

Daylight & Sunlight Report
Tate + Co Architects
York St John University



29th February 2024



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About MES Building Solutions

MES Building Solutions (MES) is an established consultancy practice specialising in providing building solutions throughout the UK.

We offer a full range of services for both residential and commercial buildings from small individual properties through to highly complex mixed use developments.

We are an industry leader in delivering a professional, accredited and certified service to a wide range of clients including architects, developers, builders, housing associations, the public sector and private householders.

Employing highly qualified staff, our team comes from a variety of backgrounds within the construction industry with combined knowledge of building design, engineering, assessment, construction, development, research and surveying.

MES Building Solutions maintains its position at the forefront of changes in building regulations as well as technological advances. Our clients, large or small are therefore assured of a cost effective, cohesive and fully integrated professional service.

About the Authors

Andrew Pickersgill is an Associate member of the Royal Institution of Chartered Surveyors and leads our neighbourly matters team. He has a BSc (Hons) degree in Building Surveying. Andrew undertakes daylighting, sunlight and shadow analysis for planning applications. He is also involved in party wall issues and carries out other building surveying services for our clients.

Chris Jones is the Technical Director at MES Building Solutions. Chris has a Masters Degree in Energy Efficient & Sustainable Building, as well as an Honours degree in Mechanical Engineering. Chris has over 20 years' experience in providing sustainable building solutions and assists the Neighbourly Matters team at MES. He undertakes daylighting, sunlight and shadow cast analysis for planning applications. Chris is also a qualified BREEAM and Code for Sustainable Homes assessor and has worked with some of the UK's top developers, as well as housing associations and local authorities.

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1.0 Executive Summary

We have carried out calculations following guidance in Site Layout Planning for Daylight & Sunlight (SLPDS), PJ Littlefair et al 2022 to ascertain the impact of the proposed redevelopment to the rear of the Design Centre within York St John, on the daylight and sunlight of the neighbouring properties.

In dense urban locations such as this, site constraints, including the number, height and proximity of other neighbouring buildings means that windows and rooms will often fall short of the guidance figures.

Daylight and sunlight is one of a number of considerations when designing a building and should therefore be balanced with other planning issues, such as the appearance of the building, the need for additional local housing, the existing street scene and the commercial viability of the project.

The guidance is clear that the advice is not mandatory, should be used flexibly and that in certain environments (such as this) a higher degree of obstruction may be unavoidable.

In this case 103 of 104 of neighbouring windows meet the BRE Guidance for VSC and all the rooms assessed comfortably fulfill all the planning guidance. This would be regarded as a high level of compliance in a dense urban environment such as this. All of the windows assessed meet the BRE guidance for sunlight provision.

We have also assessed a shared amenity space serving 1-11 Aldbrough House and this too comfortably meets the BRE guidance for sunlight provision and overshadowing.

Therefore, in our opinion the proposals accord with the intent and context of the planning guidance in this case. We have provided our further comments and details in the following report.

2.0 Introduction

The purpose of this report is to assess the impact of the proposed development to the rear of the Design Centre at York St John University, on the neighbouring properties.

This report considers the daylight and sunlight issues against the criteria set out for national guidance in the following publications:

Site Layout Planning for Daylight & Sunlight (SLPDS), PJ Littlefair et al 2022 published by the BRE (Building Research Establishment).

The SLPDS is the culmination of research undertaken by the BRE to determine whether or not a new development will adversely affect the light to nearby properties. The BRE tests are approved by the Department of the Environment and are widely used by local authorities when deciding on development applications.

BS 8206-2- Code of practice for skylighting.

There are no minimum mandatory requirements for sunlight & skylight in Building Regulations for England & Wales but the guidance set out in SLPDS is widely accepted as the approved methodology when calculating sunlight & skylight.

3.0 Planning Policy

3.1 National Planning Policy

The national Planning Policy Framework (Department for Levelling Up, Housing & Communities 2023) makes little direct reference to Daylight & Sunlight However, in Section 11 (Making effective use of land), paragraph 119 states:

“Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions.”

Section 11 continues in paragraph 125c:

“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).”

Section 12 (Achieving well-designed places), paragraph 126, goes on to make a more general statement about high quality design:

“The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. Being clear about design expectations, and how these will be tested, is essential for achieving this.”

Section 14 (Meeting the challenge of climate change, flooding and coastal change states:

In paragraph 152; “The planning system should support the transition to a low carbon future in a changing climate” it then goes on to state in paragraph 153: “Plans should take a proactive approach to mitigating and adapting to climate change, taking into account ... the risk of overheating from rising temperatures”.

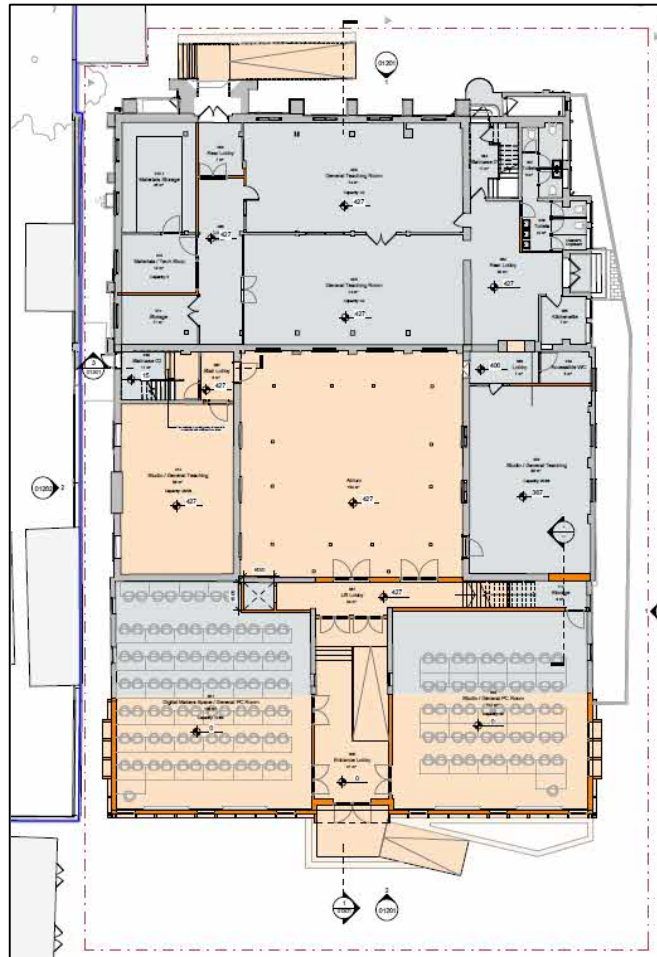
Paragraph 154 then goes on... “New development should be planned for in ways that:

- a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and
- b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government’s policy for national technical standards.”

4.0 Description of Development

The scheme comprises of proposed re development to the rear of the Design Centre at York St John University, which is located on Brook Street.

The property is located on the west side of Brook Street and is situated within a primarily residential area with a mix of dwelling types, consisting of primarily two storey blocks of flats.



Site Location Plan

5.0 Assessment Process

The SLPDS describes three parameters to be assessed in order to measure the impact of the proposed new building on Daylight/Sunlight availability to the key adjacent properties. The three parameters to be assessed are as follows:

- 1) Daylight:
Vertical Sky Component (VSC)
Daylight Distribution (DD)
- 2) Sunlight:
Annual Probable Sunlight Hours (APSH)
- 3) Overshadowing (Amenity Space)
On relevant open spaces

The guidance states that rooms to be assessed should be living rooms, kitchens and bedrooms in residential properties. In non-domestic buildings rooms where occupants 'have a reasonable expectation of daylight' should be assessed. Although these spaces are not defined, examples are given of the type of non-domestic buildings that would normally fall into this category. These include schools, hospitals, hotels and hostels, small workshops and some offices.

As it is difficult to be sure of the specific use of neighbouring spaces, we have taken a view on the relevance of the spaces adjacent to the proposed development. If we have been in any doubt, we have carried out the assessment. However, it should be noted some of the spaces we have assessed could fall outside the test requirement criteria.

It is important to note that the numerical values in the guidance are advisory and different criteria may be used based on the requirements for daylighting in an area viewed against other site layout constraints.

The neighbouring properties we have assessed are as follows:

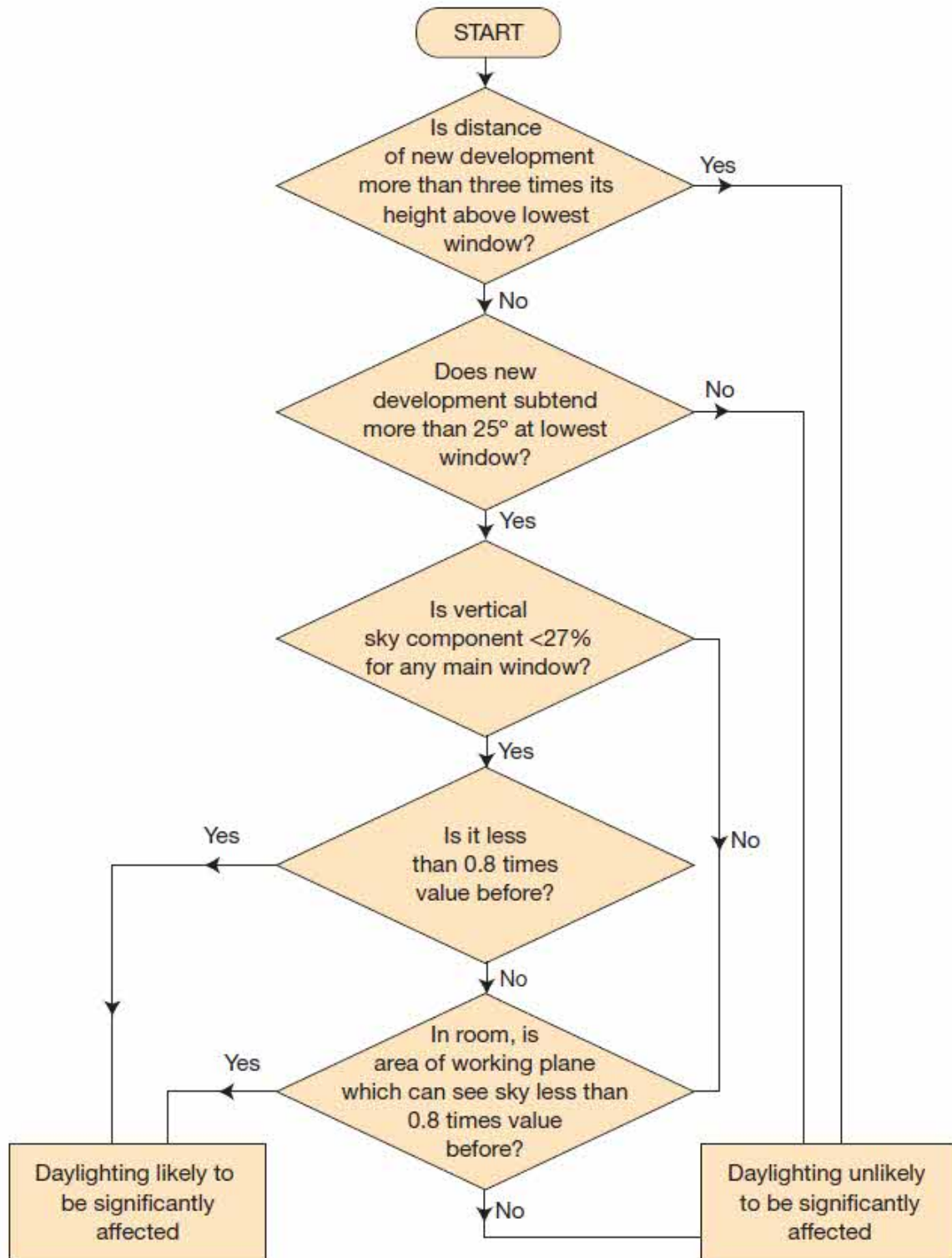
- 1-11 Aldbrough House
- 12-15 Aldbrough House
- 16-21 Aldbrough House

The assessment is based on a site visit, 3D laser scan survey, photographic evidence and OS data, along with the following drawings, provided by ARCHITECT:

1034_TCA_DWG_Design Centre Revit Model
1034 TCA DC 000 DR A 00110 Revision P02 – Design Centre Existing Ground Floor
1034 TCA DC 000 DR A 00120 Revision P02 – Design Centre Ground Floor Demolition Plan
1034 TCA DC 000 DR A 01110 Revision P03 – Design Centre Proposed Floor Plan
1034 TCA DC 001 DR A 00111 Revision P02 – Design Centre Existing First Floor Plan
1034 TCA DC 001 DR A 00121 Revision P02 – Design Centre First Floor Demolition Plan
1034 TCA DC 001 DR A 01111 Revision P03 – Design Centre Proposed First Floor Plan
1034 TCA DC 002 DC 002 DR A 00112 Revision P02 – Design Centre Existing Second Floor Plan
1034 TCA DC 002 DC 002 DR A 00122 Revision P02 – Design Centre Second Floor Demolition Plan
1034 TCA DC 002 DR A 01112 Revision P03 – Design Centre Proposed Second Floor Plan
1034 TCA DC 003 DR A 00113 Revision P02 – Design Centre Existing Roof Plan
1034 TCA DC 003 DR A 00123 Revision P02 – Design Centre Roof Demolition Plan
1034 TCA DC 003 DR A 01113 Revision P02 – Design Centre Proposed Roof Plan
1034 TCA DC XXX DR A 00301 Revision P03 – Design Centre Existing Sections
1034 TCA DC XXX DR A 01301 Revision P03 – Design Centre Proposed Sections
1034 TCA XX ZZZ DR A 00201 Revision P01 – Existing North and South Elevations
1034 TCA XX ZZZ DR A 00202 Revision P01 – Existing East & West Elevations
1034 TCA XX ZZZ DR A 01201 Revision P01 – Proposed North and South Elevations
1034 TCA XX ZZZ DR A 01202 Revision P01 – Proposed East and West Elevations

6.0 Daylight

Site Layout Planning for Daylight & Sunlight contains the following flow chart showing the steps which should be taken in order to establish whether a building will receive adequate daylight:



Distance Check:

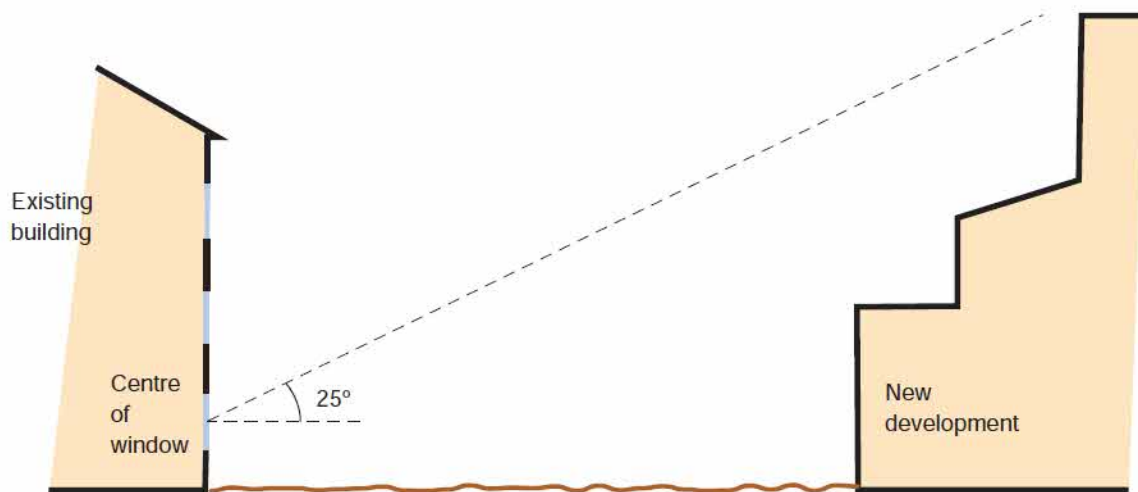
Site Layout Planning for Daylight & Sunlight (2022) states: "Loss of light to existing windows need not be analysed if the distance of each part of the new development from the existing window is three or more times its height above the centre of the existing window."

Distance Check Results

On this occasion the ratio of the height of the proposed building to its distance from the centre of the lowest existing window is less than 1:3 and the 25° rule must be applied.

25° Rule:

The angle to the horizontal subtended by the new development at the level of the centre of the lowest affected window should be no greater than 25°. If this is the case then it is unlikely to have a noticeable effect on diffuse skylight enjoyed by the existing building.



If, for any part of the development, the angle is more than 25°, a more detailed check is needed to find the loss of skylight to the existing building:

25° Rule Results

On this occasion the angle to the horizontal subtended by the new development at the level of the centre of the lowest affected window will be greater than 25° and therefore the following more detailed checks have been carried out:

Vertical Sky Component:

Daylight is the light received from the sun which is diffused through the sky's clouds. Even on a cloudy day when the sun is not visible a room will continue to be lit with light from the sky. This is also known as 'diffuse light'. Any reduction in the total amount of daylight can be calculated by finding the 'Vertical Sky Component'.

The Vertical Sky Component (VSC) is the ratio of the direct skylight illuminance falling on a vertical face at a reference point (usually the centre of a window), to the simultaneous horizontal illuminance under an unobstructed sky.

The guidance states that the VSC will be adversely affected if after a development it is both less than 27% of the overall available diffuse light and less than 0.8 times its former value.

Therefore, if the VSC is more than 27% then enough light would still be reaching the window of the neighbouring building. However, if the VSC is less than 27% as well as less than 0.8 times its former value the occupants will notice the reduction in the amount of skylight.

VSC Results

Calculations were undertaken in accordance with the planning guidance contained in BRE document 209 'Site Layout Planning for Daylight & Sunlight' - PJ Littlefair et al 2022.

Detailed results are in Appendix 1.

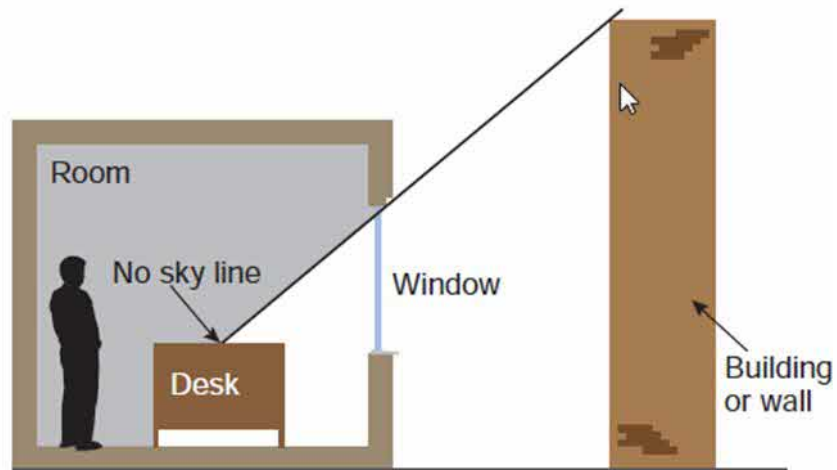
As can be seen the proposed development has very little impact on neighbouring properties with 103 of the 104 windows assessed meeting the BRE guidelines for VSC. It should be noted that the single window, serving a ground floor room within 1-11 Albrough House falls just short of guidance and could be regarded as being marginal.

It should also be noted that this is one of two windows serving the same room and the daylight distribution results suggest that the reduced VSC value does not have a significant impact on daylight levels within the room served.

Daylight Distribution:

Where room layouts are known (or estimated) the impact on daylighting distribution can be found by plotting what is known as the 'no sky line' in each of the main rooms. These are the same rooms as used for the VSC test.

The no sky line effectively divides the points on the working plane (0.85m high for residential properties and 0.7m high for offices) that cannot see the sky. Therefore areas beyond the no sky line will receive no direct daylight but will instead be lit from reflected light.



BRE 209

If, following the construction of a new development, the no sky line moves so that the area of the existing room, which does not receive direct skylight, is reduced to less than 0.8 times its former value, this will be noticeable to the occupants.

We have estimated internal layouts to assess the Daylight Distribution in rooms adjacent to the development.

Daylight Distribution Results

Calculations were undertaken in accordance with the planning guidance contained in BRE document 209 'Site Layout Planning for Daylight & Sunlight' - PJ Littlefair et al 2022.

Detailed results are in Appendix 2:

As can be seen the proposed development has very little impact on neighbouring properties with all 79 rooms assessed meeting the BRE guidelines for daylight distribution.

7.0 Sunlight

Available Sunlight Hours

Guidance for minimum sunlight values can be found in Section 3 of Site Layout Planning for Daylight and Sunlight (SLPDS).

Habitable rooms in domestic buildings that face within 90° of due south are tested, as are rooms in non-domestic buildings that have a particular requirement for sunlight.

The recommendations are that applicable windows should receive a minimum of 25% of the total annual probable sunshine hours, to include a minimum of 5% of that which is available during the winter months between 21st September to the 21st March (the approximate dates of the spring and autumn equinoxes).

However if this is not possible (or the amount of sunlight is already reduced because of the effect of existing obstructions) then a further reduction in sunlight availability will be noticeable to an occupier if the total number of sunlight hours is below the target 25% of the total annual probable sunshine hours, to include a minimum of 5% of that which is available during the winter months, and is less than 0.8 times its former value prior to the development.

There is no requirement for windows that face within 90° of due north so windows that fall into this category have not been considered for sunlight calculations.

Available Sunlight Hours Results

Calculations were undertaken in accordance with the planning guidance contained in BRE document 209 'Site Layout Planning for Daylight & Sunlight' - PJ Littlefair et al 2022.

Detailed results are in Appendix 1:

As can be seen the proposed development has very little impact on neighbouring properties with all 82 windows assessed within 90° degrees of due south meeting the BRE guidelines for annual and winter probable sunlight hours.

8.0 Amenity Space

Recent guidance through the BRE suggests that at least 50% of any garden or open spaces should receive no less than 2 hours of direct sun on the spring equinox (March 21st).

Open spaces would normally include:

- Gardens, usually the main back garden of a house
- Parks and playing fields
- Children's playgrounds
- Outdoor swimming pools and paddling pools
- Sitting out areas such as those between non-domestic buildings and in public squares
- Focal points for views such as a group of monuments or fountains

Amenity Space Results

Calculations were undertaken in accordance with the planning guidance contained in BRE document 209 'Site Layout Planning for Daylight & Sunlight' - PJ Littlefair et al 2022.

Detailed results are in Appendix 3:

We have completed a 2 hours of sunlight to amenity assessment on the shared amenity space serving, 1-11 Aldbrough House. Our calculations show that there will be no significant reduction in sunlight provision to this space.

We have also produced hourly shadow cast images for the space for the 21st of March, as recommended in the BRE guidance. These images support the results of the numerical calculation, illustrating that additional overshadowing due to the proposed development will be minimal. The full set of images for both the existing and proposed situations can be found in Appendix 5.

9.0 Notes

This report has been prepared for the sole use of the Client in support of a planning application. No representation or warranty (expressed or implied) is given to any other parties for any other purpose. Therefore, this report should not be relied upon by any third party for any other use and we accept no liability from the use of this report by any other party for any purpose other than that originally intended.

Where full access was not available we have made reasonable estimations of internal layouts, floor areas, window sizes and positions etc.

Our calculations model has been built from a combination of architect's plans, partial site survey, site and aerial photographs.

We are not aware of any conflicts of interest between ourselves and any other party concerning this project.



Appendix 1

Window Test Results

Vertical Sky Component & Available Sunlight Hours



Floor Ref.	Room Ref.	Property Type	Window Ref.	VSC	Light Retained	Meets BRE Guidance	Light Retained	Light Retained	Meets BRE Guidance	Winter	Light Retained	Meets BRE Guidance		
1-11 Aldbrough House														
Ground	R1	Residential	W1	Existing	34.70	1.00	YES	78.00	0.99	YES	26.00	0.96	YES	
			Proposed	34.61			77.00			25.00				
		R2	Residential	W2	Existing	34.40	1.00	YES	78.00	0.99	YES	26.00	0.96	YES
				Proposed	34.28			77.00			25.00			
		R3	Residential	W3	Existing	33.52	1.00	YES	74.00	0.99	YES	24.00	0.96	YES
					Proposed	33.36			73.00			23.00		
				W4	Existing	33.56	1.00	YES	73.00	0.99	YES	24.00	0.96	YES
					Proposed	33.40			72.00			23.00		
		R4	Residential	W5	Existing	33.82	0.99	YES	75.00	0.99	YES	24.00	0.96	YES
				Proposed	33.60			74.00			23.00			
		R5	Residential	W6	Existing	33.69	0.99	YES	73.00	1.00	YES	23.00	1.00	YES
				Proposed	33.41			73.00			23.00			
	R6	Residential	W7	Existing	33.38	0.99	YES	73.00	1.00	YES	25.00	1.00	YES	
				Proposed	33.06			73.00			25.00			
	R7	Residential	W8	Existing	27.47	1.00	YES	53.00	1.00	YES	17.00	1.00	YES	
				Proposed	27.47			53.00			17.00			
				W9	Existing	25.81	1.00	YES	49.00	1.00	YES	14.00	1.00	YES
				Proposed	25.81			49.00			14.00			
	R8	Residential	W10	Existing	31.21	1.00	YES	57.00	1.00	YES	18.00	1.00	YES	
				Proposed	31.21			57.00			18.00			
				W11	Existing	33.71	0.96	YES	79.00	0.95	YES	26.00	0.85	YES
				Proposed	32.44			75.00			22.00			
			W12	Existing	30.40	0.86	YES	73.00	0.93	YES	25.00	0.80	YES	
				Proposed	26.25			68.00			20.00			
	R9	Residential	W13	Existing	28.46	0.89	YES	64.00	0.86	YES	22.00	0.64	YES	
				Proposed	25.42			55.00			14.00			
				W14	Existing	18.64	0.78	MARGINAL	37.00	0.73	YES	14.00	0.50	YES
				Proposed	14.48			27.00			7.00			
	R10	Residential	W15	Existing	24.87	1.00	YES		*North	*North	*North	*North		
			Proposed	24.87										
	R11	Residential	W16	Existing	23.77	1.00	YES		*North	*North	*North	*North		
			Proposed	23.77										
	R12	Residential	W17	Existing	18.21	1.00	YES		*North	*North	*North	*North		
				Proposed	18.21									
			W18	Existing	18.07	1.00	YES		*North	*North	*North	*North		
				Proposed	18.07									



Floor Ref.	Room Ref.	Property Type	Window Ref.	VSC	Light Retained	Meets BRE Guidance	Light Retained	Light Retained	Meets BRE Guidance	Winter	Light Retained	Meets BRE Guidance	
First	R1	Residential	W1	Existing 36.36 Proposed 36.32	1.00	YES	79.00 79.00	1.00	YES	28.00 28.00	1.00	YES	
	R2	Residential	W2	Existing 36.13 Proposed 36.08	1.00	YES	78.00 78.00	1.00	YES	27.00 27.00	1.00	YES	
	R3	Residential	W3	Existing 35.95 Proposed 35.87	1.00	YES	78.00 78.00	1.00	YES	27.00 27.00	1.00	YES	
	R4	Residential	W4	Existing 35.77 Proposed 35.67	1.00	YES	78.00 77.00	0.99	YES	27.00 26.00	0.96	YES	
	R5	Residential	W5	Existing 35.66 Proposed 35.54	1.00	YES	76.00 76.00	1.00	YES	26.00 26.00	1.00	YES	
	R6	Residential	W6	Existing 35.43 Proposed 35.30	1.00	YES	75.00 75.00	1.00	YES	25.00 25.00	1.00	YES	
	R7	Residential	W7	Existing 28.60 Proposed 28.60	1.00	YES	53.00 53.00	1.00	YES	17.00 17.00	1.00	YES	
	R8	Residential	W8	Existing 33.28 Proposed 33.28	1.00	YES	59.00 59.00	1.00	YES	20.00 20.00	1.00	YES	
				W9	Existing 35.90 Proposed 35.37	0.99	YES	80.00 79.00	0.99	YES	27.00 26.00	0.96	YES
				W10	Existing 32.57 Proposed 30.75	0.94	YES	76.00 75.00	0.99	YES	28.00 27.00	0.96	YES
	R9	Residential	W11	Existing 30.71 Proposed 29.36	0.96	YES	70.00 69.00	0.99	YES	26.00 25.00	0.96	YES	
				W12	Existing 26.70 Proposed 24.23	0.91	YES	51.00 46.00	0.90	YES	19.00 14.00	0.74	YES
R10	Residential	W13	Existing 28.81 Proposed 28.81	1.00	YES			*North	*North	*North	*North		
R11	Residential	W14	Existing 28.38 Proposed 28.38	1.00	YES			*North	*North	*North	*North		
R12	Residential	W15	Existing 23.79 Proposed 23.79	1.00	YES			*North	*North	*North	*North		



Floor Ref.	Room Ref.	Property Type	Window Ref.	VSC	Light Retained	Meets BRE Guidance	Light Retained	Light Retained	Meets BRE Guidance	Winter	Light Retained	Meets BRE Guidance		
Second	R1	Residential	W1	Existing Proposed	30.85 30.85	1.00	YES	67.00 67.00	1.00	YES	28.00 28.00	1.00	YES	
	R2	Residential	W2	Existing Proposed	30.76 30.76	1.00	YES	67.00 67.00	1.00	YES	28.00 28.00	1.00	YES	
	R3	Residential	W3	Existing Proposed	30.69 30.69	1.00	YES	67.00 67.00	1.00	YES	28.00 28.00	1.00	YES	
	R4	Residential	W4	Existing Proposed	30.63 30.63	1.00	YES	67.00 67.00	1.00	YES	28.00 28.00	1.00	YES	
	R5	Residential	W5	Existing Proposed	29.23 29.23	1.00	YES	61.00 61.00	1.00	YES	26.00 26.00	1.00	YES	
	R6	Residential	W6	Existing Proposed	29.13 29.13	1.00	YES	61.00 61.00	1.00	YES	26.00 26.00	1.00	YES	
	R7	Residential	W7	Existing Proposed	24.95 24.95	1.00	YES	52.00 52.00	1.00	YES	17.00 17.00	1.00	YES	
	R8	Residential	W8	Existing Proposed	37.33 37.33	1.00	YES	81.00 81.00	1.00	YES	28.00 28.00	1.00	YES	
	R9	Residential	W9	Existing Proposed	27.85 27.85	1.00	YES	58.00 58.00	1.00	YES	28.00 28.00	1.00	YES	
				W10	Existing Proposed	33.39 33.56	1.01	YES	60.00 60.00	1.00	YES	22.00 22.00	1.00	YES
	R10	Residential	W11	Existing Proposed	25.11 25.11	1.00	YES		*North	*North		*North	*North	
	R11	Residential	W12	Existing Proposed	24.97 24.97	1.00	YES		*North	*North		*North	*North	
	R12	Residential	W13	Existing Proposed	25.08 25.08	1.00	YES		*North	*North		*North	*North	



Floor Ref.	Room Ref.	Property Type	Window Ref.	VSC	Light Retained	Meets BRE Guidance	Light Retained	Light Retained	Meets BRE Guidance	Winter	Light Retained	Meets BRE Guidance		
12-15 Albrough House														
Ground	R1	Residential	W1	Existing	13.65	1.00	YES	9.00	1.00	YES	0.00	1.00	YES	
			Proposed	13.65			9.00			0.00				
		R2	Residential	W2	Existing	17.43	1.00	YES	16.00	1.00	YES	0.00	1.00	YES
				Proposed	17.43			16.00			0.00			
		R3	Residential	W3	Existing	20.98	1.00	YES	29.00	1.00	YES	0.00	1.00	YES
				Proposed	20.99			29.00			0.00			
		R4	Residential	W4	Existing	23.44	1.00	YES	34.00	1.00	YES	3.00	1.00	YES
				Proposed	23.43			34.00			3.00			
		R5	Residential	W5	Existing	24.18	1.00	YES	39.00	1.00	YES	7.00	1.00	YES
				Proposed	24.16			39.00			7.00			
		R6	Residential	W6	Existing	0.49	1.00	YES	1.00	1.00	YES	0.00	1.00	YES
				Proposed	0.49			1.00			0.00			
				W7	Existing	13.62	1.00	YES	24.00	1.00	YES	6.00	1.00	YES
				Proposed	13.60			24.00			6.00			
			W8	Existing	19.58	1.00	YES	29.00	0.97	YES	6.00	0.83	YES	
			Proposed	19.55			28.00			5.00				
			W9	Existing	16.05	1.00	YES	26.00	1.00	YES	7.00	1.00	YES	
			Proposed	16.03			26.00			7.00				
			W10	Existing	16.17	1.00	YES	27.00	1.00	YES	7.00	1.00	YES	
			Proposed	16.15			27.00			7.00				
	R7	Residential	W11	Existing	25.61	1.00	YES	46.00	1.00	YES	10.00	1.00	YES	
			Proposed	25.59			46.00			10.00				
	R8	Residential	W12	Existing	26.17	1.00	YES	48.00	1.00	YES	10.00	1.00	YES	
			Proposed	26.14			48.00			10.00				
	R9	Residential	W13	Existing	25.65	1.00	YES	47.00	1.00	YES	11.00	1.00	YES	
			Proposed	25.64			47.00			11.00				
	R10	Residential	W14	Existing	22.17	1.00	YES	48.00	1.00	YES	12.00	1.00	YES	
			Proposed	22.16			48.00			12.00				
	R11	Residential	W15	Existing	15.25	1.00	YES	39.00	1.00	YES	10.00	1.00	YES	
			Proposed	15.24			39.00			10.00				



Floor Ref.	Room Ref.	Property Type	Window Ref.	VSC	Light Retained	Meets BRE Guidance	Light Retained	Light Retained	Meets BRE Guidance	Winter	Light Retained	Meets BRE Guidance		
First	R1	Residential	W1	Existing	16.81	1.00	YES	13.00	1.00	YES	0.00	1.00	YES	
				Proposed	16.81			13.00			0.00			
	R2	Residential	W2	Existing	26.18	1.00	YES	39.00	1.00	YES	5.00	1.00	YES	
				Proposed	26.19			39.00			5.00			
				W11	Existing	32.17	1.00	YES	19.00	*North	*North	0.00	*North	*North
					Proposed	32.17			19.00			0.00		
	R3	Residential	W3	Existing	27.95	1.00	YES	46.00	1.00	YES	10.00	1.00	YES	
				Proposed	27.98			46.00			10.00			
				W12	Existing	34.57	1.00	YES	24.00	*North	*North	0.00	*North	*North
					Proposed	34.57			24.00			0.00		
R4	Residential	W4	Existing	28.97	1.00	YES	50.00	1.00	YES	13.00	1.00	YES		
			Proposed	28.99			50.00			13.00				
R5	Residential	W5	Existing	29.34	1.00	YES	52.00	1.00	YES	14.00	1.00	YES		
			Proposed	29.35			52.00			14.00				
R6	Residential	W6	Existing	29.53	1.00	YES	51.00	1.00	YES	14.00	1.00	YES		
			Proposed	29.53			51.00			14.00				
R7	Residential	W7	Existing	29.85	1.00	YES	49.00	1.00	YES	13.00	1.00	YES		
			Proposed	29.86			49.00			13.00				
R8	Residential	W8	Existing	30.15	1.00	YES	52.00	1.00	YES	13.00	1.00	YES		
			Proposed	30.16			52.00			13.00				
			W13	Existing	36.52	1.00	YES	29.00	*North	*North	5.00	*North	*North	
				Proposed	36.52			29.00			5.00			
R9	Residential	W9	Existing	29.87	1.00	YES	53.00	1.00	YES	16.00	1.00	YES		
			Proposed	29.86			53.00			16.00				
			W14	Existing	36.20	1.00	YES	29.00	*North	*North	5.00	*North	*North	
				Proposed	36.20			29.00			5.00			
R10	Residential	W10	Existing	24.99	1.00	YES	52.00	1.00	YES	17.00	1.00	YES		
			Proposed	24.99			52.00			17.00				



Floor Ref.	Room Ref.	Property Type	Window Ref.	VSC	Light Retained	Meets BRE Guidance	Light Retained	Light Retained	Meets BRE Guidance	Winter	Light Retained	Meets BRE Guidance	
Second	R1	Residential	W1	Existing Proposed	19.73 19.73	1.00	YES	31.00 31.00	1.00	YES	2.00 2.00	1.00	YES
	R2	Residential	W2	Existing Proposed	23.55 23.55	1.00	YES	38.00 38.00	1.00	YES	8.00 8.00	1.00	YES
	R3	Residential	W3	Existing Proposed	24.78 24.79	1.00	YES	40.00 40.00	1.00	YES	10.00 10.00	1.00	YES
	R4	Residential	W4	Existing Proposed	26.68 26.69	1.00	YES	46.00 46.00	1.00	YES	13.00 13.00	1.00	YES
	R5	Residential	W5	Existing Proposed	27.09 27.09	1.00	YES	46.00 46.00	1.00	YES	15.00 15.00	1.00	YES
	R6	Residential	W6	Existing Proposed	27.28 27.28	1.00	YES	47.00 47.00	1.00	YES	15.00 15.00	1.00	YES
	R7	Residential	W7	Existing Proposed	27.39 27.39	1.00	YES	47.00 47.00	1.00	YES	15.00 15.00	1.00	YES
	R8	Residential	W8	Existing Proposed	27.62 27.62	1.00	YES	48.00 48.00	1.00	YES	15.00 15.00	1.00	YES
	R9	Residential	W9	Existing Proposed	28.09 28.09	1.00	YES	48.00 48.00	1.00	YES	15.00 15.00	1.00	YES
	R10	Residential	W10	Existing Proposed	27.34 27.34	1.00	YES	44.00 44.00	1.00	YES	13.00 13.00	1.00	YES
	R11	Residential	W11	Existing Proposed	27.21 27.21	1.00	YES	45.00 45.00	1.00	YES	14.00 14.00	1.00	YES
	R12	Residential	W12	Existing Proposed	26.63 26.63	1.00	YES	45.00 45.00	1.00	YES	15.00 15.00	1.00	YES



Appendix 2

Room Test Results

Daylight Distribution



Floor Ref.	Room Ref	Property Type	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Light Retained	Meets BRE Guidance
1-11 Aldbrough House									
Ground	R1	Residential	Unknown	Area m2	9.60	9.43	9.43	1.00	YES
				% of room		98.24%	98.24%		
	R2	Residential	Unknown	Area m2	11.53	11.28	11.28	1.00	YES
				% of room		97.80%	97.80%		
	R3	Residential	Stairwell	Area m2	4.75	4.73	4.73	1.00	YES
				% of room		99.76%	99.76%		
	R4	Residential	Unknown	Area m2	10.89	10.62	10.62	1.00	YES
				% of room		97.60%	97.60%		
	R5	Residential	Unknown	Area m2	5.71	5.47	5.47	1.00	YES
				% of room		95.95%	95.95%		
	R6	Residential	Unknown	Area m2	11.58	10.96	10.96	1.00	YES
				% of room		94.72%	94.72%		
R7	Residential	Unknown	Area m2	5.35	5.20	5.20	1.00	YES	
			% of room		97.28%	97.28%			
R8	Residential	Unknown	Area m2	19.84	19.66	19.65	1.00	YES	
			% of room		99.08%	99.03%			
R9	Residential	Unknown	Area m2	11.19	11.06	11.03	1.00	YES	
			% of room		98.85%	98.58%			
R10	Residential	Unknown	Area m2	7.87	7.49	7.49	1.00	YES	
			% of room		95.08%	95.08%			
R11	Residential	Unknown	Area m2	6.43	5.67	5.67	1.00	YES	
			% of room		88.10%	88.10%			
R12	Residential	Stairwell	Area m2	3.87	3.10	3.10	1.00	YES	
			% of room		80.23%	80.23%			
First	R1	Residential	Unknown	Area m2	9.60	9.54	9.54	1.00	YES
				% of room		99.44%	99.44%		
	R2	Residential	Unknown	Area m2	11.53	11.39	11.39	1.00	YES
				% of room		98.76%	98.76%		
	R3	Residential	Unknown	Area m2	6.45	6.39	6.39	1.00	YES
				% of room		99.15%	99.15%		
	R4	Residential	Unknown	Area m2	9.81	9.75	9.75	1.00	YES
				% of room		99.39%	99.39%		
	R5	Residential	Unknown	Area m2	5.71	5.53	5.53	1.00	YES
				% of room		96.98%	96.98%		
	R6	Residential	Unknown	Area m2	9.18	8.95	8.95	1.00	YES
				% of room		97.54%	97.54%		
R7	Residential	Unknown	Area m2	8.37	7.80	7.80	1.00	YES	
			% of room		93.16%	93.16%			
R8	Residential	Unknown	Area m2	19.84	19.73	19.73	1.00	YES	
			% of room		99.46%	99.45%			
R9	Residential	Unknown	Area m2	11.19	11.09	11.09	1.00	YES	
			% of room		99.19%	99.18%			
R10	Residential	Unknown	Area m2	7.87	7.68	7.68	1.00	YES	
			% of room		97.53%	97.53%			
R11	Residential	Unknown	Area m2	6.43	5.80	5.80	1.00	YES	
			% of room		90.14%	90.14%			
R12	Residential	Unknown	Area m2	7.58	7.15	7.15	1.00	YES	
			% of room		94.38%	94.38%			



Floor Ref.	Room Ref	Property Type	Room Use	Room Area	Lit Area Existing	Lit Area Proposed	Light Retained	Meets BRE Guidance
Second	R1	Residential	Unknown	Area m2	9.60	9.54	9.54	
				% of room		99.40%	99.40%	1.00
	R2	Residential	Unknown	Area m2	11.53	11.38	11.38	
				% of room		98.66%	98.66%	1.00
	R3	Residential	Unknown	Area m2	6.45	6.39	6.39	
				% of room		99.11%	99.11%	1.00
	R4	Residential	Unknown	Area m2	9.81	9.74	9.74	
				% of room		99.33%	99.33%	1.00
	R5	Residential	Unknown	Area m2	5.71	5.52	5.52	
				% of room		96.71%	96.71%	1.00
	R6	Residential	Unknown	Area m2	9.18	8.89	8.89	
				% of room		96.88%	96.88%	1.00
R7	Residential	Unknown	Area m2	8.37	7.84	7.84		
			% of room		93.71%	93.71%	1.00	
R8	Residential	Unknown	Area m2	19.27	19.15	19.15		
			% of room		99.35%	99.35%	1.00	
R9	Residential	Unknown	Area m2	11.19	11.10	11.10		
			% of room		99.20%	99.20%	1.00	
R10	Residential	Unknown	Area m2	7.87	7.54	7.54		
			% of room		95.74%	95.74%	1.00	
R11	Residential	Unknown	Area m2	6.43	5.75	5.75		
			% of room		89.48%	89.48%	1.00	
R12	Residential	Unknown	Area m2	7.58	7.06	7.06		
			% of room		93.11%	93.11%	1.00	



Floor Ref.	Room Ref	Property Type	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Light Retained	Meets BRE Guidance
12-15 Aldbrough House									
Ground	R1	Residential	Unknown	Area m2	4.14	2.94	2.94	1.00	YES
				% of room		71.02%	71.02%		
	R2	Residential	Unknown	Area m2	3.29	3.16	3.16	1.00	YES
				% of room		96.17%	96.17%		
	R3	Residential	Unknown	Area m2	7.04	6.82	6.82	1.00	YES
				% of room		96.85%	96.85%		
	R4	Residential	Unknown	Area m2	7.04	6.85	6.85	1.00	YES
				% of room		97.33%	97.33%		
	R5	Residential	Unknown	Area m2	5.70	5.51	5.51	1.00	YES
				% of room		96.63%	96.63%		
	R6	Residential	Stairwell	Area m2	5.16	3.92	3.92	1.00	YES
			% of room		76.00%	76.00%			
R7	Residential	Unknown	Area m2	5.70	5.49	5.49	1.00	YES	
			% of room		96.40%	96.40%			
R8	Residential	Unknown	Area m2	7.04	6.85	6.85	1.00	YES	
			% of room		97.29%	97.29%			
R9	Residential	Unknown	Area m2	7.04	6.84	6.84	1.00	YES	
			% of room		97.19%	97.19%			
R10	Residential	Unknown	Area m2	3.29	3.18	3.18	1.00	YES	
			% of room		96.70%	96.70%			
R11	Residential	Unknown	Area m2	4.06	3.16	3.16	1.00	YES	
			% of room		77.97%	77.97%			
First	R1	Residential	Unknown	Area m2	4.14	3.11	3.11	1.00	YES
				% of room		75.13%	75.13%		
	R2	Residential	Unknown	Area m2	16.15	16.07	16.07	1.00	YES
				% of room		99.48%	99.48%		
	R3	Residential	Unknown	Area m2	16.15	16.11	16.11	1.00	YES
				% of room		99.73%	99.73%		
	R4	Residential	Unknown	Area m2	5.70	5.54	5.54	1.00	YES
				% of room		97.23%	97.23%		
	R5	Residential	Unknown	Area m2	2.34	2.25	2.25	1.00	YES
				% of room		95.75%	95.75%		
R6	Residential	Unknown	Area m2	2.31	2.22	2.22	1.00	YES	
			% of room		96.44%	96.44%			
R7	Residential	Unknown	Area m2	5.70	5.51	5.51	1.00	YES	
			% of room		96.69%	96.69%			
R8	Residential	Unknown	Area m2	16.15	16.12	16.12	1.00	YES	
			% of room		99.82%	99.82%			
R9	Residential	Unknown	Area m2	16.15	16.14	16.14	1.00	YES	
			% of room		99.91%	99.91%			
R10	Residential	Unknown	Area m2	4.06	3.87	3.87	1.00	YES	
			% of room		95.30%	95.30%			



Floor Ref.	Room Ref	Property Type	Room Use	Room Area	Lit Area Existing	Lit Area Proposed	Light Retained	Meets BRE Guidance
Second	R1	Residential	Unknown	Area m2	4.14	3.82	3.82	
				% of room		92.17%	92.17%	1.00
	R2	Residential	Unknown	Area m2	3.29	3.13	3.13	
				% of room		95.30%	95.30%	1.00
	R3	Residential	Unknown	Area m2	7.04	6.75	6.75	
				% of room		95.87%	95.87%	1.00
	R4	Residential	Unknown	Area m2	7.04	6.89	6.89	
				% of room		97.91%	97.91%	1.00
	R5	Residential	Unknown	Area m2	5.70	5.53	5.53	
				% of room		97.08%	97.08%	1.00
	R6	Residential	Unknown	Area m2	2.34	2.26	2.26	
				% of room		96.20%	96.20%	1.00
R7	Residential	Unknown	Area m2	2.31	2.23	2.23		
			% of room		96.71%	96.71%	1.00	
R8	Residential	Unknown	Area m2	5.70	5.50	5.50		
			% of room		96.49%	96.49%	1.00	
R9	Residential	Unknown	Area m2	7.04	6.90	6.90		
			% of room		98.05%	98.05%	1.00	
R10	Residential	Unknown	Area m2	7.04	6.73	6.73		
			% of room		95.65%	95.65%	1.00	
R11	Residential	Unknown	Area m2	3.29	3.09	3.09		
			% of room		93.90%	93.90%	1.00	
R12	Residential	Unknown	Area m2	4.06	3.85	3.85		
			% of room		94.94%	94.94%	1.00	
16-21 Aldbrough House								
Ground	R1	Residential	Unknown	Area m2	3.87	3.10	3.10	
				% of room		80.04%	80.04%	1.00
	R2	Residential	Unknown	Area m2	6.43	5.72	5.72	
				% of room		89.00%	89.00%	1.00
	R3	Residential	Unknown	Area m2	7.78	7.45	7.45	
			% of room		95.74%	95.74%	1.00	
R4	Residential	Unknown	Area m2	11.77	11.65	11.65		
			% of room		99.02%	99.02%	1.00	
R5	Residential	Unknown	Area m2	19.60	18.10	18.10		
			% of room		92.32%	92.32%	1.00	
First	R1	Residential	Unknown	Area m2	7.58	6.17	6.17	
				% of room		81.37%	81.37%	1.00
	R2	Residential	Unknown	Area m2	6.43	5.07	5.07	
				% of room		78.80%	78.80%	1.00
	R3	Residential	Unknown	Area m2	7.78	7.16	7.16	
			% of room		92.05%	92.05%	1.00	
R4	Residential	Unknown	Area m2	11.77	11.71	11.71		
			% of room		99.49%	99.49%	1.00	
R5	Residential	Unknown	Area m2	19.60	19.34	19.34		
			% of room		98.64%	98.64%	1.00	



Appendix 3

Amenity Space Results

2 Hours Sunlight to Amenity

2 Hour Sunlight to Amenity Test
 Project: York St John University Design Centre
 Date of Analysis: 29/02/2024

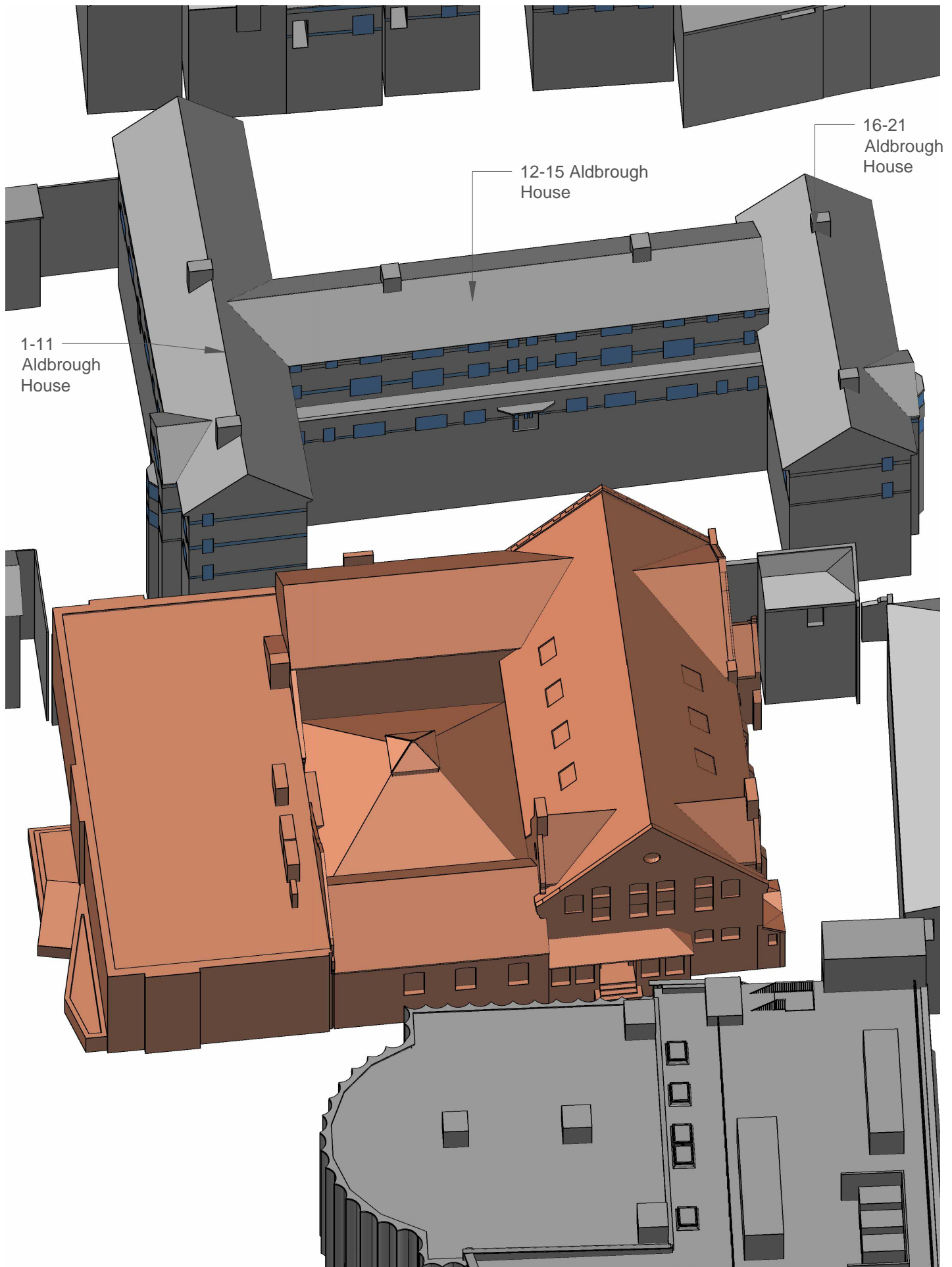


Floor Ref	Amenity Ref	Amenity Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
1-11 Aldbrough House						
Ground	A1	Area m2 Percentage	331.41 278.60 84%	271.08 82%	0.97	YES



Appendix 4

Window, Room & Amenity Space References



Newark Beacon
 Cafferata Way
 Newark NG24 2TN
 01636 653 055
www.mesbuildingsolutions.co.uk

CLIENT:
 Tate & Co.

PROJECT:
 Garden Street
 York University

DRAWING TITLE:
 3D Overview

DRAWN BY:
 NJW
 DATE:
 5/2/2024

CHECKED BY:
 CJ
 SCALE:
 NTS



Newark Beacon
Cafferata Way
Newark NG24 2TN
01636 653 055
www.mesbuildingsolutions.co.uk

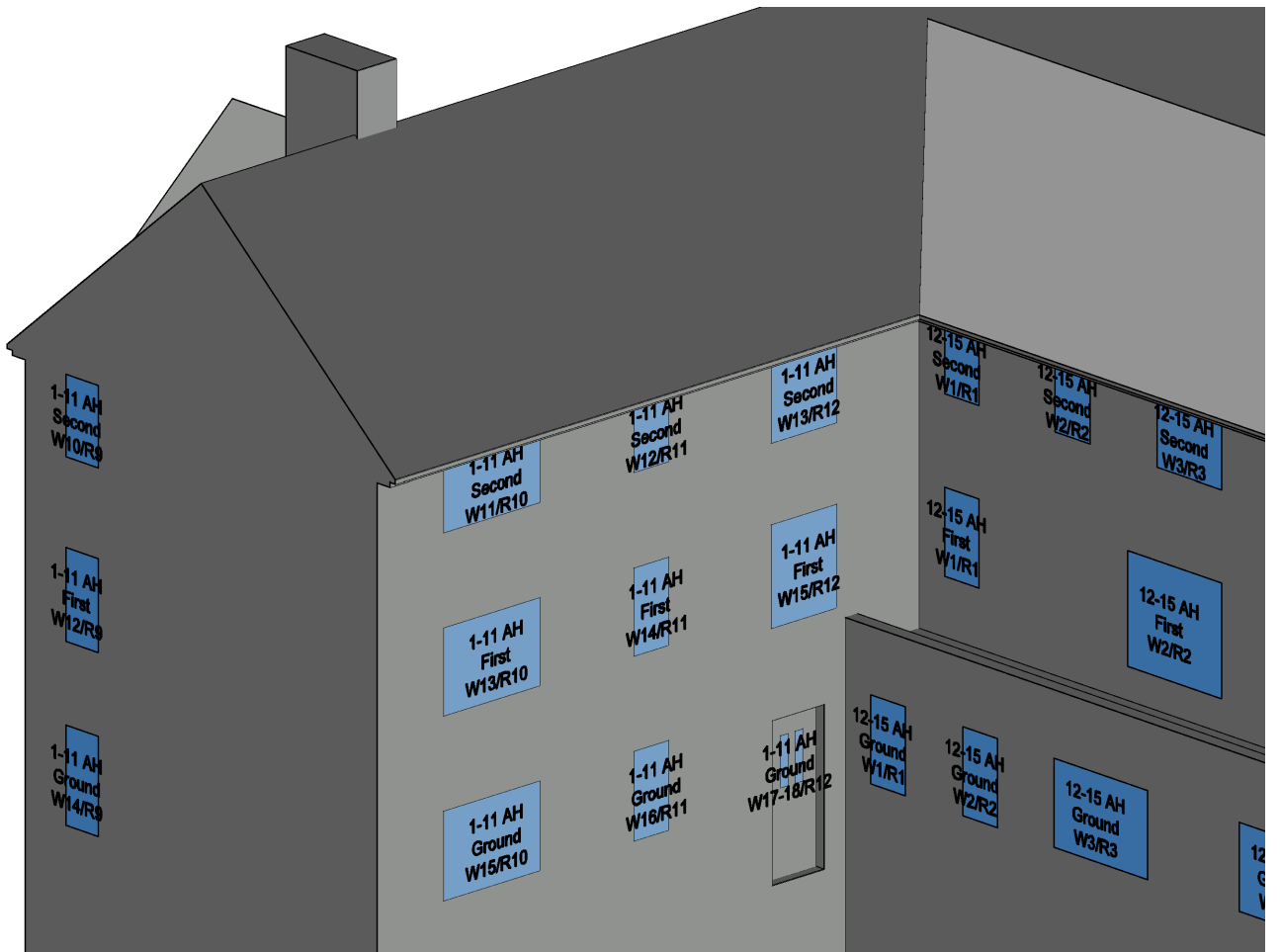
CLIENT:
Tate & Co.

PROJECT:
Garden Street
York University

DRAWING TITLE:
Window Labels
1-11 Aldbrough House
Sheet 1

DRAWN BY:
NJW
DATE:
5/2/2024

CHECKED BY:
CJ
SCALE:
NTS



Newark Beacon
 Cafferata Way
 Newark NG24 2TN
 01636 653 055
www.mesbuildingsolutions.co.uk

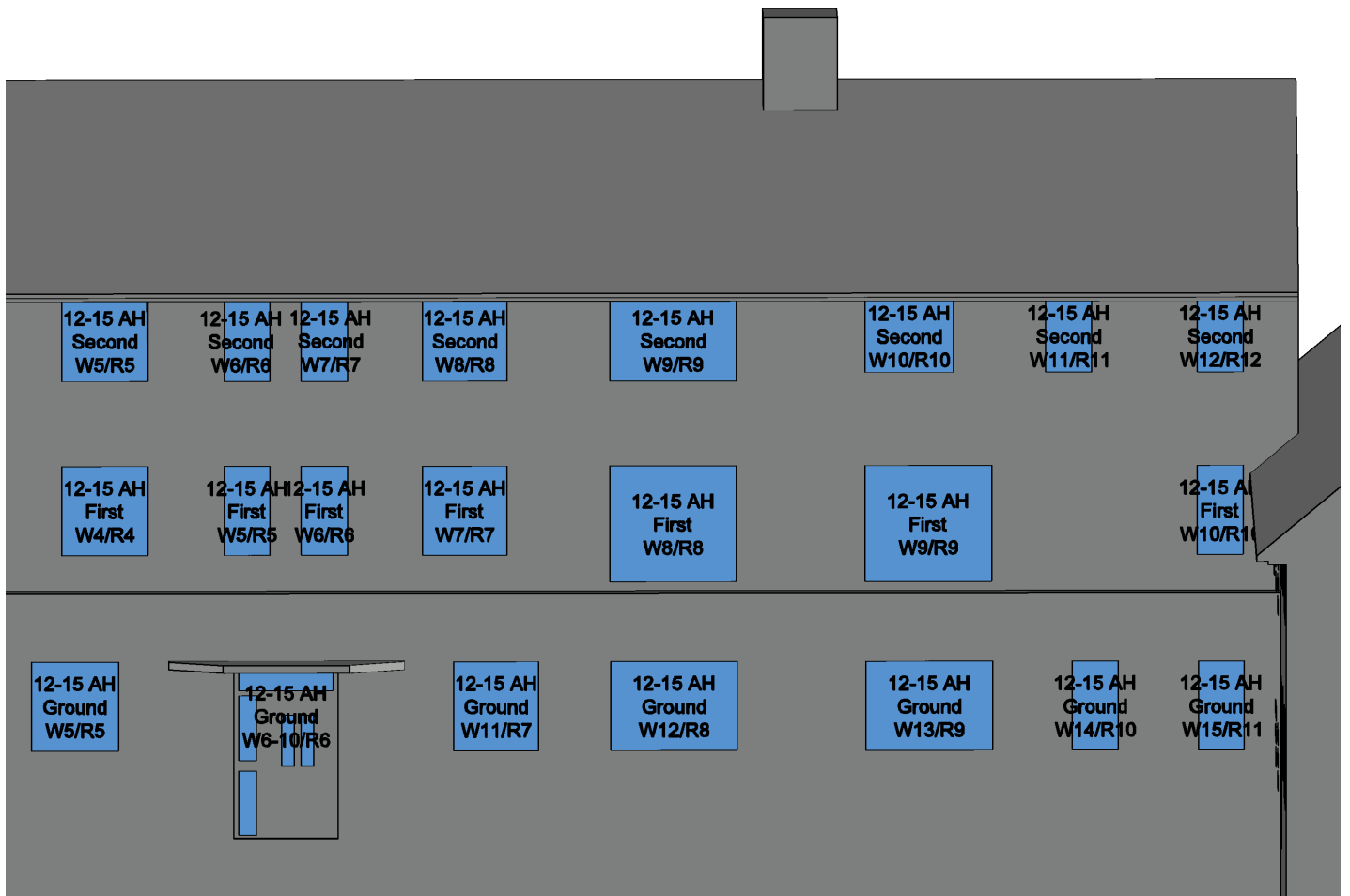
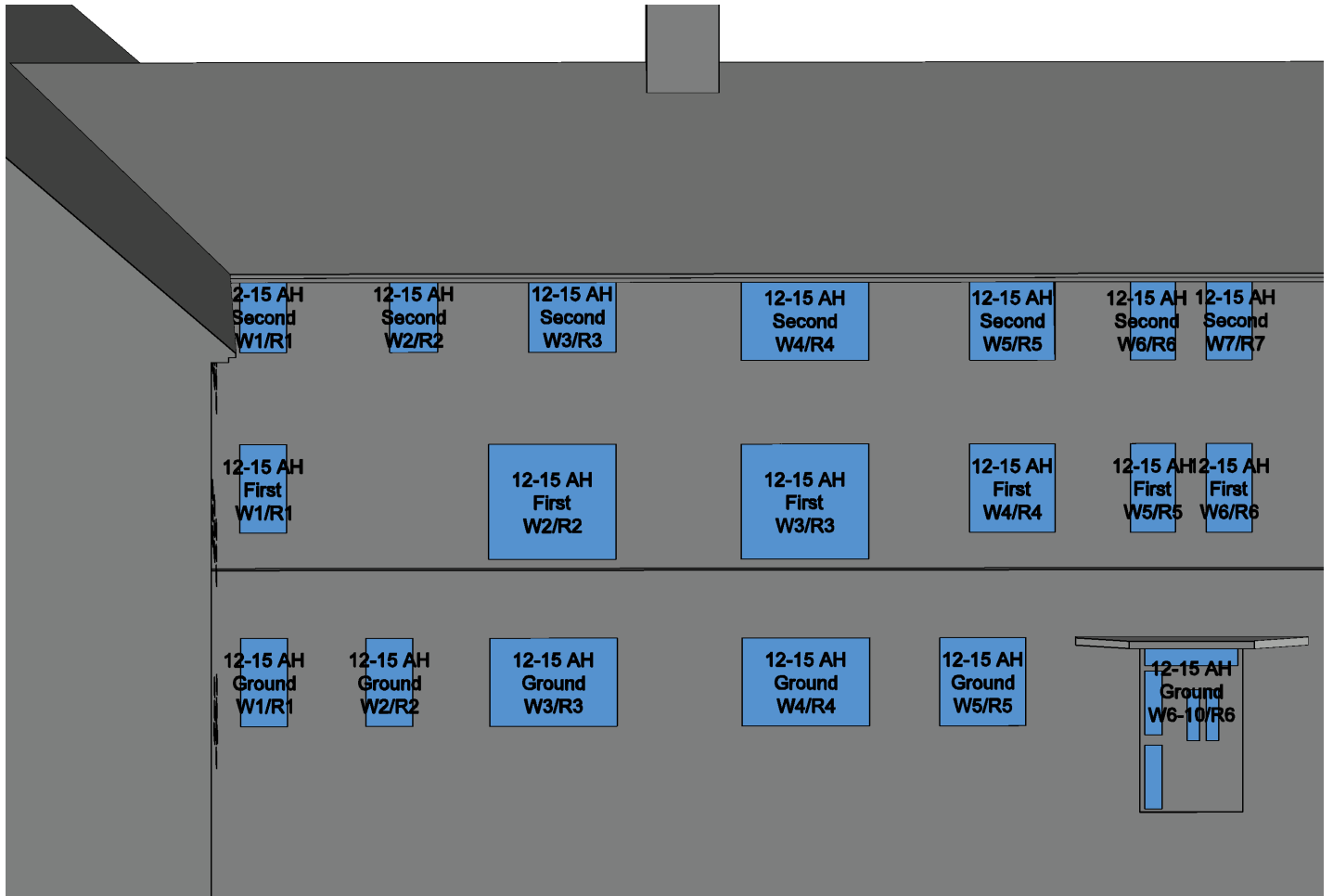
CLIENT:
 Tate & Co.

PROJECT:
 Garden Street
 York University

DRAWING TITLE:
 Window Labels
 1-11 Aldbrough House
 Sheet 2

DRAWN BY:
 NJW
 DATE:
 5/2/2024

CHECKED BY:
 CJ
 SCALE:
 NTS



Newark Beacon
 Cafferata Way
 Newark NG24 2TN
 01636 653 055
www.mesbuildingsolutions.co.uk

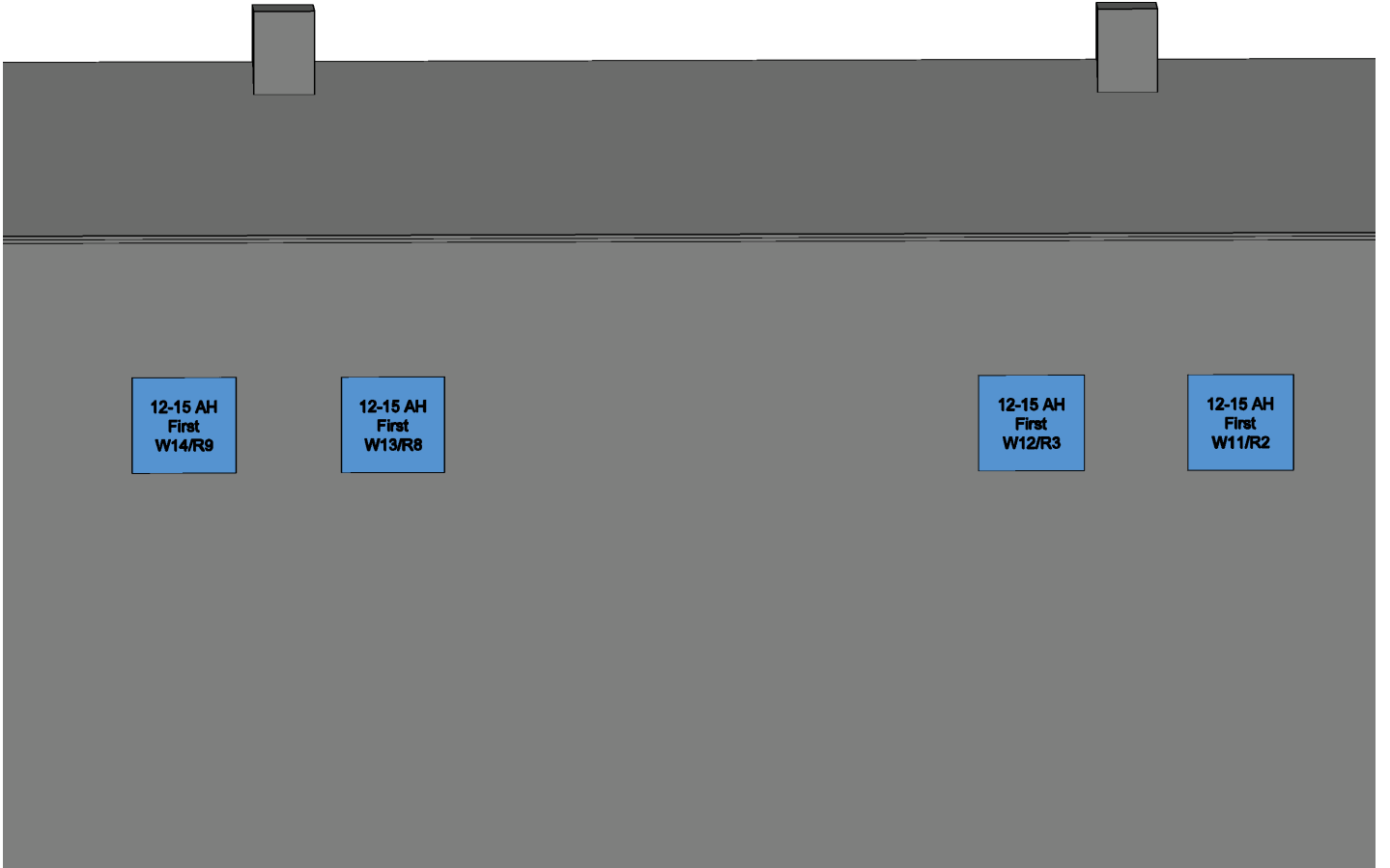
CLIENT:
 Tate & Co.

PROJECT:
 Garden Street
 York University

DRAWING TITLE:
 Window Labels
 12-15 Aldbrough House
 Sheet 1

DRAWN BY:
 NJW
 DATE:
 5/2/2024

CHECKED BY:
 CJ
 SCALE:
 NTS



12-15 AH
First
W14/R9

12-15 AH
First
W13/R8

12-15 AH
First
W12/R3

12-15 AH
First
W11/R2

Newark Beacon
Cafferata Way
Newark NG24 2TN
01636 653 055
www.mesbuildingsolutions.co.uk

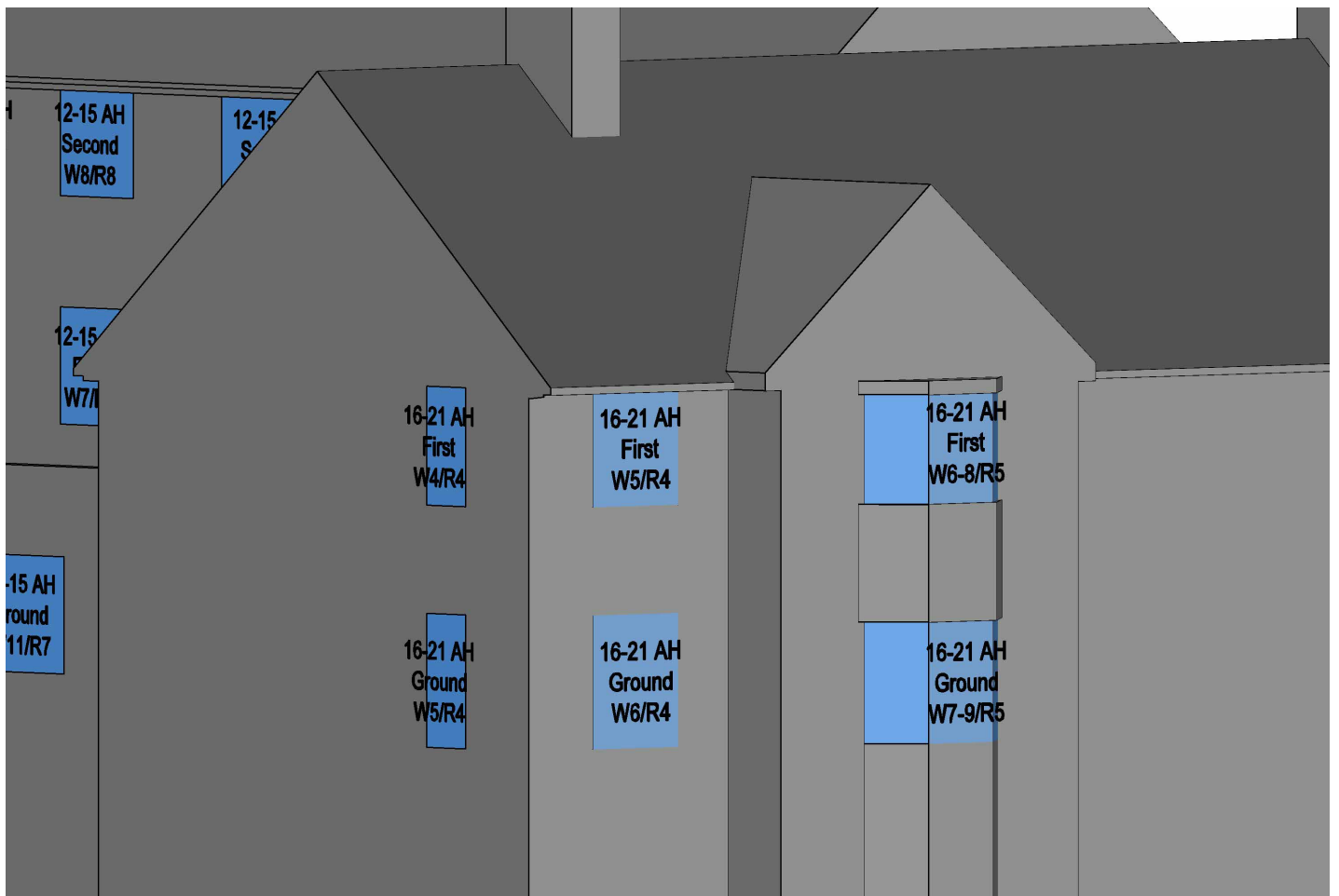
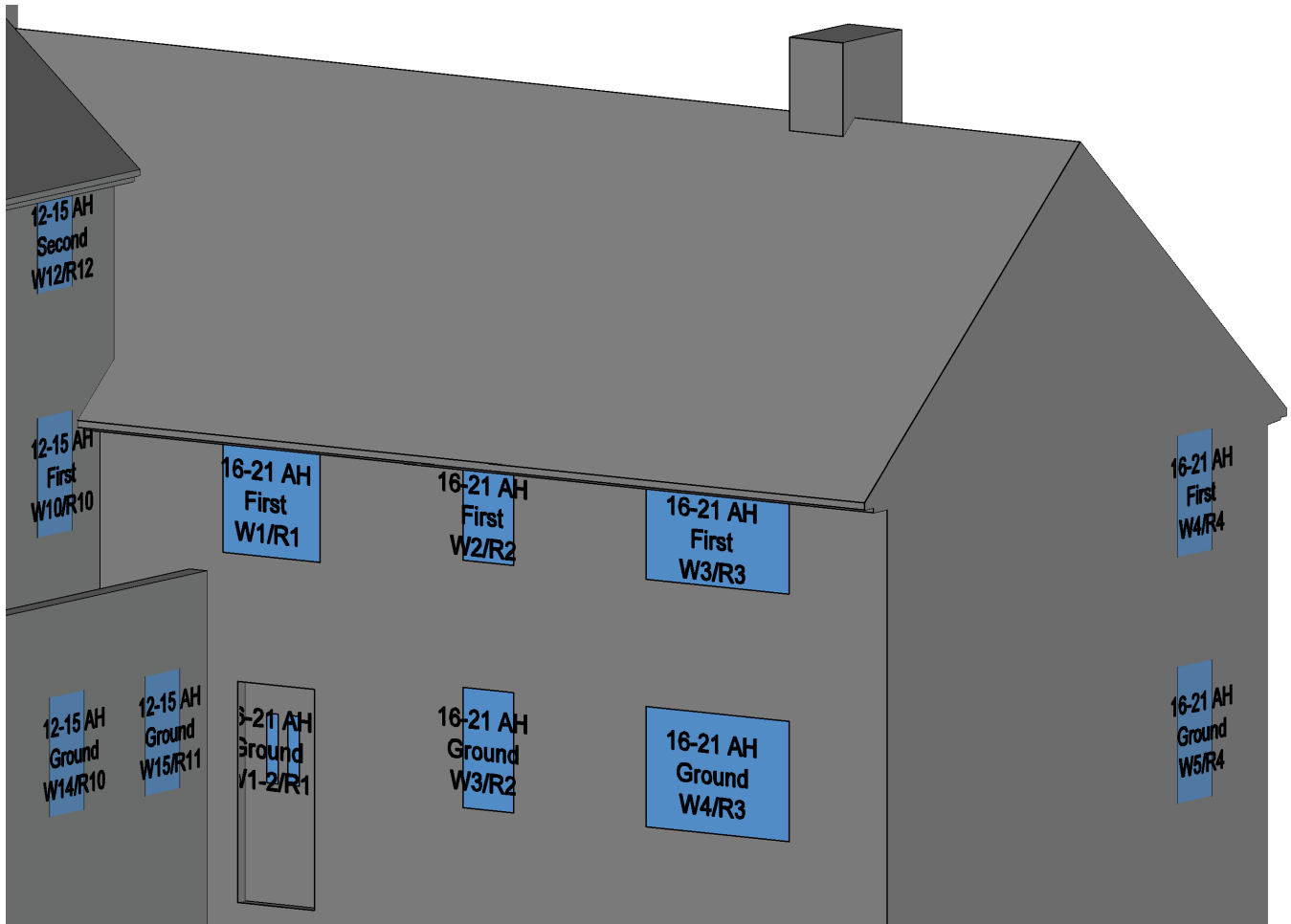
CLIENT:
Tate & Co.

PROJECT:
Garden Street
York University

DRAWING TITLE:
Window Labels
12-15 Aldbrough House
Sheet 2

DRAWN BY:
NJW
DATE:
5/2/2024

CHECKED BY:
CJ
SCALE:
NTS



Newark Beacon
Cafferata Way
Newark NG24 2TN
01636 653 055

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CLIENT:
Tate & Co.

PROJECT:
Garden Street
York University

DRAWING TITLE:
Window Labels
16-21 Aldbrough House




DRAWN BY:
NJW

DATE:
5/2/2024

CHECKED BY:
CJ

SCALE:
NTS

Key:

-  Existing well-lit contour line
-  Proposed well-lit contour line
-  Area between existing and proposed well-lit contours, in which light gain/loss crosses the threshold of receiving illumination from 0.2% of the sky on the working plane

1-11 Aldbrough House
A1

Newark Beacon
Cafferata Way
Newark NG24 2TN
01636 653 055
www.mesbuildingsolutions.co.uk

CLIENT:
Tate & Co.

PROJECT:
Garden Street
York University

DRAWING TITLE:
Amenity Contours
1-11 Aldbrough House

DRAWN BY:
NJW

DATE:
29/2/2024

CHECKED BY:
CJ

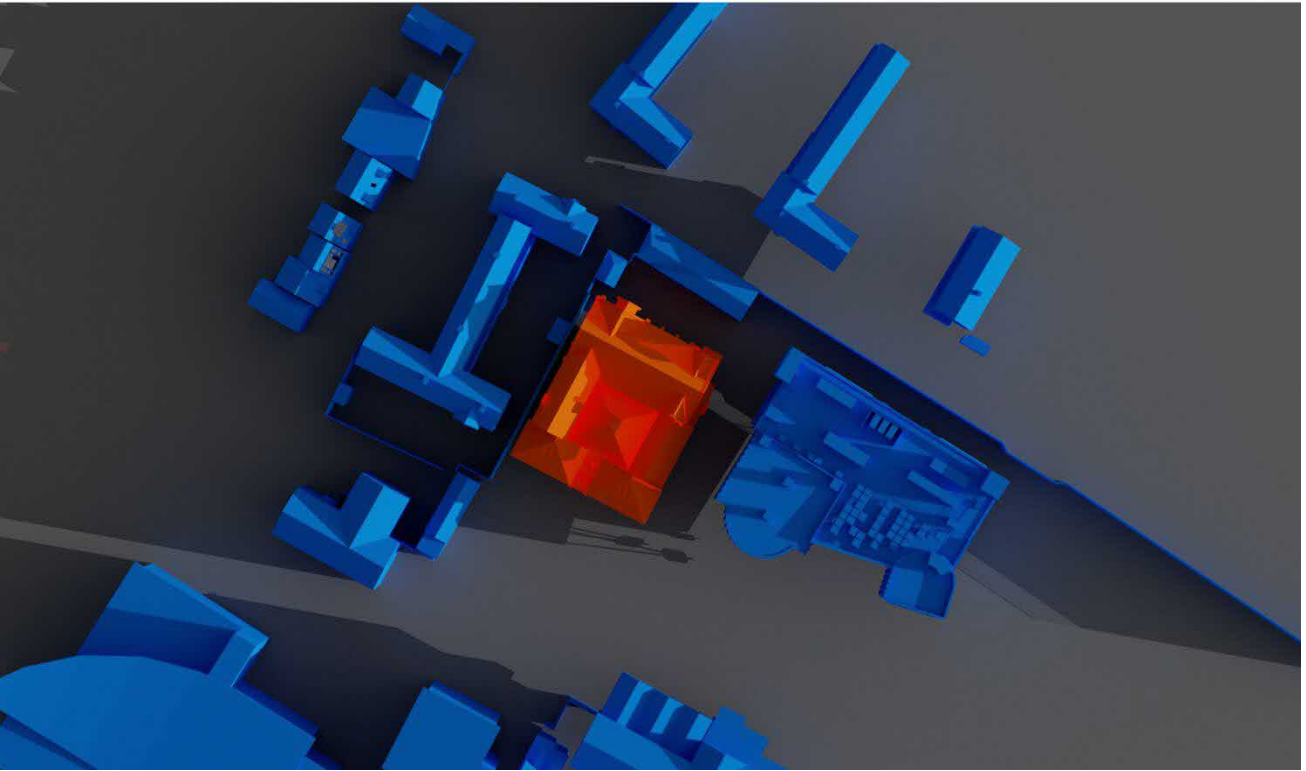
SCALE:
NTS



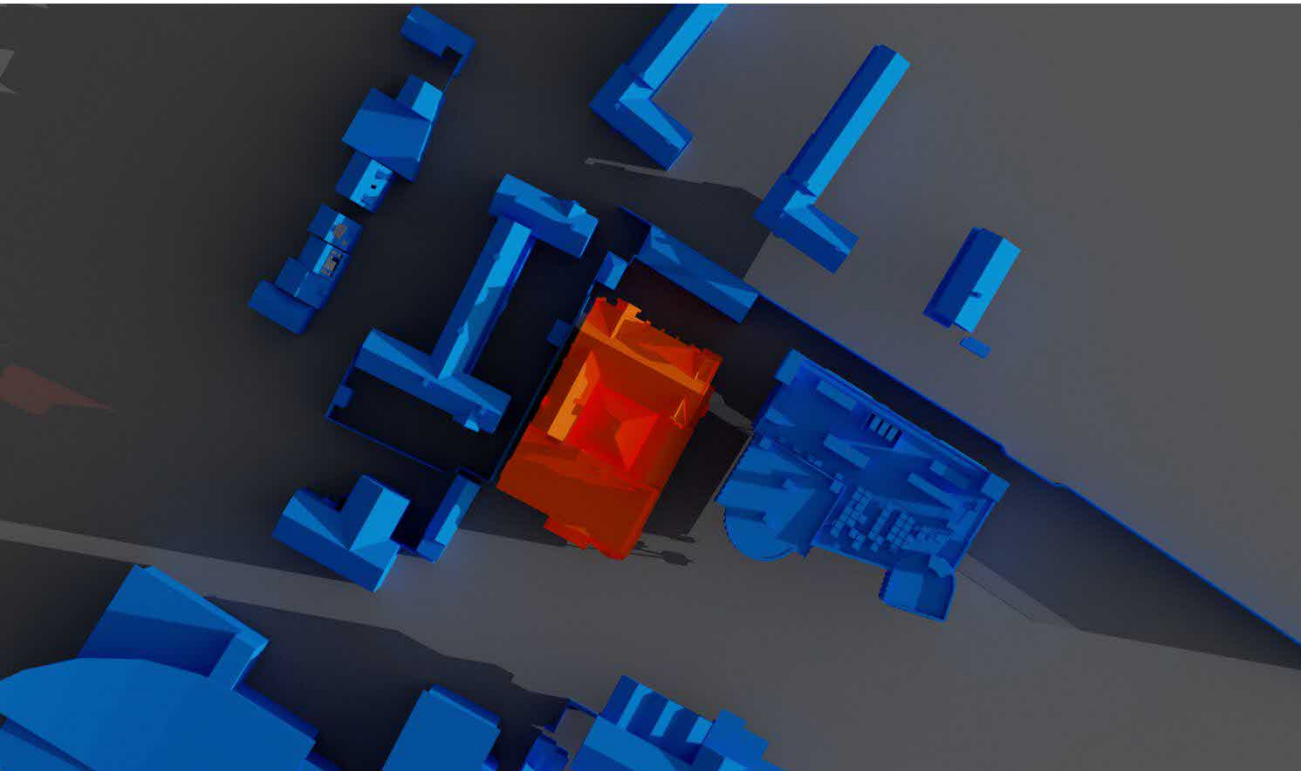
Appendix 5

Existing & Proposed Shadow Cast Images for 21st March

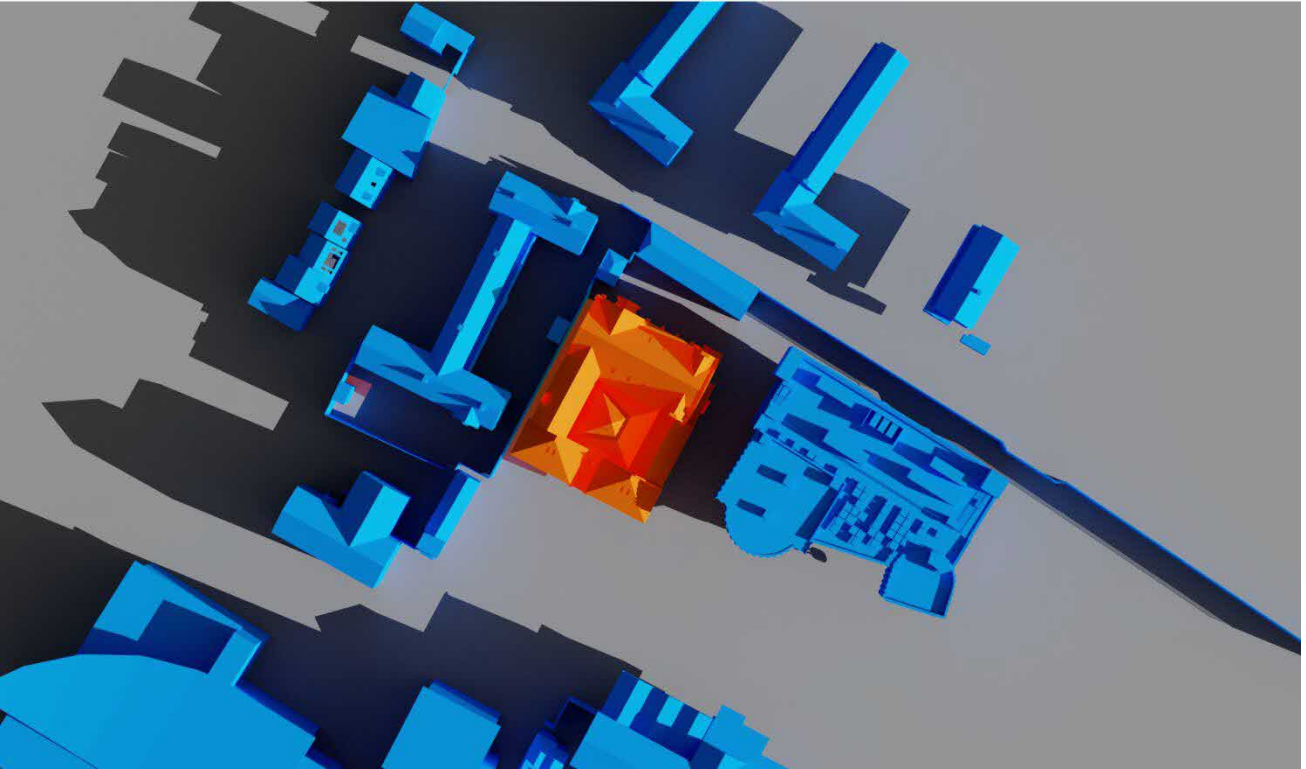
240229 York St John University
EXISTING-21-Mar 07-00



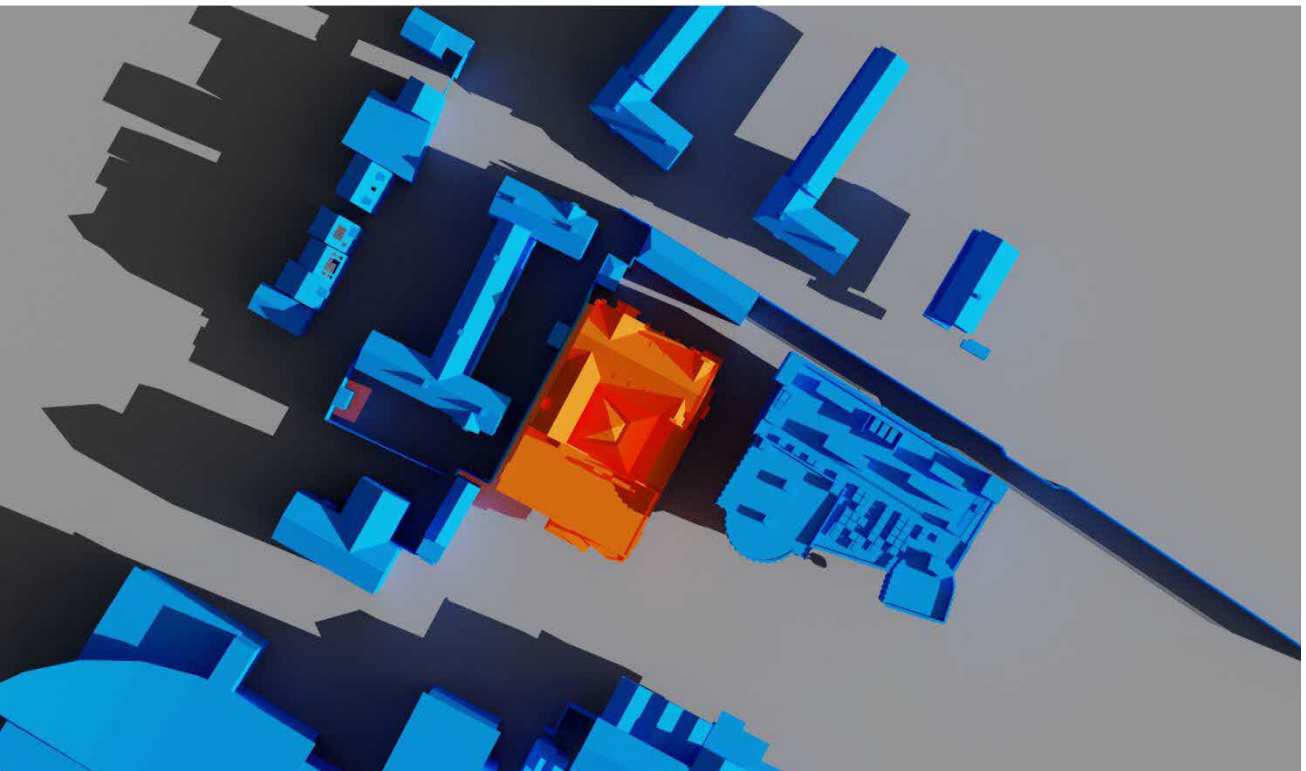
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PROPOSED-21-Mar 07-00



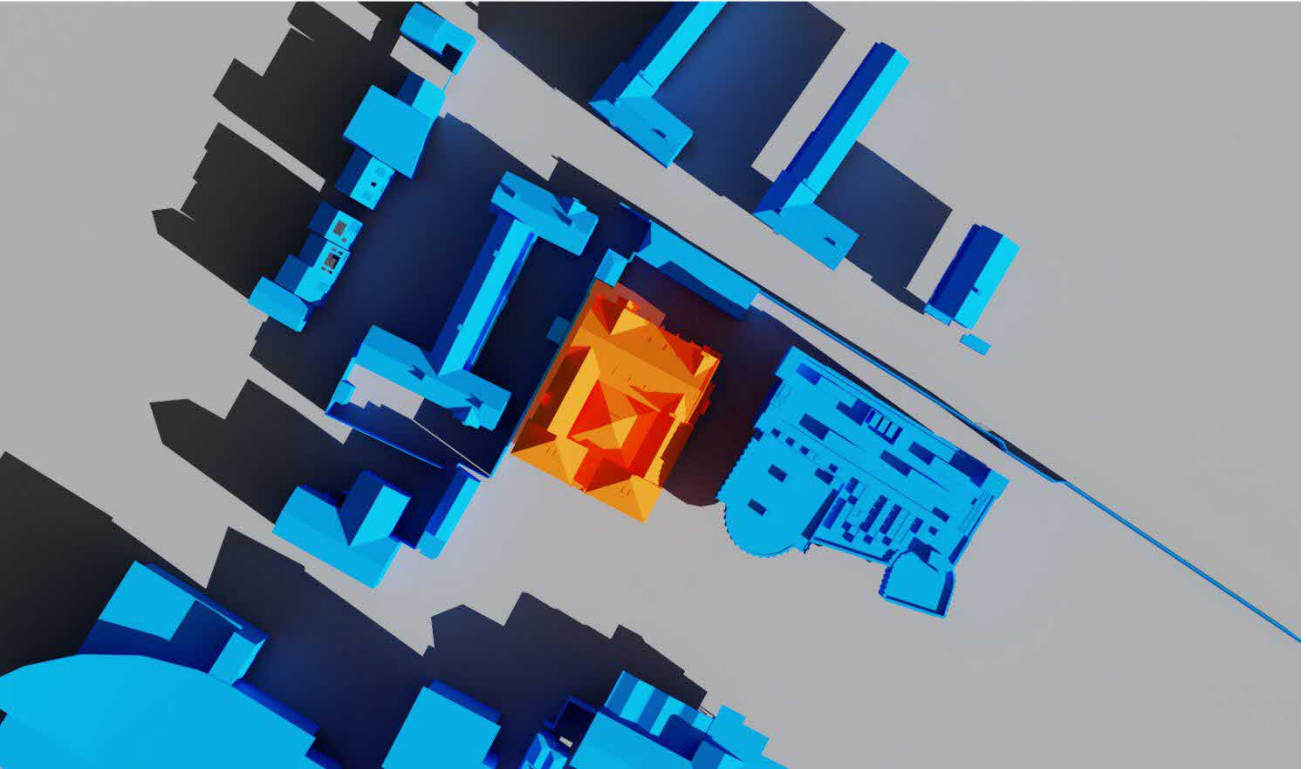
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EXISTING-21-Mar 08-00



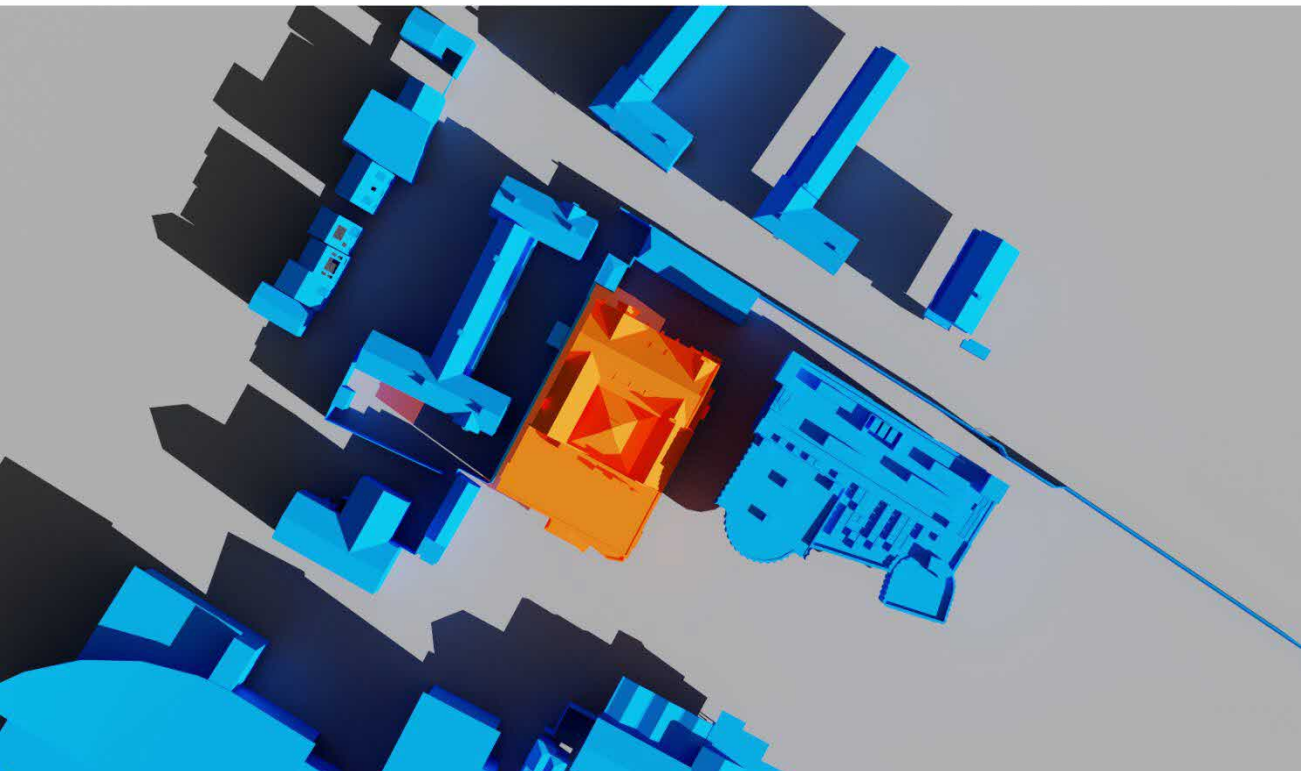
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PROPOSED-21-Mar 08-00



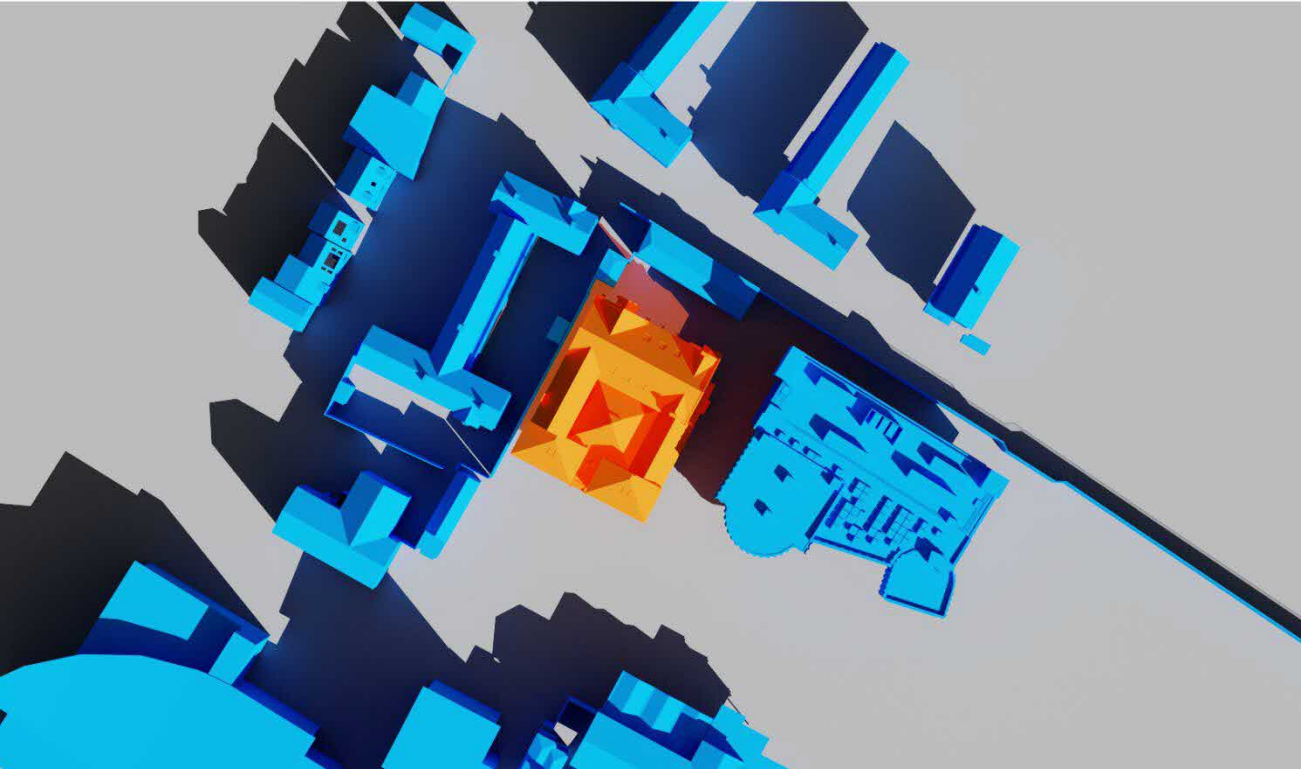
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EXISTING-21-Mar 09-00



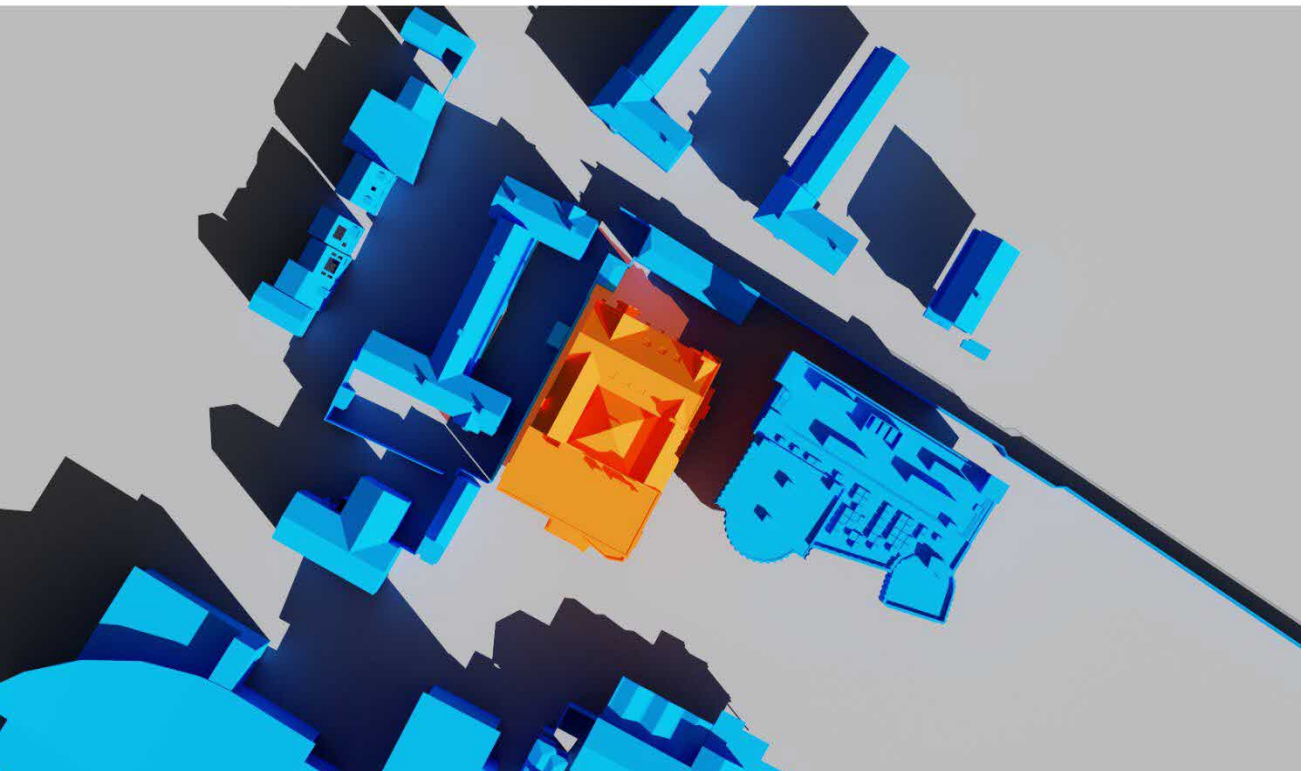
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PROPOSED-21-Mar 09-00



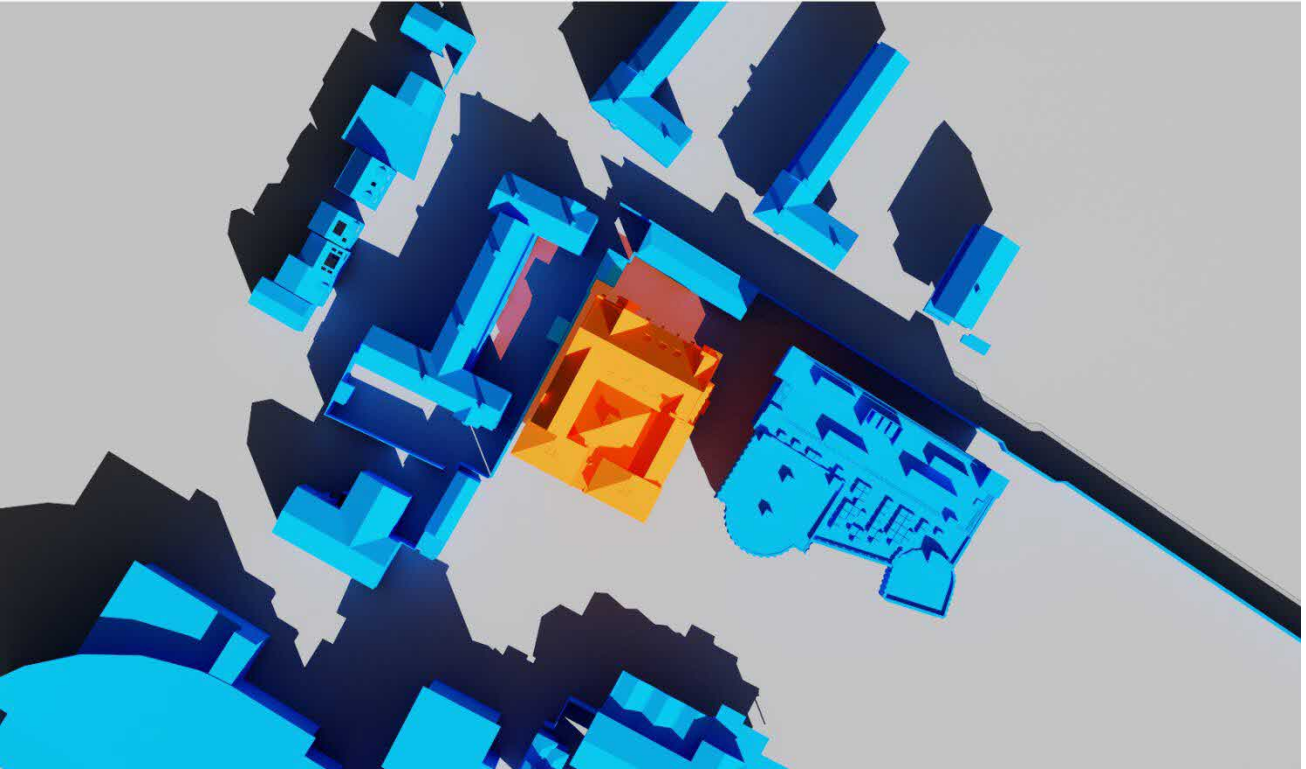
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EXISTING-21-Mar 10-00



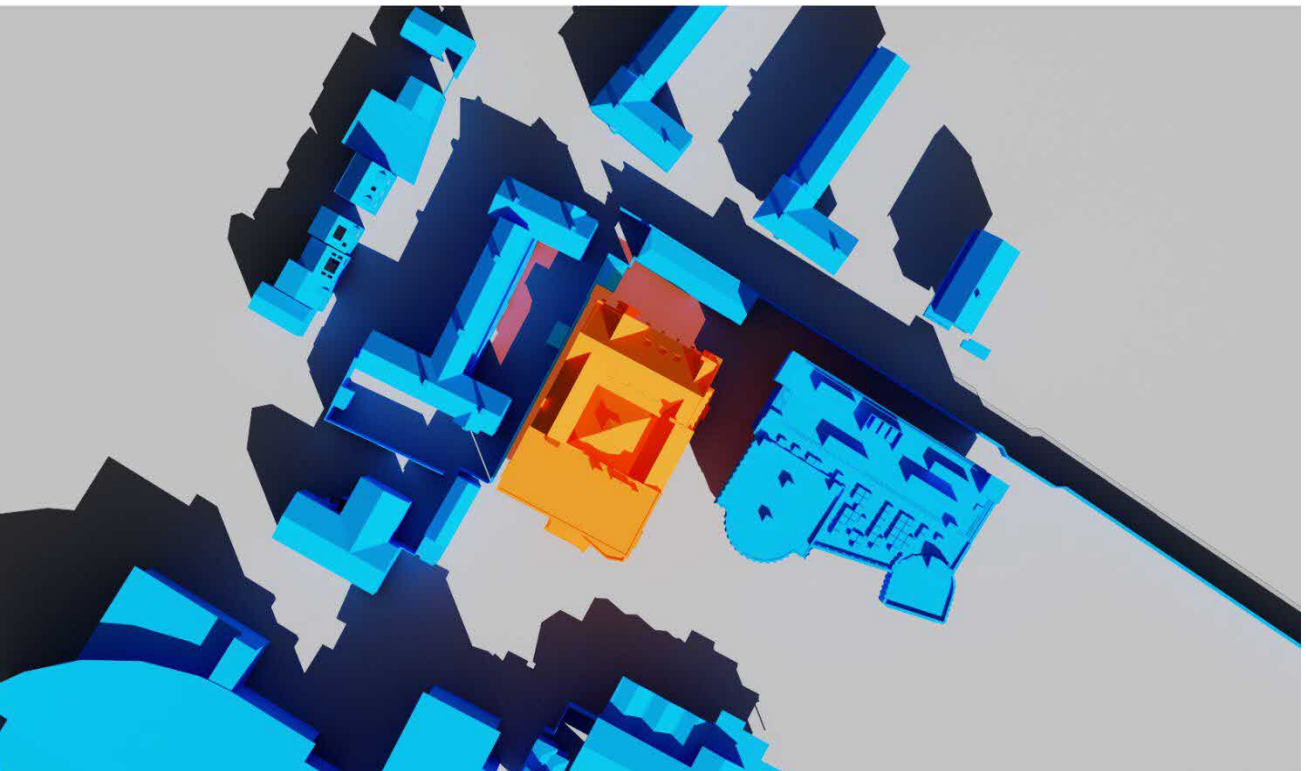
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PROPOSED-21-Mar 10-00



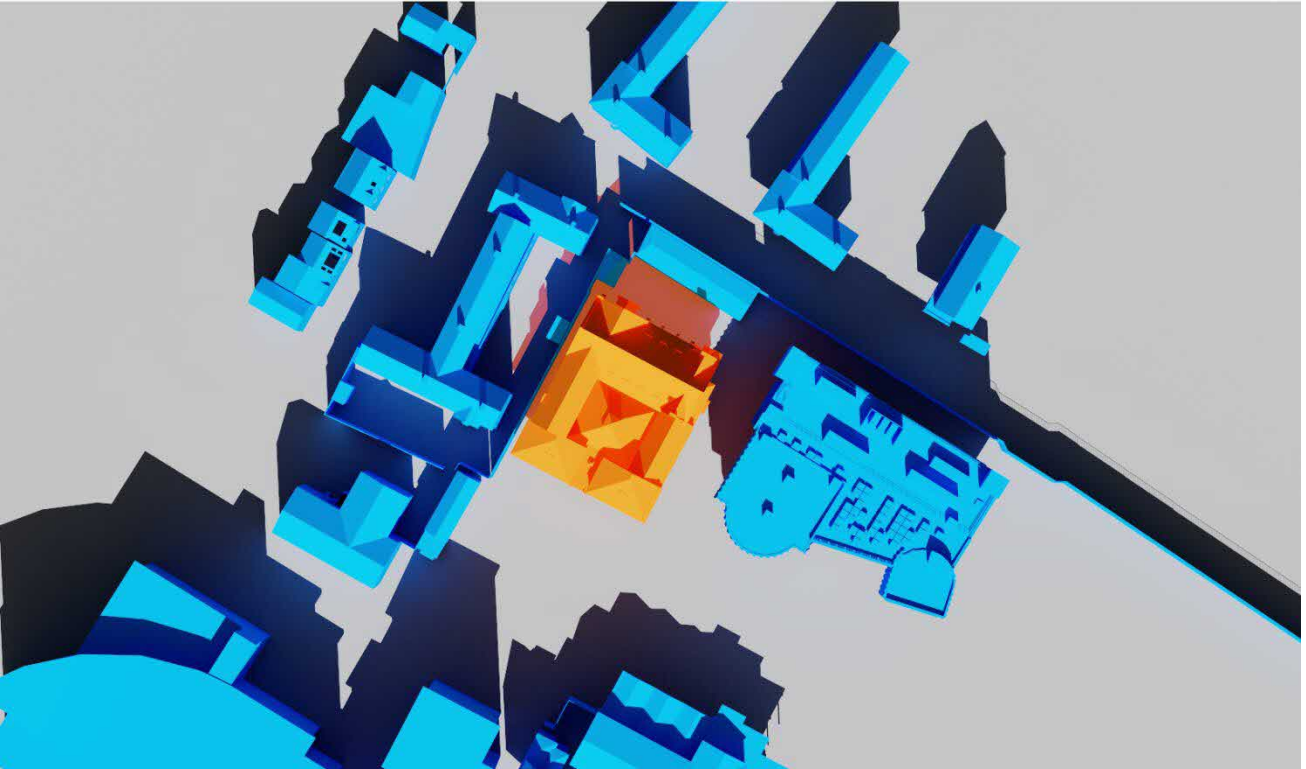
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EXISTING-21-Mar 11-00



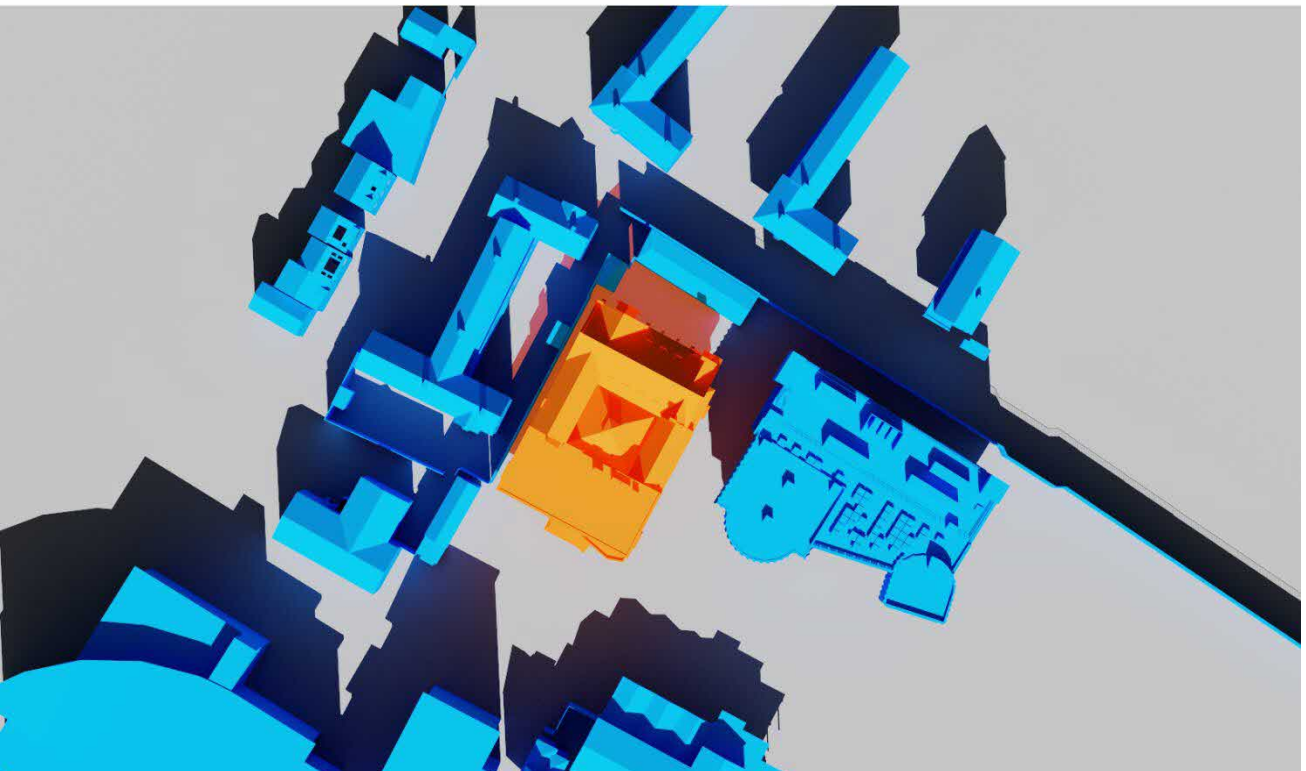
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PROPOSED-21-Mar 11-00



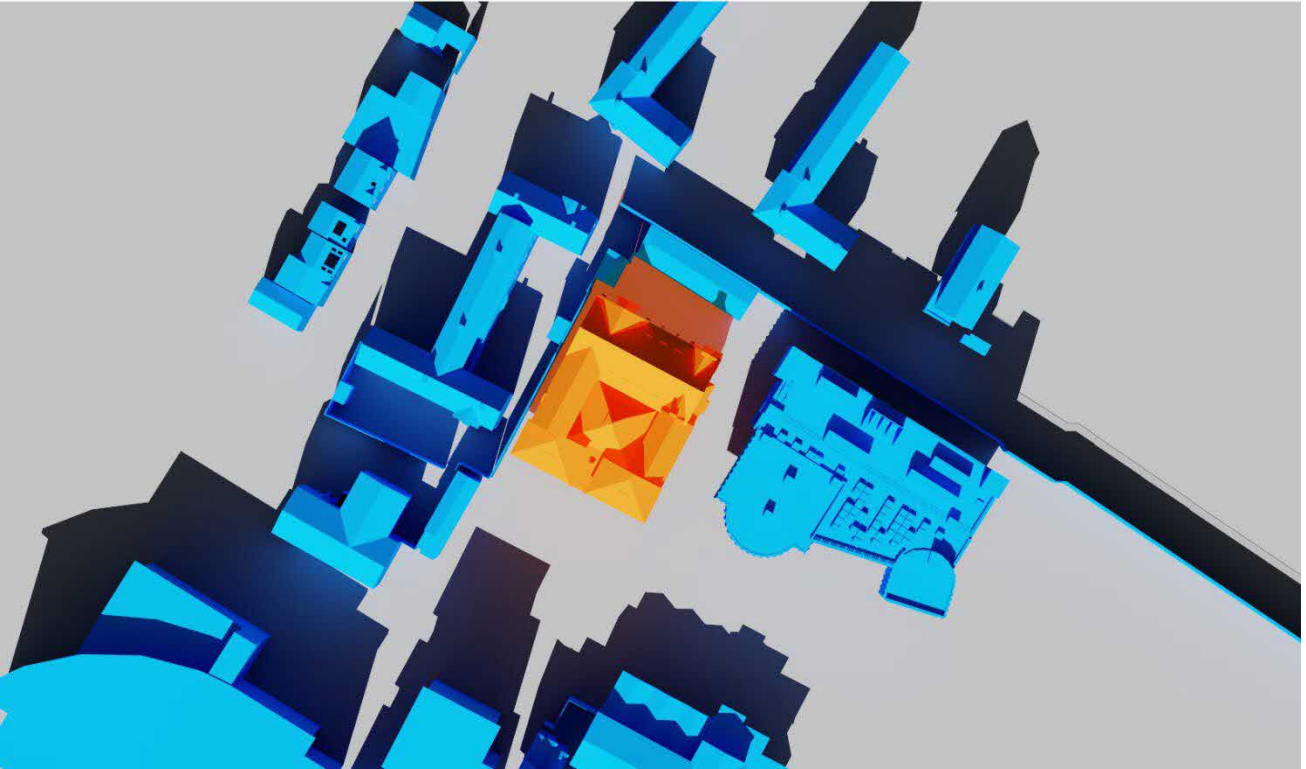
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EXISTING-21-Mar 12-00



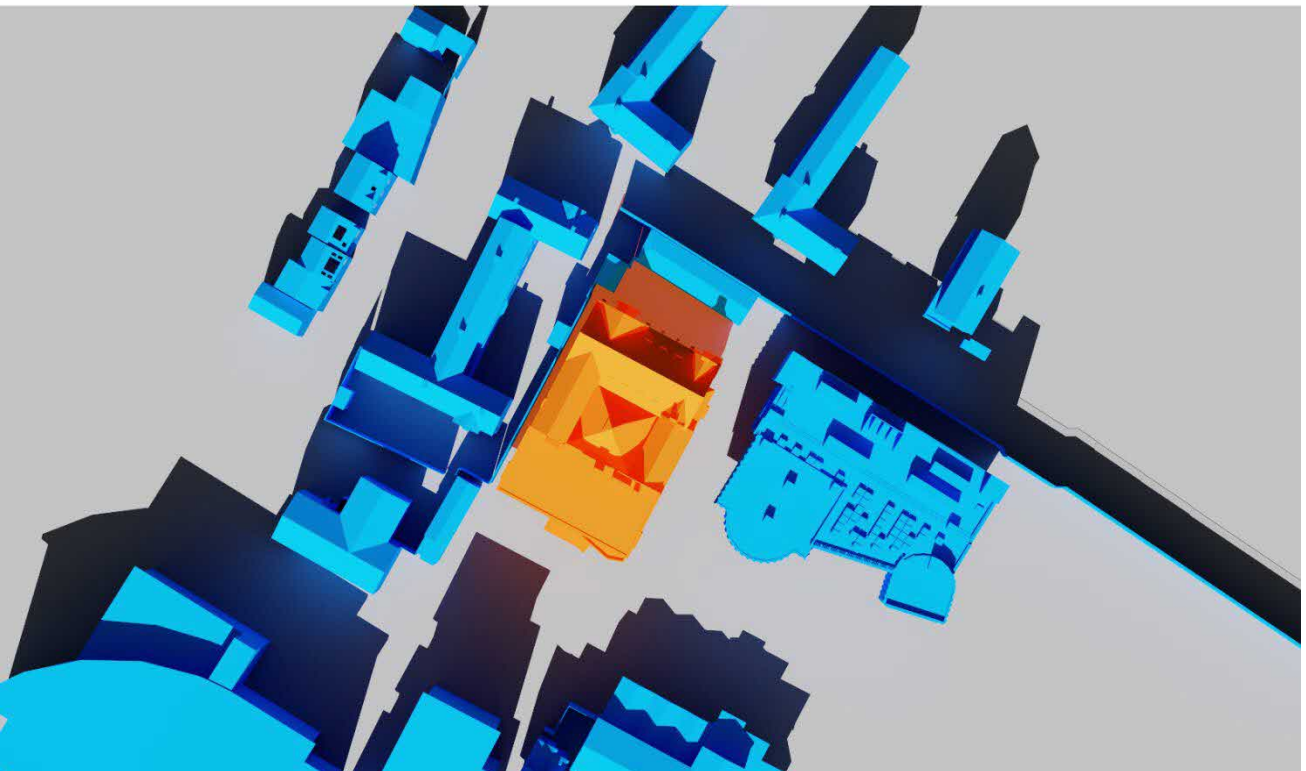
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PROPOSED-21-Mar 12-00



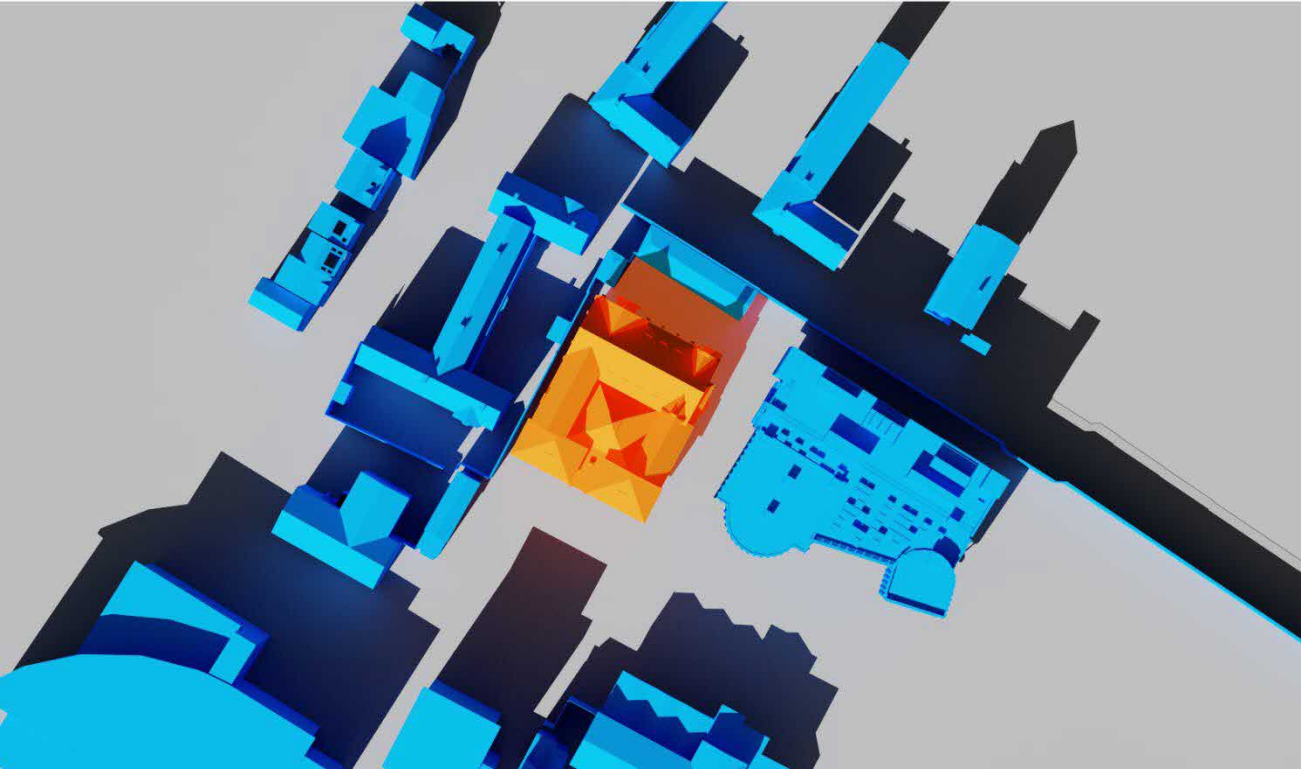
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EXISTING-21-Mar 13-00



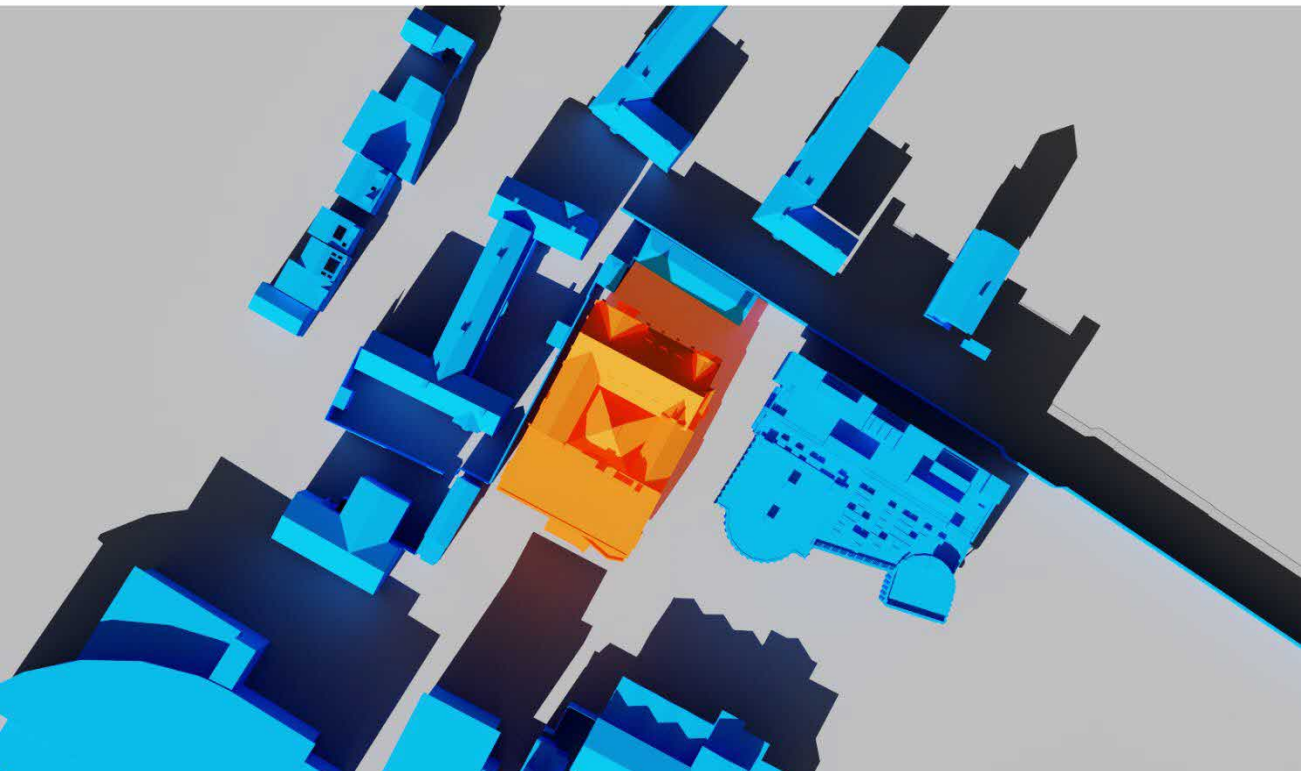
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PROPOSED-21-Mar 13-00



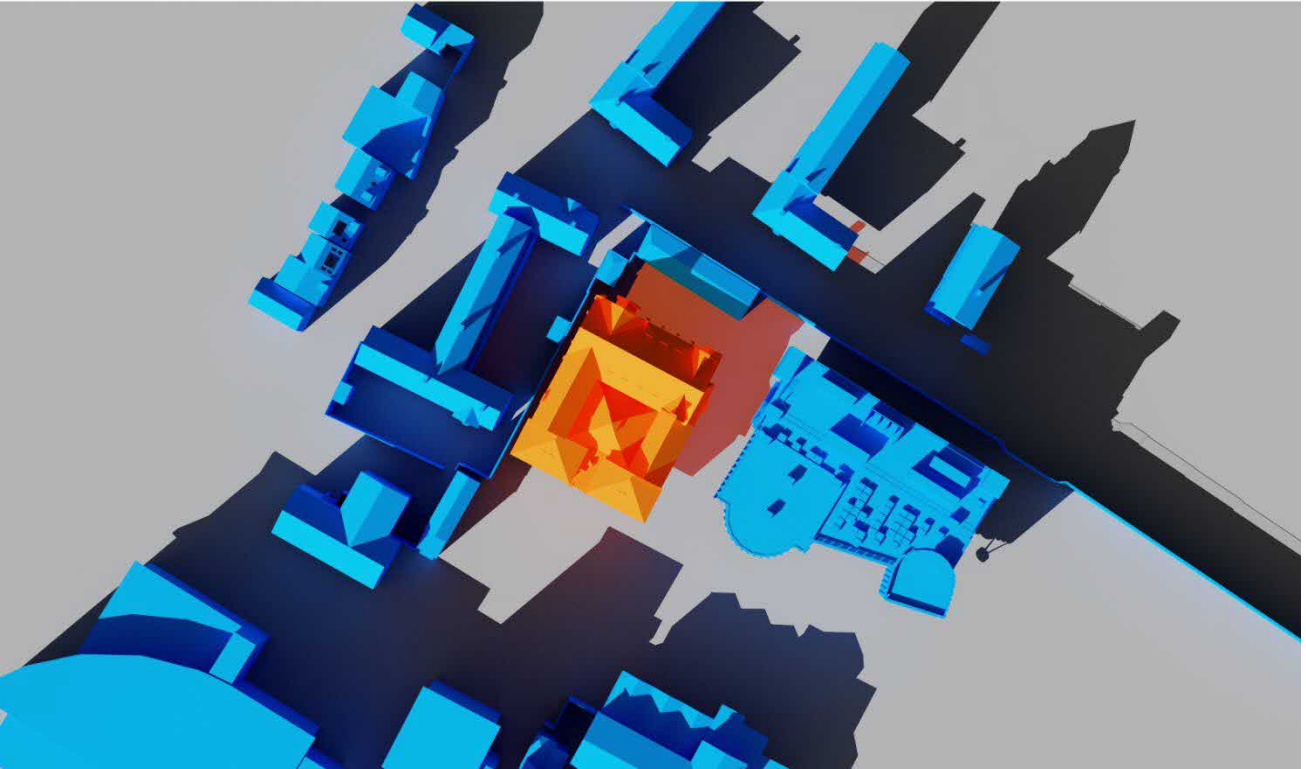
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EXISTING-21-Mar 14-00



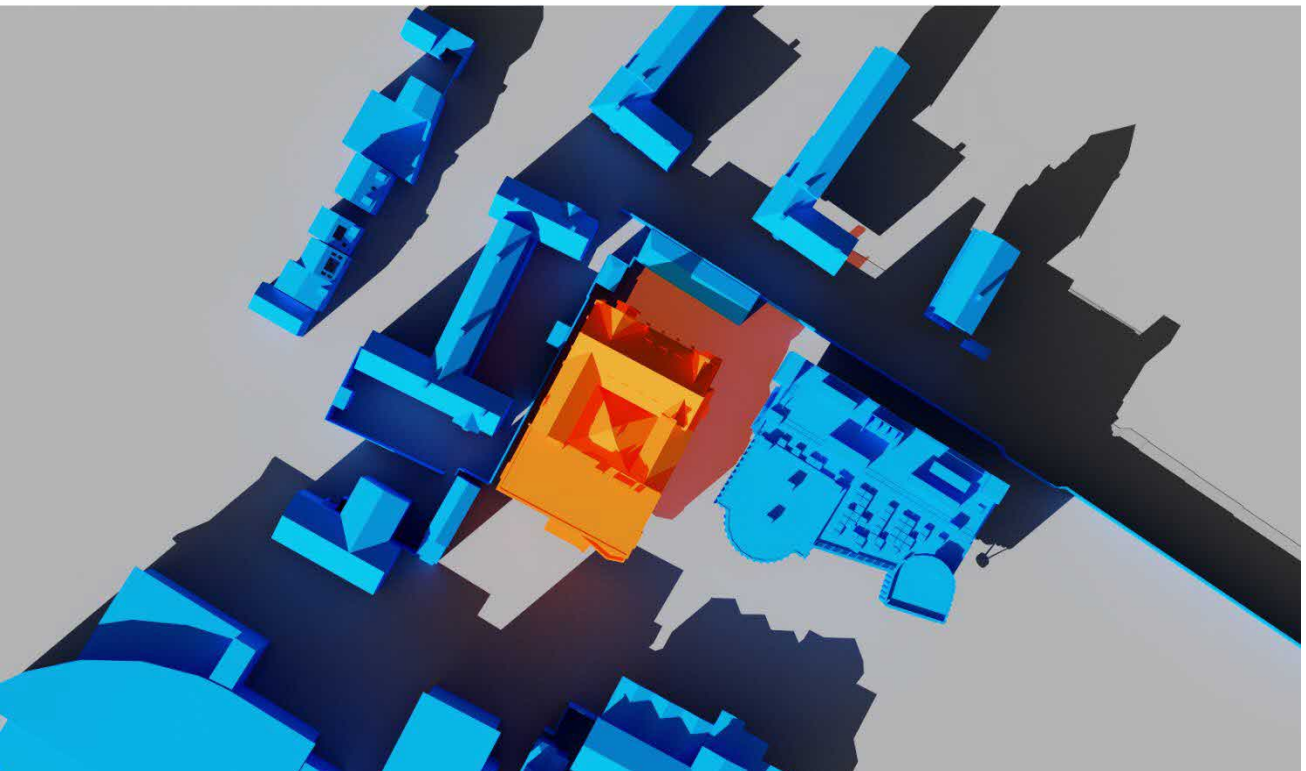
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PROPOSED-21-Mar 14-00



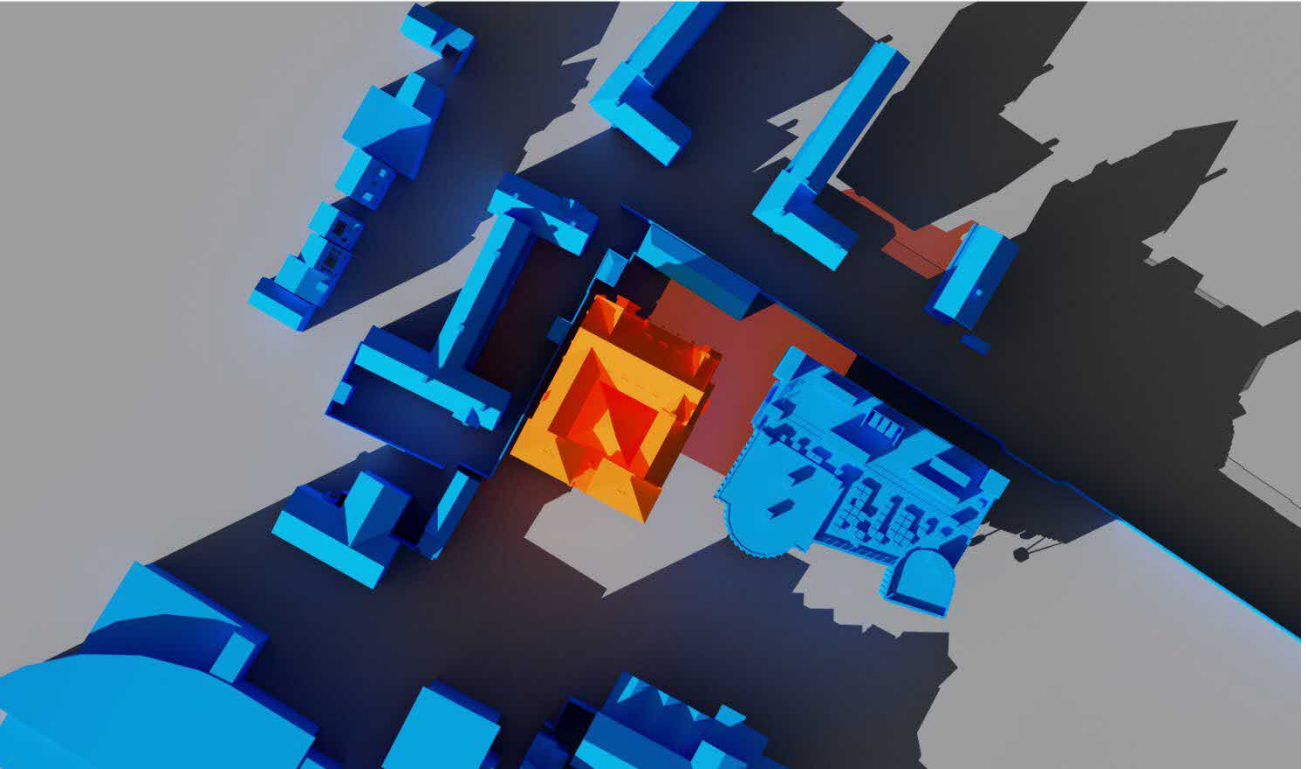
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EXISTING-21-Mar 15-00



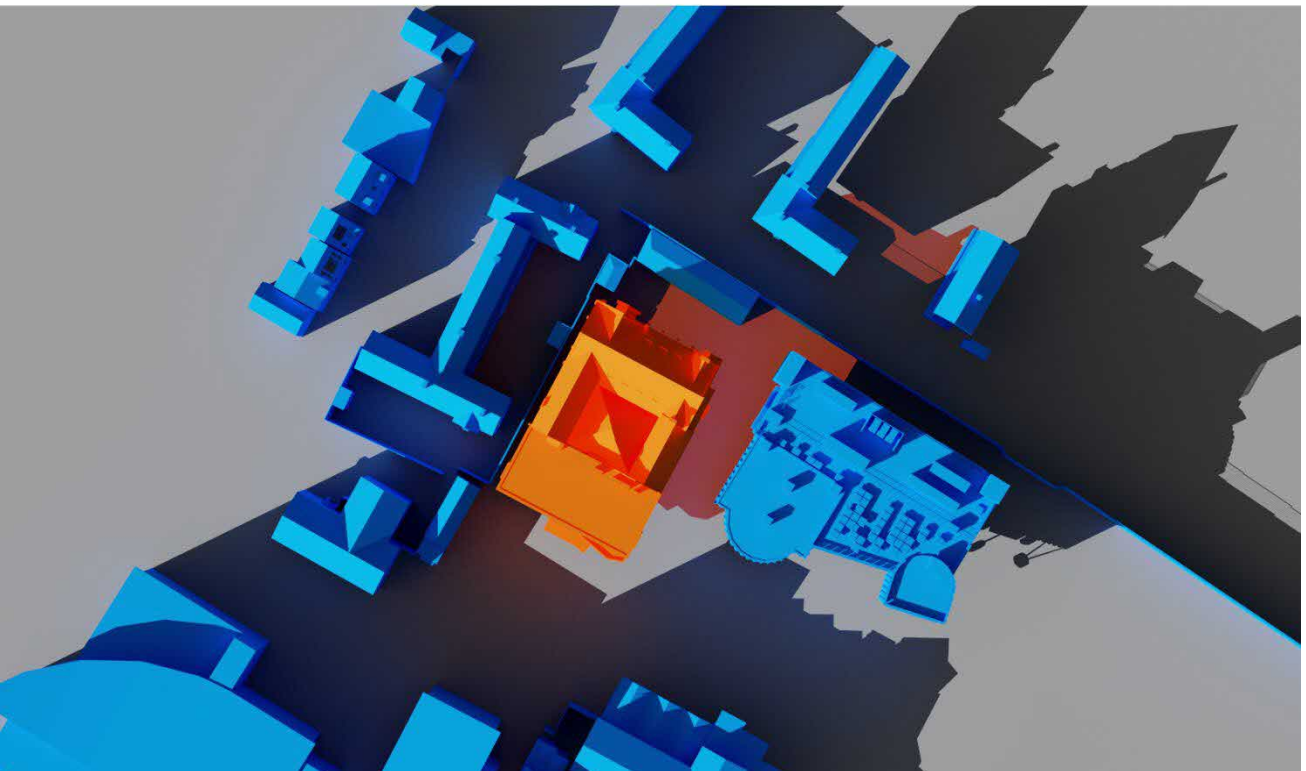
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PROPOSED-21-Mar 15-00



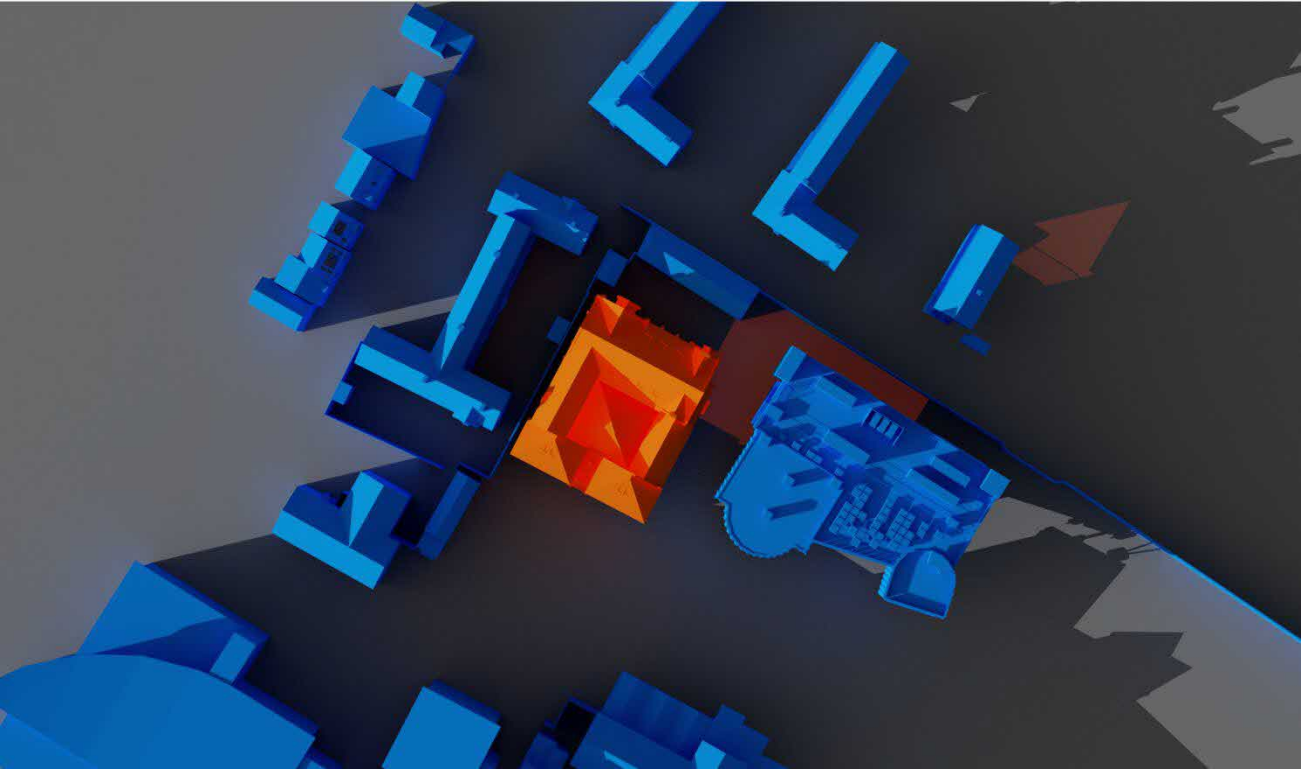
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EXISTING-21-Mar 16-00



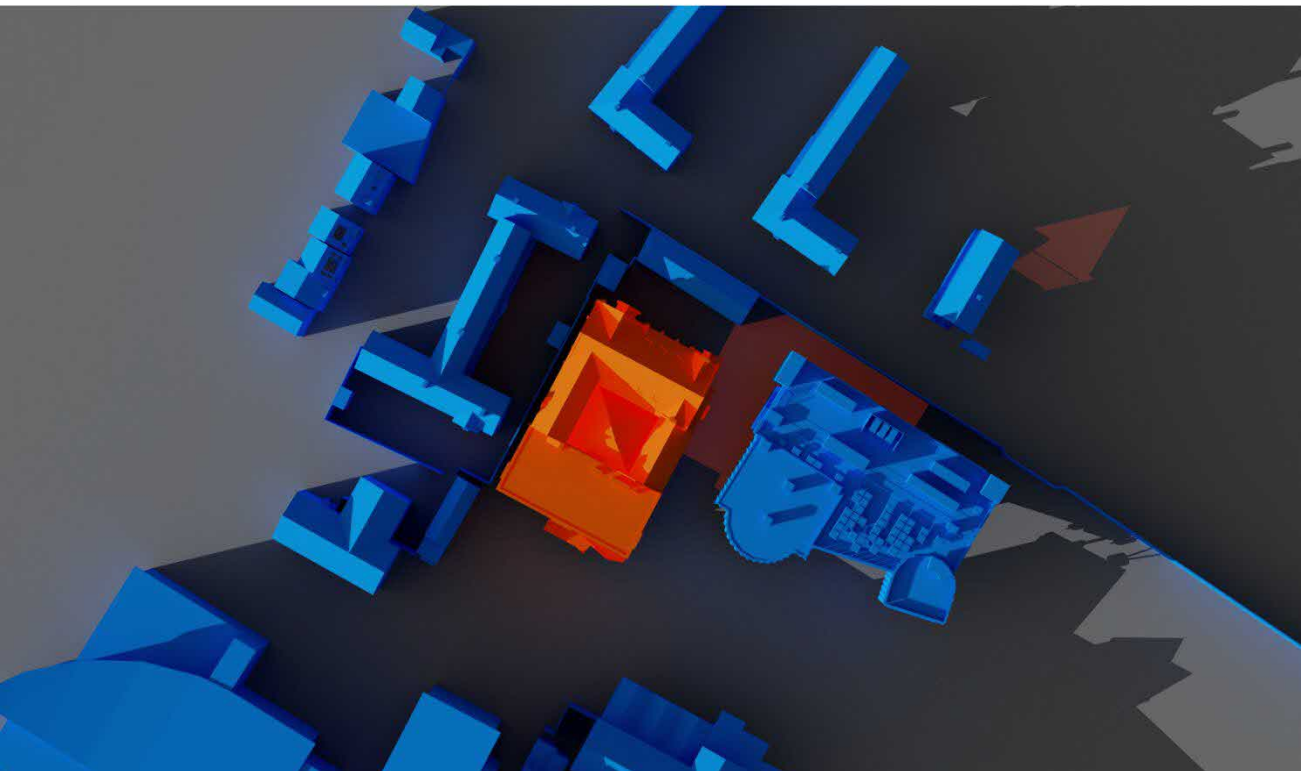
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PROPOSED-21-Mar 16-00



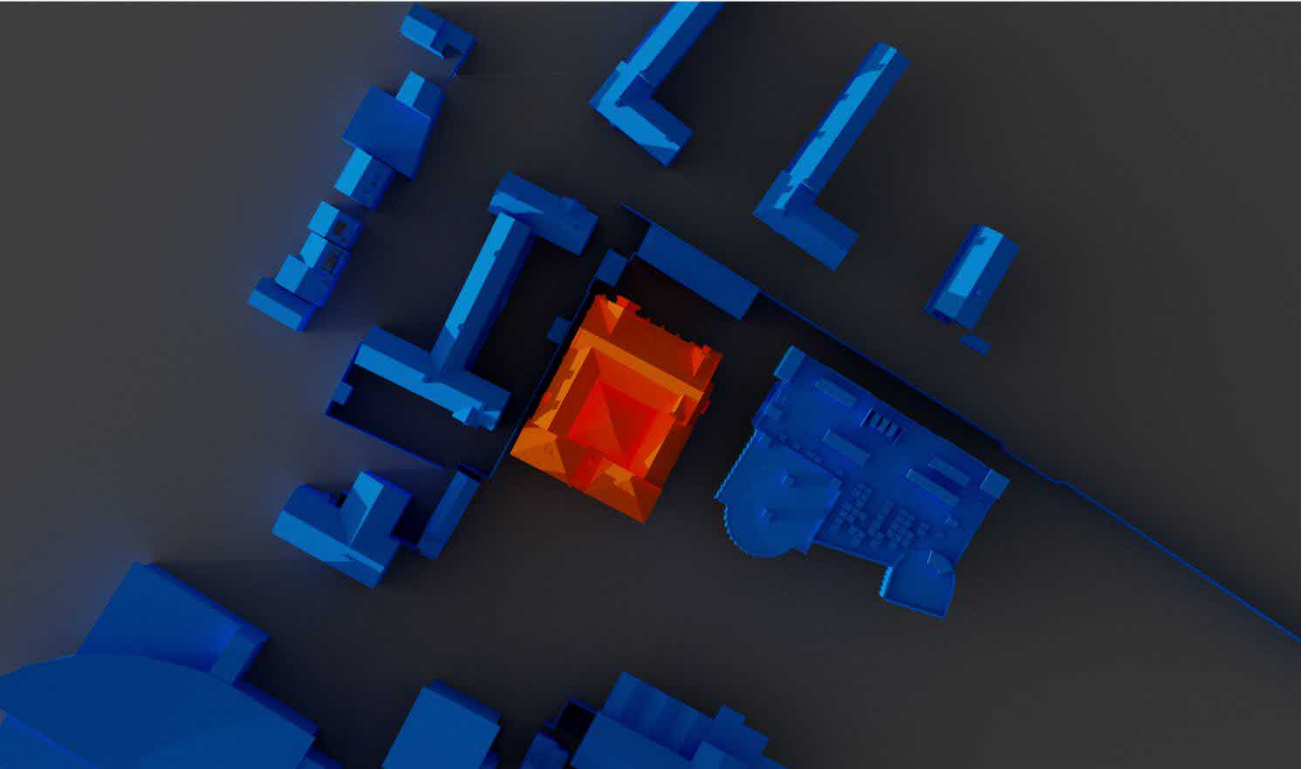
240229 York St John University
EXISTING-21-Mar 17-00



240229 York St John University
PROPOSED-21-Mar 17-00



240229 York St John University
EXISTING-21-Mar 18-00



240229 York St John University
PROPOSED-21-Mar 18-00

