



READING BOROUGH COUNCIL

**TOWN AND COUNTRY PLANNING ACT 1990
TOWN AND COUNTRY PLANNING (INQUIRIES PROCEDURE)
(ENGLAND) RULES 2000
SECTION 78 APPEALS**

REBUTTAL PROOF OF EVIDENCE ON DAYLIGHT AND SUNLIGHT

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Appeal by: Aviva Life and Pensions UK Ltd

Appeal Site: Vastern Court, Reading

**Appeal Against: The failure of Reading Borough Council to determine within
the prescribed period a planning application**

Planning Inspectorate Reference: APP/E0345/W/21/3289748

Reading Borough Council Reference: 200328

April 2022

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1 INTRODUCTION: SCOPE OF EVIDENCE

- 1.1 This rebuttal proof addresses the 'Appellant's Position Statement on Daylight and Sunlight, Reading Station Park, Vastern Court, Reading' (CD 8.16) written by James Crowley of CHP Surveyors on 28th March 2022. This focuses on four areas where further information would be helpful to the inquiry:
- a. Correction of statements made about the recommendations in the BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice' (CD 7.20).
 - b. A rebuttal of statements made in the Appellant's Position Statement, particularly on the applicability of comparators from elsewhere.
 - c. Clarification on which data should be used.
 - d. A revision of the statements in my proof on loss of light to the consented development at 55 Vastern Road, following the submission of material that was not available to me when I wrote my proof.
- 1.2 This rebuttal proof does not address all the points raised in the Appellant's Position Statement (APS) and omissions from this proof should not be taken to imply agreement with any of the statements in this document. Many of the points raised in the APS have already been dealt with in my original Proof of Evidence.

2 THE BRE GUIDELINES

2.1 Within the APS (CD 8.16) there are incorrect statements about the guidelines in the BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice' (CD 7.20).

2.2 The first concerns the applicability of the guidelines. Paragraph 4.6.3 of the APS states:

'The BRE guidelines are designed to be applied within suburban environment, not a dense urban location'

2.3 This is not correct. The BRE guidelines are not based on any particular built environment but on national and internal recommendations for daylight and sunlight. The quotation at the end of paragraph 4.6.3 on the advisory nature of the guidelines is correct.

2.4 The second is in paragraph 4.6.5 which states:

'This analysis advises that each window should achieve a VSC of 27% or 0.8 times the existing value. These values are for a suburban location whereas for an urban location, a VSC of 20% is considered more appropriate.'

2.5 This is also not correct. The BRE guidelines do not give separate figures for suburban and urban environments. The 20% VSC (vertical sky component) value is not in the guidelines. The applicability of a 20% criterion to this particular development is discussed in 3.8 below.

2.6 A third error is in paragraph 4.6.6 which states that the daylight distribution analysis *'does not consider the number and size of windows to a room'*. Again, this is not correct. The daylight distribution will usually depend on the number and size of windows in a room. In general, rooms with more than one window, and larger windows, will have a better daylight distribution than rooms with only one small window.

2.7 Paragraph 4.6.7 states that the average daylight factor (ADF) method is *'more precise in its measurement of daylight'*. This depends on the quality of the input data. The average daylight factor depends on window framing, glass transmittance and room reflectances. If these are incorrect, there is the possibility that ADF data may be very imprecise.

- 2.8 Finally there are typographical errors in 4.6.7: '*expresses the ration of daylight within the room as a portion of the daylight outside*' should be '*expresses the ratio of daylight within the room as a proportion of the daylight outside*'.

3 REBUTTAL OF STATEMENTS IN THE APPELLANT'S POSITION STATEMENT

Loss of daylight to 17-51 Vastern Road

- 3.1 This is dealt with in section 5.1 of the APS. Paragraph 5.1.4 states that *'it is inevitable that any massing which is higher than the current units will result in daylight levels appearing to be significantly affected, when in reality the change may not appear to be that noticeable.'* However this is not correct. The width of Vastern Road (around 36m from building line to building line) means that a six storey high frontage on the proposal site all the way along the road, with further set back upper storeys, could be accommodated while still meeting the BRE guidelines. Alternatively a series of taller buildings with gaps between them could still meet the guidelines.
- 3.2 To justify the large reductions in light experienced in 17-51 Vastern Road, the APS cites a number of planning decisions which are not relevant to the case of Vastern Road. Winstanley Estate (a decision of Wandsworth Council, and not an appeal decision as erroneously stated in 5.1.19 of the APS), Graphite Square and Whitechapel Estate are inner London sites with a dense street pattern. Goldsworth Road is in the central area of Woking with existing buildings close by.
- 3.3 The target VSC of 15% and daylight distribution of 50% of the room retaining direct daylight, cited in the Winstanley Road decision, has been rejected in appeal decisions, for example that for 8 Albert Embankment (APP/N5660/V/20/3254203 & APP/N5660/V/20/3257106) in Lambeth. The Inspector's report (CD5.5, paragraph 7.59) concluded
- 'Nevertheless, I conclude that the proposal would result in some significant individual reductions in daylight levels to a limited number of properties. Those reductions at Whitgift House and 2 Whitgift Street would result in reductions greater than the BRE guidelines, in some cases substantially so, and residents would experience an unacceptable increase in gloominess. The reduction in light would affect all of the flats in Whitgift House but would be particularly noticeable on the lower floors. I attach very significant weight to the harm to the occupiers of these two properties.'*
- 3.4 This was despite windows in Whitgift House retaining VSCs in the 16-23% range, and its rooms retaining direct daylight over more than half their area.
- 3.5 The Hertford Gasworks (APP/J1915/W/19/3234842, CD 5.4) development cited in 5.1.11 of the APS is particularly inappropriate. The 21.6% VSC yardstick used by the

Inspector applied to houseboats moored near to the Gasworks site. The Inspector accepted a lower value on the basis that the houseboats were not permanent residences and some of the windows facing the appeal site were curtained off, with the residents relying on daylight from the other side of the boat (see paragraphs 50-58 of CD 5.4).

- 3.6 While Station Hill, cited in 5.1.16 of the APS, is in Reading, and not far from the proposal site, it is closer to the commercial heart of the town and surrounded by narrow streets. Outline planning permission was given in 2015 and at the time the site was principally surrounded by commercial buildings; the only dwellings to have significant impacts were two public houses and a large recently constructed development at Merchant's Place (Icon House/Projection East/Projection West). Since then two office blocks (Garrard House and 49-51 Greyfriars Road) have been converted to residential, and student housing has been built at Bridewell and Samuel House. The daylight and sunlight provision to dwellings in the area should therefore be seen as an unfortunate planning accident rather than a deliberate attempt by Reading Council to impose substandard daylight conditions on residents as part of its planning policy.
- 3.7 A more appropriate precedent for the Council's intentions is the Reading Station Area Framework. Data for the RSAF in Technical Annex 10.2 of the Environmental Statement (CD 1.9.32) give VSCs in 17-49 Vastern Road of 24-28% at ground floor level, 26-30% at first floor level, and 28-32% at second floor level. This would appear to be a more appropriate level of flexibility in applying the BRE guidelines to this specific site.
- 3.8 Thus given the width of Vastern Road and the opportunity to develop the site fully without substantial reductions in daylight to neighbouring properties, a 24% minimum VSC for the most obstructed windows on the lowest floor would be appropriate, rather than 15% or 20%.
- 3.9 There are a number of mistakes in paragraph 5.1.19 of the APS which states

'Concerning Daylight Distribution within 17-21 Vastern Road, 52 rooms were considered within these properties with 25 (48%) achieving the recommended area in front of the NSL. However, taking into account the

urban location and with reference to the Winstanley Estate Appeal, the results demonstrate that 37 (71%) will have at least 50% of their area in front of the No Sky Line. Of the 25 rooms that do not achieve this, 24 (96%) are bedrooms'

- 3.10 The 52 rooms figure is for 17-51 Vastern Road, not 17-21 Vastern Road. Also, only 16 rooms (31%), not 25, would achieve the recommendation in these dwellings; 14 in 17-49 Vastern Road (see table 10.15 of the Environmental Statement) and 2 in 51 Vastern Road. 15 rooms, not 25, would have less than 50% of their area in front of the No Sky Line. These include 14 rooms, not 15, which the APS identifies as bedrooms. (It is not known whether all these rooms are actually being used as bedrooms, or whether some of the properties are in multiple occupation).
- 3.11 It should be noted that the latter criterion used by James Crowley, that up to 50% of the room can lie behind the no sky line, is not in published guidance. As explained in 4.18 of my proof, this could give a large gloomy area covering almost half the room, and is unlikely to be acceptable to the occupants.
- 3.12 This was demonstrated in historic daylight research by Percy Waldram in the 1920s, and adopted by the CIE (Commission Internationale d'Eclairage, the international lighting body) in 1932. He developed the concept of the 'grumble line' based on a 0.2% sky factor (the ratio of direct skylight inside to outside, under a uniform sky). In his surveys, daylight was found to be unacceptable if over half the room had a sky factor below 0.2%. This criterion is still used in legal cases today.
- 3.13 A point beyond the no sky line has a sky factor of 0%, and therefore the criterion that up to 50% of the room can be beyond the no sky line would, according to Waldram's findings, lead to unacceptable lighting conditions. (Today's lighting standards recommend that more light, not less, is provided in interiors).
- 3.14 There are more mistakes in paragraph 5.1.22 of the APS which states

'Concerning the 17 assumed living rooms, 11 (65%) will achieve the NSL criteria, with the remaining six all experiencing a reduction of no more than 0.77 times the existing, with between 57% and 71% of each room area in front of the NSL which is considered well-lit for a room of this size in this location.'

3.15 The 'assumed living rooms' are taken to be the ground floor rooms in 17-49 Vastern Road (again, it is not known whether rooms on the upper floors might be being used as living rooms too). There are 17 ground floor rooms here, but only 5 (29%) would achieve the NSL (daylight distribution) criteria, not 11. The remaining 12 would have reductions of between 23% and 51%. This means that the areas receiving direct light from the sky would be reduced to between 0.49 and 0.77 their existing values. In these twelve rooms, between 49% and 76% of the room area would be in front of the NSL, not 57-71%. This is not considered well-lit, either in the BRE guidelines or in the British Standard Code of Practice for daylight, BS 8206 Part 2.

Assessment of illustrative scheme for daylight and sunlight provision

3.16 This is covered in section 5.2 of the APS. Paragraph 5.2.4 gives the statistic that in the cumulative situation 80% of rooms analysed would comply with the minimum standard for average daylight factor in the British Standard Code of Practice for daylight, BS 8206 Part 2. This is not supported by the data. 456 rooms were analysed in Blocks B and C. Of these, the data in the APS show that 344 (75%) would comply with the BS minima if the lower value of 1.5% is used for living/kitchen/diners. With the recommended higher value of 2% for living/kitchen/diners, the figure drops to 302 or 66% of all the rooms analysed.

3.17 With a realistic frame factor of 0.8, 321 out of 456 or 70% of the rooms analysed would comply with the BS minima if the lower value of 1.5% is used for living/kitchen/diners. With the recommended higher value of 2% for living/kitchen/diners, the figure drops to 286 or 63% of all the rooms analysed.

3.18 However 276 of these rooms are bedrooms which have a lower requirement for daylight. Out of the 180 living/kitchen/diners or studios, 68 (38%) would meet the minimum 1.5% ADF for a living room. Only 33 (18%) would meet the higher 2% recommendation.

3.19 Thus the basic 80% statistic is incorrect. Even the correct figures of 63%/70% hide a shortfall in daylight provision in the principal living rooms of dwellings.

3.20 The Epping College scheme cited in 5.2.9 of the APS had a substantially better, though not ideal, compliance rate. In their reports for that scheme CHP gave proportions of 88% and 98% meeting the recommendations, and the Inspector gave

'worst-case' figures of 81% and 83%, presumably based on a 2% ADF in living/kitchen/diners.

3.21 With regard to sunlight, in 5.2.12 of the APS James Crowley states that 13% of rooms would meet the BRE/BS recommendations in the cumulative situation. In fact only 12% of principal living rooms would comply. This is an unprecedentedly poor level of sunlight provision for such a large development. It is not credible that James Crowley can extrapolate from a 12% or 13% compliance rate on the lower floors to a compliance rate of 50% or more in the development as a whole, given that there will be fewer flats on the upper floors.

3.22 Paragraph 5.2.12 suggests that 60% of all rooms considered would have annual probable sunlight hours of 15% or more. In fact only 59 living rooms, 33% of the total 180, would meet even this low figure. The 15% value is not in any published guidance and represents a substandard level of sunlight provision.

3.23 **Cumulative effects**

3.24 These are dealt with in sections 4 (paragraph 4.6-4.10) and 5 below.

4 DATA IN THE APPELLANT'S POSITION STATEMENT

4.1 The Appellant's Position Statement (APS) (CD 8.16) is not set out like a conventional proof of evidence. The main text is short and gives little detail on the loss of light to existing and consented properties, or daylight and sunlight provision within the proposed development. Data are given in a set of Appendices which consist of edited reprints of a report and letters. These data are incomplete and not presented in an order which is easy to follow. This section of the rebuttal proof seeks to explain where the data are, and comments on their validity.

Loss of light to existing dwellings

- 4.2 Data on loss of vertical sky component (VSC) and annual probable sunlight hours (APSH) to existing dwellings at 87-97 Caversham Road and 17-49 Vastern Road are not given in the APS, but are in Technical Annex 10.2 of the Environmental Statement (CD 1.9.32). These data were agreed in the daylight and sunlight Statement of Common Ground (CD 12.2). The summary figures for the loss of VSC to the dwellings at 17-49 Vastern Road in table 10.14 of the Environmental Statement (CD 1.9.10) were also agreed.
- 4.3 Data on impacts on daylight distribution in existing dwellings at 87-97 Caversham Road and 17-49 Vastern Road are given in the APS Appendix 3 to Appendix B, on pages 67-73 of the PDF. These data were also agreed in the daylight and sunlight Statement of Common Ground (CD 12.2).
- 4.4 Data on loss of VSC, impacts on daylight distribution and annual probable sunlight hours to 51 Vastern Road are given in the APS Appendix 4 to Appendix B, on pages 75-76 of the PDF, for the existing baseline. These data were also agreed in the daylight and sunlight Statement of Common Ground (CD 12.2).
- 4.5 VSC, daylight distribution and annual probable sunlight hours data for cumulative loss of sky light and sunlight to 51 Vastern Road with the 80 Caversham Road and 55 Vastern Road schemes in place, were supplied in two emails from Janine Dunn to Paul Littlefair, dated 17th March 2022. These data were also agreed in the daylight and sunlight Statement of Common Ground (CD 12.2). Unfortunately they do not appear to be in the APS. They are reproduced in Appendix 1 of this rebuttal proof.

Loss of light to 80 Caversham Road/Reading Metropolitan/Hermes scheme

- 4.6 Data on loss of light to this proposed development are given in the APS solely in the form of coloured contour plans. These are given in Appendix C of the APS, on pages 86 and 87 of the PDF. Earlier versions of these contour plans are also given in Appendix 1 to Appendix B of the APS, on pages 47 and 48 of the PDF. However I understand that James Crowley is relying on the versions in Appendix C.
- 4.7 As I set out in paragraphs 5.6 and 5.7 of my proof, the shading on the drawings is not clear and it is not possible to judge accurately what the vertical sky component might be at any particular point. The critical façade facing the proposed Appeal scheme is only shown obliquely. Also, the drawings do not give vertical sky components for Block C of the Hermes development; Block C is the block likely to be most affected by the proposed Appeal Scheme, and incorporates shared ownership dwellings in the indicative scheme for the Hermes site.
- 4.8 Thus it is not possible to tell how large that impact will be, or whether future residents of this site would have adequate daylight with the Appeal Scheme in place.

Loss of light to 55 Vastern Road/SSE scheme

- 4.9 Initially James Crowley provided similar coloured VSC and annual probable sunlight hours diagrams for the loss of light to the 55 Vastern Road/SSE scheme, also in Appendix 1 to Appendix B of the APS, on pages 49-52 of the PDF. Following planning consent for this scheme, he then included the letter report produced by Eb7 assessing daylight and sunlight within the 55 Vastern Road scheme with the Vastern Court development in place. This is Appendix D in the APS.
- 4.10 However, as pointed out in paragraph 5.8 of my proof, the Vastern Court scheme Eb7 analysed does not appear to be the same as that in the maximum parameter plans for the Appeal Scheme; in particular the outline of Block C appears different. James Crowley has therefore recalculated the same data and the results are given in Appendix F of the APS. These data are reviewed in section 5 of this rebuttal proof.

Daylight provision within the proposed development

- 4.11 Data for average daylight factors (ADFs) within the proposed Illustrative Scheme with the existing baseline are given in Appendix 2 to Appendix B of the APS on pages 53-64 of the PDF. Data for average daylight factors (ADFs) within the proposed Illustrative Scheme with the cumulative baseline (including the Hermes and SSE schemes) are given in Appendix C of the APS on pages 88-96 of the PDF.
- 4.12 Data for percentages of rooms meeting the illuminance recommendations in the new British Standard, BS EN 17037, with the Hermes and SSE schemes in place, are given in Appendix F of the APS.
- 4.13 Both these sets of data represent an update on the figures in the original CHP internal daylight and sunlight review (CD 1.46), dated 6th October 2021. An earlier version of this report, dated 23rd September 2021, forms Appendix A of the APS. It is not clear why this report has been included; it is clearly out of date, and uses different assumptions about reflectance factors and glass transmissions. The data in this Appendix should be ignored.
- 4.14 As explained in paragraph 6.3 of my proof, the daylight calculations have applied a frame factor of 0.9 which is unusually high, and this means the calculated ADFs and illuminances would be expected to be overestimated by 12% or more in relative terms.
- 4.15 Data for annual and winter probable sunlight hours, both in the existing baseline and cumulative scenarios, are given in Appendix C of the original CHP internal daylight and sunlight review (CD 1.46), dated 6th October 2021. These data were agreed in the daylight and sunlight Statement of Common Ground (CD 12.2).
- 4.16 Data on sun on ground in open spaces within the proposed scheme are given in Appendix C of the APS, on pages 80-83 of the PDF.
- 4.17 Table 1 below is a ready reference explaining where to find the data.

Table 1. Locations of data in evidence by James Crowley

| Location | Baseline | Parameter | Where to find data |
|--|----------------------|---|--|
| 83-97 Caversham Road, 17-49 Vastern Road | Existing, cumulative | Vertical sky component (VSC)*, annual probable sunlight hours (APSH)* | Technical Annex 10.2 of the Environmental Statement (CD 1.9.32). |
| 83-97 Caversham Road, 17-49 Vastern Road | Existing, cumulative | Daylight distribution (DD)* | APS Appendix 3 to Appendix B, pages 67-73 of the PDF. |
| 51 Vastern Road | Existing | VSC*, APSH*, DD* | APS Appendix 4 to Appendix B, pages 75-76 of the PDF |
| 51 Vastern Road | Cumulative | VSC*, APSH*, DD* | Appendix 1 of this proof |
| 80 Caversham Road (Hermes) | Cumulative | VSC? | Appendix C of the APS, pages 86 and 87 of the PDF. |
| 55 Vastern Road (SSE) | Cumulative | Average daylight factor (ADF)^, APSH^ | Appendix F of the APS |
| Illustrative scheme | Existing | ADF@ | Appendix 2 to Appendix B of the APS, pages 53-64 of the PDF |
| Illustrative scheme | Cumulative | ADF@ | Appendix C of the APS, pages 88-96 of the PDF |
| Illustrative scheme | Cumulative | Areas of rooms meeting daylight illuminances@ | Appendix F of the APS |
| Illustrative scheme | Existing, cumulative | APSH* | Appendix C of the original CHP internal daylight and sunlight review (CD 1.46), dated 6 th October 2021 |
| Illustrative and maximum parameter schemes | Existing, cumulative | Sun on ground* | Appendix C of the APS, pages 80-83 of the PDF |

NOTES TO TABLE 1

* Agreed data

? Coloured plots, incomplete data

^ Data for proposed only

@ Data overestimate actual values

5 LOSS OF LIGHT TO 55 VASTERN ROAD

5.1 As explained above, James Crowley has now given new data for daylight and sunlight provision in 55 Vastern Road with the Appeal Scheme in place. These data are given in Appendix F of the APS. Although this takes the form of a letter to me dated 28th March 2022, it was not delivered to me until 5th April 2022 after I had seen the APS and asked for a copy of the letter. So I was unable to take account of the new data when I wrote my original proof.

5.2 I had to base my assessment of loss of light to the SSE scheme on a letter written by consultants Eb7 for that development, dated 20 May 2020 (this is Appendix D of the APS). They calculated average daylight factors (ADFs) on ground and first floors of the proposed SSE scheme, with an outline Vastern Court development opposite. Unfortunately the Vastern Court scheme Eb7 analysed was not the same as that in the maximum parameter plans for the Appeal Scheme. CHP have now analysed ADFs and annual probable sunlight hours for the SSE scheme and produced alternative data.

5.3 Paragraph 5.9 of my original proof should, using CHP's new data, now be modified to read

'The results show that, out of the twelve living rooms facing the Vastern Court scheme, eleven would have average daylight factors between 1% and 1.4%, below the minimum 1.5% recommendation in the British Standard Code of Practice for daylight, BS 8206 Part 2. The other one, which has an additional window which does not face Vastern Court, and bedrooms in this area would meet their minimum recommendation.'

5.4 Paragraph 5.10 can now be modified to read

'CHP do not give data for these rooms for the situation with the current retail park, so it is not possible to tell what the loss of light is as a result of construction of the Appeal Scheme. However other dwellings in Vastern Road are predicted to lose 30-40% of their light as a result of the Appeal Scheme, so it is likely that some of these rooms would meet the BS recommendation without the Appeal Scheme.'

5.5 Paragraph 5.11 can be modified to read

'Annual sunlight to seven of these living rooms and winter sunlight to eight of them would be below the BRE recommendations with the Appeal Scheme in place. Again,

CHP do not give 'before' values, but it is likely that there would be a significant loss of sunlight, and particularly winter sunlight, to these windows as a result of the Appeal Scheme.'

- 5.6 Using CHP's data, with the correct massing for the Appeal Scheme, instead of Eb7's data gives worse results in general for 55 Vastern Road, with lower ADFs and annual probable sunlight hours with the Appeal Scheme in place.

6 CONCLUSIONS

- 6.1 This rebuttal proof addresses the 'Appellant's Position Statement on Daylight and Sunlight, Reading Station Park, Vastern Court, Reading' (CD 8.16) written by James Crowley of CHP Surveyors on 28th March 2022. It focuses on four areas where further information would be helpful to the inquiry:
- a. Correction of statements made about the recommendations in the BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice' (CD 7.20).
 - b. A rebuttal of statements made in the Appellant's Position Statement, particularly on the applicability of comparators from elsewhere.
 - c. Clarification on which data should be used.
 - d. A revision of the statements in my proof on loss of light to the consented development at 55 Vastern Road, following the submission of material that was not available to me when I wrote my proof.
- 6.2 The Appellant's Position Statement (APS) has made a number of inaccurate statements about the BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice'. In particular, the BRE guidelines are not designed to be applied solely in suburban environments and do not give a recommendation for 20% vertical sky component in urban environments.
- 6.3 The APS suggests daylight and sunlight criteria that are well below what are recommended in standards, and would be expected to result in inadequate levels of light for existing occupiers. It incorrectly concludes (in its 6.4) that '*17-51 Vastern Road will retain an acceptable living standard in accordance with Reading Borough Council's Policy CC8*'. In fact retained levels of light would be significantly below those resulting from the Reading Station Area Framework envisaged by the council.
- 6.4 Daylight and sunlight data are not laid out in a logical manner in the APS. Instead the daylight and sunlight data to be used in the inquiry are spread over three appendices in the APS and three other documents, including this rebuttal proof. A table giving the locations of the various data is given as Table 1 of this rebuttal.

- 6.5 The summary figures given in the APS for numbers of rooms meeting daylight distribution criteria in 17-51 Vastern Road are incorrect.
- 6.6 The APS concludes (6.6) that the proposed scheme *'will be able to provide accommodation with good access to daylight and sunlight'*. In fact when analysed properly the data for the Illustrative Scheme show large numbers of proposed rooms with very poor access to daylight, and very few with the recommended levels of sunlight.
- 6.7 Appendix F of the APS gives new data for daylight and sunlight provision in 55 Vastern Road with the new Vastern Court development in place. These data show that most of the living rooms analysed would fall below minimum standards for daylight and sunlight once Vastern Court was built. The APS does not give data for the existing situation, so it is not possible to quantify the loss of light, but it is likely that these rooms would have significant losses of daylight and sunlight due to the construction of Vastern Court. This contradicts the statement in the 6.7 of the APS that *'this will retain appropriate access to daylight and sunlight'*.
- 6.8 The same paragraph also states that *'the cumulative analysis demonstrates that... the indicative scheme for 80 Caversham Road will be able to provide accommodation with appropriate access to daylight'*. However it has not done so, because the diagram provided is impossible to interpret and the block in the 80 Caversham Road development likely to be most affected has not been analysed at all.
- 6.9 The evidence which I have prepared and provide for this appeal reference APP/E0345/W/21/3289748 in this proof of evidence is true, and I confirm that the opinions expressed are my true and professional opinions.

APPENDIX 1. CUMULATIVE DATA FOR 51 VASTERN ROAD

These tables were prepared by CHP Surveyors and give VSC, daylight distribution and APSH data for cumulative loss of sky light and sunlight to 51 Vastern Road with the 80 Caversham Road and 55 Vastern Road schemes in place. They were supplied in two emails from Janine Dunn to Paul Littlefair, dated 17th March 2022.

Reading Station Park, Reading

Daylight Results for Proposed Scheme - Cumulative

| LEVEL | WINDOW | ROOM | VSC | | LOSS | % LOSS | NOSKY | |
|------------------------|--------|------|----------|----------|------|--------|----------|----------|
| | | | EXISTING | PROPOSED | | | EXISTING | PROPOSED |
| <u>51 Vastern Road</u> | | | | | | | | |
| Ground | W1 | R1 | 30.1 | 19.4 | 10.7 | 35.5 | >80% | >80% |
| | W2 | | 37.3 | 20.5 | 16.9 | 45.2 | | |
| | W3 | | 33.0 | 18.0 | 15.0 | 45.4 | | |
| | W4 | | 31.8 | 15.3 | 16.5 | 51.9 | | |
| | W5 | | 31.5 | 14.9 | 16.6 | 52.6 | | |
| | W6 | | 7.2 | 1.2 | 6.0 | 82.9 | | |
| | W7 | | 32.4 | 17.4 | 15.0 | 46.4 | | |
| | W8 | | 32.1 | 16.6 | 15.5 | 48.3 | | |
| First | W1 | R1 | 32.4 | 22.3 | 10.1 | 31.2 | >80% | >80% |
| | W2 | | 37.9 | 21.8 | 16.1 | 42.6 | | |
| | W3 | | 34.3 | 19.6 | 14.7 | 42.8 | | |
| | W4 | | 34.5 | 18.4 | 16.1 | 46.6 | | |

Rebuttal Proof of Evidence – Dr Paul Littlefair

Land North of Reading Station,
Station Shopping Park, Vastern Road, Reading
Daylight Distribution Results - Cumulative

| LEVEL | ROOM | ROOM USE | WHOLE ROOM SQFT | EXISTING SQFT | PROPOSED SQFT | LOSS SQFT | % LOSS |
|------------------------|------|----------|-----------------|---------------|---------------|-----------|--------|
| <u>51 Vastern Road</u> | | | | | | | |
| Ground | R1 | Bedroom | 18.63 | 18.62 | 18.59 | 0.03 | 1% |
| First | R1 | Bedroom | 19.73 | 19.67 | 17.5 | 2.17 | 11% |

Reading Station Park, Reading
Sunlight Results for Proposed Scheme - Cumulative

| LEVEL | WINDOW | EXISTING | | | PROPOSED | | | % LOSS | |
|------------------------|--------|----------|--------|-------|----------|--------|-------|--------|-------|
| | | SUMMER | WINTER | TOTAL | SUMMER | WINTER | TOTAL | WINTER | TOTAL |
| <u>51 Vastern Road</u> | | | | | | | | | |
| Ground | R1 | 67% | 28% | 95% | 48% | 6% | 54% | 78.57 | 43.16 |
| First | R1 | 67% | 29% | 96% | 51% | 7% | 58% | 75.86 | 39.58 |