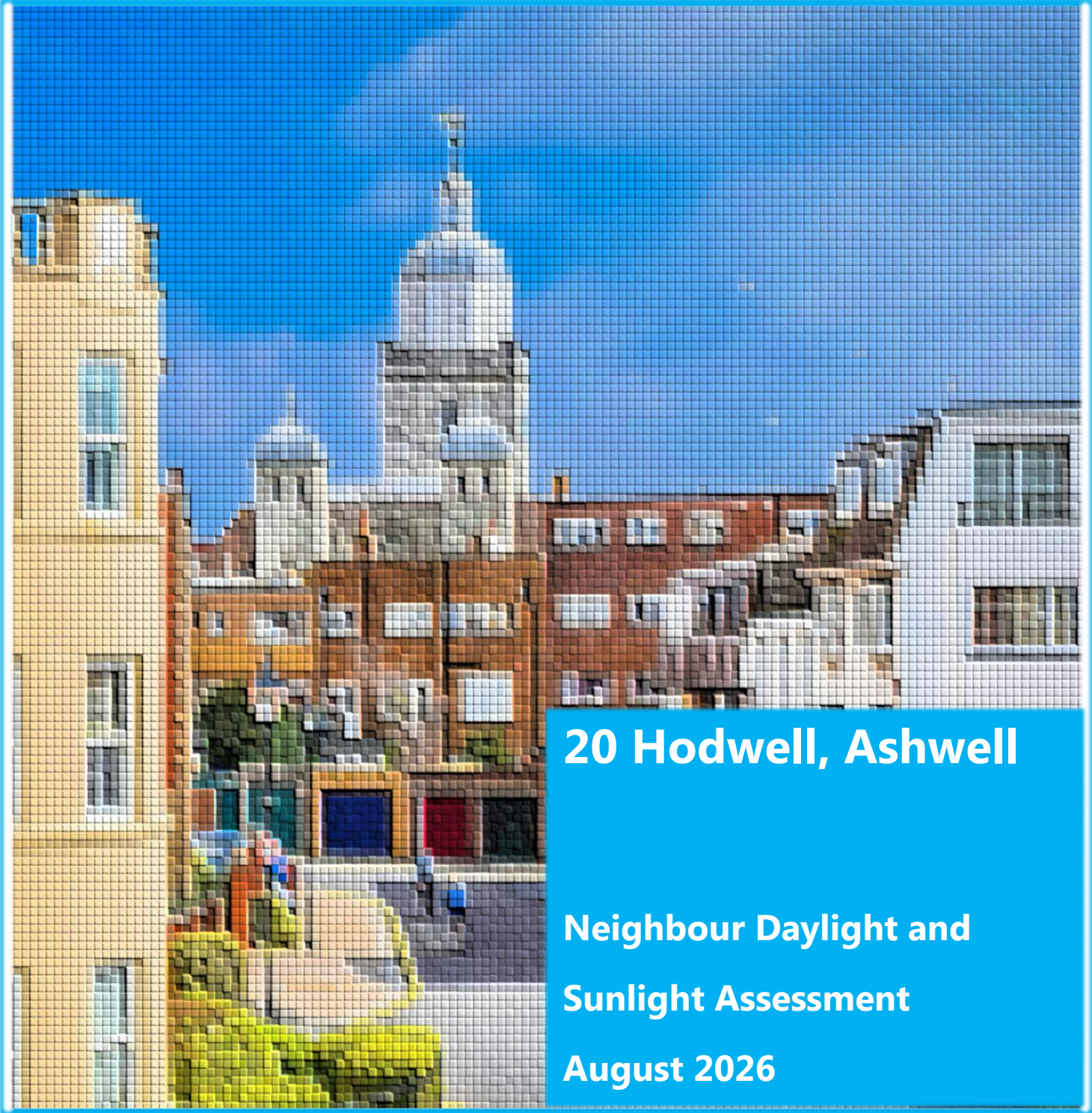




20 Hodwell, Ashwell

**Neighbour Daylight and
Sunlight Assessment**

August 2026

Project	Details
Development	20 Hodwell, Ashwell- Single storey side extensions following demolition of existing Western side element.
Planning reference	26/01468/FPH
Prepared for	Malcolm Tilbe
Prepared by	Radhika Ganesh BArch MSc
Date / Revision	21 August 2026 / R01

Document Control

Revision	Date	Description	Prepared by
R01	21 August 2026	Neighbour Daylight and Sunlight Assessment to support planning application of the proposed development	Radhika Ganesh BArch MSc

About Environmental Economics

Environmental Economics provides practical building performance, energy and environmental consultancy to the residential and construction sectors. Our consultants bring experience across sustainability, energy, engineering, building physics, construction, environmental management and auditing.

Over the last decade, Environmental Economics has provided assessments and design advice for major UK housebuilders and development teams. Our services include:

- daylight and sunlight simulations;
- overheating analysis and dynamic thermal modelling;
- energy reports and Part L compliance;
- ventilation, water and other Building Regulations advice;
- BREEAM, SBEM and MEES assessments; and
- thermal-bridging and building-performance advice.



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1. Executive Summary

Environmental Economics Ltd has undertaken a daylight and sunlight assessment in support of the proposed development at 20 Hodwell, Ashwell (planning application reference: 26/01468/FPH).

The assessment considers the effect of the proposal on the neighbouring residential properties identified as plots 22 and 24.

Vertical Sky Component (VSC) and Annual Probable Sunlight Hours (APSH) have been assessed with reference to BRE BR 209:2022, Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice.

All ten assessed neighbouring windows meet the adopted VSC guidance. APSH results are fully compliant at plot 24. At plot 22, four of the five windows meet the APSH guidance in full. One window records a modest shortfall against the annual retained-value test only, retaining 76% of its existing annual sunlight availability; its winter sunlight result meets the guidance.

The one annual APSH shortfall is not material in planning terms. The affected window is one of three windows serving the same kitchen/dining room, and the remaining windows to that room retain compliant sunlight amenity. The result is also considered in the context of the existing close-built relationship at plot 22. No adverse daylight or sunlight effect is identified at plot 24.

2. Introduction

2.1 Instruction

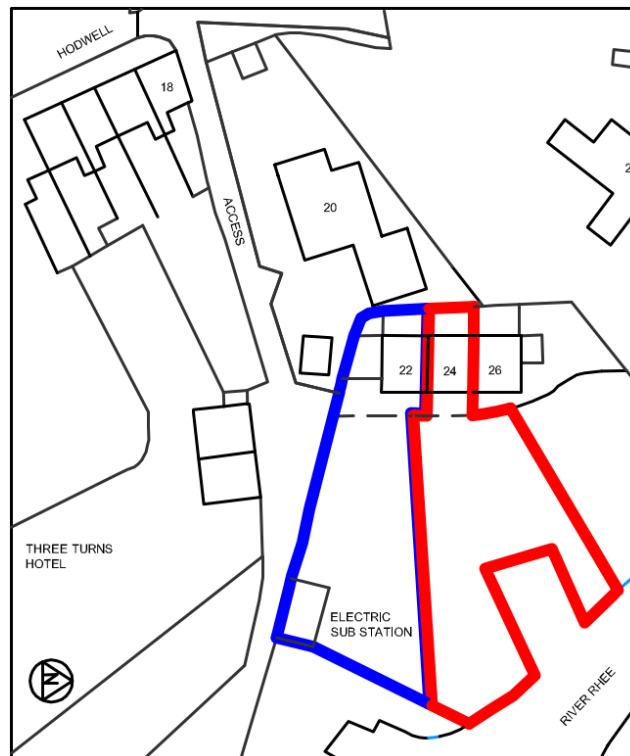
Environmental Economics Ltd has been instructed to assess the potential effect of the proposed development at 20 Hodwell, Ashwell on daylight and sunlight received by neighbouring residential windows.

2.2 Scope

The scope is limited to daylight and sunlight amenity at the neighbouring residential windows at plots 22 and 24 that face the proposed development. This is the relevant planning relationship created by the scheme.

An internal daylight assessment is not required because the scheme as modelled does not create new habitable spaces.

An assessment of neighbouring garden sunlight is also not included. The principal garden areas at plots 22 and 24 are located to the front of those properties, whereas the rear elevations face the proposal; the gardens are therefore not within the materially affected relationship.



2.3 Information Reviewed and Proposed Development

The assessment is based on the existing and proposed drawings supplied by the client. The neighbouring building geometry has been prepared using drawings available through the planning portal, with the latest permitted application used as the best available representation of the current scenario. Client site photographs have been used to verify the current site context and the relationship represented in the model.

The report therefore relates to the proposed development geometry and context modelled from those sources.

FIGURE 1 - SITE CONTEXT AND ASSESSMENT EXTENT

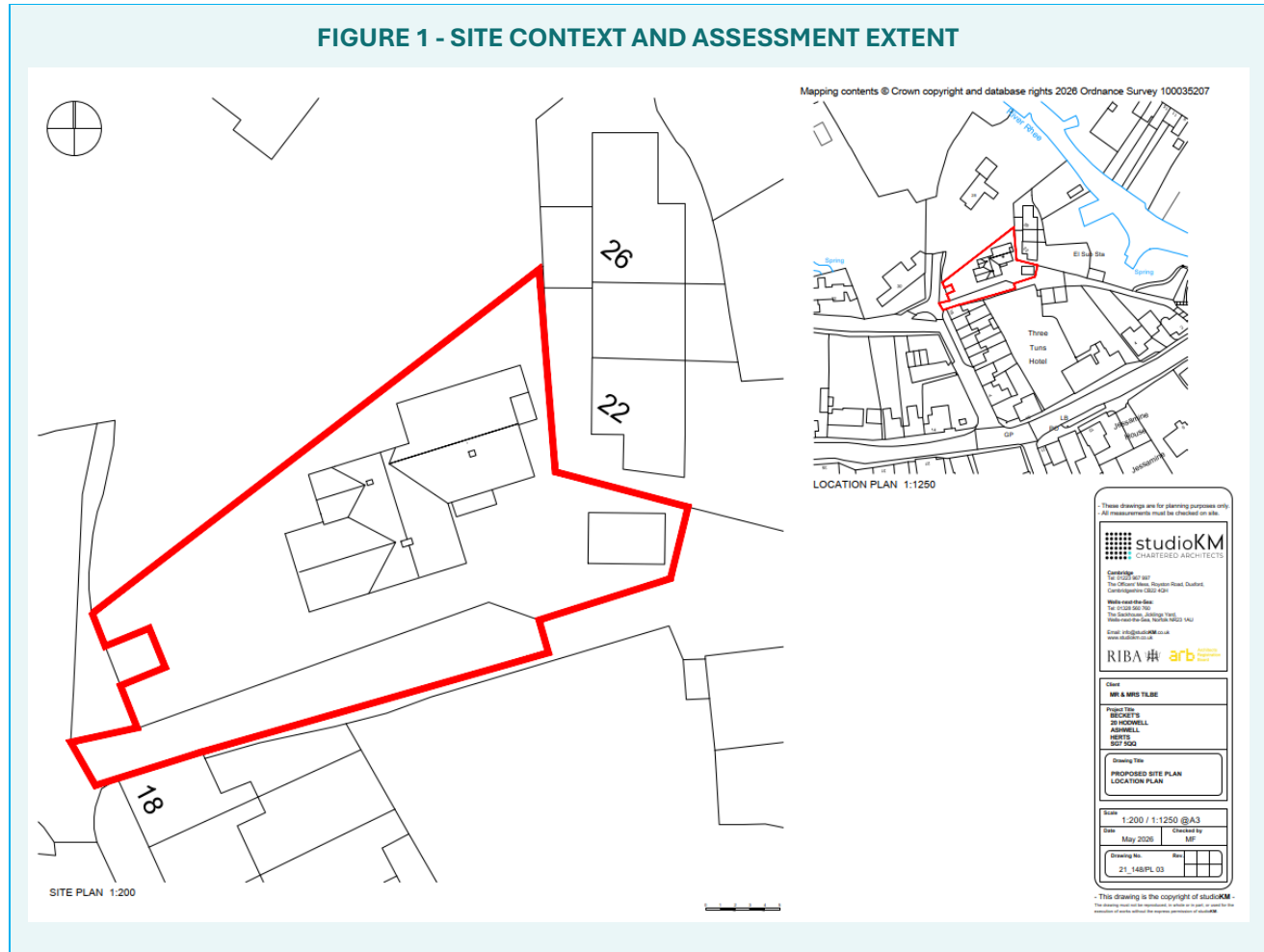


FIGURE 2 - EXISTING DRAWINGS

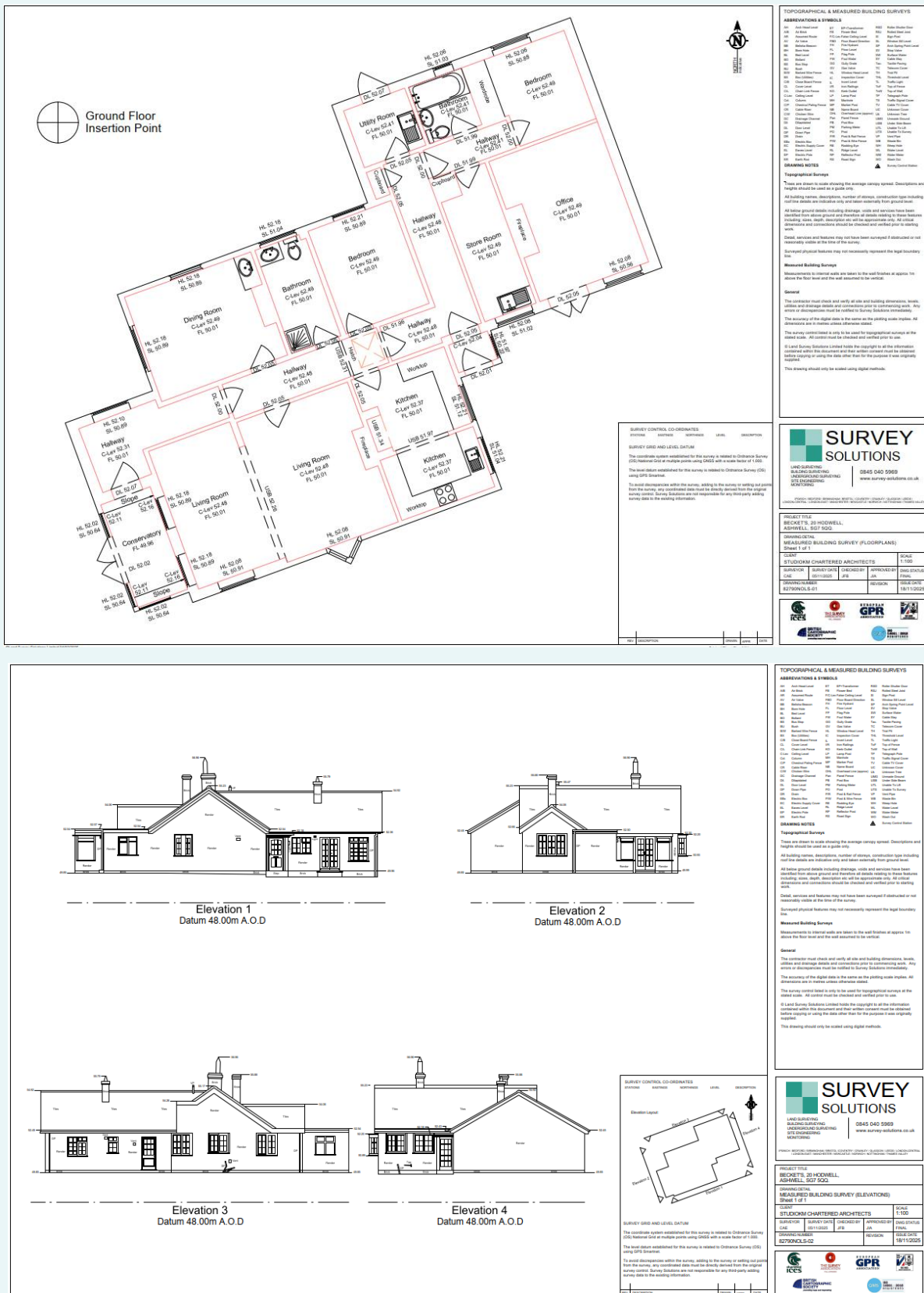
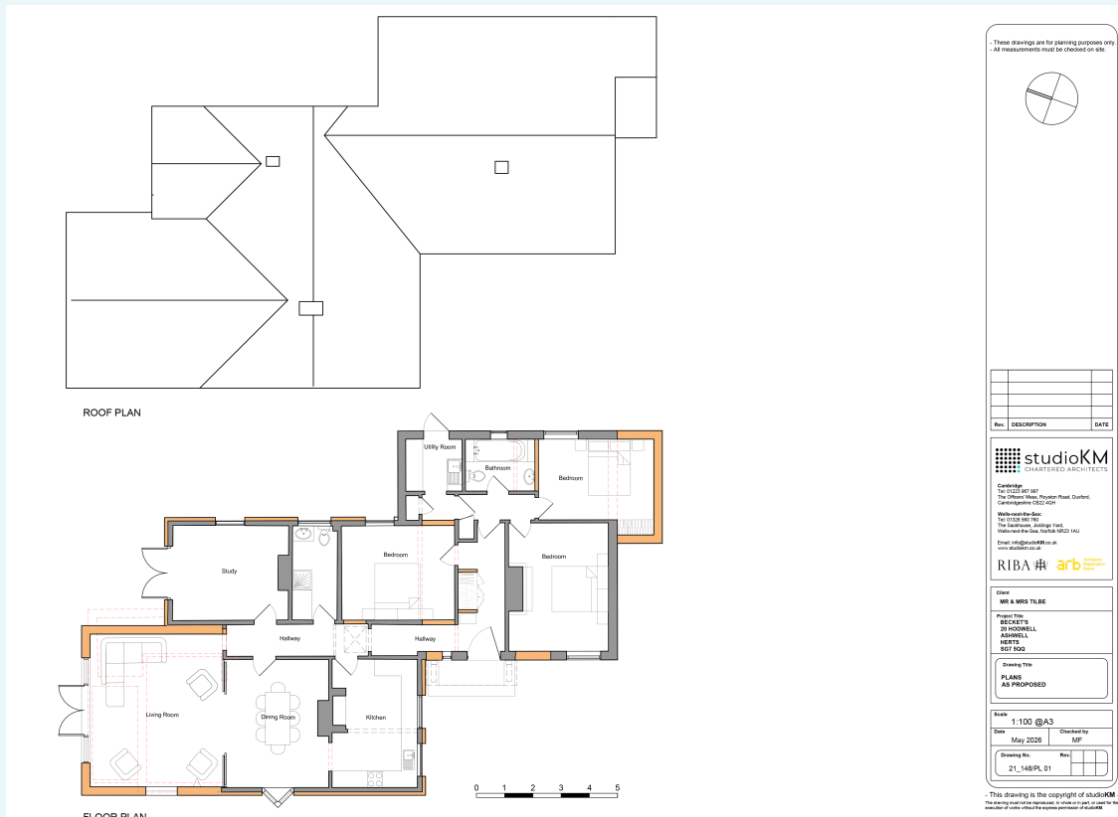


FIGURE 3 - PROPOSED DRAWINGS



3. Assessment Methodology

3.1 Guidance

The assessment has been undertaken with reference to BRE BR 209:2022. BR 209 provides guidance to inform the design and planning process; it is not a prescriptive standard and should be applied with professional judgement, taking account of the proposal, the site context and the evidence provided by the assessment.

3.2 Vertical Sky Component

VSC is a measure of the amount of visible sky available at the centre of an existing window. It takes account of surrounding obstructions, but not the size of the window or reflected light. It is used to assess whether the proposal would materially change the diffuse daylight received by a neighbouring window.

For existing residential windows, BR 209 indicates that daylight is unlikely to be noticeably affected where the proposed VSC is at least 27%, or where it retains at least 80% of the existing value. The results are assessed against both tests.

3.3 Annual Probable Sunlight Hours

APSH measures the availability of direct sunlight at the centre of a window over the year and over the winter period. The annual and winter results are compared between the existing and proposed conditions. BR 209 gives greatest emphasis to main living-room windows that face within 90 degrees of due south, although this assessment considers all relevant rear-facing windows in the study area so that the effect is transparently reported.

For an existing window, sunlight amenity is generally considered acceptable where the proposed condition achieves at least 25% annual APSH, including at least 5% winter APSH. Where these absolute values are not achieved, the relevant annual or winter result is also considered acceptable where it retains at least 80% of the existing value. The annual and winter APSH outcomes are assessed against these absolute and retained-value tests.

Where a result is close to a numerical benchmark, the assessment also considers the room served, other windows serving that room, and the practical amenity effect.

4. Assessment Model and Assumptions

4.1 Model Preparation

A three-dimensional model was prepared in SketchUp using the client existing and proposed drawings, neighbouring drawings from the latest permitted planning application, and verified site photographs. The model includes the proposed development, relevant neighbouring building geometry, assessed windows and the surrounding obstructions that influence the tested daylight and sunlight relationship.

4.2 Calculation Method

The daylight and sunlight calculations were undertaken using the MBS Daylight plugin for SketchUp, using the Radiance lighting engine. Radiance is a physically based ray-tracing calculation engine used to simulate the passage of daylight and direct sunlight through the geometric model. The calculation outputs record a ray-casting method, software version 7.0.0.13 and a calculation date of 21 August 2026.

For APSH, the calculation location is London and the Gatwick weather file is used, as recorded in the model assumptions. The applicable BR 209 recommended settings have been adopted for the modelling and calculations; the detailed settings schedule is included at Appendix A.

4.3 Assessment Figures

FIGURE 4 - SKETCHUP ASSESSMENT MODEL- EXISTING

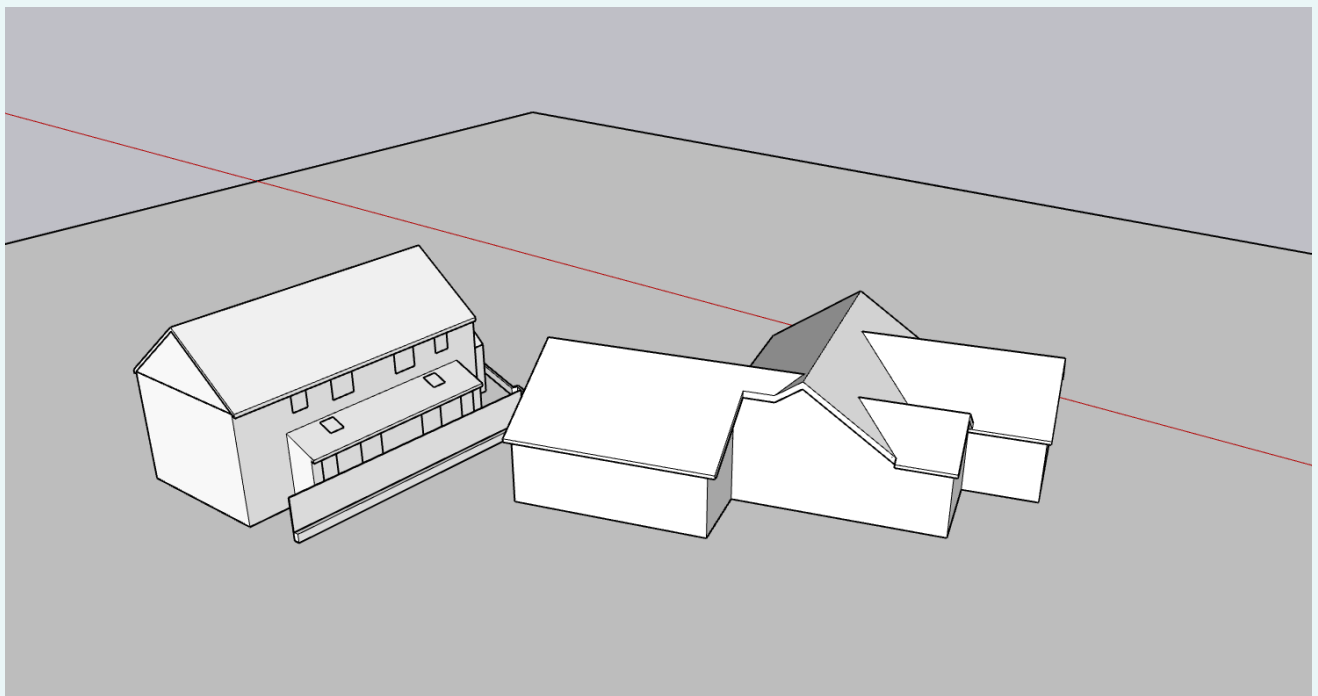


FIGURE 5 - SKETCHUP ASSESSMENT MODEL- PROPOSED

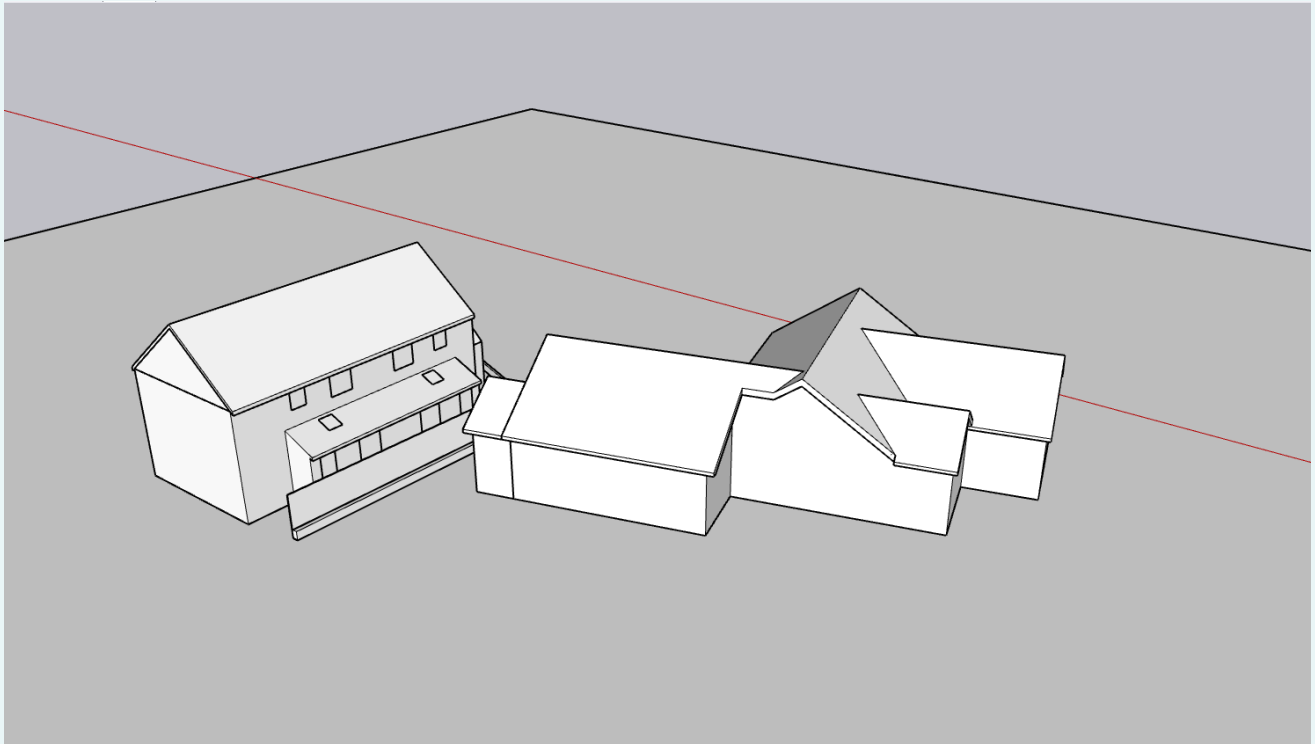
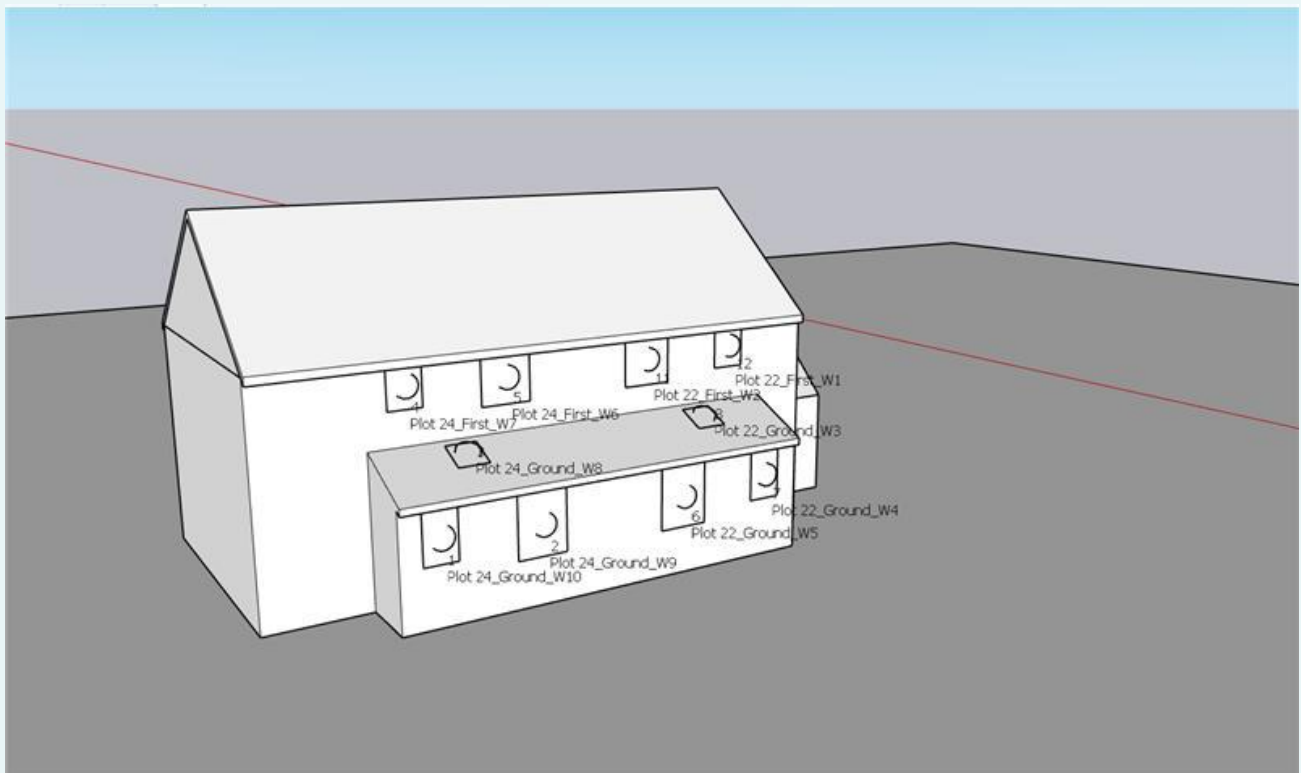


FIGURE 6 - SKETCHUP ASSESSMENT MODEL- WINDOWS ASSESSED



5. Results

5.1 Results Summary

Property	Windows tested	VSC outcome	APSH outcome	Overall
Plot 22	5	5 of 5 pass	4 of 5 pass in full; W3 annual APSH marginal	No material effect
Plot 24	5	5 of 5 pass	5 of 5 pass	No effect identified
Total	10	10 of 10 pass	9 of 10 pass in full	Acceptable

5.2 Vertical Sky Component Results

All ten windows meet the adopted VSC guidance. The results identify no minor, moderate or substantial adverse daylight effects at either plot.

Property	Window	Existing VSC	Proposed VSC	Retained	Outcome
Plot 22	W1	66.84%	66.25%	99%	Pass
Plot 22	W2	23.39%	20.07%	86%	Pass
Plot 22	W3	26.25%	22.94%	87%	Pass
Plot 22	W4	33.11%	33.11%	100%	Pass
Plot 22	W5	35.10%	35.10%	100%	Pass
Plot 24	W1	68.87%	68.87%	100%	Pass
Plot 24	W2	30.10%	29.68%	99%	Pass
Plot 24	W3	33.73%	33.73%	100%	Pass
Plot 24	W4	35.39%	35.39%	100%	Pass
Plot 24	W5	33.99%	33.99%	100%	Pass

5.3 Annual Probable Sunlight Hours Results

All five windows at plot 24 meet the annual and winter APSH guidance. At plot 22, W1, W2, W4 and W5 meet the annual and winter APSH guidance. W3 meets the winter test and records an annual value of 22 in the proposed condition, compared with 29 existing, equating to 76% retention.

Annual APSH

Property	Window	Existing annual	Proposed annual	Retained	Outcome
Plot 22	W1	48	47	98%	Pass
Plot 22	W2	21	21	100%	Pass
Plot 22	W3	29	22	76%	Marginal annual shortfall
Plot 22	W4	38	38	100%	Pass
Plot 22	W5	39	39	100%	Pass
Plot 24	W1	50	50	100%	Pass
Plot 24	W2	36	36	100%	Pass
Plot 24	W3	39	39	100%	Pass
Plot 24	W4	40	40	100%	Pass
Plot 24	W5	39	39	100%	Pass

Winter APSH

Property	Window	Existing winter	Proposed winter	Retained	Outcome
Plot 22	W1	14	14	100%	Pass
Plot 22	W2	8	8	100%	Pass
Plot 22	W3	8	8	100%	Pass
Plot 22	W4	11	11	100%	Pass
Plot 22	W5	12	12	100%	Pass
Plot 24	W1	14	14	100%	Pass
Plot 24	W2	9	9	100%	Pass
Plot 24	W3	11	11	100%	Pass
Plot 24	W4	13	13	100%	Pass
Plot 24	W5	12	12	100%	Pass

6. Assessment and Interpretation

The assessment results demonstrate that the proposed development preserves acceptable daylight and sunlight amenity to the assessed neighbouring properties. VSC performance is fully compliant across all assessed windows.

The sole annual APSH shortfall at plot 22 is limited in scale: the proposed annual value is 22 compared with 29 existing, retaining 76% of the baseline and falling only 4 percentage points below the 80% retained-value benchmark. The winter APSH result remains compliant.

W3 is one of three windows serving the same kitchen/dining room (W3, W4 and W5). The room continues to benefit from the other two compliant windows. Taken together with the existing close-built relationship at plot 22, the numerical change to W3 does not represent a material loss of sunlight amenity in planning terms.

All windows at plot 24 meet the adopted VSC and APSH guidance. The assessment therefore identifies no material daylight or sunlight amenity harm arising from the proposal.

6.1 Assessment Output Figures

FIGURE 7 - MBS DAYLIGHT OUTPUT- VSC

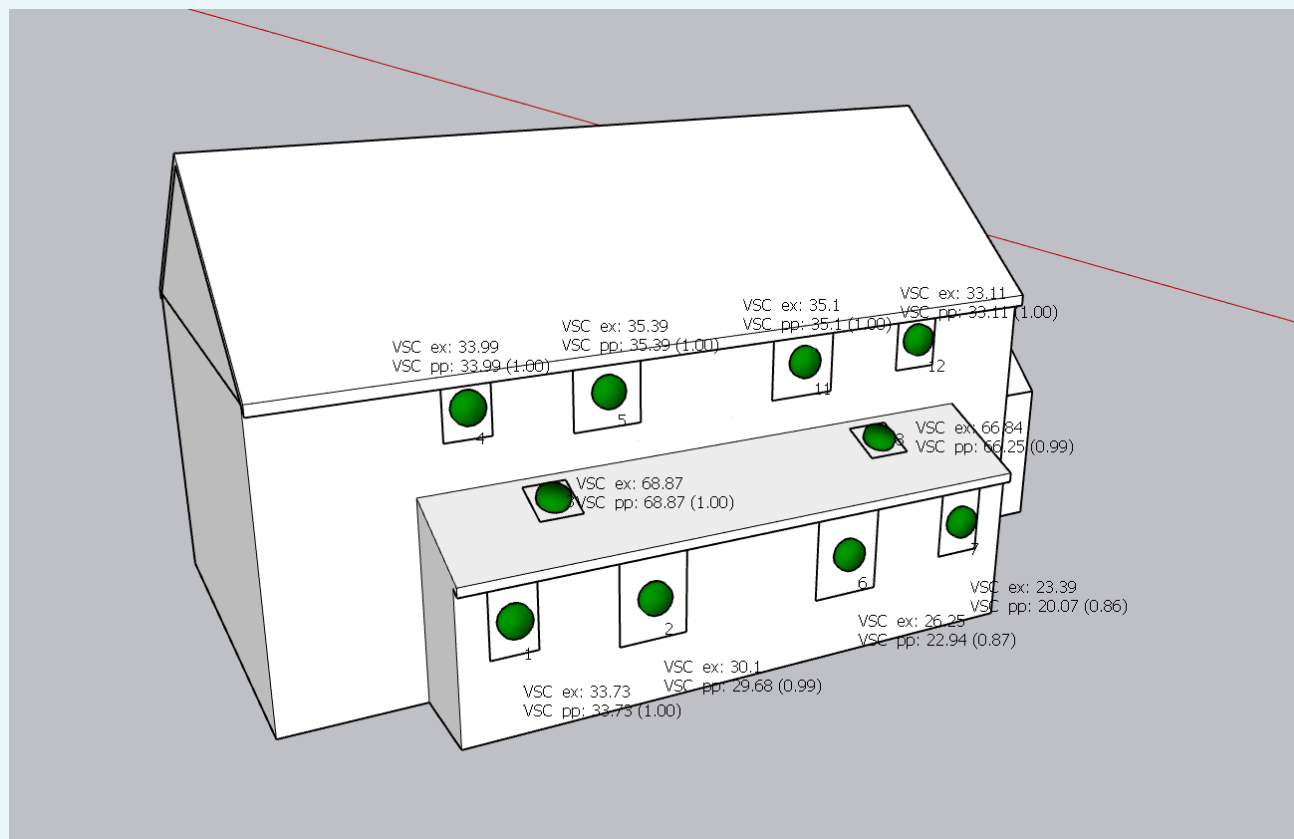
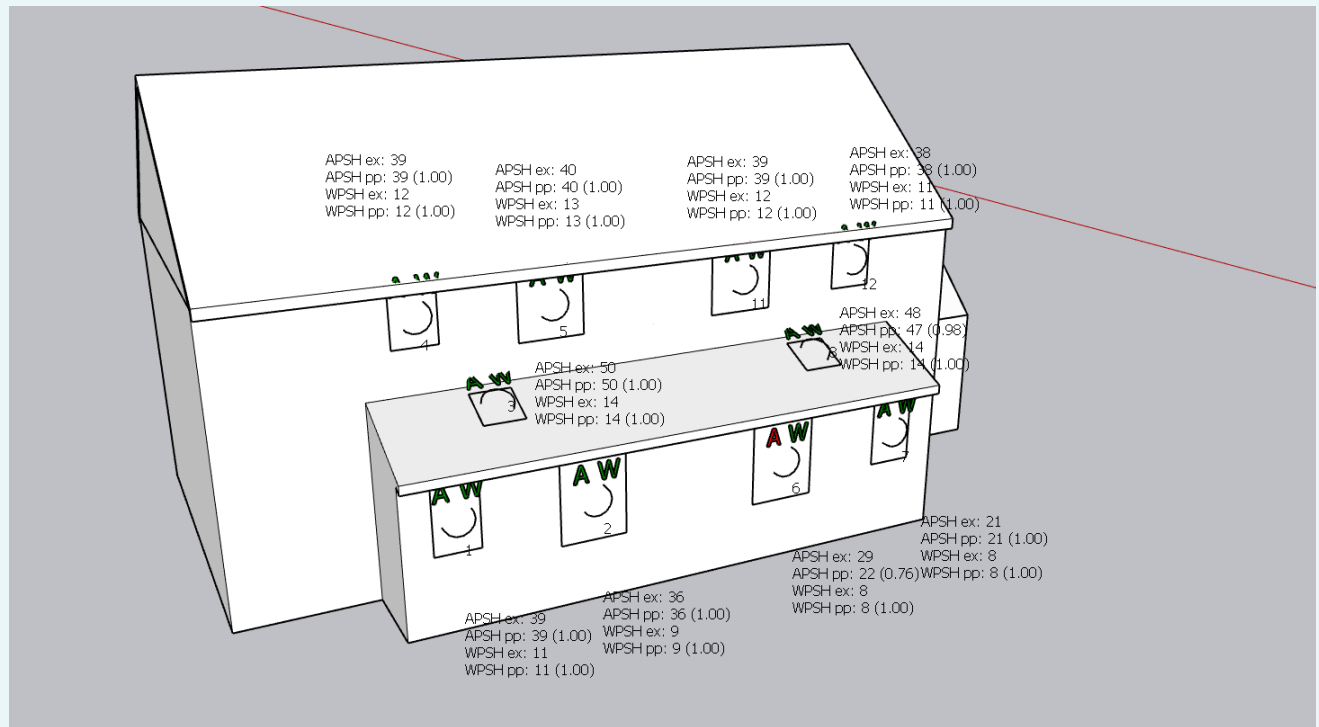


FIGURE 8 - MBS DAYLIGHT OUTPUT – APSH & WPSH



7. Conclusion

This neighbour daylight and sunlight assessment concludes that the proposed development at 20 Hodwell, Ashwell would not cause material harm to the daylight or sunlight amenity of the assessed neighbouring properties.

The assessment finds that:

- all 10 assessed windows meet the adopted VSC guidance;
- all five assessed windows at plot 24 meet the adopted VSC and APSH guidance;
- at plot 22, four of five windows meet APSH guidance in full, and the remaining window meets winter APSH guidance while retaining 76% of its existing annual sunlight;
- the limited annual APSH shortfall affects one of three windows to the same kitchen/dining room and is not material in amenity terms; and
- the proposal is acceptable in respect of neighbouring daylight and sunlight amenity.

Appendix A - Model Assumptions and Calculation Settings

Item	Assessment setting / source
Guidance	BRE BR 209:2022, Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice
Model authoring	SketchUp
Calculation tool	MBS Daylight plugin using the Radiance lighting engine
Calculation method	Raycasting; output version 7.0.0.13
APSH location and weather file	London; Gatwick weather file
Client information	Existing and proposed drawings, plus site photographs used to verify site context
Neighbour context	Planning-portal drawings from the latest permitted application, cross-referenced with site photographs
Window assessment points	Centres of the modelled neighbouring windows
VSC criteria	Proposed VSC of at least 27% or retention of at least 80% of existing VSC
APSH criteria	BR 209 annual and winter absolute and retained-value tests, considered with the relevant room and window context

Appendix B – Site Pictures



The drawings are taken from the planning portal- planning reference: 17/02738/1PUD

REVISION		DATE
PROJECT: 22 & 24 HODWELL ASHWELL, HERTS		
CLIENT: HEATHCOURT PROPERTIES LIMITED		
DRAWING: PROPOSED FLOOR PLANS		
Drawing No.: HD08/1		Scale: 1:100 @ A3
Drawn/Check: JRC		Date: 09/17
Status: Sketch ☐ Planning ☒ Construction ☐ Other ☐		
AITCHISON RAFFETY LTD Building Surveying and Design 83 Marlborough Road Hemel Hempstead, Herts, HP1E 6LE 01462 230826 www.aimgroup.co.uk		

