

Chapter 9: Daylight, Sunlight, Overshadowing and Solar Glare

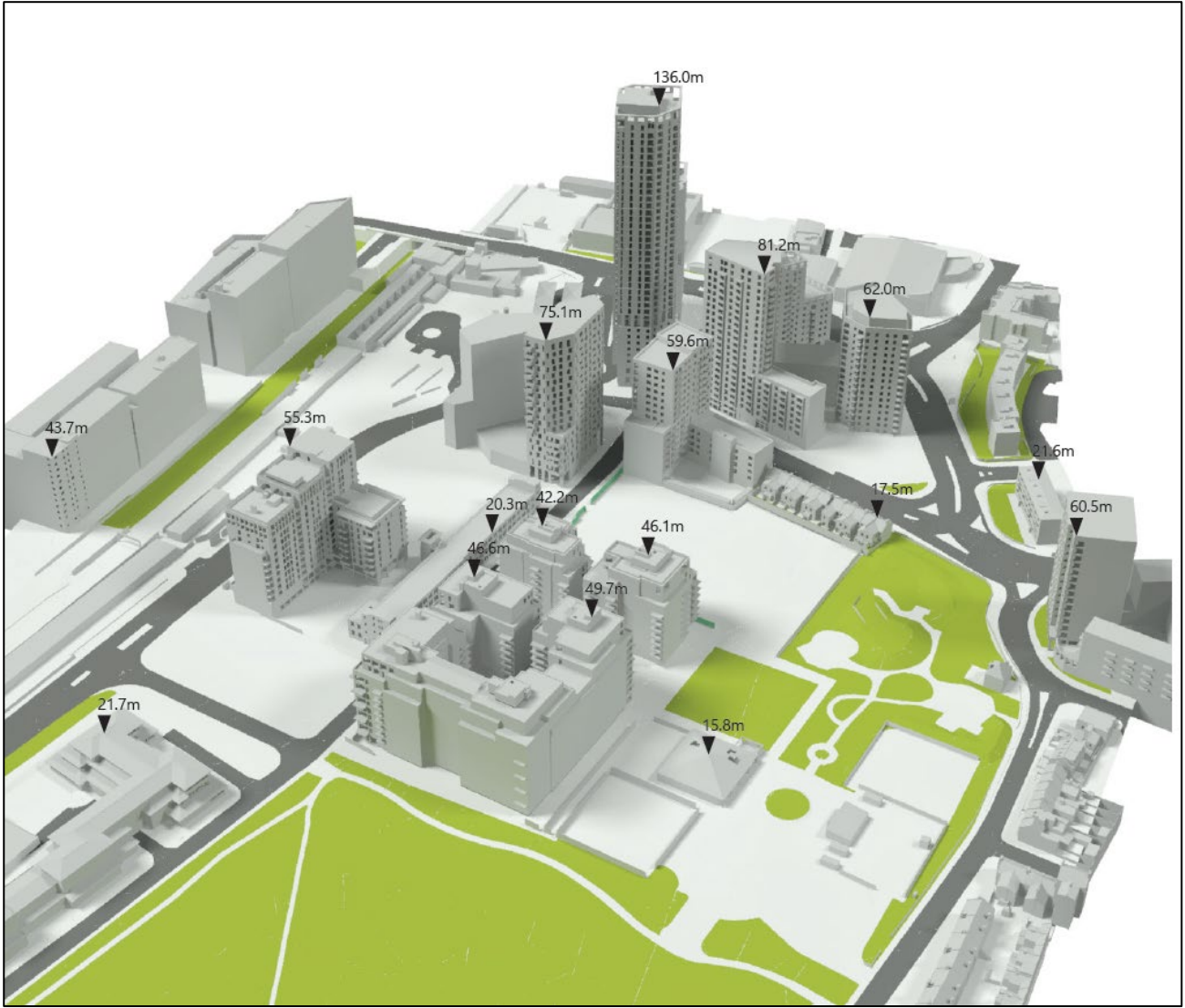
DAYLIGHT, SUNLIGHT, OVERSHADOWING AND SOLAR GLARE	
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SUPPORTING APPENDIX	ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 1: Drawings of the Existing, Proposed, and Surrounding Buildings Annex 2: Results of the Daylight and Sunlight Assessments within Neighbouring Properties; Annex 3: Results of the Cumulative Daylight and Sunlight Assessments; Annex 4: Results of the Future Baseline Daylight and Sunlight Assessments; Annex 5: Results of the Extant Consented Baseline Daylight and Sunlight Assessments Annex 6: Results of the Mirrored Assessment for Rosa Luxemburg Apartments Annex 7: Results of The Sunlight Amenity Assessments Annex 8: Transient Shadow images Annex 9: Solar Glare Images Annex 10: Policy and Legislation Review Annex 11: Hale Road Properties
KEY CONSIDERATIONS	This ES chapter outlines the methodologies applied to identify and assess the baseline conditions at the site and of its surrounds and the potential daylight, sunlight, overshadowing and solar glare effects to sensitive receptors associated with the Proposed Development. Embedded mitigation has been factored into the design process, and this has been summarised as necessary and the residual likely significant effects are identified. The internal daylight, sunlight and overshadowing levels within the proposed residential units are presented in a standalone report which accompanies the planning application. The potential daylight, sunlight, overshadowing and solar glare impacts, and effects associated with the Proposed Development are as follows: • Changes to daylight and sunlight amenity within surrounding residential properties that have a reasonable expectation of natural light once the Proposed Development is complete and operational; • Changes to overshadowing of surrounding outdoor amenity spaces once the Proposed Development is complete and operational; and • The potential for solar glare effects to sensitive viewpoints surrounding the site, particularly drivers of vehicles and trains on nearby roads and railway lines once the Proposed Development is complete and operational.
CONSULTATION	An EIA Scoping Opinion Request Report was submitted to the LBH on 27 July 2026 (hereafter referred to as the 'EIA Scoping Report') to request an EIA Scoping Opinion from the LBH and statutory consultees regarding the scope of the EIA. The EIA Scoping Report is provided in ES Volume 3, Appendix: EIA Methodology – Annex 1. At the time of writing, an EIA Scoping Opinion has not yet been received.

ASSESSMENT METHODOLOGY

Defining the Baseline

- 9.1
- The baseline conditions which have been considered within this ES chapter consists of the existing condition (i.e. a cleared, hoarded site, following the demolition of the previous buildings associated with a light industrial yard).
- 9.2
- As discussed within the introductory chapters of this ES, there are two extant permissions which relate to the site: the Ashley House/ Cannon Factory permission (Outline Ref. HGY/2016/4165; RMA ref. HGY/2018/2353) and the Ashley Park permission (Ref. HGY/2019/0108 / APP/Y5420/W/19/3232707).
- 9.3
- The baseline conditions have been established using a three-dimensional (3D) model of the site and surroundings. This 3D model has been informed by using information based on site visits, online layouts from the London Borough of Haringey (LBH) planning portal, the Valuation Office Agency (VOA) and local Real Estate agent layouts. Measured Survey information (Cloud 10 Model received July 2026) and Ordnance Survey information have also been used to construct the 3D model that will form the baseline conditions for the Daylight, Sunlight, Overshadowing and Solar Glare assessments (DSOSG). This is referred to in this ES chapter as the 'existing baseline scenario'. A 3D image of the baseline site can be found in Figure 9.1.

Figure 9.1 3D image of the Existing Site and Surrounding Buildings (in grey)



- 9.4
- Professional experience was used to determine an appropriate study area, including all sensitive receptors that are likely to experience changes as a result of the Proposed Development.
- 9.5
- This includes the surrounding residential receptors, nearby road junctions, the train tracks to the north of the site as well as amenity areas and solar panels within close proximity to the site. The receptors identified for assessment within this ES chapter were outlined in the EIA Scoping Report submitted to the LBH.
- 9.6
- To determine the baseline conditions, the daylight and sunlight levels within each of the relevant existing sensitive receptors are defined using the Vertical Sky Component (VSC), No-Skyline (NSL) and Annual Probable Sunlight Hours (APSH) methods, in line with BRE Guidance and the regional and local planning policies (as detailed within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 10**). For overshadowing, existing baseline conditions are measured through the BRE '2-hour sun on ground' (SHOG) assessment, otherwise known as the Sunlight Amenity assessment. A Transient Shadow assessment is measured by plotting the shadow plan of existing conditions at three key dates during the year, to demonstrate the current impacts experienced to the surrounding sensitive receptors and amenity areas.
- 9.7
- Solar Glare is not considered using comparative assessments as the potential effects are caused by the Completed Development and these are not mitigated or justified by any existing effects that may occur in the baseline condition. Therefore, the assessment of solar glare is considered in relation to the effect of the Proposed Development in absolute terms based on the Completed Development scenario.

- 9.8 As set out in the EIA Scoping Report, an internal daylight and sunlight assessment of the residential units within the Proposed Development, as well as an assessment of internal overshadowing of proposed amenity areas are considered a design issue and are not considered in detail within this ES. These assessments have been presented in a standalone report which accompanies the planning application, with the outcome of the assessment summarised in this chapter.

Evolution of the Baseline

- 9.9 An evolved baseline scenario describes how a site and its surrounding area might naturally change over time without the Proposed Development (and other cumulative schemes) coming forward. In the event that the Proposed Development does not come forward, the evolved baseline for daylight, sunlight, overshadowing and solar glare would not materially alter at the site or surrounding area and therefore the evolved baseline is not considered further within this ES chapter.
- 9.10 The implementation of other committed or reasonably foreseeable developments in the surrounding area (the 'future baseline') could alter the environmental baseline for surrounding receptors. Those changes are considered separately as part of the cumulative / future baseline assessment
- 9.11 It should be noted that to the east of the site, the development, Berol Quarter (HGY/2023/0261/HGY/2025/0930) and 29-33 The Hale (HGY/2021/2304) are assumed to come forward as part of the future cumulative baseline scenario. As noted above, an assessment of the potential effects on these future receptors has been provided below within the 'Cumulative Assessment' section.

Impact Assessment Methodology

Enabling and Construction

- 9.12 During the enabling and construction phase the level of effect the Proposed Development will have in regard to daylight, sunlight and overshadowing will vary. The effect will almost certainly be less than the effects seen as a result of the Completed Development, given the permanent massing will increase throughout the enabling and construction phase, until the Proposed Development is complete. The construction phase will result in a changing impact on neighbours due to its evolving position. Therefore, a technical assessment of the construction phase is not considered to be necessary as the Completed Development represents the fixed and worst-case effects for these aspects.
- 9.13 Potential solar glare effects will not occur until the building's claddings is fixed and as such, it is not deemed necessary to assess enabling and construction effects in isolation. The assessment of operational effects would be considered a worst-case.

Completed Development

Daylight assessments

- 9.14 The BRE guidance provide two different methods for assessing daylight for existing residential receptors: The VSC method and the NSL method. Each method is summarised in the following sections.
- 9.15 When reviewing the daylight results for each surrounding receptor in the first instance, the VSC results are considered, looking at the daylight potential at the window face. This is the most basic daylight assessment and is considered in conjunction with the NSL to consider the daylight entering the rooms.

Vertical Sky Component (VSC) Method

- 9.16 VSC is a quantified measurement of the amount of skylight falling on a vertical wall or window. This is the ratio of the direct sky luminance falling on a vertical wall at the reference point for the simultaneous horizontal illuminance under an unobstructed sky. The 'standard 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 vertical sky component on a window can be related to the average daylight factor in a room.

- 9.17 Where a potential future receptor is only submitted in outline, a VSC façade assessment is used on the basic massing, typically at its maximum extents. This assesses the full VSC potential of the massing, rather than VSC levels within specific windows.

No Skyline (NSL) Method

- 9.18 The NSL method is a measure of the distribution of daylight at the 'working plane' within a room. In residential properties the 'working plane' means a horizontal 'desktop' plane 0.85 meters (m) in height. The NSL divides those areas of the working plane in a room which receive direct sky light through the windows from those areas of the working plane which cannot. If a significant area of the working plane lies beyond the NSL (i.e. it receives no direct sky light), then the distribution of daylight in the room will be poor and supplementary electric lighting may be required.

Sunlight Assessments

Annual Probable Sunlight Hours (APSH) Method

- 9.19 With regard to sunlight, the same skylight indicator is used for the VSC test at the same reference point to calculate Annual Probable Sunlight Hours (APSH), which is expressed as a percentage.
- 9.20 The BRE Guidance also note:
"Access to sunlight should be checked for the main window of each which faces within 90 degrees (°) of due south".
- 9.21 Therefore, any windows facing 90° of due north need not be analysed as they have no expectation of sunlight.
- 9.22 Where a potential future receptor is only submitted in outline, an APSH façade assessment is used on the basic massing, typically at its maximum extents. This assesses the full APSH potential of the massing, rather than APSH levels within specific windows.

Secondary Daylight and Sunlight Assessment Scenarios

- 9.23 As noted above, in dense urban areas it is not uncommon for deviations from the recommended BRE daylight and sunlight targets to occur. In these instances, the BRE Guidance provides additional assessment scenarios which can be used where relevant to provide additional context and justification for deviations which are exacerbated or driven by elements outside of the Proposed Development. These secondary assessment scenarios are not determinative of significance in EIA terms but provide contextual information to assist planning judgment in dense urban conditions. Further detail on these additional assessments is provided below.
- 9.24 It is important to note that as these assessment scenarios are notional and secondary assessments, they are not used to influence or determine the likely significance of effect assigned to a property. These secondary assessments are presented after the primary significance conclusions, in order to provide context and explain where deviations are influenced by elements outside the Proposed Development.

Balconies/Eaves Removed Assessment

- 9.25 Where buildings are obstructed by self-constraining features such as overhanging balconies and eaves, the BRE guidance states 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 without the balcony in place."

- 9.26 Therefore, this alternative assessment has also been undertaken as a secondary assessment for all relevant daylight and sunlight receptors, in line with the methodologies stated above, without the balconies in place, to provide additional context.

Mirror Assessment

- 9.27 Where the neighbouring receptors sit very close to the boundary of the Proposed Development with windows unusually close to the boundary, Appendix F of the BRE Guidance provides the following in providing context around impacts and alternative targets:

"Example of how to assess targets could be set to those for a 'mirror-image' building of the same height and size an equal distance away on the other side of the boundary."

- 9.28 Therefore, this assessment which provides context around impacts and alternative targets has also been undertaken as a further secondary assessment for all relevant daylight and sunlight receptors, in line with the methodologies stated above.

Extant Consented Baseline Assessments

- 9.29 As with the Mirror Assessment, Appendix F of the BRE Guidance/Guidance also sets out an assessment for all relevant daylight and sunlight receptors, in line with the methodologies outline above, however rather than comparing against the existing baseline, comparing to impacts caused by an extant permission.

"F2 Sometimes there may be an extant planning permission for a site but the developer wants to change the design. In assessing the loss of light to existing windows nearby, a local authority may allow the vertical sky component (VSC) and annual probable sunlight hours (APSH) for the permitted scheme to be used as alternative benchmarks. However, since the permitted scheme only exists on paper, it would be inappropriate for it to be treated in the same way as an existing building, and for the developer to set 0.80 times the values for the permitted scheme as benchmarks".

- 9.30 As the site benefits from two extant planning permission, the Ashley Road South Masterplan (Ref. HGY/2016/4165) and the Ashley Park permission (Ref. HGY/2019/0108 / APP/Y5420/W/19/3232707), a secondary assessment has been undertaken. Whilst both schemes are extant and sit on the same site, it is considered that they were designed to sit alongside each other as per the 2006 Tottenham Hale Urban Centre Masterplan. Therefore, this secondary assessment considers both consented schemes in place at the same time.

- 9.31 In line with the BRE, rather than relying on a 0.8 retained value from the consented position, this secondary assessment compares the retained levels with the Proposed Development in place, to those retained levels with the two extant permissions in place.

- 9.32 In assessing the difference in retained Vertical Sky Component (VSC) levels between the consented schemes and the Proposed Development, regard is had to the commentary provided in the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). The reasoning in the Buckle Street appeal decision is considered as contextual guidance and provides a useful benchmark for interpreting the significance of absolute VSC losses, noting that a loss of 3% VSC or less should be considered virtually imperceptible, whilst a loss of up to 5% VSC would be barely noticeable. Where the proposed development results in a reduction in retained VSC beyond that already established by the consented scheme, this difference is assessed against these thresholds.

"Many of the flats face onto narrow streets or buildings opposite and already have low VSC levels. That is a characteristic of the area. The appellants show that, while the calculated impact figures may indicate a drastic change, in practice, starting from an existing low level, many would experience no more than a 3% absolute loss of daylight, a virtually imperceptible change. The worst affected living rooms would experience less than 5% absolute loss, a barely noticeable change."

- 9.33 It is noted that the Buckle Street appeal decision is a case-specific decision and whilst sets a useful comparator, this is not a binding universal threshold. Notwithstanding this, the BRE Guidance suggests that the performance of a scheme should be reviewed in the context of the site and other schemes of a similar scale and nature.

Overshadowing Assessments

Sunlight Amenity Assessment / SHOG

- 9.34 The sunlight amenity assessment calculates the proportion of an outside amenity area which receives at least two hours of direct sunlight (SHOG). This is achieved by plotting a contour of the area which receives at least two hours of direct sunlight on the 21st March. An amenity space with at least two hours of sunlight across the majority of its area can be said to see acceptable levels of direct sun. Amenity areas surrounding the Site with the potential to see increased levels of shadow (for example Down Lane Park) will be defined and assessed.

Transient Shadow

- 9.35 The BRE Guidance suggest that where large buildings are proposed which may affect a number of gardens or open spaces, it is useful to plot a shadow plan to illustrate the location of shadows at different times of the day and year. For the purpose of this assessment, the transient overshadowing has been mapped for the following three key dates in the year:

- 21st March (Spring Equinox);
- 21st June (Summer Solstice); and
- 21st December (Winter Solstice).

- 9.36 For each of these dates, the overshadowing would be illustrated at hourly intervals throughout the day from 08:00 to 19:00 (Solar time). Some images are not included because the sun will not be present during these times (e.g. from approximately 16:00 onwards on 21 December) and thus no shadow can be cast.

Solar Glare

- 9.37 Viewpoints were selected at the potentially affected traffic intersections around the site and as defined in the 'Methodology for Defining the Baseline and Receptors' and 'Receptor Sensitivity' sections of this ES chapter (Figure 9.2). In some cases, where a driver has multiple signals or junctions to consider, more than one assessment has been provided. These consider the drivers focal point looking straight ahead and at each straight.

- 9.38 For each viewpoint two sets of an angular images were generated:

- Images displaying the time of year. The sunpath is divided into months, taking the 21st of each month as the limit for each section; and
- Images displaying the time of the day. In this case the sunpath is divided by hours of the day. The hours represent mean solar time and not local time, and therefore they do not take daylight saving hours into account.

Solar Radiation to Photovoltaic Panels

- 9.39 The solar radiation assessment calculates the amount of direct solar and diffuse sky radiation received by solar panels with both the existing and Proposed Development in place. The BRE Guidance suggests that where a solar panel receives at least 0.9 times the amount of solar radiation received in the existing scenario, then there would not be a significant impact on the solar panels.

Assumptions and Limitations

- 9.40** Modelling of the existing site and context has been informed by a combination of measured survey data, point laser scan, photogrammetric information and modelling from site photographs.
- 9.41** In some cases, drawings retrieved from the planning portal and/ or historic sales particulars and typical layouts of similar local buildings have been used to determine room use. Where internal configuration information was not available for relevant properties, reasonable assumptions have been applied to the room layouts behind the fenestration. A standard 4.27m room depth has been assumed unless the building form dictated otherwise. This assumed depth is an industry standard used in common practice. Where this was inappropriate to follow, the most realistic and practical design was used, and where there were multiple possible scenarios which could be reasonable, the worst-case option was always chosen to represent the potential for more significant effects.
- 9.42** Reasonable estimations of internal reflectance are used if not known. An internal room reflectance of 0.5 has been assumed for the surrounding receptors.
- 9.43** The solar glare assessment assumes full sun throughout the year and is not based on climatic data where variations in sun levels would be expected. For this reason, the assessment assumes a worst-case scenario.

Cumulative Effects Assessment/Future Baseline Assessment

- 9.44** The cumulative assessments consider the combination of the daylight, sunlight and overshadowing effects of the Proposed Development and relevant cumulative schemes on the existing sensitive receptors. These assessments are undertaken using the same methodologies detailed within this ES chapter and used for the Completed Development scenario.
- 9.45** It should be noted that the cumulative scenario does not present the worst-case for solar glare assessments, as the construction of any potential cumulative schemes can present an obstruction to sunlight, which could potentially reduce the instances of glare that may occur, or act as an obstruction, preventing the instances of glare from impacted surrounding drivers. Therefore, no cumulative solar glare assessment has been undertaken. Any additional glare that may arise as a result of the cumulative schemes is not a design issue related to the Proposed Development and therefore should be considered as part of the applications for said cumulative schemes.
- 9.46** As the cumulative schemes considered relevant for assessment will be comprised of a sensitive use once completed, a future cumulative baseline assessment has also been undertaken to determine the potential effect of the Proposed Development on the future receptors within the relevant cumulative schemes. This scenario considers the daylight and sunlight effects on each relevant potential future receptor, as no potential overshadowing receptors have been identified.
- 9.47** Of the cumulative schemes identified within **ES Volume 1, Chapter 2: EIA Methodology and ES Volume 3, Appendix: EIA Methodology - Annex 2**, the following schemes have been considered to be within close enough proximity (<100m) to materially impact the effects that are presented within Completed Development assessment and therefore have been included within the Cumulative assessment and future baseline scenarios:
- Berol Quarter (HGY/2023/0261/ HGY/2025/0930); and
 - 29-33 The Hale (HGY/2021/2304).
- 9.48** It should be noted that whilst The Hale is currently under construction, construction works have not progressed sufficiently for the scheme to be treated as part of the baseline for this topic and so it is appropriate to address this scheme within the cumulative assessment for this topic, rather than within the existing baseline condition.
- 9.49** Of the remaining cumulative schemes listed for consideration, the development at Block F of the Strategic Development Partnership (SDP) Site, is not considered relevant for assessment given that its scale, distance and relative location from the site is very limited potential for cumulative effects to occur within the receptors assessed within this ES Chapter. Nor is there the potential for the Proposed Development to affect the levels

of daylight, sunlight or overshadowing levels within the cumulative scheme. The Council Depot scheme is located over c.350m to the north of the site and therefore not considered likely to results in cumulative effects or be impacted by the Proposed Development and thus not relevant for assessment.

- 9.50** In addition, qualitative consideration has been given to potential emerging schemes at the Cannon Factory. When considering the likely combined effects of the Proposed Development and Cannon Factory, it is considered that these schemes are unlikely to interact cumulatively due to their position and separation distance. Neighbouring properties which sit in proximity to both sites do not view the proposals from the same facades and therefore, individual units and amenity spaces will not be affected by both schemes. As such, no technical assessment is deemed necessary.
- 9.51** In relation to the Tottenham Hale retail park site allocation, whilst a planning application has not been submitted and therefore, there is no relevant massing data available, it is considered that the site is too far away to interact cumulatively with the Proposed Development and therefore, has been discounted on this basis.

Methodology for Defining Effects

Receptors and Receptor Sensitivity

- 9.52** In terms of sensitivity, the receptors present a range of sensitivities, from Low to High. The receptors which comprise those with high sensitivity include:
- Residential properties;
 - Both public and private amenity spaces;
 - Solar panels; and
 - Drivers of trains and cars.

Magnitude of Impact

- 9.53** The BRE Guidance state the following for use in Environmental Impact Assessments (EIA) within Appendix I when considering the magnitude of impact, sunlight and overshadowing:

“The guidance in this book may be used as the basis for environmental impact assessment, where the skylight and sunlight impact of a new Development on its surroundings are taken into account.

Adverse impacts occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space.

The assessment of impact would depend on a combination of factors and there is no simple rule of thumb that can be applied.

Where the loss of skylight or sunlight fully meets the guidance in this book, the impact would be negligible or minor Adverse. Where the loss of light is well within the guidance, or only a small number of windows or limited area of open space lose light (within the guidance), a classification of negligible is more appropriate. Where the loss of light is only just within the guidance, and a larger number of windows or open space area are affected, a minor Adverse impact would be more appropriate, especially if there is a particularly strong requirement for daylight or sunlight in the affected building or open space.

Where the loss of skylight or sunlight does not meet the guidance in this book, the impact is assessed as minor, moderate or major Adverse. Factors tending towards minor Adverse effect would include:

- Only a small number of windows or limited area of open space are affected;
- The loss is only marginally outside the guidance;
- The affected room has other sources of skylight or sunlight;
- The affected building or open space only has a low-level requirement for skylight and;

- There are particular reasons why alternative, less stringent guidance should be applied, for example an overhang above the window or a window standing usually close to the boundary.

Factors tending towards a major Adverse effect include:

- A large number of windows or a large area of open space is affected;
- The loss of light is substantially outside the guidance;
- All the windows in a particular property are affected; and
- The affected indoor or outdoor spaces have a particularly strong requirement for skylight or sunlight"

9.54 There is no definition within the BRE guidance on moderate effects, so these are determined based on professional judgement.

9.55 The key terminology used to describe the magnitude of impacts are as follows and are determined with reference to the BRE Guidance criteria:

- Major;
- Moderate;
- Minor; and
- Negligible.

Defining the Effect

9.56 The specific criteria targets are discussed below and can be used to apply significance to any effects. It should be noted that each property will be served by a number of windows/ rooms showing a range of magnitudes of impact. In such cases the BRE Guidance outlined in paragraph 9.53 has been used to define the magnitude of impact and hence, significance of effect.

9.57 Should the various assessment methodologies show varying significance levels for the same building, professional judgement should be applied to assign significance based on all evidence available. In some instances, technical breaches of the guidance may occur as a result of self-limiting light features. These include windows that are recessed into the building's facade or placed beneath overhanging balconies, which provide the occupants with private external amenity space but limit the amount of daylight that can reach the window surface from directly above. In such cases, the BRE Guidance suggest additional assessments with these obstructions removed to be run in order to identify these as technical numerical breaches of the guidance. Where this is done, professional judgment may then be used to assign the significance of the effects.

9.58 The nature of effects is defined as beneficial or Adverse, with beneficial effects being where a noticeable improvement in daylight or sunlight levels occurs within a receptor, and Adverse effects being where a noticeable loss of light occurs. Negligible effects are defined as where a loss occurs, but said loss is deemed so minor as not to be noticeable.

Daylight Assessment

9.59 The text below sets out how individual VSC and NSL impacts are determined and defined. These impacts are reviewed together to determine the overall effect on daylight to the property in question, using professional judgement based on the receptor sensitivity, the number of impacts, the magnitude of the impacts and other factors such as self-limiting features.

9.60 It should be noted that where a potential future receptor has only been submitted in outline, there are no detailed facades or room layouts available to undertake a detailed assessment on the daylight and sunlight impacts. In these instances, a façade analysis has been undertaken. This demonstrates the proposed VSC and APSH impacts on the massing.

VSC Criteria

9.61 The BRE Guidance recommend that a window serving a habitable room should be able to benefit from a minimum VSC value of 27%.

9.62 In order to be regarded as meeting the VSC criteria once the Proposed Development has been constructed, a window should either:

- Retain at least 27% VSC in absolute terms; or
- Retain at least 80% of its existing VSC value after the Proposed Development is constructed.

9.63 In certain circumstances it may be appropriate to use different target values. Appendix F within the BRE Guidance, states 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. For example, in his decision to overturn the Local Authorities refusal of planning permission, the Planning Inspectorate on The Whitechapel Estate Appeal (ref: APP/E5900/W/17/3171437) noted that VSC of levels of 15% are considered acceptable in major developments within London. A brief sample of his report has been provided below:

"112. The figures show that a proportion of residual Vertical Sky Component ('VSC') values in the mid-teens have been found acceptable in major developments across London. This echoes the Mayor's endorsement in the pre-SPG decision at Monmouth House, Islington that VSC values in the mid-teens are acceptable in an inner urban environment. They also show a smaller proportion in the bands below 15%."

9.64 As such, whilst this Appeal Decision is not a binding threshold, it is clear that alternative levels of daylight can be deemed acceptable when viewed in their specific context and that strict adherence to the BRE Guidance is not always appropriate.

9.65 Where there will be a noticeable change, the results have been summarised dependant on how far beyond the suggested targets the reductions are from baseline levels. For VSC, based on professional judgment the ranges of reduction have been set at:

- Up to 19.9% (Negligible);
- 20-29.9% (Minor Adverse);
- 30-39.9% (Moderate Adverse); and
- >40% (Major Adverse).

NSL Criteria

9.66 In order to be regarded as meeting the NSL criteria, an existing room should retain at least 80% of its existing NSL value after the Proposed Development is constructed.

9.67 Where the results show compliance with the NSL criteria, the effect is of Negligible significance since the occupants are unlikely to experience any noticeable change to their daylight amenity levels. For the purposes of this assessment, such an effect would be considered Negligible.

9.68 If, following construction of a new development, the NSL changes so that the area of the existing room which receives direct sky light 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.

9.69 Where there will be a noticeable change, the results have been summarised dependant on how far beyond the suggested targets the reductions from baseline levels will occur. For NSL, based on professional judgment the ranges of reduction have been set at:

- Up to 19.9% (Negligible);
- 20-29.9% (Minor Adverse);

- 30-39.9% (Moderate Adverse); and
- >40% (Major Adverse).

Sunlight Assessments

- 9.70** The text below sets out how individual APSH impacts are determined and defined. These impacts are reviewed together to determine the overall effect on sunlight to the property in question, using professional judgement based on the receptor sensitivity, the number of impacts, the magnitude of the impacts and other factors such as self-limiting features.

APSH Assessment

- 9.71** The BRE Guidance for the APSH method state that if a window:
- "...can receive more than one quarter of annual probable sunlight hours, including at least 5% of annual probable sunlight hours during the winter months between 21 September and 21 March, then the room should still receive enough sunlight".*
- 9.72** Accordingly, in order to be regarded as meeting APSH criteria once the Proposed Development has been constructed, a window should either:
- Retain at least 25% total APSH and 5% APSH in the winter months in absolute terms;
 - Retain at least 80% of its existing total and winter APSH values after the Proposed Development is constructed; or
 - The loss of total absolute annual APSH should be no more than 4% lower than the existing level.
- 9.73** Where the results show compliance with the BRE Guidance APSH criteria, the effect is of Negligible significance since occupants are unlikely to experience any noticeable change to their sunlight amenity levels.
- 9.74** Where the assessment demonstrates that sunlight levels will not meet any of the above requirements, the results have been assessed on the basis of how far beyond the suggested targets the reductions from baseline levels will occur. For total APSH, based on professional judgment the ranges of reduction have been split into:
- Up to 19.9% (Negligible);
 - 20-29.9% (Minor Adverse);
 - 30-39.9% (Moderate Adverse); and
 - >40% (Major Adverse).

Overshadowing Assessment

Transient Overshadowing

- 9.75** The BRE Guidance do not include criteria for the scale and nature of effects and subsequent significance of TOS other than to identify the different times of the day and year when shadow would be cast over a surrounding area.
- 9.76** The assessment of potential effects as a result of TOS is therefore based on professional judgement, taking into consideration the overshadowing condition of the existing site and surrounding area, and comparing this against the resultant impact of the Proposed Development.

Sunlight Amenity / SHOG Assessment

- 9.77** It is suggested in the BRE Guidance that for an area to appear adequately sunlit throughout the year, at least half (50%) of any assessment area should see direct sunlight for at least two hours on the 21st March. If, as a result of new development, an existing assessment area will not meet these guidance and the area which can

receive two hours of direct sunlight on the 21st March is reduced to less than 0.8 times its former area, then the loss of sunlight is likely to be noticeable.

- 9.78** Where the results show compliance with the BRE Guidance criteria, the occupants are unlikely to experience any noticeable change to their sunlight amenity levels. For the purposes of this assessment, such an effect would be considered Negligible. Should the relevant criteria not be achieved, a judgment has to be made as to the scale and nature of the effect and thus, the significance of the effect, based on the level of loss, retained sunlight levels and the relevant baseline condition.

- 9.79** A summary of the BRE criteria for the above assessments is provided in Table 9.1.

Table 9.1 Summary of BRE Guidance Criteria

Topic	Method	BRE Guidance Criteria
Daylight	VSC	A window may be Adversely affected if the VSC measured at the centre of the window is less than 27% and less than 0.8 times its former value.
	NSL	A room may be Adversely affected if the daylight distribution (NSL) is reduced beyond 0.8 times its existing area.
Sunlight	APSH	A window may be Adversely affected if a point at the centre of the window receives for the whole year, less than 25% of the APSH including at least 5% of the PSH during the winter months (21st September to 21st March) and less than 0.8 times its former sunlight hours during either period, or (for existing neighbouring buildings), if there is a reduction in total APSH which is greater than 4%.
Overshadowing	Sun Hours on Ground	An area of amenity space or garden may be Adversely affected if less than half (50%) of the area is prevented by buildings from receiving two hours of sunlight on the 21st March (as suggested in BRE Guidance) and the area which can receive some sun on the 21st March is less than 0.8 times its former value.

Solar Glare Assessment

- 9.80** There are no quantitative criteria within the BRE guide or elsewhere on solar glare as to what is or is not acceptable. Therefore, the likelihood of an impact due to solar glare associated with a particular development will be judged on published research and professional experience.
- 9.81** The impact criteria are based on the glare angle (between the glare source and the observer's line of sight), the sensitivity of the viewpoint and the frequency of reflections, which would increase the risk of a glare episode.
- 9.82** Solar glare is not a comparative assessment; the fact it may occur in the baseline does not necessarily justify its occurrence as a result of a Proposed Development. Therefore, the assessment qualitatively considers the effect of the Proposed Development in absolute terms and not against a baseline condition.
- 9.83** The following criteria for the scale of effect are therefore used based on professional judgement:
- Negligible: Glare angles greater than 30°, as reflections beyond this angle are normally not intense enough to cause glare (CIE 146:2000), or between 10° and 30° for brief periods of time;
 - Minor Adverse: Glare angles between 10° and 30° for long periods of time or between 3° and 10° for a short period of time;
 - Moderate Adverse: Glare angles between 3° and 10° for a long period of time; and
 - Major Adverse: Solar reflections with glare angles smaller than 3°.
- 9.84** Glare angle refers to the angle between a reflection and the driver's line of sight. According to International Commission on Illumination (CIE), glare angles beyond 30° are normally of little significance unless the glare source is of unusual intensity (i.e. very reflective glass or tilted rooflights that could reflect intense sunlight from high solar altitudes).
- 9.85** A long period of time is considered as more than two hours per day during more than two months per year.

- 9.86 These are general criteria, which should be adapted to the specific situation in order to consider the complexity of solar glare. The probability of a glare episode occurring can be reduced e.g. a limited intensity.
- 9.87 The severity of glare could also be reduced if the reflections were broken up by the façade, the intensity of the solar reflection is likely to be too weak or if the driver was able to use a car's visor for mitigation. Other parameters may apply in unusual situations.

Scale and Duration of Effect

- 9.88 All effects, unless stated otherwise, will be 'direct', 'local', 'permanent' and 'long-term'.

Categorising Likely Significant Effects

- 9.89 For the purposes of the assessment, a significant effect in EIA terms is one which is Moderate Adverse or Major Adverse. An effect which is Negligible or Minor Adverse is considered to be not significant in EIA terms.

RECEPTORS AND RECEPTOR SENSITIVITY

Existing

Daylight and Sunlight

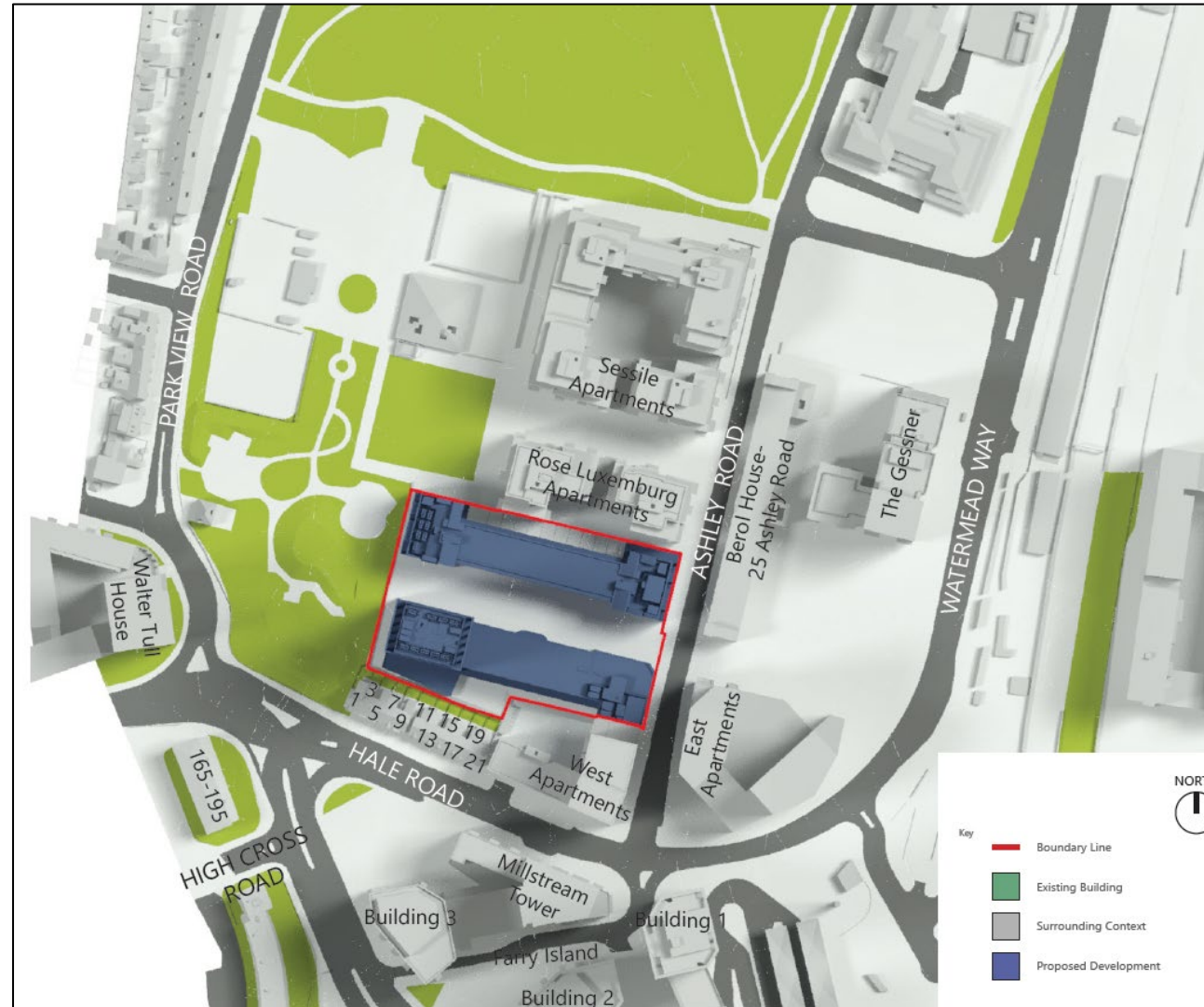
- 9.90 The full list of receptors deemed relevant for daylight and sunlight assessment has been provided below in Table 9.2 and can be seen on Figure 9.2.
- 9.91 All receptors deemed relevant for assessment are comprised of residential use.
- 9.92 As noted in the Scoping Report, it is understood that there are some properties along Hale Road, which are either privately owned, owned by LBH and rented out, or vacant and subject to future redevelopment plans. The assessment will treat those properties occupied as being highly sensitive receptors. Given the existing baseline condition of the vacant nature of the remaining properties, nos. 11-17 (odds*), and our understanding that these properties are vacant and potentially subject to future redevelopment plans, an assessment of these properties will be undertaken however, will form a separate assessment located within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 11** to the ES chapter. Whilst these properties will be treated with the same sensitivity, it is not considered appropriate to consider the reductions in daylight, sunlight and overshadowing to the vacant dwellings in the main body of the assessment and ES chapter. These properties are nevertheless assessed separately out of caution, given the possibility that occupation status could change.

Table 9.2 Identified Existing Receptors for Daylight and Sunlight Assessments

Receptor	Sensitivity
Ferry Island Building 1	High
Ferry Island Building 2	High
The Gessner	High
11 Hale Road*	High
13 Hale Road*	High
15 Hale Road*	High
17 Hale Road*	High
21 Hale Road	High
19 Hale Road	High
1 Hale Road	High
3 Hale Road	High

Receptor	Sensitivity
5 Hale Road	High
7 Hale Road	High
9 Hale Road	High
1B Park View Road	High
1A Park View Road	High
1 Park View Road	High
2 Park View Road	High
The Volunteer	High
3 Park View Road	High
5 Park View Road	High
4 Park View Road	High
6 Park View Road	High
7A Park View Road	High
Rosa Luxemburg Apartments	High
West Apartments	High
Walter Tull House	High
East Apartments	High
Millstream Tower	High
Sessile Apartments	High
165-195 High Cross Road	High
Ferry Island North Apartments Building 3	High

Figure 9.2 Existing Receptor for Daylight and Sunlight Assessment



Overshadowing

9.93 For the sunlight amenity (overshadowing) assessment, the following receptors have been considered due to their orientation and position in relation to the Proposed Development. For example, amenity areas to the south of the proposal are not considered relevant for assessment due to the sun's natural southerly path only casting shadows to the north, east and west. The rear gardens on Hale Street (8) sit to the southwest of the site and as such have been included for completeness.

9.94 All of which are deemed to be high sensitivity. These have been listed below and can be seen in Figure 9.3:

- Down Lane Park Football Pitch (1)
- Down Lane Park Tennis Courts (2)
- Down Lane Park Baseball Court (3)
- Community Centre Playground (4)
- Down Lane Park (5)
- Rear Gardens of 1-21 Hale Road (odds) (6-16)
- Rosa Luxemburg Amenity Area (17)
- The Gessner Amenity Area (18)

- Sessile Apartments Courtyard (19)

Figure 9.3 Existing Receptors for Overshadowing – Sun on Ground Assessment



Photovoltaic Panel

9.95 The following photovoltaic panels have been considered for assessment given their proximity and orientation with regard to the Proposed Development, and are listed below.

- Solar Panels at Rosa Luxemburg Apartments (1)
- Solar Panels at Sessile Apartments (2)
- Solar Panels at The Gessner (3)
- Solar Panels at 2 Ashley Road (East Apartments) (4)

Figure 9.4 Existing Receptors for Overshadowing – Solar Radiation Assessment

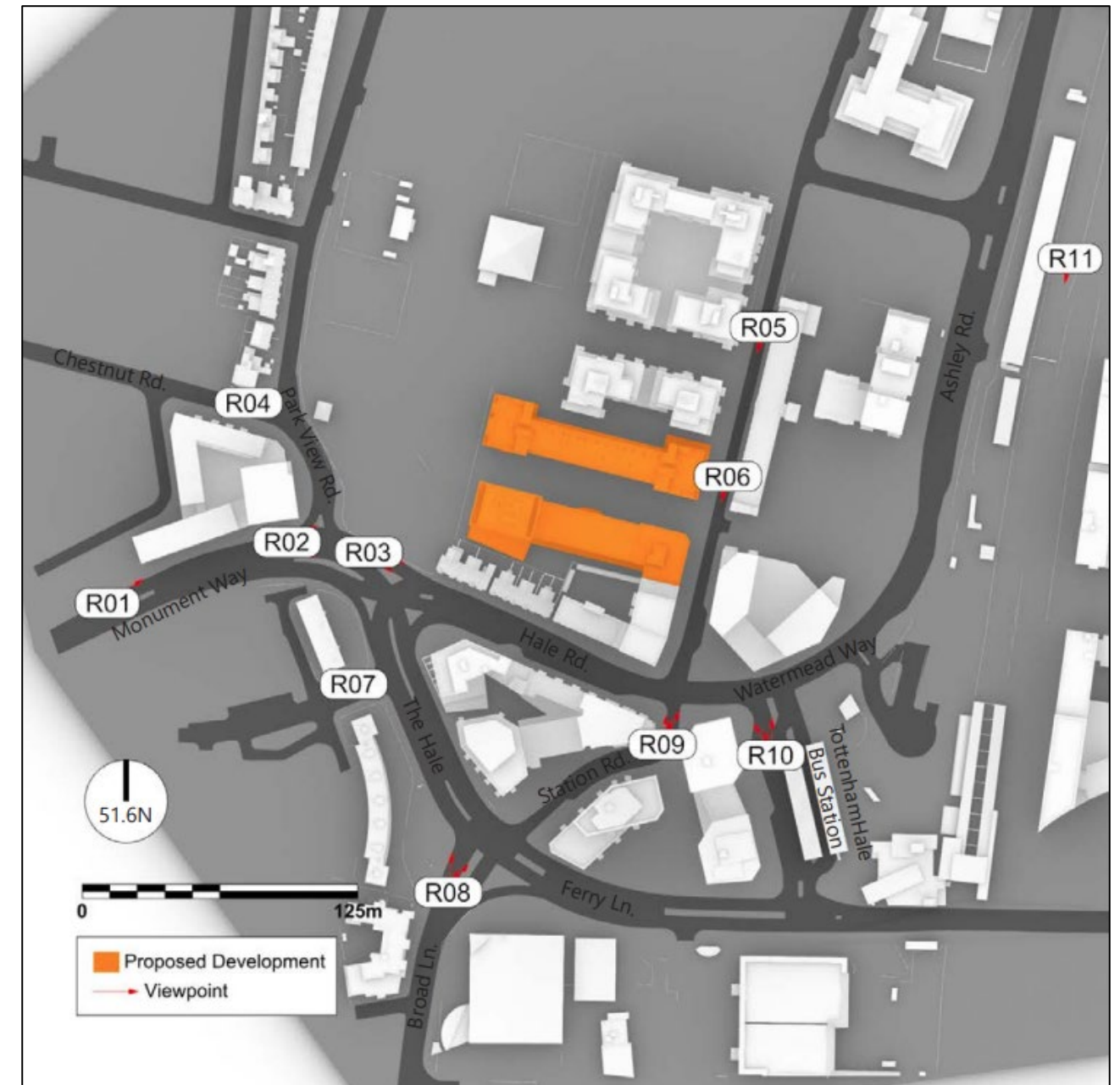


Solar Glare

9.96 11 Key viewpoints have been selected and assessed with respect to solar glare. These have been listed below and can be seen in in Figure 9.5.

- Viewpoint R01 – Travelling east on Monument Way ;
- Viewpoint R02 – Travelling east on Monument Way ;
- Viewpoint R03 – Travelling east on Hale Road;
- Viewpoint R04 - Travelling east on Chesnut Road;
- Viewpoint R05 – Travelling south on Ashley Road;
- Viewpoint R06 – Travelling south on Ashley Road;
- Viewpoint R07 – Travelling east onto The Hale;
- Viewpoint R08 - Travelling north on Broad Lane.;
- Viewpoint R09 - Travelling north on Station Road;
- Viewpoint R10 - Travelling north on Watermead Way;
- Viewpoint R11 – Travelling south along the rail tracks towards Tottenham Hale Station.

Figure 9.5 Viewpoints Considered for the Solar Glare Assessment



Introduced

9.97 All introduced receptors have been considered within the Internal Daylight, Sunlight and Overshadowing Report, submitted as a standalone planning deliverable and are therefore not considered in this ES chapter.

BASELINE CONDITIONS

9.98 The existing baseline conditions comprise of a vacant and cleared site following the demolition of low-storey commercial buildings which previously resided on-site. This is a temporary but actual baseline condition for the purposes of the principal assessment, which results in directly adjacent properties benefiting from temporarily higher levels than they would should either the extant or new Proposed Development be constructed on site.

9.99 It should be noted that the site is an allocated Site (TH6 – Ashley Road South Employment Area and TH5 – Station Square North), and the wider area is subject to a number of other site allocations within the Ashley Road South Masterplan. As such, the surrounding area has been subject to significant regeneration, which has

locally increased the density and associated building heights within the area. The site sits in immediate proximity to mid to high rise buildings overlooking the site on the northern, eastern and southern boundaries. The surrounding buildings sit in close proximity to the site and each other and as such existing levels of daylight are lower than a less dense urban area. In addition, a number of these surrounding receptors benefit from an external balcony space. Where windows and rooms are located beneath or behind these balconies, lower existing levels of daylight and sunlight occur, particularly in the VSC assessment. The results of the baseline VSC assessment show that only 47% of the windows assessed achieve the BRE recommended 27% in the existing condition. Lower levels of existing daylight make windows and rooms more susceptible to change, and likely will result in larger proportional reductions with the Proposed Development in place.

9.100 Notwithstanding this, given the clear nature of the existing site, where windows and rooms have a clearer outlook and are not obstructed by overhanging balconies, there are instances of relatively high levels of existing daylight and sunlight.

9.101 Again, this variation in existing levels is echoed in the overshadowing baseline levels. Where existing receptors are unobstructed in their outlook, such as Down Lane Park to the west, due to the vacant nature of the site, these amenity area experiences high levels of sunlight in the baseline conditions. Although where amenity areas are constrained by their own design, for example, the central amenity space within the Sessile Apartments and the ground floor amenity of Gessner Apartments both see very low levels due to their own design and orientation. The same can be said for the rear gardens of Hale Road, which are located to the north of the buildings.

9.102 Solar glare is not a comparative assessment and so baseline solar glare levels are less important, although it is noted that as the Site is cleared, there will be no existing solar glare as a result.

Daylight and Sunlight

9.103 Table 9.3 to Table 9.5, summarise the baseline daylight and sunlight results for the existing scenario. Full results of the baseline assessments can be found in **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 2.**

Table 9.3 Baseline VSC Summary

Receptor (all residential use)	Total Number of Windows	Total Number of Windows that Achieve or Exceed VSC Levels Suggested in the BRE Guidance	Total Number of Windows that Achieve VSC Levels Below those Suggested in the BRE Guidance
Ferry Island Building 1	514	271	243
Ferry Island Building 2	245	33	212
The Gessner	485	282	203
21 Hale Road	4	1	3
19 Hale Road	7	2	5
1 Hale Road	6	3	3
3 Hale Road	8	2	6
5 Hale Road	6	2	4
7 Hale Road	6	2	4
9 Hale Road	5	2	3
1B Park View Road	9	8	1
1A Park View Road	9	8	1
1 Park View Road	5	4	1
2 Park View Road	5	4	1
The Volunteer	3	1	2

Receptor (all residential use)	Total Number of Windows	Total Number of Windows that Achieve or Exceed VSC Levels Suggested in the BRE Guidance	Total Number of Windows that Achieve VSC Levels Below those Suggested in the BRE Guidance
3 Park View Road	5	4	1
5 Park View Road	9	6	3
4 Park View Road	7	4	3
6 Park View Road	7	5	2
7A Park View Road	5	4	1
Rosa Luxemburg Apartments	201	66	135
West Apartments	178	86	92
Walter Tull House	172	101	71
East Apartments	332	186	146
Millstream Tower	331	126	205
Sessile Apartments	462	208	254
165-195 High Cross Road	100	20	80
Ferry Island North Apartments Building 3	170	112	58
Grand Total	3296	1553	1743

Table 9.4 Baseline NSL Summary

Receptor (all residential use)	Total Number of Rooms	Total Number of Rooms that Achieve or Exceed NSL Levels Suggested in the BRE Guidance	Total Number of Rooms that Achieve NSL levels below those suggested in the BRE Guidance
Ferry Island Building 1	285	243	42
Ferry Island Building 2	149	38	111
The Gessner	287	229	58
21 Hale Road	4	1	3
19 Hale Road	4	2	2
1 Hale Road	4	4	0
3 Hale Road	5	5	0
5 Hale Road	5	3	2
7 Hale Road	5	4	1
9 Hale Road	5	3	2
1B Park View Road	4	4	0
1A Park View Road	4	4	0
1 Park View Road	2	2	0
2 Park View Road	2	2	0
The Volunteer	2	2	0
3 Park View Road	2	2	0
5 Park View Road	3	2	1
4 Park View Road	2	2	0
6 Park View Road	3	3	0
7A Park View Road	2	2	0

Ashley Park Chapter 9: Daylight, Sunlight, Overshadowing and Solar Glare

Receptor (all residential use)	Total Number of Rooms	Total Number of Rooms that Achieve or Exceed NSL Levels Suggested in the BRE Guidance	Total Number of Rooms that Achieve NSL levels below those suggested in the BRE Guidance
Rosa Luxemburg Apartments	132	103	29
West Apartments	104	86	18
Walter Tull House	79	79	0
East Apartments	162	137	25
Millstream Tower	190	128	62
Sessile Apartments	347	183	164
165-195 High Cross Road	32	32	0
Ferry Island North Apartments Building 3	119	103	16
Grand Total	1944	1408	536

Table 9.5 Baseline APSH Summary

Receptor (all residential use)	Total Number of Rooms Facing the Site Within 90° of Due South	Total Number of Rooms that Achieve or Exceed both Annual and Winter APSH Levels Suggested in the BRE Guidance	Total Number of Rooms that Achieve Annual or Winter APSH Levels Below those Suggested in the BRE Guidance
Ferry Island Building 1	35	25	10
Ferry Island Building 2	12	12	0
The Gessner	53	45	8
21 Hale Road	0	0	0
19 Hale Road	0	0	0
1 Hale Road	0	0	0
3 Hale Road	0	0	0
5 Hale Road	0	0	0
7 Hale Road	0	0	0
9 Hale Road	0	0	0
1B Park View Road	1	1	0
1A Park View Road	1	1	0
1 Park View Road	1	1	0
2 Park View Road	1	1	0
The Volunteer	0	0	0
3 Park View Road	1	1	0
5 Park View Road	1	1	0
4 Park View Road	1	1	0
6 Park View Road	1	1	0
7A Park View Road	1	1	0
Rosa Luxemburg Apartments	46	48	8
West Apartments	18	9	9
Walter Tull House	26	26	26
East Apartments	54	26	28
Millstream Tower	73	2	71
Sessile Apartments	144	94	50

Receptor (all residential use)	Total Number of Rooms Facing the Site Within 90° of Due South	Total Number of Rooms that Achieve or Exceed both Annual and Winter APSH Levels Suggested in the BRE Guidance	Total Number of Rooms that Achieve Annual or Winter APSH Levels Below those Suggested in the BRE Guidance
165-195 High Cross Road	12	5	7
Ferry Island North Apartments Building 3	0	0	0
Grand Total	482	301	217

9.104 Typically, the existing receptors experience existing levels of daylight below the BRE recommendations due to the dense urban nature of the surrounding context. The majority of receptors have a direct view of an adjacent neighbour, which are typically within a close proximity and of substantial height and mass. The receptors with the highest number of windows are also served by self-constraining overhanging features such as balconies or set beneath solid obstructions such as deep access decks. Where these self-constraining features occur, they cut out light from the top part of the sky, reducing daylight and sunlight potential within the receptors affected.

9.105 At Rosa Luxemburg Apartments, East Apartments, West Apartments, Millstream Tower, and the buildings 1-3 at Ferry Island, windows especially are beneath deep overhanging balconies which obstruct the windows beneath which results in lower levels of daylight.

9.106 At 165-195 High Cross Road, windows are set beneath a solid overhanging access deck which will also result in deviating levels of daylight from the BRE Guidance, however, see high levels of NSL compliance due to the unusual open outlook across the low-rise and underdeveloped existing site.

9.107 As a result of these solid-overhangs, and self-limiting design features, any Adverse effect the Proposed Development have may on these receptors will be exacerbated. As such any proportional reductions that occur onto these existing receptors should be viewed flexibly given the already lower levels of daylight. An additional assessment with the balconies removed has been undertaken to highlight the Adverse effects of these self-constraining features.

9.108 The baseline sunlight assessment (APSH) indicates that the vast majority of south facing rooms do comply with the BRE guidance for both the winter and annual period. This represents a good level of compliance in this urban context. Where lower levels of compliance do occur, they are primarily driven by self-limiting, or neighbourly factors, such as solid overhanging balconies or neighbouring massing elements.

Overshadowing

9.109 The baseline BRE '2 hours Sun Contour' levels are shown on drawings included within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 7**.

9.110 The assessment considered the most proximate amenity areas.

9.111 In the baseline condition, six of 19 spaces assessed experience two hours of direct sunlight on March 21st to at least 50% of the space assessed and therefore shows full compliance with the BRE Guidance in the baseline scenario.

9.112 Of the remaining 13 amenity spaces those referred to as 6-16 and 18-19, all see levels below 50% ranging from 0% to 17% is likely due to either northerly orientation in the case of areas 6-16, or massing to the south at 18 and 19, reducing the sunlight potential within these amenity areas.

Transient Shadow

9.113 As there is no massing on-site, there is no shadow cast onto neighbouring receptors.

Solar Glare

9.114 As per the description of the baseline scenario, the site is vacant. As such, there is no potential for reflective solar glare in the baseline scenario.

POTENTIAL EFFECTS

Enabling and Construction

9.115 As noted above, the daylight, sunlight, overshadowing and solar glare assessments consider the Proposed Development as fully completed. This presents the worst-case and therefore no construction assessment is required. Refer to the results of the Completed Development, which can be applied to the later stages of the construction works.

Completed Development

Daylight and Sunlight

9.116 Full Details of the VSC, NSL and APSH assessments for the Proposed Development can be found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 2**. A summary of these can be found in Table 9.6 to Table 9.8 to below.

Table 9.6 VSC in Relation to BRE Guidance

Receptor (all residential use)	Total number of Windows	Total number of windows that achieve or exceed VSC levels suggested in the BRE Guidance	Total number of windows that achieve VSC levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
Ferry Island Building 1	514	514	0	0	0	0
Ferry Island Building 2	245	245	0	0	0	0
The Gessner	485	485	0	0	0	0
21 Hale Road	4	0	0	0	4	4
19 Hale Road	7	0	0	0	7	7
1 Hale Road	6	3	2	0	1	3
3 Hale Road	8	0	0	0	8	8
5 Hale Road	6	1	0	0	5	5
7 Hale Road	6	0	0	1	5	6
9 Hale Road	5	0	0	0	5	5
1B Park View Road	9	9	0	0	0	0
1A Park View Road	9	9	0	0	0	0
1 Park View Road	5	5	0	0	0	0
2 Park View Road	5	5	0	0	0	0
The Volunteer	3	3	0	0	0	0
3 Park View Road	5	5	0	0	0	0
5 Park View Road	9	9	0	0	0	0
4 Park View Road	7	7	0	0	0	0

Receptor (all residential use)	Total number of Windows	Total number of windows that achieve or exceed VSC levels suggested in the BRE Guidance	Total number of windows that achieve VSC levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
6 Park View Road	7	7	0	0	0	0
7A Park View Road	5	5	0	0	0	0
Rosa Luxemburg Apartments	201	115	30	18	38	86
West Apartments	178	120	11	11	36	58
Walter Tull House	172	152	14	6	0	20
East Apartments	332	280	16	12	24	52
Millstream Tower	331	325	6	0	0	6
Sessile Apartments	462	457	4	1	0	5
165-195 High Cross Road	100	52	14	29	5	48
Ferry Island North Apartments Building 3	170	151	16	3	0	19
Grand Total	3296	2964	113	81	138	332

Table 9.7 NSL in Relation to BRE Guidance

Receptor (all residential use)	Total number of rooms	Total number of rooms that achieve or exceed NSC levels suggested in the BRE Guidance	Total number of rooms that achieve NSL levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
Ferry Island Building 1	285	285	0	0	0	0
Ferry Island Building 2	149	149	0	0	0	0
The Gessner	287	287	0	0	0	0
21 Hale Road	4	0	1	0	3	4
19 Hale Road	4	1	0	0	3	3
1 Hale Road	4	4	0	0	0	0
3 Hale Road	5	1	1	0	3	4
5 Hale Road	5	2	2	0	1	3
7 Hale Road	5	1	1	0	3	4
9 Hale Road	5	1	0	0	4	4
1B Park View Road	4	4	0	0	0	0
1A Park View Road	4	4	0	0	0	0
1 Park View Road	2	2	0	0	0	0
2 Park View Road	2	2	0	0	0	0
The Volunteer	2	2	0	0	0	0
3 Park View Road	2	2	0	0	0	0
5 Park View Road	3	3	0	0	0	0
4 Park View Road	2	2	0	0	0	0

Receptor (all residential use)	Total number of rooms	Total number of rooms that achieve or exceed NSC levels suggested in the BRE Guidance	Total number of rooms that achieve NSL levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
6 Park View Road	3	3	0	0	0	0
7A Park View Road	2	2	0	0	0	0
Rosa Luxemburg Apartments	132	100	6	4	22	32
West Apartments	104	84	4	7	9	20
Walter Tull House	79	79	0	0	0	0
East Apartments	162	145	2	3	12	17
Millstream Tower	190	190	0	0	0	0
Sessile Apartments	347	346	1	0	0	1
165-195 High Cross Road	32	32	0	0	0	0
Ferry Island North Apartments Building 3	119	117	2	0	0	2
Grand Total	1944	1850	20	14	60	94

Table 9.8 APSH in relation to the BRE Guidance

Receptor (all residential use)	Total Number of Main Living Rooms Facing the Site Within 90° of Due South	Total number of rooms that achieve or exceed both Annual and Winter APSH levels suggested in the BRE Guidance	Total number of rooms that achieve Annual APSH levels below those suggested in the BRE Guidance				Total number of rooms that achieve Winter APSH levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total	20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
Ferry Island Building 1	35	35	0	0	0	0	0	0	0	0
Ferry Island Building 2	12	12	0	0	0	0	0	0	0	0
The Gessner	53	53	0	0	0	0	0	0	0	0
21 Hale Road	0	0	0	0	0	0	0	0	0	0
19 Hale Road	0	0	0	0	0	0	0	0	0	0
1 Hale Road	0	0	0	0	0	0	0	0	0	0
3 Hale Road	0	0	0	0	0	0	0	0	0	0
5 Hale Road	0	0	0	0	0	0	0	0	0	0
7 Hale Road	0	0	0	0	0	0	0	0	0	0
9 Hale Road	0	0	0	0	0	0	0	0	0	0
1B Park View Road	1	1	0	0	0	0	0	0	0	0
1A Park View Road	1	1	0	0	0	0	0	0	0	0
1 Park View Road	1	1	0	0	0	0	0	0	0	0

Receptor (all residential use)	Total Number of Main Living Rooms Facing the Site Within 90° of Due South	Total number of rooms that achieve or exceed both Annual and Winter APSH levels suggested in the BRE Guidance	Total number of rooms that achieve Annual APSH levels below those suggested in the BRE Guidance				Total number of rooms that achieve Winter APSH levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total	20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
2 Park View Road	1	1	0	0	0	0	0	0	0	0
The Volunteer	0	0	0	0	0	0	0	0	0	0
3 Park View Road	1	1	0	0	0	0	0	0	0	0
5 Park View Road	1	1	0	0	0	0	0	0	0	0
4 Park View Road	1	1	0	0	0	0	0	0	0	0
6 Park View Road	1	1	0	0	0	0	0	0	0	0
7A Park View Road	1	1	0	0	0	0	0	0	0	0
Rosa Luxemburg Apartments	46	36	1	0	4	5	0	0	9	9
West Apartments	18	18	0	0	0	0	0	0	0	0
Walter Tull House	26	26	0	0	0	0	0	0	0	0
East Apartments	54	50	0	1	3	4	0	0	0	0
Millstream Tower	73	73	0	0	0	0	0	0	0	0
Sessile Apartments	144	143	0	0	0	0	0	0	1	1
165-195 High Cross Road	12	12	0	0	0	0	0	0	0	0
Ferry Island North Apartments Building 3	0	0	0	0	0	0	0	0	0	0
Grand Totals	482	467	1	1	7	9	0	0	10	10

9.117 As detailed in the full detailed VSC and NSL analysis and summarised in Table 9.6 and Table 9.7 above, the results of the daylight assessments (VSC and NSL) for the Completed Development scenario show that the following properties would not experience any noticeable reductions and that they show full compliance with the BRE Guidance;

- Ferry Island Building 1
- Ferry Island Building 2
- The Gessner
- 1A – 7A Park View Road
- The Volunteer

9.118 Therefore, the overall effect to daylight at the above properties with the Proposed Development in place is considered to be direct, local, long-term, permanent and Negligible (not significant).

9.119 As detailed in the full detailed APSH analysis and summarised in Table 9.8 above, the results of the sunlight assessment (APSH) for the Completed Development scenario shows that the following properties would show full compliance with BRE Guidance:

- Ferry Island Building 1
- Ferry Island Building 2
- The Gessner
- 1-21 Hale Road (odds)
- 1A – 7A Park View Road
- The Volunteer
- West Apartments
- East Apartments
- Millstream Tower
- 165-195 High Cross Road
- Ferry Island Building 3

9.120 Therefore, the overall effect to sunlight at the above properties with the Proposed Development in place is considered to be direct, local, long-term, permanent and Negligible (not significant).

9.121 The remaining properties which do see daylight and sunlight deviations have been discussed further below.

9.122 It is important to consider that a large portion of the windows and the majority of rooms within the neighbouring properties that face the Site enjoy very high levels of existing daylight due to the vacant nature of the existing Site. Therefore, any meaningful development will inevitably result in a noticeable relative change in light levels.

9.123 There are also a number of windows which are obstructed in the existing position, either by an overhanging balcony or as a result of proximity to tall buildings. Where this occurs, these windows have lower levels of existing daylight and sunlight and as such are more sensitive to larger proportional reductions.

9.124 As discussed above, where relevant secondary assessments have been discussed for certain receptors. This includes the use of the 'balconies removed', 'mirrored baseline' or 'consented vs proposed' assessments. These secondary assessments do not influence the significance conclusion but are presented to provide context and justification.

Rosa Luxemburg Apartments

9.125 This 10-storey mixed-use apartment block is located directly to the north of the Proposed Development and currently benefits from a clear view over the Site from the southern elevation. This property is comprised of commercial use at the ground floor and residential flats above.

Daylight

9.126 The results of the VSC assessment show that with the Proposed Development in place, 115 (57%) of 201 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 30 would experience a minor impact, 18 would experience a Moderate Adverse impact and 38 would experience a Major Adverse impact.

9.127 The results of the NSL assessment show that with the Proposed Development in place, 100 (76%) of the 132 rooms assessed would show full compliance with the BRE Guidance. Of the remaining 32 rooms, six would experience a Minor Adverse reduction, four would experience a Moderate Adverse reduction and 22 a Major Adverse reduction.

9.128 Based on the above, considering impact on VSC and NSL compliance compared to the existing scenario in isolation, the effect on this property is considered to be local, long-term, direct, and Major Adverse (**significant**).

Secondary Assessments

9.129 As noted in the BRE, as this property is served by overhanging balconies, an additional assessment has been undertaken. Full details of this assessment are found within Annex 2. With the overhanging balconies removed, the compliance rate improves with 126 (63%) of the 201 windows assessed would see no noticeable reduction in daylight.

9.130 Of the remaining 75 windows that continue to deviate, 31 would experience a Minor Adverse reduction, 20 would see a Moderate Adverse reduction and the remaining 24 a Major Adverse Reduction.

9.131 With the balconies removed, the retained levels of VSC within the affected windows also improve, with 34 of the deviating windows also retaining 15% VSC which is a level that has been accepted in some urban contexts. Of the remaining 41 deviating windows that retain below 15% VSC with the balconies removed, 33 still experience deviating levels of VSC within the existing scenario, demonstrating how constrained this receptor is within the existing scenario.

9.132 This receptor also presents a continuous and solid obstruction sitting directly on the site facing boundary, which places an unneighbourly constraint on the development site, as any significant massing on site would result in similar impacts to those presented by the Proposed Development. As per the BRE Guidance, a 'mirror image' can be used to set an alternative baseline in this type of situation. Therefore, we have undertaken a mirror baseline assessment and full details of this can be found in Annex 6, which shows that 150 of the 201 windows assessed would experience the same or a greater VSC reduction as a result of a mirrored massing of this receptor, than when compared to the Proposed Development.

9.133 The mirrored NSL assessment shows that 98 of the 132 rooms assessed would retain the same or lower NSL levels as a result of the mirrored massing, compared to the Proposed Development. Both assessments therefore highlight that the Proposed Development would have a lesser impact on this receptor than if it were to neighbour itself. This highlights the extent to which the design of this receptor constrains development on the adjoining site and demonstrates that a comparable massing on the opposite side of the boundary would produce similar or greater effects.

9.134 The receptor sits immediately adjacent to a site long identified for redevelopment, such that a high degree of change from the current cleared-site baseline is unsurprising. That context is material, but does not alter the significance conclusion from the primary assessment.

Sunlight

9.135 The results of the APSH assessment show that of the 46 main living rooms with windows facing within 90 degrees of due south, 36 (78%) show full compliance with the BRE Guidance.

9.136 The 10 remaining rooms present five deviations in Annual sunlight and nine deviations in Winter sunlight. Each impacted room is set beneath a solid overhanging balcony which limits sunlight potential to the rooms set beneath.

9.137 Based on the above, considering the high overall compliance, and where deviations occur, they are set beneath solid overhanging balconies, the effect on sunlight within this property is considered to be local, long term, direct and Moderate Adverse (**significant**).

Secondary Assessments

9.138 With the overhanging balconies removed, compliance improves up to the 38 (83%) of the 46 main living rooms would show full compliance with the BRE Guidance. It would also reduce the number of Total APSH deviations to a single major impact and reduce the number of Winter APSH deviations by one.

9.139 Whilst there are major deviations in Winter APSH below the BRE target of 5%, seven of the rooms achieve Total APSH sunlight levels in excess of 25% with the majority above 33%. The remaining Total APSH deviation would achieve levels of 20% with the Proposed Development in place, only marginally below the BRE target of 25%.

Sessile Apartments

9.140 This 11-storey mixed-use apartment block is located further to the north of the proposals. There is commercial use on the ground floor, both commercial and residential uses on the first floor, and residential across the upper floors. This receptor will have an oblique view of the Proposed Development from the southern elevation.

Daylight

9.141 The results of the VSC assessment show that with the Proposed Development in place, 457 (99%) of 462 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 4 would experience a minor impact and 1 would experience a moderate Adverse impact.

9.142 Each of the five windows that deviate are secondary windows that serve dual aspect LKD's which in each case benefit from a separate, unaffected window that retains in excess of 34% VSC, and therefore the 'real-world' impact of the deviating window is considered to be limited.

9.143 The results of the NSL assessment show that with the Proposed Development in place, all rooms assessed would show full compliance with the BRE Guidance.

9.144 Based on the above, considering the high VSC compliance and full NSL compliance, the effect on daylight within this property is considered to be local, long term, direct and Minor Adverse (not significant).

Sunlight

9.145 The results of the APSH assessment show that 143 (99%) of the 144 rooms assessed, would not show a noticeable reduction in sunlight levels and therefore are fully in line with BRE Guidance. The remaining deviation occurs within a ground floor LKD with a Major Adverse reduction to Winter APSH levels.

9.146 The Winter APSH levels are reduced to 4%, which is marginally below the BRE Guideline target of 5%. This room will also benefit from full compliance levels of Total APSH levels at 37%.

9.147 Based on the above, considering the high overall compliance, and where the deviation occurs it is only marginally below the noticeable thresholds, the effect on sunlight within this property is considered to be local, long term, direct and Minor Adverse (not significant).

East Apartments

9.148 This 19-storey mixed-use apartment block is located directly to the east of the Proposed Development and enjoys an unobstructed view over the undeveloped site from the western elevation. This has resulted in a number of windows experiencing high levels of daylight which is unusual for an urban context such as this.

Daylight

9.149 The results of the VSC assessment show that with the Proposed Development in place, 280 (84%) of 332 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 16 would experience a minor impact, 12 would experience a moderate Adverse impact and 26 would experience a Major Adverse impact.

9.150 The results of the NSL assessment show that with the Proposed Development in place, 145 (90%) of the 162 rooms assessed would show full compliance with the BRE Guidance. Of the remaining 17 rooms, two would experience a Minor Adverse reduction, three would experience a Moderate Adverse reduction and 12 a Major Adverse reduction.

9.151 Based on the above, considering the high VSC and NSL compliance, the effect on daylight within this property is considered to be local, long-term, direct and Minor Adverse (not significant).

Secondary Assessment

9.152 As noted above, as the Site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE, drawing comparison to between the retained levels with the Proposed Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in Annex 5.

9.153 Of the 52 deviating windows, each would only experience an absolute VSC shift of 2.6% or less compared to the levels presented with the consented massing in place. This level of shift has previously been considered to be "virtually imperceptible" within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). As such it is considered that the levels of retained VSC with the Proposed Development in place would not be noticeably different than those that would occur with both consented schemes in place.

Sunlight

9.154 The results of the APSH assessment show that 50 (93%) of the 54 rooms assessed, would not show a noticeable reduction in sunlight levels and therefore are fully in line with BRE Guidance. The remaining four deviations are split between one Moderate Adverse Reduction and three Major Adverse Reductions to Total APSH levels.

9.155 Within these deviating LKDs, whilst Total APSH levels are reduced further below the BRE Guidance target of 25%, the Winter APSH levels within the rooms remain unchanged.

9.156 Based on the above, considering the high overall compliance, the effect on sunlight within this property is considered to be local, long term, direct and Minor Adverse (not significant).

2 Ashley Road (Ferry Island Building 3)

9.157 This 18-storey mixed-use receptor is located to the south of the site and will have an overlooking view of the Site from the northern elevation.

Daylight

9.158 The results of the VSC assessment show that with the Proposed Development in place, 151 (89%) of 170 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 15 would experience a minor impact and 4 would experience a moderate Adverse impact.

9.159 Each of the remaining 19 impacted windows all experience deviating levels of VSC within the existing scenario, six of which are located on the lower levels of the northern elevation where the outlook is directly obstructed by the massing of Millstream Tower. As such these lower levels result in exacerbated proportional reductions with the Proposed Development in place.

9.160 The remaining 13 windows are set beneath a solid overhanging obstruction which will limit the daylight potential these windows receive. Each of the 13 deviating windows set beneath balconies serve dual-aspect LKDs which retain in excess of 25% VSC, with the majority retaining over 27% VSC and see no impact as a result of the Proposed Development. As such we would consider the 'real-world' impact within these LKDs to be limited.

9.161 The results of the NSL assessment show that with the Proposed Development in place, 117 (98%) of the 119 rooms assessed would show full compliance with the BRE Guidance. Of the remaining two rooms, both would experience a Minor Adverse reduction.

9.162 Based on the above, considered the high level of VSC and NSL compliance and that the deviations are driven the overhanging obstructions, the effect on daylight within this property is considered to be direct, local, permanent, long-term and Minor Adverse (not significant).

Secondary Assessment

9.163 As noted above, as the Site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE, drawing comparison to between the retained levels with the Proposed

Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.

- 9.164** Each of the deviating six windows located with an obstructed view of Millstream Tower, all also deviate with the consented massing in place, with absolute VSC shifts of 3% or less, and as such is considered within the range considered “*virtually imperceptible*” within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). Therefore, the impacts of the Proposed Development on these six windows are considered to be not materially worse than those that would occur with both consented schemes in place.

Sunlight

- 9.165** As set out in Table 9.8 the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a direct, local, permanent, long-term, Negligible (not significant) effect.

Millstream Tower

- 9.166** This 20-storey mixed-use apartment block is located to the south of the Proposed Development across Hale Road. This development comprises commercial use on the ground floor and residential flats across the upper floors.

Daylight

- 9.167** The results of the VSC assessment show that with the Proposed Development in place, 325 (98%) of 331 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, all six would experience a minor impact. Of these six deviating windows, five retain VSC levels of at least 15%, which has been considered acceptable for an urban context, with the remaining window retaining 14.5%, only marginally below this target.
- 9.168** It should be noted that each deviating window also experiences VSC levels below the BRE target in the existing condition and are therefore more susceptible to reductions.
- 9.169** The results of the NSL assessment show that with the Proposed Development in place, all rooms would show full compliance with the BRE Guidance.
- 9.170** Based on the above, considering the acceptable retained levels of VSC and full NSL compliance, the effect on this property is considered to be local, long-term, direct, and Minor Adverse (not significant).

Sunlight

- 9.171** As set out in Table 9.8 the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a direct, local, permanent, long-term, Negligible (not significant) effect.

West Apartments

- 9.172** This 16-storey mixed use receptor is located directly to the south of the site and will have a direct view of the proposals from the north and west elevations. This receptor currently enjoys an open outlook over an undeveloped site. This has resulted in a number of windows on the northern facade experiencing high levels of daylight unusual for a very dense context such as this.

Daylight

- 9.173** The results of the VSC assessment show that with the Proposed Development in place, 120 (67%) of 178 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 11 would experience a minor impact, 11 would experience a moderate Adverse impact and 36 would experience a major Adverse impact.

- 9.174** All of the 58 deviating windows occur on the lowest six floors of this neighbour. These floors are obstructed by the existing L-shape nature of the courtyard levels, making them entirely reliant on daylight from across the vacant Site which has been allocated for development and was always likely to be redeveloped in some way. As such, these reductions are considered to be unavoidable, and it is likely that any other massing option on this Site would likely result in similar impacts. All windows above the sixth floor show full compliance with the BRE Guidance, highlighting that where windows are not constrained in the existing scenario, the Proposed Development has a negligible impact.

- 9.175** The results of the NSL assessment show that with the Proposed Development in place, 84 (81%) of the 104 rooms assessed would show full compliance with the BRE Guidance. Of the remaining 20 rooms, four would experience a Minor Adverse reduction, seven would experience a Moderate Adverse reduction and nine a Major Adverse reduction.

- 9.176** Based on the above, and notwithstanding full NSL compliance in a majority of rooms, the reductions in VSC affecting the lower courtyard-constrained levels result in an overall daylight effect that is considered local, long-term, direct and Moderate Adverse (**significant**).

Secondary Assessment

- 9.177** As noted above, as the Site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE Guidance/Guidance, drawing comparison to between the retained levels with the Proposed Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in Annex 5.

- 9.178** Of the deviating 58 windows, each would experience only a 4.6% absolute VSC shift compared to the levels within the same windows with the Consented Scheme in place. As such this is within the range considered to be “barely noticeable” within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757).

Sunlight

- 9.179** As set out in Table 9.8 the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a direct, local, permanent, long-term, Negligible (not significant) effect.

165--195 High Cross Road

- 9.180** This four-storey residential receptor is located to the southwest of the Proposed Development, further to the Hale Road terraced housing and across Hale Road. It does however have a direct view onto the site from the eastern elevation. The site facing windows at this receptor are set beneath deep overhanging balconies, which results in lower levels of daylight directly beneath the obstruction.

Daylight

- 9.181** The results of the VSC assessment show that with the Proposed Development in place, 52 (52%) of 100 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 14 would experience a minor impact, 29 would experience a moderate Adverse impact and 5 would experience a major Adverse impact.

- 9.182** It should be noted that each of the 48 deviating windows are overhung by a balcony. As stated above, where balconies provide an essential private outdoor amenity space, they also present a significant obstruction to daylight potential of the windows beneath them.

- 9.183** The results of the NSL assessment show that with the Proposed Development in place, all 32 rooms would show full compliance with the BRE Guidance.

- 9.184** Based on the reduction in VSC compliance, but considering the full NSL compliance, the effect on daylight within this property is considered to be local, direct, permanent, long term and Moderate Adverse (**significant**).

Secondary Assessment

9.185 As noted in the BRE, as this property is served by overhanging balconies, an additional assessment has been undertaken. Full details of this assessment are found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.

9.186 With the overhanging eaves removed, each window experiences no noticeable reduction and would be in line with the BRE Guidance. This therefore highlights how the deviations and low levels of daylight are exacerbated and primarily driven by the deep overhanging access decks.

Sunlight

9.187 As set out in Table 9.8 the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a direct, local, permanent, long-term, Negligible (not significant) effect.

Walter Tull House

9.188 This 16-storey mixed-use apartment block is located further to the west of the Proposed Development across Park View Road. This property currently benefits from an unobstructed view over the undeveloped Site from the eastern elevation. There are site facing windows at this receptor which are set beneath deep overhanging balconies, which results in lower levels of daylight directly beneath the obstruction.

Daylight

9.189 The results of the VSC assessment show that with the Proposed Development in place, 152 (88%) of 172 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 14 would experience a minor impact and six would experience a moderate Adverse impact. Again, where each deviation occurs, the window is overhung by a balcony, which significantly reduces the daylight potential of the window below.

9.190 The results of the NSL assessment show that with the Proposed Development in place, all rooms would show full compliance with the BRE Guidance.

9.191 Based on the high VSC compliance and full NSL compliance, the effect on daylight within this property is considered to be local, direct, permanent, long term and Minor Adverse (not significant).

Secondary Assessments

9.192 As noted in the BRE, as this property is served by overhanging balconies, an additional assessment has been undertaken. Full details of this assessment are found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.

9.193 When removing the balconies from the assessment, with each window experiencing no noticeable reduction and would be in line with the BRE Guidance. This therefore highlights how the deviations and low levels of daylight are exacerbated and primarily driven by the deep overhanging access decks.

Sunlight

9.194 As set out in Table 9.8 the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a direct, local, permanent, long-term, Negligible (not significant) effect.

1 Hale Road

9.195 This two-storey terrace house is located directly to the south of the Proposed Development, with a clear view over the undeveloped site from the northern elevation of the property.

Daylight

9.196 The results of the VSC assessment show that with the Proposed Development in place, 3 (50%) of 6 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 2 would experience a minor impact and 1 would experience a major Adverse impact. Each deviating window retains VSC levels of at least 15%, which has been considered acceptable for an urban context.

9.197 The results of the NSL assessment show that with the Proposed Development in place, all rooms would show full compliance with the BRE Guidance.

9.198 Based on the above, considering the acceptable retained levels of VSC and full NSL compliance, the effect on this property is considered to be local, long-term, direct, and Minor Adverse (not significant).

Sunlight

9.199 As set out in Table 9.8 the results of the APSH there are no main living rooms deemed relevant for assessment within this property and therefore is fully compliant with the BRE Guidance. As such, the impacts to sunlight at this property results in a direct, local, permanent, long-term, Negligible (not significant) effect.

3 Hale Road

9.200 This two-storey terrace house is located directly to the south of the Proposed Development, with a clear view over the undeveloped site from the northern elevation of the property.

Daylight

9.201 The results of the VSC assessment show that with the Proposed Development in place, none (0%) of 8 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. All of the remaining deviating windows would experience a major Adverse impact.

9.202 The results of the NSL assessment show that with the Proposed Development in place, one (20%) of the five rooms assessed would show full compliance with the BRE Guidance. Of the remaining four rooms, one would experience a Minor Adverse reduction, and four a Major Adverse reduction.

9.203 Based on the above, considering the VSC and NSL compliance and the shift in absolute VSC levels, the effect on daylight within this property is considered to be local, direct, permanent, long-term and Major Adverse (**significant**)

Secondary Assessment

9.204 As noted above, as the site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE, drawing comparison to between the retained levels with the Proposed Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.

9.205 When compared to the consented massing, all windows would only experience an absolute VSC shift of up to 5%, which as mentioned above at 9.32 is considered a “barely noticeable change” within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). As such the Proposed Development presents retained VSC levels broadly in line with those that would occur with both consented schemes in place.

Sunlight

9.206 As set out in Table 9.8 the results of the APSH there are no main living rooms deemed relevant for assessment within this property and therefore is fully compliant with the BRE Guidance. As such, the impacts to sunlight at this property results in a direct, local, permanent, long-term, Negligible (not significant) effect.

5 Hale Road

- 9.207** This two-storey terrace house is located directly to the south of the Proposed Development, with a clear view over the undeveloped site from the northern elevation of the property.

Daylight

- 9.208** The results of the VSC assessment show that with the Proposed Development in place, 1 (17%) of 6 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 5 would experience a major Adverse impact.
- 9.209** The results of the NSL assessment show that with the Proposed Development in place, two (40%) of the five rooms assessed would show full compliance with the BRE Guidance. Of the remaining three rooms, two would experience a Minor Adverse reduction, and one a Major Adverse reduction.

- 9.210** Based on the above, considering the VSC and NSL compliance and the shift in absolute VSC levels, the effect on daylight within this property is considered to be local, direct, permanent, long-term and Major Adverse (**significant**)

Secondary Assessments

- 9.211** As noted above, as the Site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE, drawing comparison to between the retained levels with the Proposed Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.
- 9.212** When compared to the consented massing, five of the six windows would only experience an absolute VSC shift of up to 5%, which as mentioned above at 9.1 is considered a “barely noticeable change” within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). The remaining window would retain levels of 11.8% VSC, which is a 5.1% absolute VSC shift from the consented appeal, marginally above the level considered barely noticeable by the appeal decision. It should be noted that this remains in line with retained levels within the rest of the property. As such the Proposed Development presents retained VSC levels broadly in line with those that would occur with both consented schemes in place.

Sunlight

- 9.213** As set out in Table 9.8 the results of the APSH there are no main living rooms deemed relevant for assessment within this property and therefore is fully compliant with the BRE Guidance. As such, the impacts to sunlight at this property results in a direct, local, permanent, long-term, Negligible (not significant) effect.

7 Hale Road

- 9.214** This two-storey terrace house is located directly to the south of the Proposed Development, with a clear view over the undeveloped site from the northern elevation of the property.

Daylight

- 9.215** The results of the VSC assessment show that with the Proposed Development in place, none (0%) of 6 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 1 would experience a Moderate Adverse impact and 5 would experience a major Adverse impact.
- 9.216** The results of the NSL assessment show that with the Proposed Development in place, one (20%) of the five rooms assessed would show full compliance with the BRE Guidance. Of the remaining four rooms, one would experience a Minor Adverse reduction, and four a Major Adverse reduction.

- 9.217** Based on the above, considering the VSC and NSL compliance, the effect on this property is considered to be local, long-term, direct, and Major Adverse (**significant**).

Secondary Assessments

- 9.218** As noted above, as the Site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE, drawing comparison to between the retained levels with the Proposed Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.

- 9.219** When compared to the consented massing, all windows would only experience an absolute VSC shift of up to 5%, which as mentioned above at 9.1 is considered a “barely noticeable change” within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). As such the Proposed Development presents retained VSC levels broadly in line with those that would occur with both consented schemes in place.

Sunlight

- 9.220** As set out in Table 9.8 the results of the APSH there are no main living rooms deemed relevant for assessment within this property and therefore is fully compliant with the BRE Guidance. As such, the impacts to sunlight at this property results in a direct, local, permanent, long-term, Negligible (not significant) effect.

9 Hale Road

- 9.221** This two-storey terrace house is located directly to the south of the Proposed Development, with a clear view over the undeveloped site from the northern elevation of the property.

Daylight

- 9.222** The results of the VSC assessment show that with the Proposed Development in place, none (0%) of 5 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 5 would experience a major Adverse impact.
- 9.223** The results of the NSL assessment show that with the Proposed Development in place, one (20%) of the five rooms assessed would show full compliance with the BRE Guidance. Of the remaining rooms, all four would experience a Major Adverse reduction.
- 9.224** Based on the above, considering the VSC and NSL compliance, the effect on this property is considered to be local, long-term, direct, and Major Adverse (**significant**).

Secondary Assessments

- 9.225** As noted above, as the Site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE, drawing comparison to between the retained levels with the Proposed Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.
- 9.226** When compared to the consented massing, all windows would only experience an absolute VSC shift of up to 5%, which as mentioned above at 9.1 is considered a “barely noticeable change” within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). As such the Proposed Development presents retained VSC levels broadly in line with those that would occur with both consented schemes in place.

Sunlight

- 9.227** As set out in Table 9.8 the results of the APSH there are no main living rooms deemed relevant for assessment within this property and therefore is fully compliant with the BRE Guidance. As such, the impacts to sunlight at this property results in a direct, local, permanent, long-term, Negligible (not significant) effect.

19 Hale Road

- 9.228** This two-storey terrace house is located directly to the south of the Proposed Development, with a clear view over the undeveloped site from the northern elevation of the property.

Daylight

- 9.229** The results of the VSC assessment show that with the Proposed Development in place, none (0%) of 7 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 7 would experience a major Adverse impact.
- 9.230** The results of the NSL assessment show that with the Proposed Development in place, one (25%) of the four rooms assessed would show full compliance with the BRE Guidance. Of the remaining rooms, all four would experience a Major Adverse reduction.
- 9.231** Based on the above, considering the VSC and NSL compliance, the effect on this property is considered to be local, long-term, direct, and Major Adverse (**significant**).

Secondary Assessment

- 9.232** As noted above, as the Site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE, drawing comparison to between the retained levels with the Proposed Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.
- 9.233** When compared to the consented massing, all windows would only experience an absolute VSC shift of up to 5%, which as mentioned above at 9.1 is considered a “barely noticeable change” within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). As such the Proposed Development presents retained VSC levels broadly in line with those that would occur with both consented schemes in place.

Sunlight

- 9.234** As set out in Table 9.8 the results of the APSH there are no main living rooms deemed relevant for assessment within this property and therefore is fully compliant with the BRE Guidance. As such, the impacts to sunlight at this property results in a direct, local, permanent, long-term, Negligible (not significant) effect.

21 Hale Road

- 9.235** This two-storey terrace house is located directly to the south of the Proposed Development, with a clear view over the undeveloped site from the northern elevation of the property.

Daylight

- 9.236** The results of the VSC assessment show that with the Proposed Development in place, 0 (0%) of 4 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 4 would experience a major Adverse impact.
- 9.237** The results of the NSL assessment show that with the Proposed Development in place, all four of the rooms assessed would experience deviations from the BRE Guidance. Of these deviating rooms, one would experience a Moderate Adverse Reduction, and the remaining three a Major Adverse Reduction.
- 9.238** Based on the above, considering the VSC and NSL compliance, the effect on this property is considered to be local, long-term, direct, and Major Adverse (**significant**).

Secondary Assessment

- 9.239** As noted above, as the Site is subject to two extant permissions, an additional assessment has been undertaken as per the BRE, drawing comparison to between the retained levels with the Proposed

Development in place, to the retained levels with both consented extant permissions in place. Full details of this assessment can be found in **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 5**.

- 9.240** When compared to the consented massing, all windows would only experience an absolute VSC shift of up to 5%, which as mentioned above at 9.1 is considered a “barely noticeable change” within the Buckle Street Appeal Decision (APP/E5900/W/17/3191757). As such the Proposed Development presents retained VSC levels broadly in line with those that would occur with both consented schemes in place.

Sunlight

- 9.241** As set out in Table 9.8 the results of the APSH there are no main living rooms deemed relevant for assessment within this property and therefore is fully compliant with the BRE Guidance. As such, the impacts to sunlight at this property results in a direct, local, permanent, long-term, Negligible (not significant) effect.

Overshadowing

Sunlight Amenity (Sun on Ground)

- 9.242** The assessment showing the overshadowing impacts of the Proposed Development are shown in the drawings found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 7**.
- 9.243** The assessment considers the following existing amenity spaces as relevant for assessment:
- Down Lane Park Football Pitch (1)
 - Down Lane Park Tennis Courts (2)
 - Down Lane Park Baseball Court (3)
 - Community Centre Playground (4)
 - Down Lane Park (5)
 - Rear Gardens of 1-21 Hale Road (odds) (6-16)
 - Rosa Luxemburg Amenity Area (17)
 - The Gessner Amenity Area (18)
 - Sessile Apartments Courtyard (19)
- 9.244** With the Proposed Development in place, the overshadowing results show that 17 of the 19 amenity areas assessed within proximity to the Site will satisfy the BRE Guidance, experiencing no noticeable reductions. These amenity areas include each of the rear gardens along 1-21 Hale Road (odds), Down Lane Park and the Community Centre Park with associated sport courts.
- 9.245** Therefore, the effects of the Proposed Development on overshadowing within these spaces is considered direct, permanent, long-term, local and Negligible (not significant).
- 9.246** The remaining deviating areas are located at the amenity areas within at Rosa Luxemburg Apartments, which is referred to as Area 17 within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 7** and the Gessner Apartments which is referred to as Area 18.

Rosa Luxemburg Apartment

- 9.247** Regarding Area 17, the community play space to occupiers of the Rosa Luxemburg Apartments, this would experience a 100% reduction and experience no sun on ground during 21st March. Given the southern orientation of this space, any reasonable development on this site was likely to incur similar impacts. To demonstrate this, the consented massing has been modelled and the assessment run to demonstrate that previously consented massing would have a similar impact. However, the effects of the Proposed Development

on overshadowing to this area is considered to be direct, permanent, long-term, local and Major Adverse (**significant**).

Secondary Assessment

With the consented massing in place, the same area achieves 0% sun on ground, as well as a 100% reduction from the 73% the space currently enjoys in the existing scenario. As such it is clear that when the proposals for Rosa Luxemburg were approved, the level of sunlight in the play space was expected to be low. As such the level of reduction with the Proposed Development in place was expected and the same result would arise under the extant consent scenario, which is a material contextual consideration in planning terms.

Gessner Apartments

- 9.248** At Area 18, this area already experiences deviating levels of sun-on-ground within the existing scenario, with 17% of the area benefitting from 2 hours of sunlight on 21st March, which makes this space more susceptible to reductions. This is reduced by 22% with the Proposed Development in place, retaining 13% of the area benefitting from 2 hours of sunlight. Whilst this is a deviation from the BRE Guidance, it is only marginally above the noticeable threshold by 2%.
- 9.249** Therefore, the effects of the Proposed Development on overshadowing within this space is considered local, long-term, and Minor Adverse (not significant).

Solar Radiation to Photovoltaic Panels (PVs)

- 9.250** The assessment showing the overshadowing impacts of the Proposed Development are shown in the drawings found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 7**.
- 9.251** The assessment considers 312 individual solar panels across the following four areas of existing solar panels as relevant for assessment:
- Solar panels located on Sessile Apartments (PV1-PV108) (3);
 - Solar panels located on The Gessner (PV109-PV228) (1);
 - Solar panels located on Rosa Luxemburg Apartments (PV229-PV254 & PV313-344) (5); and
 - Solar panels located on 2 Ashley Road (East Apartments) (PV255-PV312) (7).
- 9.252** With the Proposed Development in place, the overshadowing results that all 344 individual Solar Panels assessed in close proximity to the site, would show full compliance with the BRE Guidance, retaining in excess of 0.90 of the existing levels of Solar Radiation.
- 9.253** Therefore, the effects of the Proposed Development on overshadowing these Solar Panels are considered direct, permanent, long-term, local and Not Significant.

Transient Shadow

- 9.254** The Transient Shadowing levels from the Proposed Development are shown on the drawings within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 8**.
- 9.255** The 21st March is where the sun is at its midpoint and therefore a useful indication of likely average overshadowing effects of the Proposed Development. As expected, the Proposed Development will cause additional shadowing on 21st March, given the current vacant Site shows no overshadowing impacts to any of the amenity areas within the baseline scenario.
- 9.256** Where additional shadows occur, these are cast primarily onto the southern element Down Lane Park. The additional shadow will begin in the morning at 8:00, passing across the playground and basketball courts quickly until 11:00. Beyond this, additional shadow is limited to the Pre-School / Community Centre Playground occurring between 12:00 until 16:00, however the thin shadow moves across the space during this time,

ensuring that parts of the playground will receive direct sunlit during this period. No additional shadow is cast onto the park beyond 16:00 on March 21st.

- 9.257** The images for 21st June show the shadows at their shortest and represent a period of the year where external amenity is more likely to be used most by the public. In this scenario, the shadows do not reach across the entirety of Down Lane Park, however two short broken additional shadows do pass across the southern most area of the park, closest to the Proposed Development from 09:00 to 12:00. Only non-material elements of minor additional shadowing encroach upon the Community Centre amenity area, however these areas are likely already overshadowed in the existing conditions due to the large trees found at the southern boundary of this space. During the winter months, shadows are longer due to the sun sitting lower in the sky. The results for the 21st December have shown additional shadows cast over Down Lane Park and the football pitch for an hour at 11:00. The Community Centre and tennis court will experience additional shadow from 13:00 and full pass over by 14:00. It should be noted that these shadows occur in winter where the amenity areas are less likely to be occupied for prolonged periods of time.
- 9.258** Whilst the results indicate areas of additional shading, these are generally limited and move across the surrounding areas quickly. There are however no numerical targets for Transient Overshadowing set out in the relevant guidance. Therefore, it is common practice not to apply a significant effect for the transient overshadowing but rather rely on the numerical targets set for the '2-hour sun contour test' mentioned above. Accordingly, the transient overshadowing effect is considered to be minor Adverse and not significant.

Solar Glare

- 9.259** Full images of the Solar Glare assessment for the Completed Development Scenario can be found **within ES Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 9**.

Viewpoint R01A: Travelling east on Monument Way

- 9.260** Car drivers travelling this route, east towards the Proposed Development on Monument Way, will see minor instance of solar glare between 10° to 30° for one hour between 08:00 and 9:00, in the autumn and winter months. This instance is brief and is heavily broken up by the non-reflective materials on the façade and can also be mitigated by the use of a sun-visor.
- 9.261** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R01B: Travelling east on Monument Way

- 9.262** Car drivers travelling this route, east towards the Proposed Development on Monument Way whilst looking at the left signal, will see a minor instance of solar glare between 10° to 30° for one hour between 08:00 and 9:00, in the autumn and winter months. This instance is brief and is heavily broken up by the non-reflective materials on the façade and can also be mitigated by the use of a sun-visor.
- 9.263** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R01C: Travelling east on Monument Way

- 9.264** Car drivers travelling this route, east towards the Proposed Development on Monument Way whilst looking at the right signal, will see a minor instance of solar glare between 2.5° to 10° for one hour between 08:00 and 9:00, in the autumn and winter months. This instance is brief and is heavily broken up by the non-reflective materials on the façade. Additionally, drivers at this viewpoint have the option to look at multiple other signals where glare is not within 10° of the focal point and can also be mitigated by the use of a sun-visor.
- 9.265** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R02A: Travelling east on Monument Way

- 9.266** Car drivers travelling this route, east towards the Proposed Development on Monument Way whilst looking ahead, will see a very small instance of solar glare between 2.5° to 10° for one hour between 19:00 and 20:00, in the summer months. This instance is brief and heavily broken up by the non-reflective materials on the façade. Additionally, drivers at this viewpoint have the option to look at multiple other signals where glare is not within 10° of the focal point.
- 9.267** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R02B: Travelling east on Monument Way

- 9.268** Car drivers travelling this route, east towards the Proposed Development on Monument Way whilst looking at the left signal, will see a very small instance of solar glare between 10° to 30° for one hour between 19:00 and 20:00, in the summer months. This instance is brief and heavily broken up by the non-reflective materials on the façade.
- 9.269** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R02C: Travelling east on Monument Way

- 9.270** Car drivers travelling this route, east towards the Proposed Development on Monument Way whilst looking at the left signal, will see no additional instances of solar glare within 30° of the driver's focal point as a result of the Proposed Development.
- 9.271** Therefore, the impact of the additional solar glare at this viewpoint is considered to be direct, permanent, long-term, local and Negligible (not significant).

Viewpoint R03A: Travelling east on Hale Road

- 9.272** Car drivers travelling this route, east towards the Proposed Development on Hale Road, will see no additional instances of solar glare within 30° of the driver's focal point as a result of the Proposed Development.
- 9.273** Therefore, the impact of the additional solar glare at this viewpoint is considered to be direct, permanent, long-term, local and Negligible (not significant).

Viewpoint R03B: Travelling east on Hale Road

- 9.274** Car drivers travelling this route, east towards the Proposed Development on Hale Road whilst looking at the left signal, will see a very small instance of solar glare between 10° to 30° for one hour between 08:00 and 09:00, in the spring and autumn months. This instance is brief and heavily broken up by the non-reflective materials on the façade.
- 9.275** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R03C: Travelling east on Hale Road

- 9.276** Car drivers travelling this route, east towards the Proposed Development on Hale Road whilst looking at the right signal, will see no additional instances of solar glare within 30° of the driver's focal point as a result of the Proposed Development.
- 9.277** Therefore, the impact of the additional solar glare at this viewpoint is considered to be direct, permanent, long-term, local and Negligible (not significant).

Viewpoint R04: Travelling east on Chesnut Road

- 9.278** Car drivers travelling this route, east towards the Proposed Development on Chesnut Road whilst looking ahead, will see instances of solar glare between 10° to 30° for two hours between 16:00 and 18:00, in the summer months. These instances are brief and are heavily broken up by the non-reflective materials on the façade.
- 9.279** Instances of glare also occurs for an hour at 18:00 during the spring months within 3° and 10° degrees of the driver's focal point, however again, this instance occurs briefly, is heavily broken up by the façade detail and the vast majority can be blocked by a sun visor.
- 9.280** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R05: Travelling south on Ashley Road

- 9.281** Car drivers travelling this route, east towards the Proposed Development on Ashley Road whilst looking ahead, will see the main instances of solar glare between 2.5° to 10° for one hour between 06:00 to 07:00, in the autumn and winter months. The same hour of glare occurs during the spring months. These instances are brief and are heavily broken up by the non-reflective materials on the façade.
- 9.282** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R06: Travelling south on Ashley Road

- 9.283** Car drivers travelling this route, south towards the Proposed Development on Ashley Road whilst looking ahead, will see an instance of solar glare between 10° to 30° for one hour between 06:00 to 07:00, in the summer months. These instances are brief and are heavily broken up by the non-reflective materials on the façade.
- 9.284** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R07: Travelling east onto The Hale

- 9.285** Car drivers travelling this route, east towards the Proposed Development onto The Hale whilst looking ahead, will see instances of solar glare between 10° to 30° for two hours between 10:00 to 12:00, in the winter months. These instances are brief and are heavily broken up by the non-reflective materials on the façade.
- 9.286** Therefore, the impact of additional solar glare on this viewpoint is considered to be local, long term, direct and Minor Adverse (not significant).

Viewpoint R08A-C: Travelling north on Broad Lane

- 9.287** Car drivers travelling this route, north towards the Proposed Development on Broad Lane whilst looking ahead, will see no additional instances of solar glare within 30° of the driver's focal point as a result of the Proposed Development.
- 9.288** Therefore, the impact of the additional solar glare at this viewpoint is considered to be direct, permanent, long-term, local and Negligible (not significant).

Viewpoint R09A-C: Travelling north on Station Road

- 9.289** Car drivers travelling this route, north towards the Proposed Development on Station Road whilst looking ahead, will see no additional instances of solar glare within 30° of the driver's focal point as a result of the Proposed Development.

9.290 Therefore, the impact of the additional solar glare at this viewpoint is considered to be direct, permanent, long-term, local and Negligible (not significant).

Viewpoint R10A-C: Travelling north onto Watermead Way

9.291 Car drivers travelling this route, north towards the Proposed Development onto Watermead whilst looking ahead, will see no additional instances of solar glare within 30° of the driver's focal point as a result of the Proposed Development.

9.292 Therefore, the impact of the additional solar glare at this viewpoint is considered to be direct, permanent, long-term, local and Negligible (not significant).

Viewpoint R11: Travelling south along the rail tracks towards Tottenham Hale Station

9.293 Train drivers travelling this route, south towards the Proposed Development on the rail tracks whilst looking ahead, will see no additional instances of solar glare within 30° of the driver's focal point as a result of the Proposed Development.

9.294 Therefore, the impact of the additional solar glare at this viewpoint is considered to be direct, permanent, long-term, local and Negligible (not significant).

MITIGATION, MONITORING AND RESIDUAL EFFECTS

Completed Development Mitigation

9.295 Mitigation measures have been embedded into the design process for daylight, sunlight, overshadowing and solar glare, including numerous rounds of design stage analysis on the massing configuration. Whilst significant effects still occur to some receptors, this is as a result of the assessments making a comparison between the vacant site and the Proposed Development, on a site allocated for development, as part of a wider opportunity area within the London Borough of Haringey. Given the site's allocation and current cleared condition, some significant effects against the existing baseline are difficult to avoid entirely and cannot be mitigated further through design.

Residual Effects

9.296 All of the residual effects resulting from the Proposed Development, are presented in 9.294, identifying whether the effect is significant or not.

Table 9.9 Residual Effects

Receptor	Description of the Residual Effect	Scale and Nature	Significant / Not Significant	Geo	D I	P T	St Mt Lt
Completed Development							
Daylight							
Ferry Island Building 1 Ferry Island Building 2 The Gessner 1A-7A Park View Road The Volunteer	Reduction to daylight within neighbouring properties	Negligible Adverse	Not Significant	L	D	P	Lt
Sessile Apartments East Apartments Ferry Island North Apartments Building 3 Millstream Tower Walter Tull House		Minor Adverse	Not Significant	L	D	P	Lt

1 Hale Road							
West Apartments 165-195 High Cross Road		Moderate Adverse	Significant	L	D	P	Lt
Rosa Luxembourg Apartments 3-9 (odds) Hale Road 19-21 (odds) Hale Road		Major Adverse	Significant	L	D	P	Lt
Sunlight							
Ferry Island Building 1 Ferry Island Building 2 The Gessner 1-9 Hale Road 19-21 Hale Road 1A – 7A Park View Road West Apartments East Apartments Millstream Tower 165-195 High Cross Road Ferry Island North Apartments Building 3	Reduction to sunlight within neighbouring properties	Negligible Adverse	Not Significant	L	D	P	Lt
Sessile Apartments East Apartments	Reduction to sunlight within neighbouring properties	Minor Adverse	Not Significant	L	D	P	Lt
Rosa Luxembourg Apartments	Reduction to sunlight within neighbouring properties	Moderate Adverse	Significant	L	D	P	Lt
Overshadowing							
Shared amenity area at Sessile Apartments Rear Gardens of 1-21 Hale Road Down Lane Park Community Centre Park / Sports Courts	Reduction in sunlight on ground to neighbouring shared amenity spaces	Negligible Adverse	Not Significant	L	D	P	Lt
Shared amenity area at The Gessner	Reduction in sunlight on ground to neighbouring shared amenity spaces	Minor Adverse	Not Significant	L	D	P	Lt
Shared amenity area at Rosa Luxembourg Apartments	Reduction in sunlight on ground to neighbouring shared amenity spaces	Major Adverse	Significant	L	D	P	Lt
Solar Panels at Sessile Apartments Solar Panels at The Gessner Solar Panels at East Apartments Solar Panels at Rosa Luxembourg Apartments	Reduction in solar radiation to neighbour Photovoltaic panels	N/A	Not Significant	L	D	P	Lt
Solar Glare							
Train Drivers approaching Tottenham Hale Station	Increased instances / longer periods of solar glare	Negligible Adverse	Not Significant	L	D	P	Lt
Car Drivers surrounding the Site	Increased instances / longer periods of solar glare	Negligible to Minor Adverse	Not Significant	L	D	P	Lt

Notes:
Residual Effect
– Scale = Negligible / Minor / Moderate / Major
– Nature = Beneficial or Adverse
Geo (Geographic Extent) = Local (L), Borough (B), Regional (R), National (N)
D = Direct / I = Indirect
P = Permanent / T = Temporary
St = Short Term / Mt = Medium Term / Lt = Long Term
N/A = not applicable / not assessed

ASSESSMENT OF THE FUTURE ENVIRONMENT

Evolution of the Baseline Scenario

- 9.297** In the event that the Proposed Development does not come forward, the evolved baseline daylight, sunlight, overshadowing and solar glare conditions would stay the same, assuming no further development comes forward in the surrounding area, and the extant permission isn't constructed. Assuming that the adjacent developments at 29-33 The Hale (HGY/2021/2304) and 2 Berol Yard (HGY/202/0930) come forward, there will be a reduction in daylight and sunlight levels within the evolved baseline position, as well as an increase in overshadowing and solar glare in the surrounding area.
- 9.298** The site is allocated for development and therefore, if this Proposed Development does not come forward, there is still scope for the future development of this site.
- 9.299** It should be noted that the adjacent developments at 29-33 The Hale and 2 Berol Yard are assumed to come forward as part of the future baseline scenario. An assessment of the potential effects on this future receptor has been provided below within the Cumulative Assessment section.

Cumulative Effects Assessment

- 9.300** This section identifies the effects of the Proposed Development in combination with the effects of other cumulative schemes within the surrounding area. Upon review of those schemes identified in **ES Volume 1, Chapter 2: EIA Methodology** the following schemes have been deemed relevant for assessment due to their proximity to the Proposed Development (<100m):
- 29-33 The Hale (HGY/2021/2304)
 - 2 Berol Quarter (HGY/2023/0261/ HGY/2025/0930)
- 9.301** All other cumulative schemes identified within **ES Volume 1: Chapter 2: EIA Methodology**, are not considered to be within close enough proximity to materially impact these effects that are presented within the Completed Development Scenario. Further detail is provided at paragraphs 9.44-9.51 above.
- 9.302** It is acknowledged the Applicant intends to bring forward a standalone application on the Cannon Factory site. Where possible and subject to the information available, the technical assessments of the ES have qualitatively assessed Cannon Factory in terms of its broad parameters as a separate tiered cumulative scenario by reviewing any additional or different cumulative effects associated with the proposals based on an indicative massing, building footprint and quantum of development.
- 9.303** Consequently, the following cumulative assessments have been carried out:
- Cumulative Assessment – the Proposed Development with cumulative schemes; and
 - Cumulative Consideration of the Cannon Factory Emerging Proposals – the Proposed Development with cumulative schemes, in addition to qualitative consideration of the emerging proposals for the Cannon Factory across the enabling and construction works and once the Proposed Development and surrounding cumulative schemes are complete and operational.

Completed Development

- 9.304** Full details of the VSC, NSL, APSH assessments for the Cumulative Assessments can be found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Glare - Annex 3**. A summary of these can be found in Table 9.10 to Table 9.12 below.

Table 9.10 Cumulative Scenario – VSC in relation to BRE Guidance

Receptor (all residential use)	Total number of Windows	Total number of windows that achieve or exceed VSC levels suggested in the BRE Guidance	Total number of windows that achieve VSC levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
Ferry Island Building 1	514	505	5	2	2	9
Ferry Island Building 2	245	220	12	10	3	25
The Gessner	485	333	12	11	129	152
21 Hale Road	4	0	0	0	4	4
19 Hale Road	7	0	0	0	7	7
1 Hale Road	6	3	2	0	1	3
3 Hale Road	8	0	0	0	8	8
5 Hale Road	6	1	0	0	5	5
7 Hale Road	6	0	0	1	5	6
9 Hale Road	5	0	0	0	5	5
1B Park View Road	9	9	0	0	0	0
1A Park View Road	9	9	0	0	0	0
1 Park View Road	5	5	0	0	0	0
2 Park View Road	5	5	0	0	0	0
The Volunteer	3	3	0	0	0	0
3 Park View Road	5	5	0	0	0	0
5 Park View Road	9	9	0	0	0	0
4 Park View Road	7	7	0	0	0	0
6 Park View Road	7	7	0	0	0	0
7A Park View Road	5	5	0	0	0	0
Rosa Luxemburg Apartments	201	77	47	22	55	124
West Apartments	178	77	32	22	47	101
Walter Tull House	172	130	27	15	0	42
East Apartments	332	228	40	34	30	104
Millstream Tower	331	316	12	2	1	15
Sessile Apartments	462	422	25	11	4	40
165-195 High Cross Road	100	29	17	4	50	71
Ferry Island North Apartments Building 3	170	38	8	7	117	132
Grand Total	3296	2443	239	141	473	853

Ashley Park Chapter 9: Daylight, Sunlight, Overshadowing and Solar Glare

Table 9.11 Cumulative Scenario – NSL in relation to BRE Guidance

Receptor (all residential use)	Total number of rooms	Total number of rooms that achieve or exceed NSC levels suggested in the BRE Guidance	Total number of rooms that achieve NSL levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
Ferry Island Building 1	285	285	0	0	0	0
Ferry Island Building 2	149	118	14	13	4	31
The Gessner	287	215	7	8	57	72
21 Hale Road	4	0	0	0	4	4
19 Hale Road	4	1	0	0	3	3
1 Hale Road	4	4	0	0	0	0
3 Hale Road	5	1	1	0	3	4
5 Hale Road	5	2	2	0	1	3
7 Hale Road	5	1	1	0	3	4
9 Hale Road	5	1	0	0	4	4
1B Park View Road	4	4	0	0	0	0
1A Park View Road	4	4	0	0	0	0
1 Park View Road	2	2	0	0	0	0
2 Park View Road	2	2	0	0	0	0
The Volunteer	2	2	0	0	0	0
3 Park View Road	2	2	0	0	0	0
5 Park View Road	3	3	0	0	0	0
4 Park View Road	2	2	0	0	0	0
6 Park View Road	3	3	0	0	0	0
7A Park View Road	2	2	0	0	0	0
Rosa Luxemburg Apartments	132	85	10	9	28	47
West Apartments	104	83	3	6	12	21
Walter Tull House	79	79	0	0	0	0
East Apartments	162	143	4	3	12	19
Millstream Tower	190	190	0	0	0	0
Sessile Apartments	347	339	4	3	1	8
165-195 High Cross Road	32	32	0	0	0	0
Ferry Island North Apartments Building 3	119	38	5	0	76	81
Grand Total	1944	1643	51	42	208	301

Table 9.12 Cumulative Scenario – APSH in relation to BRE Guidance

Receptor (all residential use)	Total Number of Main Living Rooms Facing the Site Within 90° of Due South	Total number of rooms that achieve or exceed both Annual and Winter APSH levels suggested in the BRE Guidance	Total number of rooms that achieve Annual APSH levels below those suggested in the BRE Guidance				Total number of rooms that achieve Winter APSH levels below those suggested in the BRE Guidance			
			20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total	20% - 29.9% reduction	30% - 39.9% reduction	≥40% reduction	Total
Ferry Island Building 1	35	35	0	0	0	0	0	0	0	0
Ferry Island Building 2	12	12	0	0	0	0	0	0	0	0
The Gessner	53	40	0	0	7	0	0	0	1	1
21 Hale Road	0	0	0	0	0	0	0	0	0	0
19 Hale Road	0	0	0	0	0	0	0	0	0	0
1 Hale Road	0	0	0	0	0	0	0	0	0	0
3 Hale Road	0	0	0	0	0	0	0	0	0	0
5 Hale Road	0	0	0	0	0	0	0	0	0	0
7 Hale Road	0	0	0	0	0	0	0	0	0	0
9 Hale Road	0	0	0	0	0	0	0	0	0	0
1B Park View Road	1	1	0	0	0	0	0	0	0	0
1A Park View Road	1	1	0	0	0	0	0	0	0	0
1 Park View Road	1	1	0	0	0	0	0	0	0	0
2 Park View Road	1	1	0	0	0	0	0	0	0	0
The Volunteer	0	0	0	0	0	0	0	0	0	0
3 Park View Road	1	1	0	0	0	0	0	0	0	0
5 Park View Road	1	1	0	0	0	0	0	0	0	0
4 Park View Road	1	1	0	0	0	0	0	0	0	0
6 Park View Road	1	1	0	0	0	0	0	0	0	0
7A Park View Road	1	1	0	0	0	0	0	0	0	0
Rosa Luxemburg Apartments	46	27	0	4	7	11	0	0	13	13
West Apartments	18	10	2	3	0	5	0	0	8	8
Walter Tull House	26	26	0	0	0	0	0	0	0	0
East Apartments	54	50	0	1	3	4	0	0	0	0
Millstream Tower	73	73	0	0	0	0	0	0	0	0
Sessile Apartments	144	130	7	1	1	9	0	0	10	10
165-195 High Cross Road	12	4	0	6	2	8	0	0	0	0
Ferry Island North Apartments Building 3	0	0	0	0	0	0	0	0	0	0
Grand Total	482	416	9	15	20	37	0	0	32	32

9.305 With the Cumulative Schemes of Berol Quarter and The Heart of Hale in place, the daylight and sunlight results do see additional deviations from the BRE Guidance with what was presented within the Completed Development Scenario.

9.306 The results of the Daylight Assessments (VSC and NSL) for the Cumulative Scenario show that the following properties would still show full compliance with the BRE Guidance:

- 1A-7A Park View Road

9.307 Therefore, the overall effect to daylight on the above properties within the Cumulative Scenario is considered to remain direct, long-term, local, permanent and Negligible (not significant).

9.308 The remaining properties not listed above either still present some daylight deviations to windows/room or experience additional deviations not previously occurring within the Completed Development Scenario and have been discussed in further detail below.

9.309 The results of the sunlight assessment (APSH) for the Cumulative Scenario show that the following properties would still show full compliance with the BRE Guidance;

- Ferry Island Building 1
- Ferry Island Building 2
- The Gessner
- 1-21 Hale Road (odds)
- 1A - 7A Park View Road
- West Apartments
- East Apartments
- Millstream Tower
- 165-195 High Cross Road
- Ferry Island Building 3

9.310 Therefore, the overall effect to sunlight on the above properties within the Cumulative Scenario is considered to remain direct, local, Long-term, permanent and Negligible (not significant).

9.311 The remaining properties not listed above either still present some sunlight deviations to windows/room or experience additional deviations not previously occurring within the Completed Development Scenario and have been discussed in further detail below.

Rosa Luxemburg Apartments

9.312 As described in the Completed Development Scenario, this mixed-use property is located directly to the north of the Proposed Development, with a clear outlook over the Site from the southern elevation.

Daylight

9.313 The results of the VSC assessment show that within the Cumulative Scenario, 77 (38%) of 201 windows assessed would see no noticeable reduction in daylight and therefore are in line with BRE Guidance. Of the deviating 124 windows, 32 would experience a Minor Adverse, 22 a Moderate Adverse impact, and 55 a Major Adverse impact. This presents an additional 38 impacts compared to the Completed Development Scenario.

9.314 The results of the NSL Assessment show that within the Cumulative Scenario, 85 (64%) of the 132 rooms assessed would show full compliance with BRE Guidance. Of the deviating 47 rooms, 10 would experience a Minor Adverse impact, nine a Moderate Adverse impact, and 28 a Major Adverse impact. This presents and additional 15 impacts compared to the Completed Development Scenario.

9.315 Therefore, when comparing the results between the Cumulative Scenario and Completed Development Scenario, whilst there is a shift in VSC and NSL impacts, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Major Adverse (**significant**).

Sunlight

9.316 The results of the APSH assessment show that of the 46 main living rooms with windows facing within 90 degrees of due south, 27 (59%) show full compliance with the BRE Guidance. Of the deviating rooms, four experience moderate Adverse reductions, and seven major reductions to Total APSH levels, and 13 major Adverse reductions to Winter APSH levels. This presents an additional nine impacts compared to the Completed Development Scenario.

9.317 Therefore, based on the non-material change between the Cumulative Scenario and the Completed Development Scenario, the effect on sunlight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Moderate Adverse (**significant**).

Sessile Apartments

9.318 As described in the Completed Development Scenario, this mixed-use property is located to the north of the Proposed Development.

Daylight

9.319 The results of the VSC assessment show that within the Cumulative Scenario, 422 (91%) of 462 windows assessed would see no noticeable reduction in daylight and therefore are in line with BRE Guidance. Of the deviating 40 windows, 25 would experience a Minor Adverse, 11 a Moderate Adverse impact, and 4 a Major Adverse impact. This presents an additional 35 impacts compared to the Completed Development Scenario.

9.320 The results of the NSL Assessment show that within the Cumulative Scenario, 339 (98%) of the 347 rooms assessed would show full compliance with BRE Guidance. Of the deviating eight rooms, four would experience a Minor Adverse impact, three a Moderate Adverse impact, and one a Major Adverse impact. This presents and additional seven impacts compared to the Completed Development Scenario.

9.321 Therefore, when comparing the results between the Cumulative Scenario and Completed Development Scenario, whilst there is a minor shift in VSC and NSL impacts, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Minor Adverse (not significant).

Sunlight

9.322 The results of the APSH assessment show that 130 (90%) of the 144 rooms assessed, would not show a noticeable reduction in sunlight levels and therefore are fully in line with BRE Guidance. Of the deviating living spaces, seven experience a minor Adverse reduction, one a moderate Adverse reduction and one a major Adverse reduction to Total APSH levels. Regarding Winter APSH levels, occurs within a ground floor LKD with a Major Adverse reduction to Winter APSH levels. This presents an additional 10 impacts compared to Completed Development Scenario.

9.323 Given the additional noticeable reductions that occur has a result of the cumulative schemes the cumulative effect on sunlight within this property in the Cumulative Scenario is considered to be local, direct, permanent, long term and Minor Adverse (not significant).

East Apartments

9.324 As described in the Completed Development Scenario, this mixed-use property is located to the east of the Proposed Development across Ashley Road.

Daylight

9.325 The results of the VSC assessment show that within the Cumulative Scenario, 228 (69%) of 332 windows assessed would see no noticeable reduction in daylight and therefore are in line with BRE Guidance. Of the deviating 104 windows, 40 would experience a Minor Adverse, 34 a Moderate Adverse impact, and 30 a Major Adverse impact. This presents an additional 52 impacts compared to the Completed Development Scenario.

9.326 The results of the NSL Assessment show that within the Cumulative Scenario, 143 (88%) of the 162 rooms assessed would show full compliance with BRE Guidance. Of the deviating 19 rooms, four would experience a Minor Adverse impact, three a Moderate Adverse impact, and 12 a Major Adverse impact. This presents and additional two impacts compared to the Completed Development Scenario.

9.327 Given the additional noticeable reductions that occur has a result of the cumulative schemes the cumulative effect on daylight within this property the Cumulative Scenario is considered to be local, direct, permanent, long term and Moderate Adverse (**significant**), however it is clear this is not primarily a result of the Proposed Development.

9.328 This significant effect is driven by this property having a direct view of the Berol Quarter cumulative scheme to the immediate northeast outlook. This cumulative scheme directly blocks the view from the northern elevation. Where this cumulative scheme is being developed, it is an undeveloped plot of land which has led to unusually high levels of daylight within the existing scenario as mentioned above.

Sunlight

9.329 The results of the APSH assessment show that 50 (93%) of the 54 rooms assessed, would not show a noticeable reduction in sunlight levels and therefore are fully in line with BRE Guidance. The remaining four deviations are split between one Moderate Adverse Reduction and three Major Adverse Reductions to Total APSH levels. This presents no change from the impacts in the compared to the Completed Development Scenario.

9.330 Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on sunlight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Minor Adverse (not significant).

West Apartments

9.331 As described in the Completed Development Scenario, this mixed-use property is located to the east of the Proposed Development across Ashley Road.

Daylight

9.332 The results of the VSC assessment show that within the Cumulative Scenario, 77 (43%) of 178 windows assessed would see no noticeable reduction in daylight and therefore are in line with BRE Guidance. Of the deviating 101 windows, 32 would experience a Minor Adverse, 22 a Moderate Adverse impact, and 47 a Major Adverse impact. This presents an additional 43 impacts compared to the Completed Development Scenario.

9.333 The results of the NSL Assessment show that within the Cumulative Scenario, 83 (80%) of the 104 rooms assessed would show full compliance with BRE Guidance. Of the deviating 21 rooms, three would experience a Minor Adverse impact, six a Moderate Adverse impact, and 12 a Major Adverse impact. This presents one additional impact compared to the Completed Development Scenario.

9.334 Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Moderate Adverse (**significant**).

Sunlight

9.335 As set out in paragraph 9.310 the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

2 Ashley Road (Ferry Island Building 3)

9.336 As described in the Completed Development Scenario, this mixed-use property is located to the south of the Proposed Development across Hale Road. This receptor will have a direct view of the Heart of Hale from the northern elevation.

Daylight

9.337 The results of the VSC assessment show that within the Cumulative Scenario, 38 (22%) of 170 windows assessed would see no noticeable reduction in daylight and therefore are in line with BRE Guidance. Of the deviating 132 windows, eight would experience a Minor Adverse, seven a Moderate Adverse impact, and 117 a Major Adverse impact. This presents an additional 113 impacts compared to the Completed Development Scenario.

9.338 The results of the NSL Assessment show that within the Cumulative Scenario, 38 (32%) of the 119 rooms assessed would show full compliance with BRE Guidance. Of the deviating 81 rooms, five would experience a Minor Adverse impact, and 76 a Major Adverse impact. This presents 79 additional impacts compared to the Completed Development Scenario.

9.339 Given the additional noticeable reductions that occur has a result of the cumulative schemes the cumulative effect on daylight within this property the Cumulative Scenario is considered to be local, direct, permanent, long term and Major Adverse (**significant**), however it is clear this is not primarily a result of the Proposed Development.

9.340 This significant effect is driven by this property having a direct view of The Hale cumulative scheme directly to the north of this receptor. This cumulative scheme directly blocks the view from the northern elevation. Where this cumulative scheme is being developed, it is an undeveloped plot of land which has led to unusually high levels of daylight within the existing scenario as mentioned above.

Sunlight

9.341 As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

Millstream Tower

9.342 As described in the Completed Development Scenario, this mixed-use property is located to the south of the Proposed Development across Hale Road. This receptor will have a view of the Berol Quarter from the northern elevation.

Daylight

9.343 The results of the VSC assessment show that within the Cumulative Scenario, 316 (95%) of 331 windows assessed would see no noticeable reduction in daylight and therefore are in line with BRE Guidance. Of the

deviating 15 windows, 12 would experience a Minor Adverse, two a Moderate Adverse impact, and one a Major Adverse impact. This presents an additional 14 impacts compared to the Completed Development Scenario.

9.344 The results of the NSL assessment show that with the Proposed Development in place, all rooms would show full compliance with the BRE Guidance. This presents no change from the Completed Development Scenario.

9.345 Therefore, based on the non-material change between the Cumulative Scenario and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Minor Adverse (not significant).

Sunlight

9.346 As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

165-195 High Cross Road

9.347 As described in the Completed Development Scenario, this mixed-use property is located to the east of the Proposed Development across Hale Road. This receptor will have an oblique view of The Hale from the eastern elevation.

Daylight

9.348 The results of the VSC assessment show that with the Proposed Development in place, 29 (29%) of 100 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 17 would experience a minor impact, four would experience a moderate Adverse impact and 50 would experience a major Adverse impact. This presents an additional 21 impacts compared to the Completed Development Scenario.

9.349 The results of the NSL assessment show that with the Proposed Development in place, all 32 rooms would show full compliance with the BRE Guidance. This presents no change from the Completed Development Scenario.

9.350 Given the additional noticeable reductions that occur has a result of the cumulative schemes the cumulative effect on daylight within this property in the Cumulative Scenario is considered to be local, direct, permanent, long term and Major Adverse (**significant**), however it is clear this is not primarily a result of the Proposed Development.

Sunlight

9.351 As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

Walter Tull House

9.352 As described in the Completed Development Scenario, this mixed-use property is located to the east of the Proposed Development across Hale Road. This receptor will have a long-distance view of the Berol Quarter from the northern elevation.

Daylight

9.353 The results of the VSC assessment show that with the Proposed Development in place, 130 (76%) of 172 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining 42 deviating windows, 27 would experience a minor impact and 15 would experience a moderate

Adverse impact. This presents an additional 10 impacts compared to the additional compared to the Completed Development Scenario.

9.354 The results of the NSL assessment show that with the Proposed Development in place, all rooms would show full compliance with the BRE Guidance. This presents no change from the Completed Development Scenario.

9.355 Based on the VSC deviations being driven by the overhanging balconies, and full NSL compliance, the effect on daylight within this property is considered to be local, direct, permanent, long term and Minor Adverse (not significant).

9.356 Therefore, based on the non-material change between the Cumulative Scenario and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Minor Adverse (not significant).

Sunlight

9.357 As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

The Gessner

9.358 This 15-storey mixed-use building is located to the northwest of the Proposed Development. This receptor comprises commercial use on the ground floor and residential accommodation across the upper floors. Windows located on the southwestern elevation will have a direct outlook towards the Proposed Development. Windows and rooms located across the entire southern elevation will have a direct outlook onto the Berol Quarter.

Daylight

9.359 The results of the VSC assessment show that with the Proposed Development in place, 333 (69%) of the 485 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining 152 deviating windows, 12 would experience a minor impact, 11 a moderate impact and the remaining 129 a major impact. This presents an additional 129 impacts compared to the Completed Development Scenario.

9.360 The results of the NSL assessment show that with the Proposed Development in place, 215 (75%) of the 287 rooms would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining 72 deviating rooms, 7 would experience a minor impact, eight a moderate impact and 57 a major impact. This presents an additional 72 impacts compared to the Completed Development Scenario.

9.361 As mentioned above, these significant effects are driven by this property having a direct view of the Berol Quarter cumulative scheme. This cumulative scheme completely impacts previously fully compliant windows and rooms. Demonstrating that the additional deviations are driven by Berol Quarter and not the Proposed Development.

9.362 Given the additional noticeable reductions that occur has a result of the cumulative schemes the cumulative effect on daylight within this property in the Cumulative Scenario is considered to be local, direct, permanent, long term and Major Adverse (**significant**), however it is clear this is not primarily a result of the Proposed Development.

Sunlight

9.363 The results of the APSH assessment show that 40 (75%) of the 53 rooms assessed, would not show a noticeable reduction in sunlight levels and therefore are fully in line with BRE Guidance. The remaining 13 deviations are split between 13 Major Adverse Reduction to Total APSH levels and one Major Adverse Winter APSH. This presents an additional 13 deviations compared to the Completed Development Scenario.

9.364 Based on the above, considering the high overall compliance, the effect on sunlight within this property is considered to be local, long term, direct and Minor Adverse (not significant).

Ferry Island Building 1

Daylight

9.365 The results of the VSC assessment show that with the Proposed Development in place, 505 (98%) of the 514 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining nine deviating windows, five would experience a minor impact, two a moderate impact and two a major impact. This presents an additional nine impacts compared to the Completed Development Scenario.

9.366 The results of the NSL assessment show that with the Proposed Development in place, all rooms would show full compliance with the BRE Guidance. This presents no change from the Completed Development Scenario.

9.367 Given the additional noticeable reductions that occur has a result of the cumulative schemes the cumulative effect on daylight within this property in the Cumulative Scenario is considered to be local, direct, permanent, long term and Minor Adverse (not significant), however it is clear this is not primarily a result of the Proposed Development.

Sunlight

9.368 As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

Ferry Island Building 2

Daylight

9.369 The results of the VSC assessment show that with the Proposed Development in place, 220 (90%) of the 245 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining 25 deviating windows, 12 would experience a minor impact, 10 a moderate impact and three a major impact. This presents an additional 25 impacts compared to the Completed Development Scenario.

9.370 The results of the NSL assessment show that with the Proposed Development in place, 118 (75%) of the 149 rooms would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining 31 deviating rooms, 14 would experience a minor impact, 13 a moderate impact and four a major impact. This presents an additional 31 impacts compared to the Completed Development Scenario.

9.371 Given the additional noticeable reductions that occur has a result of the cumulative schemes the cumulative effect on daylight within this property in the Cumulative Scenario is considered to be local, direct, permanent, long term and Minor Adverse (not significant), however it is clear this is not primarily a result of the Proposed Development.

Sunlight

9.372 As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

1 Hale Road

9.373 As described in the Completed Development Scenario, this residential property is located to the south of the Proposed Development with no direct view of the Cumulative schemes from the site facing elevation.

Daylight

9.374 The results of the VSC assessment show that with the Proposed Development in place, 3 (50%) of 6 windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. Of the remaining deviating windows, 2 would experience a minor impact and 1 would experience a major Adverse impact. This does not present any additional impact compared to the Completed Development Scenario.

9.375 The results of the NSL assessment show that with the Proposed Development in place, all rooms would show full compliance with the BRE Guidance. This does not present any additional impact compared to the Completed Development Scenario.

9.376 Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Minor Adverse (not significant).

Sunlight

9.377 As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

3 Hale Road

9.378 As described in the Completed Development Scenario, this residential property is located to the south of the Proposed Development with no direct view of the Cumulative schemes from the site facing elevation.

Daylight

9.379 The results of the VSC assessment show that within the Cumulative Scenario in place, none (0%) of 8 windows would show compliance with the BRE Guidance. All of the deviating windows would experience a major Adverse impact. This does not present any additional impact compared to the Completed Development Scenario.

9.380 The results of the NSL assessment show that with the Proposed Development in place, one (20%) of the five rooms assessed would show full compliance with the BRE Guidance. Of the remaining four rooms, one would experience a Minor Adverse reduction, and four a Major Adverse reduction. This does not present any additional impact compared to the Completed Development Scenario.

9.381 Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Major Adverse (**significant**).

Sunlight

9.382 As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

5 Hale Road

9.383 As described in the Completed Development Scenario, this residential property is located to the south of the Proposed Development with no direct view of the Cumulative schemes from the site facing elevation.

Daylight

- 9.384** The results of the VSC assessment show that with the Cumulative Scenario, 1 (17%) of six windows would not see a noticeable reduction and therefore are in line with the BRE Guidance. All five of the remaining deviating windows would experience a major Adverse impact. This does not present any additional impact compared to the Completed Development Scenario.
- 9.385** The results of the NSL assessment show that with the Proposed Development in place, two (40%) of the five rooms assessed would not experience a noticeable reduction and therefore, show full compliance with the BRE Guidance. Of these deviating rooms, two would experience a Minor Adverse Reduction and one a Major Adverse Reduction. This does not present any additional impact compared to the Completed Development Scenario.
- 9.386** Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Major Adverse (**significant**).

Sunlight

- 9.387** As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

7 Hale Road

- 9.388** As described in the Completed Development Scenario, this residential property is located to the south of the Proposed Development with no direct view of the Cumulative schemes from the site facing elevation.

Daylight

- 9.389** The results of the VSC assessment show that with the Cumulative Scenario, none (0%) of six windows would show compliance with the BRE Guidance. All of the deviating windows would experience a major Adverse impact. This does not present any additional impact compared to the Completed Development Scenario.
- 9.390** The results of the NSL assessment show that with the Proposed Development in place, one (20%) of the five rooms assessed would show full compliance the BRE Guidance. Of the four deviating rooms, one would experience a minor Adverse reduction and three would experience a Major Adverse Reduction. This does not present any additional impact compared to the Completed Development Scenario.
- 9.391** Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Major Adverse (**significant**).

Sunlight

- 9.392** As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

9 Hale Road

- 9.393** As described in the Completed Development Scenario, this residential property is located to the south of the Proposed Development with no direct view of the Cumulative schemes from the site facing elevation.

Daylight

- 9.394** The results of the VSC assessment show that with the Cumulative Scenario, none (0%) of five windows would show compliance with the BRE Guidance. All five of the remaining deviating windows would experience a major Adverse impact. This does not present any additional impact compared to the Completed Development Scenario.
- 9.395** The results of the NSL assessment show that with the Proposed Development in place, one (20%) of the five rooms assessed would show compliance with the BRE Guidance. All four of the deviating rooms would experience a Major Adverse Reduction. This does not present any additional impact compared to the Completed Development Scenario.
- 9.396** Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Major Adverse (**significant**).

Sunlight

- 9.397** As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

19 Hale Road

- 9.398** As described in the Completed Development Scenario, this residential property is located to the south of the Proposed Development with no direct view of the Cumulative schemes from the site facing elevation.

Daylight

- 9.399** The results of the VSC assessment show that with the Cumulative Scenario, none (0%) of seven windows would show compliance with the BRE Guidance. All seven of the remaining deviating windows would experience a major Adverse impact. This does not present any additional impact compared to the Completed Development Scenario.
- 9.400** The results of the NSL assessment show that with the Proposed Development in place, one (20%) of the four rooms assessed would show compliance with the BRE Guidance. All four of the deviating rooms would experience a Major Adverse Reduction. This does not present any additional impact compared to the Completed Development Scenario.
- 9.401** Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Major Adverse (**significant**).

Sunlight

- 9.402** As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

21 Hale Road

- 9.403** As described in the Completed Development Scenario, this residential property is located to the south of the Proposed Development with no direct view of the Cumulative schemes from the site facing elevation.

Daylight

- 9.404** The results of the VSC assessment show that with the Cumulative Scenario, none (0%) of four windows would show compliance with the BRE Guidance. All four of the remaining deviating windows would experience a major Adverse impact. This does not present any additional impact compared to the Completed Development Scenario.
- 9.405** The results of the NSL assessment show that with the Proposed Development in place, all four of the rooms assessed would experience deviations from the BRE Guidance, with all presenting a Major Adverse Reduction. This does not present any additional impact compared to the Completed Development Scenario.
- 9.406** Therefore, based on the non-material change between the Cumulative Scenarios and the Completed Development Scenario, the effect on daylight within this property is considered to be in line with what was identified within the Completed Development Scenario, to be local, direct, permanent, long term and Major Adverse (**significant**).

Sunlight

- 9.407** As set out in paragraph 9.310, the results of the APSH for this property are fully compliant with the BRE Guidance and as such, result in a local, direct, permanent, long-term and Negligible (not significant) effect.

Overshadowing

- 9.408** The assessment showing the overshadowing impacts of the Cumulative Scenario are shown on the drawings found within **ES Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 7**.
- 9.409** Within the Cumulative Scenario, the overshadowing results show that 16 of the 19 amenity areas assessed would satisfy the BRE Guidance, experiencing no noticeable reductions as a result of the Proposed Development.
- 9.410** Therefore, the effects of the Proposed Development + Cumulative Schemes within these spaces is considered direct, permanent, long-term, local and Negligible (not significant).
- 9.411** The remaining spaces that do see deviations include:
- Area 17 – Rosa Luxemburg Apartments
 - Area 18 – The Gessner
 - Area 19 – Sessile Apartments

Amenity area 17

- 9.412** This community space at Rose Luxemburg Apartments experiences a total reduction down to 0% sunlight on 21st March, which is the same level of impact as presented with the Completed Development Scenario. As such this presents no additional impact with the Cumulative Schemes in place.
- 9.413** Therefore, the effects of the Proposed Development with the Cumulative Scheme in place remains in line with what was presented within the Completed Development Scenario, local, long-term, and Major Adverse (**significant**).

Amenity Area 18

- 9.414** This community space within the courtyard at the Gessner experiences a total reduction down to 0% sunlight on 21st March. This amenity space experienced no impact within the Completed Development Scenario and is a direct result of the Berol Quarter Scheme directly to the south of this receptor. As such this cumulative scheme will overshadow this amenity area entirely.

- 9.415** Accordingly, the cumulative effect of the Proposed Development and Cumulative schemes on this amenity space is considered to be local, long-term, and Major Adverse (**significant**).

Amenity Area 19

- 9.416** This community space within the courtyard at Sessile Apartments also experiences a total reduction down to 0% sunlight on 21st March. This amenity space experienced no impact within the Completed Development Scenario and is a result of the Berol Quarter Scheme to the southeast of this receptor. As such this cumulative scheme will overshadow this amenity area.
- 9.417** Accordingly, the cumulative effect of the Proposed Development and Cumulative schemes on this amenity space is considered to be local, long-term, and Major Adverse (**significant**).

Photovoltaic Panels

- 9.418** The assessment showing the overshadowing impacts to the photovoltaic panel within the Cumulative Scenario are shown in the drawings found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 7**.
- 9.419** The assessment considers 312 individual solar panels across the following four areas of existing solar panels as relevant for assessment:
- Solar panels located on Sessile Apartments (PV1-PV108) (3);
 - Solar panels located on The Gessner (PV109-PV228) (1);
 - Solar panels located on Rosa Luxemburg Apartments (PV229-PV254) (PV373-PV404) (5); and
 - Solar panels located on 2 Ashley Road (East Apartments) (PV255-PV312) (7).
- 9.420** Within the Cumulative Scenario in place, the overshadowing results show that all 404 individual Solar Panels assessed in close proximity to the site would show full compliance with the BRE Guidance, retaining in excess of 0.90 of the existing levels of Solar Radiation. This presents no change from the Completed Development Scenario.
- 9.421** Therefore, the effects of overshadowing on the closest photovoltaic panels within the Cumulative Scenario is considered to remain direct, permanent, long-term, local and not significant.

Transient Overshadowing

- 9.422** The Transient Shadowing levels from the Proposed Development are shown on the drawings within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 8**.
- 9.423** Where additional shadows occur within the Cumulative Scenario, these are cast primarily onto the southern element Down Lane Park. The additional shadow will be cast from The Hale. begin in the morning at 11:00, passing across quickly until 13:00.
- 9.424** The images for 21st June show the shadows at their shortest and represent a period of the year where external amenity is more likely to be used most by the public. In this scenario, no additional shadow is cast by the cumulative schemes onto the most proximate amenity areas.
- 9.425** During the winter months, shadows are longer due to the sun sitting lower in the sky. The results for the 21st December have shown additional shadows cast over Down Lane Park, football and basketball pitches for an hour at 11:00. It should be noted that these shadows occur in winter where the amenity areas are less likely to be occupied for prolonged periods of time.
- 9.426** Whilst the results indicate areas of additional shading, these are generally limited and move across the surrounding areas quickly. There are however no numerical targets for Transient Overshadowing set out in the relevant guidance. Therefore, its common practice not to apply a significant effect for the transient

overshadowing but rather rely on the numerical targets set for the '2-hour sun contour test' mentioned above. This determined a minor (**not significant**) effect.

Cumulative Consideration of the Cannon Factory Emerging Proposals

Enabling and Construction

- 9.427** As with the Completed Development Scenario and the Cumulative Assessment, the Enabling and Construction scenario is not relevant for daylight, sunlight and overshadowing assessments as the Cumulative Completed Development presents the worst-case scenario in terms of obstruction.

Completed Development

- 9.428** With the Completed and Operational Cumulative Scenario in place, it is likely that the vast majority of existing receptors will not experience any new or additional effects to daylight, sunlight or overshadowing than those presented in the Cumulative Assessment.
- 9.429** The Cannon Factory site is located some distance to the northeast of both the Proposed Development and the two cumulative schemes deemed relevant for assessment. As such, most receptors which will have a direct view of the Cannon Factory site will not have a direct view of the Proposed Development and cumulative schemes.
- 9.430** The two most proximate receptors to the Cannon Factory site are The Gessner and Sessile Apartments. Whilst both of these properties will see impacts to daylight as a result of the Proposed Development and Cumulative scenarios, these affect different facades to those that will have a view of the Cannon Factory. For example, Sessile Apartments is located to the north of the Proposed Development and to the west of Cannon Factory, as such, two separate facades are impacted and as such there would not be a combined cumulative effect on individual units within this block. The same can be said for the Gessner, with the Cannon Factory sitting to the north, whilst the Proposed Development sits to the southwest.
- 9.431** As such new cumulative effects are not expected in this cumulative scenario.

Impact of the Proposed Development on the Future Baseline Scenario

- 9.432** The Future Baseline Scenario considers the impacts of the Proposed Development on the Future receptors within the adjacent cumulative scheme of Berol Quarter and The Hale.

Daylight and Sunlight

- 9.433** Full details of the 'Future Baseline Assessment' can be found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 4**. This 'Future Baseline Assessment' considers the daylight and sunlight effects that would occur within the cumulative scheme as a result of the Proposed Development.
- 9.434** This assessment considers the impacts of the Proposed Development on the potential future receptors within the cumulative schemes at Berol Quarter and The Hale. Berol Quarter is located directly to the east of the Site; the western elevation of the scheme will have a view of the Proposed Development. The Hale is located directly to the southwest of the Proposed Development and will have an overlooking view of the Proposed Development from the northern elevations.

Berol Quarter

- 9.435** This consented planning application for a mixed-use development is located to the east of the Proposed Development. This property will have an obstructed view of the Proposed Development from the western elevation.

Daylight

- 9.436** The results of the VSC assessment show that within the Proposed Development in place, 1030 (98%) of 1054 windows assessed would see no noticeable reduction, and therefore in line with BRE Guidance. Of the remaining 24 windows, 11 would see a minor Adverse reduction, 10 would see a moderate Adverse reduction and three would see a major Adverse reduction.
- 9.437** Each of the deviating 24 windows each serve a dual-aspect LKD which benefits from a separate unaffected window which benefits from fully compliant levels of VSC. As such the 'real-world' impact of these windows is considered to be limited.
- 9.438** The results of the NSL assessment show that with the Proposed Development in place, 488 (99.8%) of 489 rooms assessed show no noticeable reduction in daylight levels. The remaining deviating room would experience a major Adverse reduction. This major Adverse reduction occurs in a shared residential amenity space on the first floor. This shared space is one of many shared spaces and is immediately connected to a fully daylighted community space that is unaffected by the proposals. As such the impact on this room is considered less material than if it were the sole living room within the property.
- 9.439** Based on the above, considering the high levels of VSC and NSL compliance, the effect on daylight within this property is considered to be local, long-term direct and Minor Adverse (not significant).

Sunlight

- 9.440** The results of the APSH assessment show that with the Proposed Development in place, 154 (99%) of the 155 main living spaces assessed would show no noticeable reduction in daylight levels and are therefore in line with the BRE Guidance. The remaining main living space would experience a major Adverse reduction to Winter APSH levels. Whilst this residential amenity area would experience deviating Winter APSH levels, it would benefit from compliance Total APSH levels and is connected to a separate community amenity space which benefits from fully compliant Total APSH and Winter APSH levels.
- 9.441** Therefore, the overall effect to sunlight at this receptor is considered to be direct, local, long-term, permanent and Minor Adverse (not significant).

The Hale

- 9.442** This consented planning application for a mixed-use development is located to the west of the Proposed Development. This property will have a direct view of the Proposed Development from the eastern elevation.

Daylight

- 9.443** The results of the VSC assessment show that within the Proposed Development in place, 480 (79%) of 607 windows assessed would see no noticeable reduction, and therefore in line with BRE Guidance. Of the remaining 127 windows, 124 would see a minor Adverse reduction, and three would see a moderate Adverse reduction. Each deviating window retains VSC levels of at least 15%, with the majority achieving over 20% which has been considered acceptable for an urban context.
- 9.444** The results of the NSL assessment show that with the Proposed Development in place, all rooms would show full compliance with the BRE Guidance.
- 9.445** Based on the above, considering the high levels of VSC and NSL compliance, the effect on daylight within this property is considered to be local, long-term direct and Minor Adverse (not significant).

Sunlight

- 9.446** The results of the APSH assessment show that with the Proposed Development in place, all three of the main living rooms assessed would show no noticeable reduction in daylight levels and are therefore in line with the BRE Guidance.
- 9.447** Therefore, the overall effect to sunlight at this receptor is considered to be direct, local, long-term, permanent and Negligible (not significant).

Overshadowing

- 9.448** The assessment showing the overshadowing impacts of the Proposed Development onto potential amenity spaces are shown on the drawings found within **ES Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 7**.
- 9.449** The assessment has considered the following future amenity spaces as relevant assessment.
- Podium space at Berol Quater
- 9.450** With the Proposed Development in place, this amenity space across Berol Quarter would not presents a deviation from the recommended BRE targets and is therefore fully compliant with the BRE Guidance.
- 9.451** Therefore, the effect of the Proposed Development on overshadowing within this space is considered local, long-term, direct and Negligible (not significant).

Photovoltaic Panels

- 9.452** The assessment showing the overshadowing impacts to the photovoltaic panel within the Future Baseline are shown in the drawings found within **ES Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare - Annex 7**.
- 9.453** The assessment considers 59 (PV313-372) individual solar panels found atop the Berol Quarter Development the following four areas of existing solar panels as relevant for assessment:
- 9.454** Within the Cumulative Scenario in place, the overshadowing results show that all 59 individual Solar Panels assessed would show full compliance with the BRE Guidance, retaining in excess of 0.90 of the existing levels of Solar Radiation.
- 9.455** Therefore, the effects of overshadowing on the closest photovoltaic panels within the Future Baseline Scenario is considered to be direct, permanent, long-term, local and not significant.

LIKELY SIGNIFICANT EFFECTS

- 9.456** It is considered that there would be significant effects to daylight as a result of the Proposed Development in both the Completed Development and Cumulative Scenario. With the Proposed Development in place the daylight impacts to Rosa Luxemburg Apartments, West Apartments, 165-195 High Cross Road, 3-9 (odds) Hale Road and 19-21 (odds) Hale Road are considered to be significant by presenting Moderate or Major Adverse impacts. Across these properties however, these impacts are driven by self-constraining features and unusually high levels of daylight and sunlight within the baseline scenario. Typical retained levels of VSC are within a range that is considered “barely noticeable” when compared to previously consented massing on-site.
- 9.457** Within the Cumulative Scenario, the majority of the properties present no change to effect significance, with the exceptions of The Gessner Building, 165-195 High Cross Road, East Apartments, 2 Ashley Road (Ferry Island Building 3) which see Moderate to Major Adverse effects to daylight. These effects are entirely driven by the Cumulative Schemes, highlighted by the non-significant effects of The Gessner in the Completed Development Scenario.
- 9.458** The Proposed Development would result in a significant effect as a result of reduction in sunlight amenity to Rosa Luxemburg apartment however, these impacts are driven by self-constraining features.
- 9.459** The Proposed Development would result in a significant effect to overshadowing to the amenity area at Rosa Luxemburg Apartment, however, is no greater than the level that was deemed permissible from a previous consented development.
- 9.460** The Proposed Development would not result in significant effects to daylight, sunlight or overshadowing to any of the cumulative schemes assessed as part of the future baseline assessment.
- 9.461** There would be no significant effects to solar glare or photovoltaic panels as a result of the Proposed Development in both the Completed Development and Cumulative Scenarios.