DAYLIGHT & SUNLIGHT

OVERSHADOWING ASSESSMENT

The Oracle, Reading

16 February 2024

GIA No: **19007**

PROJECT DATA:

Client	**Packaged Living**
Architect	**CRTKL**
Project Title	**The Oracle, Reading**
Project Number	**19007**

REPORT DATA:

Report Title	**Overshadowing Assessments**
GIA Department	**Daylight & Sunlight**
Dated	**16 February 2024**

Prepared by	**VT**
Checked by	**KST**
Type	**Planning**

Revisions	No:	Date:	Notes:	Signed:

DISCLAIMER:

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SOURCES OF INFORMATION:

Information Received	**IR-17-19007**
Release Number	**Rel_04_19007_DSD**
Issue Number	**04**
Site Photos	**GIA**
3D models	**VERTEX**
OS Data	**FIND Maps**

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1 SCENARIOS

EXISTING



Fig. 01: Top View - Existing Scenario



Fig. 02: Perspective View - Existing Scenario

PROPOSED

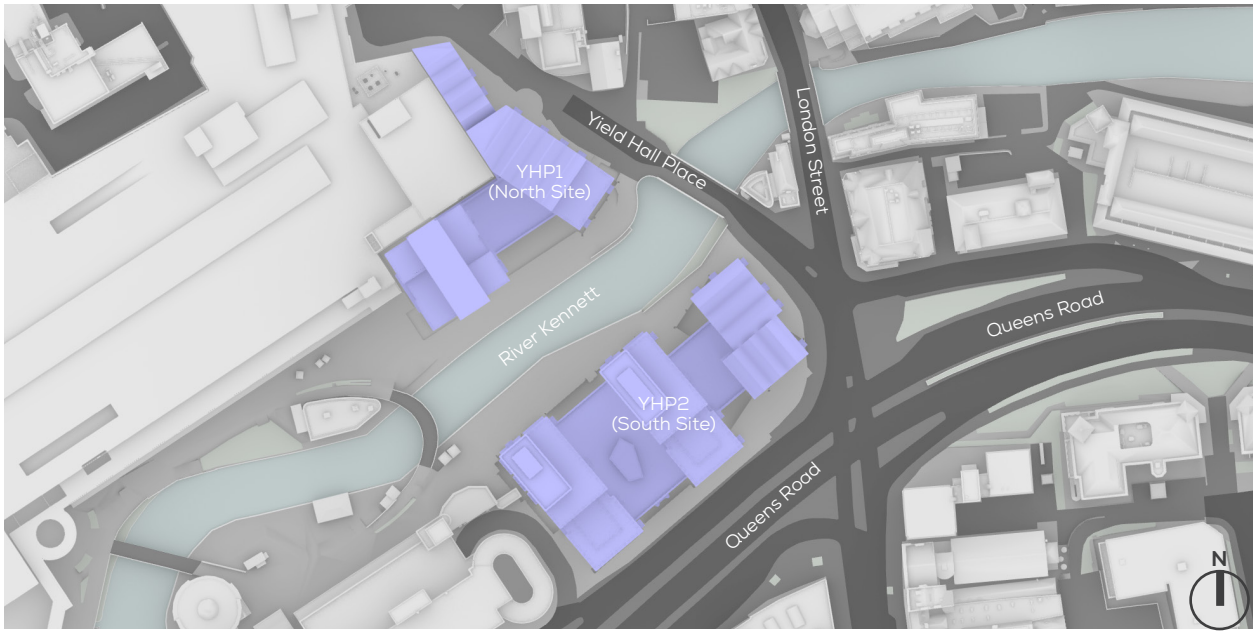


Fig. 03: Top View - Proposed Scenario

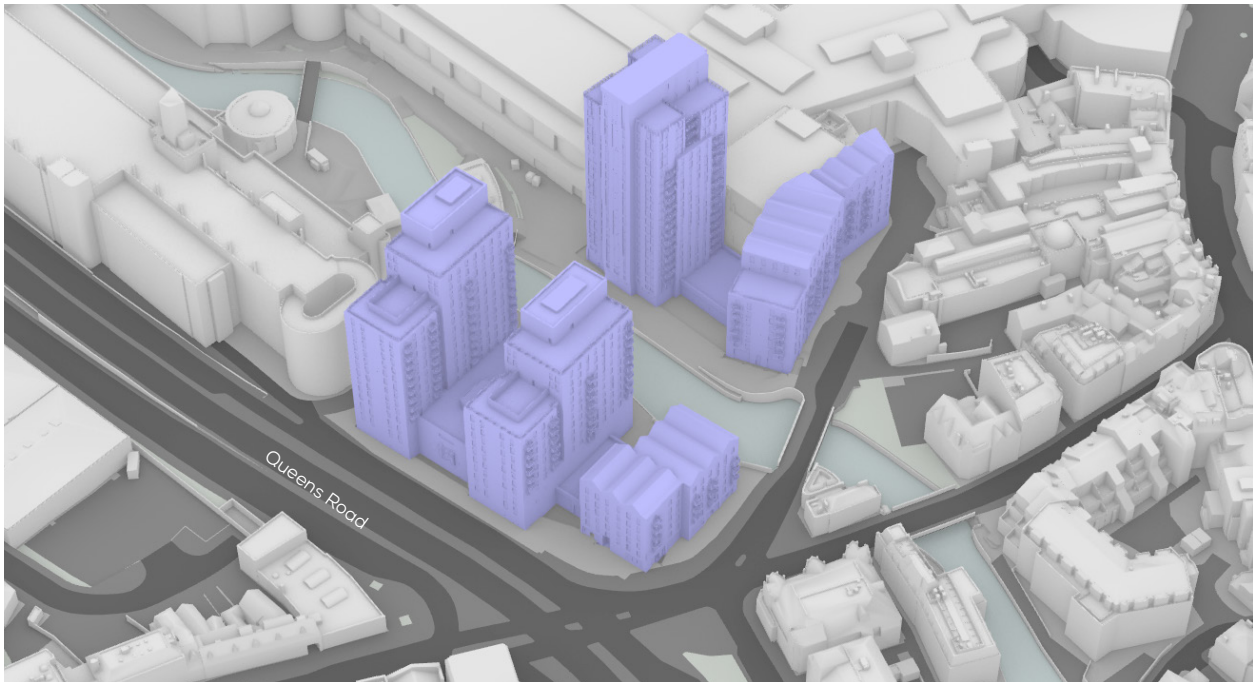


Fig. 04: Perspective View - Proposed Scenario

2 TRANSIENT OVERSHADOWING

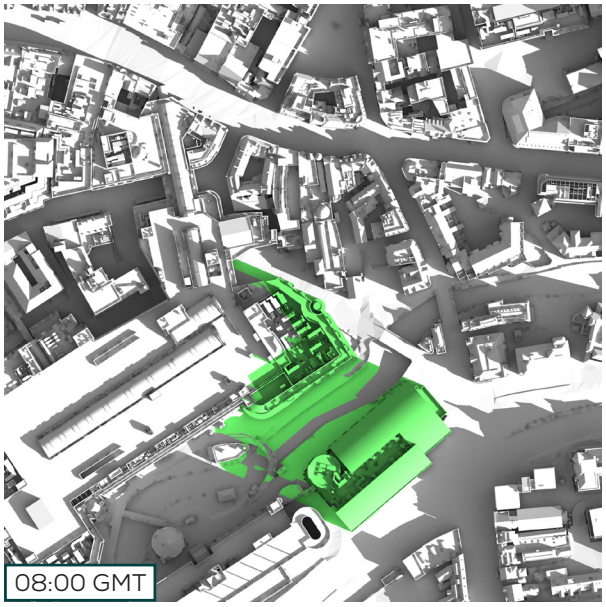
21st March (Equinox)

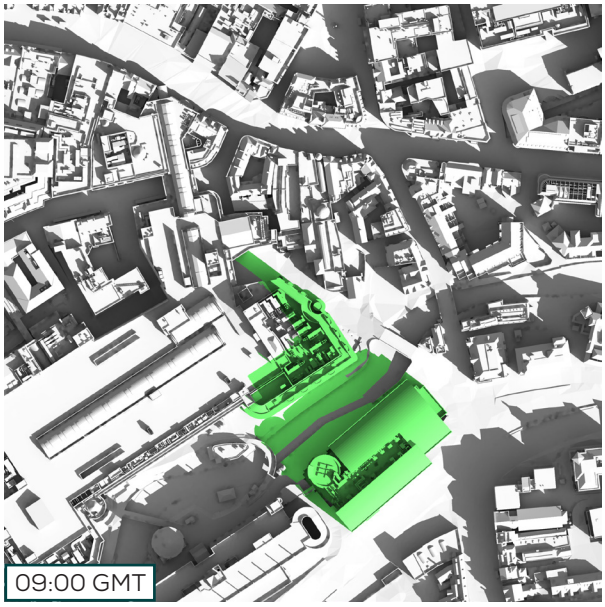
21st June (Summer Solstice)

21st December (Winter Solstice)

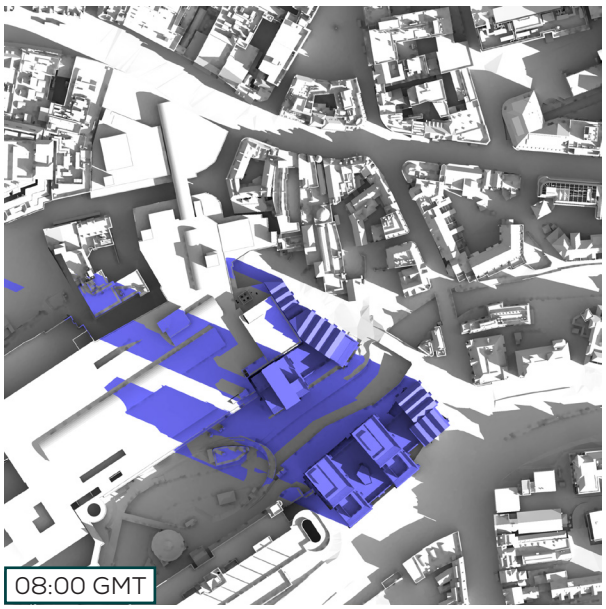
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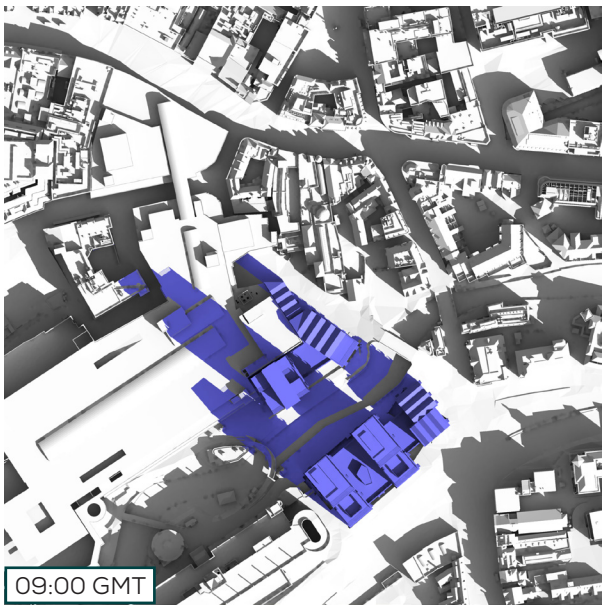
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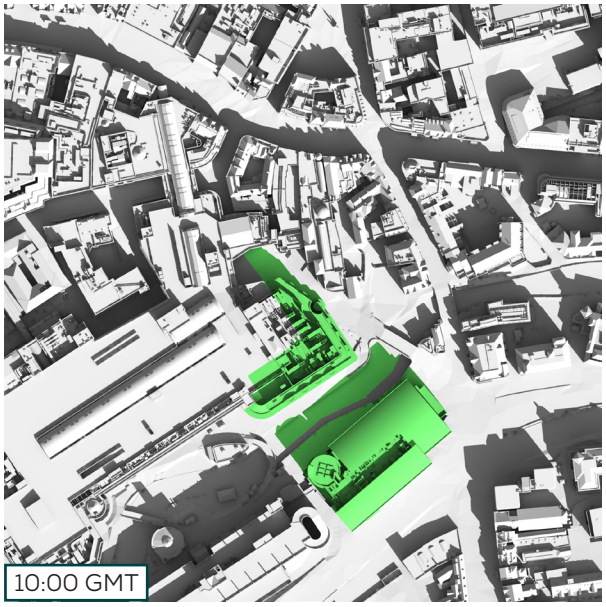


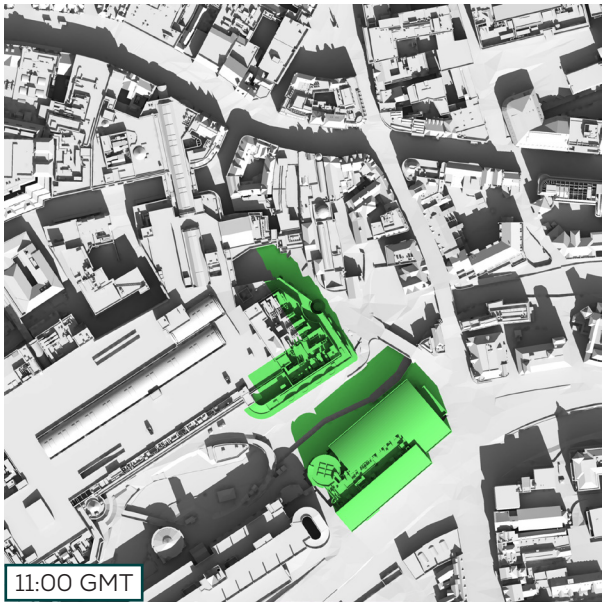
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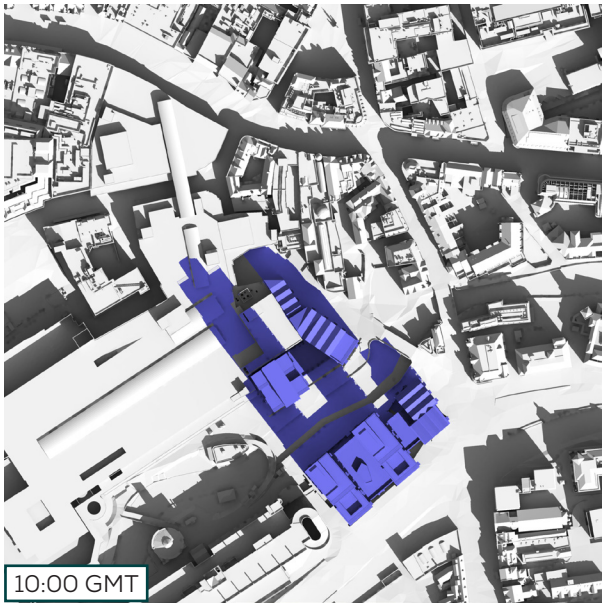


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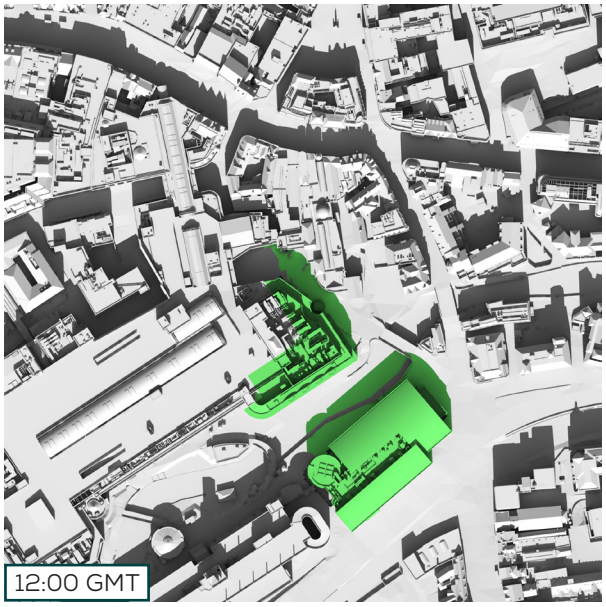
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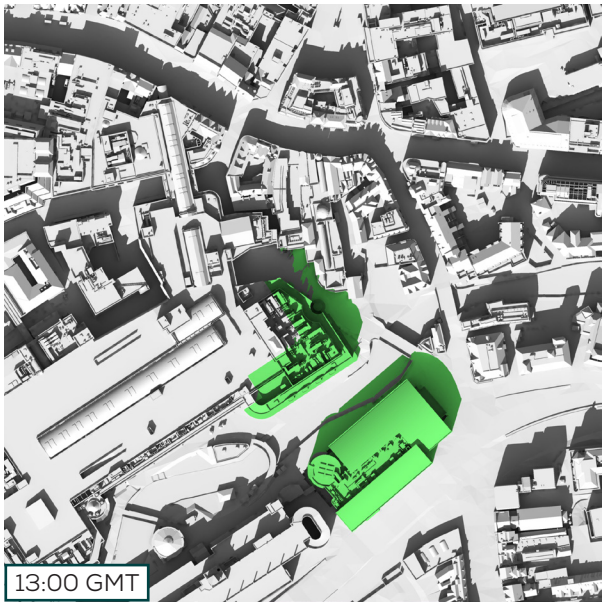




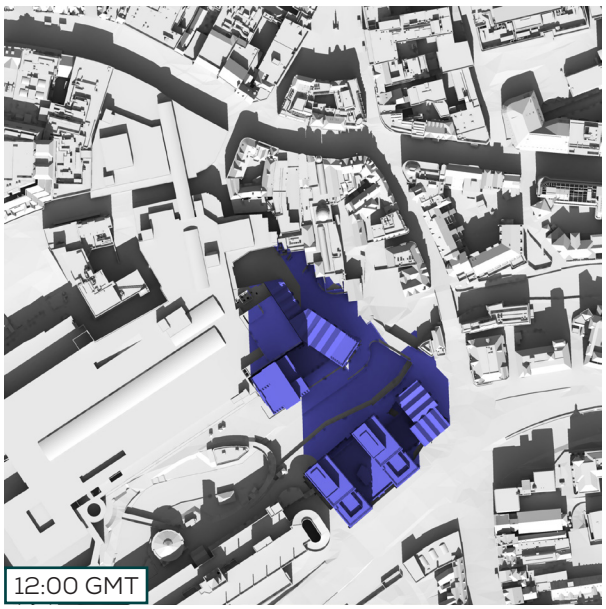
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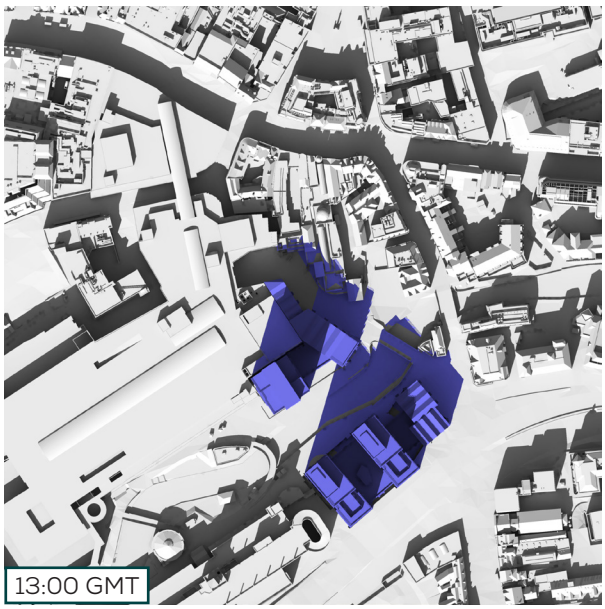
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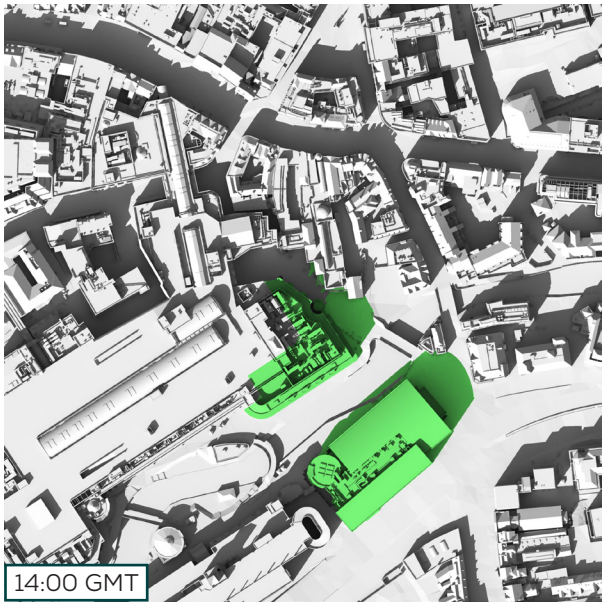


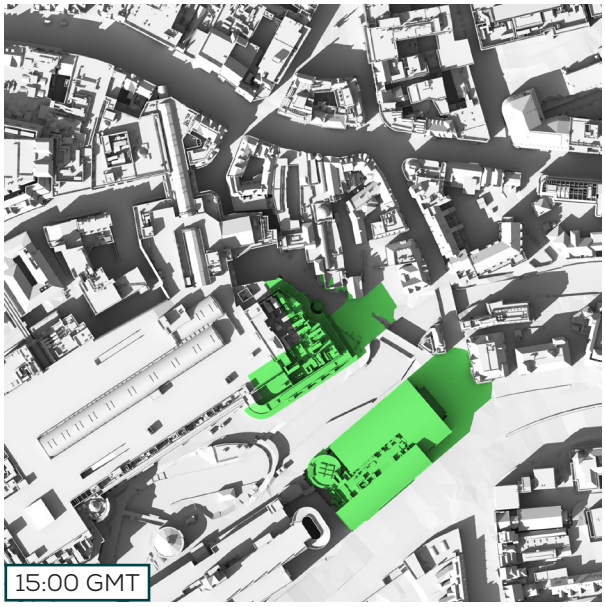
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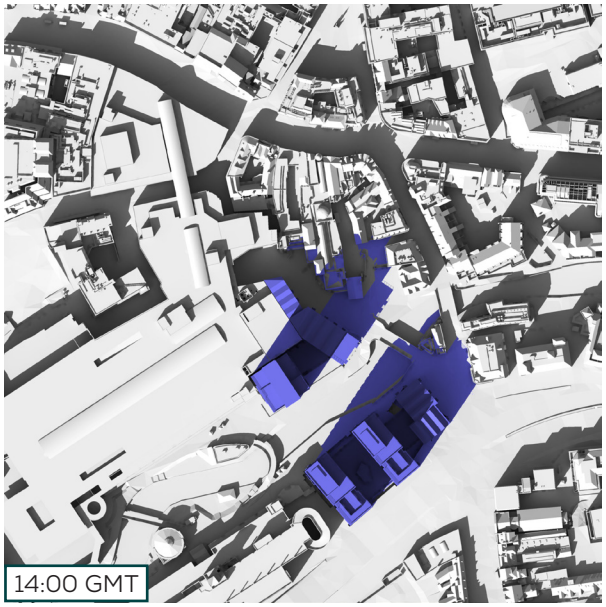


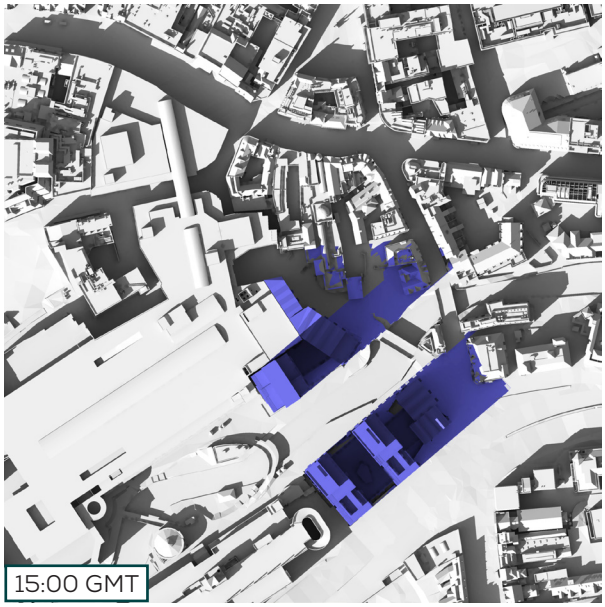
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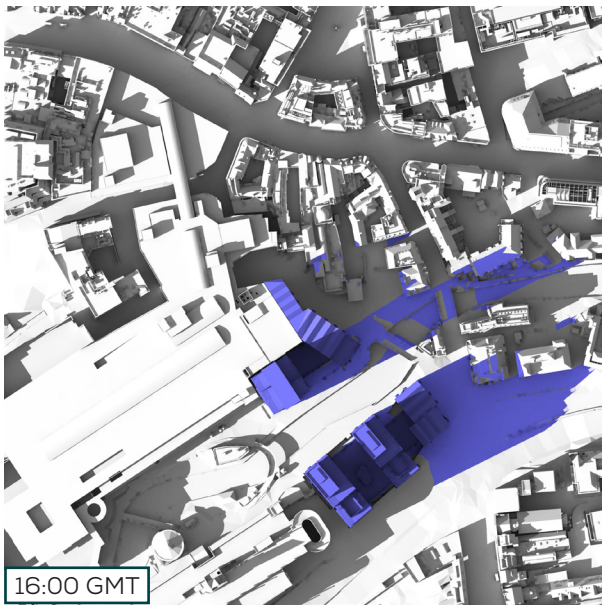
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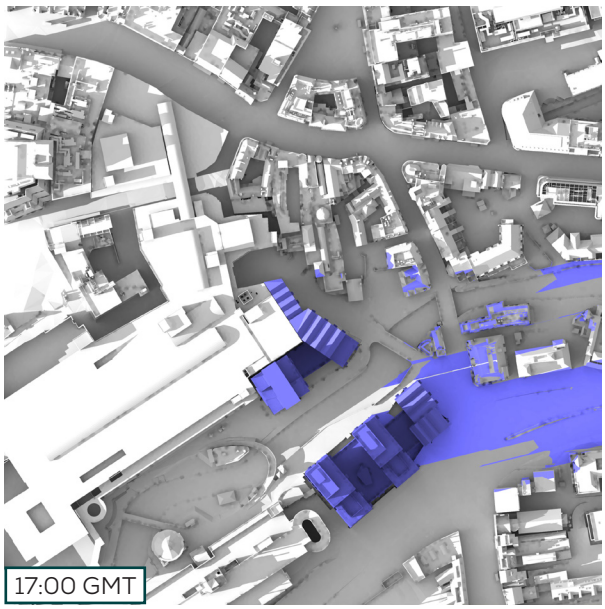
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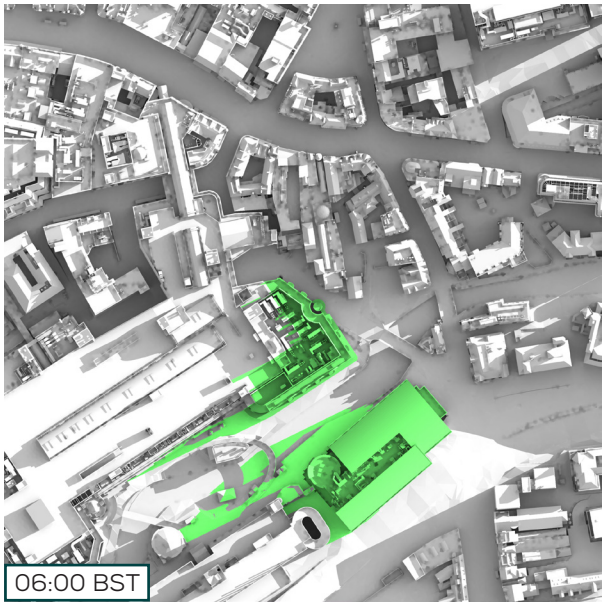
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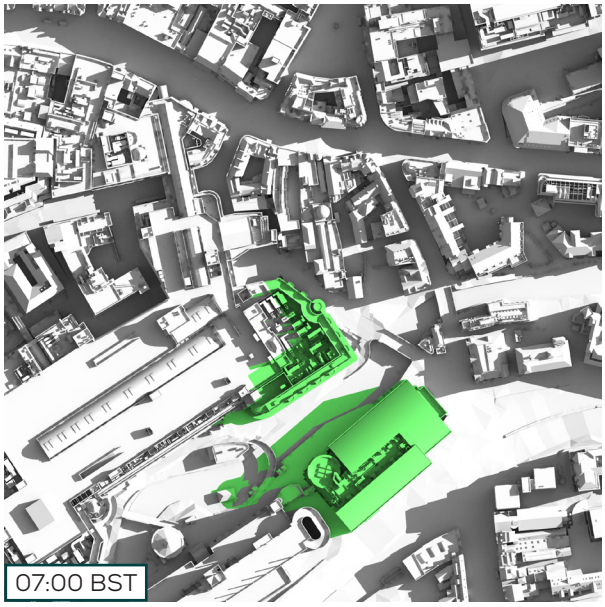




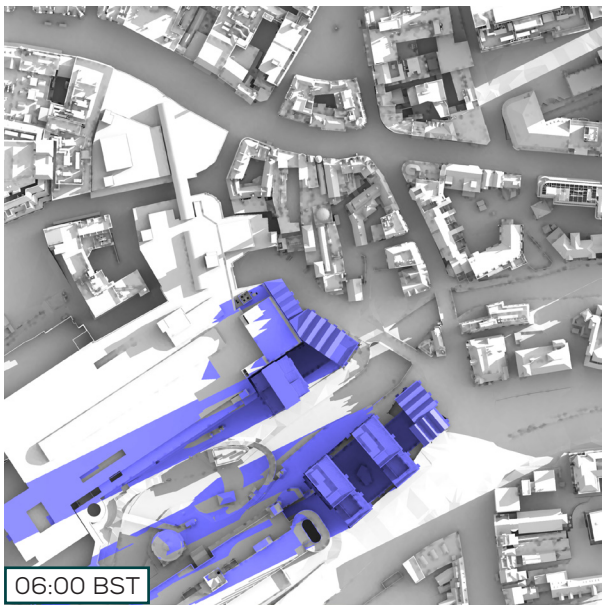
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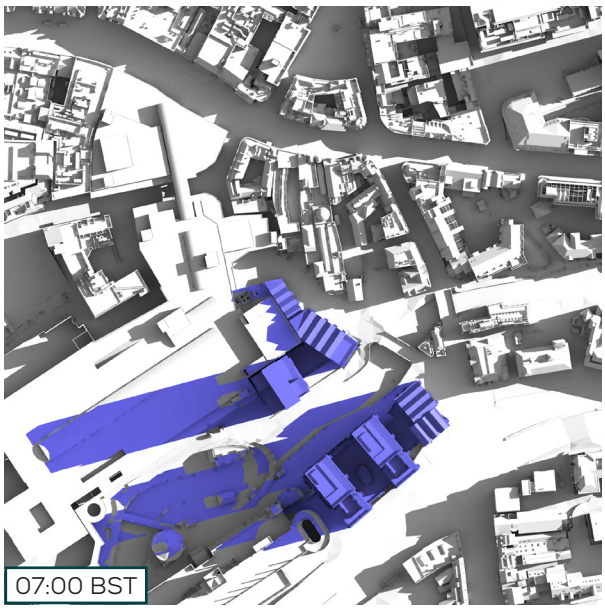
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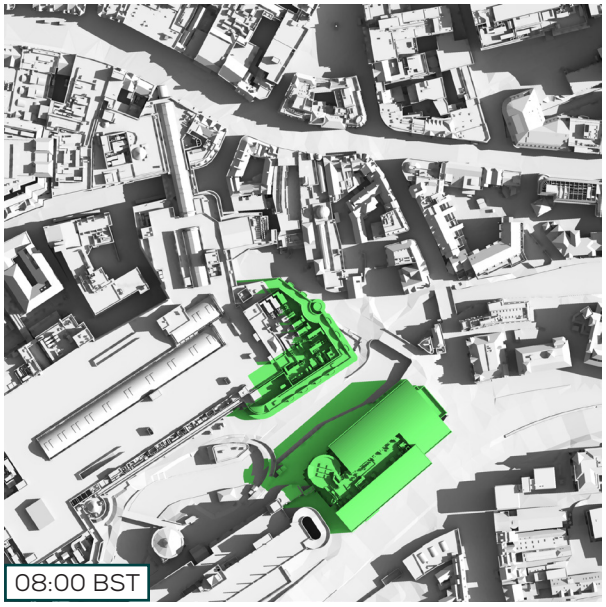


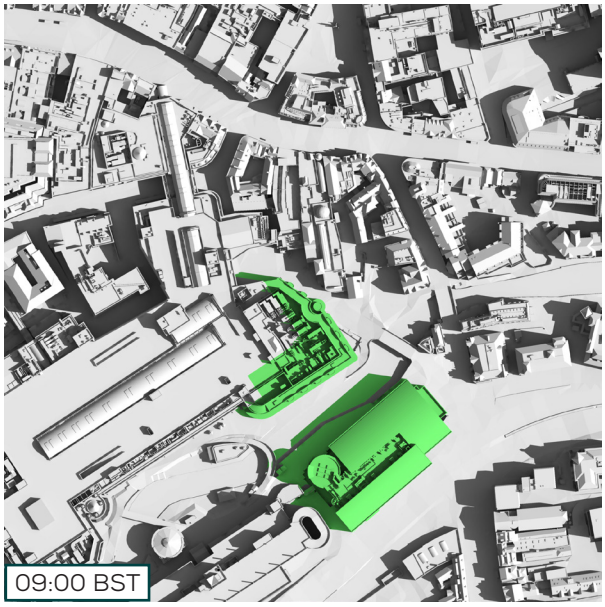
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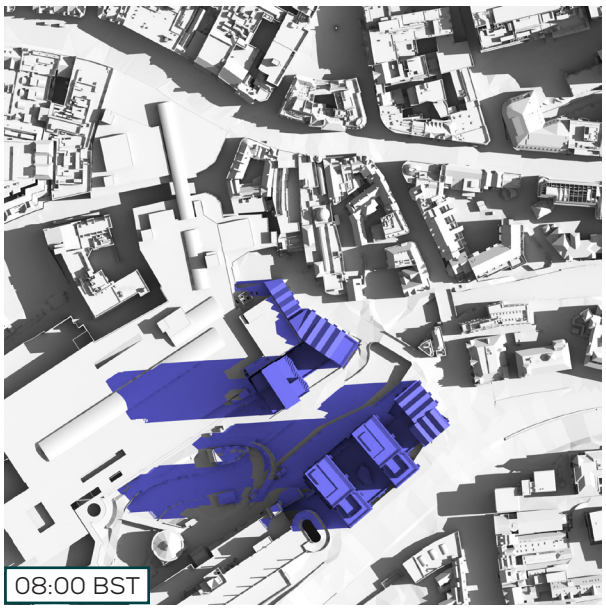


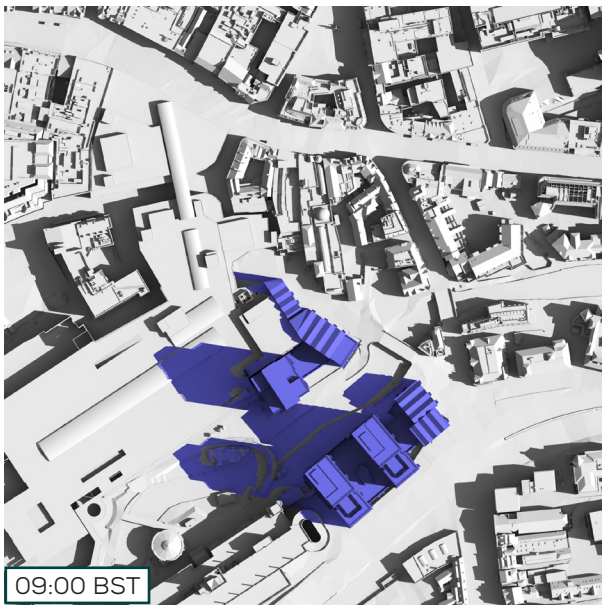
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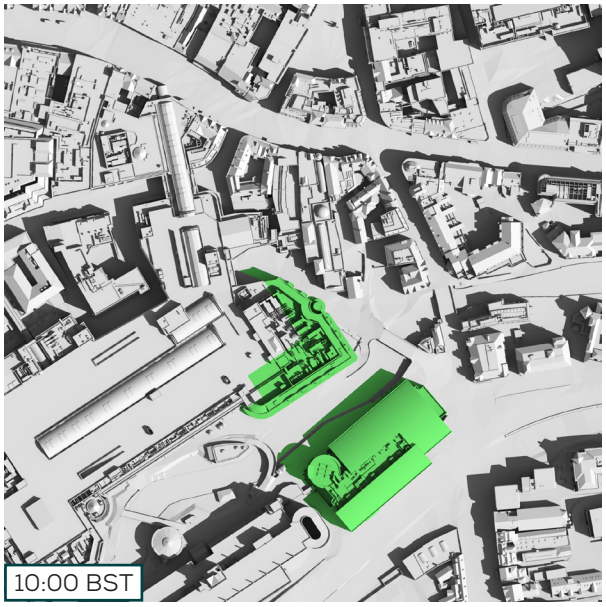
PROPOSED





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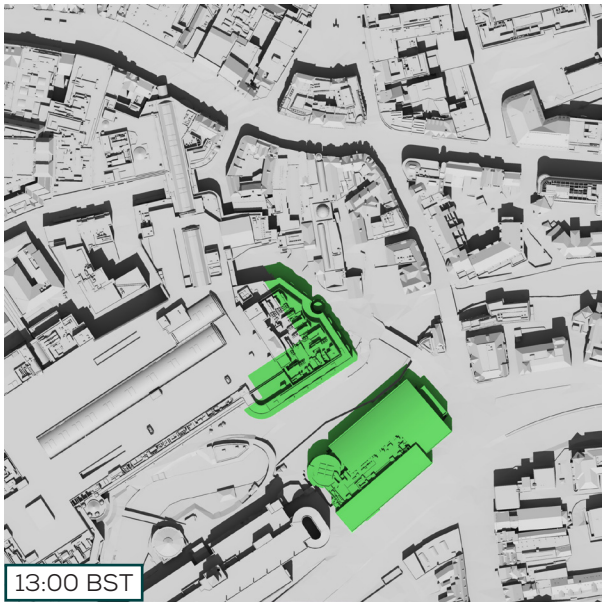
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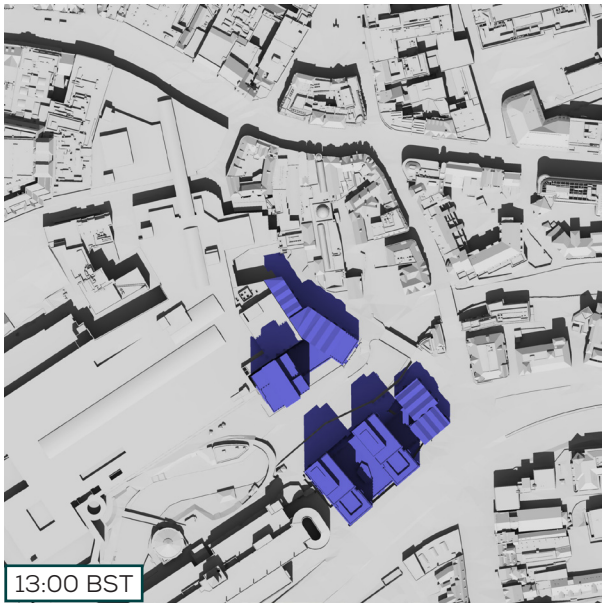
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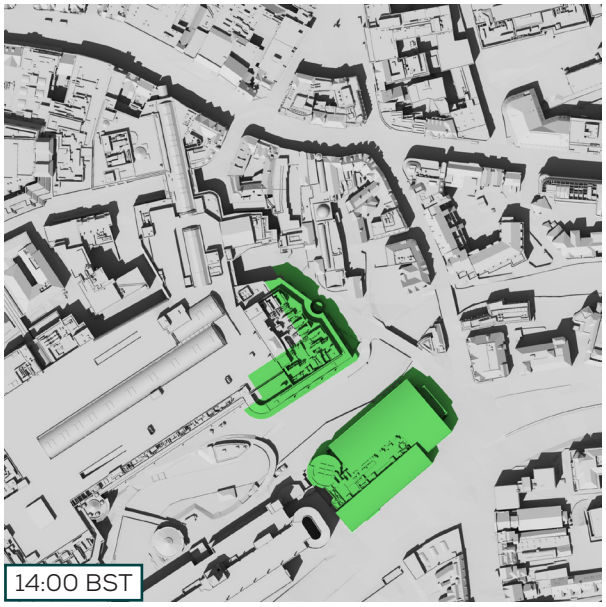
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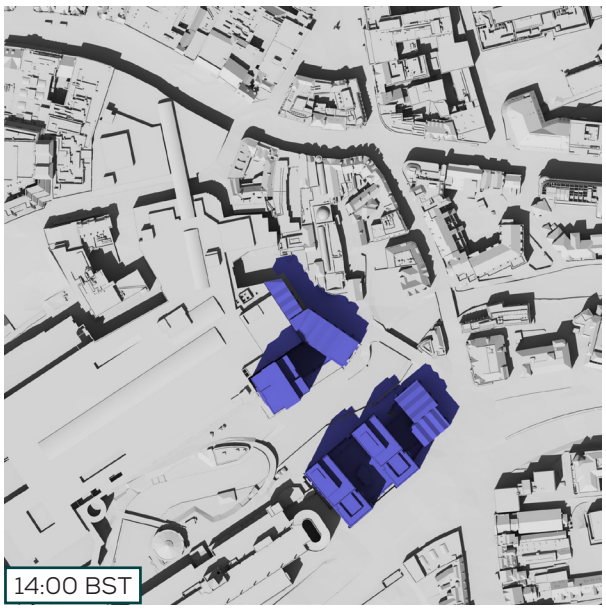
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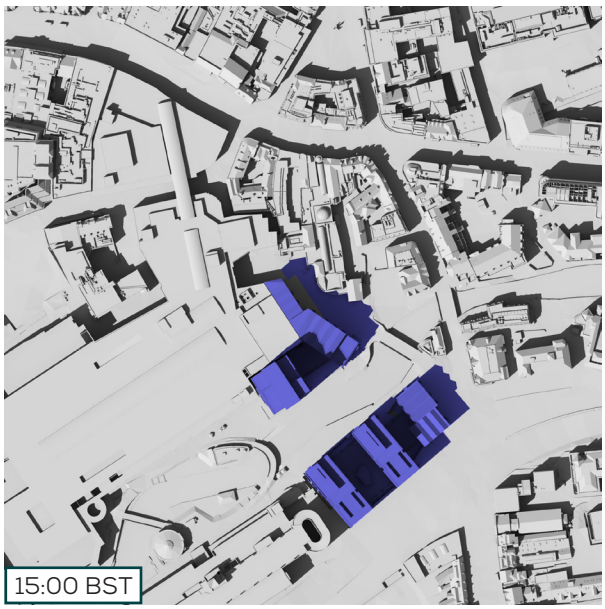
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PROPOSED





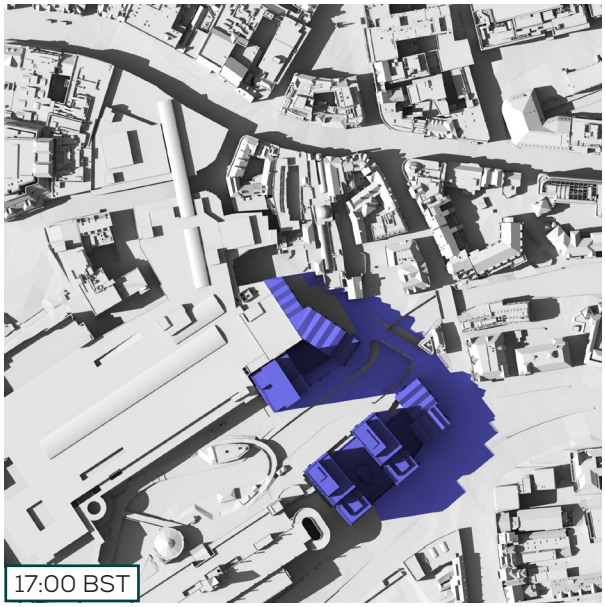
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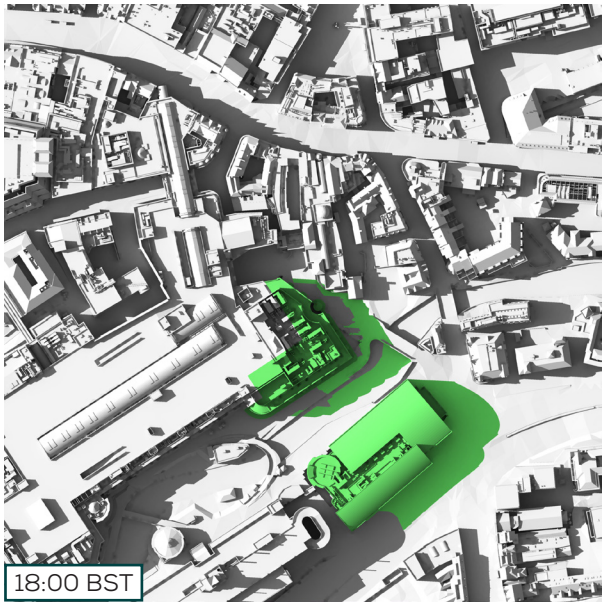
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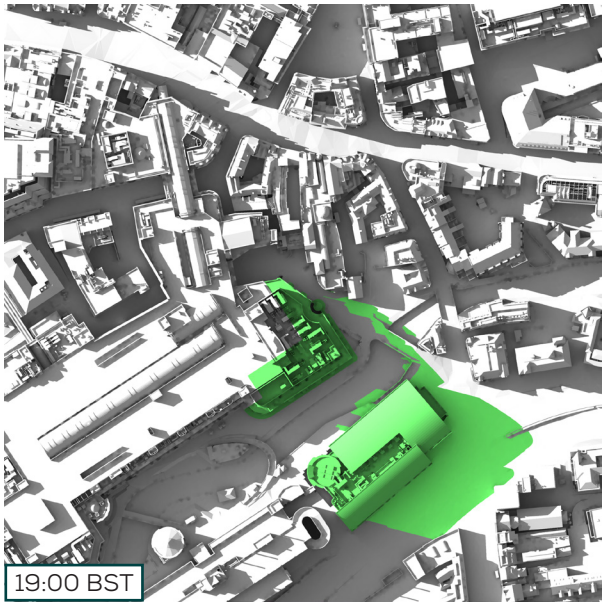




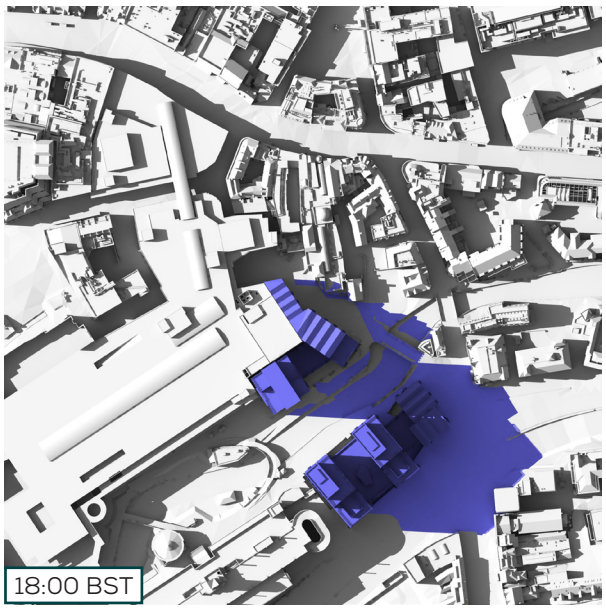
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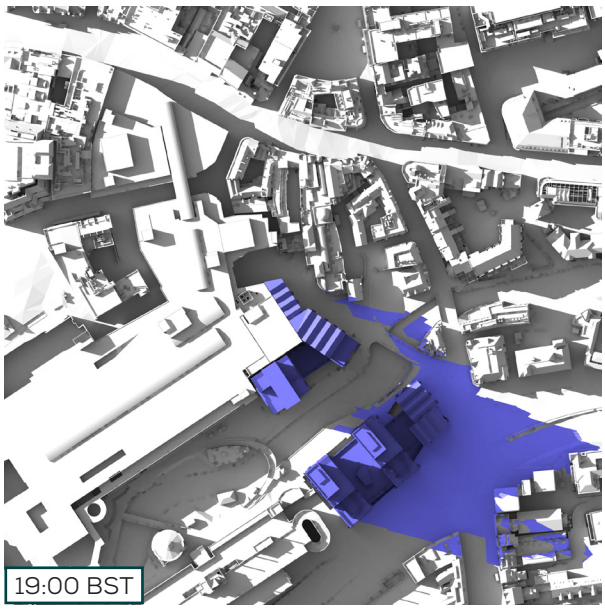
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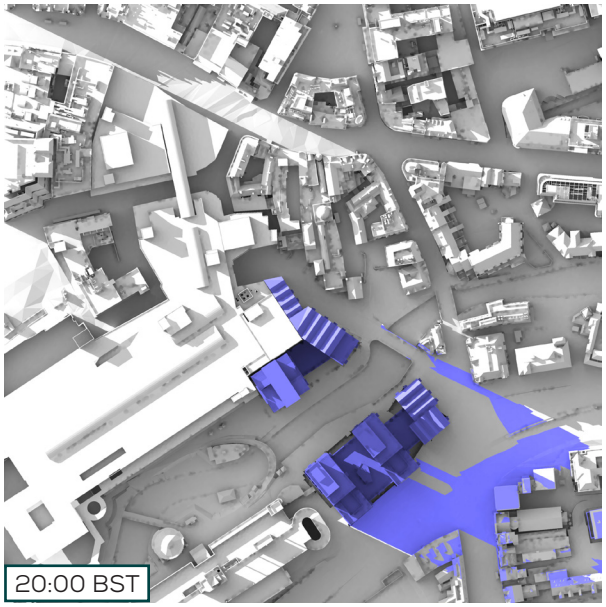




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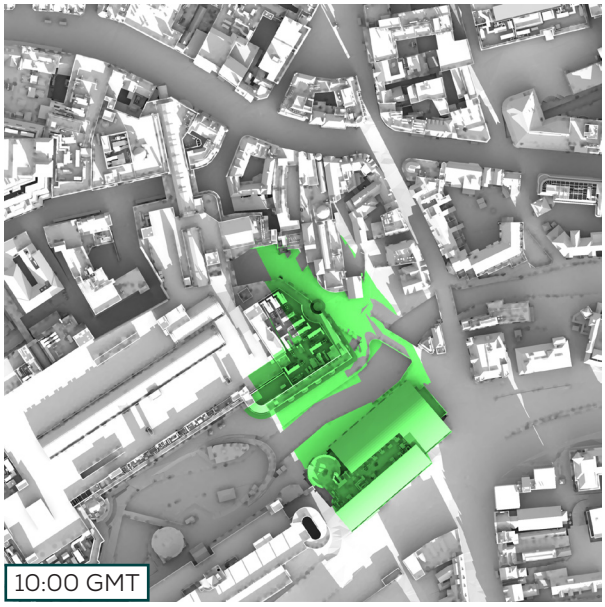
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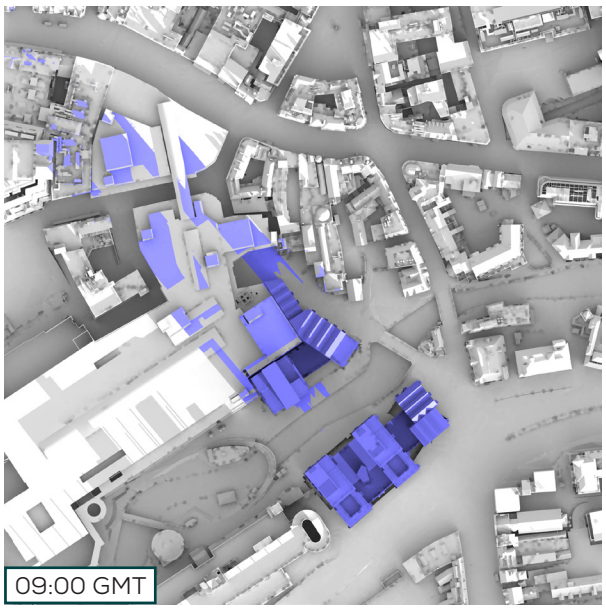
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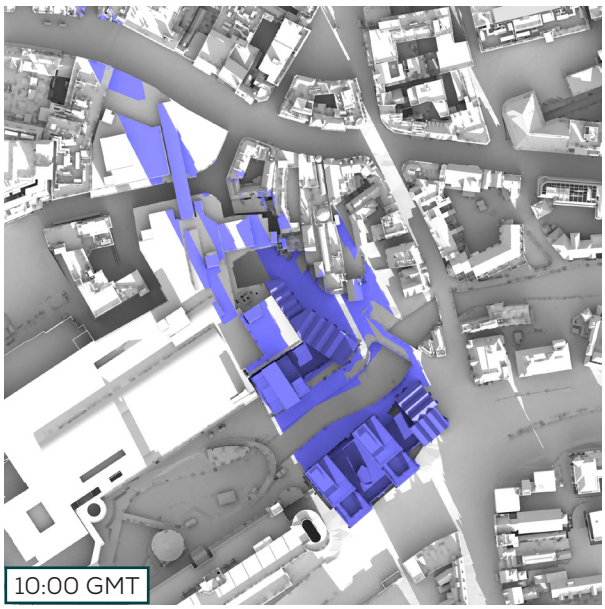
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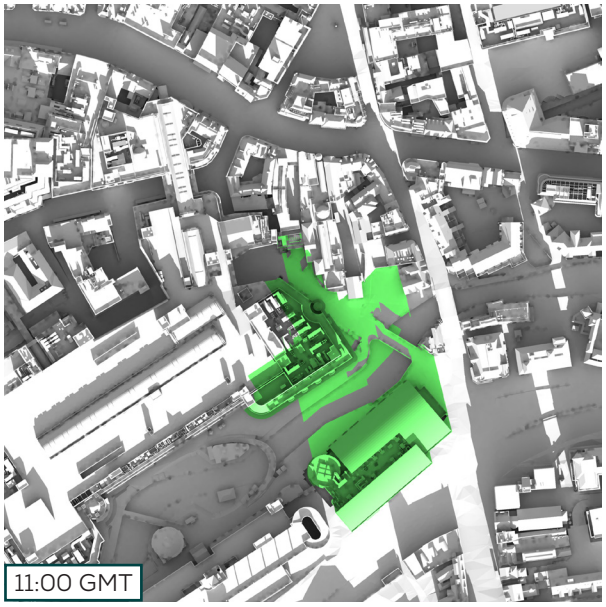


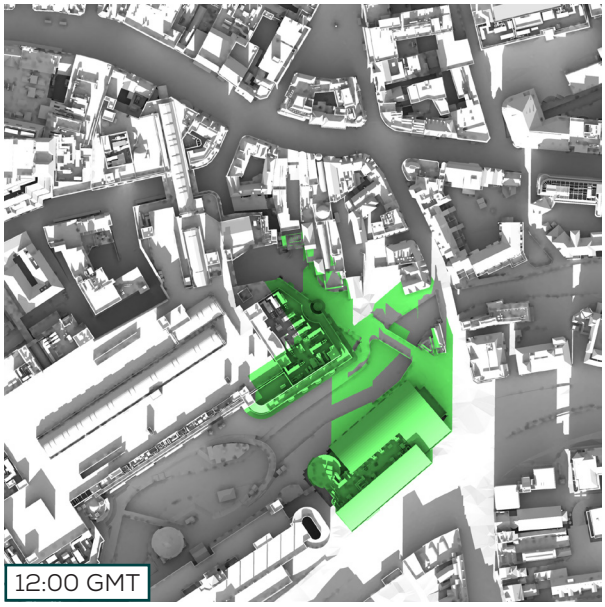
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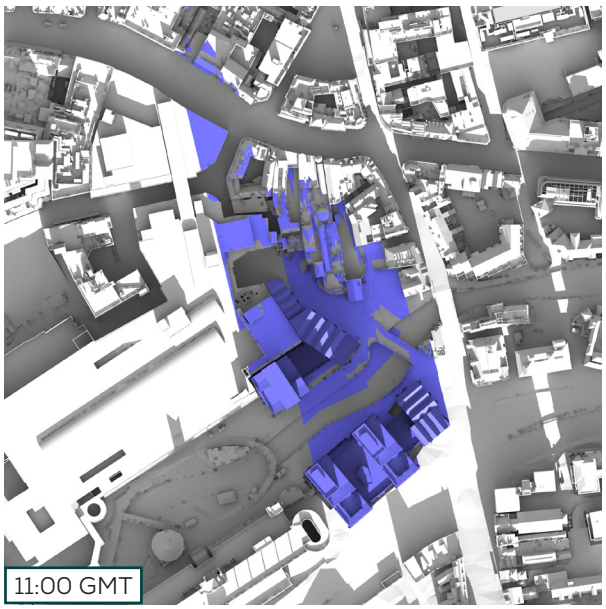


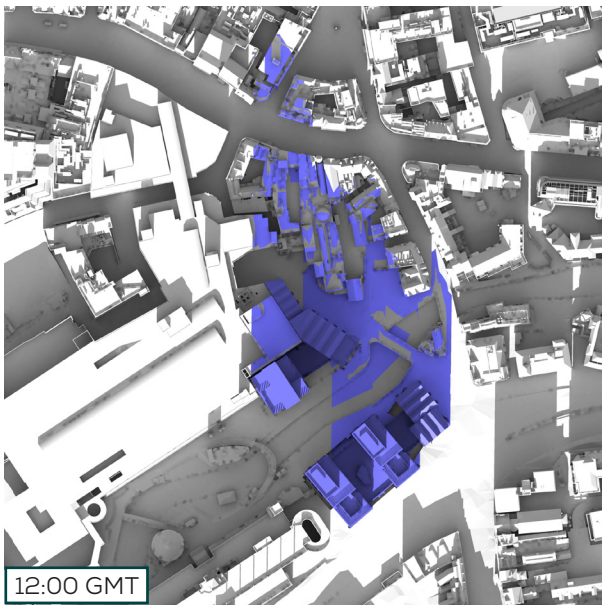
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PROPOSED

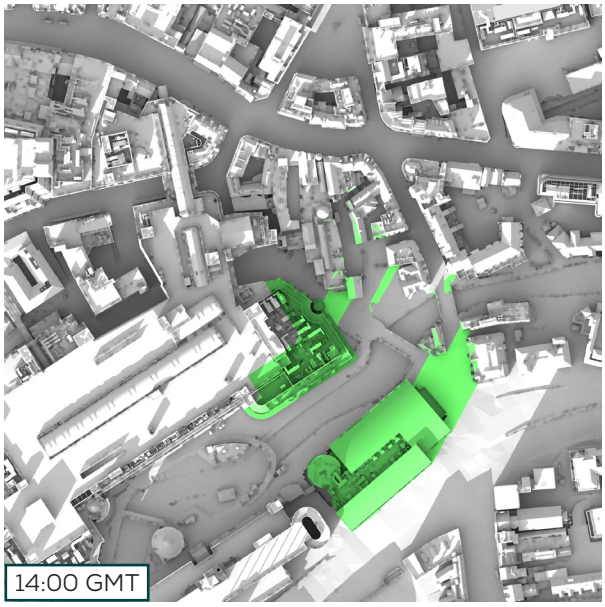




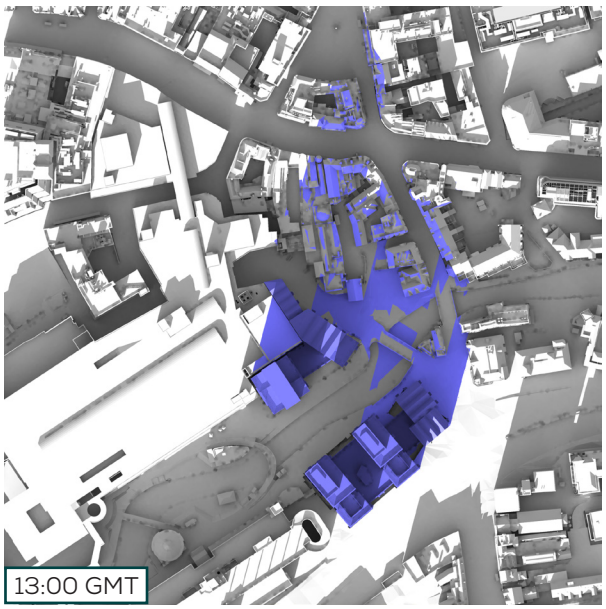
TRANSIENT OVERSHADOWING ASSESSMENT
21ST DECEMBER (13:00 - 15:00 GMT)

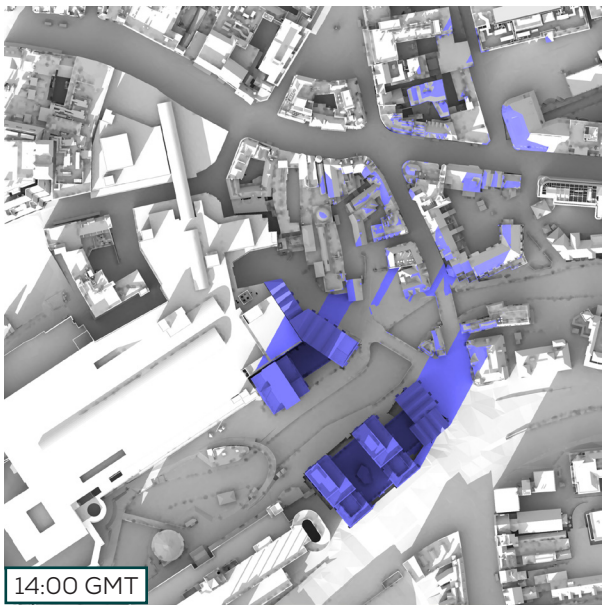
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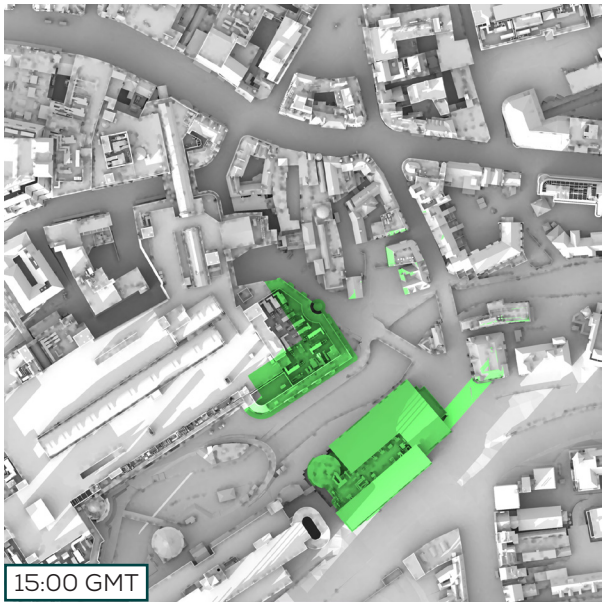


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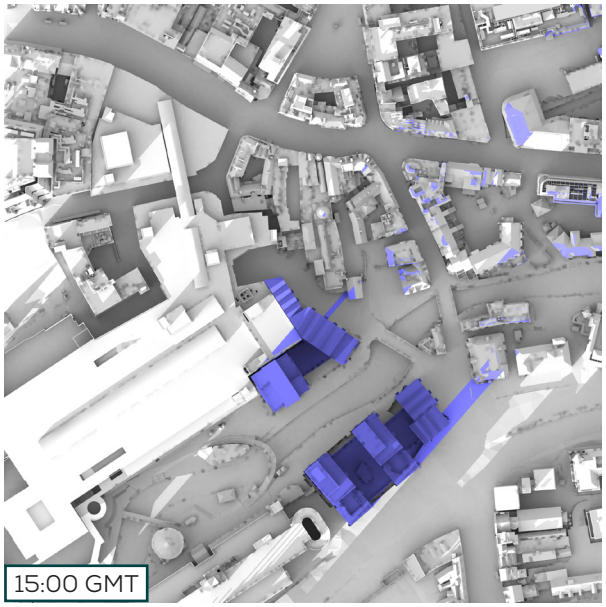




EXISTING



PROPOSED



3 **SUN HOURS ON GROUND**

RIVER KENNETT

EXISTING

BRE TEST

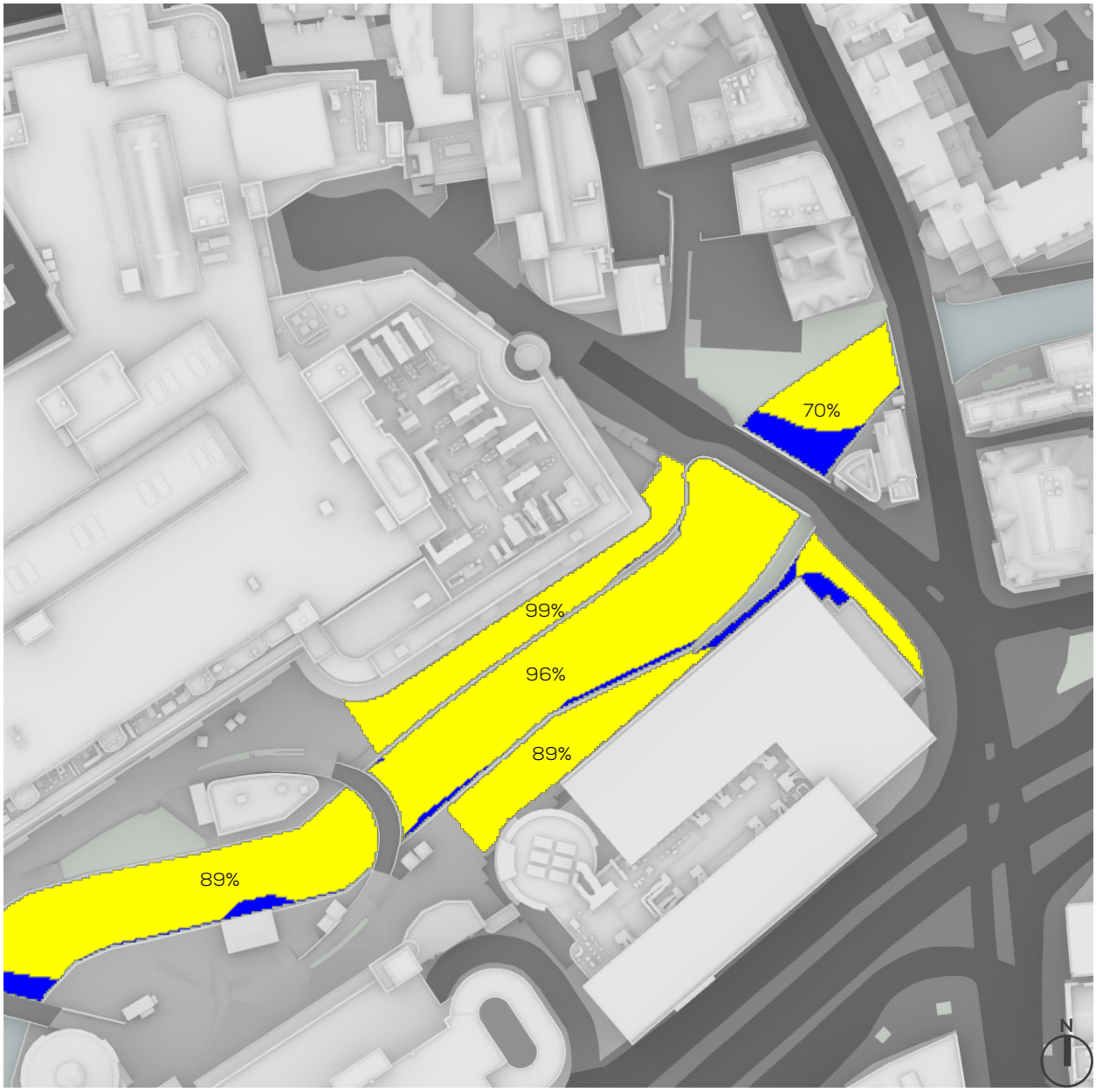


Fig. 05: BRE Test - Existing Scenario

(BRE RECOMMENDS 2+ HOURS OF SUNLIGHT ON 21ST MARCH FOR AT LEAST 50% OF THE OPEN SPACE)

SUN HOURS ON GROUND
BRE TEST - 21ST MARCH



RIVER KENNETT

PROPOSED

BRE TEST



Fig. 06: BRE Test - Proposed Scenario

(BRE RECOMMENDS 2+ HOURS OF SUNLIGHT ON 21ST MARCH FOR AT LEAST 50% OF THE OPEN SPACE)

SUN HOURS ON GROUND
BRE TEST - 21ST MARCH



RIVER KENNETT

EXISTING

SUN EXPOSURE - 21ST MARCH (21ST SEPTEMBER)

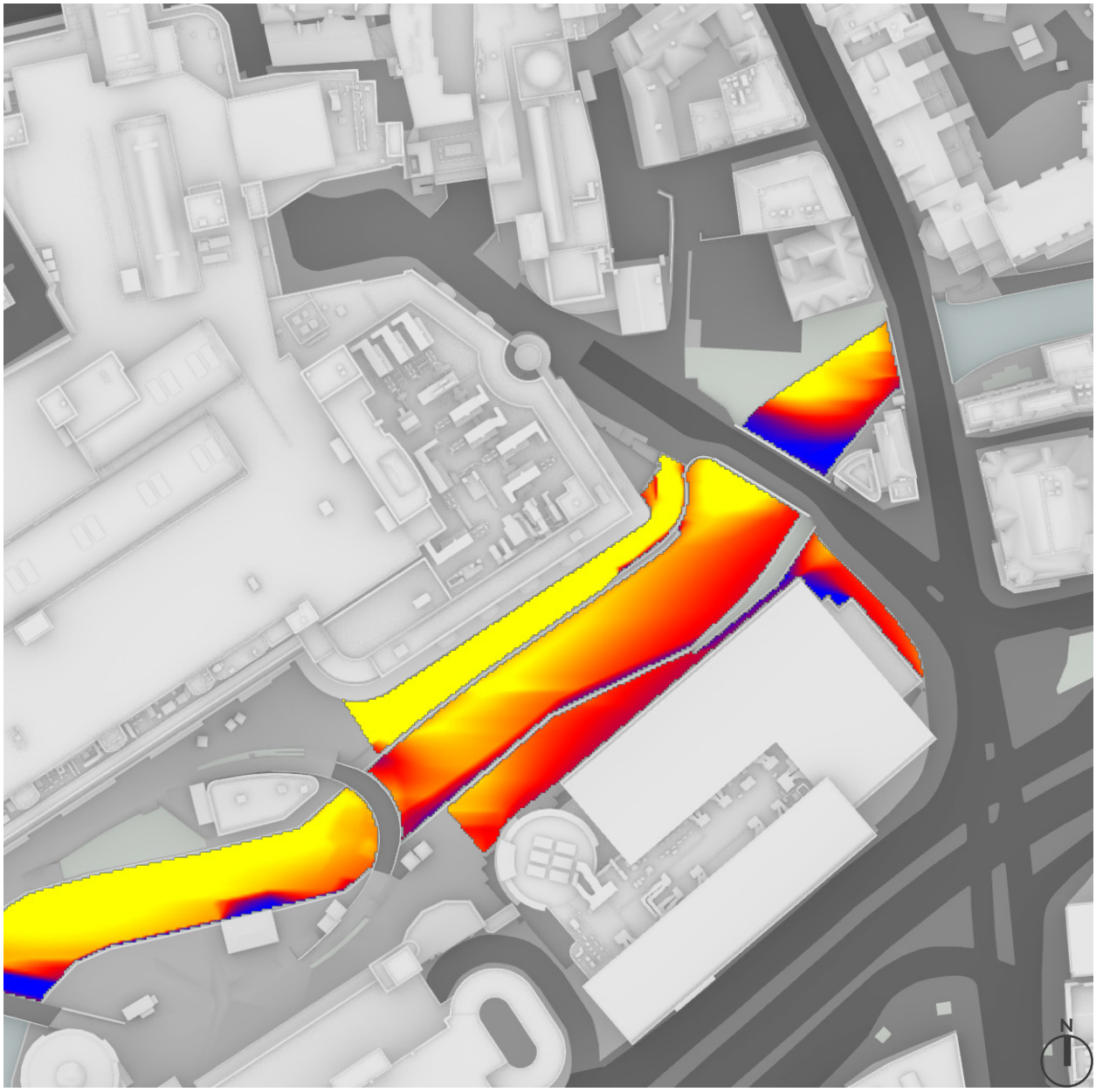


Fig. 07: Sun Exposure - Existing Scenario

SUN EXPOSURE
TOTAL HOURS

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5 5.5 6.0+

21st MARCH (SPRING EQUINOX)

READING

Latitude:	51.5
Longitude:	0.0
Sunrise:	06:05 GMT
Sunset:	18:18 GMT

Total Available Sunlight:
12hrs 13mins

RIVER KENNETT

PROPOSED

SUN EXPOSURE - 21ST MARCH (21ST SEPTEMBER)

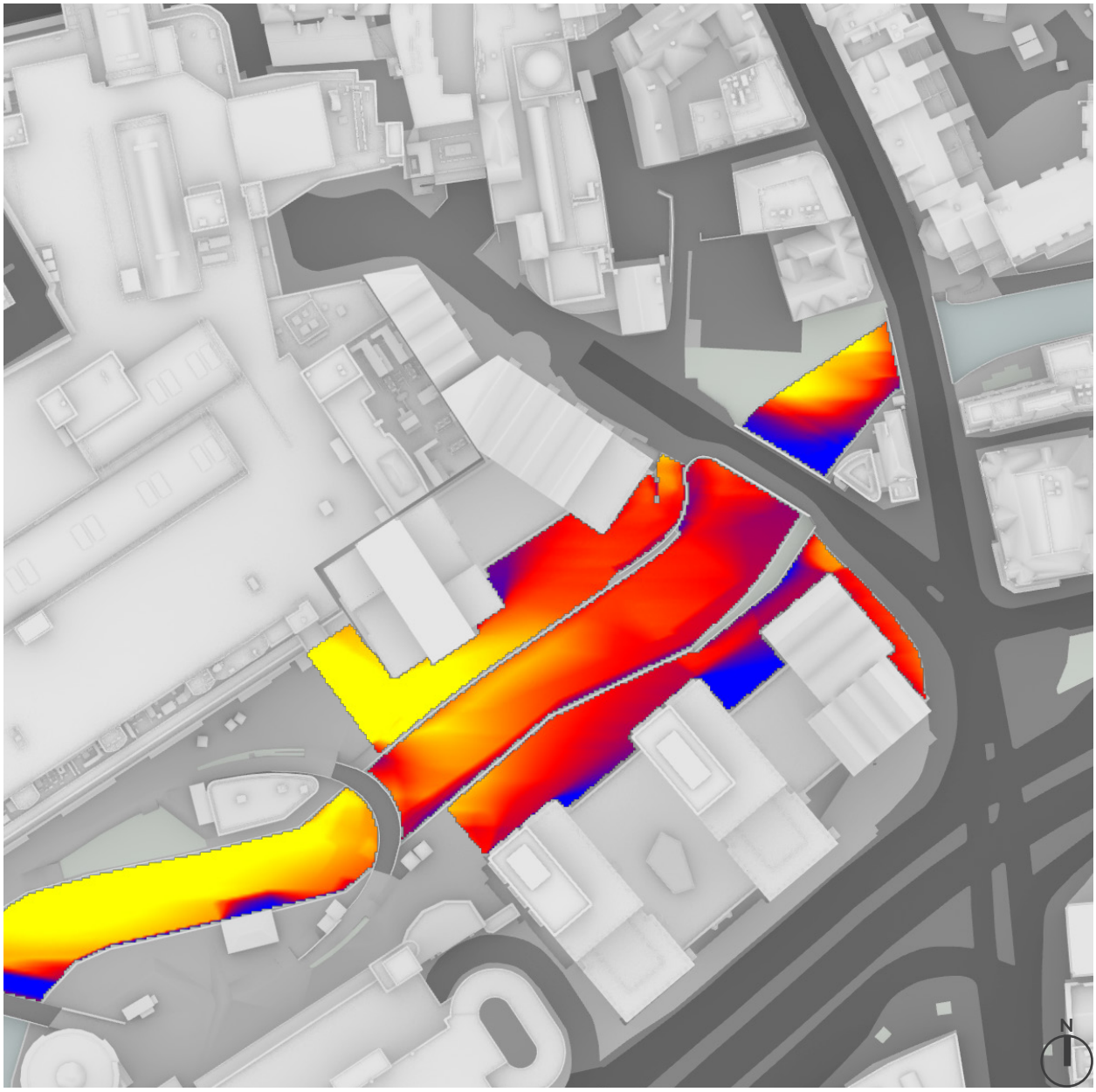


Fig. 08: Sun Exposure - Proposed Scenario

SUN EXPOSURE
TOTAL HOURS

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5 5.5 6.0+

21st MARCH
(SPRING EQUINOX)

READING

Latitude:	51.5
Longitude:	0.0
Sunrise:	06:05 GMT
Sunset:	18:18 GMT

Total Available Sunlight:
12hrs 13mins

RIVER KENNETT

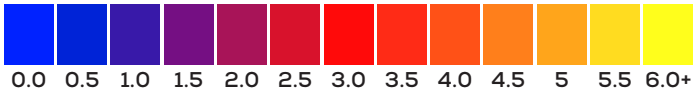
EXISTING

SUN EXPOSURE - 21ST JUNE



Fig. 09: Sun Exposure - Existing Scenario

SUN EXPOSURE
TOTAL HOURS



21st JUNE
(SUMMER SOLSTICE)

READING

Latitude:	51.5
Longitude:	0.0
Sunrise:	04:46 BST
Sunset:	21:24 BST

Total Available Sunlight:
16hrs 38mins

RIVER KENNETT

PROPOSED

SUN EXPOSURE - 21ST JUNE

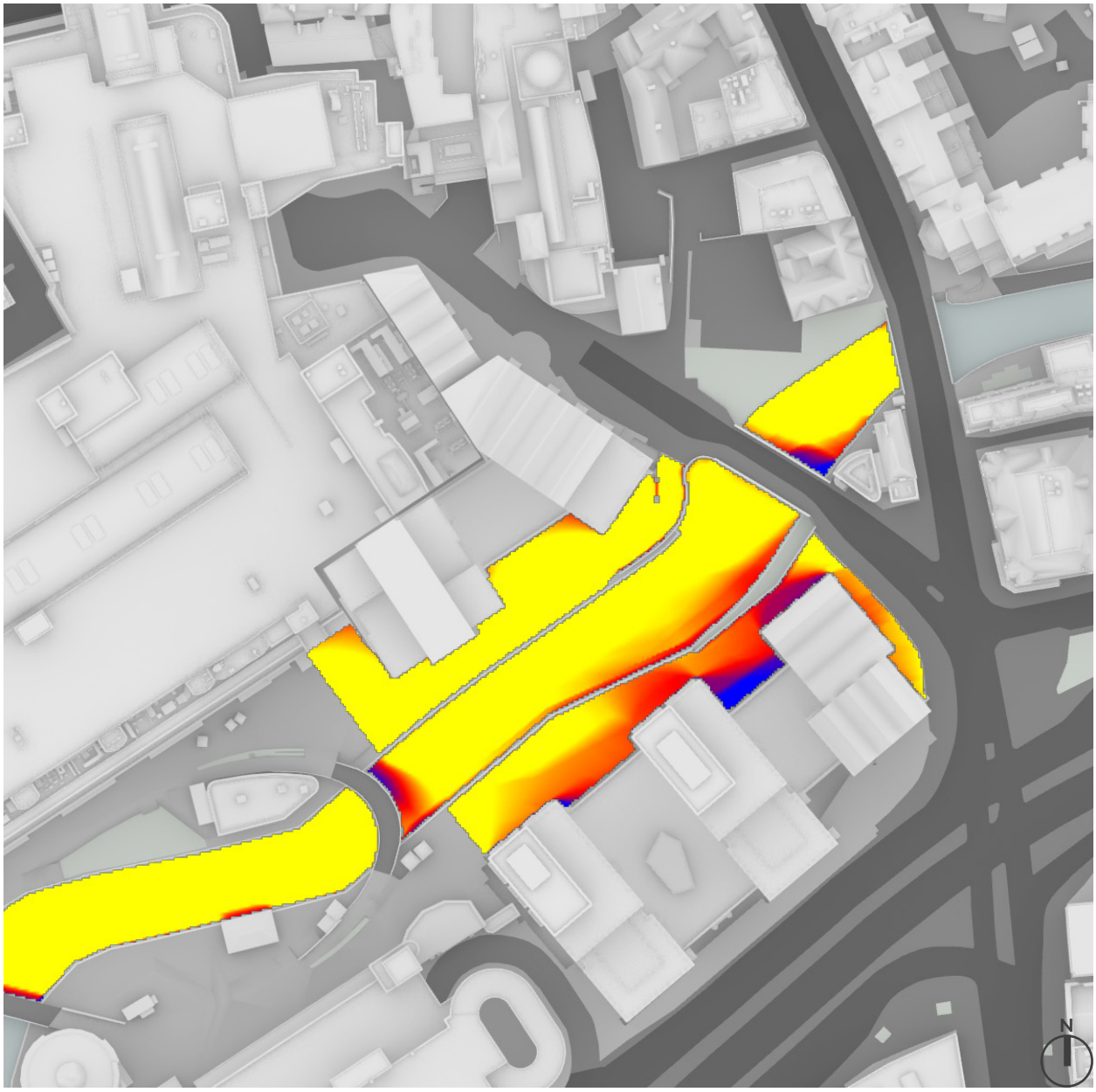
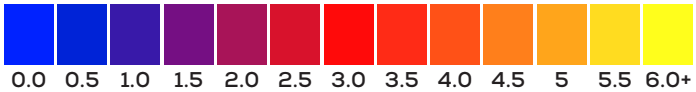


Fig. 10: Sun Exposure - Proposed Scenario

SUN EXPOSURE
TOTAL HOURS



21st JUNE
(SUMMER SOLSTICE)

READING

Latitude:	51.5
Longitude:	0.0
Sunrise:	04:46 BST
Sunset:	21:24 BST

Total Available Sunlight:
16hrs 38mins

gia

For further details please contact us on:

LONDON

T **020 7202 1400**

E **mail@gia.uk.com**

The Whitehouse
Belvedere Road
London SE1 8GA

MANCHESTER

T **0161 672 5100**

E **manchester@gia.uk.com**

2 Commercial Street
Manchester
M15 4RQ

BELFAST

T **02892 449 674**

E **belfast@gia.uk.com**

River House
48-60 High Street
Belfast BT1 2BE

BRISTOL

T **0117 374 1504**

E **bristol@gia.uk.com**

33 Bristol
Colston Avenue
Bristol BS1 4UA

DUBLIN

T **020 7202 1400**

E **hello@giasurveyors.ie**

26-27 Upper Mount Street
Dublin Ireland
DO2 F890

GIA SURVEYORS LIMITED incorporated and registered in England and Wales with company number **14032506** whose registered office is at **The Whitehouse, Belvedere Road, London SE1 8GA**