



**DAYLIGHT & SUNLIGHT
REPORT**

for

PROPOSED DEVELOPMENT

at

**PREMIER INN,
PENTREBACH,
MERTHYR TYDFIL,
CF48 4BB**

REF: WW/JK/ROL01390
19 June 2024

expertise
applied

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Figure 1: Aerial photograph of the site facing north (Source: Google)

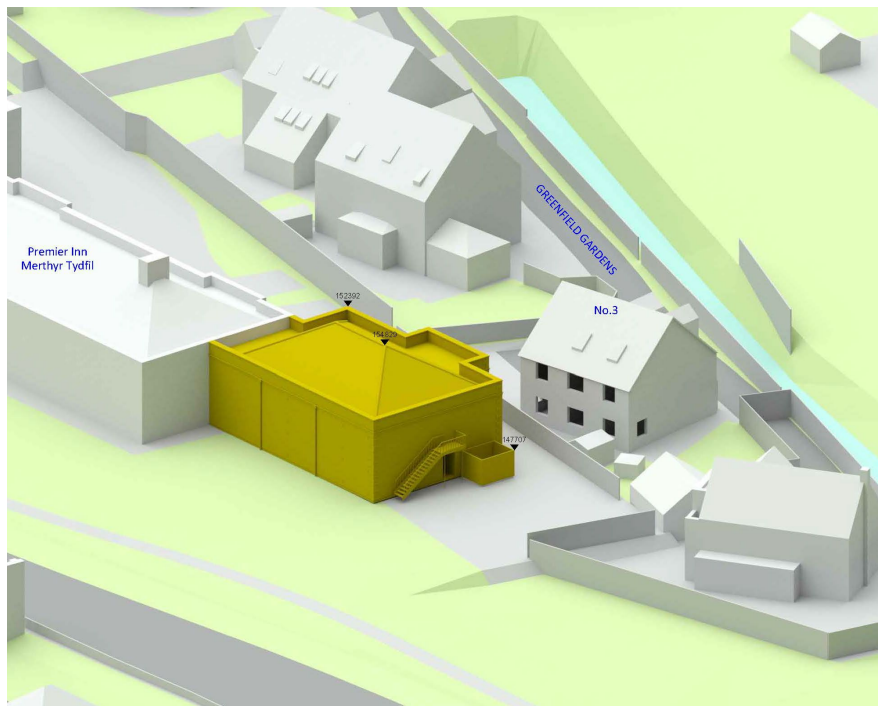


Figure 2: 3D view of computer model in the proposed condition

1. INTRODUCTION

- 1.1 Whitbread Group PLC is proposing a hotel extension at Premier Inn, Pentrebach, Merthyr Tydfil, CF48 8BB.
- 1.2 The application site is situated to the southeast of Pentre-Bach of Rail Station and is bounded by residential properties along Greenfield Court to the east and the A4060 to the west.
- 1.3 Whitbread Group PLC is conscious of the need to minimise impact on the light to neighbouring residential properties and therefore instructed Anstey Horne to work with the project architect, Axiom, so that the effects of the proposed development could be properly understood and, wherever possible, minimised.
- 1.4 Anstey Horne has been commissioned to undertake a formal technical assessment of the effect of the proposed development upon the existing surrounding properties and amenity spaces, having regard to the recommendations in BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice* (third edition, 2022), commonly referred to as “The BRE Guidelines”.
- 1.5 Our study has been carried out using 3D computer modelling and our specialist computer simulation software. Our 3D model is shown in Figure 2: 3D view of computer model in the proposed condition on page 1.
- 1.6 This report summarises the relevant planning policy, the basic principles of daylighting and sunlighting, the methods used to assess the potential impact of the development, the information used in compiling our 3D computer model and the results of our technical assessment. Drawings and full tables of results of our technical assessment are attached in the appendices.

2. PLANNING POLICY AND GUIDANCE

Local Planning Policy and Guidance

Merthyr Tydfil Replacement Local Development Plan 2016 – 2031

- 2.1 The development site is located within the Merthyr Tydfil County Borough Council.
- 2.2 The Merthyr Tydfil Replacement Local Development Plan (LDP) 2016 - 2031 provides the local planning policy framework for the area and was adopted by Council on 29th January 2020. It is the basis for land use planning decisions in the County Borough including that of Pentrebach.
- 2.3 Policy SW11 on page 44 of the Local Development Plan highlights that:
- “Development must contribute to the creation of attractive and sustainable places through high quality, sustainable and inclusive design”*
- 2.4 With reference to daylight and sunlight the Policy stresses the importance that development must:
- “not result in an unacceptable impact on local amenity, loss of light or privacy, or visual impact, and incorporate a good standard of landscape design;”*
- 2.5 We confirm that we have undertaken our daylight and sunlight study in accordance with BRE Guidelines 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice* (third edition, 2022).

3. BRE METHOD OF ASSESSMENT AND NUMERICAL GUIDELINES

Daylight to existing surrounding buildings

- 3.1 Section 2.2 of the BRE Guidelines makes recommendations concerning the effect on daylight to existing buildings. In summary, the BRE Guidelines state that:

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

- the VSC [vertical sky component] measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value; [or]*
- the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value.”*

- 3.2 So, where the angle to the horizontal subtended by the new development measured at the centre of the lowest window in an existing surrounding building (the angle of obstruction) is less than 25° (see Figure 3 below), the diffuse daylight to that building is unlikely to be significantly affected and need not be tested.

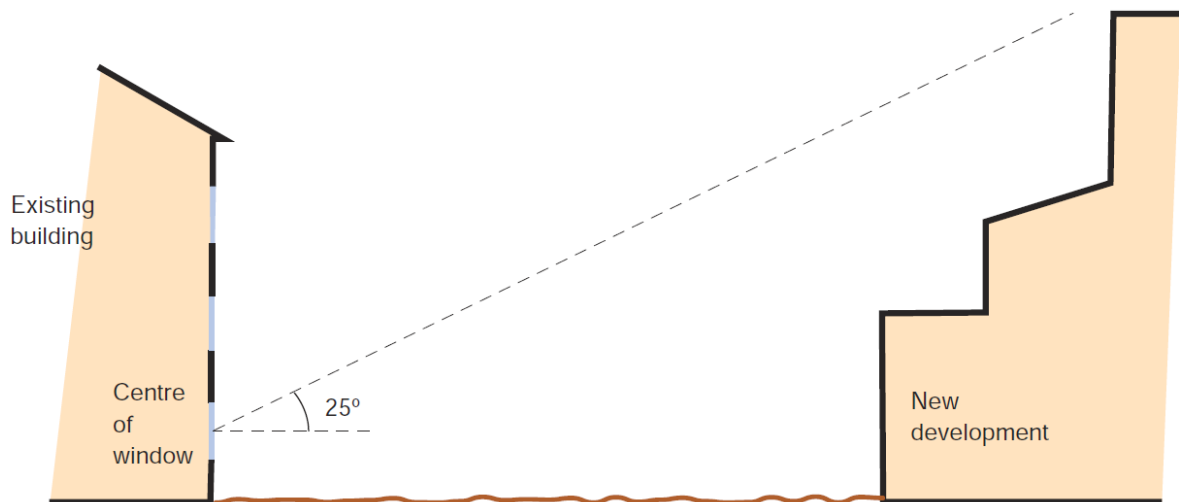


Figure 3 - Section perpendicular to a main window wall of an existing building showing a new development subtending an angle of less than 25° to the horizontal from the centre of the lowest window. (© BRE Report 209)

- 3.3 Where the obstruction angle is greater than 25°, both of the more detailed daylight tests should be undertaken, namely vertical sky component ('VSC') at the window and daylight distribution on the working plane. For each test the Guidelines operate on the general principle that if the amount of daylight is reduced to less than 0.8 times its former value (i.e. there will be more than a 20% loss) the reduction will be noticeable to the building's occupants.
- 3.4 'Noticeable' does not necessarily equate to 'unacceptable' and the BRE's standard target values should not be considered as pass/fail criteria. Ultimately the local planning authority will need to make a judgement as to whether any impacts are acceptable when weighed against the many other planning considerations.
- 3.5 The VSC test measures the amount of skylight available at the centre of a window on the external plane of the window wall. It has a maximum value of almost 40% for a completely unobstructed vertical window wall. If a room has two or more windows of equal size, the mean of their VSCs may be taken. As the VSC calculation takes no account of the size of the window being tested, the size of the room it lights or multiple windows of unequal size, it does not measure light inside the room. It merely measures the potential conditions in the room. The VSC results can therefore be potentially misleading if considered in isolation and should be read in conjunction with those of the second test - daylight distribution.
- 3.6 The daylight distribution test calculates the area of the working plane inside a room that will have a direct view of the sky. This is done by plotting the no-sky line, i.e. the line on the working plane that divides those areas that receive direct skylight from those that do not, as shown in Figure 4 below.

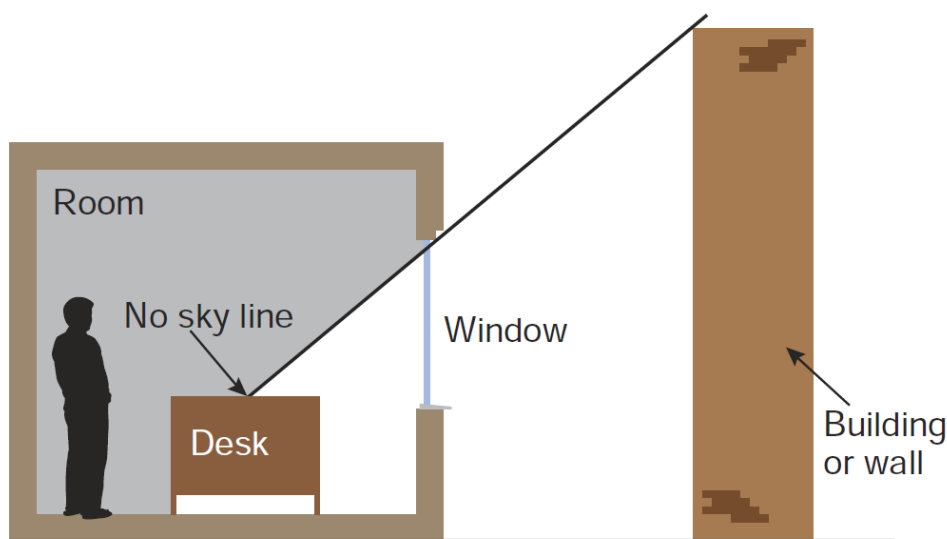


Figure 4 - The no-sky line divides areas of the working plan which can and cannot receive direct skylight.
(© BRE Report 209)

- 3.7 One benefit of the daylight distribution test is that the resulting contour plans show where the light falls within a room, both in the existing and proposed conditions, and a judgement may be made as to whether the room will retain light to a reasonable depth.
- 3.8 The BRE Guidelines are intended for use for rooms in adjoining dwellings. They may also be applied to any existing non-domestic buildings where the occupants have a reasonable expectation of daylight, which could include schools, hospitals, hotels and offices. For dwellings it states that living rooms, dining rooms and kitchens should be assessed. Bedrooms should also be checked, although it states that they are less important. Other rooms, such as bathrooms, toilets, storerooms, circulation areas and garages need not be assessed.

Sunlight to existing surrounding buildings

- 3.9 Section 3.2 of the BRE Guidelines makes recommendations concerning the impact on sunlight to existing dwellings or non-domestic buildings where there is a particular requirement for sunlight. The Guidelines note at paragraph 3.2.2 that:

“obstruction to sunlight may become an issue if:

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

- 3.10 If these angle criteria are not met, the Guidelines recommend a more detailed check to calculate the impact of the proposed development on the available sunlight.

- 3.11 The BRE Guidelines suggest:

“all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun. In non-domestic buildings any spaces which are deemed to have a special requirement for sunlight should be checked; they will normally face within 90° of due south anyway.” (BRE paragraph 3.2.3)

- 3.12 The available sunlight is measured in terms of the percentage of annual probable sunlight hours ('APSH') at the centre point of the window. 'Probable sunlight hours' is defined as:

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

3.13 Paragraph 3.2.13 of the BRE Guidelines summarises its sunlight guidance as follows:

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

- receives less than 25% of annual probable sunlight hours and less than 0.80 times its former annual value; or less than 5% of annual probable sunlight hours between 21 September and 21 March and less than 0.80 times its former value during that period;*
- and also has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours”.*

Sunlight to existing surrounding gardens and open spaces

3.14 Section 3.3 of the BRE Guidelines makes recommendations concerning the impact of proposed development on sunlight to open spaces between buildings, such as main back gardens of houses, allotments, parks and playing fields, children’s playgrounds, outdoor swimming pools, sitting-out areas, such as in public squares and focal points for views, such as a group of monuments or fountains. The Guidelines recommend that the level of overshadowing on such areas should be checked on the equinox (21 March).

3.15 The BRE Guidelines recognises that each of these spaces has different sunlighting requirements and that it is difficult to suggest a hard and fast rule. It recommends that at least half of the amenity area should receive at least two hours of sunlight on the equinox on 21 March.

3.16 When assessing the impact of a proposed development on the level of overshadowing of an existing open amenity, the BRE Guidelines recommend that:

“if, as a result of new development the area which can receive two hours of direct sunlight on 21 March is reduced to less than 0.8 times its former size, this further loss of sunlight is significant. The garden or amenity area will tend to look more heavily overshadowed”.

3.17 Sunlight at an altitude of 10° or less does not count, because it is likely to be blocked by planting anyway. Driveways and hard standing for cars is usually left out of the area calculation. Around housing, front gardens which are relatively small and visible from public footpaths can be omitted with only main back gardens needing to be analysed.

3.18 Fences or walls less than 1.5 metres high can be ignored. The Guidelines note that:

“normally, trees and shrubs need not be included, partly because their shapes are almost impossible to predict, and partly because the dappled shade of a tree is more pleasant than a deep shadow of a building”.

This is especially the case for deciduous trees, which provide welcome shade in the summer whilst allowing sunlight to penetrate during the winter months.

Computer simulation

- 3.19 Appendix A of the BRE Guidelines describes a method for calculating VSC and APSH using various indicator templates and Appendix D shows how the no-sky line may be plotted inside a room. Where the obstructions on the skyline are complex these manual methods can be difficult to apply and the results can be crude. We therefore prefer to use computer simulation and our specialist software, which is based on the more accurate Waldram method, which is described in Appendix B of the BRE guide.
- 3.20 The information upon which our computer model was based is explained in the section 5 of this report.

4. APPLICATION OF BRE GUIDELINES

Flexible application of the guidelines

4.1 In its introduction the BRE Guidelines (third edition, 2022) states:

- *(Its) "main aim is ... to help to ensure good conditions in the local environment, considered broadly, with enough sunlight and daylight on or between buildings for good interior and exterior conditions."* (BRE paragraph 1.5)
- *"The Guidelines are intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and this document should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer."* (BRE paragraph 1.6)
- *"Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design."* (BRE paragraph 1.6)

4.2 Clearly, the BRE Guidelines is an advisory document, not a rigid set of rules. Care must therefore be taken to apply its recommendations in a manner fitting to the location of the proposed development.

Proximity of neighbouring building to the boundary

4.3 The BRE Guidelines permits the reasonableness or otherwise of the distance of the neighbouring building from the boundary to be taken into account. At paragraph 2.2.3 it states:

"Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light".

Interpretation of relative impacts

4.4 Except where the BRE Guidelines specified minimum values will be retained in the proposed condition. The Guidelines advises that a loss of light will be noticeable if the amount retained will be less than 0.8 times its former value. (We refer to this as the 'BRE 0.8 guideline'.) Care must be taken when interpreting the 'relative impact' figures (in the columns marked "factor of former value" in the tables of results), because where an existing value is low even a small reduction in real terms can manifest itself as a large relative impact. For example a reduction from 6% VSC to 3% VSC will appear as a reduction

to 0.5 times its former value, and is therefore a transgression of the guidelines in theory, but in reality a loss of 3% VSC is very small and would be barely perceptible.

- 4.5 When the BRE launched the second edition of their guidelines in 2011, they cited the above logic as the reason for introducing the third tier to their sunlight criteria, as referred to in paragraph 3.13 above, namely that sunlight will be adversely affected where it is reduced below 25% APSH annually or 5% APSH in winter and to less than 0.8 times its former value and where the reduction annually is greater than 4% APSH.

Deep rooms

- 4.6 The BRE Guidelines advises that light penetration into deep rooms lit from one side only may be unavoidably affected. At paragraph 2.2.12 it states

“The guidelines ... need to be applied sensibly and flexibly. There is little point in designing tiny gaps in the roof lines of new development in order to safeguard no sky lines in existing buildings. If an existing building contains rooms lit from one side only and greater than 5 m deep, then a greater movement of the no sky line may be unavoidable.”

5. INFORMATION USED IN THE TECHNICAL STUDY

- 5.1 In order to carry out the tests recommended in the BRE Guidelines, we commenced by building a 3D computer model of the existing buildings on the site, the existing surrounding buildings to be studied, other relevant background massing and the proposed scheme. The computer model is illustrated on the drawings at Appendix A and is based on the information listed below.

Proposed scheme:

- Axiom Architects 3D model of the proposed scheme received 10th June 2024.

Existing building on the site and existing surrounding buildings:

- Zmapping's survey data received 10th June 2024.
- Site photographs.

- 5.2 We have not been able to source internal layout information for 3 Greenfield Court from any online sources. In the absence of internal layout information, we have modelled the rooms behind the windows facing the site to reasoned assumptions. This is considered best practice in the absence of securing physical access into a neighbouring property. In this case, we have assumed the windows on the corners of the west elevation serve rooms that are dual aspect by virtue of windows that are present on the adjacent elevations. In a 'worst-case' scenario where this is not correct, it will have no bearing upon the tests for VSC or APSH because the reference point is at the centre of the window.

6. SCOPE OF TECHNICAL STUDY

- 6.1 In our experience local planning authorities are usually only concerned with the potential effect on dwellings and, perhaps, schools, hospitals and nursing homes. This is the basis on which we have scoped our technical study.
- 6.2 Having regard to the preliminary 25°-line test and orientation test recommended in the BRE Guidelines, as explained above in Section 3 of this report, we have calculated the impact of the proposed development on the daylight and sunlight levels to relevant rooms in 3 Greenfield Court, given its proximity to the development site. The scope of our assessments is outlined in Table 1 below:

Table 1 - Scope of assessments

Properties	Daylight	Sunlight	Sunlight to Gardens	Internal Layout information
3 Greenfield Court	Yes	Yes	Yes	Assumed

- 6.3 It is only considered necessary to test the impact on the main rooms in each property, as advised in the BRE Guidelines. It is not necessary to test staircases, hallways, bathrooms, toilets etc. however, given that internal layouts are not known, we have tested all windows and rooms within 3 Greenfield Court as a 'worst-case' scenario.
- 6.4 All public areas of open space such as parks and squares and neighbouring communal amenity areas and private gardens are considered sensitive. The BRE Guidelines states that:
- "Around housing, front gardens that are relatively small and visible from public footpaths should be omitted; only the main back garden should be analysed."*
- 6.5 In light of the above, we have only considered it appropriate to test the main back garden within 3 Greenfield Court given the car parking area to the front of the property would not have a reasonable expectation for sunlight.
- 6.6 The existing surrounding building tested is shown labelled on the plan views of the computer model on our drawings at Appendix A of this report.
- 6.7 The daylight distribution contour plans at Appendix E show the window positions and room layouts that have been tested in each of the buildings concerned.

7. IMPACT UPON SURROUNDING PROPERTIES

- 7.1 In this section of our report, we set out our analysis of the results of the technical review under the headings of daylight and sunlight. For each relevant method of assessment, a detailed appraisal has been provided.
- 7.2 To re-cap briefly on the assessment criteria explained in section 5, each of the tests is run in the existing and proposed condition so that the daylight and sunlight levels before and after development are quantified and the relative change is determined. Except where the BRE Guideline's specified minimum values will be retained in the proposed condition, it advises that a loss of light will be noticeable if the amount retained will be less than 0.8 times its former value (the "BRE 0.8 guideline").

Daylight and sunlight to 3 Greenfield Court

- 7.3 The numerical results of the vertical sky component ('VSC') test are tabulated at Appendix B. For the daylight distribution test, numerical results are tabulated at Appendix C and no-sky contour plans are shown on our drawings at Appendix E. On the plans, the area of the room with a view of sky in the proposed condition is enclosed by the red contour and in the existing condition by the green contour. Where there will be no effect on the no-sky contour the red contour sits on top of the green one and only the red contour is visible. Where there will be a change, the areas of the room that will either lose or gain a view of sky are cross-hatched black.
- 7.4 The numerical results of the percentage of annual probable sunlight hours ('APSH') test are tabulated at Appendix D. Only 3 Greenfield Court is considered relevant for assessment by application of the BRE guide's preliminary 25° line test and orientation test, as explained above.
- 7.5 The results of our technical assessments show that, of the ten windows that we considered relevant for assessment, eight (80%) achieve the guideline values for the VSC test for daylight. There are two windows located XXX which experience changes of 0.71 and 0.78 times their former value, falling only marginally short of the BRE guideline value of 0.8 times. The results also show that these windows will retain VSC values of 24.5% and 20.6% respectively which is very encouraging. We should note that, as room layouts are unknown, it may be that one of these windows serves a room which is non-habitable and therefore will not have an expectation of natural light.
- 7.6 With regard to the Daylight Distribution (DD) test to the room, all assessed rooms meet and exceed the guideline values set out in the BRE and therefore any change in daylight condition to these rooms is unlikely to be noticeable.

- 7.7 Therefore, despite the marginal reductions outside of the BRE's recommendations for two windows for the VSC test for daylight, considering that all rooms comfortably meet and exceed the DD to the room test, we consider that 3 Greenfield Gardens will continue to enjoy very good levels of daylight amenity.
- 7.8 With regard to the Annual Probable Sunlight Hours test for sunlight, all assessed rooms achieve the guideline values set out in the BRE, retaining between 45% and 84% annual PSH which is significantly above the 25% recommended by the BRE Guidelines. We therefore consider that all rooms within 3 Greenfield Gardens will remain excellently sunlit.

Sunlight to the rear garden of 3 Greenfield Court

- 7.9 In accordance with the BRE Guidelines we have calculated the effect on the rear garden of 3 Greenfield Court by plotting the two-hour sun contour on 21 March in the existing and proposed condition as shown on our drawings at Appendix F. The parts of each garden receiving at least two hours of sunlight are shaded yellow and expressed as a percentage on the drawings. The figures are also set out in Table 2 below, along with the factor by which the existing sunlit area will change as a consequence of the proposed development.

Table 2 - Summary of two-hour sun-on-ground results

Address	Proportion in sun for ≥ 2 hrs on 21 March		Factor of former value
	Existing	Proposed	
3 Greenfield Court	81%	81%	1.00

- 7.10 The results of the two-hour sun contour test confirm that 81% of the rear garden to 3 Greenfield Court will continue to receive at least two hours of direct sunlight on 21 March and will therefore remain excellently sunlit.

8. SUMMARY AND CONCLUSION

- 8.1 Anstey Horne have been appointed to undertake a technical review by reference to the daylight and sunlight effects associated with the proposed extension of the Premier Inn, Merthyr Tydfil. The only neighbouring receptor that has been identified is 3 Greenfield Court which has been assessed in relation to the methodologies of the BRE Guidelines.
- 8.2 The technical results show that that almost all full strict BRE compliance will be recorded. Whilst there are two windows which fall marginally outside of the BRE guideline values (effects within 10% of the BRE's advisory permissible 20% former value), all rooms either meet or exceed the Daylight Distribution test and therefore we consider that 3 Greenfield Court will continue to receive good levels of daylight amenity. With regard to the APSH test for sunlight, all assessed rooms comfortably meet and exceed the guideline values set out in the BRE.
- 8.3 With regards to sunlighting to 3 Greenfield Court, the main rear garden will comfortably meet and exceed the recommended guideline values set out by the BRE and will therefore remain excellently sunlit on the 21st March.
- 8.4 In conclusion, the layout of the proposed development follows the BRE Guidelines and will not significantly reduce sunlight or daylight to existing surrounding properties and rear gardens.



.....
ANSTEY HORNE

19 June 2024

APPENDIX A

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PLAN AND 3D VIEWS OF THE COMPUTER MODEL

DRAWING NOS. ROL01390_R01_V01_3D-001-006



Premier Inn
Merthyr Tydfil

No.3

GREENFIELD GARDENS

SITE PLAN VIEW

LEGEND:

- Existing
- Proposed
- Consented
- Cutback
- AOD Height (mm)

SOURCES OF INFORMATION:

EXISTING, SURROUNDING & ANALYSED BUILDINGS
ZMAPPING
Received on 10/06/24
Site and aerial photos.
PROPOSED BUILDINGS
AXIOM ARCHITECTS
Received on 10/06/24



0m 2.5m 5m 7.5m 10m 12.5m

PROJECT INFORMATION

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CLIENT: WHITBREAD GROUP PLC

PROJECT TITLE: PREMIER INN
PENTREBACH
METHYR TYDFIL, CF48 8BB

SCHEME REF: SCHEME RECEIVED: 10/06/24

DRAWING TITLE: SITE PLAN VIEW
EXISTING CONDTION

MODELLED BY: / DRAWN BY: AH/AK DATE: 12/06/24 SCALE: 1:250 **A3**

PROJECT No: ROL01390_R01_V01_ RELEASE No: VERSION No: DRAWING No: 001

3D MASSING VIEW



 Existing
 Consented

 Proposed
 Cutback

12120
 AOD Height (mm)

EXISTING, SURROUNDING & ANALYSED BUILDINGS
ZMAPING
Received on 10/06/24

Site and aerial photos.

PROPOSED BUILDINGS
AXIOM ARCHITECTS
Received on 10/06/24



0m 2.5m 5m 7.5m 10m 12.5m

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PROJECT TITLE: PREMIER INN
PENTREBACH
METHYR TYDFIL, CF48 8BB

DRAWING TITLE: SITE PLAN VIEW
PROPOSED SCHEME

PROJECT No:	RELEASE No:	VERSION No:	DRAWING No:
ROL01390_R01_V01_			004

Site Plan

No.3

GREENFIELD GARDENS

SITE PLAN VIEW



 Existing
 Consented

 Proposed
 Cutback

12120
 AOD Height (mm)

PROPOSED BUILDINGS
AXIOM ARCHITECTS
Received on 10/06/24

3D Massing Model

3D MASSING VIEW

APPENDIX B

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VERTICAL SKY COMPONENT ('VSC') TABLE

Property/ room ref.	Property type	Flat no.	Room usage	Window ref.	Existing VSC(%)	Proposed VSC(%)	*Factor of former value
3 Greenfield Gardens							
Gnd Floor							
R1	RESIDENTIAL		UNKNOWN	W1	35.58	35.58	N/A
R1	RESIDENTIAL		UNKNOWN	W2	31.81	27.12	N/A
R2	RESIDENTIAL		UNKNOWN	W3	31.50	24.47	0.78
R3	RESIDENTIAL		UNKNOWN	W4	29.07	20.61	0.71
R3	RESIDENTIAL		UNKNOWN	W5	32.89	30.75	N/A
R4	RESIDENTIAL		UNKNOWN	W6	33.80	32.07	N/A
1st Floor							
R1	RESIDENTIAL		UNKNOWN	W1	36.47	33.13	N/A
R2	RESIDENTIAL		UNKNOWN	W2	36.41	30.65	N/A
R3	RESIDENTIAL		UNKNOWN	W3	36.28	27.62	N/A
R4	RESIDENTIAL		UNKNOWN	W4	36.50	35.91	N/A

APPENDIX C

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DAYLIGHT DISTRIBUTION TABLE

Property / room ref.	Property type	Flat no.	Room Usage	Room area (m ²)	Existing lit area (m ²)	Proposed lit area (m ²)	*Factor of former value
3 Greenfield Gardens							
Gnd Floor							
R1	RESIDENTIAL		UNKNOWN	12.41	12.39	12.01	0.97
R2	RESIDENTIAL		UNKNOWN	13.37	13.25	10.94	0.83
R3	RESIDENTIAL		UNKNOWN	7.65	7.57	7.56	1.00
R4	RESIDENTIAL		UNKNOWN	2.00	1.79	1.79	1.00
1st Floor							
R1	RESIDENTIAL		UNKNOWN	12.41	12.19	12.15	1.00
R2	RESIDENTIAL		UNKNOWN	13.37	13.21	12.83	0.97
R3	RESIDENTIAL		UNKNOWN	13.00	12.67	10.58	0.84
R4	RESIDENTIAL		UNKNOWN	4.44	4.44	4.44	1.00

APPENDIX D

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DAYLIGHT DISTRIBUTION CONTOUR PLANS

DRAWING NOS. ROL01390_R01_V01_PL-101-01

LEGEND:

Room Layout - Plan/ Inspection

Room Layout - Notional/ Cellular

Room Layout - Assumed

Proposed Contour

Existing Contour

Square Ft. Grid

SOURCES OF INFORMATION:

EXISTING, SURROUNDING & ANALYSED BUILDINGS
ZMAPPING
Received on 10/06/24
Site and aerial photos.

PROPOSED BUILDINGS
AXIOM ARCHITECTS
Received on 10/06/24



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CLIENT: WHITBREAD GROUP PLC

PROJECT TITLE:
PREMIER INN
PENTREBACH
METHYR TYDFIL, CF48 8BB

SCHEME REF: SCHEME RECEIVED: 10/06/24

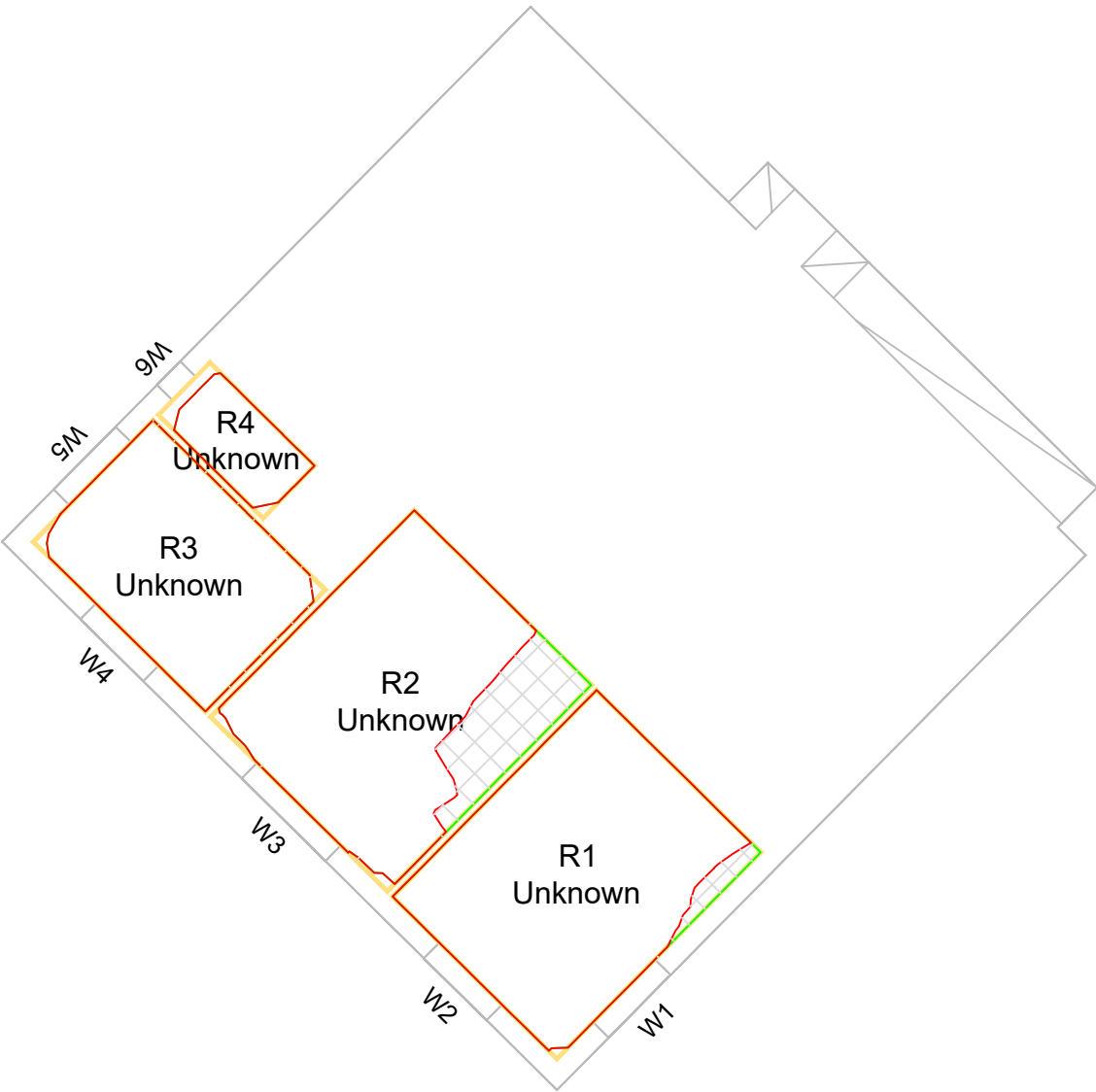
DRAWING TITLE:
DAYLIGHT DISTRIBUTION CONTOURS
3 GREENFIELD GARDENS

MODELLER BY: / DRAWN BY: AH/AK DATE: 12/06/24 SCALE: 1:100 A3

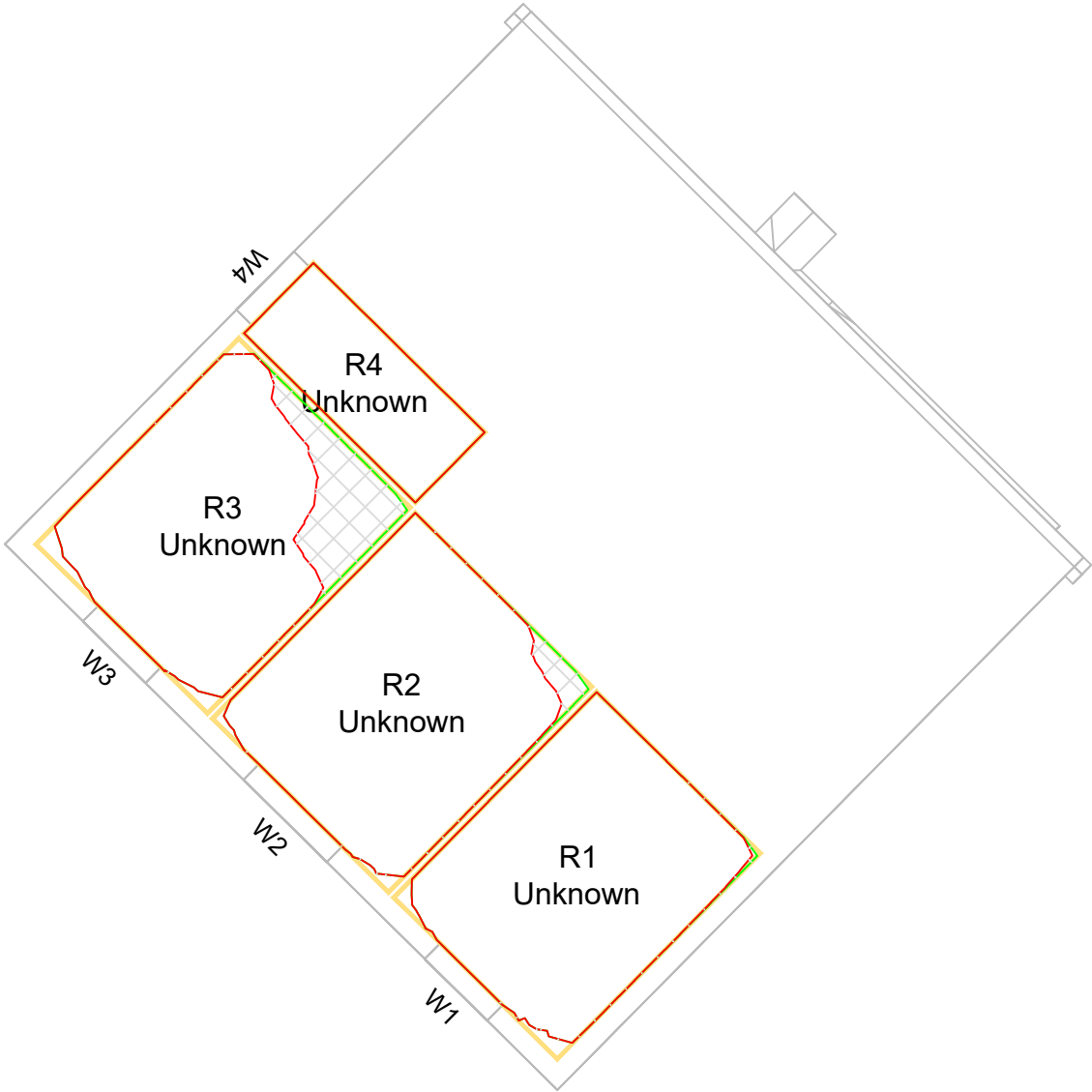
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ROL01390_R01_V01_ 101-01

Daylight & Sunlight



GROUND



1ST FLOOR

APPENDIX E

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TWO-HOUR SUN CONTOUR ON 21 MARCH DRAWINGS

DRAWING NOS. ROL01390_R01_V01_SOG-301-01-02

Premier Inn
Merthyr Tydfil

No.3

A1
81%

GREENFIELD GARDENS

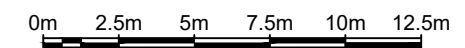
SITE PLAN VIEW

LEGEND:

- Area receiving ≥ 2 hr Sunlight on 21st March
- Area receiving < 2 hr Sunlight on 21st March
- X% - Percentage of Amenity Space receiving ≥ 2 hr Sunlight on 21st March

SOURCES OF INFORMATION:

EXISTING, SURROUNDING & ANALYSED BUILDINGS
ZMAPPING
Received on 10/06/24
Site and aerial photos.
PROPOSED BUILDINGS
AXIOM ARCHITECTS
Received on 10/06/24



PROJECT INFORMATION

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CLIENT: WHITBREAD GROUP PLC

PROJECT TITLE: PREMIER INN
PENTREBACH
METHYR TYDFIL, CF48 8BB

SCHEME REF: SCHEME RECEIVED: 10/06/24

DRAWING TITLE: TWO-HOUR SUNLIGHT TEST
21ST MARCH (GMT)
EXISTING CONDTION

MODELLED BY: / DRAWN BY: AH/AK DATE: 12/06/24 SCALE: 1:250 **A3**

PROJECT No: RELEASE No: VERSION No: DRAWING No:
ROL01390_R01_V01_ 301-01

2Hr Sun-On-Ground

Premier Inn
Merthyr Tydfil

GREENFIELD GARDENS

No.3

A1
81%

SITE PLAN VIEW

LEGEND:

- Area receiving ≥ 2 hr Sunlight on 21st March
- Area receiving < 2 hr Sunlight on 21st March
- X% - Percentage of Amenity Space receiving ≥ 2 hr Sunlight on 21st March

SOURCES OF INFORMATION:

EXISTING, SURROUNDING & ANALYSED BUILDINGS

ZMAPPING
Received on 10/06/24

Site and aerial photos.

PROPOSED BUILDINGS

AXIOM ARCHITECTS
Received on 10/06/24



0m 2.5m 5m 7.5m 10m 12.5m

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CLIENT: WHITBREAD GROUP PLC

PROJECT TITLE: PREMIER INN
PENTREBACH
METHYR TYDFIL, CF48 8BB

SCHEME REF: SCHEME RECEIVED: 10/06/24

DRAWING TITLE: TWO-HOUR SUNLIGHT TEST
21ST MARCH (GMT)
PROPOSED SCHEME

MODELLED BY: / DRAWN BY: AH/AK DATE: 12/06/24 SCALE: 1:250 **A3**

PROJECT No: RELEASE No: VERSION No: DRAWING No:
ROL01390_R01_V01_ 301-02

2Hr Sun-On-Ground



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