

OLD CHARLTON ROAD, HITCHIN

DAYLIGHT AND SUNLIGHT REPORT

CLIENT: MCCARTHY STONE
DATE: 10 APRIL 2025
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APPENDICES

- Appendix 1:** Site Plan & 3D Drawings
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1 Introduction

- 1.1 McCarthy Stone have instructed Point 2 to assess the daylight and sunlight impact of the proposed development at Old Charlton Road, Hitchin (the “Proposed Development”) on the neighbouring properties.
- 1.2 The analysis has been based on the scheme drawings by Ridge, a 3D Zmapping model of the wider surrounding context, and any relevant surrounding property information obtained through our research and site imagery.
- 1.3 The analysis has been carried out in accordance with the methodologies contained in the Building Research Establishment’s *Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice* (2022) (known as the “BRE Guidelines”), which is often used by local authorities to determine the acceptability of a proposal in terms of its daylight and sunlight.

2 Sources of Information

2.1 In the process of compiling this report, the following sources of information have been used:

Ridge

- Proposed Scheme Information (received 7/4/25)
 - LSE-2983-03-AC-007-G1_Proposed Context Elevations – Coloured
 - LSE-2983-03-AC-009-G1_Proposed Elevations 1 of 2
 - LSE-2983-03-AC-010-G1_Proposed Elevations 2 of 2
 - LSE-2983-03-AC-0001-G1_Location Plan
 - LSE-2983-03-AC-002-G1_Proposed Site Plan
 - LSE-2983-03-AC-003-G1_Proposed Ground Floor Plan
 - LSE-2983-03-AC-004-G1_Proposed First Floor Plan
 - LSE-2983-03-AC-005-G1_Proposed Second Floor Plan
 - LSE-2983-03-AC-006-G1_Proposed Roof Plan
 - LSE-2983-03-AC-020-G1_Site Hazard Plan
 - LSE-2983-03-AC-011-G1_Proposed Site Sections

Zmapping Ltd

- 3D Zmapping Model

Local Authority's Online Planning Portal

- Radcliffe House
 - 641-P-200 Proposed Elevations 1 of 2
 - 641-P-201 Proposed Elevations 2 of 2
 - 641-P-100 Proposed Ground Floor
 - 641-P-101 Proposed First Floor
 - 641-P-102 Proposed Second Floor

Valuation Office Agency

- Property Uses

3 Planning Policy

- 3.1 Below we have set out relevant sections from the planning policies and guidance documents as they are, in our opinion, the most pertinent in relation to daylight and sunlight matters and how we have approached the potential effects of the Proposed Development on surrounding properties.

NATIONAL PLANNING POLICY

National Planning Policy Framework (NPPF) 2023

- 3.2 The NPPF discusses the need to make efficient use of land and recognises that, in order to do so, it is necessary to take a flexible approach when it comes to considering daylight and sunlight. Paragraph 129 of the NPPF states:

“Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities and ensure that developments make optimal use of the potential of each site. In these circumstances: ...

(c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).”

LOCAL PLANNING POLICY

NORTH HERTFORDSHIRE COUNCIL PLANNING POLICY

- 3.3 Policy D3 states:

“Planning permission will be granted for development proposals which do not cause unacceptable harm to living conditions.

Where the living conditions of proposed developments would be affected by an existing use or the living conditions of an existing development would be affected by a proposed use, the Council will consider whether there are mitigation measures that can be taken to mitigate the harm to an acceptable level. If the Council is not satisfied that mitigation proposals would address the identified harm, development proposals will not be permitted.”

4 Assessment Methodology

THE BRE GUIDELINES

- 4.1 The main reference document typically used to determine the acceptability of proposals in terms of their impact on daylight and sunlight to the surrounding properties is the BRE Guidelines, used in conjunction with British Standard Daylight in Buildings, BS EN 17037.
- 4.2 The BRE Guidelines is a document that is applied across the country. Due to its national application, the framework is a 'one size fits all' approach to the assessment of daylight and sunlight. Theoretically, the methodology and subsequent technical specification offered by the BRE Guidelines is applicable to all manner of built environments, ranging from villages to dense city centres, to areas where significant regeneration is taking place. Notwithstanding the stark disparity between these environments, the suggested target daylight and sunlight values remain consistent despite a suburban setting having very little in common with inner urban locations.
- 4.3 When assessing the effects on surrounding properties, the BRE guidelines suggest that only those windows that have a 'reasonable expectation' of daylight or sunlight need to be assessed. In particular, the BRE guidelines state at paragraph 2.2.2:

"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic building where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops and some offices."

- 4.4 Commercial properties are generally not treated as having a reasonable expectation of daylight or sunlight. This is because they are usually designed to rely on electric lighting to provide sufficient light by which to work rather than natural daylight or sunlight. In addition to commercial buildings, windows to residential properties which serve non-habitable rooms, such as entrance ways, garages, bathrooms or storerooms, are also considered not to have a reasonable expectation of daylight or sunlight and are therefore not assessed.

Daylight and Sunlight Criteria to Surrounding Properties

- 4.5 According to the BRE Guidelines, a surrounding existing building to a proposed scheme will retain the potential for good interior daylighting if the scheme subtends less than 25 degrees from the horizontal as measured from the lowest habitable windows in the neighbouring windows. If this is the case then there may be an adverse effect, and more detailed calculations are required to quantify the extent of any impact.
- 4.6 The BRE Guidelines provide two principal measures of daylight for assessing the impact on properties neighbouring a site, namely Vertical Sky Component (VSC) and No-Sky Line (NSL).

4.7 In terms of sunlight, we examine the Annual Probable Sunlight Hours (APSH) and in relation to sunlight amenity to gardens and amenity spaces, we apply the quantitative BRE overshadowing guidance.

4.8 These measures of daylight and sunlight are discussed in the following paragraphs.

Diffuse Daylight

4.9 **Vertical Sky Component (VSC)** – VSC is a measure of the direct skylight reaching a point from an overcast sky. It is the ratio of the illuminance at a point on a given vertical plane to the illuminance at a point on a horizontal plane due to an unobstructed sky.

4.10 The BRE guidelines state that if the VSC at the centre of a window is less than 27%, and it is less than 0.8 times its former value (i.e. the proportional reduction is greater than 20%), then the reduction in skylight will be noticeable, and the existing building may be adversely affected.

4.11 Where there are multiple windows serving a room, an overall VSC can be derived by weighting the VSC for each window in accordance with its window area. This method should not be used where the windows are more than 5m apart.

4.12 **No-Sky Line (NSL)** - NSL is a measure of the distribution of daylight within a room. It maps out the region within a room where light can penetrate directly from the sky, and therefore accounts for the size of and number of windows by simple geometry. It may be used where the room layouts are known.

4.13 The BRE suggest that the area of the working plane (set at 850mm above the floor) within a room that can receive direct skylight should not be reduced to less than 0.8 times its former value (i.e. the proportional reduction in area should not be greater than 20%).

Sunlight

4.14 **Annual Probable Sunlight Hours (APSH)** - In relation to sunlight, the BRE recommends that the APSH received at a given window in the proposed case should be at least 25% of the total available, including at least 5% in winter.

4.15 Where the proposed values fall short of these, and the absolute loss is greater than 4%, then the proposed values should not be less than 0.8 times their previous value in each period (i.e. the proportional reductions should not be greater than 20%).

4.16 The BRE guidelines state that *'...all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90 degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block out too much sun. Normally loss of sunlight need not be analysed to kitchens and bedrooms....'*

4.17 In accordance with the BRE Guidelines we have not assessed bedrooms or kitchens for APSH. The APSH figures are calculated for each window, and where a room is served by more than one window the contribution of each is accounted for in the overall figures for the room. The criteria is applied to overall room-based figures.

5 Alternative Target Values and Applying a Flexible Approach

- 5.1 As set out above, Planning Policy and the BRE Guidelines specify that the daylight and sunlight results be considered flexibly and in the context of the site. The important factor in all cases is whether the levels of daylight and sunlight are contextually appropriate taking into account all the planning policy requirements of the site. The BRE Guidelines acknowledge this in the introduction where they state in paragraph 1.6:

"The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly as natural lighting is only one of many factors in site layout design. In special circumstances the developer or planning authority may wish to use different target values."

- 5.2 The BRE Guidelines go on to state in paragraph 2.2.3:

"Note that numerical values given here are purely advisory. Different criteria may be used based on the requirements for daylighting in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking more than its fair share of light. Appendix F gives further guidance."

- 5.3 The numerical figures set out in the BRE Guidelines should therefore not be rigidly applied, but instead used as part of the overall evaluation of the daylight and sunlight to the surroundings in context of the site, its existing massing, and the need for regeneration and local planning policy guidance for the site. In particular, existing local precedents or recent planning consents may provide a good indication as to appropriate levels in the vicinity.

- 5.4 Appendix F of the BRE Guidelines advises on setting alternative target values. The BRE recommend that, in urban development locations, alternative baselines or lower target values may be used. Paragraph F1 states:

"These values are purely advisory and different targets may be used based on the special requirements of the proposed development or its location. Such alternative targets may be generated from the layout dimensions of existing development, or they may be derived from considering the internal layout and daylight needs of the proposed development itself."

Two-Stage Approach

- 5.5 Applying flexibility when considering the BRE Guidelines in planning terms is supported by the BRE Guidelines and the NPPF.
- 5.6 It is important to note that the BRE Guidelines merely state that occupants may "notice" reductions of more than 20% and do not talk about acceptability.

5.7 Planning appeal decisions and investigations carried out by the Inspectorate in recent years (such as appeal Plot H1, Elephant Park, Land bounded by Walworth Road, Elephant Road, Deacon Street, and Sayer Street North, London SE17 ref. APP/A5840/W/23/3319797 dated 30th November 2023) have made it clear that, in assessing daylight and sunlight impacts, the context of the site is key in understanding whether occupants in surrounding properties will be left with appropriate levels of amenity and whether or not reductions are acceptable. For instance, where the resulting levels of daylight and sunlight are comparable to those of other local residents, changes (i.e. reductions) can be considered acceptable and contextually appropriate. It is also important to remember that residential amenity should be balanced against the advantages of living in such a location (such as close links to transport, amenities, employment, services etc.) and the wider benefits that such a scheme would deliver.

5.8 The Appeal (APP/A5840/W/23/3319797) decision states that, in considering daylight and sunlight impacts, the following two-stage process should be considered:

“49... first as a matter of calculation, whether there would be a material deterioration in conditions; and second, as a matter of judgment, whether any deterioration would be acceptable or unacceptable in the particular circumstances of the case.”

5.9 In considering planning policy, it is important therefore to firstly establish whether the impact of a proposed development on the daylighting and sunlight conditions of surrounding property to the development would result in a noticeable impact, and secondly whether such an impact can be considered acceptable or not in view of the site context. A two-stage approach can therefore be adopted as follows:

1. Whether a proposed scheme would or would not result in an alteration in daylight and sunlight as assessed against the BRE's target values, with a 20% or more reduction in daylight and sunlight being considered as having a “noticeable” impact; and
2. whether such alteration would be considered acceptable or not given the context of the site.

6 Assumptions

- 6.1 Uses of the surrounding properties have been based on research via the VOA website and also on external appearances to determine whether they are residential or commercial in use.
- 6.2 All property addresses are taken from the Land Registry MapSearch website or OS Map information.
- 6.3 We have obtained layouts for the following properties from the local planning portal and/or estate agency listings. Please note that we have not had access to the neighbouring properties in order to verify whether they layouts obtained are accurate.
 - Consented PD conversion at Radcliffe House
- 6.4 In accordance with normal working practice, where we have not been able to obtain layouts or gain access internally to the surrounding properties, details of the internal layouts and floor level heights have been assumed from the external appearance of the building, and the locations of windows. Unless known or otherwise, appropriate the depths of rooms have been assumed at C.4m-5m for residential properties and 6m-8m for commercial properties, or half the building depth if this is less than these dimensions.



7 Site Context and Scope of Assessment

7.1 The existing site and Proposed Development can be seen in the images below.



Image 1: The Existing Site



Image 2: The Proposed Development

7.2 In terms of daylight and sunlight, the following properties were analysed due to their sensitive use and proximity to the development site given the height and massing of the proposal. All other properties were deemed to be sufficiently far from the site that their daylight and sunlight is unlikely to be adversely affected by the Proposed Development.



- 20 Old Charlton Road (8)
- 28 Old Charlton Road (7)
- Radcliffe House (9)
- 8 Woodcroft, Wratten Road East (2)
- 9 Woodcroft, Wratten Road East (1)
- 15, 16, 17 & 18 Wratten Road East (3 to 6)

7.3 The following properties meet the target values a set out in the BRE Guidelines for daylight (in terms of VSC and NSL) and sunlight (in terms of APSH) and therefore, are not commented on further:

- 20 Old Charlton Road (8)
- 28 Old Charlton Road (7)
- 8 Woodcroft, Wratten Road East (2)
- 9 Woodcroft, Wratten Road East (1)
- 15, 16, 17 & 18 Wratten Road East (3 to 6)

7.4 Commentary on the remaining properties follows below.

8 Daylight and Sunlight Assessment Results to Surrounding Properties

RADCLIFFE HOUSE



Property Description

- 8.1 A planning application to convert this former office building into residential units was recently granted planning consent. The consented scheme drawings were obtained from the local planning portal and incorporated into our 3D model for analysis.

Results (Stage 1)

- 8.2 In daylight terms, 46 out of 47 windows on the ground floor retain at least 0.8 times their existing level of VSC with the proposed development in place and so will experience no worse than negligible and unnoticeable impacts. The one remaining window is within a room (ref: R16/10) that contains three further windows. When the weighted mean VSC is calculate for the room, as recommended in the BRE Guidelines, the room is shown to retain 0.94 times its existing level of VSC and so will remain acceptably daylit.
- 8.3 All ground floor rooms retain at least 0.8 times their existing level of NSL and so will experience no worse that negligible and unnoticeable impacts.
- 8.4 All ground floor rooms containing at least one window that faces within 90° of due south meet the target values for annual and winter sunlight with the proposal in place.
- 8.5 Given these results across the ground floor of the consented Radcliffe House scheme, the windows and rooms must also remain appropriately daylit and sunlit with the Proposed Development in place.

- 8.6 The impact of the Proposed Development on Radcliffe House is therefore in line with local and national planning policy and acceptable.

9 Conclusions

- 9.1 McCarthy Stone have instructed Point 2 to assess the daylight and sunlight impact of the Proposed Development on the neighbouring residential properties.
- 9.2 The analysis has been carried out in accordance with the methodologies contained in the BRE Guidelines, which is often used by local authorities to determine the acceptability of a proposal in terms of its effect on neighbouring daylight and sunlight amenity.
- 9.3 The analysis demonstrates that the windows and rooms in the nearby residential properties will all remain appropriately daylit and sunlit with the Proposed Development in place, retaining at least 0.8 times of their existing levels of daylight and sunlight.
- 9.4 The Proposed Development is therefore in line with local and national planning policy on daylight and sunlight and therefore acceptable in planning terms from this perspective.

Appendix 1:

Site Plan & 3D Drawings



Sources: Temp Transfer
Old Charlton Road_040425_Solids XYID@NE.dwg

Key:

Existing Buildings

Proposed Scheme

Scheme Confirmed:

-

Date:

-

Project:

Old Charlton Road, Hitchin

Drawn By:

WDC

Scale:

1:750@A3

Date:

10-04-25

Title:

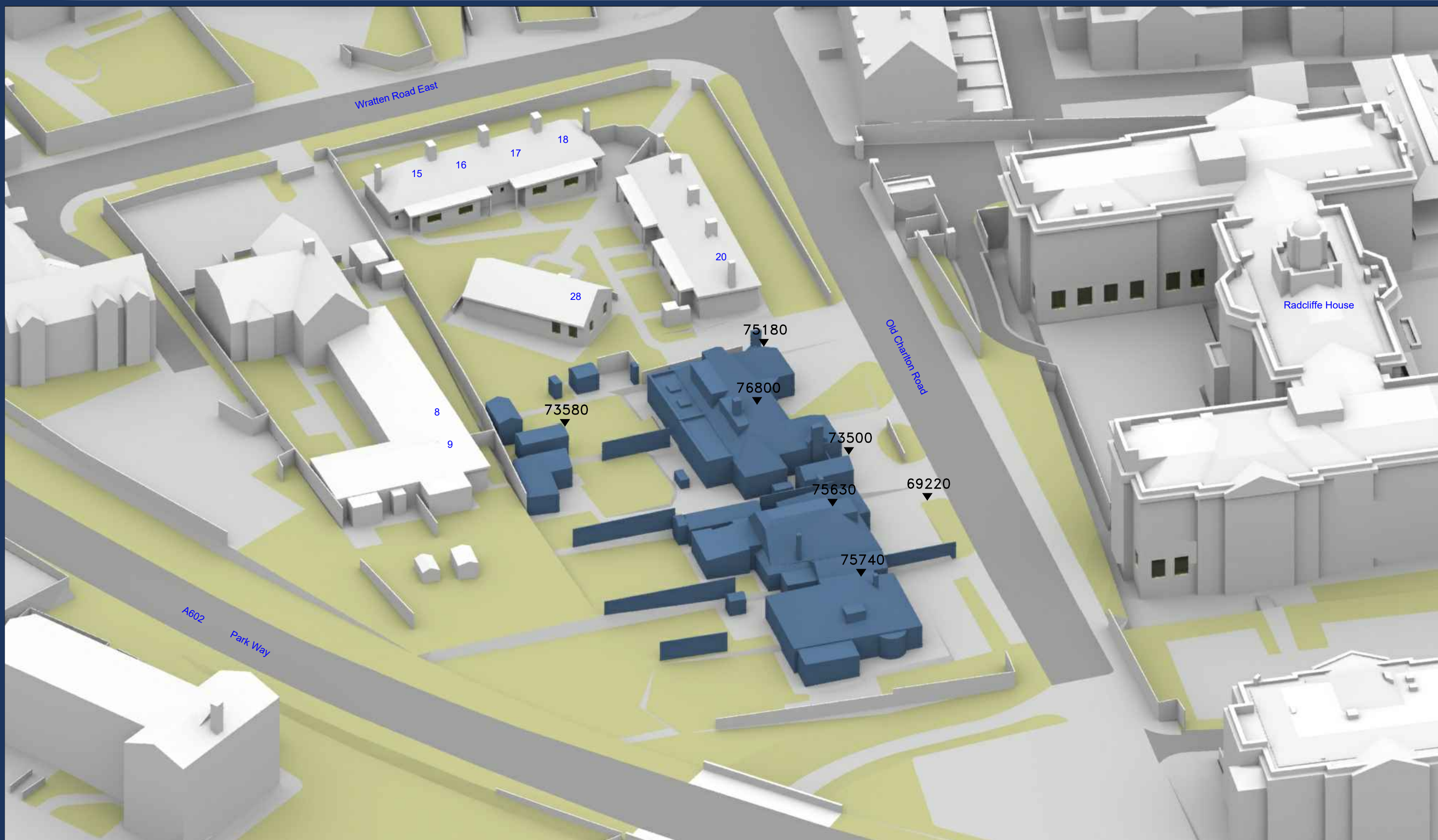
Existing VIEW
Site Plan
Proposed Scheme 09/04/25

Dwg No:

P3637/01

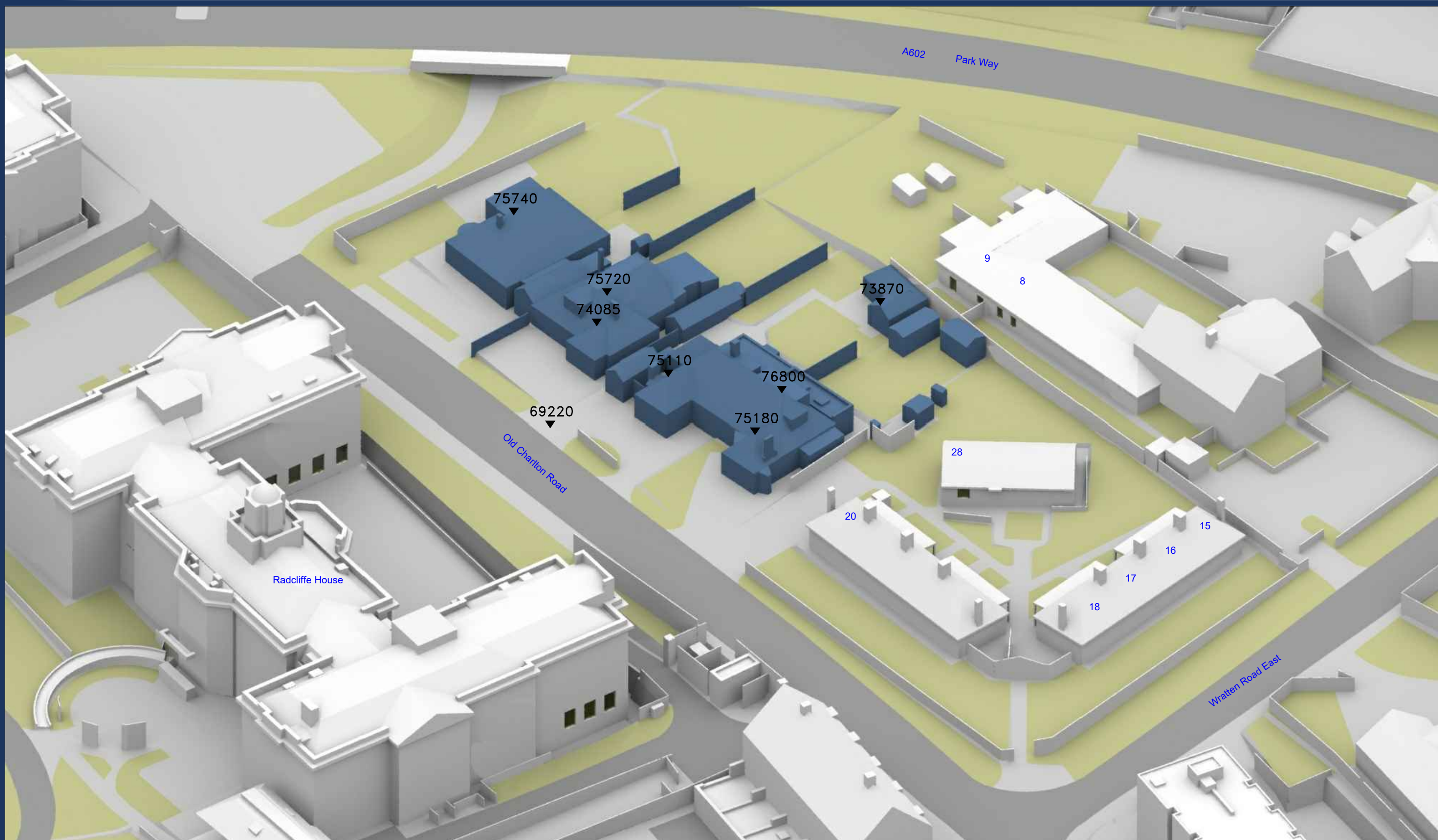
Rel:

01



Sources: Temp Transfer Old Charlton Road_040425_Solids XYID@NE.dwg		Key: Existing Buildings Proposed Scheme		Project: Old Charlton Road, Hitchin		Title: Existing 3D VIEW Site Plan Proposed Scheme 09/04/25	
All Heights in mm AOD							
Scheme Confirmed: -		Date: -		Drawn By: WDC		Scale: @A3	
				Date: 10-04-25		Dwg No: P3637/02	
						Rel: 01	





Sources: Temp Transfer
Old Charlton Road_040425_Solids XYID@NE.dwg

Key: Existing Buildings
Proposed Scheme

All Heights in mm AOD

Project: Old Charlton Road, Hitchin

Title: Existing 3D VIEW
Site Plan
Proposed Scheme 09/04/25

Scheme Confirmed:

-

Date:

-

Drawn By:
WDC

Scale:
@A3

Date:
10-04-25

Dwg No:
P3637/03

Rel:
01





Sources: Temp Transfer
Old Charlton Road_040425_Solids XYID@NE.dwg

Key: Existing Buildings
Proposed Scheme

Project: Old Charlton Road, Hitchin

Title: Proposed VIEW
Site Plan
Proposed Scheme 09/04/25

Scheme Confirmed:

-

Date:

-

Drawn By:
WDC

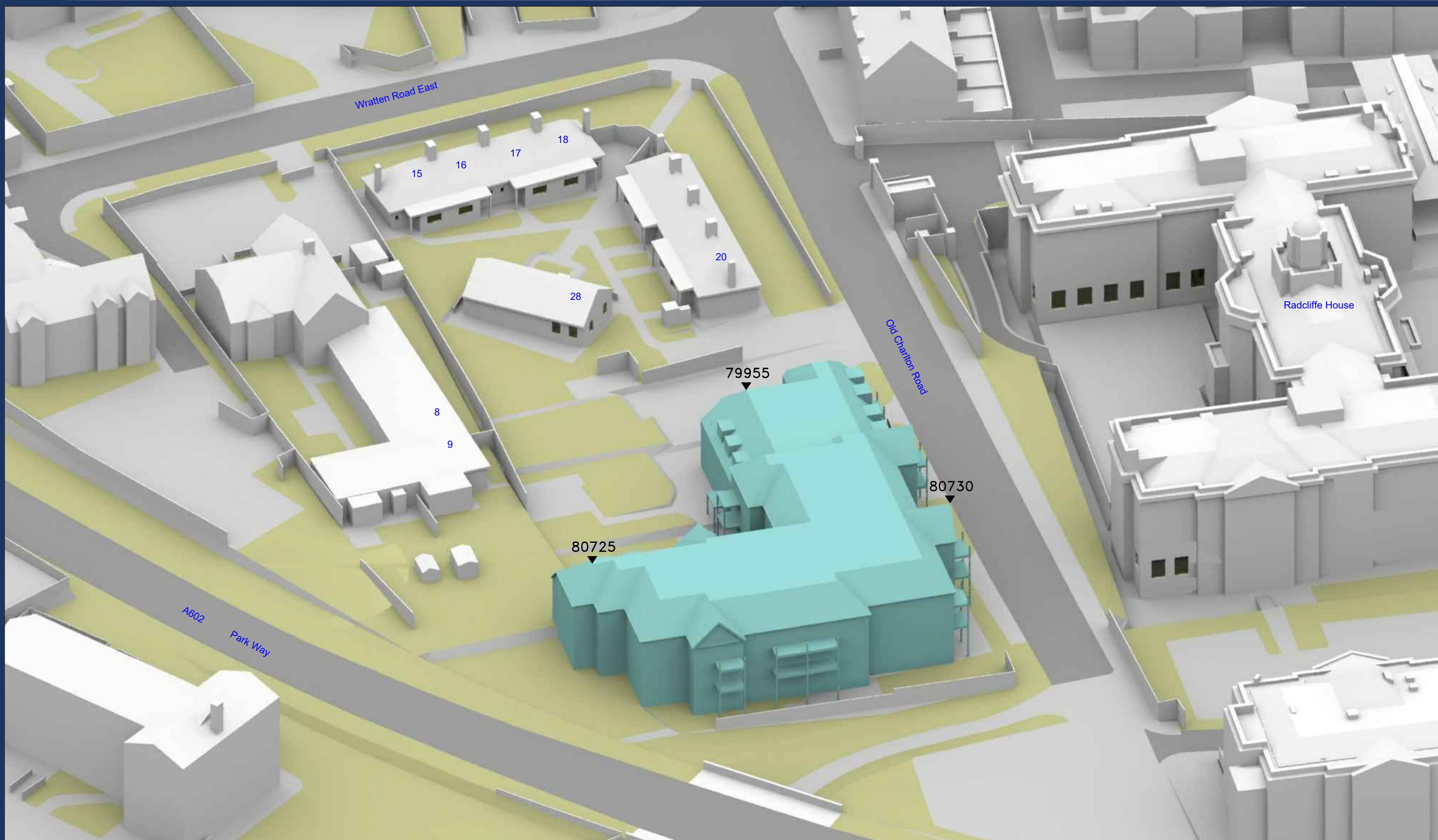
Scale:
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Date:
10-04-25

Dwg No:
P3637/04

Rel:
01





Sources: Temp Transfer
Old Charlton Road_040425_Solids XYID@NE.dwg

Key: Existing Buildings
 Proposed Scheme

All Heights in mm AOD

Project: Old Charlton Road, Hitchin

Title: Proposed 3D VIEW
Site Plan
Proposed Scheme 09/04/25

Scheme Confirmed:

-

Date:

-

Drawn By:
WDC

Scale:
@A3

Date:
10-04-25

Dwg No:
P3637/05

Rel:
01





Sources: Temp Transfer
Old Charlton Road_040425_Solids XYID@NE.dwg

Key:

Existing Buildings

Proposed Scheme

All Heights in mm AOD

Scheme Confirmed:

-

Date:

-

Project:

Old Charlton Road, Hitchin

Drawn By:

WDC

Scale:

@A3

Date:

10-04-25

Title:

Proposed 3D VIEW
Site Plan
Proposed Scheme 09/04/25

Dwg No:

P3637/06

Rel:

01



Appendix 2:

Daylight and Sunlight Results for
Neighbouring Properties



Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
DAYLIGHT ANALYSIS

Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
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Radcliffe House

R1/10	LKD	W1/10	32.78	32.78	0.00	0.00
R1/10	LKD	W2/10	32.58	32.58	0.00	0.00
R1/10	LKD	W3/10	32.01	32.01	0.00	0.00
R1/10	LKD	W4/10	0.00	0.00	0.00	0.00
R2/10	LKD	W5/10	0.00	0.00	0.00	0.00
R2/10	LKD	W6/10	30.57	29.57	1.00	3.27
R2/10	LKD	W7/10	29.66	28.67	0.99	3.34
R3/10	BEDROOM	W8/10	28.26	27.31	0.95	3.36
R4/10	BEDROOM	W9/10	26.29	25.41	0.88	3.35
R5/10	LKD	W10/10	20.98	20.25	0.73	3.48
R5/10	LKD	W11/10	17.66	17.00	0.66	3.74
R6/10	LKD	W12/10	17.67	16.90	0.77	4.36
R6/10	LKD	W13/10	19.11	18.34	0.77	4.03
R6/10	LKD	W14/10	17.24	16.63	0.61	3.54
R7/10	BEDROOM	W15/10	26.11	25.20	0.91	3.49
R8/10	BEDROOM	W16/10	28.33	27.34	0.99	3.49
R9/10	LKD	W17/10	28.71	27.22	1.49	5.19
R9/10	LKD	W18/10	29.13	27.68	1.45	4.98
R10/10	BEDROOM	W19/10	27.22	25.90	1.32	4.85
R11/10	BEDROOM	W20/10	19.09	18.05	1.04	5.45
R12/10	BEDROOM	W21/10	18.62	17.76	0.86	4.62
R13/10	BEDROOM	W22/10	17.79	17.64	0.15	0.84
R14/10	BEDROOM	W23/10	22.40	22.20	0.20	0.89
R15/10	BEDROOM	W24/10	25.70	25.45	0.25	0.97
R16/10	LKD	W25/10	27.91	27.59	0.32	1.15
R16/10	LKD	W26/10	29.51	29.09	0.42	1.42



Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
DAYLIGHT ANALYSIS

Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R16/10	LKD	W27/10	30.73	30.16	0.57	1.85
R16/10	LKD	W28/10	33.62	26.55	7.07	21.03
R17/10	LKD	W29/10	34.00	28.06	5.94	17.47
R17/10	LKD	W30/10	34.76	34.35	0.41	1.18
R17/10	LKD	W31/10	33.65	33.35	0.30	0.89
20 Old Charlton Road						
R1/20		W1/20	31.86	31.82	0.04	0.13
R2/20		W2/20	25.83	25.86	-0.03	-0.12
15 Wratten Road East						
R7/30		W7/30	31.38	30.96	0.42	1.34
R8/30		W8/30	22.91	22.56	0.35	1.53
16 Wratten Road East						
R5/30		W5/30	24.41	24.17	0.24	0.98
R6/30		W6/30	32.31	31.97	0.34	1.05
17 Wratten Road East						
R3/30		W3/30	32.55	32.41	0.14	0.43
R4/30		W4/30	24.60	24.38	0.22	0.89
18 Wratten Road East						
R1/30		W1/30	24.69	24.45	0.24	0.97
R2/30		W2/30	32.40	32.33	0.07	0.22
28 Old Charlton Road						
R1/40		W1/40	32.46	31.83	0.63	1.94
R2/40		W2/40	32.62	32.13	0.49	1.50
R2/40		W3/40	33.99	33.36	0.63	1.85



Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
DAYLIGHT ANALYSIS

Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
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R3/40		W4/40	33.41	32.69	0.72	2.16
R3/40		W5/40	28.83	28.83	0.00	0.00

9 Woodcroft, Wratten Road East

R1/50		W1/50	30.54	30.20	0.34	1.11
R2/50		W2/50	30.81	29.87	0.94	3.05

8 Woodcroft, Wratten Road East

R3/50		W3/50	33.65	34.06	-0.41	-1.22
R4/50		W4/50	34.43	34.27	0.16	0.46



Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
DAYLIGHT ANALYSIS



Old Charlton Road, Hitchin

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Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
DAYLIGHT ANALYSIS



Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
NSL ANALYSIS

Room	Room Use	Whole Room sq ft	Existing sq ft	Proposed sq ft	Loss sq ft	%Loss
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Radcliffe House

R1/10	LKD	294.8	294.0	294.0	0.0	0.0
R2/10	LKD	210.3	209.6	209.6	0.0	0.0
R3/10	BEDROOM	104.2	102.2	102.2	0.0	0.0
R4/10	BEDROOM	140.4	137.2	137.2	0.0	0.0
R5/10	LKD	281.6	253.6	253.6	0.0	0.0
R6/10	LKD	411.7	311.4	311.4	0.0	0.0
R7/10	BEDROOM	84.3	83.4	83.4	0.0	0.0
R8/10	BEDROOM	119.9	116.5	116.5	0.0	0.0
R9/10	LKD	312.3	307.7	307.7	0.0	0.0
R10/10	BEDROOM	98.9	97.6	97.6	0.0	0.0
R11/10	BEDROOM	99.3	94.4	94.4	0.0	0.0
R12/10	BEDROOM	153.0	133.8	133.8	0.0	0.0
R13/10	BEDROOM	164.5	101.4	101.4	0.0	0.0
R14/10	BEDROOM	122.4	105.8	105.8	0.0	0.0
R15/10	BEDROOM	115.2	112.3	112.3	0.0	0.0
R16/10	LKD	345.5	343.9	342.8	1.2	0.3
R17/10	LKD	280.9	280.1	279.3	0.8	0.3

20 Old Charlton Road

R1/20	143.4	142.2	142.2	0.0	0.0
R2/20	65.0	46.7	46.7	0.0	0.0

15 Wratten Road East

R7/30	143.4	141.5	141.5	0.0	0.0
R8/30	65.0	33.7	33.7	0.0	0.0

16 Wratten Road East

R5/30	69.9	49.9	49.9	0.0	0.0
R6/30	143.4	141.5	141.5	0.0	0.0

17 Wratten Road East

R3/30	143.4	141.5	141.5	0.0	0.0
R4/30	69.9	49.9	49.9	0.0	0.0

18 Wratten Road East

R1/30	65.0	42.5	42.5	0.0	0.0
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Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
NSL ANALYSIS

Room	Room Use	Whole Room sq ft	Existing sq ft	Proposed sq ft	Loss sq ft	%Loss
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R2/30		143.4	141.5	141.5	0.0	0.0
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28 Old Charlton Road

R1/40		74.6	72.9	72.9	0.0	0.0
R2/40		69.5	69.2	69.2	0.0	0.0
R3/40		153.9	153.1	153.1	0.0	0.0

9 Woodcroft, Wratten Road East

R1/50		143.2	137.9	137.9	0.0	0.0
R2/50		137.4	130.6	130.6	0.0	0.0

8 Woodcroft, Wratten Road East

R3/50		106.5	103.0	103.0	0.0	0.0
R4/50		106.5	102.3	102.3	0.0	0.0



Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
SUNLIGHT ANALYSIS

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
Radcliffe House														
R1/10	W1/10	LKD	0	14	0	14	-	0.0						
R1/10	W2/10	LKD	2	18	2	18	0.0	0.0						
R1/10	W3/10	LKD	2	18	2	18	0.0	0.0						
R1/10	W4/10	LKD	0	0	0	0	-	-	2	18	2	18	0.0	0.0
R2/10	W5/10	LKD	0	0	0	0	-	-						
R2/10	W6/10	LKD	15	61	14	60	6.7	1.6						
R2/10	W7/10	LKD	13	60	12	59	7.7	1.7	16	64	15	63	6.3	1.6
R3/10	W8/10	BEDROOM	12	58	11	56	8.3	3.4	12	58	11	56	8.3	3.4
R4/10	W9/10	BEDROOM	9	50	8	48	11.1	4.0	9	50	8	48	11.1	4.0
R5/10	W10/10	LKD	5	35	4	33	20.0	5.7						
R5/10	W11/10	LKD	4	28	3	26	25.0	7.1	5	36	4	34	20.0	5.6
R17/10	W29/10	LKD	7	32	7	27	0.0	15.6						
R17/10	W30/10	LKD	24	70	24	69	0.0	1.4						
R17/10	W31/10	LKD	21	64	21	62	0.0	3.1	25	72	25	70	0.0	2.8



Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
SUNLIGHT ANALYSIS

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		

15 Wratten Road East

R7/30	W7/30	20	68	20	68	0.0	0.0	20	68	20	68	0.0	0.0
R8/30	W8/30	19	54	19	54	0.0	0.0	19	54	19	54	0.0	0.0

16 Wratten Road East

R5/30	W5/30	16	47	16	47	0.0	0.0	16	47	16	47	0.0	0.0
R6/30	W6/30	24	71	24	71	0.0	0.0	24	71	24	71	0.0	0.0

17 Wratten Road East

R3/30	W3/30	25	71	25	71	0.0	0.0	25	71	25	71	0.0	0.0
R4/30	W4/30	19	49	19	49	0.0	0.0	19	49	19	49	0.0	0.0

18 Wratten Road East



Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
SUNLIGHT ANALYSIS

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R1/30	W1/30		15	49	15	49	0.0	0.0	15	49	15	49	0.0	0.0
R2/30	W2/30		24	69	24	69	0.0	0.0	24	69	24	69	0.0	0.0
28 Old Charlton Road														
R1/40	W1/40		20	51	20	51	0.0	0.0	20	51	20	51	0.0	0.0
R2/40	W2/40		20	51	20	51	0.0	0.0						
R2/40	W3/40		25	79	26	80	-4.0	-1.3	27	92	27	92	0.0	0.0
R3/40	W4/40		25	78	25	78	0.0	0.0						
R3/40	W5/40		4	26	4	26	0.0	0.0	25	79	25	79	0.0	0.0
9 Woodcroft, Wratten Road East														
R1/50	W1/50		18	55	17	54	5.6	1.8	18	55	17	54	5.6	1.8
R2/50	W2/50		18	53	18	53	0.0	0.0	18	53	18	53	0.0	0.0

8 Woodcroft, Wratten Road East



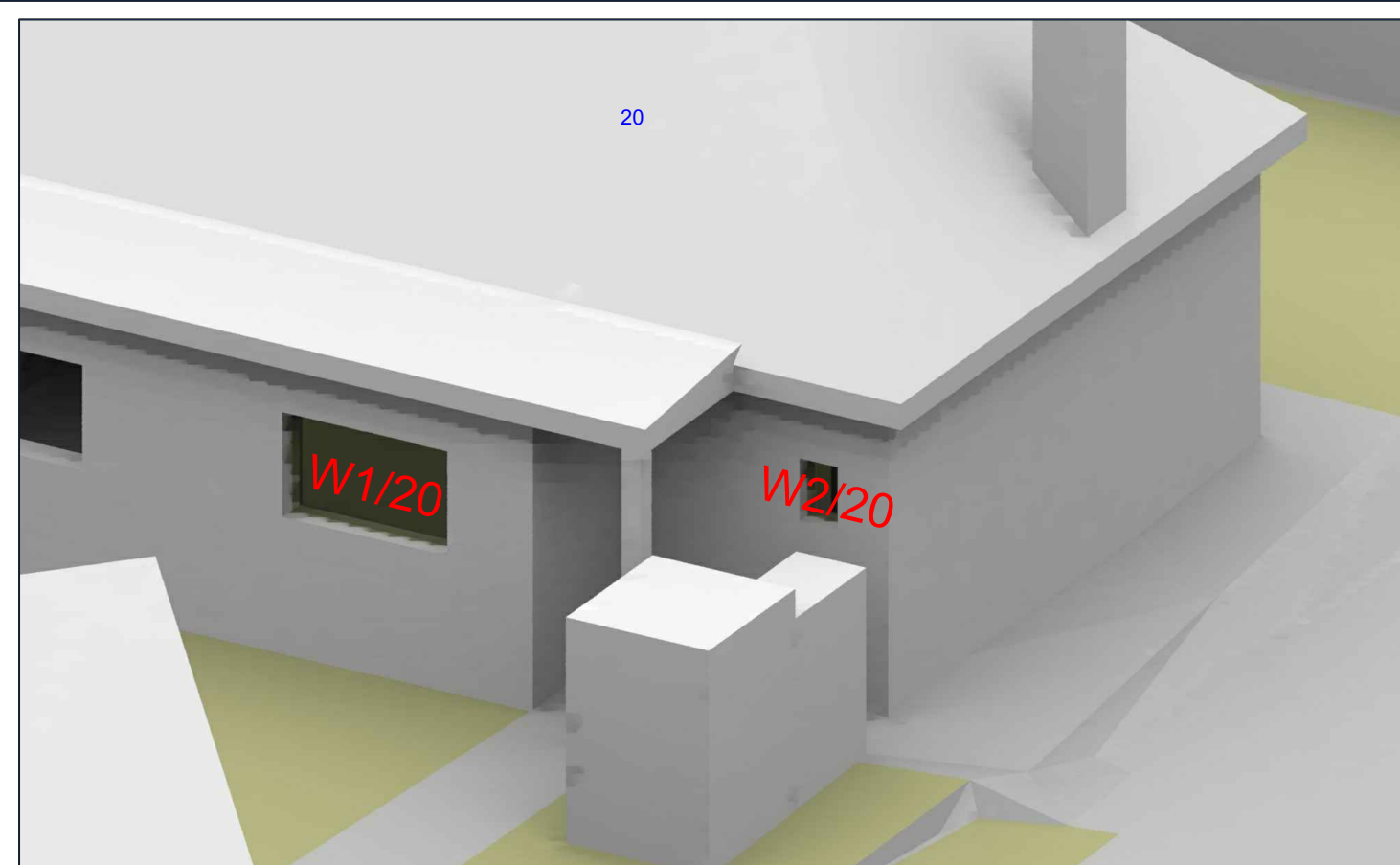
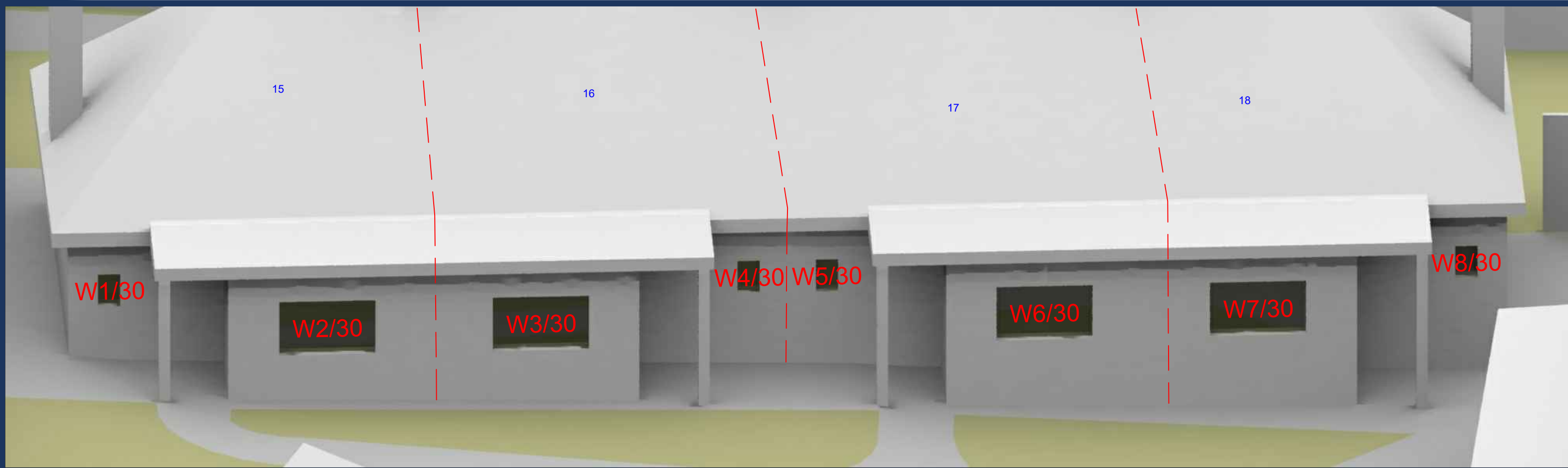
Old Charlton Road, Hitchin

Project No: 3637, Existing v Proposed 09/04/25
SUNLIGHT ANALYSIS

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R3/50	W3/50		18	56	19	57	-5.6	-1.8	18	56	19	57	-5.6	-1.8
R4/50	W4/50		18	56	19	57	-5.6	-1.8	18	56	19	57	-5.6	-1.8

Appendix 3:

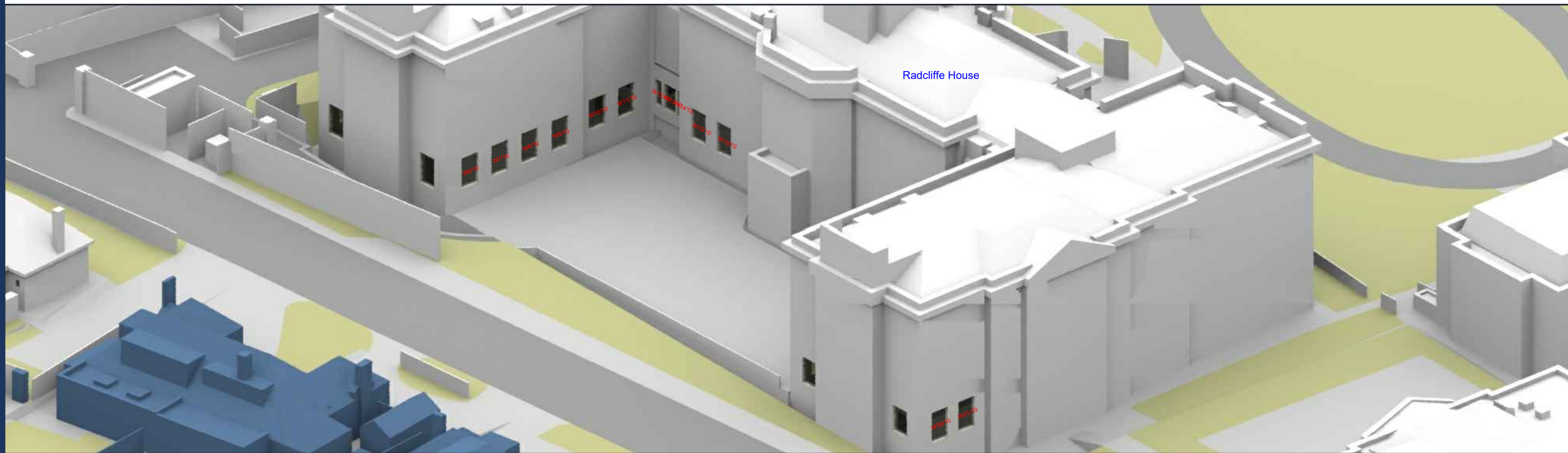
Window Maps



Sources: Temp Transfer Old Charlton Road_040425_Solids XYID@NE.dwg		Key:		Project: Old Charlton Road, Hitchin		Title: Window Region 3D VIEW Proposed Scheme 09/04/25		
Scheme Confirmed: -		Date: -		Drawn By: WDC	Scale: @A3	Date: 10-04-25	Dwg No: P3637/WM 01	Rel: 01

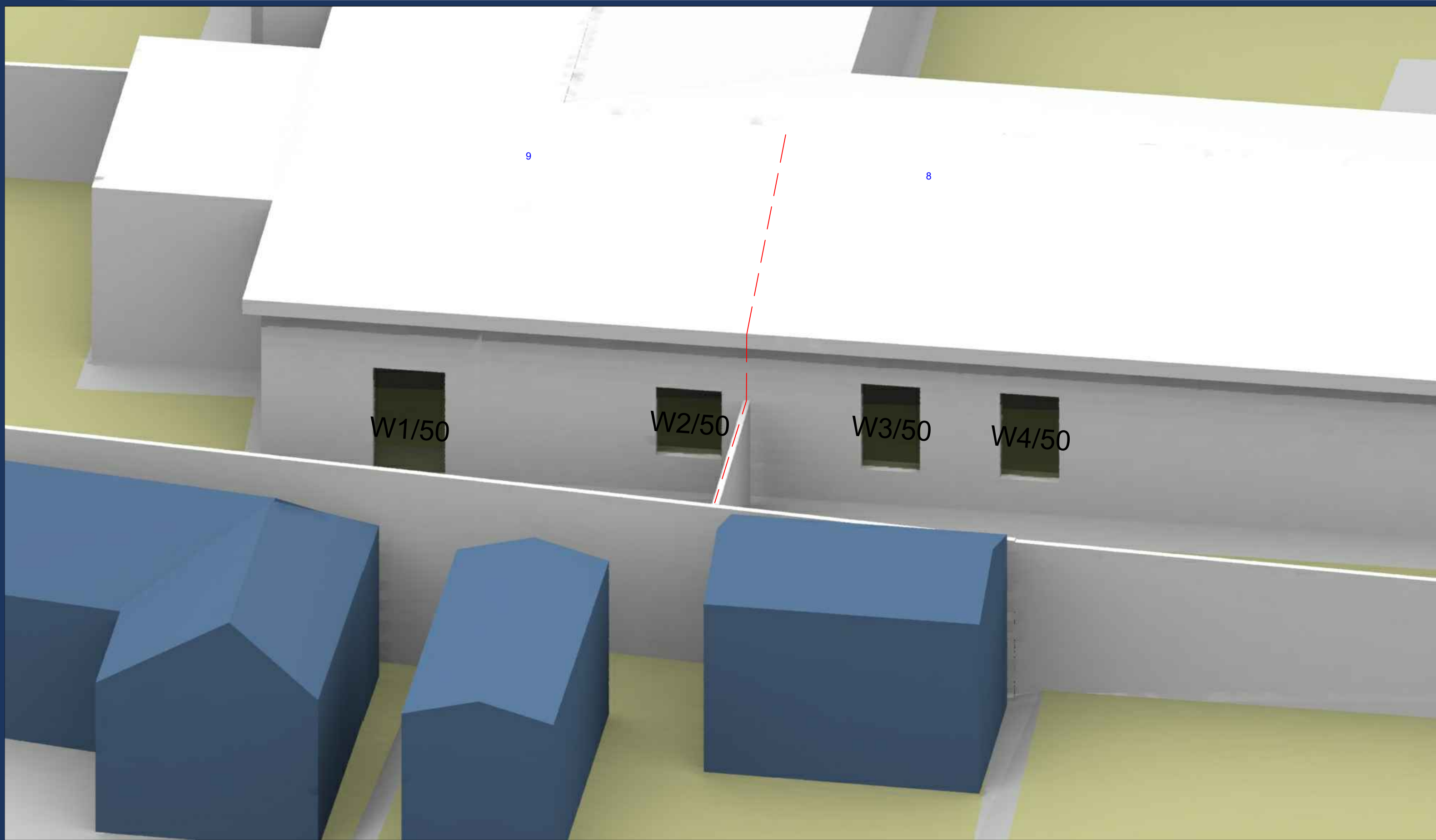
POINT





Sources: Temp Transfer Old Charlton Road_040425_Solids XYID@NE.dwg		Key:		Project: Old Charlton Road, Hitchin			Title: Window Region 3D VIEW Proposed Scheme 09/04/25		
Scheme Confirmed: -		Date: -		Drawn By: WDC		Scale: @A3		Date: 10-04-25	
						Dwg No: P3637/WM/02		Rel: 01	





Sources: Temp Transfer
Old Charlton Road_040425_Solids XYID@NE.dwg

Key:

Scheme Confirmed: -

Project: Old Charlton Road, Hitchin

Date: -

Drawn By: WDC

Title: Window Region 3D VIEW
Proposed Scheme 09/04/25

Scale: @A3

Date: 10-04-25

Dwg No: P3637/WM 03

Rel: 01



