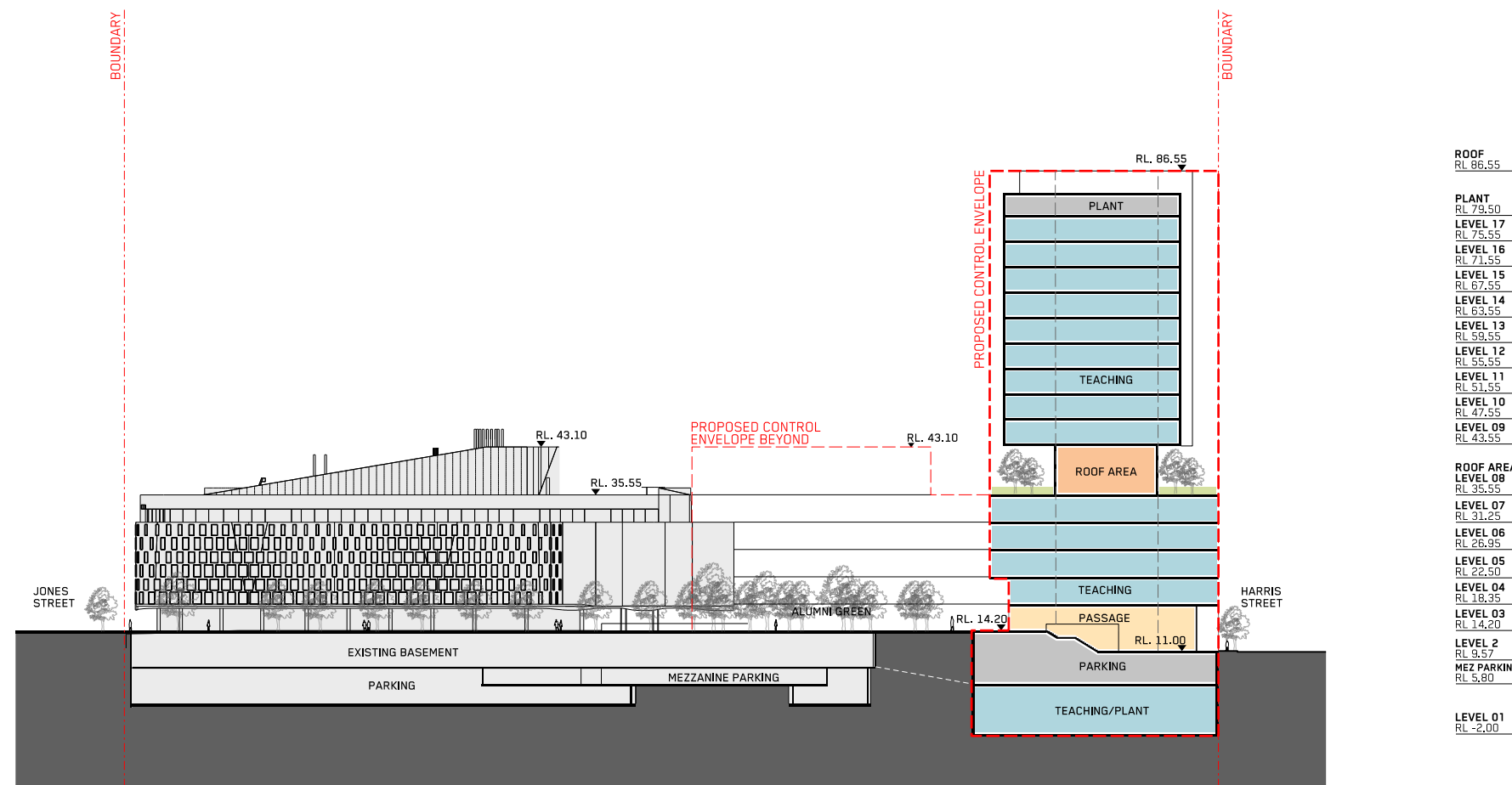
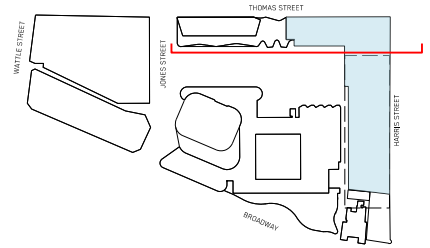
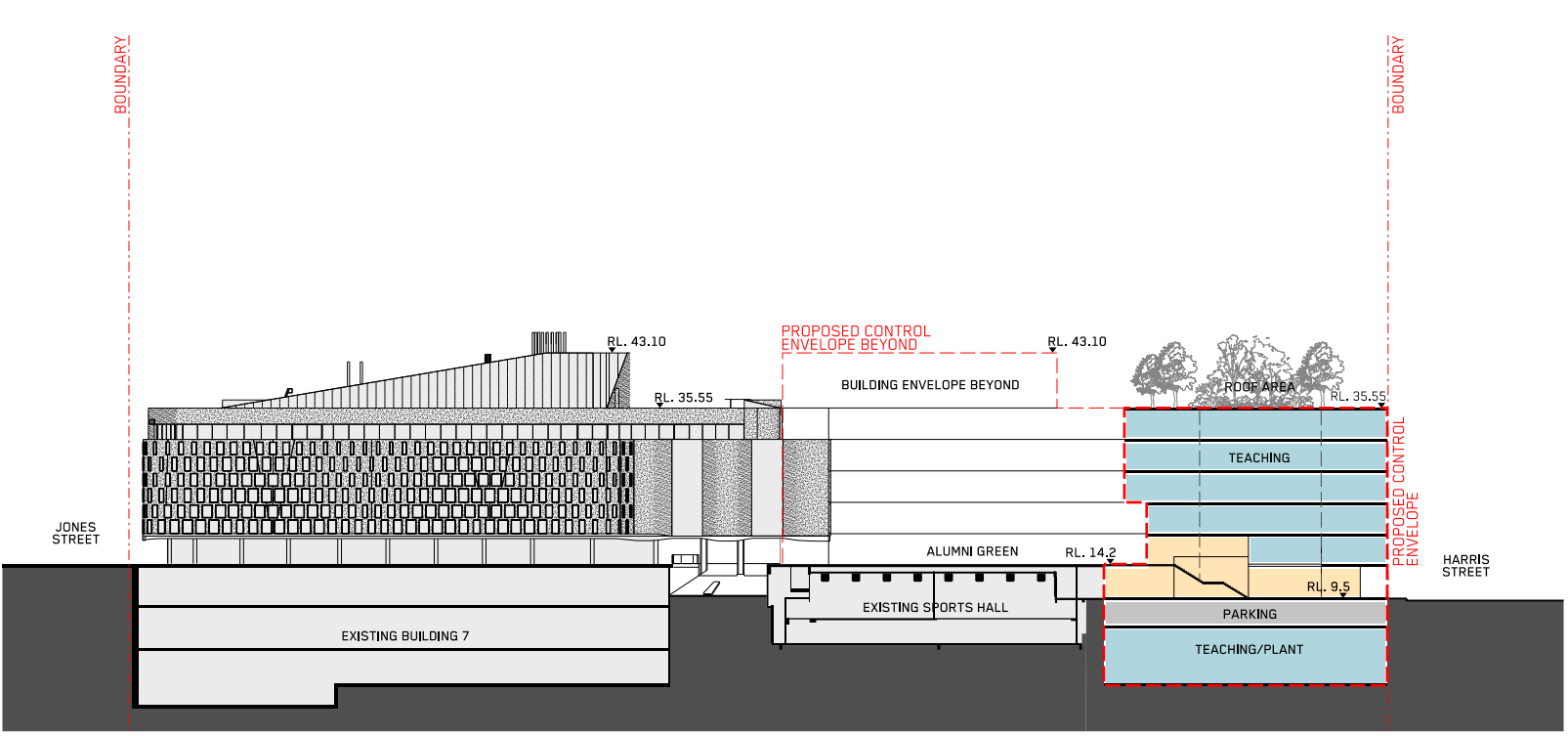


ROOF	RL 86.55
PLANT	RL 79.50
LEVEL 17	RL 75.55
LEVEL 16	RL 71.55
LEVEL 15	RL 67.55
LEVEL 14	RL 63.55
LEVEL 13	RL 59.55
LEVEL 12	RL 55.55
LEVEL 11	RL 51.55
LEVEL 10	RL 47.55
LEVEL 09	RL 43.55
ROOF AREA	LEVEL 08
LEVEL 07	RL 31.25
LEVEL 06	RL 26.95
LEVEL 05	RL 22.50
LEVEL 04	RL 18.35
LEVEL 03	RL 14.20
LEVEL 2	RL 9.57
MEZ PARKING	RL 5.80
LEVEL 01	RL -2.00

FOR INFORMATION ONLY







ROOF	RL 86.55
PLANT	RL 79.50
LEVEL 17	RL 75.55
LEVEL 16	RL 71.55
LEVEL 15	RL 67.55
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LEVEL 09	RL 43.55
ROOF AREA	RL 35.55
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LEVEL 06	RL 22.50
LEVEL 05	RL 18.35
LEVEL 04	RL 14.20
LEVEL 03	RL 9.57
LEVEL 02	RL 5.80
LEVEL 01	RL -2.00

FOR INFORMATION ONLY



LEGEND	NEW PUBLIC REALM	TEACHING	PARKING + PLANT	CIRCULATION HUB	CLIENT
FRONT OF HOUSE	SKY GARDEN	EXISTING	CAMPUS BOUNDARY	UNIVERSITY OF TECHNOLOGY SYDNEY	

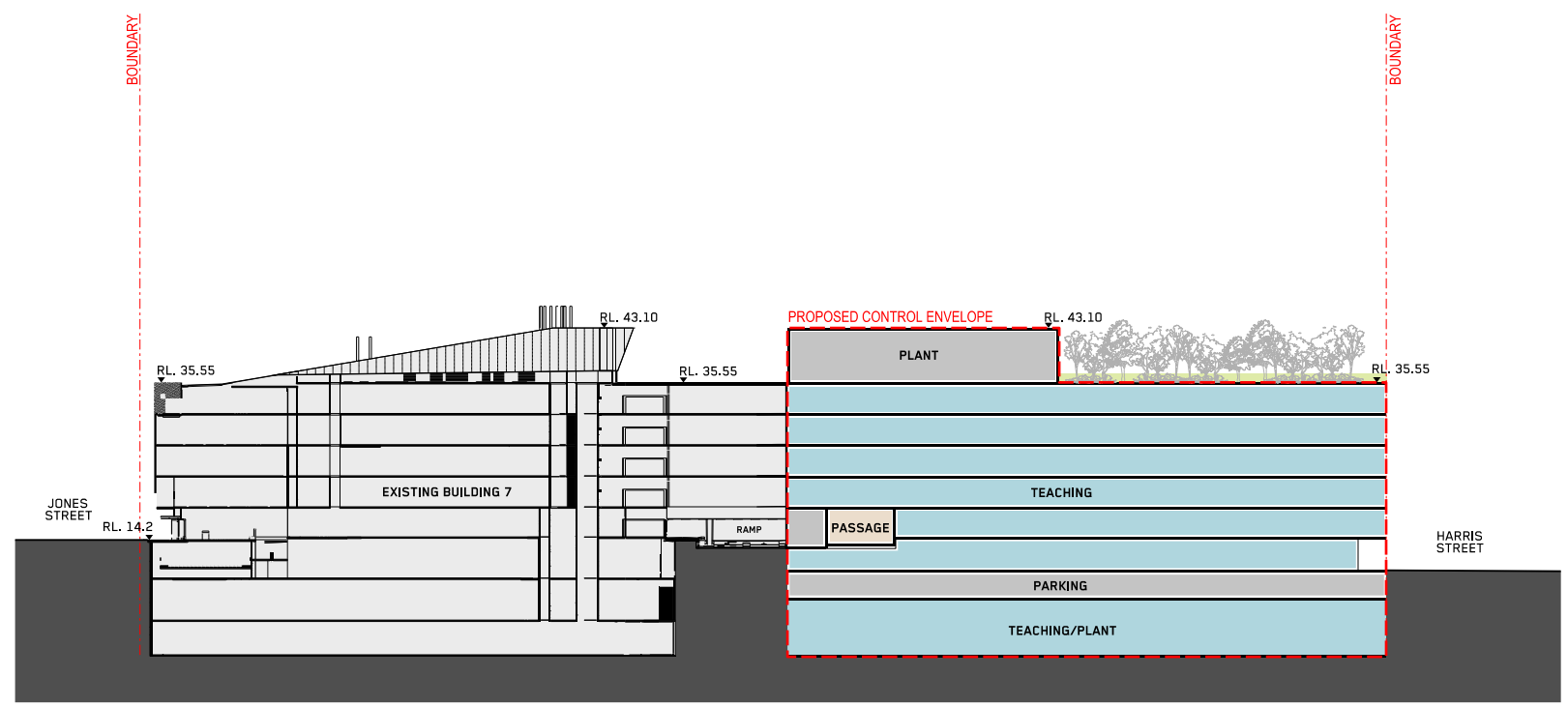
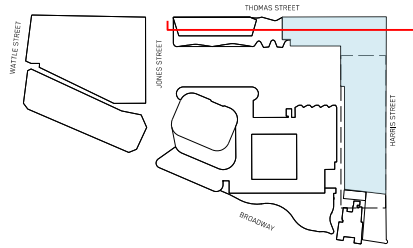
PROJECT	BON MARCHE & SCIENCE PRECINCT
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TRUE NORTH	PROJ. NORTH	GRAPHIC SCALE
0	10000	25000

SCALE	1:500 at A1
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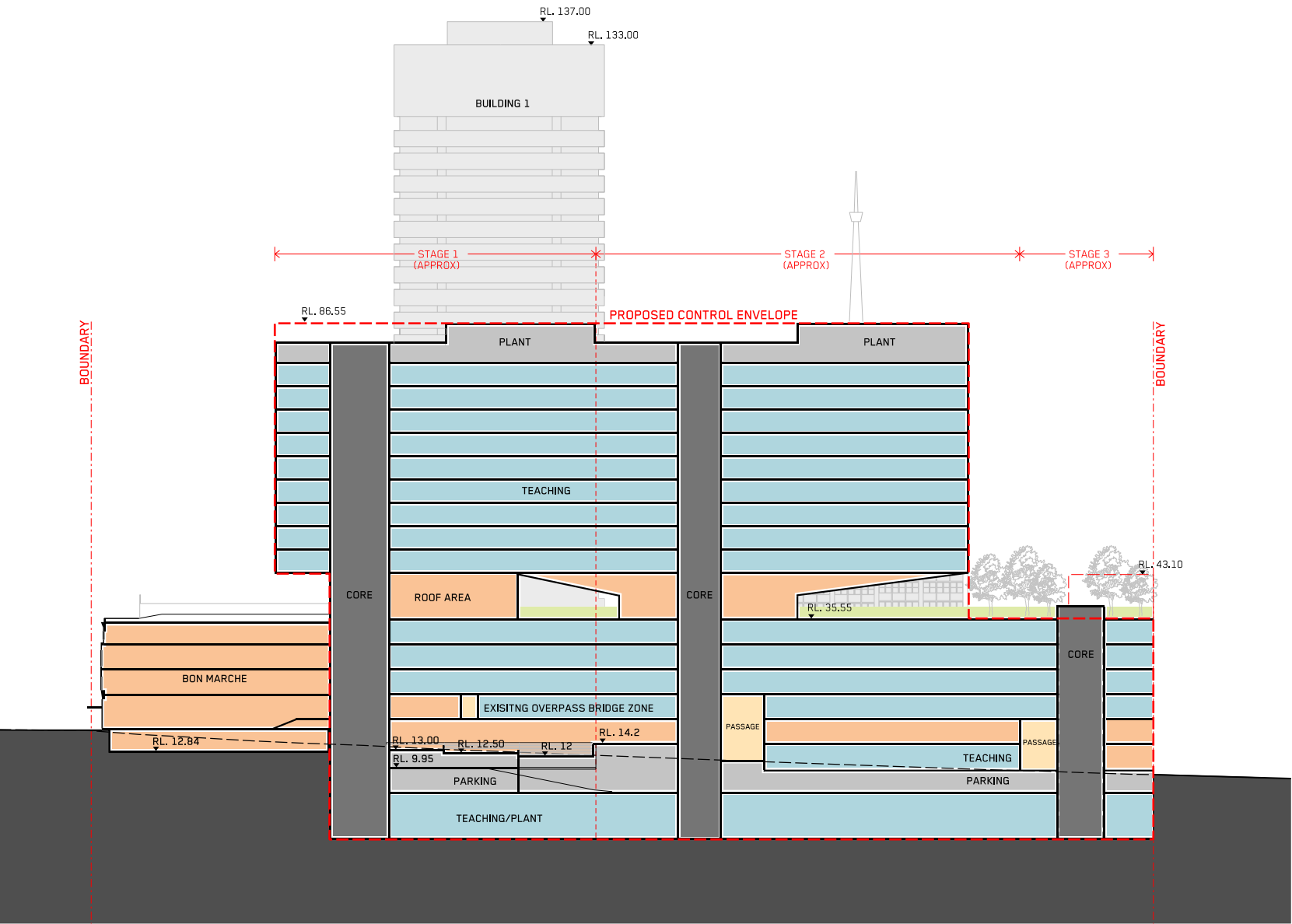
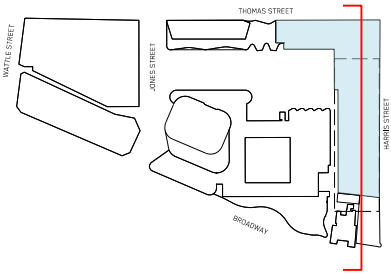
DRAWING	INDICATIVE DESIGN
EAST-WEST SECTION 03	

DRAWING NO	DATE	ISSUE
ID-SS-EW-03	1/11/2018	B



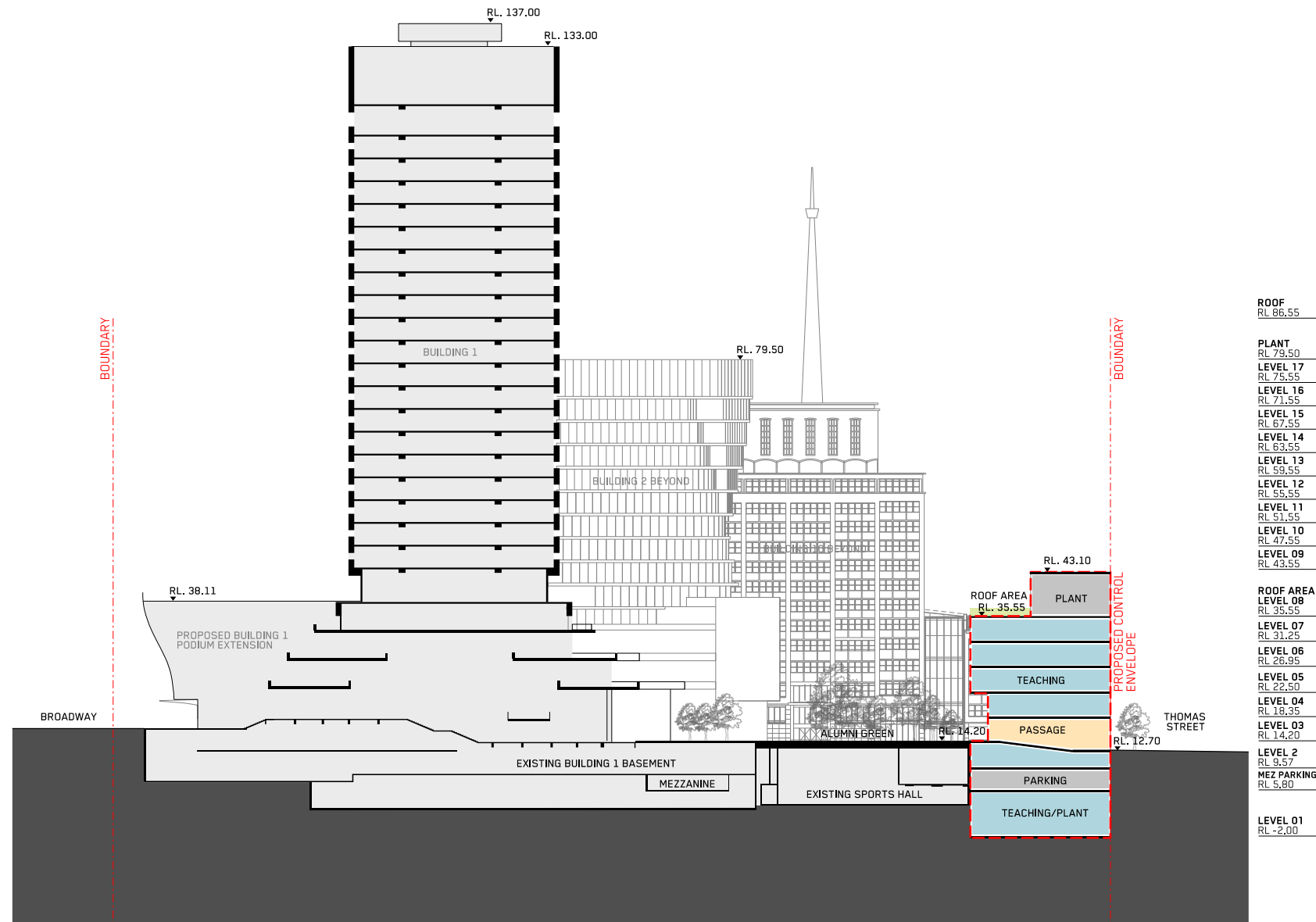
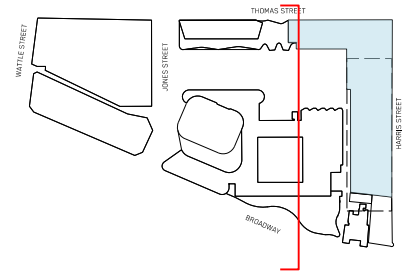
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PLANT	RL 79.50
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LEVEL 08	RL 31.25
LEVEL 07	RL 26.95
LEVEL 06	RL 22.50
LEVEL 05	RL 18.35
LEVEL 04	RL 14.20
LEVEL 03	RL 9.57
MEZ PARKING	RL 5.00
LEVEL 01	RL -2.00

FOR INFORMATION ONLY



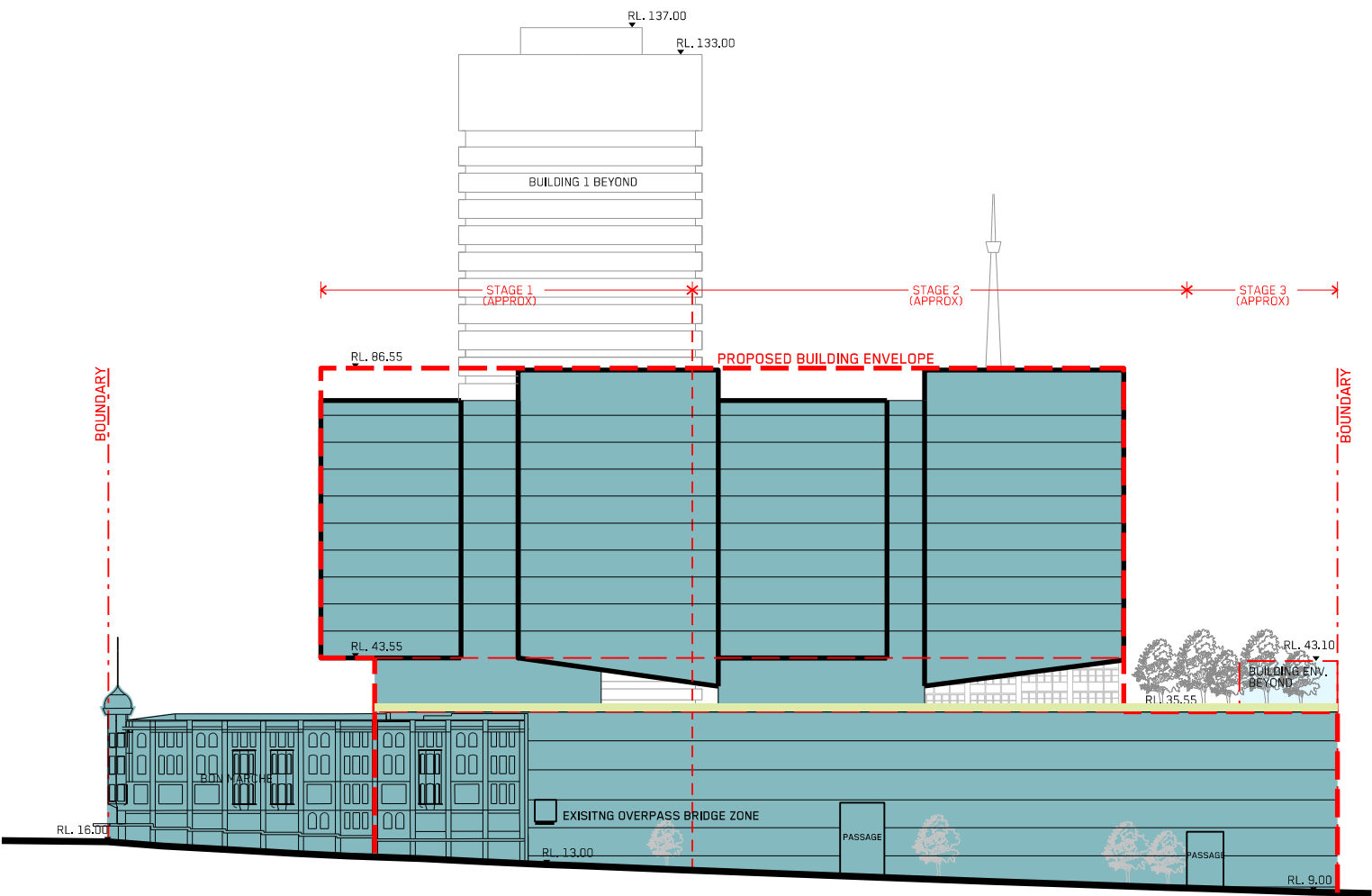
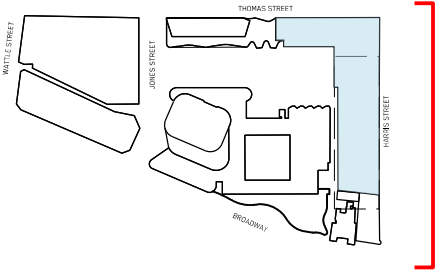
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LEVEL 09	RL 43.55
ROOF AREA	RL 35.55
LEVEL 08	RL 31.25
LEVEL 07	RL 26.95
LEVEL 06	RL 22.50
LEVEL 05	RL 18.35
LEVEL 04	RL 14.20
LEVEL 03	RL 9.57
MEZ PARKING	RL 5.80
LEVEL 01	RL -2.00

FOR INFORMATION ONLY



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PLANT	RL 79.50
LEVEL 17	RL 75.55
LEVEL 16	RL 71.55
LEVEL 15	RL 67.55
LEVEL 14	RL 63.55
LEVEL 13	RL 59.55
LEVEL 12	RL 55.55
LEVEL 11	RL 51.55
LEVEL 10	RL 47.55
LEVEL 09	RL 43.55
ROOF AREA	RL 35.55
LEVEL 08	RL 31.25
LEVEL 07	RL 26.95
LEVEL 06	RL 22.50
LEVEL 05	RL 18.35
LEVEL 04	RL 14.20
LEVEL 03	RL 9.57
LEVEL 02	RL 5.60
LEVEL 01	RL -2.00

FOR INFORMATION ONLY



ROOF
RL 86.55
PLANT
RL 79.50
LEVEL 17
RL 75.55
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RL 71.55
LEVEL 15
RL 67.55
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RL 63.55
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LEVEL 2
RL 9.57
MEZ PARKING
RL 5.80
LEVEL 01
RL -2.00

FOR INFORMATION ONLY

SHADOW ANALYSIS

ONE CENTRAL PARK AND NEIGHBOURING MULTIRESIDENTIAL DEVELOPMENTS

Careful control of solar impact to residential properties has been analysed and implemented.

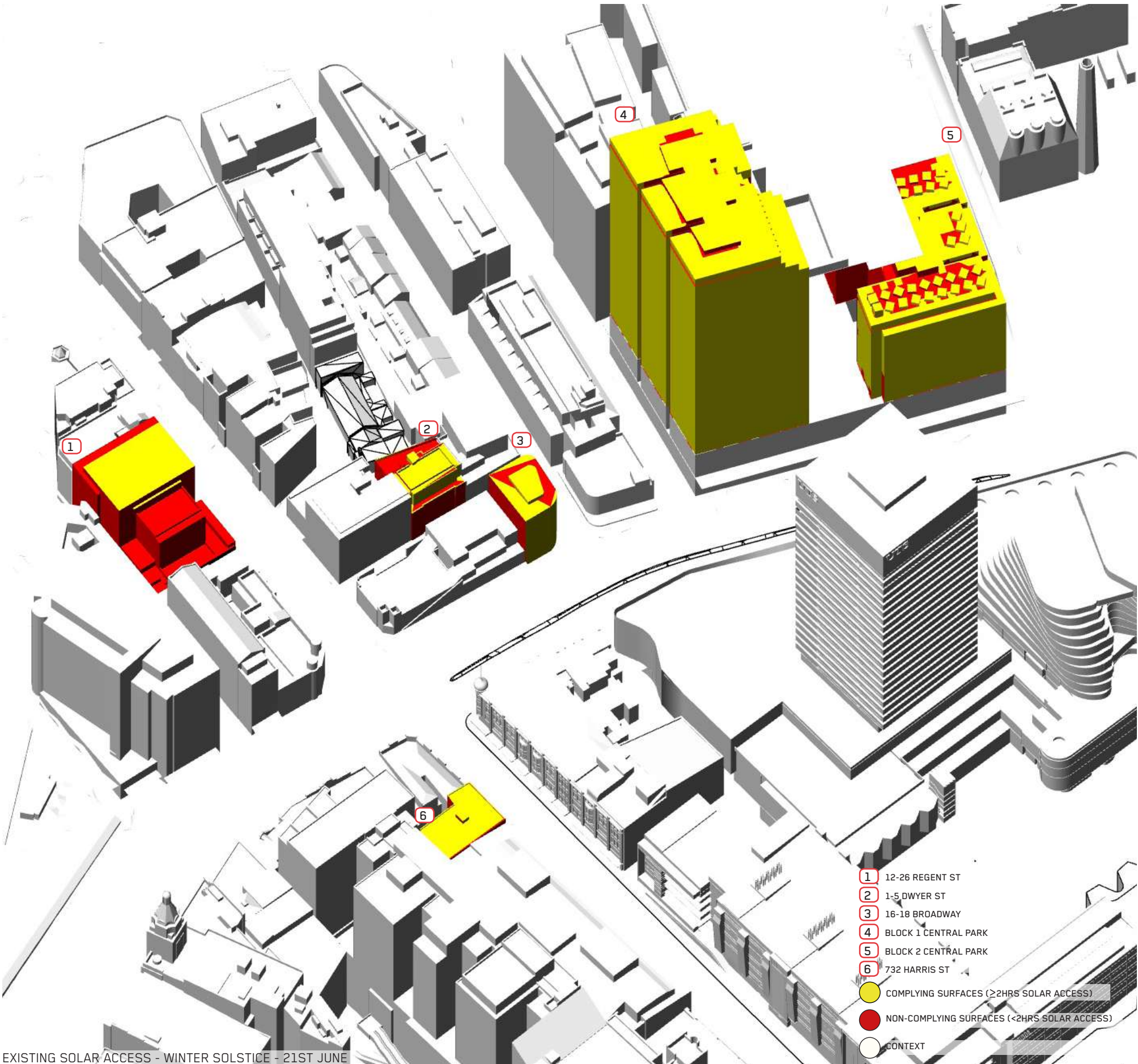
Due regard to the protection of residential amenity (in particular solar access) has been taken in developing the control envelope for the Bon Marche and Science Precinct. The key surrounding residential building potentially affected by the proposed new built form is One Central Park (Block 2). Consistent with the objectives of SEPP 65 and the site specific amenity controls that apply to the Central Park site (which includes assessment of solar access from 7.30am – 4.30pm), the proposed envelope ensures minimal impact to the solar access of existing adjacent apartments.

A cumulative analysis of One Central Park (Block 2) has been undertaken illustrating the required solar access to residential units' façades (above podium level in One Central Park) has not been compromised from the existing scenario. In addition, the shadow cast over every hour between 730am and 4.30pm during the Winter Solstice also illustrates the minimal impact of shadowing from the proposed control envelope.

Careful consideration of solar access to the public open space of Alumni Green has also been investigated. The proposed envelope ensures minimal solar impact to the open space and preserves the outdoor amenity of Alumni Green and the new podium levels to Building 2. As shown, at certain times of the day, with a proposed reduced Building 4 podium height, sun access is in fact improved from the existing scenario.

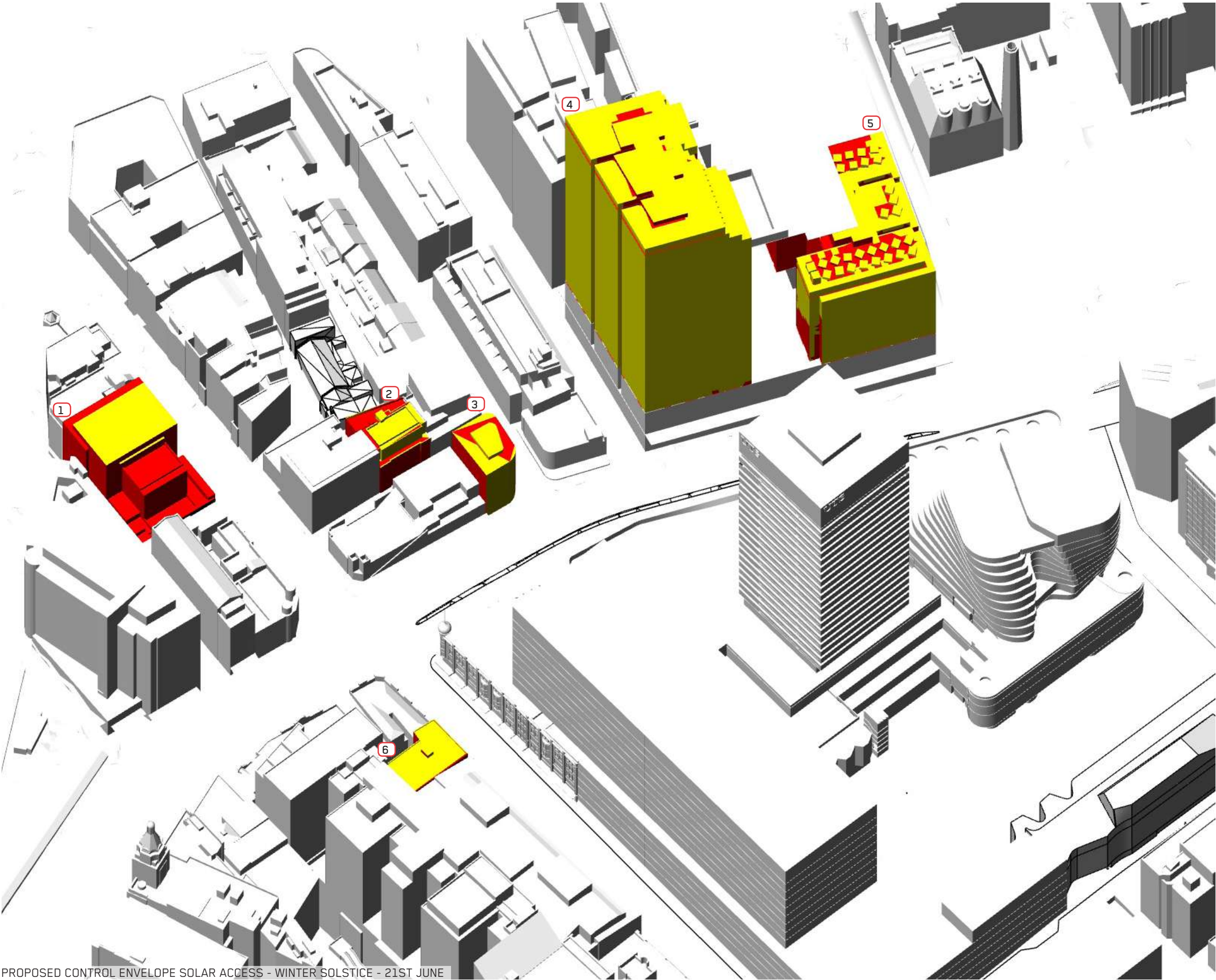
CUMULATIVE IMPACT - METHOD OF ASSESSMENT

- The solar access script used relies on latitude and longitude extracted from a weather file to calculate the path of the Sun.
- The date and time parameters are adjusted to the desired analysis period – in this case, 2 hours of direct sunlight between 7.30am-4.30pm on June 21 for One Central Park (Central Park Concept Plan Approval requirements), and 2 hours of direct sunlight between 9.00am-3.00pm on June 21 for the other surrounding developments analysed.
- The program identifies the objects (eg. One Central Park) that are to be analysed, and the rest are classified as context.
- The program registers when the Sun's rays are blocked by an object (either surrounding context or One Central Park) and calculates the aggregate time of direct sun exposure on the facade between 7.30am – 4.30pm on June 21 for One Central Park and 9.00am - 3.00pm on June 21 for other analysed surrounding developments..
- Complying surfaces (≥2 hours) and non-complying surfaces(<2 hours) are then split and coloured



EXISTING SOLAR ACCESS - WINTER SOLSTICE - 21ST JUNE

SHADOW ANALYSIS
ONE CENTRAL PARK AND NEIGHBOURING MULTIRESIDENTIAL DEVELOPMENTS



PROPOSED CONTROL ENVELOPE SOLAR ACCESS - WINTER SOLSTICE - 21ST JUNE

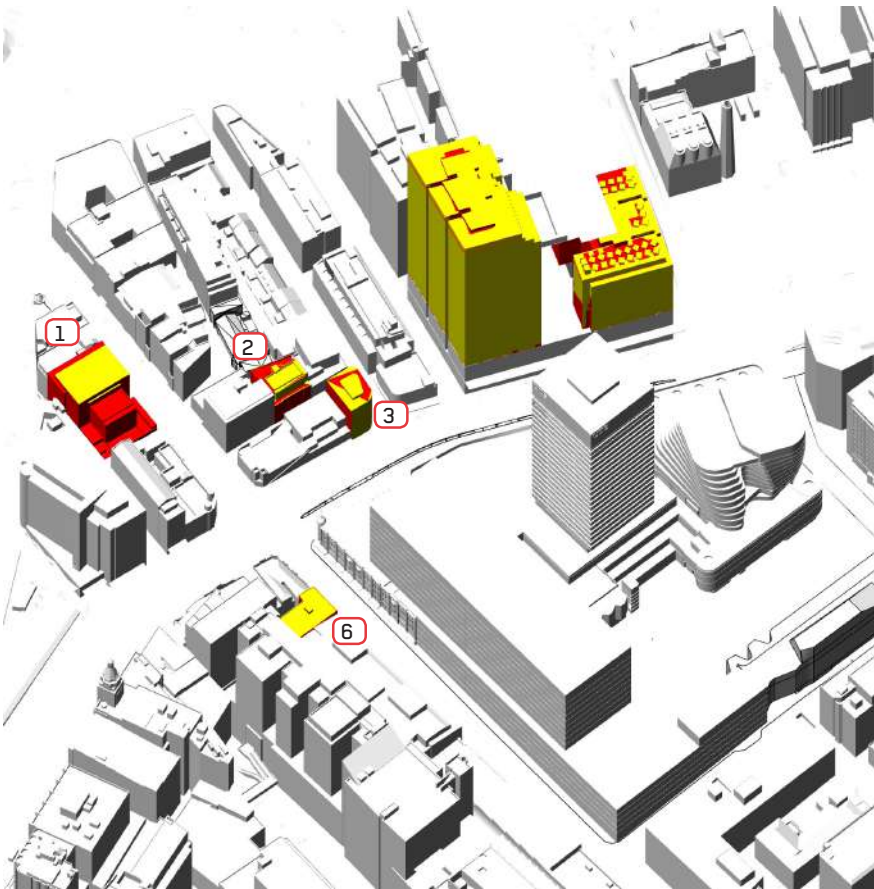
- 1 12-26 REGENT ST
- 2 1-5 DWYER ST
- 3 16-18 BROADWAY
- 4 BLOCK 1 CENTRAL PARK
- 5 BLOCK 2 CENTRAL PARK
- 6 732 HARRIS ST
- COMPLYING SURFACES (≥2HRS SOLAR ACCESS)
- NON-COMPLYING SURFACES (<2HRS SOLAR ACCESS)
- CONTEXT

SHADOW ANALYSIS

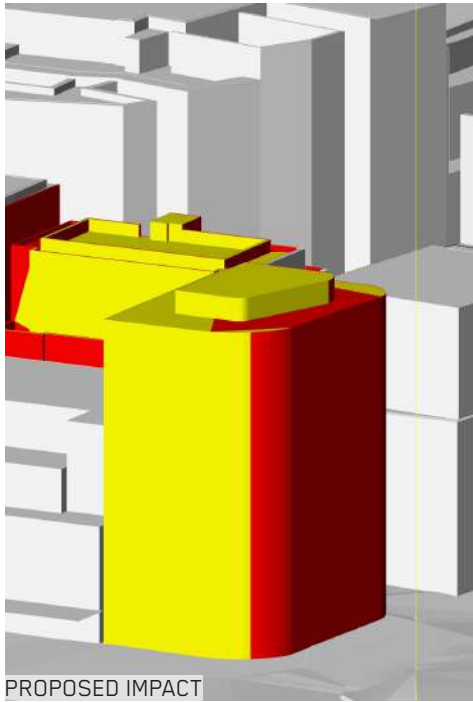
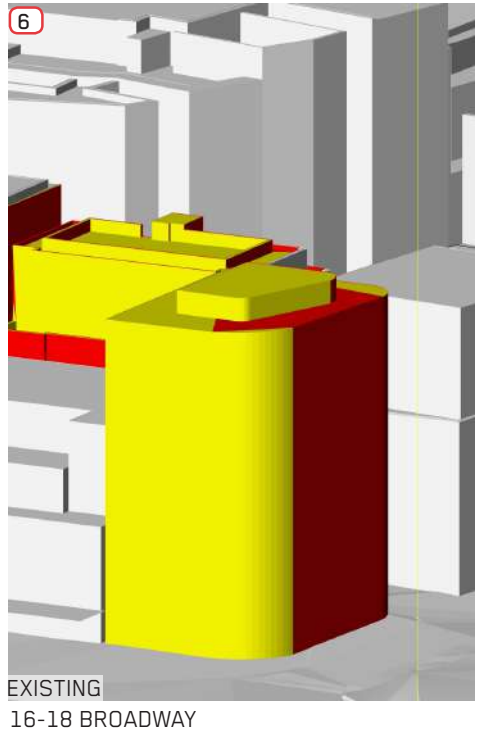
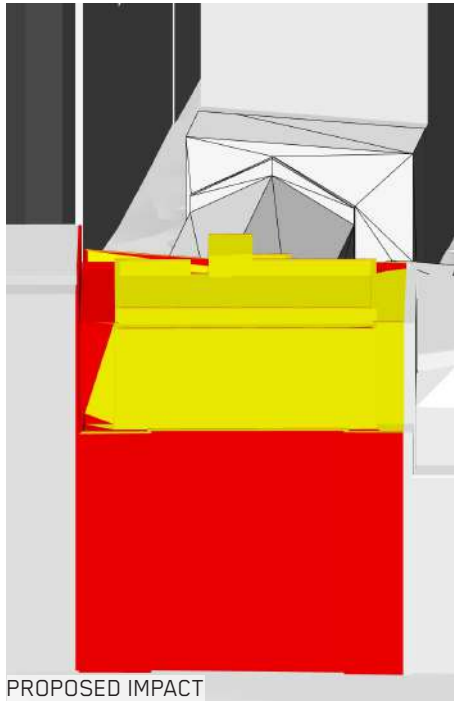
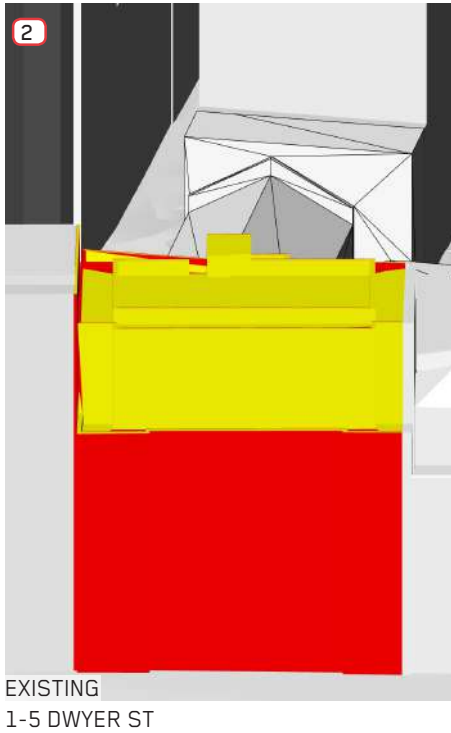
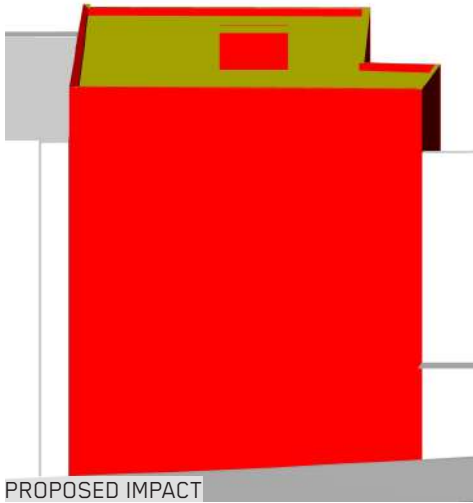
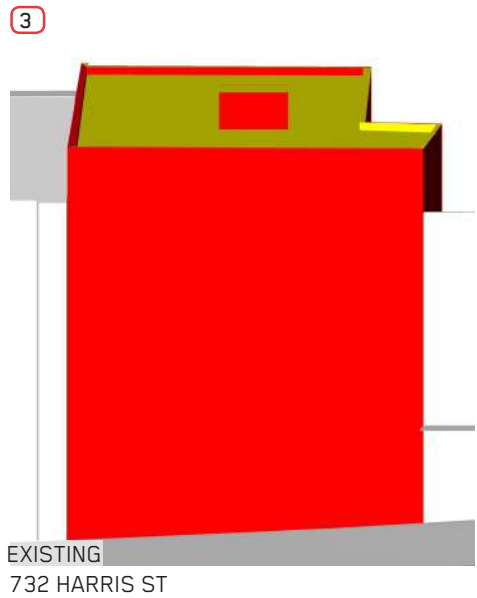
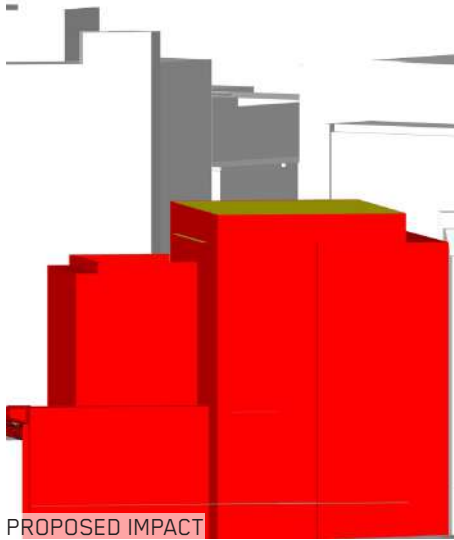
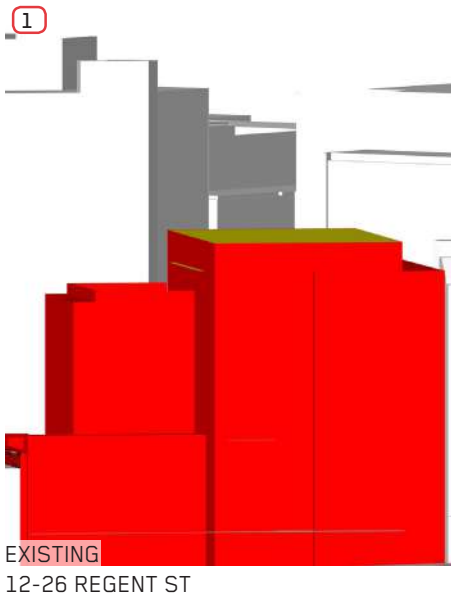
ONE CENTRAL PARK AND NEIGHBOURING MULTIRESIDENTIAL DEVELOPMENTS

CUMULATIVE SOLAR IMPACTS ON NEIGHBOURING MULTI-RESIDENTIAL BUILDINGS

The following diagrams demonstrate the solar impacts of the proposal on neighbouring multi-residential developments. The before and after cumulative solar impact diagrams show that the proposal has little effect on the ability of neighbouring buildings to achieve 2 hours of direct solar access during mid winter.

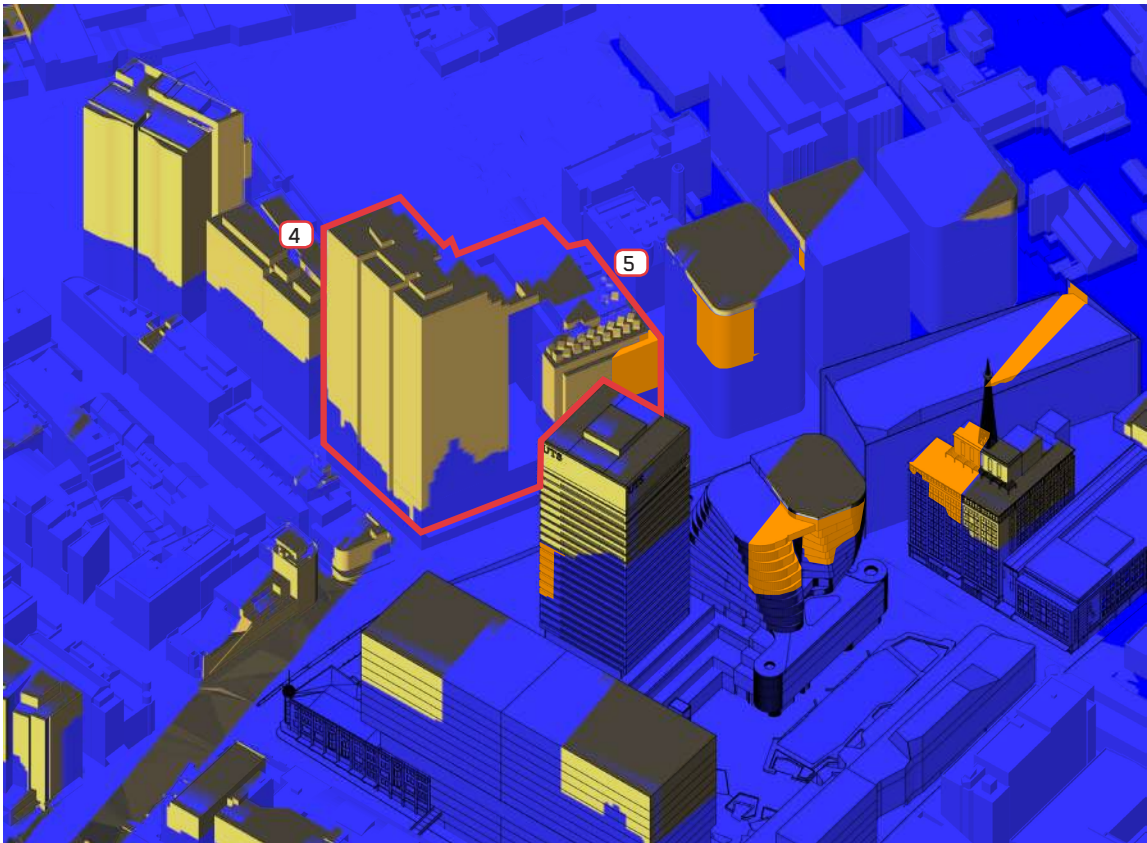


- COMPLYING SURFACES (≥2HRS SOLAR ACCESS)
- NON-COMPLYING SURFACES (<2HRS SOLAR ACCESS)

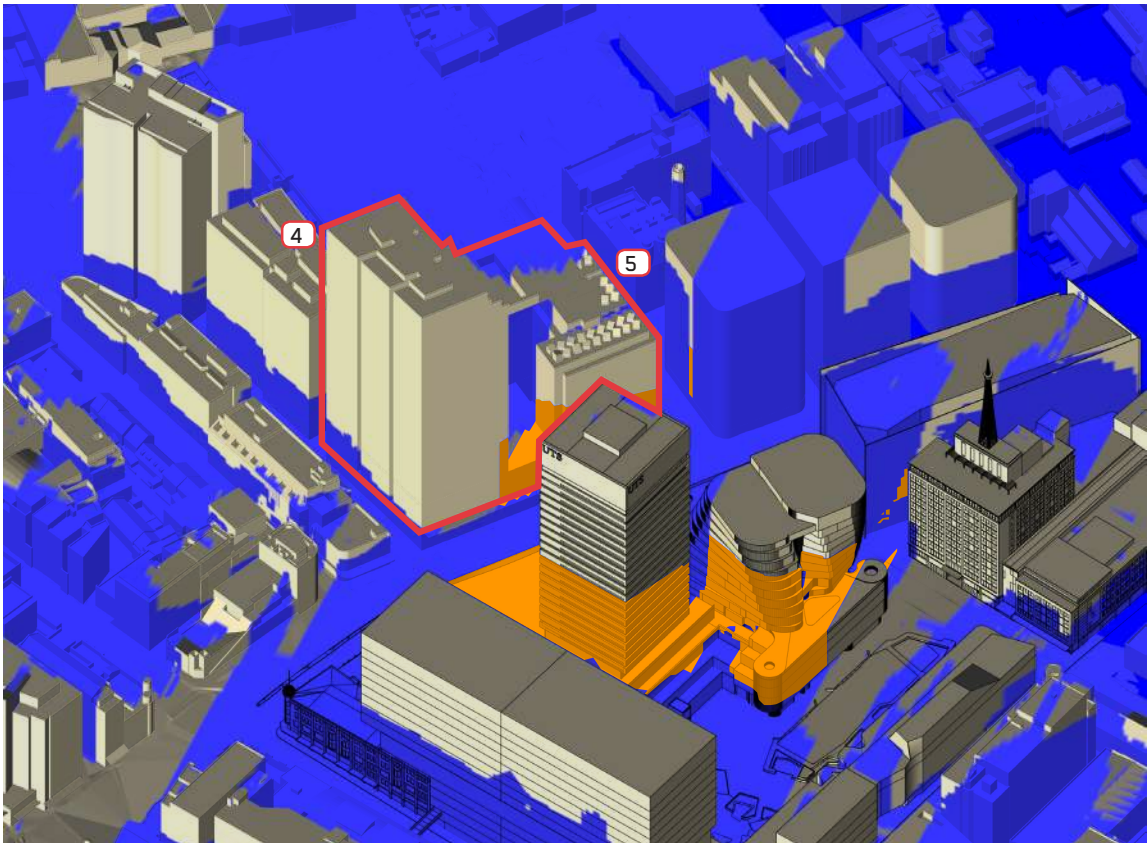


SHADOW ANALYSIS

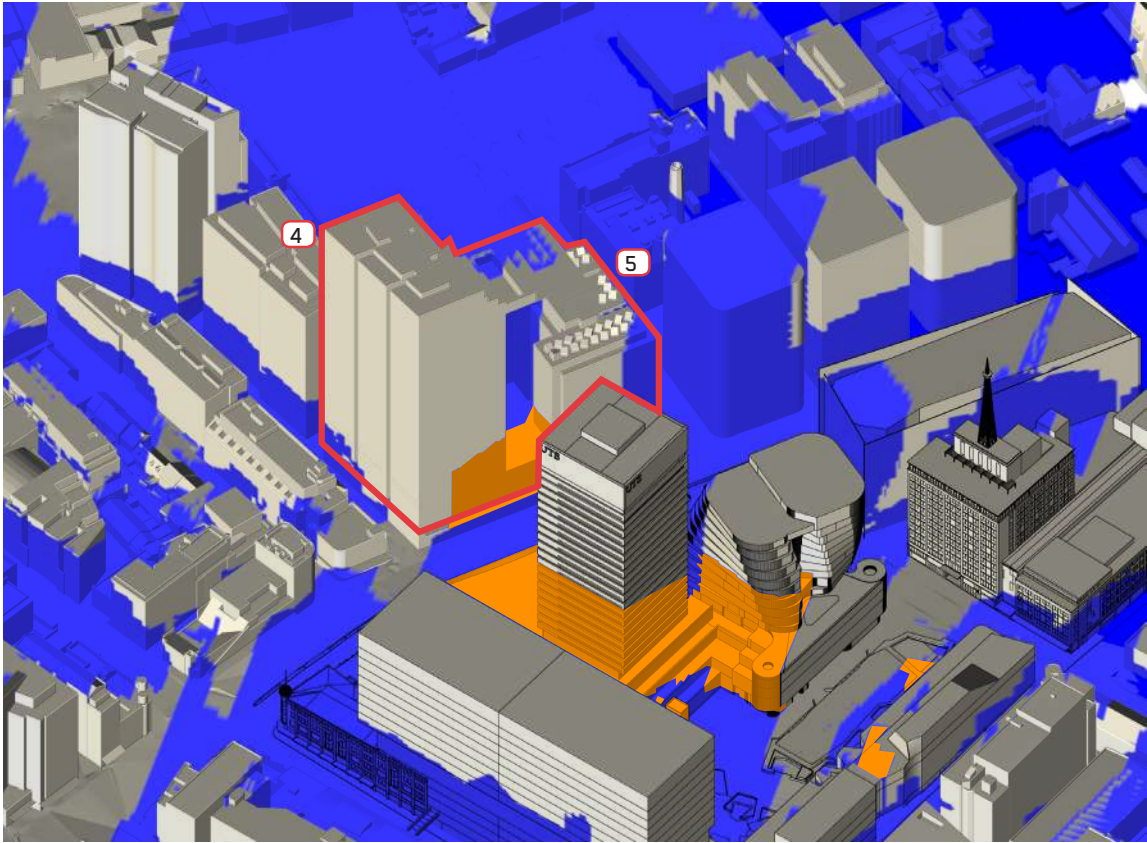
ONE CENTRAL PARK SHADOW ANALYSIS - PROPOSED CONTROL ENVELOPE - WINTER SOLSTICE - 21ST JUNE



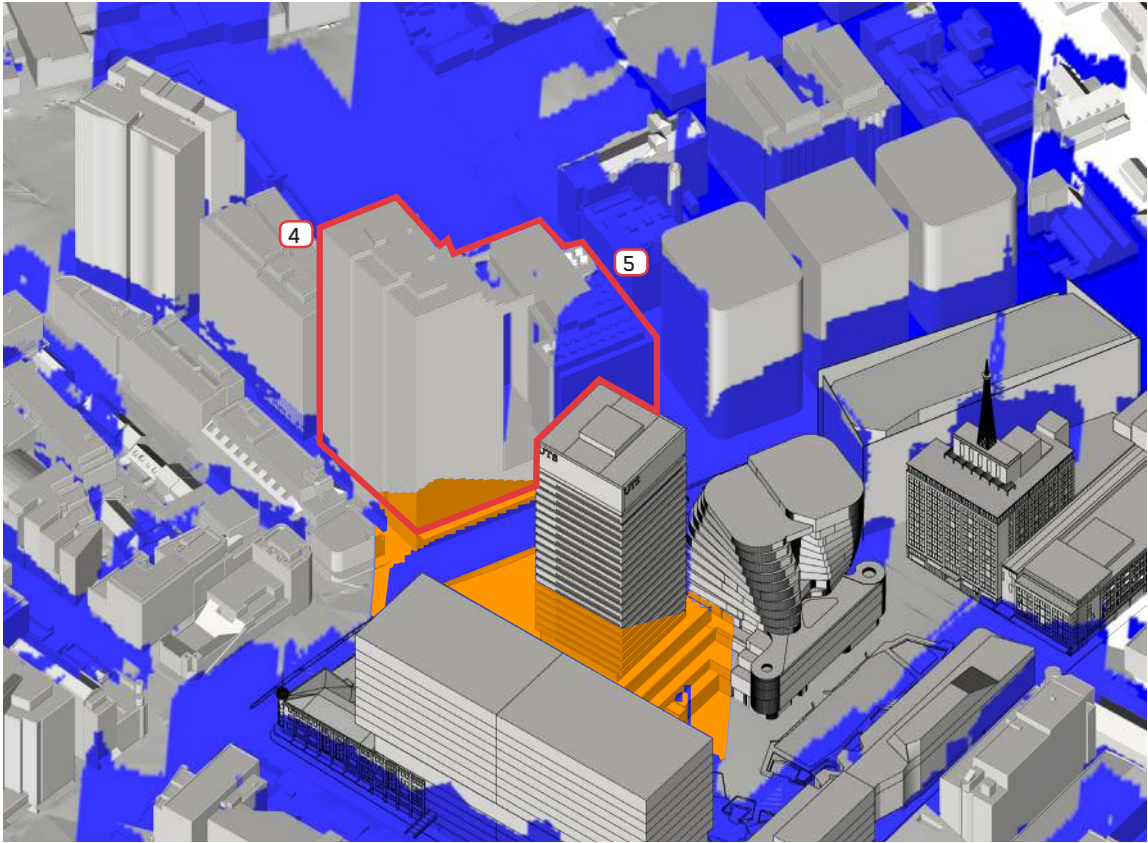
7:30 AM



8:30 AM



9:00 AM



10:00 AM

LEGEND:

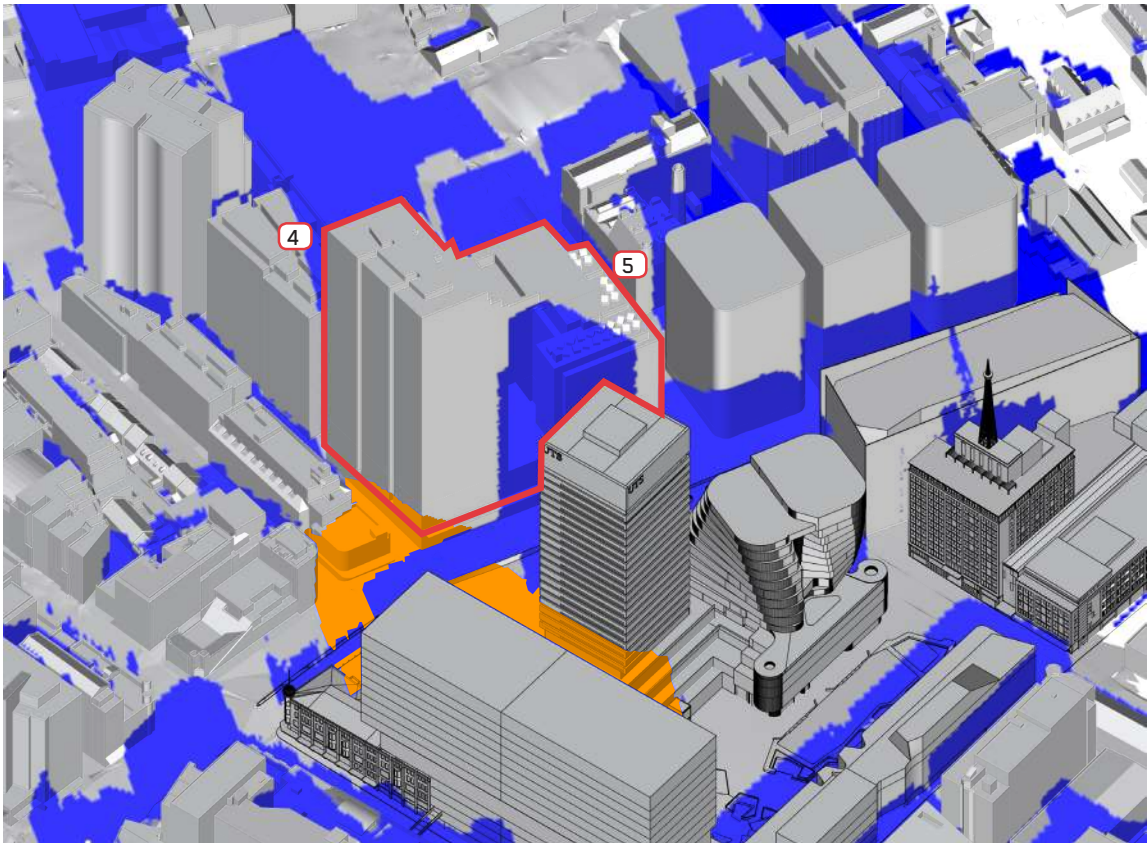
RESIDENTIAL BUILDINGS

- 4 BLOCK 1 CENTRAL PARK
- 5 BLOCK 2 CENTRAL PARK
- EXISTING SHADOW CAST
- ADDITIONAL SHADOW CAST BY PROPOSED CONTROL ENVELOPE

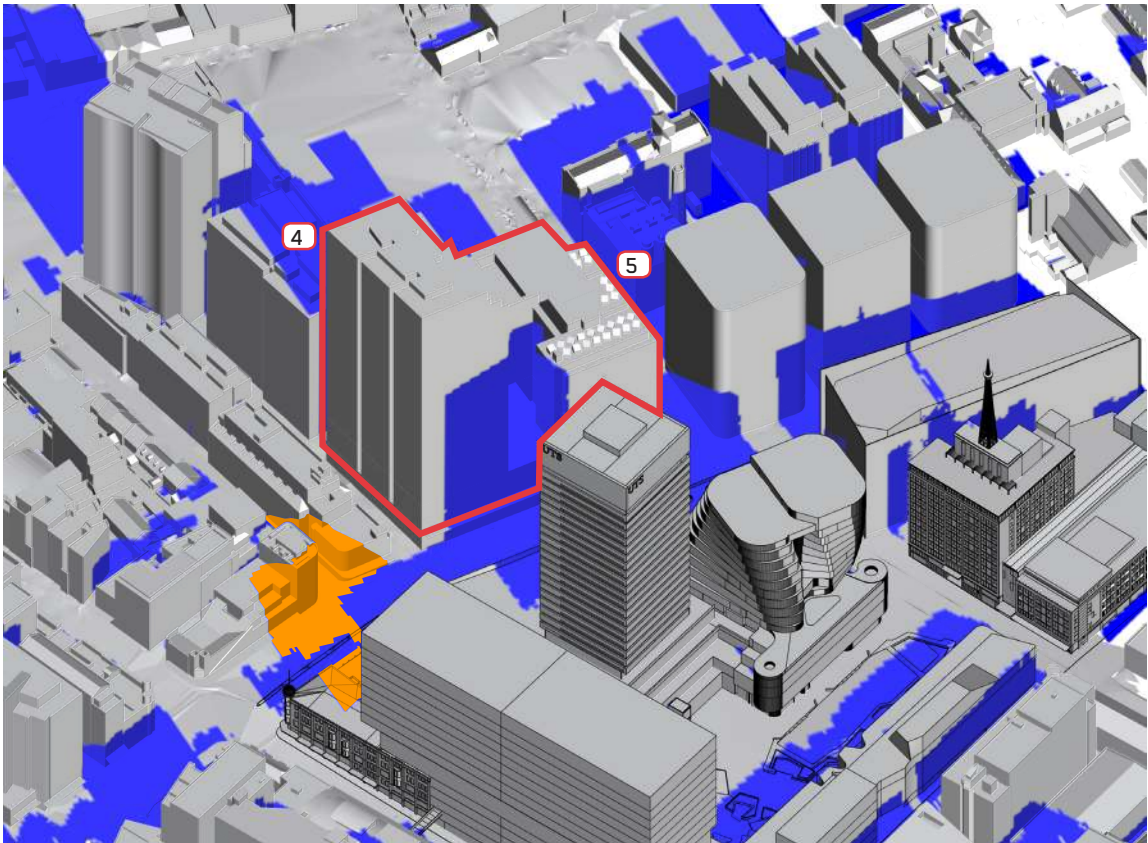
SHADOW ANALYSIS

ONE CENTRAL PARK SHADOW ANALYSIS - PROPOSED CONTROL ENVELOPE - WINTER SOLSTICE - 21ST JUNE

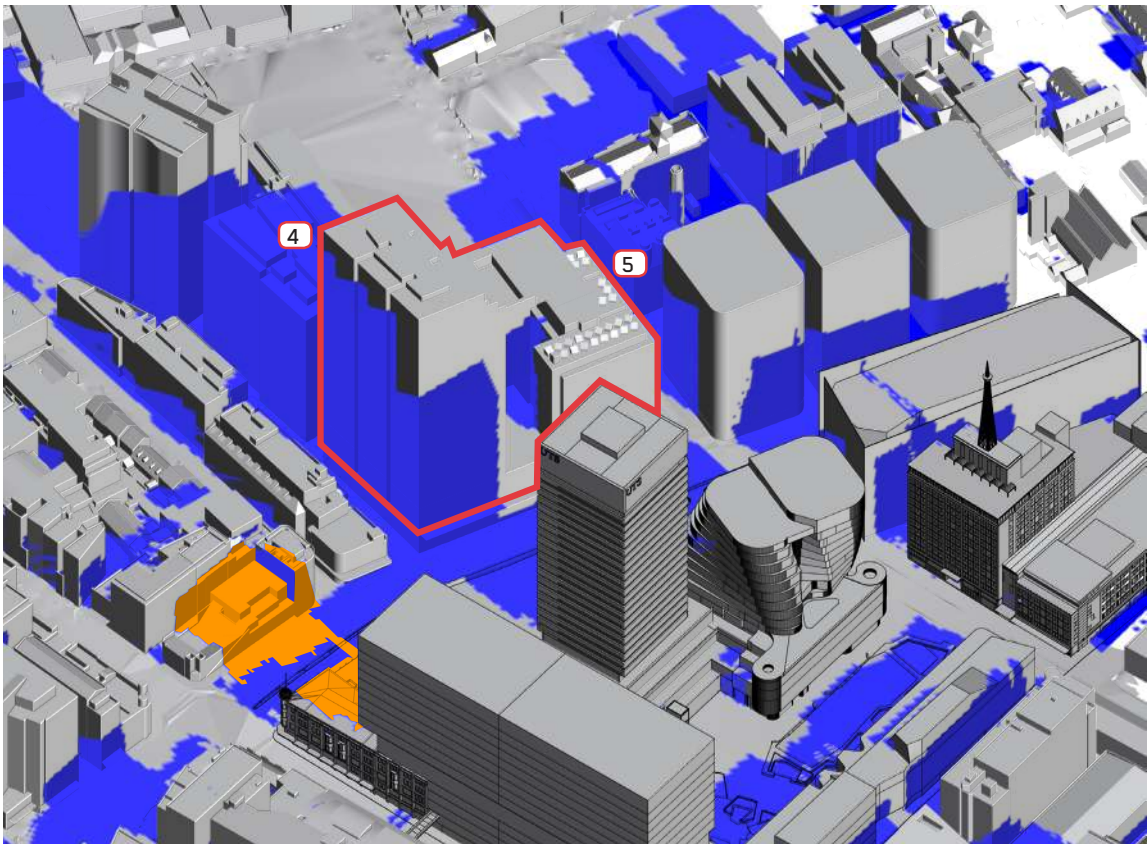
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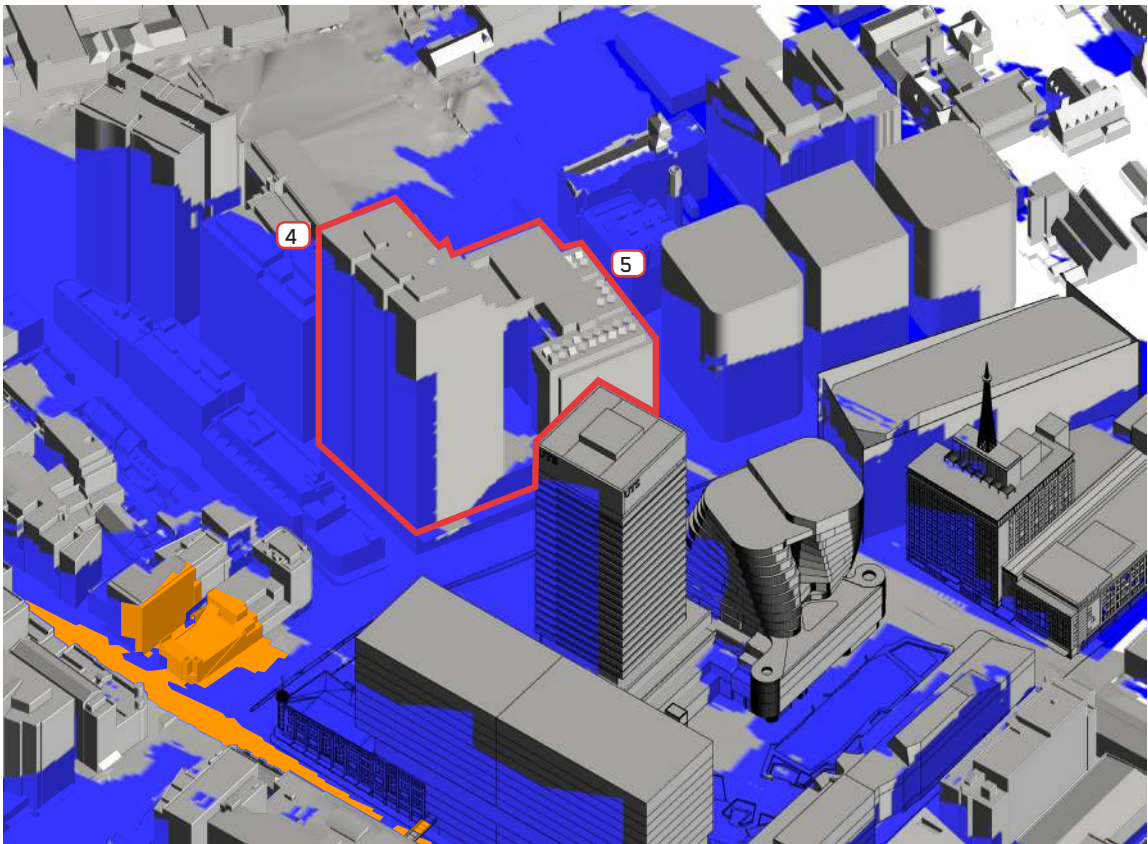
11:00 AM



12:00 PM



1:00 PM

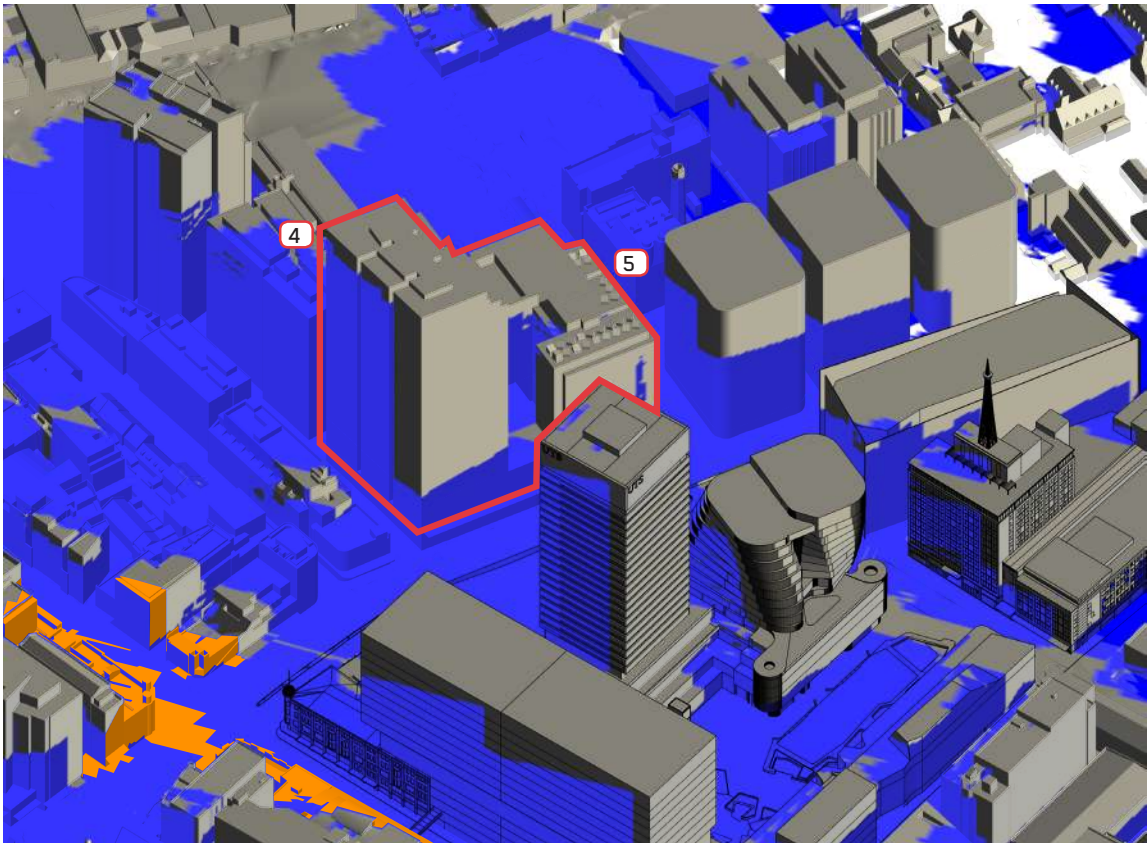


2:00 PM

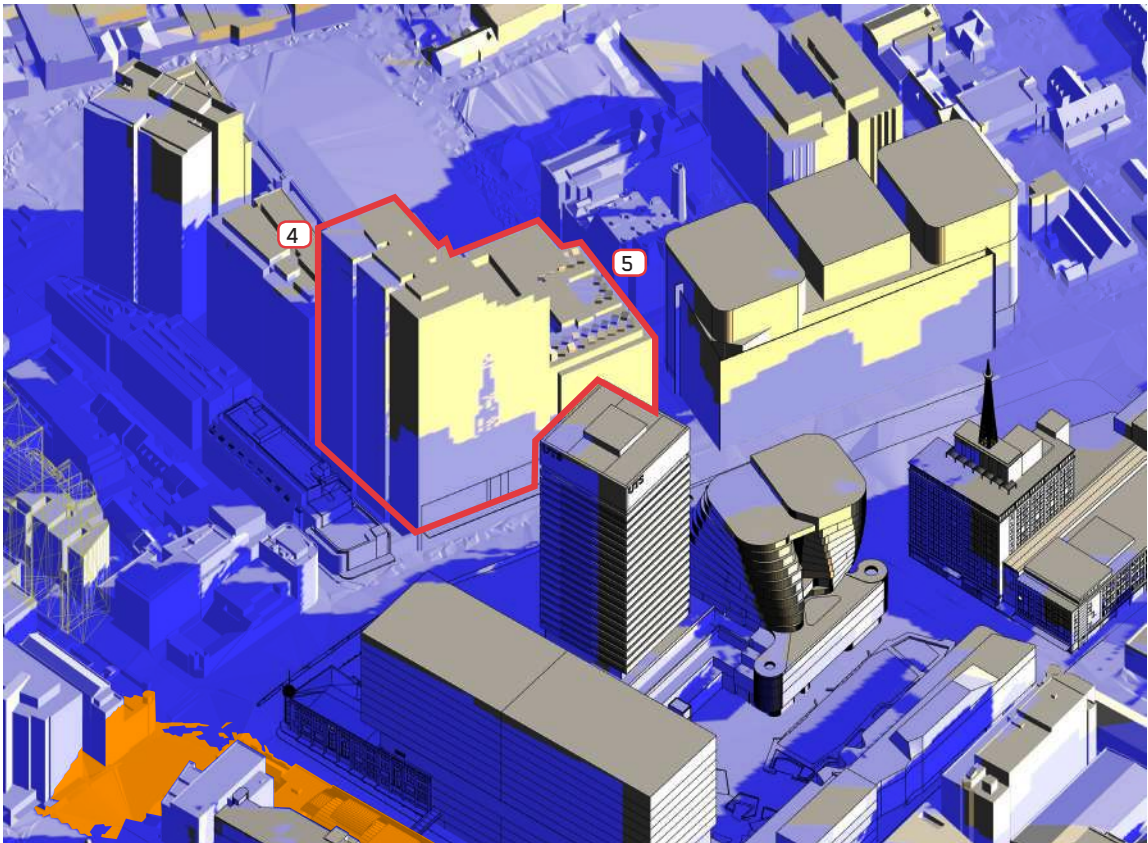
- LEGEND:
- RESIDENTIAL BUILDINGS
 - 4 BLOCK 1 CENTRAL PARK
 - 5 BLOCK 2 CENTRAL PARK
 - EXISTING SHADOW CAST
 - ADDITIONAL SHADOW CAST BY PROPOSED CONTROL ENVELOPE

SHADOW ANALYSIS

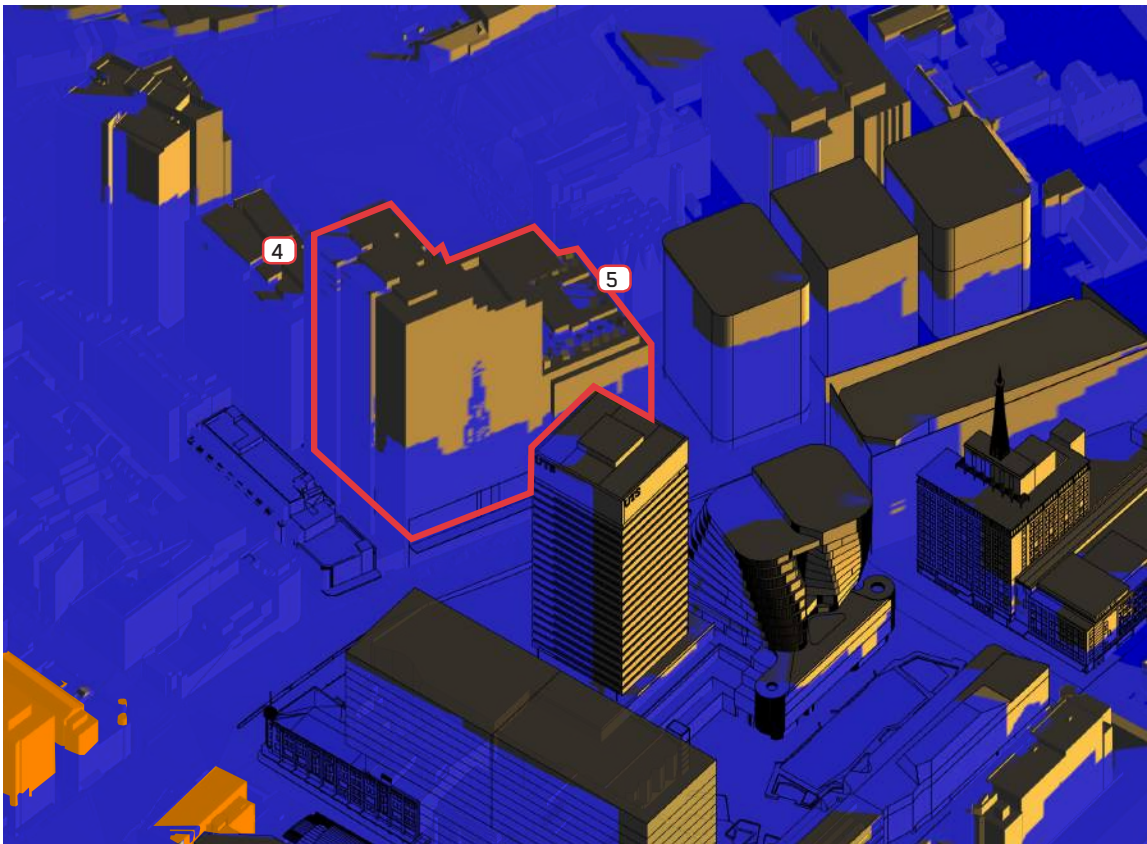
ONE CENTRAL PARK SHADOW ANALYSIS - PROPOSED CONTROL ENVELOPE - WINTER SOLSTICE - 21ST JUNE



3:00 PM



4:00 PM



4:30 PM

LEGEND:

RESIDENTIAL BUILDINGS

4 BLOCK 1 CENTRAL PARK

5 BLOCK 2 CENTRAL PARK

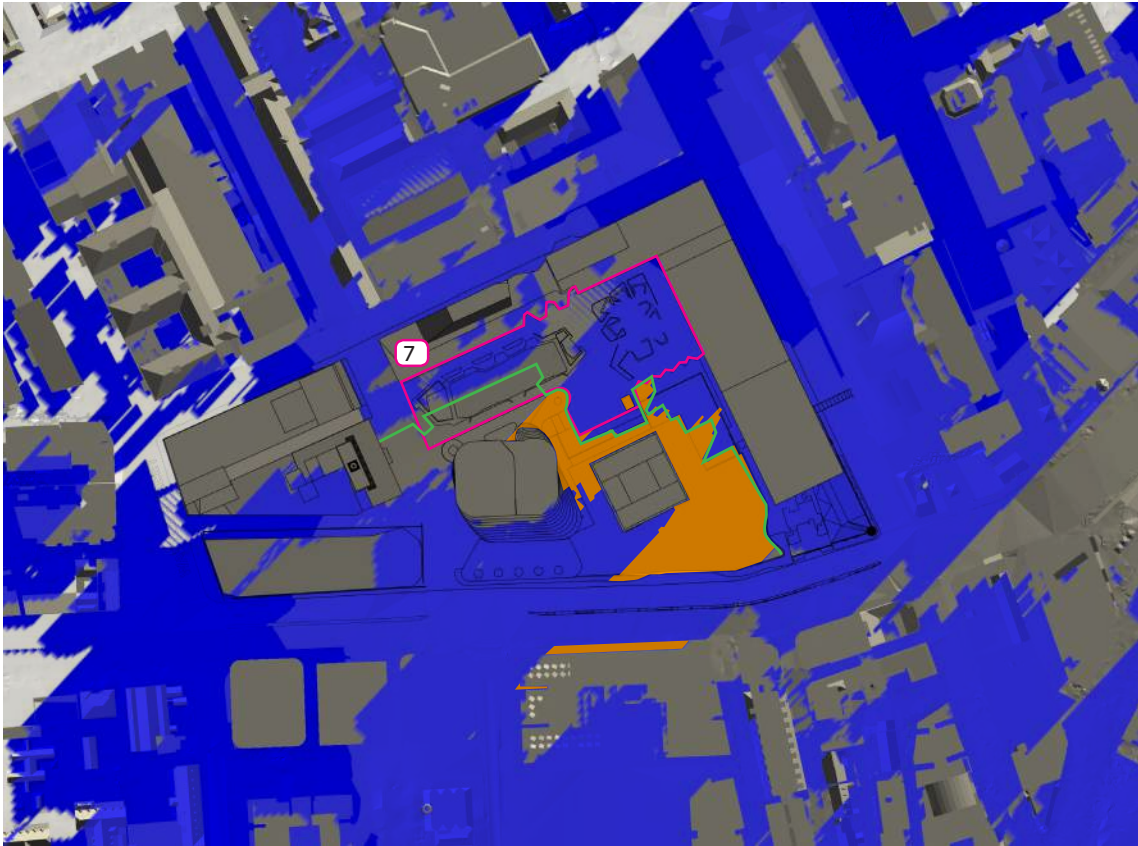
EXISTING SHADOW CAST

ADDITIONAL SHADOW CAST BY PROPOSED CONTROL ENVELOPE

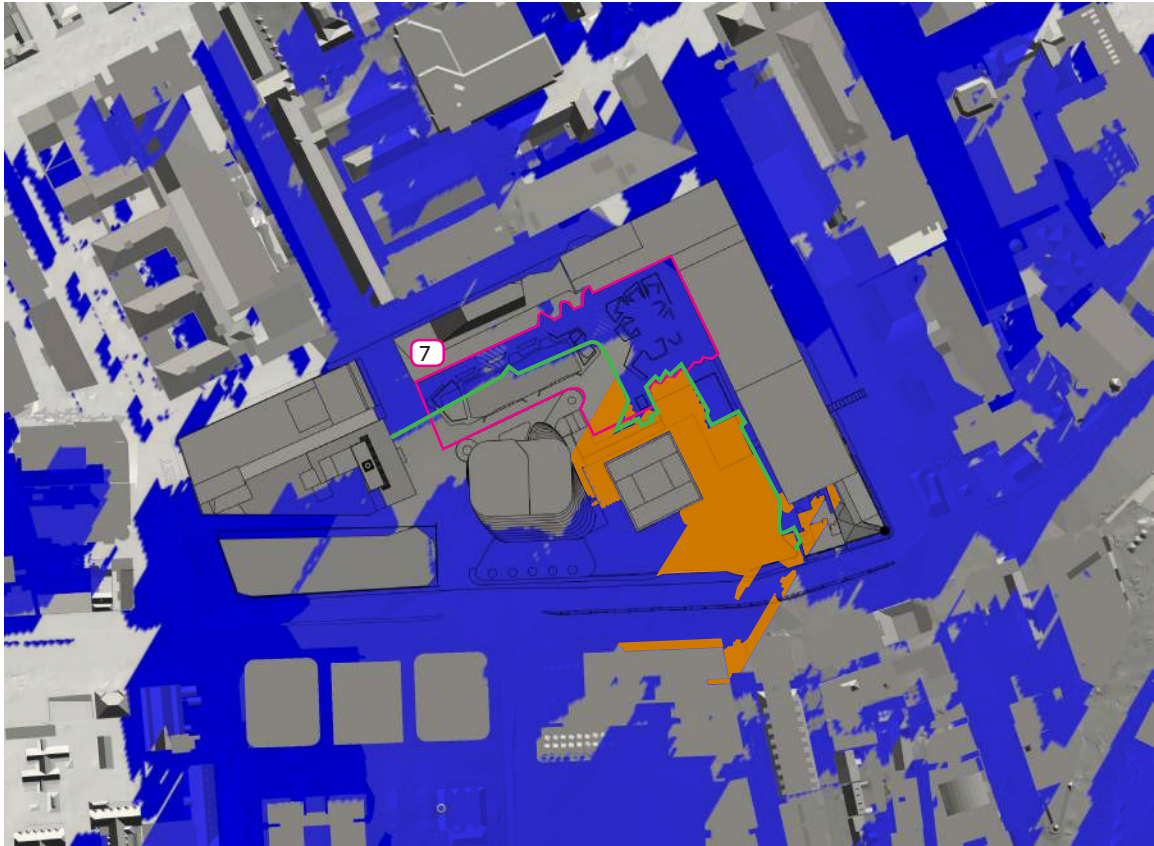
SHADOW ANALYSIS

ALUMNI GREEN - PROPOSED CONTROL ENVELOPE - WINTER SOLSTICE - 21ST JUNE

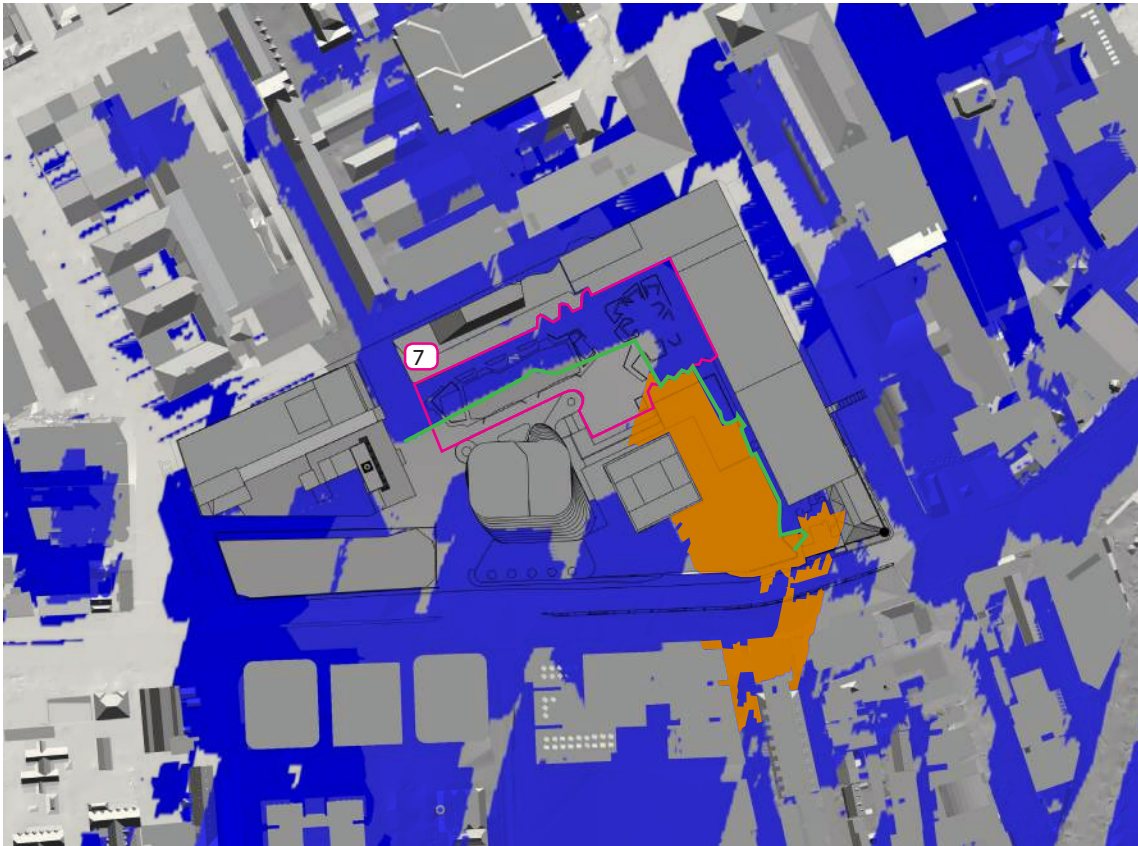
66



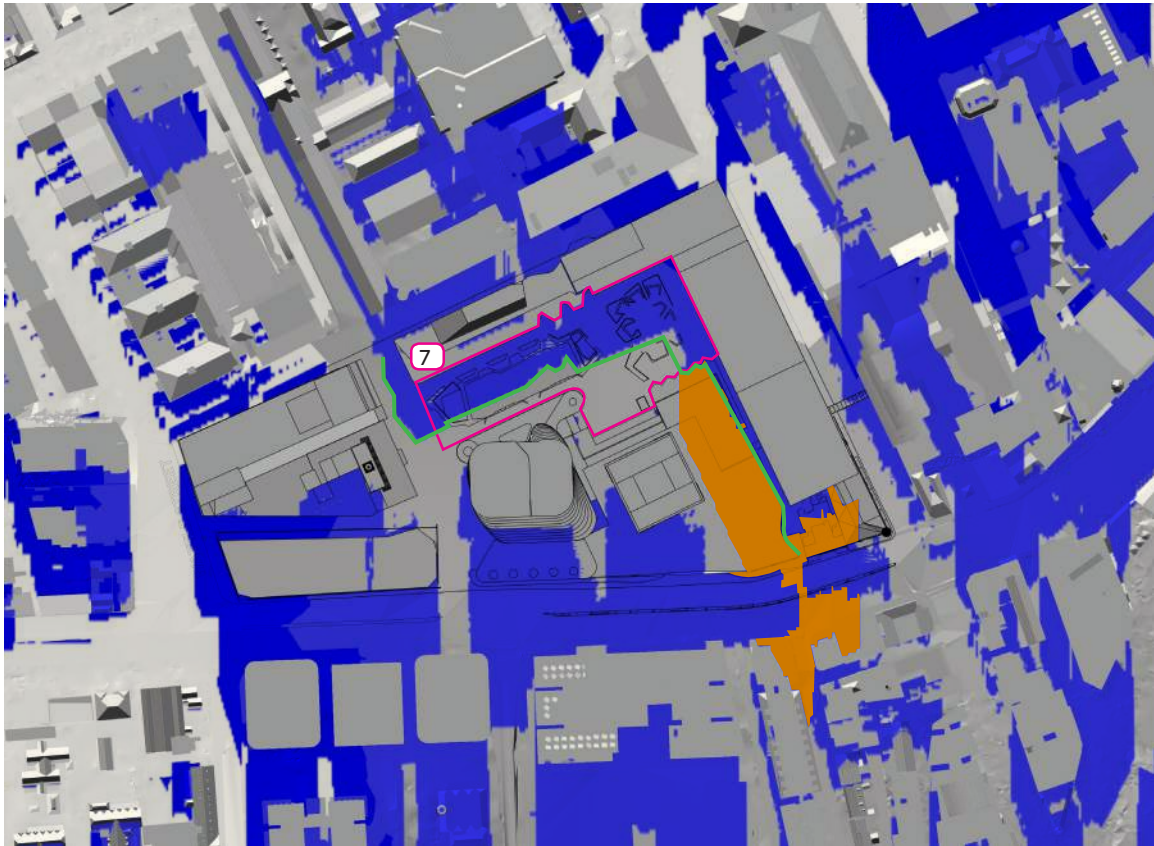
9:00 AM



10:00 AM



11:00 AM

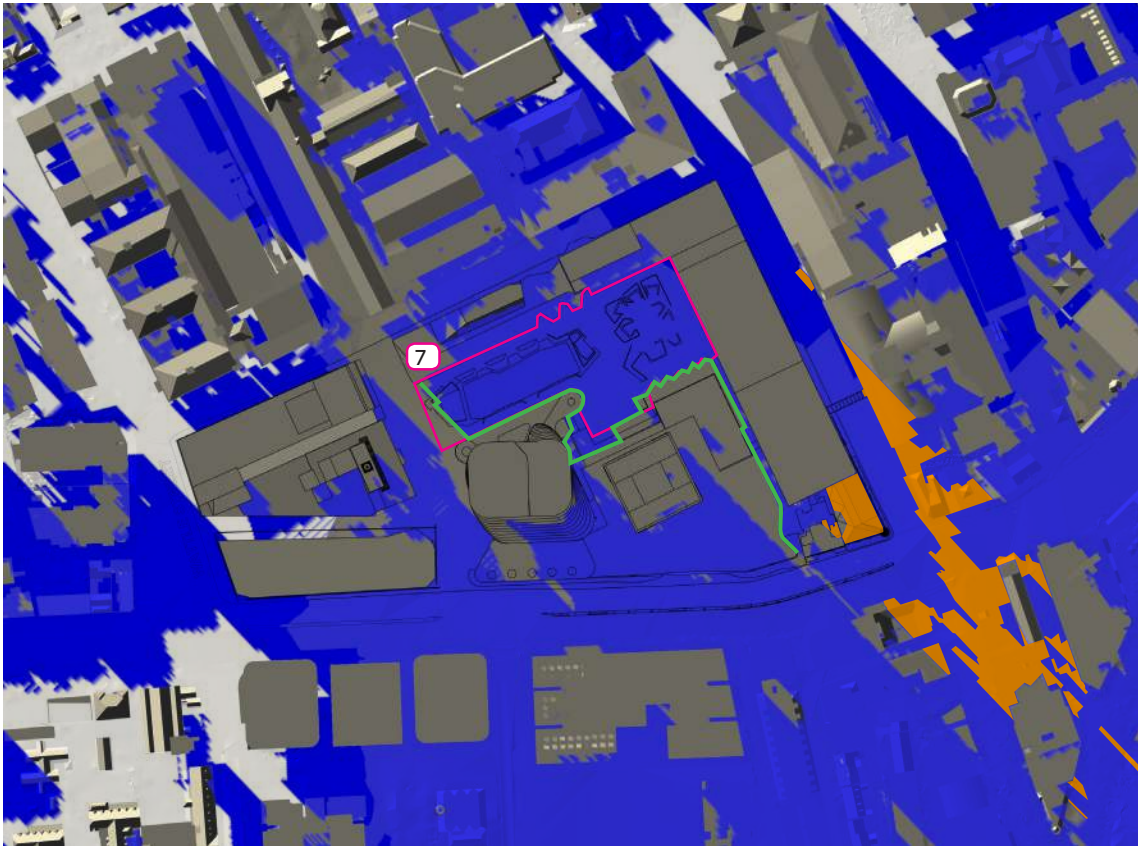
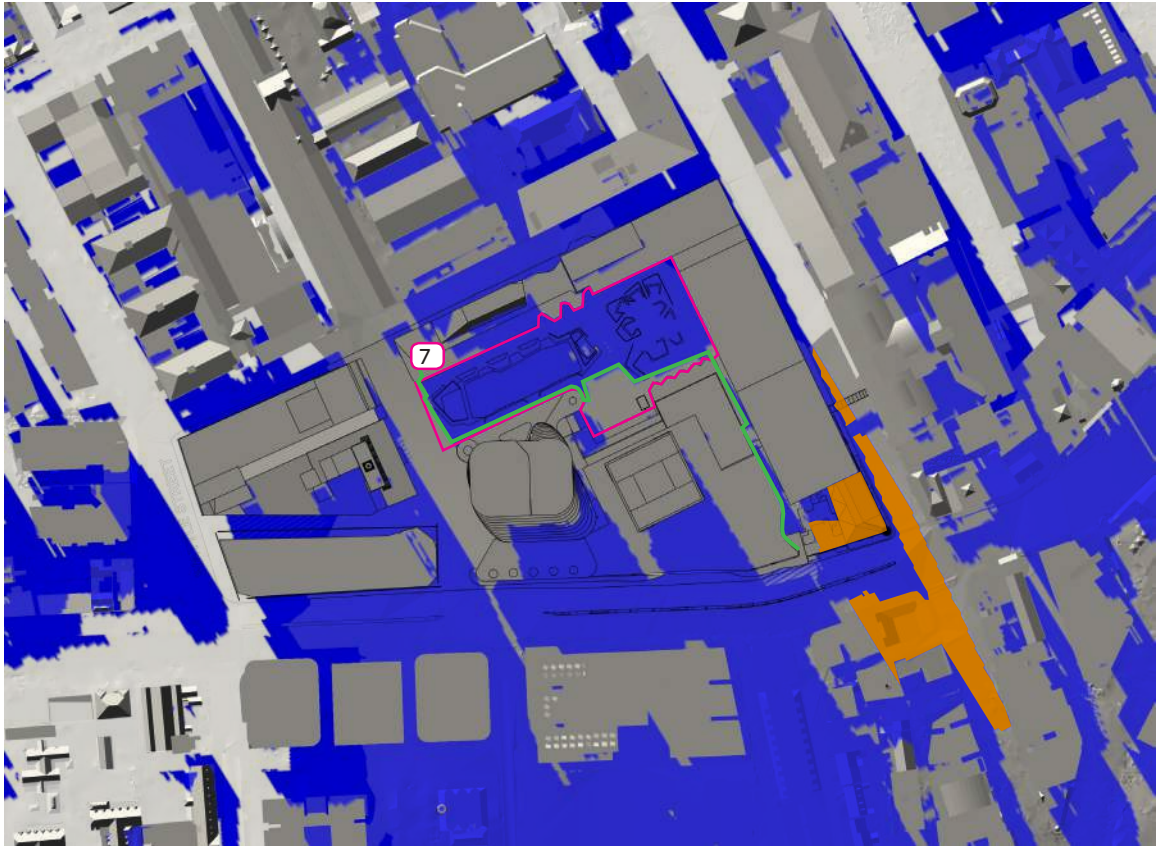
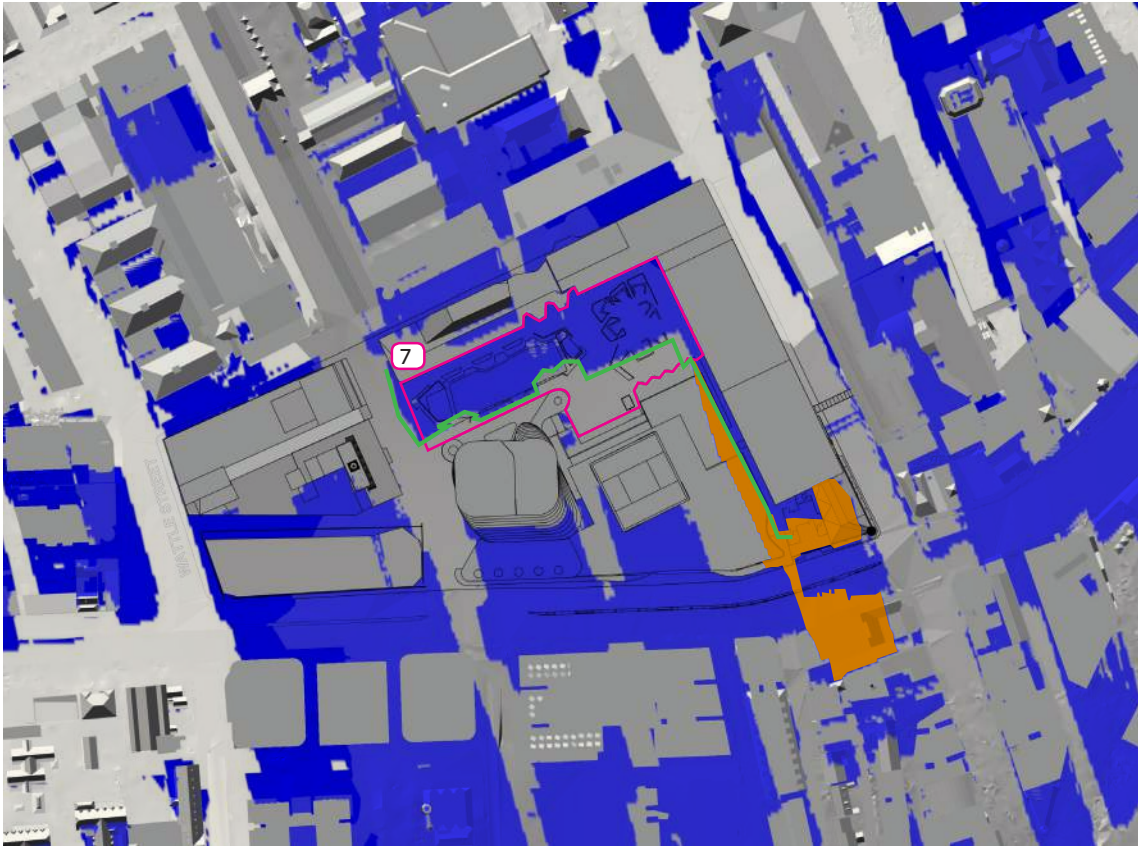


12:00 PM

- LEGEND:
- 7 ALUMNI GREEN
 - EXISTING SHADOW CAST
 - ADDITIONAL SHADOW CAST BY PROPOSED CONTROL ENVELOPE
 - EXISTING SHADOW LINE

SHADOW ANALYSIS

ALUMNI GREEN - PROPOSED CONTROL ENVELOPE - WINTER SOLSTICE - 21ST JUNE



- LEGEND:
- 7 ALUMNI GREEN
 - EXISTING SHADOW CAST
 - ADDITIONAL SHADOW CAST BY PROPOSED CONTROL ENVELOPE
 - EXISTING SHADOW LINE

