms of paragraph 11dii is engaged.
- 41. The proposal would contribute 49 dwellings to the local housing supply. While the housing shortfall is modest, the proposed number of dwellings is not insignificant. I am also mindful of **the Government's objective of significantly** boosting the supply of homes. The proposal would also provide a temporary economic benefit during the construction phase and future occupiers would provide economic and social benefits to the local community. However, given the limited width of buffer strip, this benefit would be limited. Therefore, I attribute moderate weight to the benefits of the scheme.
- 42. The proposal would result in limited harm to the waterway for the reasons given above. It would result in conflict with BLP Policy NR1 and with the development plan as a whole. Given the limited harm that would result from the development plan conflict, I attribute limited weight to the conflict with BLP Policy NR1.
- 43. Accordingly, the adverse impacts of the proposal would not significantly and demonstrably outweigh the benefits, when assessed against the policies in the Framework taken as a whole. This material consideration warrants a decision other than in accordance with the development plan.

Conditions

- 44. The condition requiring details of materials is necessary to safeguard the character and appearance of the area. The conditions relating to access and vehicle parking spaces are necessary in the interests of highway safety and the conditions relating to cycle parking and EV charging are necessary in the interests of sustainable transport.
- 45. Conditions regarding light, biodiversity net gain, construction environmental management plan and biodiversity enhancements are necessary in the interests of biodiversity and wildlife. The conditions regarding drainage, flood risk and SuDS assessment are necessary to safeguard against flooding. In the interest of sustainability, a condition relating to sustainable design and construction is necessary.
- 46. In order to safeguard the living conditions of neighbouring occupiers, conditions relating to noise and refuse storage are also necessary. The conditions relating to building regulations part M are necessary in accordance with BLP Policy HO2.
- 47. Conditions relating to the submission of the reserved matter, biodiversity net gain, the construction environmental management plan and surface water

drainage are pre-commencement as they are likely to affect the early stages of construction.

Planning Obligation

- 48. The appellant has completed a legal agreement under Section 106 of the Act (a S106) in conjunction with Royal Borough of Windsor and Maidenhead which includes a number of obligations to come into effect if planning permission is granted. I have considered these in light of the statutory tests contained in Regulation 122 of The Community Infrastructure Levy (CIL) Regulations 2010. They relate to the following matters.
- 49. Affordable Housing: BLP Policy H03 requires all developments for 10 dwellings gross, or more than 1,000 sq. m of residential floorspace, to provide 30% of the total number of units as on-site affordable housing.
- 50. I note that the supporting text to the policy states that where the provision of affordable housing in accordance with this policy is not economically viable, the Council will expect the submission of open book financial appraisal information alongside the planning application.
- 51. Notwithstanding this, given the wording of the policy itself, and as no on site affordable housing units are proposed, the scheme would conflict with this policy. However, the Viability report submitted by the appellant demonstrates that the provision of affordable homes would make the scheme unviable.

 Furthermore, given the Council's housing land supply position, I attribute limited weight to the conflict with this Policy.
- 52. While the agreement does not provide for on-site contributions towards affordable homes, it does include a Viability Review Mechanism which requires that viability reviews are carried out prior to the commencement of development and prior to the sale or lease of more than 75% of the dwellings.
- 53. As part of the appeal, the Appellant submitted a Viability Appraisal Addendum dated April 2021. In 2023, the Council reviewed updated viability evidence from the Appellant and concluded that the scheme would result in a deficit. However, given the time available for the Appellant to commence development including the submission of the reserved matter, an early stage viability review is necessary, and I consider this approach to be robustly justified. Therefore, I consider the S106 agreement is fairly and reasonably related to the development proposed and as such passes the statutory tests.

Conclusion

54. For the reasons given above the appeal should be allowed.

R Sabu

INSPECTOR

SCHEDULE OF CONDITIONS

- 1) Details of the landscaping (hereinafter called 'the reserved matter') shall be submitted to and approved in writing by the local planning authority before any development takes place and the development shall be carried out as approved.
- 2) Application for approval of the reserved matters shall be made to the local planning authority not later than [3] years from the date of this permission.
- 3) The development hereby permitted shall take place not later than [2] years from the date of approval of the last of the reserved matters to be approved.
- 4) The development hereby permitted shall be carried out in accordance with the following approved plans: 010 Rev 00, 100 Rev 00, 200 Rev 01, 201 Rev 01, 202 Rev 02, 203 Rev 01, 204 Rev 01, 205 Rev 01, 206 Rev 01, 207 Rev 01, 208 Rev 00, 300 Rev 01, 301 Rev 01, 302 Rev 01, 303 Rev 01, 400 Rev 01 and 401 Rev 00.
- Prior to commencement of the development, details of the biodiversity net gain which will be delivered as part of this development (including a clear demonstration through the use of an appropriate biodiversity calculator such as the Defra Metric 3.0 that a net gain would be achieved) shall be submitted to and approved in writing by the council. The agreed net gain measures shall thereafter be implemented/installed in full as agreed.
- Prior to commencement of the development (including demolition, ground works, vegetation clearance) a construction environmental management plan (CEMP: Biodiversity) shall be submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following:
 - a) Risk assessment of potentially damaging construction activities.
 - b) Identification of "biodiversity protection zones".
 - c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements and should include all mitigation measures outlined in the ecology report (Ethos Environmental Planning, January 2021), an updated ecology walkover survey (including an updated PRA of the building) prior to commencement of any works to ensure that conditions on the site have not significantly changed since the time of the 2020 surveys, reasonable avoidance measures during site clearance works for reptiles, nesting birds, and hedgehog (including measures which would be undertaken should any individuals of these species be found), removal of the identified PRF under the supervision of a suitably qualified ecologist, protection of the river and any vegetation to be retained, and construction lighting to be directed away from the river and any suitable bat habitat.).
 - d) The location and timing of sensitive works to avoid harm to biodiversity features.
 - e) The times during construction when specialist ecologists need to be present on site to oversee works.

- f) Responsible persons and lines of communication.
- g) The role and responsibilities on site of an ecological clerk of works (EcoW) or similarly competent person.
- h) Use of protective fences, exclusion barriers and warning signs. The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority. An updated ecology report detailing the results of this updated survey should be submitted with any Reserved Matters application, and if any new signs of presence of protected species on the site is found then further surveys may need to be undertaken and/or conditioned as part of the Reserved Matters application.
- 7) Prior to commencement of the development (excluding demolition) a surface water drainage scheme for the development, based on sustainable drainage principles shall be submitted to and approved in writing by the local planning authority. Details shall include:
 - Full details of all components of the proposed surface water drainage system including dimensions, locations, gradients, invert levels, cover levels and relevant construction details.
 - Details of the maintenance arrangements relating to the proposed surface water drainage system confirming who will be responsible for its maintenance and the maintenance regime to be implemented.

The surface water drainage system shall be implemented and maintained in accordance with the approved details thereafter.

- 8) No development above ground floor slab level shall take place until samples of the materials to be used on the external surfaces of the development hereby approved have been submitted to and approved in writing by the local planning authority. This should accord with the details submitted in the Design and Access Statement. The development shall be carried out and maintained in accordance with the approved details.
- 9) No development above ground floor slab level shall commence until a report detailing the external lighting scheme, and how this will not adversely impact upon wildlife, has been submitted to and approved in writing by the LPA. The report shall include the following figures and appendices:
 - A layout plan with beam orientation o A schedule of equipment
 - Measures to avoid glare
 - An isolux contour map showing light spillage to 1 lux both vertically and horizontally, areas identified as being of importance for commuting and foraging bats, and locations of bird and bat boxes. The approved lighting plan shall thereafter be implemented as agreed.
- 10) No development above ground floor slab level shall commence until details of biodiversity enhancements, to include integral bat boxes, bricks, or tiles, and at least four swift bricks built into the walls of the new building shall be submitted and approved in writing by the council. The boxes, bricks, or tiles shall thereafter be installed in accordance with the plans and a brief letter report confirming that the boxes, bricks or

- tiles have been installed, including a simple plan showing their location and photographs of the boxes, bricks or tiles in situ, is to be submitted to and approved in writing by the Council.
- 11) No development above ground floor slab level (as shown on the approved site section drawing) shall commence until details of measures to incorporate sustainable design and construction shall be submitted to and approved by the local planning authority, this should be based on the Sustainability and Energy Statement prepared by Bluesky Unlimited dated 12 February 2019 or such other details as agreed in writing by the local planning authority.
- 12) No development above ground floor slab level (as shown on the approved long section drawing) shall commence until a noise study has been submitted to and approved in writing by the local planning authority. This shall include:
 - i) Details of all the measures to be taken to acoustically insulate all habitable rooms against environmental and operational noise (including the operation of the adjoining railway), together with details of the methods of providing acoustic ventilation
 - ii) Details of how the proposed development is designed so that cumulative noise from surrounding uses (including the railway) does not impact on residential amenity. This shall include any appropriate mitigation measures.

The development shall be carried out in accordance with the approved details and retained as such thereafter.

- 13) Notwithstanding the drawings hereby approved, details regarding the provision of units designed to meet Categories M4(1), M4(2) and M4(3) of Approved Document Part M of Building Regulations 2010 (as amended) shall be submitted to, and approved, in writing by the local planning authority prior to the commencement of above ground floor slab level building works of that building. Thereafter, the development shall be completed in accordance with the approved details.
- 14) No part of the development shall be occupied until the access has been constructed in accordance with drawing number 100 Revision 00 (proposed site plan). The access shall thereafter be retained.
- 15) No part of the development shall be occupied until the cycle parking facilities have been provided in accordance with the details set out in drawing number 200 Rev. 01 (Proposed Ground Floor Plan) and 401 Rev. 00 (Two Tier Rack Space Requirements). These facilities shall thereafter be kept available for the parking of cycles in association with the development at all times.
- 16) No part of the development shall be occupied until EV charging facilities have been provided in accordance with drawing 362-2XX-01 (EVCP Spaces Plan). These facilities shall thereafter be kept available for the charging of electric vehicles in association with the development at all times.
- 17) No part of the development shall be occupied until vehicle parking spaces have been provided and laid out in accordance with drawing number 100 Revision 00 (proposed site plan). The spaces approved shall be retained for parking in association with the development.

- 18) No part of the development shall be occupied until the refuse bin storage area and recycling facilities have been provided in accordance with drawing 200 Rev. 01 (ground floor plan). These facilities shall be kept available for use in association with the development at all times.
- 19) The development shall be carried out in accordance with the submitted Flood Risk and SuDS Assessment, Project Number 20076, by Water Environment dated November 2020 and the following mitigation measures it details: The footprint of the proposed development shall be located outside of the 1% annual probability (1 in 100) flood extent with an appropriate allowance for climate change as listed In section 5.19 Finished floor levels shall be set no lower than 25.29 m above Ordnance Datum (AOD). There shall be no raising of existing ground levels within the 1% annual probability (1 in 100) flood extent with an appropriate allowance for climate change as shown in drawing number 200 revision 3 entitled "proposed ground floor plan" and drawing number 01A entitled "site survey as existing".

These mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the scheme's timing/phasing arrangements. The measures detailed above shall be retained and maintained thereafter throughout the lifetime of the development.

FND OF SCHEDULE

APPEARANCES

FOR THE APPELLANT:

Kevin Scott Solve Planning Rosalind Gall Solve Planning

Sarah Forsyth Ethos Environmental Planning

Jonathan Lonergan EB7

Ian Rennie Shanly Homes

FOR THE LOCAL PLANNING AUTHORITY:

Jeffrey Ng Principal Planning Officer, Council Alison Long North Area Team Leader, Council

Alex Swann Environment Agency Lauren Giddings Environment Agency

INTERESTED PARTIES:

Andrew Hill Local resident

DOCUMENTS

Hard copy of Appellant's costs application including appendices

E-mail dated 1 August 2023 and hard copy of Council's rebuttal to costs application Hard copy of agreed S106 agreement

Hard copy pages 8 and 14 of the Design and Access Statement

E-mail dated 1 August 2023 attaching EB7 statement dated 23 February 2023 E-mail dated 1 August 2023 from Solve Planning confirming drawing numbers referred to in conditions.

E-mail dated 1 August 2023 - Wording of paragraph 12.2.17 of the Borough Local Plan 2013-2033

E-mail dated 1 August 2023 – **Appellant's written agre**ement to pre-commencment conditions

E-mail dated 1 August 2023 – Appellant's written agreement to pre-commencment condition number 11

E-mail dated 1 August 2023 – Appellant's written agreement to pre-commencment condition regarding buffer zone

E-mail dated 1 August 2023 attaching Drawing No. 362-2XX-01



Costs Decision

Hearing held on 1 August 2023

Site visit made on 1 August 2023

by R Sabu BA(Hons), MA, BArch, PgDip, RIBA, ARB

an Inspector appointed by the Secretary of State

Decision date: 24 August 2023

Costs application in relation to Appeal Ref: APP/T0355/W/22/3313643 Maidenhead Spiritualist Church, York Road, Maidenhead SL6 1SH

- The application is made under the Town and Country Planning Act 1990, sections 78, 322 and Schedule 6, and the Local Government Act 1972, section 250(5).
- The application is made by Shanly Homes Limited for a full award of costs against Royal Borough of Windsor and Maidenhead.
- The appeal was against the refusal of planning permission for the construction of 49 No. apartments with associated parking and landscaping following demolition of existing building.

Decision

1. The application for an award of costs is refused.

The submissions

2. The costs application and response by the Council was submitted in writing. The Applicant's final response was made orally at the Hearing and generally confirmed their position.

Reasons

- 3. Parties in planning appeals normally meet their own expenses. However, the Planning Practice Guidance (PPG) advises that costs may be awarded against a party who has behaved unreasonably and thereby caused the party applying for costs to incur unnecessary or wasted expense in the appeal process.
- 4. The planning application was refused by the **Council's** Development Management Planning Committee, **contrary to the officer's recommendation for approval.** Whilst the Committee were not bound to accept the officer recommendation, the PPG states that examples of unreasonable behaviour by local planning authorities that risk an award of costs include failure to produce evidence to substantiate each reason for refusal on appeal and vague, generalised or inaccurate assertions about a proposal's impact which are unsupported by any objective analysis.
- 5. The first reason for refusal relates to the lack of affordable housing provision. The Council's officer's report explains that the Council's independent Viability Assessors reviewed the Applicant's Viability Statement and concluded that the proposal would result in a deficit. The report went on to say that subject to a legal agreement securing a review mechanism, the scheme is considered acceptable.
- 6. The reason for refusal states that the application failed to provide affordable housing to meet the needs of the local population contrary to Borough Local Plan 2013 2033 Policy HO3. This harm was considered to have substantial weight and the evidence provided to justify the lack of affordable housing provision was not considered to outweigh this harm. As stated in the PPG, the weight to be given to

- a viability assessment is a matter for the decision maker, having regard to all the circumstances in the case. In addition, while the supporting text for the Policy allows the submission of viability appraisal information in exceptional circumstances, as the proposal would not provide affordable housing, it would conflict with the wording of the Policy itself. Therefore, the Council did not behave unreasonably in this respect.
- 7. The Council did not defend the reason for refusal during the appeal process after the committee was presented with an updated viability assessment and the Council's Independent Viability Assessor's response. The Council's decision not to defend the reason for refusal during the appeal process was therefore not unreasonable.
- 8. The remaining reasons for refusal relate to the effect on the watercourse and living conditions of neighbouring occupiers. The Council's housing land supply position changed during the course of the appeal such that it could no longer demonstrate a five year supply of housing. The applicant considers that the Council behaved unreasonably by not reassessing the issues in light of paragraph 11d of the National Planning Policy Framework after assessment of the updated viability information.
- 9. However, the Council's position with respect to the second and third reasons for refusal did not change during the appeal process. In addition, the planning balance was discussed with the main parties during the Hearing. Therefore, the Council did not behave unreasonably in this respect.
- 10. A number of other schemes near the appeal site were granted planning approval by the Council. However, the other schemes within the allocation area were determined under the previous development plan and are therefore not directly comparable to the appeal site. In any event, each case must be determined on its individual merits and the Council therefore did not behave unreasonably in this respect.
- 11. With respect to the waterway, the Environment Agency's evidence sets out that the scheme would result in the loss of riparian habitat. In terms of privacy, the scheme would meet the minimum separation distances set out in the Design SPD. However, as the document provides guidance and the separation distances are not set out in the policies, the Council did not behave unreasonably with respect to these issues.
- 12. Accordingly, I consider that the Council has not failed to properly evaluate the application or consider the merits of the scheme and therefore the appeal could not have been avoided. I have found that the Council had reasonable concerns about the impact of the proposed development which justified its decision.

Conclusion

13. Consequently, unreasonable behaviour resulting in unnecessary or wasted expense, as described in the PPG, has not been demonstrated. For this reason, and having regard to all other matters raised, an award for costs is therefore not justified.

R.Sabu INSPECTOR

APPENDIX A.24 BLENHEIM SHOPPING CENTRE DAYLIGHT, SUNLIGHT AND OVERSHADOWING IMPACT ASSESSMENT



DAYLIGHT & SUNLIGHT

IMPACT ON NEIGHBOURING PROPERTIES REPORT

Blenheim Centre, Penge

Hadley Penge LLP



PROJECT DATA:

Client Hadley Penge LLP

Architect Feilden Clegg Bradley (FCB) Studios

Project Title Blenheim Centre, Penge

Project Number 17541

REPORT DATA:

Report Title Update Impact on Neighbouring Properties

GIA Department Daylight & Sunlight

Dated D9 November 2023

Prepared by CT
Checked by BMC
Type FINAL

Revisions	No:	Date:	Notes:	Signed:

SOURCES OF INFORMATION:

Information Received IR-10-17541
Release Number Rel_12_17541_01
Issue Number 01 & 02

Issue Number 01 & 02
Site Photos GIA & Google
GIA Survey 17541-PC01-LITE
3D models GIA surveys
OS Data FIND Maps

DISCLAIMER:

N.B This report has been prepared for Hadley Penge LLP by GIA as their appointed Daylight & Sunlight consultants. This report is intended solely for Hadley Penge LLP and may contain confidential information. No part or whole of its contents may be disclosed to or relied upon by any Third Parties without the express written consent of GIA. It is accurate as at the time of publication and based upon the information we have been provided with as set out in the report. It does not take into account changes that have taken place since the report was written nor does it take into account private information on internal layouts and room uses of adjoining properties unless this information is publicly available.



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APPENDICES (BOUND SEPARATELY)

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CLIMATE BASED DAYLIGHT MODELLING STUDY - COLMAN HOUSE



1 EXECUTIVE SUMMARY

GIA have assessed the proposed Feilden Clegg Bradley (FCB) Studios scheme "proposed development" for the Blenheim Centre, Penge site to understand the potential changes in light to the relevant surrounding properties.

- 1.1 GIA have been instructed by Hadley Penge LLP to provide daylight, sunlight and overshadowing advice in relation to the Blenheim Centre, Penge development in the London Borough of Bromley.
- 1.2 This report is for a variation of the scheme which has been submitted to London Borough of Bromley in January 2023 (planning reference: 23/00178/ FULL1). This report serves to supersede the November 2022 Daylight, Sunlight and Overshadowing report prepared by GIA ('the November 2021 Report') which accompanied the planning application for the scheme submitted in January 2023 ('the Submitted Scheme').
- 1.3 The GIA November 2022 Report has been subject to a third-party review by Avison Young ("AY") on behalf of Bromley Council, dated June 2023. On the whole, the document agrees with the GIA November 2022 report in relation to the impacts to the neighbouring amenity. However, AY suggested that GIA review the following in further detail:
 - The reporting on VSC to the rooms in Colman House and Greastone House; and
 - Climate Based Daylight Modelling (CBDM) assessment on the living rooms of Colman House
- 1.4 Both of the above have been included within this updated report.
- 1.5 The site is currently a low-rise shopping centre and car park located behind the mixed use Penge High Street to the northeast. Given the low rise nature of the existing condition any form of meaningful massing on site will likely make impacts to daylight and sunlight unavoidable.
- 1.6 GIA have undertaken a technical daylight, sunlight and overshadowing assessment of FCB's scheme at the Blenheim Centre "the Site" to understand the potential effect of the development on the daylight and sunlight amenity of the relevant neighbouring properties.
- 1.7 GIA have worked alongside FCB Studios to help refine the massing and limit the potential impact to the neighbouring residential receptors. This has been further refined following the November 2022 submitted report as the scheme assessed in this report is reduced in height and performs better from a daylight and sunlight perspective than the

submitted scheme.

- 1.8 The requirement in London boroughs for significantly more living and working spaces necessitates higher density development. The Site is located within the London Borough of Bromley and is located in an area designated for regeneration in the London Plan.
- 1.9 The daylight and sunlight analysis has been considered by reference to the criteria and methodology within the Building Research Establishment Guidelines (2022), which when published, recognised that it should not form a mandatory set of criteria, rather it should be used to help and inform design.
- 1.10 In terms of the daylight and sunlight analysis undertaken against the scheme, 69 properties have been considered relevant for assessment. 37 properties meet or have negligible impacts to the BRE Guidelines. The remaining 32 properties will experience alterations in daylight and/or sunlight which are beyond the suggested BRE Guidance and will be noticeable.
- 1.11 With regards to daylight (VSC and NSL), there are:
 - 3 properties that are considered Major Adverse in significance;
 - 7 which are considered Moderate;
 - 8 that are Minor to Moderate; and
 - 14 which are Minor Adverse.
- 1.12 In relation to sunlight (APSH), there are:
 - 13 properties which are not relevant for assessment in accordance with the BRE Guidelines;
 - 52 properties which remain BRE compliant (Negligible);
 - 2 property which are considered Major Adverse in significance;
 - 2 that are Moderate;
- 1.13 In relation to overshadowing, the proposed scheme will not result in a noticeable impact to the neighbouring amenity spaces and meets the BRE criteria for overshadowing.
- 1.14 Within this report, GIA has sought to contextualise the daylight and sunlight impacts against local, regional and national policy/guidance and other relevant site factors. This has been completed to allow a full



Figure 01: Illustration of the proposed Blenheim Centre, Penge development designed by Feilden Clegg Bradley (FCB) Studios

appreciation and understanding of the Site in its urban context and this particular location.

- 1.15 Whilst the methodology within the BRE Guidelines focuses on whether the alteration in daylight and/or sunlight will cause a noticeable change, the Mayor of London's Housing Supplementary Planning Guidance (Housing SPG see Section 3) recommends that broadly similar typologies should be used to determine what levels of daylight and sunlight amenity are appropriate for a given context. The Housing SPG focuses on retained values and recommends that assessment should take into consideration comparison and context beyond the technical data outlined by the BRE Guidelines. The use of the Housing SPG (see Section 3) allows a contextual appreciation of daylight and sunlight amenity against the requirement for higher density housing sites within London.
- 1.16 As discussed in greater detail in this report, it can be difficult to achieve the BRE's optimum VSC target of 27% in areas identified for regeneration. The Greater London Authority (GLA) has previously suggested that retained values in the mid-teens or in excess of 20% should be considered either acceptable or reasonably good within central urban locations. With the Development in place, 91 (56%) of the non-compliant windows achieve a figure in excess of 15%. It is relevant to highlight that the presence of overhangs and existing architectural protrusions at the Croydon Road properties and 126-128 High Street, are a factor in the lower retained VSC values.
- 1.17 It is important to recognise that the technical alterations should not be considered in isolation and other context

- factors such as building form, room use and depth are relevant. For example bedrooms are less important with respect to daylight distribution (NSL). Bedrooms and kitchens are also less important in relation to sunlight in accordance with the BRE. Small kitchens (less than 13 sqm) may also be considered non-habitable (as per the Housing SPG and Bromley's SPD on Affordable Housing).
- 1.18 The development will bring a range of significant benefits to the local area, including, but not limited to: the creation of a new public realm, to create a new communityfocused centre at the heart of Penge which will deliver a range of cultural and social uses for both existing and future residents. The provision of 230 new homes with a mix of types and sizes, and 35% affordable homes (policy compliant). To design and deliver high-quality housing for Bromley across a range of tenures, helping to support mixed communities of all ages and to maximise the number of affordable family homes, acknowledging the local need and a new Sustainable Transport Hub for local community use to offer a wide range of sustainable, active and inclusive modes of transport within the scheme such as Brompton bikes, scooters and e-bikes for the community at large, promoting active travel to both residents and visitors.
- 1.19 Consequently, in GIA's opinion, the technical alterations in daylight and sunlight should be considered against this backdrop. A strict application of the BRE Guidelines should not be applied and weight should be given to the demands of planning policy/guidance at a national, regional and local level (see Section 3) and to what is considered contextually appropriate for a site of this nature within London.



2 THE SITE

GIA have been instructed to review and advise on the daylight and sunlight impacts associated with the implementation of the proposed development at Blenheim Centre, Penge.

THE EXISTING SITE

- 2.1 The Site is located in the London Borough of Bromley.
- 2.2 The property comprises a Shopping Centre site accessed via Empire Square in Penge. Current occupiers include Wilko, Iceland, Peacocks and Card Factory. The Site extends to 1.02 hectares.
- 2.3 The surrounding area provides a mixture of uses, including retail on Penge High Street to the east, residential uses to the south / west and educational facilities provided at the Bromley Adult Education College to the south east of the site. Nearby amenity green space is located at the Penge Recreation Ground and Royston Field to the north west and south respectively. Crystal Palace park is also located

- approximately 780 metres to the north west.
- 2.4 The Application Site accommodates a part three, part four storey building containing a shopping centre and multi storey car parking facility. The shopping centre consists of four retail units with a combined Gross Internal Area (GIA) of approximately 4,251sqm.
- 2.5 Figure 02 below illustrates the Site. Further drawings are enclosed at Appendix 03 of this report.



Figure 02: 3D model of the site and Existing Property

PREVIOUS PROPOSED DEVELOPMENT

- 2.6 The submitted development reported on in GIA's November 2022 report was for a phased development including demolition of existing buildings and erection of four blocks to facilitate a mixed-use development providing up to 250 dwellings, up to 2,828sqm of commercial/town centre floorspace and associated communal amenity space and play space, cycle parking, refuse storage and plant space in four buildings ranging between 3 and 18 storeys.
- 2.7 There is also the provision of public realm and new pocket park at ground floor with associated landscaping improvements. Provision of 24 commercial car parking spaces and 8 blue badge

- spaces for the residential accommodation.
- 2.8 GIA's understanding of the Proposed Development is illustrated in Figure 03 and further drawings are enclosed at Appendix 03.



Figure 03: 3D Perspective View of the Proposed Scheme



UPDATED PROPOSED DEVELOPMENT

- 2.9 The updated proposed development is for a phased development including demolition of existing buildings and erection of four blocks to facilitate a mixed-use development providing up to 230 dwellings, up to 2,714 sqm of commercial/town centre floorspace and associated communal amenity space and play space, cycle parking, refuse storage and plant space in four buildings ranging between 3 and 16 storeys.
- 2.10 There is a provision of public realm and new pocket park at ground floor with associated landscaping improvements. Provision of 24 commercial car parking spaces and 8 blue badge spaces for the residential accommodation.

2.11 GIA's understanding of the Proposed Development is illustrated in Figure 04 and further drawings are enclosed at Appendix 03.



Figure 04: 3D Perspective View of the Proposed Scheme

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3 POLICY & THE WIDER CONTEXT

- 3.1 Planning policy is the development framework under which decisions on planning applications are made. Within this section GIA has considered a wide range of national, regional and local planning policy and guidance to provide an understanding of how both the government and local authorities consider daylight and sunlight amenity against the need for increased density in highly accessible urban locations which have been allocated for specific types of development.
- 3.2 GIA has extracted detailed sections from several policy and guidance documents (listed below) which we believe are pertinent to daylight and sunlight matters and the redevelopment of the Site. These have set the planning policy context within which GIA has approached the assessment of the Site on the relevant neighbouring properties:
 - Housing White Paper: Fixing our broken housing market (Department for Communities and Local Government - February 2017).
 - National Planning Policy Framework (NPPF July 2021);
 - The London Plan (March 2021);
 - The London Plan Housing SPG (March 2016, updated 2017);
 - Bromley Local Plan (Adopted January 2019)
 - Bromley Regeneration Strategy (Draft) 2020-2030 (August 2020); and
 - Bromley Adopted SPD Affordable Housing (March 2008)

HOUSING WHITE PAPER - FIXING OUR BROKE HOUSING MARKET (FEBRUARY 2017)

- 3.3 The DCLG (Department for Communities and Local Government) published a White Paper in February 2017. The Government provided a response to the consultation of this document in March 2018 and issued a further supplementary consultation paper, 'Planning for the right homes in the right places', which outlined how to identify housing need and planning processes within a local borough. The White Paper illustrates the direction of travel at Government level in relation to density and development.
- 3.4 Paragraph A.69 of the White Paper states that;

"the Government intends to amend national planning guidance to highlight planning

approaches that can be used to help support higher densities, and to set out ways in which daylight considerations can be addressed in a pragmatic way that does not inhibit dense, high quality development."

3.5 Paragraph 1.53 of the White Paper goes on to note that:

"To help ensure that effective use is made of land, and building on its previous consultations, the Government proposes to amend the National Planning Policy Framework to make it clear that plans and individual development proposals should:

- make efficient use of land and avoid building homes at low densities where there is a shortage of land for meeting identified housing requirements;
- address the particular scope for higher density housing in urban locations that are well served by public transport (such as around many railway stations); that provide scope to replace or build over low-density uses (such as retail warehouses, lock-ups and car parks); or where buildings can be extended upwards by using the 'airspace' above them:
- ensure that the density and form of development reflect the character, accessibility and infrastructure capacity of an area, and the nature of local housing needs; and
- take a flexible approach in adopting and applying policy and guidance that could inhibit these objectives in particular circumstances; for example, avoiding a rigid application of open space standards if there is adequate provision in the wider area."
- 3.6 In Annex A (page 88), public and private sectors as well as the general public were invited to respond on whether the above proposals should be implemented into the National Planning Policy Framework. Of the 744 responses received, 56% (416) agreed with the proposals above. The Government response stated that;

"In the revised Framework we are proposing to make clear that, 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 development proposals make optimal use of the potential of each site".

3.7 Since the White Paper was published, the Government has updated the NPPF (see below) to reflect all of the above. This illustrates that, at national level, the Government is addressing the need for flexibility in relation to daylight and sunlight target to support much needed densification of housing in relevant areas.

NATIONAL PLANNING POLICY FRAMEWORK (NPPF JULY 2021)

3.8 In July 2021, the Ministry of Housing, Communities & Local Government published the National Planning Policy Framework (NPPF). The document;

"sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced."

- 3.9 Chapter 11 (Making effective use of land) highlights that effective use of land should be promoted within planning policies and decisions;
 - "119. Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or 'brownfield' land."
- 3.10 Paragraph 125 goes further and explicitly states that the use of character-based assessments, design guides and masterplans should be used to help ensure that land is used efficiently to avoid homes being built at low densities. This paragraph also notes the flexibility of the BRE guidance;

"125. a) plans should contain policies to optimise the use of land in their area and meet as much of the identified need for

housing as possible. This will be tested robustly at examination, and should include the use of minimum density standards for city and town centres and other locations that are well served by public transport. These standards should seek a significant uplift in the average density of residential development within these areas, unless it can be shown that there are strong reasons why this would be inappropriate;

"125. 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)"

3.11 In GIA's opinion, the above demonstrates the Government's recognition of the need for flexibility when considering daylight and sunlight targets. There is an acknowledgement that to achieve efficient use of land and optimise massing for growth and regeneration, impacts to existing daylight and sunlight amenity will likely occur.

NATIONAL PLANNING PRACTICE GUIDANCE (LAST UPDATED JUNE 2021)

- 3.12 The updated NPPG includes a section relating to more effective use of land and reference is made to daylight and sunlight. This section was updated in July 2019.
- 3.13 Paragraph 6 of the NPPG (Ref ID: 66-006-20190722) acknowledges that new development may cause an impact on daylight and sunlight levels enjoyed by neighbouring occupiers. It requires local authorities to assess whether the impact to neighbouring occupiers would be "unreasonable".

"Where a planning application is submitted, local planning authorities will need to consider whether the Proposed Development would have an unreasonable impact on the daylight and sunlight levels enjoyed by



neighbouring occupiers, as well as assessing whether daylight and sunlight within the development itself will provide satisfactory living conditions for future occupants".

3.14 The NPPG goes on further by stating under Paragraph 7 (Ref ID: 66-007-20190722): What are the wider planning considerations in assessing appropriate levels of sunlight and daylight?

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

3.15 The above sections recognise the significance of context in determining what are appropriate and reasonable levels of daylight and sunlight amenity.

3.16 THE LONDON PLAN - THE SPATIAL DEVELOPMENT STRATEGY FOR GREATER LONDON (MARCH 2021)

- 3.17 The new London Plan was published in March 2021 and sets out, "an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years."
- 3.18 Within Chapter 1 'Planning London's Future Good Growth' at page 15 paragraph 1.2.2, it is noted that to accommodate London's future growth, efficient use of the city's land with increased density is proposed;

"This will mean creating places of higher density in appropriate locations to get more out of limited land, encouraging a mix of land uses, and co-locating different uses to provide communities with a wider range of services and amenities."

3.19 It goes on to further state at paragraph 1.2.3 page 15;

"The benefits of this approach are wide ranging, going well beyond the simple ability to provide more homes and jobs. High-density, mixed-use places to support the clustering effect of businesses known as 'agglomeration', maximising job opportunities,"

3.20 On page 17, 'Policy GG2 - Making the best use of land' it is advised that;

"To create successful sustainable mixed-use places that make the best use of land, those involved in planning and development must:

B – prioritise sites which are well-connected by existing or planned public transport;

C – pro actively explore the potential to intensify the use of land to support additional home and workspaces, promoting higher density development, particularly in locations that are well-connected to jobs, services, infrastructure and amenities by public transport, walking and cycling."

- 3.21 Within 'Policy D2 Infrastructure Requirements for Sustainable Densities', the Plan advises that to determine the level of density for a site, consideration should be given to the Site's connectivity and accessibility (including both Public Transport Accessibility Level (PTAL) and access to local services.
- 3.22 Transport accessibility and connectivity are material considerations in terms of optimising density and making effective use of land on urban development sites within the London Plan.
- 3.23 The Site has a PTAL level of 5 and has been designated as a District Town Centre within the London Plan's 'Town Centre Network' in Table A1.1, page 476. Figure 04 illustrates the type of uses that a District Town Centre could accommodate.
- 3.24 Within Table A1.1, 'Residential Growth Potential', Penge is defined as Incremental however, it is also identified as a 'Strategic area for regeneration.' This is illustrated in Figure 05.
- 3.25 Daylight and sunlight is specifically referenced at paragraph D, page 125 within 'Policy D6 Housing quality and standards';

"The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate

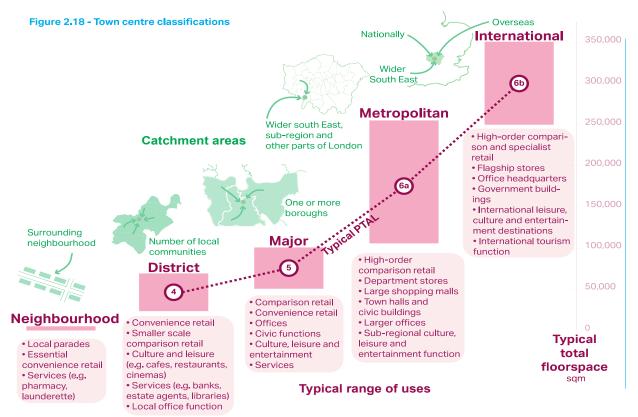


Figure 05: Town centre classifications (taken from The London Plan)

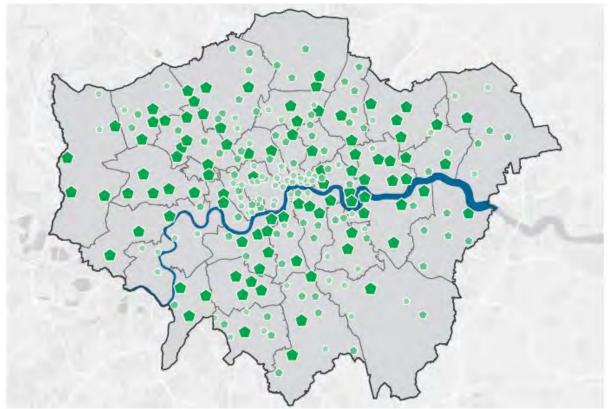


Figure 06: Town centre residential growth potential (taken from The London Plan)



for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space".

- 3.26 The above statement highlights the relevance of context in determining what levels of daylight and sunlight are appropriate for a given location within London. This appears to be an endorsement of the recommendations of the Mayor of London's Housing SPG (discussed below) which suggests the need for increased density, more flexibility of the BRE guide, the use of alternative target values and comparisons to other broadly comparable typologies rather than a strict application of the BRE Guidelines.
- 3.27 The London Plan provides scope for flexibility in reviewing daylight and sunlight impacts by reference to context. By following the demands of policy in terms of regeneration and density, deviations from the strict BRE Guide are likely to occur and this must be appreciated when reviewing daylight and sunlight impacts and retained values.

3.28 HOUSING SUPPLEMENTARY PLANNING GUIDANCE (LAST UPDATED JUNE 2021)

- 3.29 The Housing SPG provides guidance on a range of strategic policies such as housing supply, residential density and housing standards.
- 3.30 The SPG moves away from the rigid application of the national numerical values provided in the BRE Guidelines. At Paragraph 1.3.45, page 52 of the Housing SPG it is stated that:

"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."

- 3.31 Spatial planning considers where such densification may be appropriate within London. It is generally accepted and agreed that it should be centred on transport nodes or as mentioned above, large, accessible town centre locations. As mentioned, the Site is situated to the southeast of Penge West National Rail & Overground station within an excellent 5 PTAL classification.
- 3.32 Paragraph 1.3.46 on page 53 of the Housing SPG further states that:

"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."

3.33 Paragraph 2.3.47 on page 85, further suggests that the:

"BRE guidelines on assessing daylight and sunlight should be applied sensitively to higher density development in London, particularly in central and urban settings, recognising the London Plan's strategic approach to optimise housing output (Policy 3.4) and the need to accommodate additional housing supply in locations with good accessibility suitable for higher density development (Policy 3.3). Quantitative standards on daylight and sunlight should not be applied rigidly, without carefully considering the location and context and standards experienced in broadly comparable housing typologies in London."

3.34 The extracted guidance demonstrates that a more flexible and holistic approach to the national numerical BRE standards should be applied when considering emerging development in London. The Housing SPG states that "broadly comparable residential typologies" should be the alternative targets for which to assess daylight and sunlight. This is a reasoned approach that has been accepted in many recent planning decisions (including appeals

- see Section 4).

- 3.35 To summarise, the Housing SPG;
 - Calls for an appropriate degree of flexibility in the application of the BRE guidance to the circumstances of London;
 - Recommends that the BRE guidance is applied sensitively to high density development, especially in opportunity areas such as town centres, where alternative targets (from the BRE standards) may be more appropriate;
 - Suggests that the application of the BRE guidance needs to be consistent with optimising density and growth in recognition of the need for change in an area;
 - Advises that comparisons should be made with the daylight and sunlight values achieved in comparable areas and typologies across London (rather than strictly with the national numerical values); and
 - Notes that to fully optimise housing potential on large sites may necessitate a departure from the current 'standards.'

3.36 **BROMLEY LOCAL PLAN** (ADOPTED JANUARY 2019)

- 3.37 Bromley's Local Plan was adopted on 16 January 2019 and, in conjunction with the London Plan is used to determine planning applications. Upon adoption, the Local Plan replaced the Unitary Development Plan, which was previously part of the statutory Development Plan for Bromley.
- 3.38 Policy 37 (General Design of Development) under part d states that:
 - "..the relationship with existing buildings should allow for adequate daylight and sunlight to penetrate in and between buildings."
- 3.39 Part e further states that:
 - "..developments should respect the amenity of occupiers of neighbouring buildings and those future occupants, providing healthy environments and ensuring they are not harmed by noise and disturbance, inadequate daylight, sunlight, privacy or by overshadowing."
- 3.40 The site is also designated in the Local Plan as an

Area of Renewal, where proposals seeking to deliver transformational benefits are strongly encouraged.

3.41 BROMLEY REGENERATION STRATEGY 2020-2030 (DRAFT

- 3.42 In line with the Building a Better Bromley ambitions, this strategy sets out the borough's priorities for regeneration over the next ten years.
- 3.43 The document recognises the need for greater density in the borough given that it currently is one of the lowest London boroughs for density, however, this is not a true picture as a significant portion of the borough is located in the Green Belt therefore density does occur in smaller pockets throughout the borough.
- 3.44 The document recognises that Penge is an area of deprivation and low employment within the borough and investment must be sought to improve standards:

"The borough is the 4th least deprived in London with unemployment levels lower than the national average. However there are pockets of deprivation which buck this trend. Unemployment is at its highest in the Crystal Palace, Penge and Cator, Mottingham and Chislehurst North, and Cray Valley West wards. Therefore investment needs to be enabled in these areas to improve the lives of those who live there."

3.45 In section 3 of the document, the council recognises:

"the importance of ensuring that the new communities these homes create have good access to local amenities, and that existing residents are not negatively impacted by housing density and increased demand on facilities."

3.46 This demonstrates that the benefits of the scheme in this deprived area of the borough will be a key asset and need to be taken into consideration with any impact that may occur as a result of the proposed development.



3.47 ADOPTED SPD AFFORDABLE HOUSING (MARCH 2008, ADDENDUM'S ADDED IN 2012, 2013 AND 2018)

3.48 The adopted affordable housing SPD for Bromley defines the parameters of what is considered by the borough to be a habitable room.

"A room within a dwelling the primary purpose of which is for living, sleeping or dining - including kitchens where the total area (including fittings) is more than 13 sq.m. In proposals for blocks of flats, rooms exceeding 20 sq.m. readily capable of division will be counted as two."

3.49 This is key in that the BRE states that only habitable rooms need be assessed for daylight and sunlight.

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."

3.54 There is a recognition from the BRE that context plays an important role in determining appropriate daylight and sunlight values for a given location and that alternative targets can be used in special circumstances.

SUMMARY

- 3.50 In determining acceptability, it is important to consider not only the technical data set out within the BRE Guidelines but also the demands of planning policy. With transformational regeneration comes density in areas which are highly accessible, this is clear from regional & local plans and guidance. It is therefore key to consider amenity in a holistic way against the backdrop of planning policy, the aspirations for the Site and the many benefits the Site will bring.
- 3.51 From national through to local level, policy and guidance is clear, if land is to be used more efficiently and density is to be increased in urban locations then deviations from the BRE Guidelines will occur.
- 3.52 The Site has been allocated for growth and intensification in an area where taller buildings could be deemed appropriate. It is important to remember that daylight and sunlight is but one form of amenity, which should be not be considered in isolation when reviewed against other material planning considerations outlined in detail within this section.
- 3.53 The BRE Guidelines, themselves, recognise this in their Introduction, which notes,
 - "1.6 The advice given here is not mandatory and the guide should not be seen as an

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4 BRE GUIDELINES & CONTEXT METHODOLOGY

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

- 4.1 The BRE Guidelines provide the technical calculations for which daylight and sunlight impacts are assessed. Within the BRE guide, there are two methodologies for daylight assessment of neighbouring properties, namely:
 - The Vertical Sky Component (VSC); and
 - The No Sky Line (NSL).
- 4.2 For daylight to be compliant (in accordance with Figure 20 within the BRE Guidelines), both the VSC and NSL tests must be met. The BRE recommends that no more than a 20% (0.8 times) alteration should occur from the former value.
- 4.3 Full details of the BRE assessment methodologies can be found in Appendix 02 of this report.
- 4.4 The BRE Guidelines suggest an optimum daylight value for VSC of 27%. Although it is not explicitly stated in the BRE guide, it can be inferred from the diagrams set out in the guidance and the basis behind the calculations, that this VSC value is derived from an environment where the obstruction angle between buildings is no more than 25 degrees.
- 4.5 The Greater London Authority has made reference to VSC values within urban locations in a 2013 GLA hearing report (D&P/3067/03) which notes,
 - "It, should, nevertheless, be noted that the 27% VSC target value is derived from a low-density suburban housing model. The independent daylight and sunlight review states that in an inner-city urban environment, VSC values in excess of 20% should be considered as reasonably good, and that VSC in the mid-teens should be acceptable. However, where the VSC value falls below 10% (so as to be in single figures), the availability of direct light from the sky will be poor".
- 4.6 Whilst the development Site is located in an Outer London borough, it has been determined as a "Strategic area for regeneration" as such, if density is increased, it is likely that deviations from the BRE Guidance will occur where obstruction angles increase.

- 4.7 There is one methodology provided by the BRE Guidelines for sunlight assessment, denoted as Annual Probable Sunlight Hours (APSH).
- 4.8 In GIA's experience, daylight and sunlight can be more limited in urban locations or regeneration areas where there is significant redevelopment. It is well acknowledged that when developing in such situations there may also be many other planning and urban design matters to consider in addition to daylight and sunlight amenity.
- 4.9 As noted previously, the BRE guidance notes in its opening summary that, "it is purely advisory and the numerical targets within it may be varied to meet the needs of the development and its location. Appendix F explains how this can be done in a logical way."
- 4.10 Within Appendix F of the BRE Guidelines it states ways of setting alternative target values for skylight (daylight) and sunlight access. Paragraph F1 of Appendix F notes,
 - "Sections 2.1, 2.2 and 2.3 give numerical target values in assessing how much light from the sky is blocked by obstructing buildings. These values are purely advisory and different targets may be used based on the special requirements of the proposed development or its location,"
- 4.11 Paragraph F4 of Appendix F outlines:
 - "...a mews in a historic city centre, where the obstruction angle from ground floor window level might be close to 40°. This would correspond to a VSC of 18%, which could be used as a target value for ground floor windows in that street if new development is to match the existing layout. Windows at other levels would have different obstruction angle and target VSC."
- 4.12 Table F1 within Appendix F of the BRE Guidelines also provides a list of obstruction angles (ranging from 16 to 50 degrees) and the corresponding VSC value (ranging from 32% to 13%).
- 4.13 The BRE therefore recognises the relevance of context when considering daylight and sunlight values, albeit it does not give specific alternative targets for urban environments.

4.14 There are properties surrounding the Site that contain balconies, which can inherently reduce the daylight (VSC) and sunlight (APSH) availability. The BRE Guidelines states the following in relation to VSC for windows under balconies at paragraph 2.2.13:

> "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 opposite 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".

4.15 With regards to sunlight (APSH) and balconies, it notes at paragraph 3.2.11,

"Balconies and overhangs above an existing window tend to block sunlight, especially in summer. Even a modest obstruction opposite may result in a large relative impact on the sunlight received. One way to demonstrate this would be to carry out an additional calculation of the APSH, for both the existing and proposed situations, without the balcony in place. For example, if the proposed APSH 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 sunlight."

- 4.16 GIA has undertaken a no balconies assessment at the following property:
 - 126-128 High Street
- 4.17 The BRE also states that where a room is served by two or more windows, the mean VSC can be calculated to understand the true picture of the

daylight to that room. Paragraph 2.2.6 states:

"For a bay window, the centre window facing directly outwards can be taken as the main window. If a room has two or more windows of equal size, the mean of their VSCs may be taken."

4.18 Full details of the BRE assessment methodologies can be found in Appendix 02 of this report.

RECENT DECISIONS

Melanie Rainbird v London Borough of Tower Hamlets (March 2018)

- 4.19 With regards to relevant case law, the Rainbird judgement (28th March 2018) advises that daylight and sunlight should be approached in a certain way i.e. a two-stage process should be followed when assessing impacts. Stage One is a calculation and the question to ask is whether there is a noticeable impact. Stage Two is a matter of judgement and it is necessary to consider whether any noticeable impact is unacceptable in the particular context of the case. Similar to GIA's approach, in order to answer the Stage One question, the BRE Guidelines can be utilised. In answering the Stage Two question, wider contextual considerations are to be taken into account in arriving at a balanced judgement for a specific site location.
- 4.20 A new Housing Design Standards document (London Plan Guidance February 2022) is currently undergoing consultation draft. This document looks to help and interpret the housing-related design guidance and policies set out in the London Plan 2021.
- 4.21 Within Chapter 4, Part C (Homes and private outside space), the document acknowledges that standards should aim to complement daylight and sunlight impacts using the BRE guidance by also endorsing a two-stage approach that is referred to above:

Paragraph 4.1.2: "...These standards aim to complement the consideration of daylight and sunlight impacts using the BRE guidance (Site layout planning for daylight and sunlight: a guide to good practice). This process involves a two-stage approach: firstly, by applying the BRE guidance; and



secondly, by considering the location and wider context when assessing any impacts..."

4.22 Against this background, GIA has applied the BRE Guidelines to determine whether an impact has occurred. As the context of the site is mostly lowrise, a consideration of the planning context and considered intensification of housing for Penge has been considered in this report. The broader overall planning balance is outlined in the Planning Statement appended to the application.

8 Albert Embankment – Appeal Decision (March 2021) and Secretary of State Decision (June 2021)

4.23 The above application was refused at Appeal (APP/N5660/V/20/3254203 & APP/N5660/V/20/3257106) and the decision was upheld by the Secretary of State (SoS). Whilst the scheme was refused, it is relevant to note, that the principle of using contextual comparisons, policy and relevant guidance in respect of daylight and sunlight was agreed by the Planning Inspectorate and SoS. The Inspector, however, did not agree with the research selection considered by the Appellant's daylight and sunlight consultants and noted at paragraph 92 of the Appeal decision,

"92 - The examples presented were absent of a detailed commentary such as to justify or assist an understanding of quantitative conclusions applicable to the current case that can be drawn. The comparisons made with typical London streets also lack contextual reference and robustness. As a result, little weight can be placed in detailed terms on the appellants' allusion as to what has been found acceptable in other cases based on central London experience or in an inner urban environment."

4.24 The Inspector further noted at paragraph 93,

"The approach I take is therefore to make an overall judgement of impact using all the information available and having reference to both the BRE and BS guidelines and the particular site context, while also having regard to the policy led development aspirations. This acknowledges that the criteria are to be applied flexibly and to help rather than constrain design." 4.25 The above demonstrates that the relevance of context in terms of daylight and sunlight amenity is validated by the Planning Inspectorate.

Goldsworth Road, Woking (January 2022)

- 4.26 The above appeal decision (APP/A3655/W/21/3276474) was approved by the Planning Inspectorate in early 2022.
- 4.27 The granted planning permission, following public inquiry, was for a 929 unit scheme of between nine and 37-storeys in Woking town centre. In his decision, the Inspector states at paragraph 35,

"Retaining a VSC level of 27% in neighbouring properties is unrealistic; as has been recognised in many appeal decisions and other documents. Even retaining 20% VSC is considered, generally, to be reaosnably good, and in urban areas retaining around midteen % VSC is considered to be acceptable."

4.28 The Inspector was accepting of a two staged process when reviewing daylight and sunlight impacts. At paragraph 37, he notes,

"by applying the BRE guidance, is only the first stage in a necessary two stage test; the second stage being consideration of context, including planning policy and wider amenity issues. There are many contextual factors to take into account."

- 4.29 The daylight and sunlight analysis included an assessment of the levels of daylight and sunlight achieved in comparable building typologies in Woking and in similar spatial contexts.
- 4.30 The Inspector concluded (see paragraph 39) that the second-stage evidence was "compelling" and that "the reduction in daylight levels is not a reason to withhold planning permission for the proposed development". This decision demonstrates the importance of the two staged approach which looks at technical quantitative calculations and also specific context in line with relevant planning policy and guidance at national, regional and local level.

- 4.31 There are number of other recent decisions within London in which context and the two staged approach to daylight and sunlight has been a determining factor in decision making. The use of alternative target values in response to context has also been key in these decisions. The decisions include but are not limited to;
 - Whitechapel Estate, 2017; (APP/E5900/W/17/3171437)
 - Empire House, 21 Buckle Street, 2018; (APP/E5900/w/17/3191757)
 - Graphite Square, 2019; (APP/N5660/W/18/3211223)
 - Biscuit Factory, 2020; and (17/AP/4088)
 - Hertford Gasworks, 2020 (APP/J1915/W/19/3234842)
- 4.32 Appendix 02 of this report elaborates on the mechanics of each of the above assessment criteria, explains the appropriateness of their use and the parameters of each specific recommendation.

CONTEXT METHODOLOGY

- 4.33 As noted previously, the Housing SPG (see Section 3) suggests that flexibility should be applied to the BRE Guidance and that context plays an important role in the determination of appropriate daylight and sunlight values within London. In consideration of context, it is suggested that a proposal should be analysed by drawing comparisons to other broadly similar residential typologies.
- 4.34 The Housing SPG suggests that the BRE Guidance is applied sensitively to higher density development. Given the planned regeneration for this area and the increase in density that will come over time (as noted in the London Plan), it is GIA's opinion that the recommendations of the Housing SPG are a material consideration in relation to this Site.
- 4.35 Whilst there are no direct comparable sites of recent redevelopment in the Penge area, GIA have reviewed the existing site context and the potential daylight levels that may exist to those properties which have windows and rooms likely serving habitable spaces which face onto the buildings on the northeast side of the High Street.



Figure 07: Location of properties reviewed



- 4.36 Given their location, in close proximity to the High Street buildings, the rear facing windows of 6-32 Raleigh Road (Evens) will draw a comparison to what daylight levels may be experienced to the rear facing windows along the High Street and Croydon Road which will face over the proposed development.
- 4.37 GIA have not undertaken detailed modelling of these properties, however, have undertaken a VSC facade assessment using our VU.CITY App. Using this software we are able to understand the level of existing VSC experienced by these properties.
- 4.38 As can be seen in the figures below and opposite, 50% of the ground floor windows have existing VSC levels between 5%-11%. The remaining ground floor windows have VSCs between 13%-21%.
- 4.39 On the first floor there is one window which has 11% VSC, the majority of the remaining windows have VSC levels between 18%-27%.

- 4.40 The reason for some of these very low existing VSC values is a combination of existing architectural features of the properties on Raleigh Road with the rear extensions limiting daylight access and the close proximity of the rear walls of the properties along the High Street. Nevertheless, given the ages of the properties on Raleigh Road, it is a consideration that daylight is not a sole amenity when considering where to live and that in urban areas such as Penge there are instances where poor daylight levels exist.
- 4.41 The high level assessment therefore demonstrates that achieving the BRE's criteria of 27% in built up urban areas is not possible in some contexts and that a more flexible approach to the guidelines of the BRE should be considered, in line with national, regional and local planning policy.



Figure 08: Raleigh Road VSCs



Figure 09: Raleigh Road VSCs



Figure 10: Raleigh Road VSCs



5 DAYLIGHT & SUNLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

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

- 5.1 A three-dimensional computer model of the Site and surrounding properties was produced to carry out the relevant technical studies. All relevant assumptions made in producing this model can be found in Appendix 01.
- 5.2 Given the high street location, there are a number of properties to the north and east of the site which are mixed use. Where possible GIA have sought floor plans for all properties, however, in the case of the mixed use properties, where it is known that there is a commercial or retail unit occupying the ground floor we have removed these windows from our analysis as they do not serve habitable rooms.

SURROUNDING PROPERTIES

- 5.3 GIA have identified the following 69 properties as relevant for daylight and sunlight assessment:
 - 2-6 Blenheim Road (Evens)
 - 180-184 Blenheim Road (Evens)
 - The Salvation Army Citadel
 - 164-178 Maple Road (Evens)
 - 112-118 High Street (Evens))
 - 126-128 High Street
 - 1-8 and 29-32 Burham Close
 - · Colman House
 - 1-11 Greatstone House
 - 1-11 Strood House
 - 9-14 Pawleyne Close
 - 117-123A High Street (Odds)
 - 127-131 High Street (Odds)
 - 137-141 High Street (Odds)
 - 153-155 High Street (Odds)
 - 159-161 High Street (Odds)
 - 171-173 High Street (Odds)
 - 2, 4, 8 & 10 Croydon Road
 - · John Baird House
 - 132-138 High Street (Evens)
 - 144-146 High Street (Evens)
 - 152-156 High Street (Evens)
- 5.4 The following 37 properties adhere to the numerical values set out within the BRE Guidelines and are not discussed further:
 - 2,486 Blenheim Road
 - 180, 182 & 184 Blenheim Road

- 164-178 Maple Road (Evens)
- 112-118 High Street (Evens)
- 29-32 Burham Close
- 1, 2, 3 & 8 Burham Close
- 117-123A High Street (Odds)
- 127-131 High Street (Odds)
- 161, 171 & 173 High Street
- 156 High Street
- 159 High Street
- 5.5 The following 14 properties experience a negligible or minor impact (between 20.1%-29.9% alteration) in daylight (VSC or NSL) or sunlight (APSH) and therefore are not discussed further in this report:
 - The Salvation Army Citadel
 - 4, 5, 6 & 7 Burham Close
 - 1-11 Strood House
 - 9, 10, 11, 12, 13 & 14 Pawleyne Close
 - 152-154 High Street
 - 10 Croydon Road
- 5.6 Where changes in daylight and sunlight occur to the remaining 18 properties, the impacts are fully discussed in the following sections. All results can be found in Appendix 04. These properties are:
 - 126-128 High Street
 - · Colman House
 - 1-11 Strood House
 - 1-11 Greatstone House
 - 137-141 High Street (Odds)
 - 153-155 High Street
 - · John Baird House
 - 2, 4 & 8 Croydon Road
 - 132-138 High Street (Evens)
 - 144 & 146 High Street
- 5.7 To assist the readers understanding of the surrounding properties and window locations, we have produced window maps which are enclosed at Appendix 05 of this report



Figure 11: Property Use Map

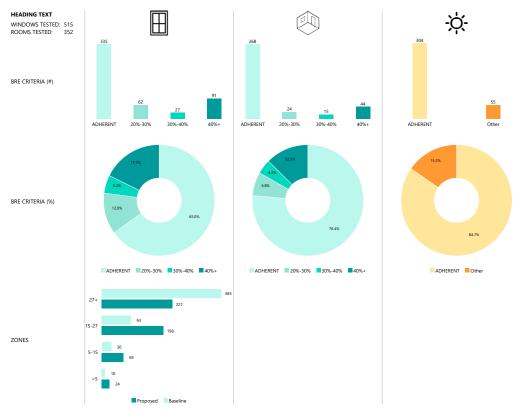


Figure 12: VSC, NSL and APSH Results graphs



126-128 HIGH STREET

Property Reference

- 5.8 This property is a three-storey mixed use building, with commercial and retail occupying the ground floor and six residential apartments on the first and second floor. It is located to the northeast and is directly adjacent to the Site.
- 5.9 The internal configurations are based on floor plans sourced from the online sales archives and example Lease plans taken from the Land Registry. These layouts have been replicated across all floors in our 3D model.
- 5.10 We understand that the site facing windows serve entrance spaces and small kitchens on the first floor (F01) and bedrooms occupy the second floors (F02)
- 5.11 A full set of window maps can be found in Appendix05 and daylight distribution contours are in Appendix04
- 5.12 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.13 There are 15 rooms relevant for daylight analysis in accordance with the BRE Guide, Five of the rooms (33%) will meet the BRE Guidelines for both VSC and NSL.
- 5.14 Of the 19 windows assessed for VSC, nine (47%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. The remaining 10 windows will experience alterations between 45% and 76.5%.
- 5.15 Of the 10 affected windows, 4 (40%) are understood to serve bedrooms. The remaining six windows serve kitchens. These kitchens are understood to be less than 13sqm which are considered in Bromley's Adopted Affordable Housing SPD as a non-habitable space and therefore could be discounted from the BRE assessments.
- 5.16 When considering the retained VSC levels, the four bedroom windows will retain between 4.2%-8.7%. The kitchen windows will retain between 2.8%-8.4%. What is key to note is that the bedroom and kitchen

- windows which face the site are located under overhanging walkways. These existing architectural forms serve to limit access to daylight in the existing condition. In order to understand the level of obstruction, GIA have undertaken a without overhang assessment and is discussed on the following page.
- 5.17 In terms of NSL, five of the 15 (33%) rooms will meet the BRE criteria for NSL. Four of the remaining ten rooms (R7 & R8/F01 and R9 & R10/F02) will experience transgressions between 20.6%-29.2% which are considered minor. One of the six remaining rooms will experience a transgression of 39.5% which is considered moderate. The remaining five rooms will experience changes between 42.8%-71.8% which would be considered noticeable.
- 5.18 Of the ten affected rooms, four (40%) are understood to serve bedrooms which have a lower expectation for daylight. The remaining six rooms serve the kitchens which are less than 13sqm and not considered habitable spaces due to the small size.
- 5.19 When considering the retained sky visibility, six of the ten rooms will retain between 51.7%-74.1% NSL. As such, over half the rooms will have a view of the sky at the working plane. Three of the remaining four rooms (R6, R7 & R8/F02) serve two small kitchens and a bedroom and will retain between 42.1% and 48.3% which is marginally below a 50% retained level. The one remaining rooms (R4/F01) serves a small kitchen and will retain 26.3%.

Sunlight (APSH)

- 5.20 There are 15 rooms relevant for sunlight analysis in accordance with the BRE Guidelines, five will meet the guidance (33%).
- 5.21 Four are understood to serve bedrooms which are considered a lower sensitivity in terms of sunlight. The remaining six windows serve the aforementioned small kitchens.
- 5.22 On the first floor, the five impacted rooms will experience major adverse changes in both Annual PSH and Winter PSH. The windows will retain between 6%-16% APSH against a 25% BRE target and between 0% and 3% Winter PSH against a 5% BRE target. On the second floor, the five impacted windows will also experience major adverse changes in both Annual PSH and Winter PSH. The windows



Figure 13: Window Maps of 126-128 High Street



Figure 14: Property Location



will retain between 7%-12% APSH against a 25% BRE target and between 0% and 2% Winter PSH against a 5% BRE target. Similarly to the VSC assessment, the overhangs located above the windows serve to limit access to sunlight to these rear facing rooms. As discussed below, an additional assessment has been completed to understand the level that these obstructions limit sunlight.

Without Obstruction assessment

- 5.23 What is important to note and as can be seen in fig 15 and 16 opposite, is that the windows are restricted above by an overhanging walkway at first floor and overhanging roof eaves on the second floor. This obstruction serves to limit access to daylight at the highest window point and therefore one of the most important areas for daylight accessibility. As discussed in section 2.2.13 of the BRE Guidelines, GIA has undertaken a without overhang assessment to understand the level to which these windows are obstructed by the existing architectural features of this building.
- 5.24 In this assessment, against the VSC criteria, 10 of the 19 (53%) windows will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. Four of the remaining nine windows will experience alterations between 33.7%-38.2% which is considered moderate adverse. The remaining five windows will experience transgressions between 41.9%-48.6%.
- 5.25 The nine affected windows serve three bedrooms and six small kitchens.
- 5.26 However, the key change is when considering the retained VSC levels, in this assessment, eight of the nine windows will retain VSC levels between 18.6% and 25.4% which could be considered reasonable for a strategic area of regeneration where development is encouraged.
- 5.27 The one remaining window (W7/F01) retains 14.3%. The reason for this windows lower level is that it is also limited of the east of the window by the stair core which juts out from the window obscuring light availability from the south.
- 5.28 In relation to sunlight assessments, nine of the 15 (60%) windows will meet the guidance.

- 5.29 On the first floor, the four impacted rooms will still experience major adverse changes in both Annual PSH and Winter PSH. However, when considering the retained sunlight, three of the four rooms (W8, W9 and W10/F01) will now retain in excess of the 25% BRE target at 25-33% APSH. The remaining room (W7/F01) will retain 11%.
- 5.30 For Winter PSH, two of the four rooms (W9 and W10/F01) will retain 4% WPSH which is just shy of the 5% BRE target. The two remaining rooms will retain 0% Winter PSH against a 5% BRE target.
- 5.31 On the second floor, the two impacted rooms (W7 and W8/F02) will also experience a major adverse change in both Annual PSH and Winter PSH. The rooms will retain 33% and 34% Annual PSH exceeding the 25% BRE target and 3% and 4% Winter PSH against a 5% BRE target.

Summary

- 5.32 This property will see changes in daylight (VSC and NSL) which will be noticeable to the rear facing rooms. However, the combination of the low-rise and partly vacant nature (given the town centre urban context) in the existing condition and the existing architectural design of the building has all attributed to the high daylight losses.
- 5.33 The rooms which are significantly impacted are six kitchens (which are less than 13sqm and therefore not considered by Bromley as a habitable space) and the rear facing bedrooms on the second floor. The main habitable spaces (living rooms) face over the High Street and therefore will not be impacted by the development. When also considering the impact to the daylight of the rooms, it is also important to consider that the windows serving the rooms is limited in the existing condition by overhanging walkways. When reviewing the further assessment, there is marked improvement to the retained daylight and sunlight levels of these rear facing windows.
- 5.34 It is therefore considered that the impact to the windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 126-128 High Street. It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the benefits being brought forward by the scheme.

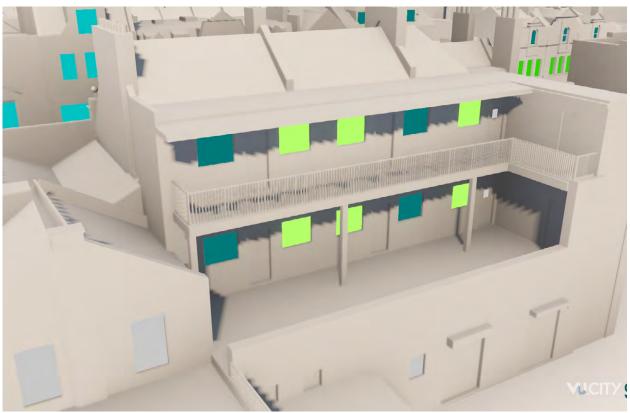


Figure 15: Window Maps of 126-128 High Street



Figure 16: Waldram Diagram W7/F01



COLMAN HOUSE

Property Reference

- 5.35 This property is a three-storey mixed use building, with commercial and retail occupying the ground floor and maisonette style residential apartments on the first and second floor. It is located to the northeast and is directly adjacent to the Site.
- 5.36 The internal configurations are based on floor plans sourced from the online sales archives and example Lease plans taken from the Land Registry. These layouts have been replicated across all floors in our 3D model.
- 5.37 We understand that the site facing windows serve entrance spaces and small kitchens on the first floor (F01) and bedrooms occupy the second floors (F02)
- 5.38 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.39 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.40 There are 19 rooms relevant for daylight analysis in accordance with the BRE Guide, one of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.41 Of the 65 windows assessed for VSC, 16 will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. Two of the remaining 49 windows (W7 & W9/F02) will experience transgressions of 33.3%-37.5% which is considered moderate. The remaining 47 windows will experience alterations between 58.1% and 100%. The six windows which experience 100% losses (W15, W17, W19, W21, W24 and W25/F02) have very low existing VSC levels between 0.8%-1.2% VSC. These are discussed in more detail in the following paragraphs.
- 5.42 Of the 49 affected windows, 19 (39%) are understood to serve bedrooms. 20 of the remaining 30 windows serve living rooms or living kitchen diners, the remaining 10 serve kitchens. These kitchens are understood to be less than 13sqm which are considered in Bromley's Adopted Affordable Housing

- SPD as a non-habitable room and therefore may be discounted from the BRE assessments.
- 5.43 For the 20 windows which serve living rooms or living kitchen diners, in each case due to the open plan nature of the use of the room, they are served by additional windows. These 20 windows are understood to serve five rooms (R1, R2, R3, R22 & R23/F01). The additional windows of these rooms are located facing onto the High Street and therefore away from the Site. As discussed in the Avison Young third party review on behalf of Bromley, it was considered that the VSC to the room may not be appropriate given the depth of the living rooms in Colman House. To better understand the daylight levels in the living rooms in Colman House, Avison Young suggested that a Climate Based Daylight modelling assessment be undertaken. This was completed and is discussed in paragraph 5.56 onward.
- 5.44 For the 19 windows which serve bedrooms, 13 have very low existing VSC levels (below 12.1%). Eight of these 13 have existing levels below 1.2% VSC and a further three are in single figures (between 6.6%-8.3%). The six other windows have existing VSC between 16.6%-20.5%. The reason for these poor levels of existing light, is the substantial overhanging roof located above the bedroom window (see figure 19 & 20). Due to this architectural element, daylight is being very restricted at the zenith point creating a potentially unfair burden on the development site. Unlike 126-128 High Street, GIA have not considered this property for a without obstruction assessment, this is primarily due to the close nature of the proposed development. Given this close proximity of the site being a factor in the daylight changes, a without obstruction assessment would not likely result in a significant difference to these bedroom windows.
- 5.45 Given the low existing levels of VSC, any meaningful massing on site will result in a disproportionate percentage alteration. However, when considering the retained VSC levels for these 19 bedroom windows they will retain between 0% and 4.1% which would be noticeable. However, given the use of these rooms as bedrooms the impact in light will not be as sensitive to that of a main habitable room.
- 5.46 In terms of NSL, six of the 19 rooms will meet the BRE criteria for NSL. Two of the remaining 13 rooms (R2

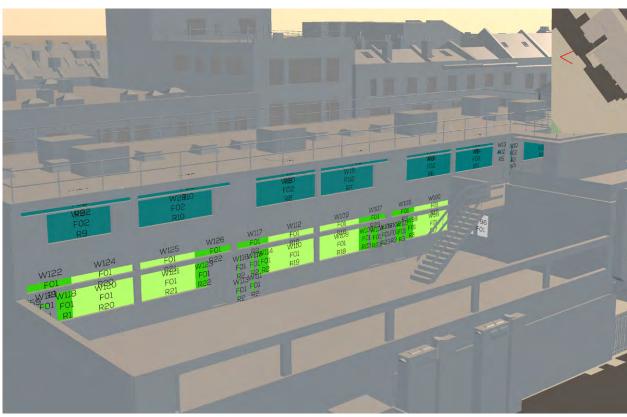


Figure 17: Window Maps of Colman House



Figure 18: Property Location



& R3/F02) will experience transgressions between 20.7%-21.2% which is considered minor. A further two rooms (R20/F01 & R6/F02) will experience transgressions of 36.8% and 32.9% which is considered moderate. The remaining ten rooms will experience changes between 43.5%-63% which would be major adverse and considered noticeable.

- 5.47 Of the 13 affected rooms, eight (62%) are understood to serve bedrooms which are considered to have a lower expectation for daylight. The remaining five rooms serve the kitchens which are less than 13sqm and not considered habitable spaces due to the small size.
- 5.48 When considering the retained sky visibility, nine of the 13 rooms will retain between 52.2%-78.1% NSL. As such, over half the rooms will have a view of the sky at the working plane. The remaining four rooms (R17/F01 & R7, R8, R9/F02) serve one small kitchen and three bedrooms. The three bedrooms will retain between 44.6% and 47.5% which is just shy of 50%. The remaining room (R17/F01) serves a small kitchen and retains 37%.

Sunlight (APSH)

- 5.49 There are 19 rooms relevant for sunlight analysis in accordance with the BRE Guidelines, six will meet the guidance (21.2%).
- 5.50 The remaining 13 rooms are located on the first and second floors. Eight are understood to serve bedrooms which are assessed but considered less important in terms of sunlight. The remaining five rooms serve the aforementioned small kitchens.
- 5.51 On the first floor, the five impacted rooms will experience major adverse changes in both Annual PSH and Winter PSH. The rooms will retain between 7%-16% APSH against a 25% BRE target. For Winter PSH, one room (R17/F01) will not meet the winter target with a retained 0% WPSH. The remaining rooms (R18, R19, R20 & R21) will retain between 7% and 9% WPSH against a BRE 5% target.
- 5.52 On the second floor, the eight impacted rooms will also experience major adverse changes in both Annual PSH and Winter PSH. The rooms will retain between 2%-13% APSH against a 25% BRE target and five of the eight rooms between 2% and 4% Winter PSH against a 5% BRE target. R2, R3 & R6/

F02 will meet the Winter PSH target of 5%.

Climate Based Daylight Modelling (CBDM) assessments

- 5.53 As stated in the third party review by Avison Young, given the depth of the living rooms in Colman House and that the main windows serving these rooms face away from the site, it was suggested that GIA undertake a detailed CBDM assessment on the Colman House living rooms.
- 5.54 Climate Based Daylight Modelling (CBDM) is used to predict daylight illuminance using sun and sky conditions derived from TMY (Typical Meteorological Year) meteorological data (often referred to as climate or weather data). This analytical method allows the prediction of absolute daylight illuminance based on the location and building orientation, in addition to the building's daylight systems (shading systems, for example). Annex A within the BS EN 17037 proposes values of target illuminance levels and minimum target illuminance levels to exceed 50 % of daylight hours.
- 5.55 This is considered to be the most accurate approach when using climate data, however, it provides a very large amount of data for each assessed room, which then needs to be interrogated.
- 5.56 The 'illuminance method' is designed to understand how often each point of the room's task area sees illuminance levels at or above a specific threshold.
- 5.57 We have also assessed the Daylight Factor method as part of the CBDM. The daylight factor is defined within BR209 as the "Ratio of total daylight illuminance at a reference point on the working plane within a space to outdoor illuminance on a horizontal plane due to an unobstructed CIE standard overcast sky" (BR209, page 6).
- 5.58 The targets for the Illuminance method are:
 - 100 lux for bedrooms,
 - 150 lux for living rooms, and
 - 200 lux for living/kitchen/diners, kitchens, and studios
- 5.59 The targets for the Daylight Factor are:
 - 0.7% DF for bedrooms,
 - 1.1% DF for living rooms, and
 - 1.4% DF for living/kitchen/diners, kitchens, and



Figure 19: Overhanging roof

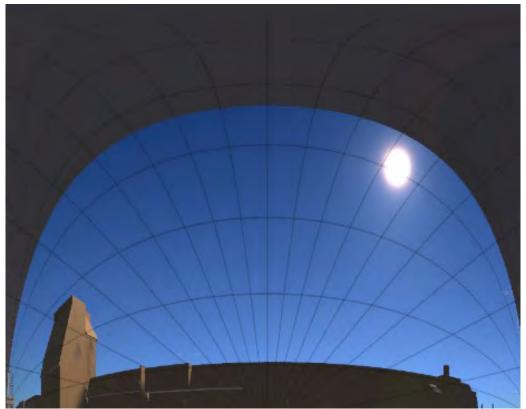


Figure 20: Waldram Diagram from bedrooms



studios.

- 5.60 These more detailed methods for daylight analysis are not usually recommended for assessment of existing buildings as it is reliant upon a number of assumptions on the reflective surfaces of a room and the glazing information. However, given this was requested by the local authority, we have undertaken further due diligence on the properties to source an idea of reflectance levels and materials. More information on the assumptions used in our CBDM assessments can be found in appendix 07.
- 5.61 The tables in figures 21 and 22 demonstrate the results between the existing daylight levels and the proposed daylight levels. As can be seen, the results demonstrate that, in both methods of assessment, with the proposed scheme in place the living rooms will exceed the target for a living room. It also shows that they will meet or exceed the higher target for kitchens.
- 5.62 Using the CBDM assessment therefore confirms that whilst there will be impacts for VSC and NSL in Colman House, the daylight levels in the main habitable spaces of the Colman House apartments (living rooms) will not be impacted by the scheme given that the main windows serving these rooms face away from the site.
- 5.63 The full CBDM report on the impact to the living rooms for Colman House can be viewed in Appendix 07.

- 5.64 This property will see changes in daylight (VSC and NSL) and sunlight which will be noticeable to the rear facing rooms. However, the combination of the low-rise and partly vacant nature (given the town centre urban context) in the existing condition and the existing architectural design of the building has all attributed to high daylight losses.
- 5.65 The rooms which are impacted are five kitchens (which are less than 13sqm and therefore not considered by Bromley as a habitable space) and the rear facing bedrooms on the second floor. The main habitable spaces and a further bedrooms within these apartments face over the High Street and therefore will not be impacted by the development.

- 5.66 When also considering the impact to the daylight of the rooms, the main habitable spaces (when considering the additional CBDM assessments) to the room, will meet or exceed the BRE criteria and therefore will not be impacted by the development site.
- 5.67 It is therefore considered that the impact to the windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of Colman House.
- 5.68 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the benefits being brought forward to this deprived area of London.

		ILLUMINANCE METHOD					
ROOM REF.	ROOM USE	Median Daylight Illuminance (target Living Room: 150 lux) (target Kitchen: 200 lux)					
		EXISTING	PROPOSED	ABSOLUTE LOSS			
COLMAN HOUSE - F01							
F01_R1	LIVING ROOM	296.2	266.9	29.3			
F01_R22	LIVING ROOM	426.2	407.7	18.5			
F01_R2	LIVING ROOM	406.0	336.9	69.1			
F01_R23	LIVING ROOM	354.4	294.4	60.0			

238.9

215.1

Figure 21: Illuminance Method

LIVING ROOM

F01_R3

		DAYLIGHT FACTOR METHOD				
ROOM REF.	ROOM USE	Median Daylight Factor (target Living Room: 1.1%) (target Kitchen: 1.4%)				
		EXISTING	PROPOSED	ABSOLUTE LOSS		
COLMAN HOUSE - F01						
F01_R1	LIVING ROOM	1.8	1.8	0.0		
F01_R22	LIVING ROOM	2.6	2.6	0.0		
F01_R2	LIVING ROOM	2.2	2.2	0.1		
F01_R23	LIVING ROOM	1.9	1.9	0.1		
F01_R3	LIVING ROOM	1.5	1.4	0.1		

Figure 22: Daylight Factor Method



23.8

1-11 GREATSTONE HOUSE

Property Reference

- 5.69 This property is a four-storey residential apartment building. It is located to the southwest of the Site.
- 5.70 The majority of the windows in this property face away from the site to the north and south, however there are two windows on the northeast elevation that directly face the site.
- 5.71 The internal configurations are based on reasonable assumptions for all floors. The room uses are unknown, therefore, we have assumed that all rooms facing the site are habitable, however, in reality this may not be the case.
- 5.72 A full set of window maps can be found in Appendix05 and daylight distribution contours are in Appendix04.
- 5.73 The technical results for this property can be found in Appendix 04

Daylight (VSC & NSL)

- 5.74 There are 33 rooms relevant for daylight analysis in accordance with the BRE Guide, 28 (85%) rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.75 The impacted windows and rooms are located on the first and second floors (F01-F02). Of the 45 windows assessed for VSC, 39 (86.7%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. Four of the six remaining windows see transgressions between 21.7% & 23.7% which are considered minor. The remaining two windows (W18/F02 and W21/F02), experience transgressions of 30.2% and 45.7% respectively which is considered moderate and major adverse. When considering the retained VSC, they will retain a VSC of 12.5% and 11.4%.
- 5.76 In each case of these most impacted windows, they serve rooms which are served by additional windows. As stated in 2.2.8 of the BRE, the area weighted VSC can be considered across a room that is served by multiple windows of different sizes. When considering the VSC to the room served by (W18/F02 and W21/F02),both rooms will meet the BRE criteria with retained VSCs of 27.3% and alterations of 7.1% and

10.8% respectively.

5.77 In terms of NSL, all 36 rooms will meet the BRE criteria for NSL

Sunlight (APSH)

- 5.78 There are 23 rooms relevant for sunlight analysis in accordance with the BRE Guidelines, of which 22 will meet the guidance (95.7%).
- 5.79 On the first floor, there is one window (W3/F01) which will experience minor change in winter APSH (20%). The window will experience a moderate change in annual APSH (34.4%). However, the retained values is good (21%).

- 5.80 This property will see changes in daylight (VSC only) and sunlight (APSH) which could be noticeable. The main impacts are to the northeast elevation which directly faces the Site. The front elevation experiences minor transgressions and is largely BRE compliant due to facing away from the Site.
- 5.81 Whilst there will be changes in daylight and sunlight overall, the impact to this property is considered minor with the majority of windows and rooms meeting the BRE criteria.



Figure 23: Window Maps of 1-11 Greatstone House



Figure 24: Property Location



Property Reference

- 5.82 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.83 The internal configurations are based on floor plans sourced from the planning portal and have been included in our 3D model.
- 5.84 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.85 The technical results for this property can be found in Appendix 04

Daylight (VSC & NSL)

- 5.86 There are two rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.87 The impacted windows and rooms are located on the first and second floors (F01-F02). Of the four windows assessed for VSC, 0 (0%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. All four windows see transgressions between 20.1% & 24% which are considered minor. All windows will also retain in excess of 24.4% VSC.
- 5.88 In terms of NSL, one room will meet the BRE criteria for NSL. The remaining room (R1/F02) will experience a 33.8% change which is considered moderate. The room is understood to serve a bedroom which is considered by the BRE to have a lesser expectation of daylight compared to other habitable rooms. The room will also retain 56.5% NSL. As such, over half the room has a view of the sky at the working plane.

Sunlight (APSH)

5.89 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

Summary

5.90 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the

- windows will experience minor transgressions and the bedroom will retain in excess of 50% NSL.
- 5.91 Whilst there will be changes in daylight and sunlight, overall, the impact to this property is considered minor with the majority of windows and rooms experiencing minor alterations.



Figure 25: Window Maps of 137 High Street



Figure 26: Property Location



Property Reference

- 5.92 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.93 The internal configurations are based on floor plans sourced from the planning portal and have been included in our 3D model.
- 5.94 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.95 The technical results for this property can be found in Appendix 04

Daylight (VSC & NSL)

- 5.96 There are two rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.97 The impacted windows and rooms are located on the first and second floors (F01-F02). Of the five windows assessed for VSC, none (0%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. All five windows see transgressions between 23.7%–29% which are considered minor. All windows will retain in excess of 21.5% VSC.
- 5.98 In terms of NSL, one room will meet the BRE criteria for NSL. The remaining room (R1/F02) will experience a 35% change which is considered moderate. The room is understood to serve a bedroom which is considered by the BRE to have a lesser expectation of daylight compared to other habitable rooms. The room will also retain 53.9% NSL. As such, over half the room has a view of the sky at the working plane.

Sunlight (APSH)

5.99 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

Summary

5.100 This property will see changes in daylight (VSC and NSL) which could be noticeable. However,

- the majority of the windows will experience minor transgressions and the impacted bedroom will retain in excess of 50% NSL.
- 5.101 Whilst there will be changes in daylight and sunlight, overall, the impact to this property is considered minor with the majority of windows and rooms experiencing minor alterations.



Figure 27: Window Maps of 139 High Street



Figure 28: Property Location



Property Reference

- 5.102 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.103 The internal configurations are based on floor plans sourced from the planning portal and have been included in our 3D model.
- 5.104 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.105 The technical results for this property can be found in Appendix 04

Daylight (VSC & NSL)

- 5.106 There are two rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.107 The impacted windows and rooms are located on the first and second floors (F01-F02). Of the five windows assessed for VSC, none (0%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. All five windows see transgressions between 22.9% & 26.4% which are considered minor. All windows will also retain in excess of 25.4% VSC.
- 5.108 In terms of NSL, one room will meet the BRE criteria for NSL. The remaining room (R1/F02) will experience a 36.3% change which is considered moderate. The room is understood to serve a bedroom which is considered by the BRE to have a lesser expectation of daylight compared to other habitable rooms. The room will also retain 53.9% NSL. As such, over half the room has a view of the sky at the working plane.

Sunlight (APSH)

5.109 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

Summary

5.110 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the

- windows will experience minor transgressions and the bedroom will retain in excess of 50% NSL.
- 5.111 Whilst there will be changes in daylight and sunlight, overall, the impact to this property is considered minor with the majority of windows and rooms experiencing minor alterations.



Figure 29: Window Maps of 141 High Street



Figure 30: Property Location



153-155 HIGH STREET

Property Reference

- 5.112 This property is a four-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.113 The internal configurations are based on floor plans sourced from the planning portal and have been included in our 3D model.
- 5.114 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.115 The technical results for this property can be found in Appendix 04

Daylight (VSC & NSL)

- 5.116 There are ten rooms relevant for daylight analysis in accordance with the BRE Guide, nine of the 10 rooms (90%) will meet the BRE Guidelines for both VSC and NSL.
- 5.117 The impacted windows and rooms are located on the third floor (F03) only. Of the 12 windows assessed for VSC, all 12 (100%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. The two remaining windows (W1 & W3/F01) see transgressions of 23% & 23.8% which are considered minor. The three windows will also retain in excess of 26.4% VSC.
- 5.118 In terms of NSL, nine of the ten rooms will meet the BRE criteria for NSL. The remaining room (R2/F03) will experience a 39.1% change which is considered moderate. The room is unknown in use. The room will retain 49.8% NSL. As such, almost half the room has a view of the sky at the working plane.

Sunlight (APSH)

5.119 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

Summary

5.120 This property will see changes in daylight (NSL only) which could be noticeable. However, all windows will meet the VSC criteria and one room will retain just

shy of 50% NSL.

- 5.121 Whilst there will be changes in daylight, overall, the impact to this property is considered minor with the majority of windows and rooms meeting the BRE criteria.
- 5.122 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.

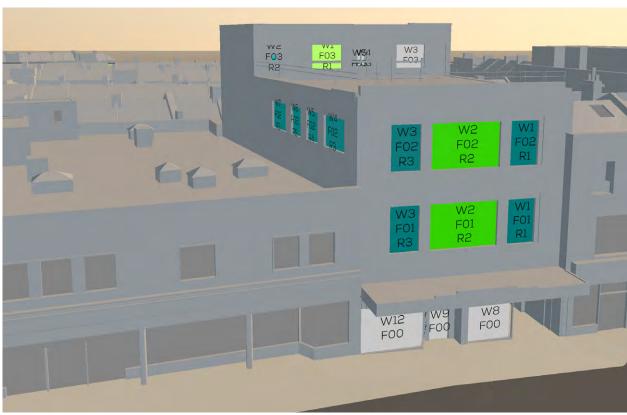


Figure 31: Window Maps of 153-155 High Street



Figure 32: Property Location



2 CROYDON ROAD

Property Reference

- 5.123 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the south of the Site.
- 5.124 The internal configurations are based on reasonable assumptions for all floors. The room uses are unknown, therefore, we have assumed that all rooms facing the site are habitable, however, in reality this may not be the case. We have assumed from site observation that the rear ground floor windows form part of the commercial unit and therefore have not been assessed
- 5.125 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.126 The technical results for this property can be found in Appendix 04

Daylight (VSC & NSL)

- 5.127 There are four rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.128 The impacted windows and rooms are located on the first floor (F01) and second floor (F02). Of the five windows assessed for VSC, one (20%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. One of the windows (W4/F02) will experience a transgression of 28% which is considered minor. A further window (W1/F02) see transgressions of 37.6% which is considered moderate. The windows will retain 22.6% and 15.7% respectively.
- 5.129 The remaining two windows (W1 & W3/F01) will experience alterations of 46.3% & 47.9%. W1/F01 will retain a VSC of 18.7%. W3/F01, however, will retain a VSC of 6.1%. However, the existing VSC of this window is low (11.7%). As can be seen in the window map and Waldram diagram opposite, W3/F01 is located between the existing rear extensions of 2 and 4 Croydon Road. Due to the length of these extensions, either side of the window, this serves to limit daylight access from oblique angles and therefore any form of development on the site will

likely result in a disproportionate daylight alteration.

- 5.130 In terms of NSL, none of the four rooms will meet the BRE criteria for NSL. One room (R1/F02) will experience a change of 21.71 which is considered minor. The remaining rooms will experience changes between 43.2%–68.9% which would be considered noticeable. 1 room (R1/F02) will retain in excess of 77.5% NSL. R1/F01 and R2/F02 will retain 50.9% and 55.5% respectively, therefore these three rooms will have half the room with a view of the sky at the working plane.
- 5.131 Similarly to the VSC, the remaining room is R2/F01 and will retain 26.4% NSL. As expected, due to the location of the window serving this room between the extensions this room will be poorly lit with any viable massing coming forward on the Blenheim Centre site.

Sunlight (APSH)

5.132 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

- 5.133 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the highest impacted windows and rooms are restricted in sky visibility due to the existing extensions of 2 and 4 Croydon Road limiting daylight access from oblique angles.
- 5.134 It is also worth noting that whilst GIA have not been able to obtain floor plans, the likelihood is that the rooms facing the site are not the main habitable spaces of this property. It is more likely (from site observation) that the main habitable spaces are facing onto Croydon Road and therefore will not experience any alteration in daylight or sunlight as they face away from the development site.
- 5.135 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 2 Croydon Road.
- 5.136 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.

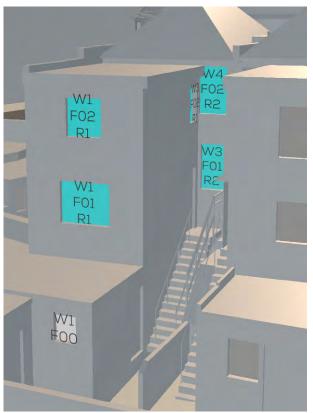






Figure 35: Property Location

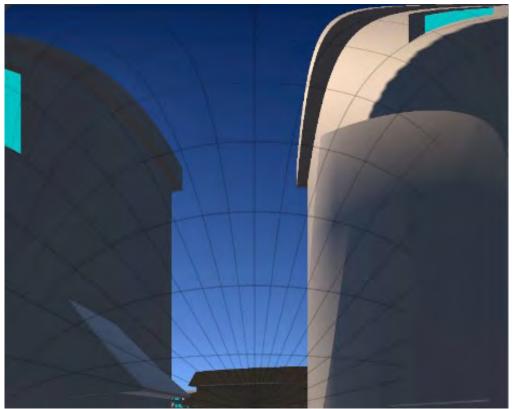


Figure 34: Waldram Diagram



4 CROYDON ROAD

Property Reference

- 5.137 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the south of the Site.
- 5.138 The internal configurations are based on reasonable assumptions for all floors. The room uses are unknown, therefore, we have assumed that all rooms facing the site are habitable, however, in reality this may not be the case. We have assumed from site observation that the rear ground floor windows form part of the commercial unit and therefore have not been assessed
- 5.139 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.140 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.141 There are 4 rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.142 The impacted windows and rooms are located on the first floor (F01) and second floor (F02). Of the 5 windows assessed for VSC, two (40%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. One of the three remaining windows (W2/F01) will experience a 34.4% change which is considered moderate.
- 5.143 The remaining two windows (W1/F01 and W1/F02) will experience alterations of 57.8% & 49% respectively. W1/F01 will retain a VSC of 12.4% post implementation of the development. W1/F02, will retain a VSC of 15.5%. As can be seen in the Waldram diagram opposite, these two windows are adjacent to the industrial ventilator extractor of the ground floor restaurant. Whilst not likely a permanent structure, is it clear that this vent does remove some access to daylight from the west. Should this be removed, it is likely that the retained VSC levels would be similar to those within 2 Croydon Road (18.1% F01 and 22% F02), which are considered acceptable by the GLA for areas of regeneration and increased density.

- 5.144 In terms of NSL, 0 of the 4 rooms will meet the BRE criteria for NSL. One room (R2/F02) will experience a change of 20.9% which is considered minor. One room (R1/F02) will experience a change of 31.3% which is considered moderate. These rooms will also retain over 67.5% and therefore over half the room will retain a view of the sky at the working plane.
- 5.145 The remaining two rooms (R1 and R2/F01) will experience transgressions of 68% and 40.1%. R1 will retain 31.3% which is likely to be a noticeable change. R2 will retain 49.8% which is marginally below retaining 50% sky visibility at the working plane.

Sunlight (APSH)

5.146 In relation to sunlight, the rooms tested face north and therefore are not relevant for sunlight assessment.

- 5.147 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the highest impacted windows and rooms are limited in sky visibility due to the existing vent of the ground floor restaurant coupled with the closest proximity to the development site.
- 5.148 It is also worth noting that whilst GIA have not been able to obtain floor plans, the likelihood is that the rooms facing the site are not the main habitable spaces of this property. It is more likely (from site observation) that the main habitable spaces are facing onto Croydon Road and therefore will not experience any alteration in daylight or sunlight as they face away from the development site.
- 5.149 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 4 Croydon Road.
- 5.150 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.

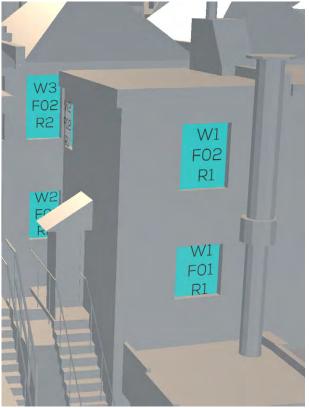


Figure 36: Window Maps of 4 Croydon Road

Figure 38: Property Location

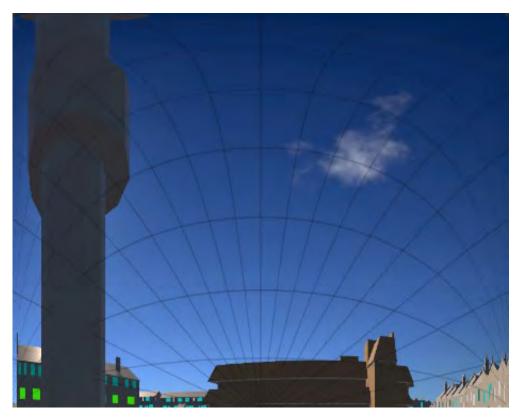


Figure 37: Waldram Diagram



8 CROYDON ROAD

Property Reference

- 5.151 This property is a three-storey mixed use building with commercial occupying the ground floor and residential above. It is located to the south of the Site.
- 5.152 The internal configurations are based on reasonable assumptions for all floors. The room uses are unknown, therefore, we have assumed that all rooms facing the site are habitable, however, in reality this may not be the case. We have assumed from site observation that the rear ground floor windows form part of the commercial unit and therefore have not been assessed
- 5.153 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.154 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

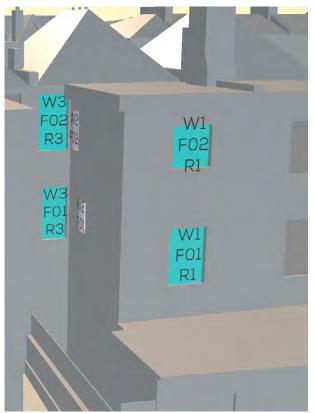
- 5.155 There are 4 rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.156 The impacted windows and rooms are located on the first floor (F01) and second floor (F02). Of the 4 windows assessed for VSC, 0 will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. Two of the four remaining windows (W1 & W3/F02) will experience changes of 26.7% and 29.2% which is considered minor. A further window (W1/F01) will see a transgression of 35% which is considered moderate. Windows W1/F01 and W1/F02 will retain VSC levels of 22.5% and 25% respectively. W3/F02 will retain 14%.
- 5.157 The remaining window (W3/F01) will experience an alteration of 43.3% and will retain a VSC of 5.9% post implementation of the development. However, the existing VSC of this window is low (10.4%). As can be seen in the window map and Waldram diagram opposite, W3/F01 is located between the existing rear extensions of 6 and 8 Croydon Road.
- 5.158 The rear extensions are located either side of the window. The location of the extensions, coupled with

- their length, serves to limit daylight access from oblique angles. Therefore, any form of development on the site will likely result in a disproportionate daylight alteration.
- 5.159 In terms of NSL, none of the four rooms will meet the BRE criteria for NSL. One room R3/F02) will experience an alteration of 24.8% which is considered minor. R1/F02 will experience an alteration of 36% which is considered moderate. The remaining two rooms (R1 & R3/F01) will experience changes of 43.1% & 49.9% which would be considered noticeable. Three of the four rooms (R1/F01, R1 and R3/F02) will retain in excess of 55.1% NSL. As such, over half the rooms will have a view of the sky at the working plane.
- 5.160 Similarly to the VSC, the remaining room is R3/F01 and will retain 47.2% NSL, which is just shy of 50% of the room with a view of the sky.

Sunlight (APSH)

5.161 In relation to sunlight, the rooms tested face north and therefore are not relevant for sunlight assessment.

- 5.162 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the highest impacted windows and rooms are restricted in sky visibility due to the existing extensions of 6 and 8 Croydon Road limiting daylight access from oblique angles.
- 5.163 It is also worth noting that whilst GIA have not been able to obtain floor plans, the likelihood is that the rooms facing the site are not the main habitable spaces of this property. It is more likely (from site observation) that the main habitable spaces are facing onto Croydon Road and therefore will not experience any alteration in daylight or sunlight as they face away from the development site.
- 5.164 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 8 Croydon Road.
- 5.165 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.







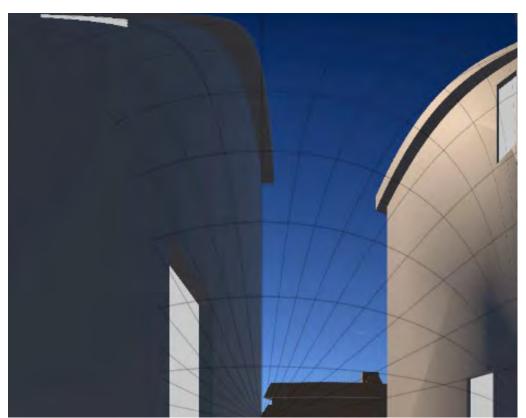


Figure 40: Waldram Diagram



JOHN BAIRD HOUSE

Property Reference

- 5.166 This property is a four-storey maisonette style residential apartment building with two storey (duplex) apartments stacked on top of one another. It is located to the southwest of the Site.
- 5.167 The internal configurations are based on floor plans sourced from the online sales archives and an example Lease from Flat 14 taken from the Land Registry. These layouts have been replicated across all floors in our 3D model.
- 5.168 We understand that living rooms occupy the ground and second floors (F00 and F02) and bedrooms occupy the first and third floors (F01 and F03)
- 5.169 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04.
- 5.170 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.171 There are 41 rooms relevant for daylight analysis in accordance with the BRE Guide, 11 (27%) of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.172 Of the 41 windows assessed for VSC, 11 (27%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. Six of the 30 remaining windows see transgressions between 20.3%–29.5% which are considered minor. A further nine windows will experience transgressions between 30.3%–37.9% which are considered moderate. The remaining 15 windows will experience alterations between 40.1% and 51.3%.
- 5.173 Of the 30 affected windows, 20 (67%) are understood to serve bedrooms. The remaining ten windows serve living rooms.
- 5.174 When considering the retained VSC levels, 19 of the 30 windows will retain in excess of 20.5% VSC which could be considered reasonably good for a strategic area of regeneration where development is encouraged. A further eight windows will retain between 16.4% and 19.5% which has been considered

- acceptable by the GLA. The two remaining windows (W1/F00 and W2/F00) are located on the ground floor and serve living rooms, the windows will both retain 14.8%. They are the closest windows of John Baird House to the development site. Whilst there are recorded VSC reductions to these windows as a result of the proposed development, this is generally due to the low-rise and partly vacant nature (given the town centre urban context) in the existing condition which has resulted in high existing light levels. The introduction of even a modest additional massing on the site, will result in reductions in the light levels enjoyed by the windows at John Baird House which overlook the development site,
- 5.175 The massing has evolved sensitively to protect light to these living rooms windows as much as possible and this is evidenced by the reasonable retained VSC levels (generally in excess of mid-teens) with a median VSC level of circa 21% on the ground floor and circa 25% on the second floor when all the site-facing living room windows are considered.
- 5.176 In terms of NSL, 21 of the 41 (51%) rooms will meet the BRE criteria for NSL. Six of the remaining 20 rooms will experience transgressions between 21.4%-29.9% which is considered minor. A further four rooms will experience transgressions between 32.9%-39.5% change which is considered moderate. The remaining ten rooms will experience changes between 40.4%-64.2% which would be considered major.
- 5.177 Of the 20 affected rooms, 13 (65%) are understood to serve bedrooms which are considered to have a lower expectation for daylight. The remaining seven rooms serve living rooms.
- 5.178 When considering the retained sky visibility, 16 of the 20 rooms will retain between 51.2%–77.8% NSL. As such, over half the rooms will have a view of the sky at the working plane. The remaining four rooms (R1 & R2/F00, R1/F01 and R1/F03) serve two living rooms and two bedrooms. Three of these rooms (R1 & R2/F00 and R2/F01) will retain between 41% and 44.9% which is just shy of 50%. The remaining room (R1/F01) serves a bedroom and will retain between 34% compared with an existing value of 94.9%.

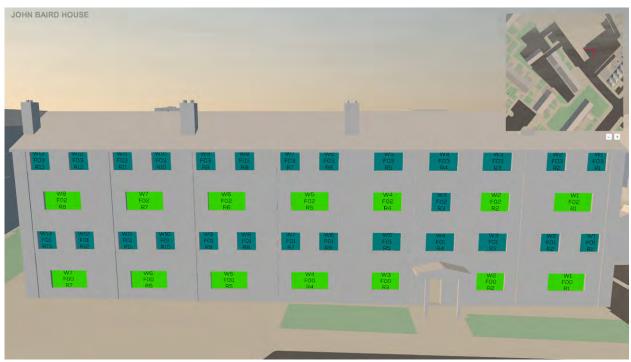
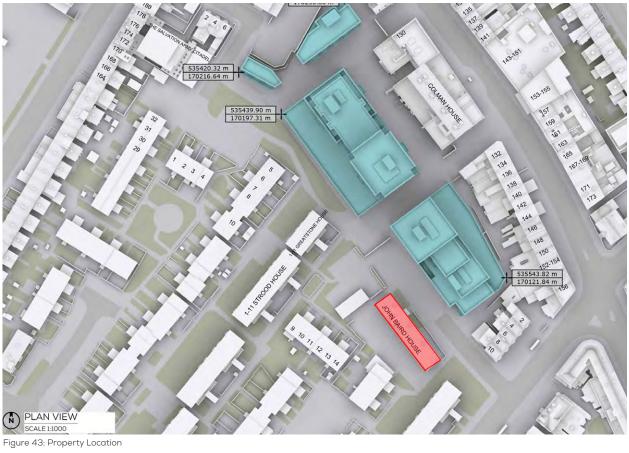


Figure 42: Window Maps of John Baird House





Sunlight (APSH)

5.179 In relation to sunlight, the site facing rooms in this property face north and therefore are not relevant for sunlight assessment.

- 5.180 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, this is generally due to the low-rise and partly vacant nature (given the town centre urban context) in the existing condition which has resulted in high existing light levels. The introduction of even a modest additional massing on the site, will result in disproportionate reductions in the light levels enjoyed by the windows at John Baird House which overlook the development site,
- 5.181 When also considering the impact to the daylight of the rooms, of the 20 impacted, 16 will retain in excess of 50% sky visibility at the working plane.
- 5.182 The massing has evolved sensitively to protect light to the living rooms as much as possible in John Baird House, given the close proximity and this is evidenced by the reasonable retained VSC levels (generally in excess of 18% VSC) with a median VSC level of circa 21% on the ground floor and circa 25% on the second floor when all the site-facing living rooms are considered.
- 5.183 It is therefore considered that the impact to the windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of John Baird House.
- 5.184 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the benefits being brought forward to this deprived area of London.

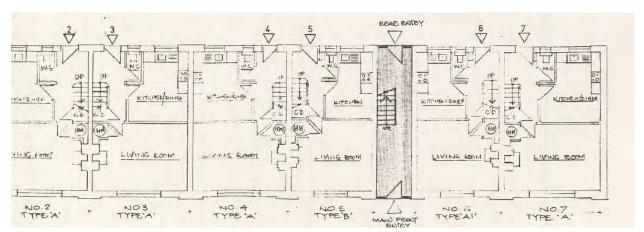


Figure 46: John Baird House - Ground and Second Floor plans

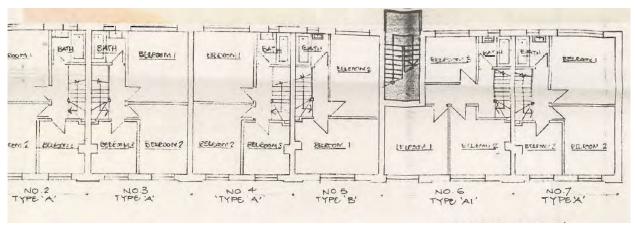


Figure 45: John Baird House - First and third Floor plans



Property Reference

- 5.185 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.186 The internal configurations are based on reasonable assumptions for all floors. The room uses are unknown, therefore, we have assumed that all rooms facing the site are habitable, however, in reality this may not be the case. We have assumed from site observation that the rear ground floor windows form part of the commercial unit and therefore have not been assessed
- 5.187 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.188 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.189 There are six rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.190 The impacted windows and rooms are located on the first floor (F01) and second floor (F02). Of the six windows assessed for VSC, none will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. All six windows will experience moderate alterations in VSC between 30.9%-36.1%.
- 5.191 However, when considering the retained VSC levels, all windows will retain between 20.7-25.5% which could be considered good for a strategic area of regeneration where development is encouraged.
- 5.192 In terms of NSL, none of the six rooms will meet the BRE criteria for NSL. Three rooms (R1, R2 & R3/F02) will experience changes between 30.5%-38.8% which is considered moderate. The remaining three rooms will experience changes between 50.1%-51.7% which would be considered noticeable. Three of the six rooms (R1, R2 & R3/F02) will also retain in excess of 59.7% NSL. As such, over half the rooms will have a view of the sky at the working plane.

5.193 The remaining three rooms will retain NSL levels between 46.6 and 49.8% which is just shy of 50%.

Sunlight (APSH)

5.194 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

- 5.195 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the retained daylight levels could be considered reasonably good for a strategic area of regeneration where development is encouraged.
- 5.196 As with a number of properties surrounding the development site, it is also worth noting that whilst GIA have not been able to obtain floor plans, the likelihood is that the rooms facing the site are not the main habitable spaces of this property. It is more likely (from site observation and neighbouring property floor plans) that the main habitable spaces are facing onto the High Street and therefore will not experience any alteration in daylight or sunlight as they face away from the development site.
- 5.197 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 146 High Street.
- 5.198 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.

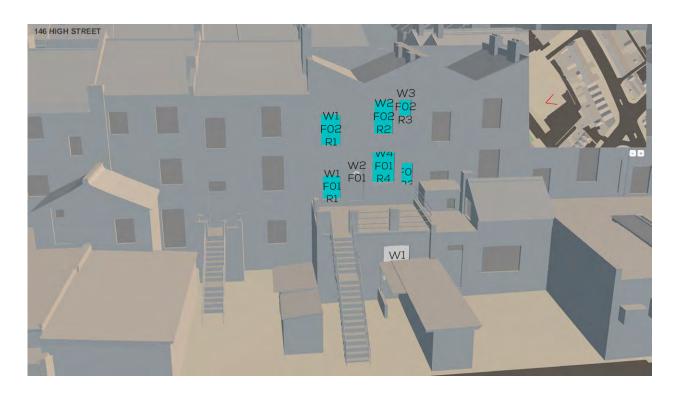


Figure 47: Window Maps of 146 High Street



Figure 48: Property Location



Property Reference

- 5.199 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.200 The internal configurations are based on floor plans sourced from the planning portal and have been included in our 3D model.
- 5.201 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.202 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.203 There are two rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.204 The impacted windows and rooms are located on the first floor (FO2) and second floor (FO3). Of the two windows assessed for VSC, none will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. Both rooms will experience moderate alterations of 35.9% and 36.6%.
- 5.205 However, when considering the retained VSC levels, the windows will retain 20.8% and 22.9% which could be considered good for a strategic area of regeneration where development is encouraged.
- 5.206 In terms of NSL, one of the two rooms will meet the BRE criteria for NSL. The remaining room (R2/F02) will experience a change of 26.9% which would be considered minor.
- 5.207 The room is understood to serve a bedroom and therefore has a lower expectation for daylight. However, the room will retain NSL levels of 70.2%. As such, over half the room will have a view of the sky at the working plane.

Sunlight (APSH)

5.208 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

- 5.209 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the retained daylight levels could be considered reasonably good for a strategic area of regeneration where development is encouraged. The minor NSL impact is also to a bedroom which has a lower expectation of daylight.
- 5.210 We are also aware that the rooms being impacted by the development are a small kitchen (less than 13sqm) and a bedroom. From our research into this property's layout we are aware that the main habitable spaces (living room and dining room) face away from the development over the High Street. These rooms therefore will not experience any alteration in daylight or sunlight and will continue to be enjoyed by the occupants.
- 5.211 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 144 High Street.
- 5.212 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.



Figure 49: Window Maps of 144 High Street



Figure 50: Property Location



Property Reference

- 5.213 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.214 The internal configurations are based on reasonable assumptions for all floors. The room uses are unknown, therefore, we have assumed that all rooms facing the site are habitable, however, in reality this may not be the case. We have assumed from site observation that the rear ground floor windows form part of the commercial unit and therefore have not been assessed
- 5.215 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.216 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.217 There are six rooms relevant for daylight analysis in accordance with the BRE Guide, three of the rooms (50%) will meet the BRE Guidelines for both VSC and NSL.
- 5.218 The impacted windows and rooms are located on the first floor (F00) and second floor (F01). Of the seven windows assessed for VSC, four (57.1%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. The remaining three windows (W5/F00, W1 & W2/F01) will experience alterations between 41.2%-43.2%.
- 5.219 However, when considering the retained VSC levels, the three impacted windows will retain between 17.7%-19.2% which could be considered in-line with the expectations for an urban area recognised for regeneration which is in line with other GLA decisions.
- 5.220 In terms of NSL, three of the six rooms will meet the BRE criteria for NSL. The remaining three rooms will experience changes between 43%-48% which would be considered noticeable. All three of the impacted rooms will also retain in excess of 51.7% NSL. As such, over half the rooms will have a view of the sky at the working plane.

Sunlight (APSH)

5.221 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

- 5.222 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the retained daylight levels could be considered reasonably good for a strategic area of regeneration where development is encouraged.
- 5.223 As with a number of properties surrounding the development site, it is also worth noting that whilst GIA have not been able to obtain floor plans, the likelihood is that the rooms facing the site are not the main habitable spaces of this property. It is more likely (from site observation and neighbouring property floor plans) that the main habitable spaces are facing onto the High Street and therefore will not experience any alteration in daylight or sunlight as they face away from the development site.
- 5.224 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 138 High Street.
- 5.225 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.



Figure 51: Window Maps of 138 High Street



Figure 52: Property location



Property Reference

- 5.226 This property is a three-storey mixed use building with retail occupying the High Street facing ground floor and residential occupying the ground floor Empire Square facing and first and second floors. It is located to the northeast of the Site.
- 5.227 The internal configurations are based on floor plans sourced from the planning portal and have been included in our 3D model.
- 5.228 A full set of window maps can be found in Appendix 05 and daylight distribution contours are in Appendix 04
- 5.229 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.230 There are six rooms relevant for daylight analysis in accordance with the BRE Guide, four of the rooms will meet the BRE Guidelines for both VSC and NSI
- 5.231 The impacted windows and rooms are located on the first floor (F01) and second floor (F02). Of the six windows assessed for VSC, four (66.7%) will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. The two remaining windows (W4/F01 & W4/F02) will experience a 31.9% and 42.4% change respectively.
- 5.232 However, when considering the retained VSC levels for the impacted windows, W4/F01 will retain 13.9% VSC and W4/F02 will retain 19.3% VSC. The latter could be considered good for an urban area considered for regeneration which is in line with GLA decisions. Upon further review of W4/F01, it is clear that the window is partially obscured by the existing rear extension of 132 High Street which limits access to daylight.
- 5.233 Both these impacted windows are understood to serve bedrooms.
- 5.234 In terms of NSL, four of the six rooms will meet the BRE criteria for NSL. The remaining rooms (R4/F01 and R2/F02) will experience a 38% and 29.8% respectively which are considered moderate and

minor

5.235 Both impacted rooms will also retain in excess of 52.9% NSL. As such, over half the rooms will have a view of the sky at the working plane.

Sunlight (APSH)

5.236 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

- 5.237 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the retained daylight levels could be considered reasonably good for a strategic area of regeneration where development is encouraged.
- 5.238 We are also aware that the rooms being impacted by the development are both bedrooms which have a lesser expectation of daylight, given the nocturnal use. From our research into this property's layout we are aware that the main habitable spaces (living rooms) face away from the development and will therefore not experience any noticeable alteration in daylight or sunlight and will continue to be enjoyed by the occupants.
- 5.239 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 132 High Street.
- 5.240 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.

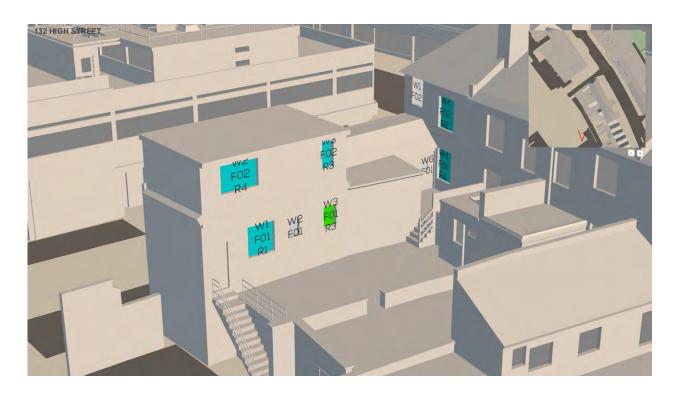


Figure 53: Window Maps of 132 High Street



Figure 54: Property Location



Property Reference

- 5.241 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.242 The internal configurations are based on floor plans sourced from the planning portal and have been included in our 3D model.
- 5.243 A full set of window maps can be found in Appendix05 and daylight distribution contours are in Appendix04
- 5.244 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

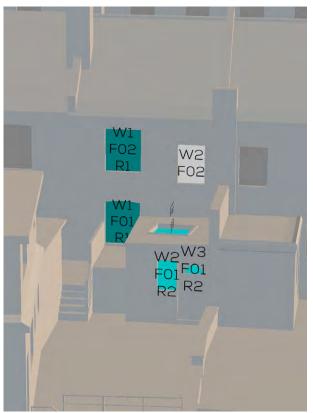
- 5.245 There are two rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.246 The impacted windows and rooms are located on the first floor (F01) and second floor (F02). Of the two windows assessed for VSC, none will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. The two windows will experience a 39.3% and 42.8% change respectively.
- 5.247 However, when considering the retained VSC levels, the windows will retain 17% and 19.1% VSC which could be considered acceptable for an urban area which is considered for regeneration which is in line with other GLA decisions.
- 5.248 We understand from the floor plans that the impacted rooms serve a small kitchen (W1/F01) and a bedroom (W1/F02). As W1/F02 serves a bedroom, this is considered by the BRE to have a lesser expectation of daylight given the use.
- 5.249 W1/F01, however, serves a main habitable space. As can be seen in the Waldram diagram opposite the window is partially obscured by the rear extension of both 132 High Street and the entrance extension of 134 High Street. These obstructions therefore limit access to daylight from oblique angles away from the development site.

5.250 In terms of NSL, none of the two rooms will meet the BRE criteria for NSL. One room (R1/F02) will experience a change of 26.7% which is considered minor. The remaining room (R1/F01) experiences a change of 31.5% which is considered moderate. Both rooms will also retain in excess of 65.8% NSL. As such, over half the rooms will have a view of the sky at the working plane.

Sunlight (APSH)

5.251 In relation to sunlight, all rooms will meet the BRE criteria for sunlight APSH targets.

- 5.252 This property will see changes in daylight (VSC and NSL) which could be noticeable. However, the retained daylight levels and the minor NSL impact could be considered reasonably good for a strategic area of regeneration where development is encouraged.
- 5.253 From our research into this property's layout we are aware that the main habitable spaces (living rooms) face away from the development and will therefore not experience any noticeable alteration in daylight or sunlight and will continue to be enjoyed by the occupants.
- 5.254 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 134 High Street.
- 5.255 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.



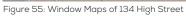




Figure 57: Property location

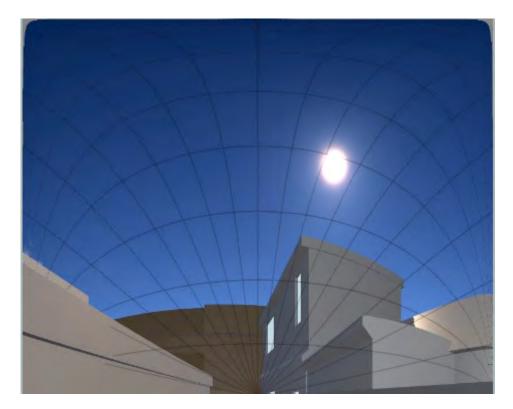


Figure 56: Waldram Diagram



136 HIGH STREET

Property Reference

- 5.256 This property is a three-storey mixed use building with retail occupying the ground floor and residential above. It is located to the northeast of the Site.
- 5.257 The internal configurations are based on floor plans sourced from the planning portal and have been included in our 3D model.
- 5.258 A full set of window maps can be found in Appendix05 and daylight distribution contours are in Appendix04
- 5.259 The technical results for this property can be found in Appendix 04.

Daylight (VSC & NSL)

- 5.260 There are two rooms relevant for daylight analysis in accordance with the BRE Guide, none of the rooms will meet the BRE Guidelines for both VSC and NSL.
- 5.261 The impacted windows and rooms are located on the first floor (F01) and second floor (F02). Of the two windows assessed for VSC, none will comply with the numerical figures outlined in section 2.2.21 of the BRE Guidelines for VSC. Both will experience noticeable changes of 40% and 44.2%.
- 5.262 When considering the retained VSC levels, W2/F01 will retain 13.2% and W2/F02 18.7%VSC. The latter could be considered acceptable for an urban area recognised for regeneration and is in line with GLA decisions.
- 5.263 We understand from the floor plans that the impacted rooms serve a small kitchen (W2/F01) and a bedroom (W2/F02). The kitchen is below 13sqm and therefore is not considered a habitable space by Bromley and therefore could be discounted from assessment.
- 5.264 W2/F01, however, serves a main habitable space. As can be seen in the Waldram diagram opposite the window is partially obscured by the rear extension of both 138 High Street and the entrance extension of 136 High Street. These obstructions therefore limit access to daylight from oblique angles away from the development site.

5.265 In terms of NSL, none of the two rooms will meet the BRE criteria for NSL. The bedroom (R2/F02) will experience a change of 25.3% which is considered minor. The kitchen (R2/F01) will experience a 31.2% change which is considered moderate. Both rooms will retain in excess of 66.9% NSL. As such, over half the rooms will have a view of the sky at the working plane.

Sunlight (APSH)

- 5.266 In relation to sunlight, the bedroom (R2/F02) will meet the BRE criteria for sunlight APSH targets.
- 5.267 The remaining room (R2/F01) will experience transgressions in both Annual PSH and Winter PSH. In the proposed scenario, the room will retain 21% APSH against a 25% BRE target. In the Winter PSH however, the existing levels are already below the 5% BRE target and therefore any massing on site will not meet the BRE criteria.

Summary

- 5.268 This property will see changes in daylight (VSC and NSL) which could be noticeable.
- 5.269 From our research into this property's layout we are aware that the main habitable spaces (living room) faces away from the development and will therefore not experience any noticeable alteration in daylight or sunlight and will continue to be enjoyed by the occupants.
- 5.270 It is therefore considered that the impact to the rear facing windows/rooms should be viewed on balance as to whether this would cause unacceptable harm to the occupants of 136 High Street.
- 5.271 It is GIA's view that the BRE transgressions should not be considered in isolation but against planning policy, guidance and the specific site context.

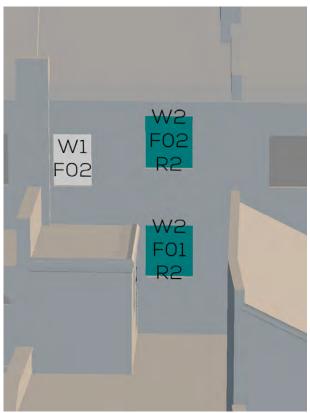






Figure 60: Property Location

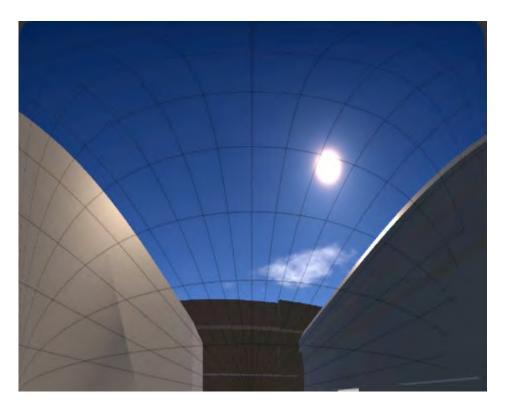


Figure 59: Waldram Diagram



6 OVERSHADOWING - NEIGHBOURING AMENITY

This section details the overshadowing impacts from the proposed scheme in relation to the relevant amenity areas surrounding the Site.

- 6.1 Due to the close proximity of the amenity areas to the south, east and west of the site GIA have assessed the potential overshadowing of these areas. In reviewing the overshadowing analysis, we have considered a sun hours on ground assessment as per Section 3.3 of the BRE Guidelines.
- 6.2 The BRE Guidelines suggest that the Spring Equinox (21st March) is a suitable date for the assessment as this is the midpoint of the sun's position throughout the year. The BRE Guidelines recommend that at least half of an amenity space should receive at least two hours of direct sunlight on 21st March. Should the existing amenity area not meet this target in the existing condition then there should be no more than a 20% alteration to the existing sun hours on ground level.
- 6.3 From the images opposite, all amenity spaces considered will meet the assessment criteria of the BRE Guidelines.
- 6.4 GIA would consider the potential overshadowing to neighbouring amenity areas to be acceptable as all areas will exceed the BRE Guidelines.

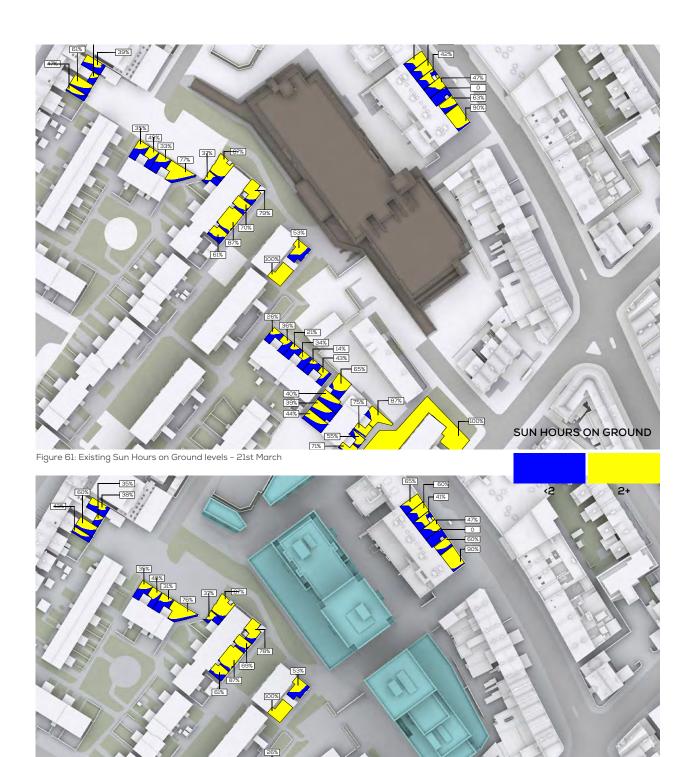


Figure 62: Proposed Sun Hours on Ground levels – 21st March



7 CONCLUSIONS

GIA have undertaken a daylight, sunlight and overshadowing assessment in relation to the Proposed Development at Blenheim Centre, Penge. The technical analysis has been undertaken in accordance with the BRE Guidelines.

- 7.1 GIA has undertaken a daylight, sunlight and overshadowing assessment in relation to the Development at the Blenheim Centre, Penge.
- 7.2 This report serves to supersede the previously submitted November 2022 daylight and sunlight report due to the amended proposed scheme.
- 7.3 Throughout the design process and scheme's evolution, the proposal has been the subject to extensive testing with the design team to help mitigate (where possible) daylight and sunlight impacts to neighbours, whilst being mindful of the Site allocation requirements. This included a series of workshops with the architects and the design team using GIA's 3D model to review where massing could be reduced to mitigate daylight and sunlight impacts to neighbours and improve the retained amenity in line with comparable locations in London. This has been further refined following the November 2022 submitted report as the scheme assessed in this report is reduced in height and performs better from a daylight and sunlight perspective than the submitted scheme.
- 7.4 When constructing buildings in an urban environment, alterations in daylight and sunlight to adjoining properties are often unavoidable. The numerical guidance given in the BRE document should be treated flexibly, especially in designated Town Centres that are considered a strategic area for regeneration.
- 7.5 In terms of the daylight and sunlight analysis undertaken against the scheme, 69 properties have been considered relevant for assessment. 37 properties meet or have negligible impacts to the BRE Guidelines. The remaining 32 properties will experience alterations in daylight and/or sunlight which are beyond the suggested BRE Guidance and will be noticeable.
- 7.6 With regards to daylight (VSC and NSL), there are:
 - 3 properties that are considered Major Adverse in significance;
 - 7 which are considered Moderate;
 - 8 that are Minor to Moderate; and
 - 14 which are Minor Adverse.
- 7.7 In relation to sunlight (APSH), there are:
 - 13 properties which are not relevant for

- assessment in accordance with the BRE Guidelines:
- 52 properties which remain BRE compliant (Negligible);
- 2 properties which are considered Major Adverse in significance;
- 2 that are Moderate:
- 7.8 In relation to overshadowing, all neighbouring amenity spaces will meet the BRE criteria and therefore the scheme performs excellently from this discipline.
- 7.9 Where transgressions from guidance occur for daylight and sunlight these are primarily located to those properties which sit in very close proximity to the development site. In the majority of instances the windows and rooms which face the site are understood to likely serve secondary rooms such as bedrooms which have a lower expectation for daylight (NSL) and sunlight (APSH) or kitchens which are less than 13sqm and therefore not considered a habitable room. The main habitable spaces of these properties, for example those along the High Street and Croydon Road, such as living rooms, face away from the development site and will not be impacted by the scheme.
- 7.10 Where there are properties which do have main living spaces facing the site, such as John Baird House, detailed design amendments have been undertaken to lessen the impact. In doing these additional studies with the architect, the majority of the living spaces in John Baird House will retain reasonable levels of VSC and NSL. Therefore, the impacts need to be considered against whether they will cause unacceptable harm to the occupiers of this property given the many benefits being brought forward by the proposed development.
- 7.11 In reviewing this report it is important to note that daylight and sunlight is only one consideration when reviewing the amenity of neighbours as a result of the proposed scheme. As such, GIA would urge that the daylight and sunlight impacts should not be viewed in isolation, and instead should be considered on the wider planning balance. The rigid application of BRE Guidelines does not create sufficient flexibility for higher density housing and development, which is greatly needed in London, a position supported by the Mayor via the Greater London Authority (GLA) in their SPG for Housing and each of the respective

boroughs in their local plans.

- 7.12 The technical alterations should not be considered in isolation and other context factors such as building form, room use and depth are relevant. For example bedrooms are less important in relation to daylight distribution (NSL). Bedrooms and kitchens are also less important in relation to sunlight in accordance with the BRE. Small kitchens (less than 13 sqm) may also be considered non-habitable (as per the Housing SPG and Bromley's habitable room standards).
- 7.13 The development will bring a range of significant benefits to the local area, including, but not limited to: the creation of a new public realm, to create a new community-focused centre at the heart of Penge which will deliver a range of cultural and social uses for both existing and future residents. The provision of 230 new homes with a mix of types and sizes, and 35% affordable homes (policy compliant). To design and deliver high-quality housing for Bromley across a range of tenures, helping to support mixed communities of all ages and to maximise the number of affordable family homes, acknowledging the local need. In addition to a new Sustainable Transport Hub for local community use to offer a wide range of sustainable, active and inclusive modes of transport within the scheme such as Brompton bikes, scooters and e-bikes for the community at large, promoting active travel to both residents and visitors.
- 7.14 Consequently, in GIA's opinion, the technical alterations in daylight and sunlight should be considered against this backdrop. A strict application of the BRE Guidelines should not be applied and weight should be given to the demands of planning policy/guidance at a national, regional and local level (see Section 3) and to what is considered contextually appropriate for a site of this nature within a London Borough









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APPENDIX A.25 62 HIGH STREET DAYLIGHT, SUNLIGHT AND OVERSHADOWING IMPACT ASSESSMENT



DAYLIGHT & SUNLIGHT REPORT

relating to the

PROPOSED DEVELOPMENT

at

62 HIGH STREET BROMLEY BR1 1EG

AUGUST 2021 Ref: 2104/E rev02



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APPENDICES

- A. 3D Perspective Views with Neighbouring Context (existing and proposed context for the purpose of analysis) and associated Window / Room Reference Plans
- B. Neighbouring Analysis:

Table 1: VSC and Sunlight for surrounding buildings

Table 2: Daylight Distribution for surrounding

buildings

C. Theoretical 'Mirror-Development' Analysis

Table 3: VSC for Henry House – Mirror *versus*

Application Proposal

D. Proposal Self-test Analysis:

Table 4: Self-test ADF

Room / Window Reference Plans



1.0 EXECUTIVE SUMMARY

- 1.1 This Daylight and Sunlight Report considers the impact of the proposal upon daylight and sunlight to neighbouring residential properties and also provides a self-test review of the new build habitable rooms.
- 1.2 The results of our examination are based upon the standard assessment procedure of the BRE Guide 'Site Layout Planning for Daylight and Sunlight - A Guide to Good Practice' Edition 2011 (The BRE Guide).
- 1.3 In terms of neighbouring properties applicable for detailed daylight and sunlight review, we have assessed the effects of the proposals on applicable windows and rooms within the following properties containing residential namely; Nos. 47, 52, 61 & 63 High Street and the modern residential apartment block known as Henry House.
- 1.4 Based upon the analysis results, for any applicable reductions to the neighbouring habitable windows / rooms, we summarise as follows;
- 1.5 Daylight VSC analysis for all applicable reductions to neighbouring windows at No 52 High Street and opposite the proposal at Nos. 47, 61 & 63 High Street, readily meet BRE default target criteria. For reductions in VSC to Henry House, Ringer's Road, the majority of windows either have reductions meeting BRE Guide default target criteria or close to target. There are a small number of windows with greater reductions but such reductions are not considered to be to living rooms and in terms of such considerations as 'mirror-development' review, such reductions should be considered reasonable (and furthermore, such reductions may potentially not all be to 'habitable rooms' details on actual room layouts within Henry House unknown).
- 1.6 Daylight distribution for all neighbouring habitable rooms readily meets BRE Guide default target criteria for habitable rooms that layouts are known / reasonably inferred (analysis of Henry House excluded as room layouts unknown).
- 1.7 Sunlight analysis to applicable neighbouring window / rooms, confirms that for where reductions are applicable, these all meet BRE Guide default target criteria thus such reductions should be considered readily acceptable.
- 1.8 In terms of sunlight analysis to amenity / sun on the ground, there are no neighbouring main amenity areas / rear gardens applicable for review for the given context.



- 1.9 Therefore, we conclude that the impact of the proposal upon daylight and sunlight to neighbouring residential properties is considered reasonable and especially, in consideration to 'mirror-development' review in reference to Henry House.
- 1.10 For the proposed new-build habitable rooms (daylight self-test), effectively all rooms satisfy the target criteria in terms of provision of suitable daylight (Average Daylight Factor) so that the proposals meet the BRE Guide target criteria (ADF within BS8206) for daylight.



2.0 OVERVIEW

- 2.1 The proposal is for conversion of the existing building and for a 3-storey roof-top extension. The redevelopment will provide ground and part 1st floor commercial and 30 No. residential apartments. The scheme has been prepared by Base Associates architects.
- 2.2 The proposals are shown in detail on the planning drawings but for general visual reference, we present 3D perspective massing views of existing (Image No.1) and proposed (Image No.2) as follows;



Image No.1 – Existing



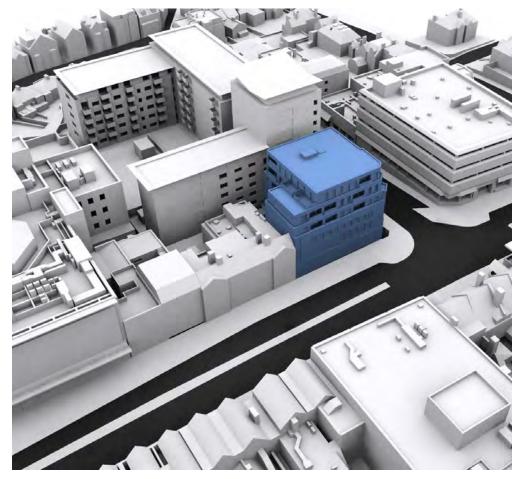


Image No.2 – Proposed

- 2.3 In terms of neighbouring properties applicable for review, these relate to those properties containing residential with windows serving habitable rooms at Nos. 47, 52, 61 & 63 High Street (residential above commercial) and to the rear of the site, the modern residential apartment block known as Henry House.
- 3D perspective views (existing and proposed) with neighbouring context (along with associated window references relating to the analysis tables) are provided within Appendix A, to enable the analysis tables and other descriptions within this report to be understood.



3.0 NEIGHBOURING REVIEW - DAYLIGHT & SUNLIGHT

3.1 BACKGROUND

- 3.1.1 Daylight and sunlight amenity are considerations that the local planning authority will ordinarily take into account when determining planning applications. There is no national planning policy relating to daylight and sunlight and overshadowing impacts although general guidance is, however, given on the need to protect existing amenity as set out in the National Planning Policy Framework. The National Planning Practice Guidance (NPPG) requires consideration on whether the impact to neighbouring daylight and sunlight would be 'unreasonable'.
- 3.1.2 At a Regional level, the Mayor of London has introduced the new London Plan (March 2021) providing an overall strategic plan for London, which includes an environmental framework for development within London. The proposal, in consideration of bulk, scale and massing is considered to be appropriate for surrounding context in terms of impacts to daylight and sunlight amenity. The proposal has carefully considered the impact of daylight and sunlight to applicable buildings and locally, the London Borough of Bromley provides policies on daylight and sunlight review.
- 3.1.3 The Building Research Establishment's (BRE) 'Site Layout Planning for Daylight and Sunlight A Guide to Good Practice' (2011) (The BRE Guide) enables an objective assessment to be made as to whether the proposals will adversely affect the daylight and sunlight reaching neighbouring habitable rooms. The BRE Guide is the industry source reference for daylight and sunlight review although it is important to highlight that the Guide is not a set of planning rules, which are either passed or failed; the numerical values are given and used, not as proscriptive or prescriptive values but as a way of comparing situations and coming to a judgement. The BRE Guide is conceived as an aid to planning officers and designers by giving objective means of making assessments. The values given as desirable in the BRE Guide may not be obtainable in dense urban areas where the grain of development is often tighter.



3.2 METHODOLOGY

- 3.2.1 We have undertaken analysis of the existing and proposed situations following the methodology set out in the BRE Guide on Site Layout Planning for Daylight and Sunlight (2nd Ed / 2011). We have considered daylight, both in terms of Vertical Sky Component (VSC) and daylight distribution analysis and have also considered sunlight (again, by the method set out in the Guide) to review as applicable, the proportion of the annual probable sunlight hours (APSHs) and winter hours, that the surrounding windows will benefit from in the existing and proposed scenario. We have not considered the BRE Guides initial 'rules of thumb / preliminary guidance' in respect of the '25° test' or '45° approach' but focused on the detailed analysis in respect of VSC, daylight distribution and APSHs and winter hours which forms the basis of this review report.
- 3.2.2 We have utilised OS data, site measured survey and photogrammetry info and the architect's design drawings to enable a 3D model of the existing and proposed arrangement, with neighbouring context, ready for analysis with industry recognised specialist software for daylight/sunlight review. As the scheme drawings form part of the formal submission, these are not reproduced here.
- 3.2.3 In terms of neighbouring properties applicable for detailed daylight and sunlight review, we have assessed the effects of the proposals on applicable windows and rooms within the following residential properties;
 - Nos. 47, 61 & 63 High Street residential above commercial (located broadly northeast of the development site / opposite on the High Street)
 - **No. 52 High Street** residential windows in the rear elevation reviewed (located broadly south-east of the development site)
 - **Henry House, Ringer's Road** modern apartment block (located broadly south-west / behind the development site)
- 3.2.4 Whilst we have not accessed the neighbouring properties, we have made reasonable assumptions and interpreted where necessary, likely room arrangements / uses to these properties based from our review of the exterior and utilising in part, information available on the plan layouts from within the public realm (planning portal, estate agents details etc).



- 3.2.5 We highlight that in respect of Henry House, Ringer's Road, whilst we have full plans of this building from the planning application ref. 07/03632, it is evident that only a circulation corridor was intended to have windows facing 62 High Street / the application site.
- 3.2.6 It would appear from external observation that this corridor is not present / windows generally serving rooms. However, we anticipate such rooms as being either bedrooms or small kitchens. Living rooms appear to be on the opposite side (thus not facing the proposal / facing into the Henry House courtyard) and so the proposal will not have any effect upon such windows in the courtyard elevation as serving daylight and sunlight important living rooms.
- 3.2.7 Give we are not aware of the actual arrangements of these apartments (although a number are anticipated to be dual-aspect), we are unable to assess daylight distribution within Henry House; for assessment of daylight distribution the BRE highlights for consideration where room layouts are known / or effectively reasonably inferred.



3.3 DAYLIGHT VSC

- 3.3.1 The BRE Guide considers that in terms of Vertical Sky Component (VSC), as a target value, if the VSC with the new development in place is both, less than 27% and less than 0.8 times its former value (i.e. the latter, if exceeding a 20% reduction), occupants of the existing building will notice the reduction in the amount of skylight. The maximum value obtainable at a flat window in a vertical wall is effectively 40%.
- 3.3.2 VSC represents a ratio of the part of illuminance at a point on a given vertical plane (usually the centre point of window on the window wall face), that would be received directly from an overcast sky (CIE standard overcast sky) to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The VSC does not include reflected light, either from the ground or from other buildings.
- 3.3.3 To highlight, the windows analysed within Henry House are of unknown room use (some may not be 'habitable rooms' for analysis in reference to the BRE Guide) but for completeness, we have analysed all windows.
- 3.3.4 However, it does appear that for at least window ref. W1s are 'secondary windows' with the main window serving such rooms (window ref. W2) then facing onto Ringer's Road / facing away from the proposal; it is anticipated that that the rooms served by window W1 (secondary) and W2 are living rooms but as noted, the primary window does not face the proposal. (As highlighted within the methodology section, it is evident from external observation that the internal layout of Henry House does not correlate with the floor plans within planning ref. 07/03632).
- 3.3.5 Table 1 VSC and sunlight for surrounding buildings within Appendix B sets-out the results of our analysis review with the existing and proposed VSC values presented along with the proportion of the former value stated from which we summarise the results as follows;
- 3.3.6 No. 47 High Street: VSC reductions range up to 1% thus negligible change and readily meeting BRE Guide target criteria.
- 3.3.7 No. 52 High Street: VSC reductions range up to 2% thus negligible change and readily meeting BRE Guide target criteria.
- 3.3.8 No. 61 High Street: VSC reduction is 4% thus negligible change and readily meeting BRE Guide target criteria.



- 3.3.9 <u>No. 63 High Street:</u> VSC reductions range up to 5% thus negligible change and readily meeting BRE Guide target criteria.
- 3.3.10 Henry House, Ringer's Road: From the 36 No. windows assessed for VSC, reductions to 18 No. meet BRE Guide default target criteria. For the 18 No. that do not meet BRE Guide default target criteria, it is anticipated that 4 No. of these windows relate to secondary windows (window ref. W1) as noted within paragraph 3.3.4 (with the primary window facing onto Ringer's Road); given these W1 windows are anticipated as secondary windows, such impacts to secondary windows should be considered acceptable (and as further background, such impacts are still close to BRE default target criteria in any case).
- 3.3.11 For the remaining 14 No. windows, the majority of reductions could be considered as 'minor adverse' with a small number of reductions of greater impact. However, given that the room uses are unknown, it is not possible to consider where there are greater impacts whether these are to habitable rooms although if they are, should these be habitable rooms, these are not anticipated to be living rooms.
- 3.3.12 We would highlight that for any meaningful development at the application site, some impact to the windows which face the application site within Henry House is inevitable given they are placed so close to the boundary. The BRE Guide recognises that greater impacts may be inevitable to such windows placed close to the boundary / expectations of daylight should be less than say windows within a primary elevation. Ultimately, both Henry House and the application proposal should only seek an equitable share of the available daylight and this consideration is reviewed further within this report please see section on Supplementary Note on 'Mirror-development' review.
- 3.3.13 Summary: Daylight VSC analysis for all applicable reductions to neighbouring windows at Nos. 47, 52, 61 & 63 High Street, readily meet BRE default target criteria. For reductions in VSC to Henry House, Ringer's Road, the majority of windows either have reductions meeting BRE Guide default target criteria or close to target. There are a small number of windows with greater reductions but such reductions are not considered to be living rooms and in terms of such considerations as 'mirror-development' review, such reductions should be considered reasonable (and furthermore, all such reductions may potentially not be to 'habitable rooms').



3.4 DAYLIGHT DISTRIBUTION

- 3.4.1 The Guide considers that in terms of daylight distribution, as a target value, if the daylight distribution with the new development in place is less than 0.8 times its former value (i.e. if exceeding a 20% reduction), occupants of the existing building will notice the reduction in the amount of daylight distribution within the room.
- 3.4.2 Daylight distribution relates to the area of the room (expressed as a percentage of the whole room area) that can see direct sky, at the working plane (working plane for residential is taken at 85 cm above floor level).
- 3.4.3 To highlight, that in respect of Henry House, Ringer's Road, whilst we have full plans of this building from the planning application ref. 07/03632, it is evident that only a circulation corridor was intended to have windows facing 62 High Street / the application site. It would appear from external observation that this corridor is not present / windows generally serving rooms.
- 3.4.4 However, it does appear that some windows are secondary (window reference W1) and other remaining windows are not anticipated to be serving living rooms; potentially serving either bedrooms or small kitchens. Give we are not aware of the actual arrangements of these apartments (although a number are anticipated to be dual-aspect), we are unable to assess daylight distribution within Henry House; for assessment of daylight distribution the BRE highlights for consideration where room layouts are known / or effectively reasonably inferred.
- 3.4.5 Table 2 Daylight Distribution for surrounding buildings within Appendix B sets out the results of our analysis review with the existing and proposed daylight distribution values presented along with the proportion of the former value stated, from which we summarise the results as follows;
- 3.4.6 <u>No. 47 High Street:</u> There are effectively no reductions in daylight distribution thus readily meeting BRE Guide default target criteria.
- 3.4.7 <u>No. 52 High Street:</u> There are effectively no reductions in daylight distribution thus readily meeting BRE Guide default target criteria.
- 3.4.8 <u>No. 61 High Street:</u> There are effectively no reductions in daylight distribution thus readily meeting BRE Guide default target criteria.
- 3.4.9 <u>No. 63 High Street:</u> Daylight distribution reductions range up to 7% thus readily meeting BRE Guide default target criteria.



3.4.10 **Summary**: Daylight distribution for all neighbouring habitable rooms readily meets BRE Guide default target criteria for habitable rooms that layouts are known / reasonably inferred (analysis of Henry House excluded as room layouts unknown).

3.5 SUPPLEMENTARY NOTE - MIRROR DEVELOPMENT REVIEW

- 3.5.1 The BRE Guide recognises that greater impacts may be inevitable to such windows placed close to the boundary / expectations of daylight should be less than say windows within a primary elevation. Ultimately, both Henry House and the application proposal should only seek an equitable share of the available daylight.
- 3.5.2 In consideration of an equitable share of daylight / 'mirror-development' (thus both sites then taking an equitable share of daylight), the concept of 'mirror-development' is presented within the following **Image Nos. 3 & 4**.

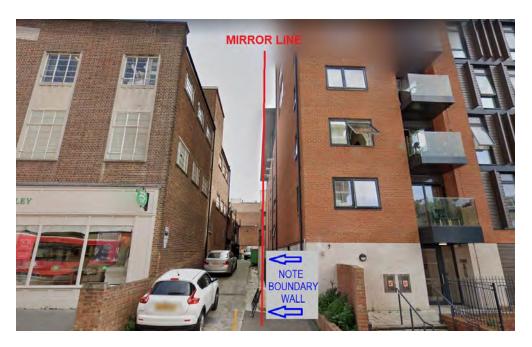


Image No. 3 – 'Mirror line' for Henry House in reference to the application proposal at No. 62 High Street

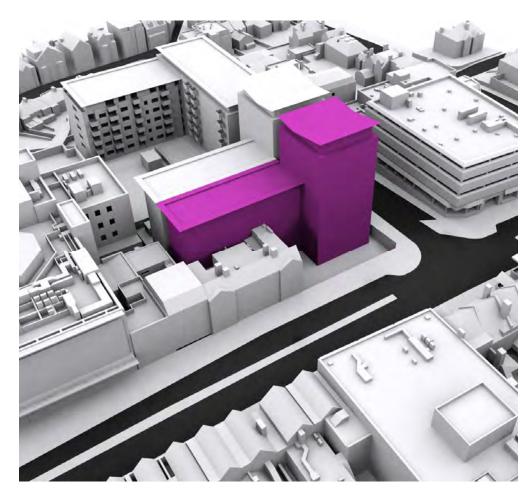


Image No. 4 – Henry House reflected, including over part of the application site of No. 62 High Street in consideration of 'mirror-development' analysis.

- 3.5.3 In considering this equitable share of daylight, we have undertaken the theoretical analysis for VSC of comparing the impact of a 'mirror development' of Henry House versus the application proposal the results of analysis are presented within Appendix C Table 3 VSC of Henry House Mirror versus Application Proposal.
- 3.5.4 In consideration of Table 3 (Appendix C.), it can readily be seen (and not unsurprisingly), that when commencing from existing theoretical 'mirror-development' massing opposite Henry House, such existing daylighting VSC levels would be very low.
- 3.5.5 In then comparing this with the application proposal, from **Table 3** in reference to comparison of the application with that of an existing mirror development situation (commencing from theoretical existing mirror-development levels) for the 'Pr/Ex' (Proposed versus Existing), in all instances the 'Pr/Ex' is above 1.00 thus the application proposal is demonstrating gains in daylight VSC in comparison to a mirror-development consideration. Indeed, in some instances, the gain is over 200 i.e. over 200% gain / betterment in comparison with a 'mirror-development' proposal in no



- instance is the application proposal worse (as background, for windows with a Pr/Ex of 1.00 i.e. existing and proposed remains the same, these relate to windows not facing the proposal / not relevant to the mirror or application review for this exercise).
- 3.5.6 In summary, the analysis confirms that the application proposal has a significantly lesser impact than a 'mirror-development' proposal thus the application proposal would be taking a significantly less equitable share of the daylight between the respective sites.
- 3.5.7 It can be considered that the application proposal is an equitable proposal and indeed seeks a significantly less share of daylight then that of Henry House. Given the impacts already reported upon for the VSC to Henry House from the application proposal, consideration of mirror-development adds that such impacts are reasonable.



3.6 SUNLIGHT

- 3.6.1 For sunlight, only windows that face within 90° of South, that is to say, facing from 90° to 270°, are ordinarily considered in reference to sunlight BRE Guide review.
- 3.6.2 The BRE Guide recommendation is that windows facing within 90° of South, should have 25% of Annual Probable Sunlight Hours (APSHs) with 5% in the winter months (from the autumn equinox to the spring equinox). Where reductions below the recommended levels are contemplated, these should be targeted so that the proposed value is 0.8 times former value or above (unless a reduction of sunlight received over the whole year is not greater than 4% of annual probable sunlight hours) for sun important rooms such as main living rooms and conservatories (with the BRE stating that sunlight to kitchen and bedrooms is less important, although care should be taken not to block too much sun).
- 3.6.3 Thus as previously for daylight, we have analysed all applicable neighbouring properties but for sunlight, only for those windows of applicable orientation (as background, Henry House is not applicable for assessment as the windows facing the application site are north-east facing).
- 3.6.4 Table 1 VSC and sunlight for surrounding buildings within Appendix B sets out the results of our analysis review with the existing and proposed APSHs values (plus winter hours) presented along with the proportion of the former value stated. The analysis results for all neighbouring habitable rooms assessed (that face within 90° of South and notwithstanding whether they are living rooms / sun important rooms), where reductions are applicable, these adhere to the BRE Guide default target criteria in reference to both APSH and winter.
- 3.6.5 **Summary**: Sunlight analysis to applicable neighbouring window / rooms, confirms that for where reductions are applicable, these all meet BRE Guide default target criteria thus such reductions should be considered readily acceptable.
- 3.6.6 In terms of Sunlight analysis to amenity / sun on the ground, there are no neighbouring main amenity areas / rear gardens applicable for review for the given context.



4.0 PROPOSAL SELF-TEST - DAYLIGHT PROVISION

- 4.1 The proposed new accommodation has been analysed to determine whether or not the new proposed habitable rooms will be provided with adequate daylight, in reference to the Average Daylight Factors (ADFs). The ADF is an overall calculation / combined consideration of such aspects as available sky at the window face (the angle of visible sky 'theta' derived from VSC), the area of the glazing and size of the room served by such glazing, the average reflectance's of the surfaces inside the room, etc. This gives a more detailed assessment for the daylight that will be available in the room than the measure of VSC which gives details of the potential for reasonable daylighting within the space rather than an actual measure of the internal daylighting.
- 4.2 BS 8206 Pt2 (whilst recently withdrawn), is still incorporated into the current BRE Guide and advise from the BRE is that this method can still be utilised for ADF review (as opposed to utilising BSEN17037:2018 Daylight in buildings which the BRE is currently considering / how to incorporate within the BRE Guide). BS 8206 Pt2 sets minimum target ADFs values for residential as 1% for bedrooms, 1.5% for living rooms and 2% for kitchens. In instances of any applicable open-plan arrangements for 'kitchen/ living / dining room', we have taken the target ADF for the predominant room use which being primarily 'living / dining room', we have allowed a target ADF of 1.5 (which differs to the default methodology within the BRE Guide).
- 4.3 Table 3 Self-test ADF within Appendix C sets out the results of the analysis review. The analysis confirms that 63 No. out of 64 No. habitable rooms assessed (i.e. 98%) meet / exceed the ADF target criteria that has been considered, indeed some by a considerable margin. For the 1 No. room that does not meet ADF, this relates to a bedroom and is still close to target ADF and should still be considered acceptable. Therefore, suitable daylighting is provided to the proposed habitable rooms.
- 4.4 **Summary**: The provision of daylight (review in reference to ADF), confirms that such levels will meet / exceed target criteria for the proposed dwellings / new habitable rooms within the proposal.



APPENDICES

A. 3D Perspective Views with Neighbouring Context (existing and proposed context for the purpose of analysis) and associated Window / Room Reference Plans

B. Neighbouring Analysis:

Table 1: VSC and Sunlight for surrounding buildings

Table 2: Daylight Distribution for surrounding

buildings

C. Theoretical 'Mirror-Development' Analysis

Table 3: VSC for Henry House – Mirror *versus*

Application Proposal

D. Proposal Self-test Analysis:

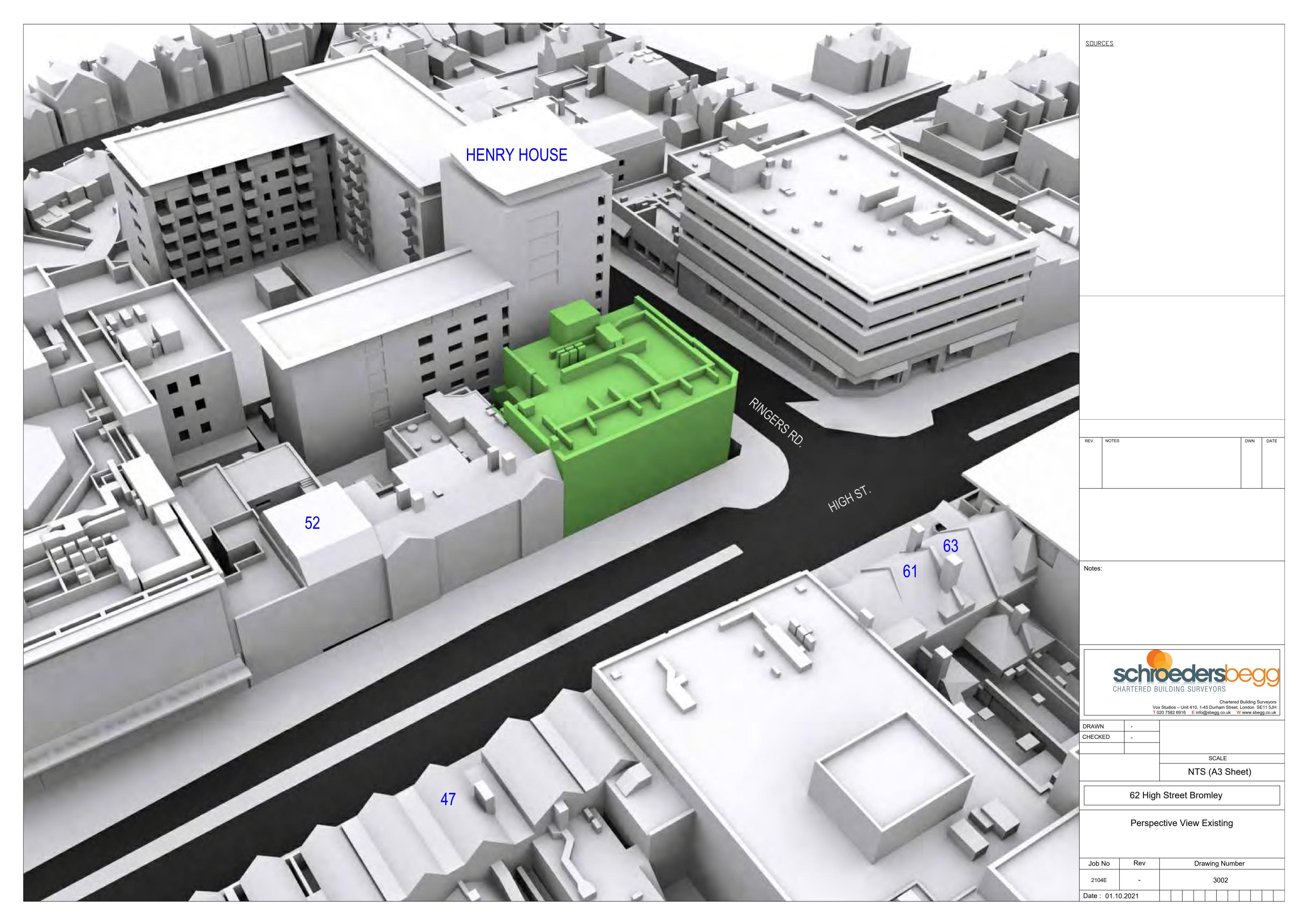
Table 4: Self-test ADF

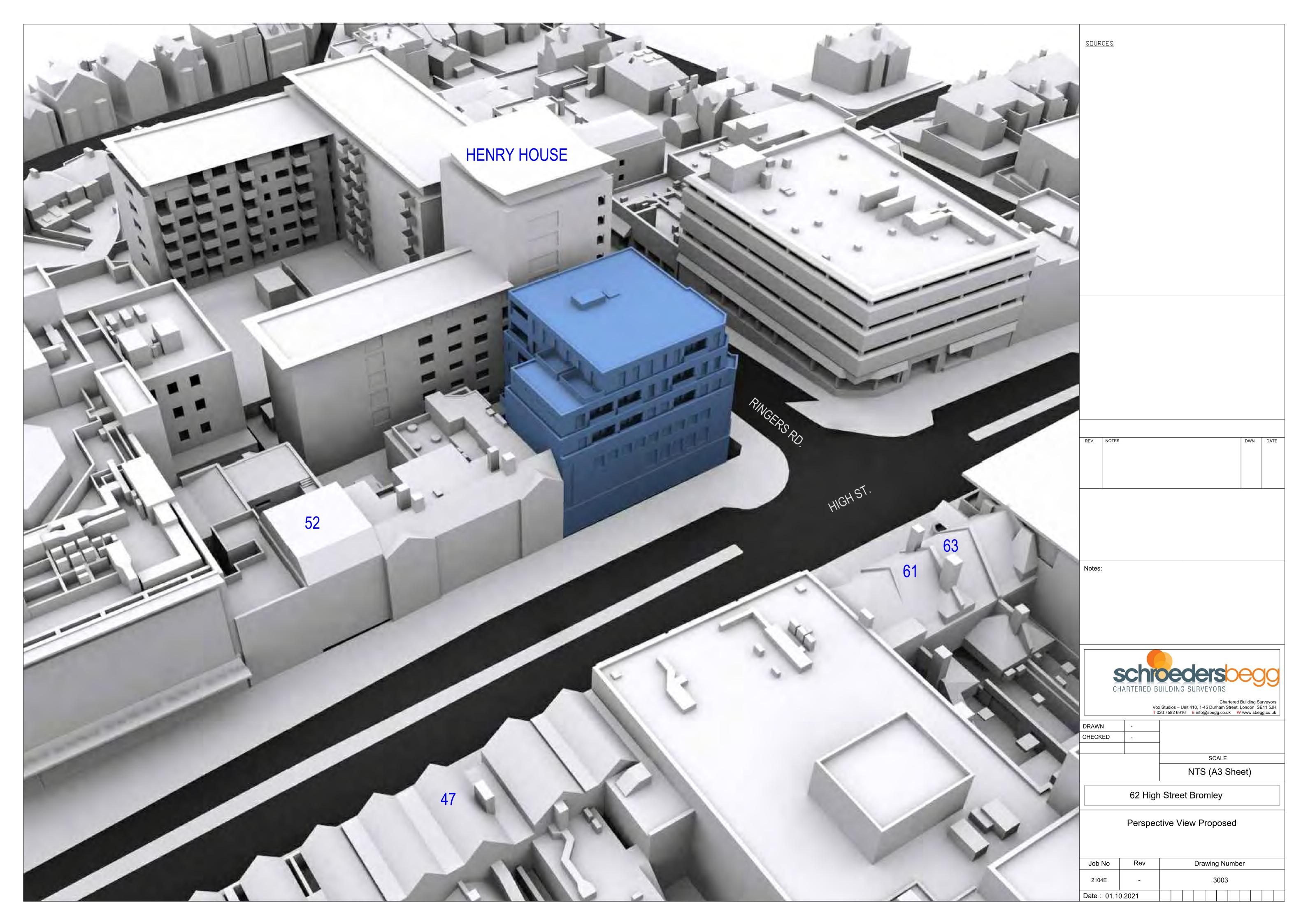
Room / Window Reference Plans

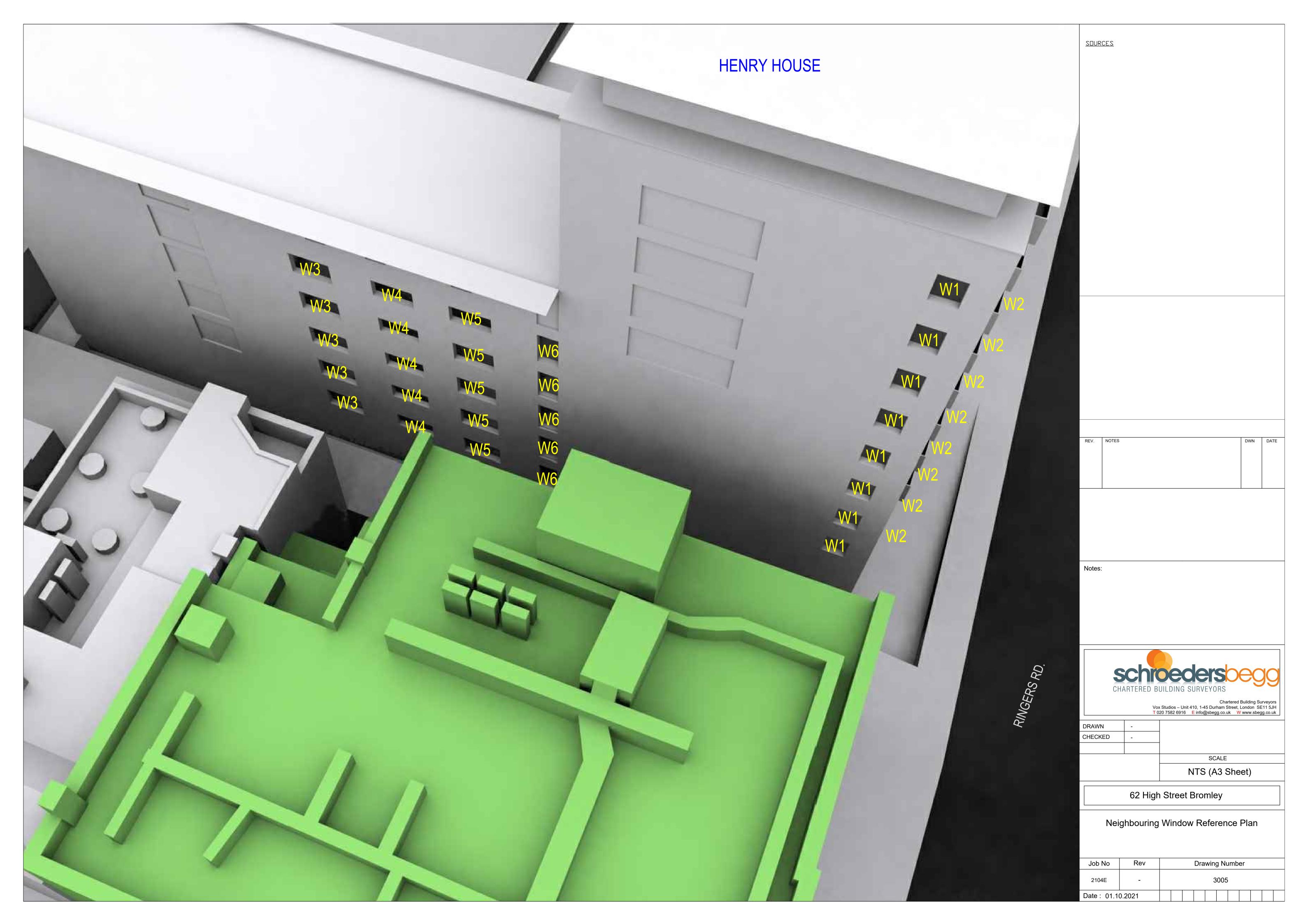


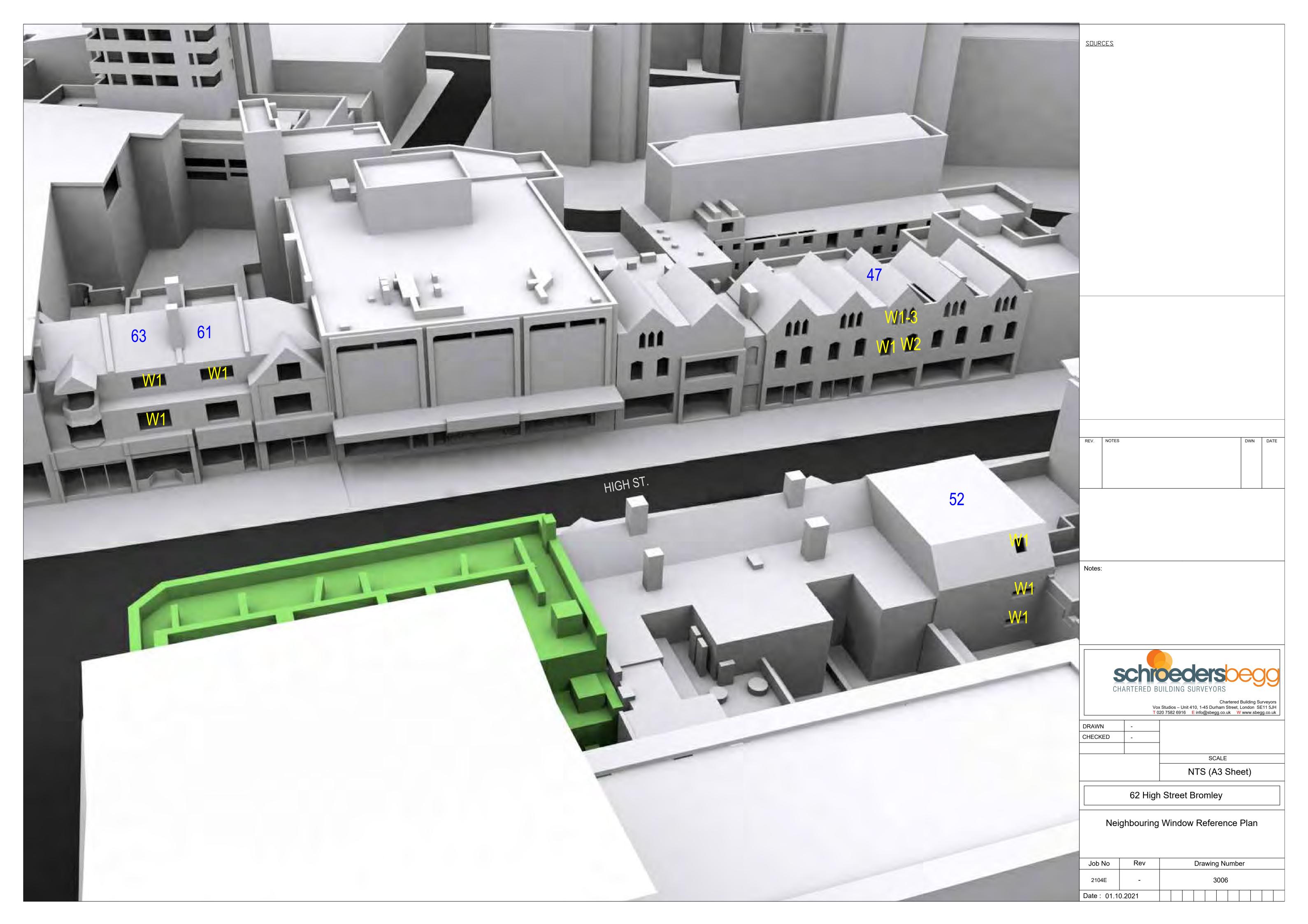
Appendix A

3D Perspective Views with Neighbouring Context (existing and proposed context for the purpose of analysis) and associated Window / Room Reference Plans











Appendix B

Neighbouring Analysis:

Table 1: VSC and Sunlight for surrounding buildings
Table 2: Daylight Distribution for surrounding buildings

Floor Ref.	Room Ref.	Room Use.	Window Ref.		VSC	Pr/Ex	Meets BRE Criteria	Annual	Winter	Total Suns per Room Annual	Meets BRE Criteria	Total Suns per Room Winter	Meets BRE Criteria
						63 High S	treet BR1 1JY						
First	R1	Living Room	W1	Existing Proposed	33.05 31.50	0.95	YES	57 55	20 18				
				Торозси	31.30			33	10	57 55	YES	20 18	YES
Second	R1	Bedroom	W1	Existing Proposed	33.86 32.84	0.97	YES	61 59	22 20				
										61 59	YES	22 20	YES
						61 High S	treet BR1 1JY						
Second	R1	Unknown	W1	Existing	34.28	0.96	YES	59	19				
				Proposed	32.98			55	15	59	VEC	19	V/F6
						47 High C	two at DD1 11 F			55	YES	15	YES
Eirct	R1	Living Room	W1	Evicting	30.81	0.99	YES	54	16				
First	KI	Living Room		Existing Proposed	30.39			54 53 54	16				
			W2	Existing Proposed	30.72 30.34	0.99	YES	53	16 16			47	
			14/4	F 1.00	22.20	0.00	V/FC		10	55 54	YES	17 17	YES
Second	R1	Living Room	W1	Existing Proposed	33.29 32.92	0.99	YES	59 58	19 19				
			W2	Existing Proposed	33.25 32.90	0.99	YES	59 58	19 19				
			W3	Existing Proposed	33.22 32.88	0.99	YES	59 58	20 20				
										60 59	YES	20 20	YES
						52 High St	treet BR1 1EG						
First	R1	Bedroom	W1	Existing	17.99	0.99	YES	19	1				
				Proposed	17.89			19	1	19		1	
	R2	Bedroom	W2	Existing	17.39	0.98	YES	*North*	*North*	19	YES	1	YES
				Proposed	17.00								
Second	R1	Bedroom	W1	Existing	23.46	1.00	YES	35	1	*North*	*North*	*North*	*North*
				Proposed	23.35			35	1	35		1	
Third	R1	Bedroom	W1	Existing	63.26	1.00	YES	62	14	35	YES	1	YES
				Proposed	63.08			62	14	62		14	
					Но	nry House Rir	ngers Road BR1 1	ΙΔΔ		62	YES	14	YES
Ground	R2	Unknown	W3	Existing	12.01	0.83	YES	*North*	*North*				
				Proposed	9.95								
	R3	Unknown	W4	Existing	12.91	0.74	Below	*North*	*North*	*North*	*North*	*North*	*North*
				Proposed	9.57								
	R4	Unknown	W5	Existing	11.17	0.80	YES	*North*	*North*	*North*	*North*	*North*	*North*
				Proposed	8.92								
	R5	Unknown	W6	Existing	7.84	0.79	Below	*North*	*North*	*North*	*North*	*North*	*North*
				Proposed	6.16								
First	R1	Living Room	W1	Existing	14.27	0.76	Below	*North*	*North*	*North*	*North*	*North*	*North*
11130	***	Erving noom	W2	Proposed Existing	10.82 25.10	1.00	YES	*North*	*North*				
			***	Proposed	25.13	2.00	125						
	R2	Unknown	W3	Existing	19.65	0.83	YES	*North*	*North*	*North*	*North*	*North*	*North*
	NZ	Ulikilowii	VVS	Proposed	16.22	0.65	163	NOILII	NOITH				
	R3	Unknown	W4	Existing	19.61	0.74	Rolow	*North*	*North*	*North*	*North*	*North*	*North*
	n3	Ulikilowii	VV4	Proposed	14.49	0.74	Below	NOILII	NOITH				
	D4	Unknown	VA/E	Eviction	17.25	0.72	Below	*North*	*North*	*North*	*North*	*North*	*North*
	R4	Unknown	W5	Existing Proposed	17.25 12.45	0.72	Below	*North*	*North*				
	R5	Holosees	W6	Evictin -	12.15	0.67	Dole	*North*	******	*North*	*North*	*North*	*North*
	I/O	Unknown	VVO	Existing Proposed	8.18	0.07	Below	MOLEU.	*North*				
Coco	D1	Linder - Process	14/4	Eul-ki-	20.70	0.62	n-I-	*********	**!!*	*North*	*North*	*North*	*North*
Second	R1	Living Room	W1	Proposed	20.76 13.00	0.63	Below	*North*	*North*				
			W2	Existing Proposed	28.07 28.09	1.00	YES	*North*	*North*				
										North	*North*	*North*	*North*
	R2	Unknown	W3	Existing Proposed	29.37 23.45	0.80	YES	*North*	*North*				
										North	*North*	*North*	*North*
	R3	Unknown	W4	Existing Proposed	28.01 20.56	0.73	Below	*North*	*North*				

Floor Ref.	Room Ref.	Room Use.	Window Ref.		VSC	Pr/Ex	Meets BRE Criteria	Annual	Winter	Total Suns per Room	Meets BRE Criteria	Total Suns per Room	Meets BRE Criteria
	R4	Unknown	W5	Existing	24.66	0.66	Below	*North*	*North*	Annual		Winter	
				Proposed	16.39								
	R5	Unknown	W6	Existing	18.89	0.55	Below	*North*	*North*	*North*	*North*	*North*	*North*
				Proposed	10.48								
hird	ird R1	Living Room	W1	Existing	30.17	0.54	Below	*North*	*North*	*North*	*North*	*North*	*North*
illiu	ira ki	LIVING ROOM		Proposed	16.40								
			W2	Existing Proposed	31.14 31.14	1.00	YES	*North*	*North*				
										North	*North*	*North*	*North*
	R2	Unknown	W3	Existing Proposed	33.97 27.40	0.81	YES	*North*	*North*				
				Порозец	27.40					*North*	*North*	*North*	**!
	R3	Unknown	W4	Existing	33.04	0.72	Below	*North*	*North*	*Nortn*	"Nortn"	*Nortn*	*North*
				Proposed	23.77								
	R4	Unknown	W5	Existing	31.64	0.60	Below	*North*	*North*	*North*	*North*	*North*	*North*
	114	OTIKITOWIT	***3	Proposed	19.02	0.00	bciow	1401111	North				
										North	*North*	*North*	*North*
	R5	Unknown	W6	Existing Proposed	28.09 12.46	0.44	Below	*North*	*North*				
	urth R1 Living									*North*	*North*	*North*	*North*
ourth		Living Room	W1	Existing Proposed	35.90 21.25	0.59	Below	*North*	*North*				
			W2	Existing	33.99	1.00	YES	*North*	*North*				
				Proposed	33.99								
	R2	Unknown	W3	Existing	34.46	0.84	YES	*North*	*North*	*North*	*North*	*North*	*North*
				Proposed	28.92								
	0.2	University	14/4	F. data	24.24	0.75	Delevi	**!	**!	*North*	*North*	*North*	*North*
	R3	Unknown	W4	Existing Proposed	34.21 25.68	0.75	Below	*North*	*North*				
										North	*North*	*North*	*North*
	R4	Unknown	W5	Existing Proposed	33.93 21.31	0.63	Below	*North*	*North*				
										North	*North*	*North*	*North*
	R5	Unknown	W6	Existing	33.52	0.46	Below	*North*	*North*	North	NOILII	NOLLII	NOILII
				Proposed	15.26								
ifth	R1	Living Room	W1	Existing	37.82	0.73	YES	*North*	*North*	*North*	*North*	*North*	*North*
		0	W2	Proposed Existing	27.43 36.58	1.00	YES	*North*	*North*				
			***2	Proposed	36.58	1.00	123	1401111	North				
										North	*North*	*North*	*North*
Sixth	R1	Living Room	W1	Existing Proposed	38.58 35.04	0.91	YES	*North*	*North*				
			W2	Existing Proposed	38.35 38.35	1.00	YES	*North*	*North*	rth*			
				oposcu	30.33					*North*	*North*	*North*	*North*
Seventh	R1	Living Room	W1	Existing	38.77	1.00	YES	*North*	*North*	· NOI till	'NOI III'	NOLLII	INOLUL.
			W2	Proposed Existing	38.77 38.88	1.00	YES	*North*	*North*				
				Proposed	38.88								
ighth	R1	Living Boos	W1	Eviction	38.88	1.00	YES	*North*	*North*	*North*	*North*	*North*	*North*
.igiiui	WI	Living Room		Proposed Proposed	38.88								
			W2	Existing Proposed	39.41 39.41	1.00	YES	*North*	*North*				
										North	*North*	*North*	*North*

Floor Ref.	Room Ref.	Room Use.	Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criter
			63 High St	reet BR1 1JY			
First	R1	Living Room	34.52	34.41	31.83		
				100%	92%	93%	YES
Second	R1	Bedroom	15.00	14.79	14.79		
				99%	99%	100%	YES
			61 High Str	reet BR1 1JY			
Second	R1	Unknown	14.17	14.01	14.01		
				99%	99%	100%	YES
			47 High Str	reet BR1 1LE			
First	R1	Living Room	26.54	26.35	26.35		
				99%	99%	100%	YES
Second	R1	Living Room	24.15	23.15	23.15		
				96%	96%	100%	YES
			52 High Str	eet BR1 1EG			
First	R1	Bedroom	11.97	8.09	8.09		
				68%	68%	100%	YES
	R2	Bedroom	11.91	5.62	5.62		
				47%	47%	100%	YES
Second	R1	Bedroom	12.61	10.25	10.25		
				81%	81%	100%	YES
Third	R1	Bedroom	10.66	10.66	10.66		
				100%	100%	100%	YES

Henry House excluded room layouts unknown



Appendix C

Theoretical 'Mirror-Development' AnalysisTable 3: VSC for Henry House – Mirror *versus* Application Proposal

				Table 3 - V	SC for Hen	ry House -	Mirror versus	Application	on Proposal				
Floor Ref.	Room Ref.	Room Use.	Window Ref.		VSC	Pr/Ex	Meets BRE Criteria	Annual	Winter	Total Suns per Room Annual	Meets BRE Criteria	Total Suns per Room Winter	Meets BRE Criteria
					He	nry House Rin	gers Road BR1 1	AA		Amidai		Willes	
Ground	R2	Unknown	W3	Existing	0.15	68.42	YES	*North*	*North*				
	R3	Unknown	W4	Proposed Existing	9.95 0.12	81.56	YES	*North*	*North*	*North*	*North*	*North*	*North*
				Proposed	9.57					*North*	*North*	*North*	*North*
	R4	Unknown	W5	Existing Proposed	0.16 8.92	54.77	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R5	Unknown	W6	Existing Proposed	0.22 6.16	27.44	YES	*North*	*North*	***		***	****
First	R1	Living Room	W1	Existing	5.80	1.86	YES	*North*	*North*	*North*	*North*	*North*	*North*
			W2	Proposed Existing	10.82 25.07	1.00	YES	*North*	*North*				
				Proposed	25.13								
	R2	Unknown	W3	Existing Proposed	0.14 16.22	112.53	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R3	Unknown	W4	Existing Proposed	0.12 14.49	121.86	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R4	Unknown	W5	Existing	0.17	73.01	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R5	Unknown	W6	Proposed Existing	0.25	33.15	YES	*North*	*North*	*North*	*North*	*North*	*North*
				Proposed	8.18					*North*	*North*	*North*	*North*
Second	R1	Living Room	W1	Existing Proposed	6.64 13.00	1.96	YES	*North*	*North*				
			W2	Existing Proposed	28.01 28.09	1.00	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R2	Unknown	W3	Existing Proposed	0.14 23.45	165.40	YES	*North*	*North*				
	R3	Unknown	W4	Existing Proposed	0.12 20.56	176.67	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R4	Unknown	W5	Existing Proposed	0.17 16.39	94.24	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R5	Unknown	W6	Existing Proposed	0.28 10.48	36.97	YES	*North*	*North*	*North*	*North*	*North*	*North*
										North	*North*	*North*	*North*
Third	R1	Living Room	W1	Existing Proposed	7.53 16.40	2.18	YES	*North*	*North*				
			W2	Existing Proposed	31.04 31.14	1.00	YES	*North*	*North*	**!	**!*	**!	*****
	R2	Unknown	W3	Existing Proposed	0.14 27.40	198.14	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R3	Unknown	W4	Existing Proposed	0.12 23.77	204.47	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R4	Unknown	W5	Existing Proposed	0.18 19.02	106.02	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R5	Unknown	W6	Existing Proposed	0.33 12.46	37.35	YES	*North*	*North*	*North*	*North*	*North*	*North*
										Nor+-	*North*	*Nor+-*	*****
Fourth	R1	Living Room	W1	Existing	8.46	2.51	YES	*North*	*North*	*North*	· NOrth*	*North*	*North*
			W2	Proposed Existing Proposed	21.25 33.89 33.99	1.00	YES	*North*	*North*				
	R2	Unknown	W3	Existing Proposed	0.13 28.92	223.55	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R3	Unknown	W4	Existing Proposed	0.14 25.68	180.67	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R4	Unknown	W5	Existing Proposed	0.19 21.31	111.87	YES	*North*	*North*	*North*	*North*	*North*	*North*
	R5	Unknown	W6	Existing	0.41	36.87	YES	*North*	*North*	*North*	*North*	*North*	*North*
				Proposed	15.26								
Fifth	R1	Living Room	W1	Existing	9.40	2.92	YES	*North*	*North*	*North*	*North*	*North*	*North*
-	·· -		W2	Proposed Existing	27.43 36.49	1.00	YES	*North*	*North*				
				Proposed	36.58		. 25						
										North	*North*	*North*	*North*

Floor Ref.	Room Ref.	Room Use.	Window Ref.		VSC	Pr/Ex	Meets BRE Criteria	Annual	Winter	Total Suns per Room Annual	Meets BRE Criteria	Total Suns per Room Winter	Meets BRE Criteria
Sixth R1 Livin	Living Room	W1	Existing	10.14	3.46	YES	*North*	*North*					
				Proposed	35.04								
			W2	Existing	38.27	1.00	YES	*North*	*North*				
				Proposed	38.35								
										North	*North*	*North*	*North*
Seventh	R1	Living Room	W1	Existing	10.73	3.61	YES	*North*	*North*				
		-		Proposed	38.77								
			W2	Existing	38.81	1.00	YES	*North*	*North*				
				Proposed	38.88								
										North	*North*	*North*	*North*
Eighth	R1	Living Room	W1	Existing	12.61	3.08	YES	*North*	*North*				
				Proposed	38.88								
			W2	Existing	39.36	1.00	YES	*North*	*North*				
				Proposed	39.41								
										North	*North*	*North*	*North*



Appendix D

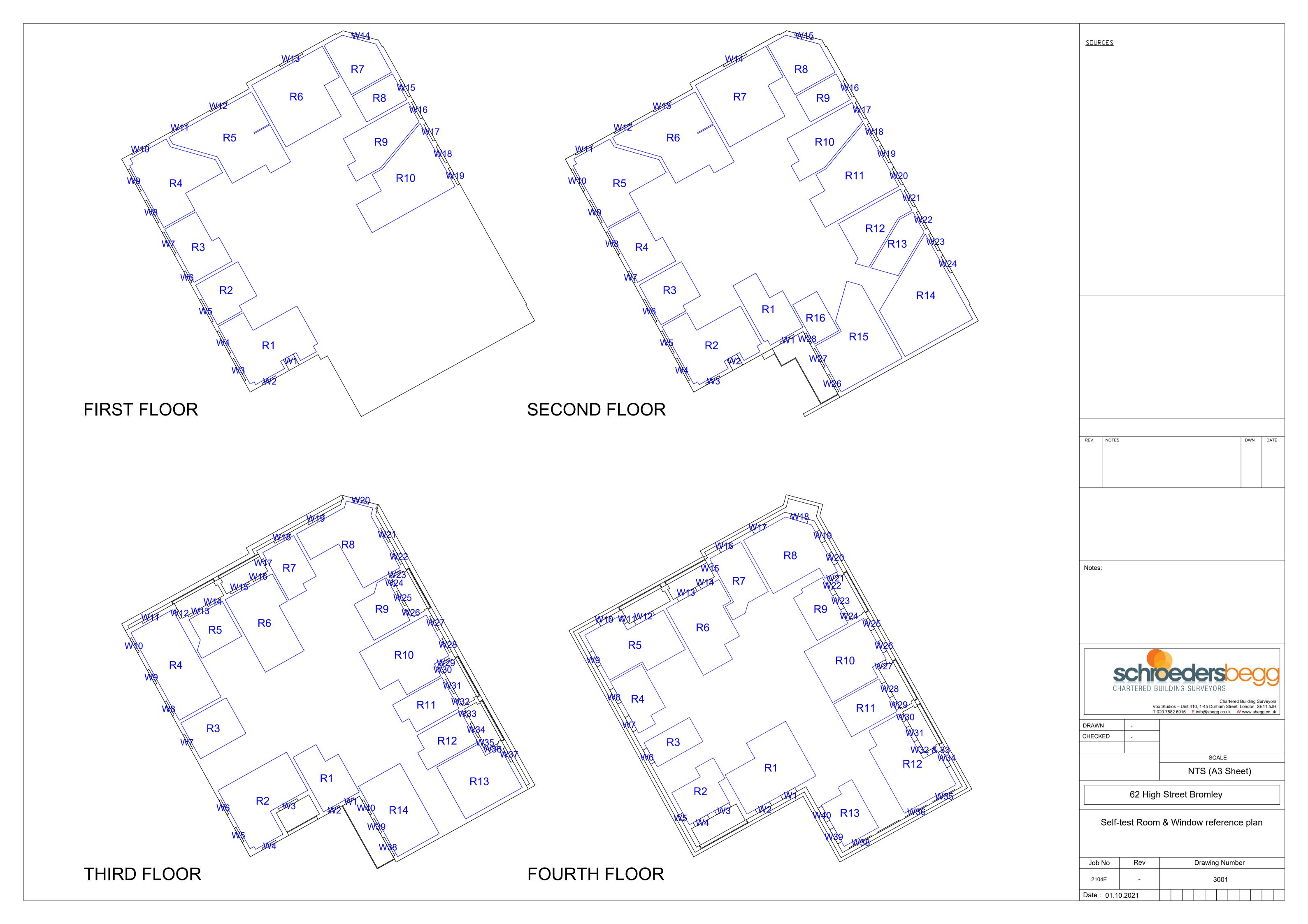
Proposal Self-test Analysis: Table 3 Self-test ADF Room / Window Reference Plans

Floor Ref.	Room Ref.	Room Use.	Window Ref.	ADF	Req'd Value	Meets BRE Criteria
				Proposed	value	
			Internal			
irst	R1	Living Room	W1 W2	0.25 0.56		
			W3 W4	0.38 0.38		
irst	R2	Bedroom	W5	1.57	1.50	YES
				0.84 0.84	1.00	BELOW
irst	R3	Bedroom	W6 W7	0.36 0.83		
irst	R4	Living Room	W8	1.19 0.68	1.00	YES
		, and the second	W9 W10-L	0.94 0.02		
			W10-U	1.63 3.26	1.50	YES
irst	R5	Living Room	W11-L	0.02	1.50	163
			W11-U W12-L	1.28 0.02		
			W12-U	1.28 2.59	1.50	YES
irst	R6	Living Room	W13-L W13-U	0.02 1.93		
				1.95	1.50	YES
First	R7	Bedroom	W14-L W14-U	0.04 3.08		
First	R8	Bedroom	W15-L	3.12 0.06	1.00	YES
			W15-U	4.74 4.80	1.00	YES
First	R9	Bedroom	W16-L W16-U	0.03 2.62		
				2.66	1.00	YES
First	R10	Living Room	W17-L W17-U	0.02 1.68		
			W18-L W18-U	0.02 1.68		
			W19-L W19-U	0.02 1.68		
San and	P4	Dada		5.12	1.50	YES
Second	R1	Bedroom	W1-L W1-U	0.21 0.99		
Second	R2	Living Room	W2	1.20 0.38	1.00	YES
			W3 W4	0.79 0.54		
			W5	0.53 2.24	1.50	YES
Second	R3	Bedroom	W6	1.01 1.01	1.00	YES
Second	R4	Bedroom	W7	0.45	1.00	1123
			W8	1.00 1.45	1.00	YES
Second	R5	Living Room	W9 W10	0.78 1.06		
			W11-L W11-U	0.07 1.25		
Second	R6	Living Room	W12-L	3.16 0.06	1.50	YES
Second	NO	Living Room	W12-U	0.99		
			W13-L W13-U	0.06 0.99		
Second	R7	Living Room	W14-L	2.09 0.09	1.50	YES
			W14-U	1.47 1.55	1.50	YES
Second	R8	Bedroom	W15-L W15-U	0.14 2.31		
Cocond	PO.	Podroom		2.45	1.00	YES
Second	R9	Bedroom	W16-L W16-U	0.21 3.55		
Second	R10	Bedroom	W17-L	3.76 0.12	1.00	YES
			W17-U	1.94 2.06	1.00	YES
Second	R11	Living Room	W18-L W18-U	0.08 1.33		•
			W19-L	0.08		
			W19-U W20-L	1.33 0.08		
			W20-U	1.33 4.22	1.50	YES
Second	R12	Bedroom	W21-L W21-U	0.12 2.08		
Second	R13	Bedroom	W22-L	2.21 0.18	1.00	YES
			W22-U	3.00 3.18	1.00	YES
Second	R14	Living Room	W23-L W23-U	0.07 1.10		·
			W24-L	0.07		
			W24-U	1.10 2.34	1.50	YES
Second	R15	Living Room	W26-L W26-U	0.16 0.67		
			W27-L W27-U	0.16 0.54		
				1.53	1.50	YES

		Table 4 - Self-to	est Average Daylig	ht Factor (ADF)		
Floor Ref.	Room Ref.	Room Use.	Window Ref.	ADF Proposed	Req'd Value	Meets BRE Criteria
Second	R16	Bedroom	W28-L W28-U	0.25 0.81 1.06	1.00	YES
Third	R1	Bedroom	W1 W2	0.73 1.18		
Third	R2	Living Room	W3-L W3-U	1.91 0.15 0.48	1.00	YES
			W4 W5	0.91 0.49		
Third	R3	Bedroom	W6 W7	0.47 2.49 1.00	1.50	YES
Third	R4	Living Room	W8	1.00 0.41	1.00	YES
			W9 W10	0.49 0.65		
			W11-L W11-U W12-L	0.09 1.29 0.07		
			W12-U	0.26 3.25	1.50	YES
Third	R5	Bedroom	W13-L W13-U	0.28 0.89		
			W14-L W14-U	0.28 0.87 2.33	1.00	VEC
Third	R6	Living Room	W15-L W15-U	0.22 0.71	1.00	YES
			W16-L W16-U	0.17 0.55		
Third	R7	Bedroom	W17-L	1.64 0.09	1.50	YES
			W17-U W18-L	0.43 0.21		
Third	R8	Living Room	W18-U W19-L	2.85 3.57 0.10	1.00	YES
Tillu	NO	Living Noom	W19-U W20	1.38 1.21		
			W21-L W21-U	0.09 1.27		
			W22-L W22-U	0.10 1.28		
			W23-L W23-U	0.07 0.26 5.76	1.50	YES
Third	R9	Bedroom	W24-L W24-U	0.11 0.41	1.50	TES
			W25-L W25-U	0.34 1.25		
			W26-L W26-U	0.11 0.42		
Third	R10	Living Room	W27-L W27-U	2.65 0.10 1.40	1.00	YES
			W28-L W28-U	0.10 1.40		
			W29-L W29-U	0.07 0.29		
			W30-L W30-U	0.06 0.20		
Third	R11	Bedroom	W31-L	3.63 0.33	1.50	YES
			W31-U W32-L W32-U	1.20 0.11 0.39		
Third	R12	Bedroom	W33-L	2.02 0.10	1.00	YES
			W33-U W34-L	0.37 0.32		
Third	D12	Living Deam	W34-U W35-L	1.17 1.96	1.00	YES
Third	R13	Living Room	W35-L W35-U W36-L	0.06 0.23 0.08		
			W36-U W37-L	0.34 0.12		
			W37-U	1.55 2.38	1.50	YES
Third	R14	Living Room	W38-L W38-U	0.30 1.50		
			W39 W40	0.94 0.87 3.60	1.50	YES
Fourth	R1	Living Room	W1-L W1-U	0.15 1.04	1.50	1 123
			W2-L W2-U	0.18 1.21		
Fourth	R2	Bedroom	W3-L	2.58 0.29	1.50	YES
			W3-U W4-L W4-U	0.94 0.28 0.93		
			W4-U W5-L W5-U	0.93 0.08 0.55		
Fourth	R3	Bedroom	W6-L	3.07 0.20	1.00	YES
			W6-U	1.36 1.56	1.00	YES

Floor Ref.	Room Ref.	Room Use.	Window Ref.	ADF Proposed	Req'd Value	Meets BRE Criteria
ourth	R4	Bedroom	W7-L	0.15	value	
			W7-U W8-L	0.99 0.16		
			W8-U	1.04		
ourth	R5	Living Room	W9-L	2.33 0.11	1.00	YES
burtii	N.S	Living Room	W9-U	0.71		
			W10-L W10-U	0.16 1.05		
			W11-L	0.05		
			W11-U W12-L	0.20 0.23		
			W12-U	0.81		
ourth	R6	Living Room	W13-L	3.31 0.22	1.50	YES
00101		Erving Noom	W13-U	0.81		
			W14-L W14-U	0.13 0.46		
				1.62	1.50	YES
ourth	R7	Bedroom	W15-L W15-U	0.08 0.39		
			W16-L	0.25		
			W16-U	1.66 2.38	1.00	YES
ourth	R8	Living Room	W17-L	0.16	1.00	120
			W17-U W18-L	1.06 0.24		
			W18-U	1.55		
			W19-L W19-U	0.16 1.06		
			W20-L	0.16		
			W20-U W21-L	1.06 0.07		
			W21-U	0.24		
ourth	R9	Bedroom	W22-L	5.76 0.12	1.50	YES
			W22-U	0.43		
			W23-L W23-U	0.34 1.23		
			W24-L	0.12		
			W24-U	0.45 2.70	1.00	YES
ourth	R10	Living Room	W25-L	0.17		,
			W25-U W26-L	1.14 0.17		
			W26-U	1.14		
			W27-L W27-U	0.07 0.26		
				2.95	1.50	YES
ourth	R11	Bedroom	W28-L W28-U	0.33 1.18		
			W29-L	0.12		
			W29-U	0.42 2.04	1.00	YES
ourth	R12	Living Room	W30-L	0.06		
			W30-U W31-L	0.19 0.16		
			W31-U	0.59		
			W32-L W32-U	0.06 0.21		
			W33-L W33-U	0.06 0.24		
			W34-L	0.22		
			W34-U W35	1.42 0.50		
			W36 _	0.49		
arth	D12	Bedroom	14/20	4.21	1.50	YES
ourth	R13	<i>p</i> euroom	W38 W39-L	0.95 0.29		
			W39-U W40-L	1.95 0.27		
			W40-L W40-U	1.82	1.50	
ifth	R1	Living Room	W1-L	5.28 0.22	1.00	YES
	I/T	LIVING NOOM	W1-U	1.50		
			W2-L W2-U	0.19 1.44		
			W31-L	0.19		
			W31-U W32-L	1.12 0.19		
			W32-L W32-U	1.12		
ifth	R2	Bedroom	W3-L	5.96 0.41	1.50	YES
	112	Dearoom	W3-U	2.95	_	
fth	R3	Living Room	W4-L	3.37 0.13	1.00	YES
			W4-U	1.02		
			W5-L W5-U	0.23 1.41		
			W6-L	0.23		
			W6-U	1.42 4.44	1.50	YES
ifth	R4	Living Room	W7-L	0.10	2.50	,
			W7-U W8-L	0.38 0.16		
			W8-U	0.62		
			W9-L W9-U	0.06 0.36		
			W10-L	0.13		
			W10-U W11-L	0.78 0.07		

Floor Ref.	Room Ref.	Room Use.	Window Ref.	ADF Proposed	Req'd Value	Meets BRE Criteria
			W11-U	0.44	4.50	VES.
· ful.	D.F.	D - d	14421	3.09	1.50	YES
fth	R5	Bedroom	W12-L	0.12		
			W12-U W13-L	0.75 0.12		
			W13-U	0.76		
			W13-0	1.75	1.00	YES
fth	R6	Living Room	W14-L	0.12	1.00	163
iitii	110	LIVING ROOM	W14-U	0.74		
			W15-L	0.18		
			W15-U	1.09		
			W16-L	0.18		
			W16-U	1.09		
			W17-L	0.18		
			W17-U	1.09		
			W18-L	0.04		
			W18-U	0.24		
				4.95	1.50	YES
fth	R7	Bedroom	W19-L	0.27		•
			W19-U	1.12		
			W20-L	0.26		
			W20-U	1.06		
				2.70	1.00	YES
ifth	R8	Living Room	W21-L	0.21		
			W21-U	1.26		
			W22-L	0.25		
			W22-U	1.48		
			W23-L	0.20		
			W23-U	1.22		
			W24-L	0.07		
			W24-U	0.28		
			W25-L	0.06		
			W25-U	0.24	1.50	YES
ifth	R9	Bedroom	W26-L	5.27 0.35	1.50	TES
iitii	בח	beuroom	W26-U	1.37		
			W27-L	0.11		
			W27-U	0.11		
			VV 2 / - U	2.28	1.00	YES
fth	R10	Bedroom	W28-L	0.33	1.00	1123
	NIO	Dearoom	W28-U	2.01		
			W29-L	0.19		
			W29-U	1.14		
			Г	3.67	1.00	YES
ifth	R11	Bedroom	W30-L	0.52	* *	
			W30-U	3.11		
			Г	3.62	1.00	YES



APPENDIX A.26 BROMLEY NORTH STATION DAYLIGHT, SUNLIGHT AND OVERSHADOWING IMPACT ASSESSMENT