SUN / SHADOW STUDY

535 BRANT

Proposed Mixed-Use Development

535 - 551 Brant Street

City of Burlington

Prepared for:

Renimmob Properties Limited

Prepared by:

Ralph Bouwmeester, P. Eng.

RBA File: S20006

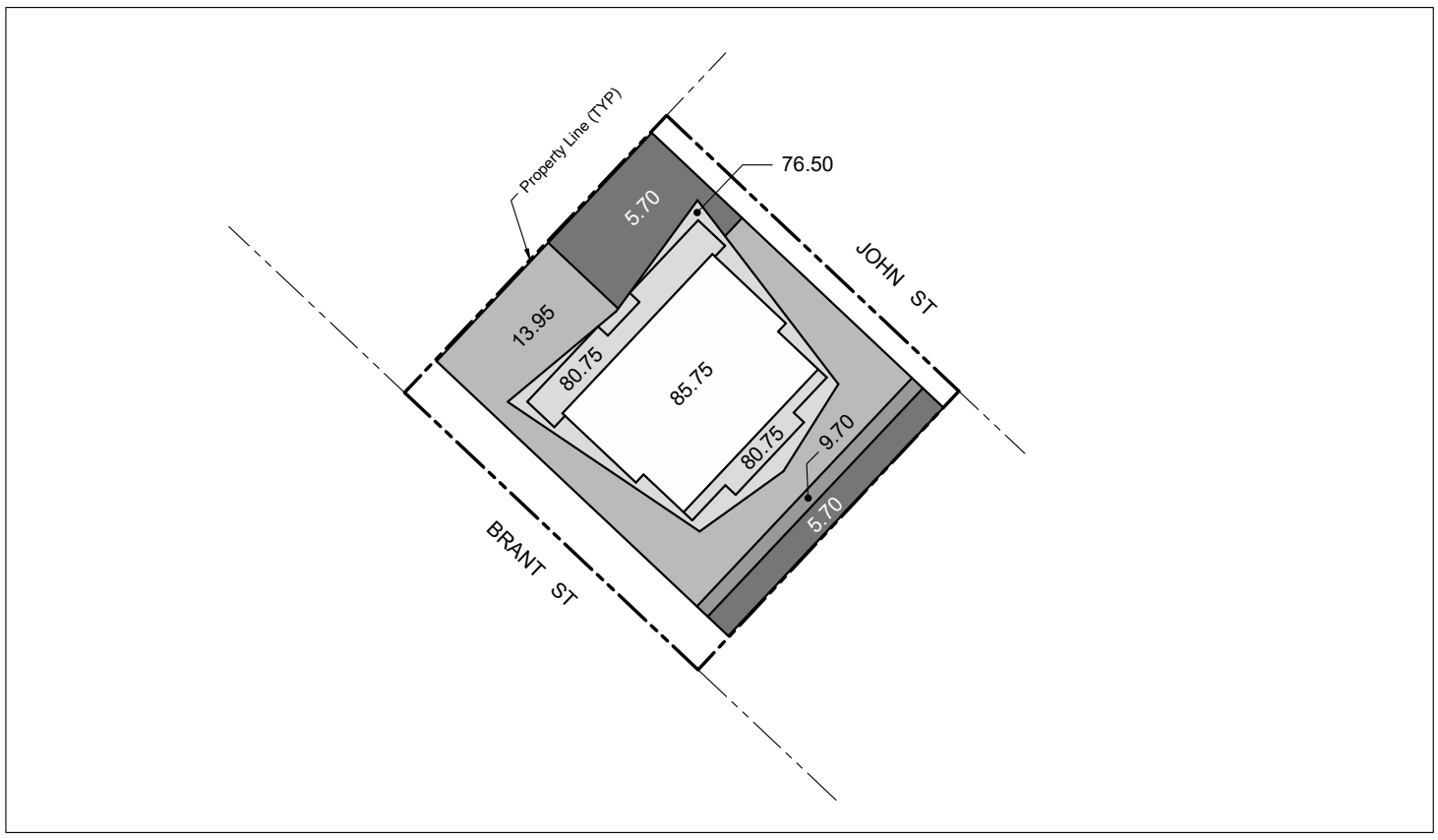
MARCH 2, 2021

R. BOUWMEESTER & ASSOCIATES
Sun & Shadow Position Specialists
165 Browning Trail, Barrie ON Tel/Fax (705) 726-3392
Web: www.sunposition.com Email: rba@sunposition.com

NOTES:

1. ROOF HEIGHTS INCLUDE PARAPETS, BALCONY SLABS, AND ROOF-TOP FEATURES, WHERE APPLICABLE.
2. ROOF HEIGHTS ARE SHOWN IN METRES ABOVE FINISHED GRADE AT SUBJECT SITE. (FFE = FIN GRADE + 0.2m)
3. SHADOWS ARE SHOWN ON ASSUMED FLAT GROUND PLANE.
4. ROOF HEIGHTS DERIVED FROM ARCHITECTURAL PLANS AND MODELS BY TURNER FLEISCHER ARCHITECTS INC.

True North



PROPOSED

GEOGRAPHIC SITE LOCATION:
LATITUDE: 43° 19' 43" N
LONGITUDE: 79° 48' 06" W

TIME ZONE:
EASTERN
- STANDARD TIME (EST) (UT - 5 hrs)
- DAYLIGHT TIME (EDT) (UT - 4 hrs)

0 5 25 50
SCALE 1 : 1000

ROOF HEIGHTS
SUN / SHADOW STUDY
Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: RH-1
Drawn by:	RB	Scale:	1 : 1000	
Checked by:	RB	Date:	MAR 2/21	



MAR 21

9:00 AM

Site Boundary

Net New Shadows cast on roof surfaces

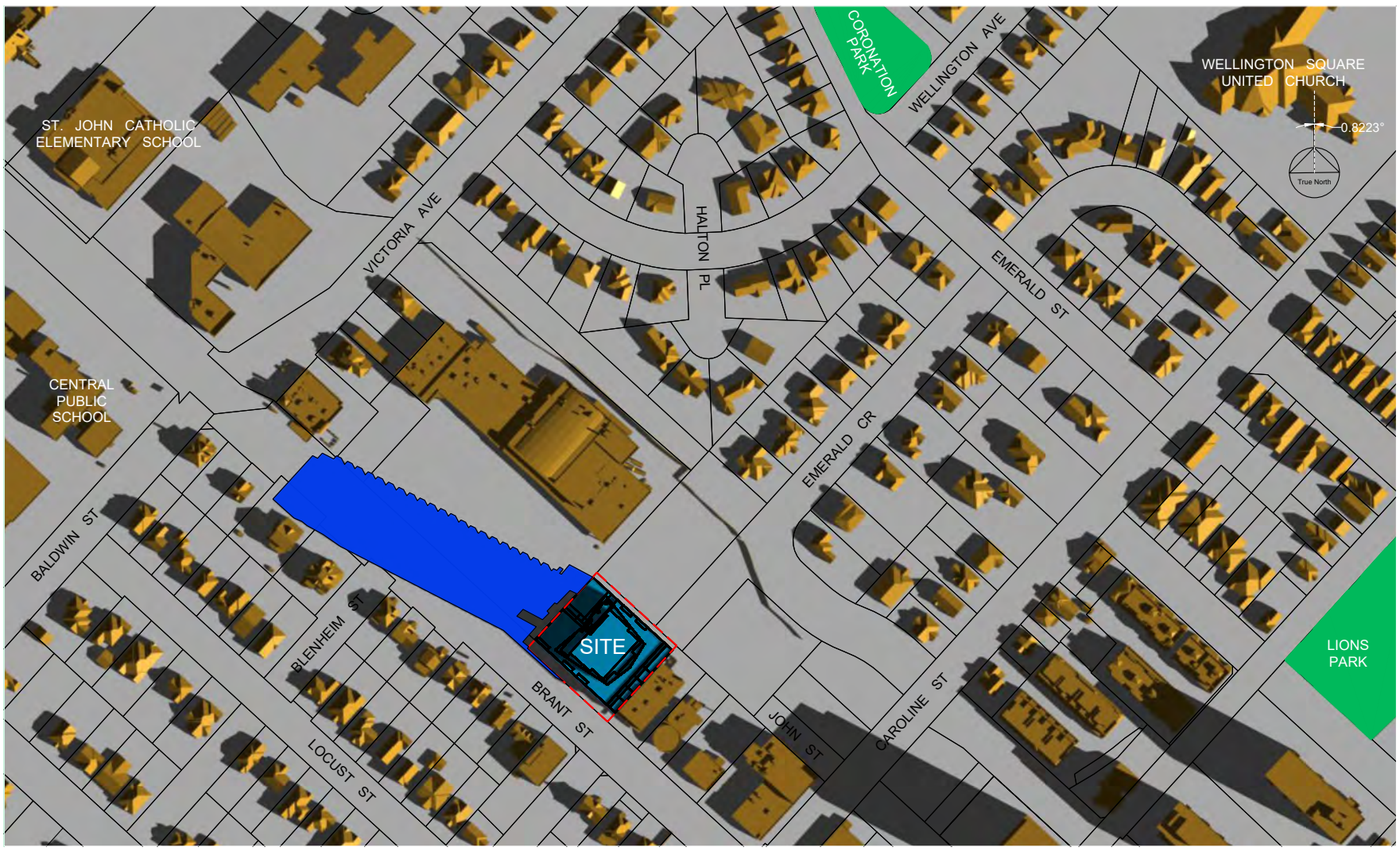
Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



MAR 21

10:00 AM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

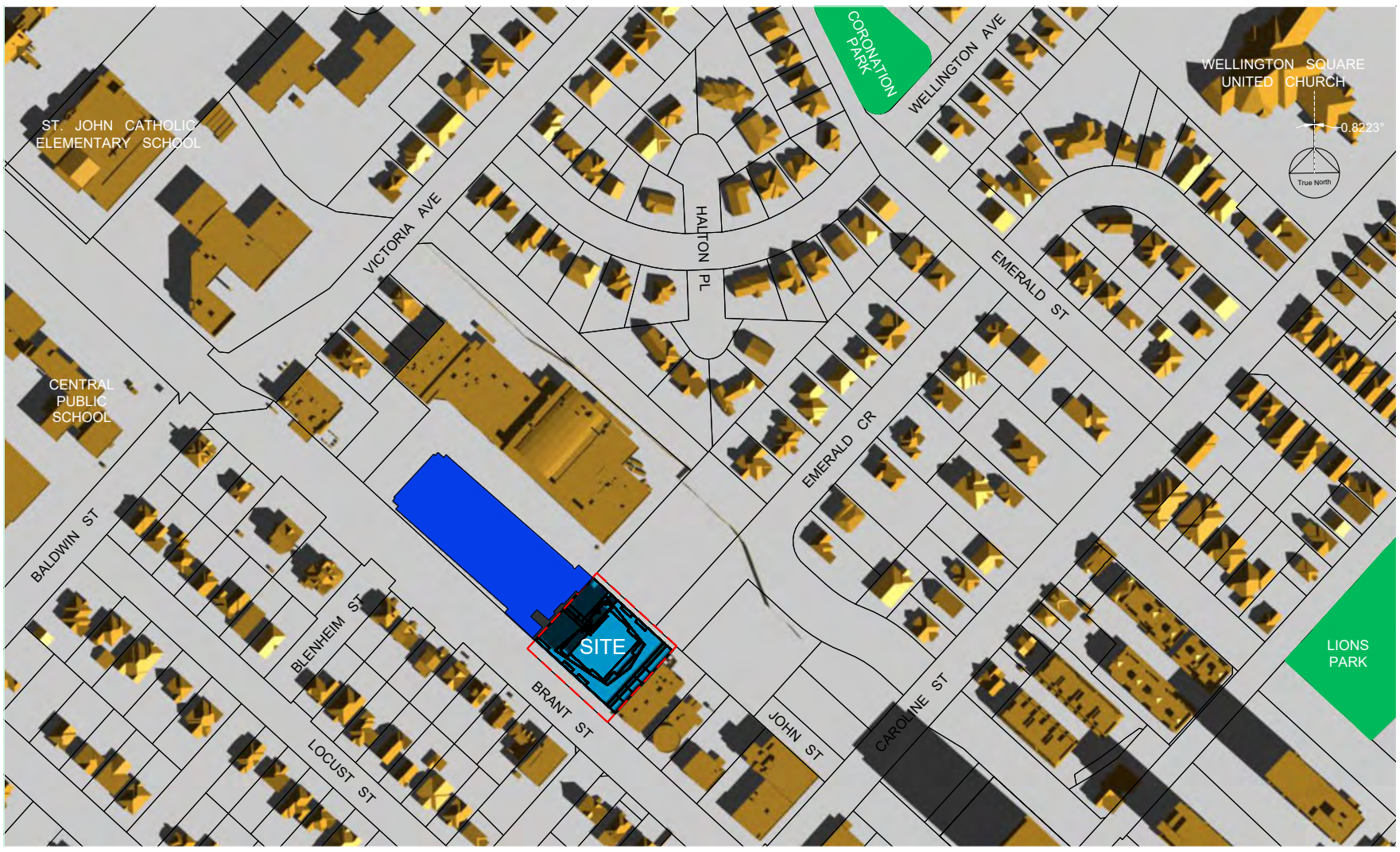
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Calculated by:	RB	Project:	S20006	Drawing No.: SS-01
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



MAR 21

11:00 AM

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



MAR 21

12:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-02
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



MAR 21

1:00 PM

ALL TIMES IN EDT

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

0 20 100 200

SCALE 1 : 3000



MAR 21

2:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-03
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



MAR 21

3:00 PM

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



MAR 21

4:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-04
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



MAR 21

5:00 PM

Site Boundary

Net New Shadows cast on roof surfaces

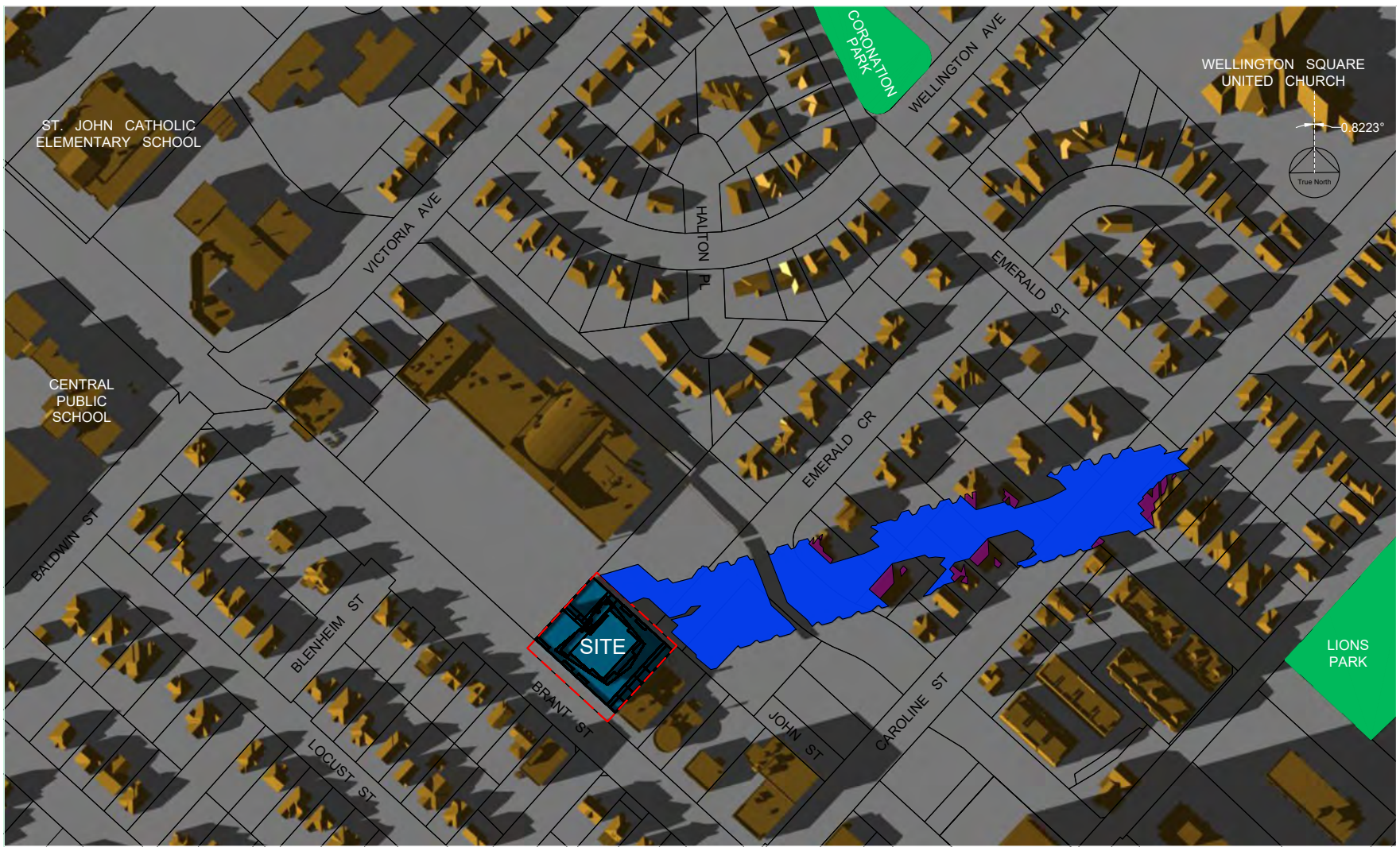
Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



MAR 21

6:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

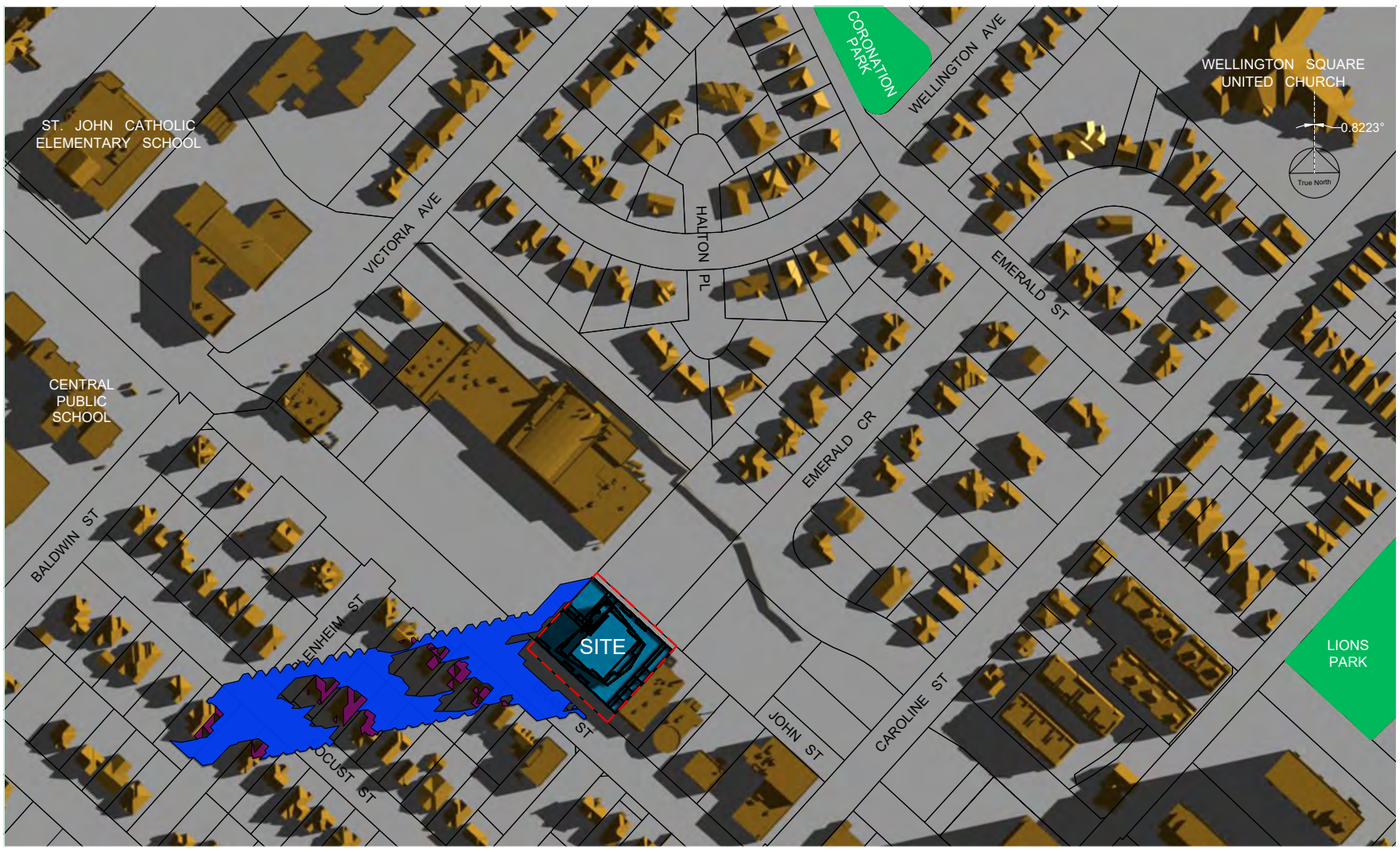
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Calculated by:	RB	Project:	S20006	Drawing No.: SS-05
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



JUN 21

8:00 AM

Site Boundary

Net New Shadows cast on roof surfaces

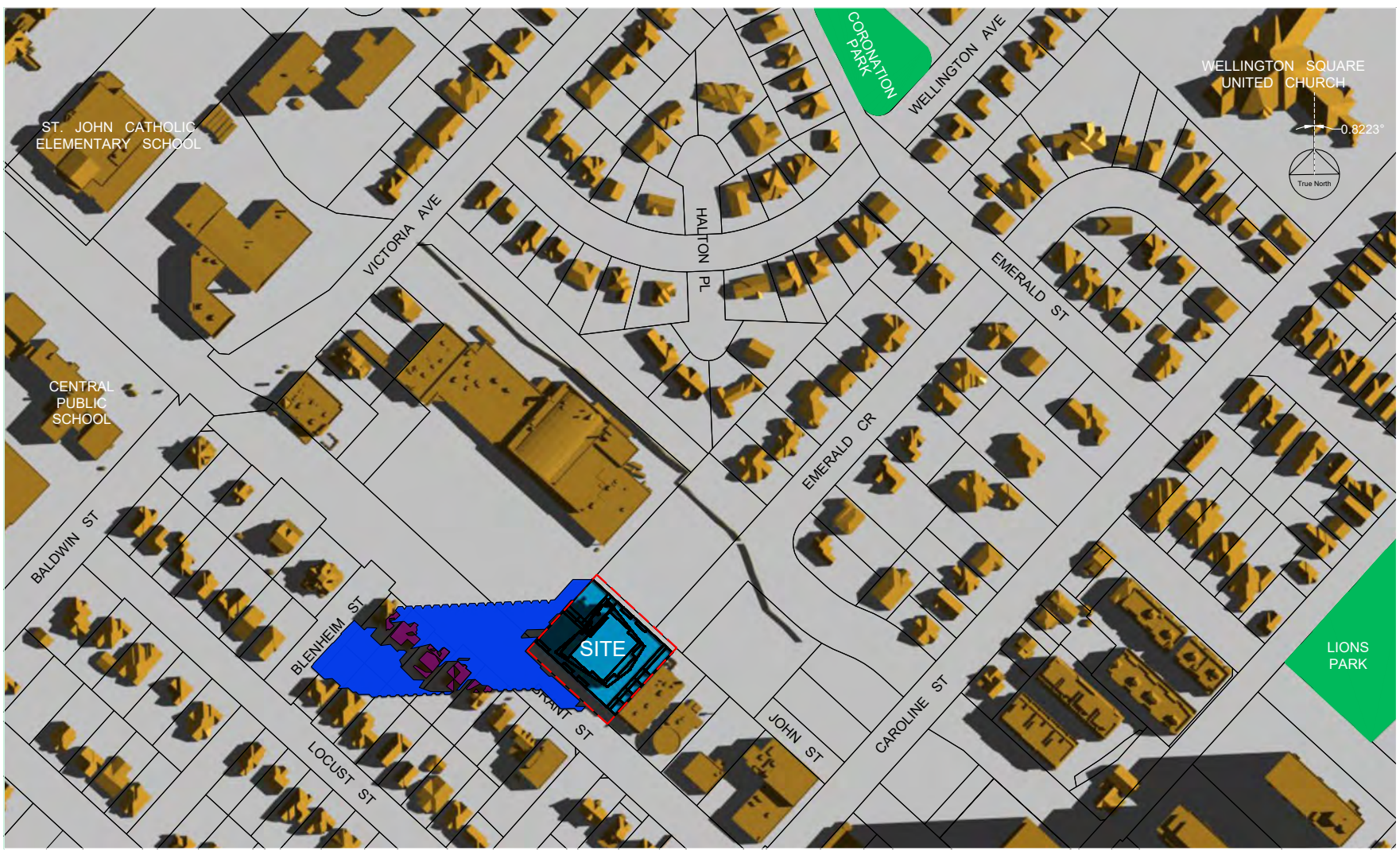
Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



JUN 21

9:00 AM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-06
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



JUN 21

10:00 AM

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



JUN 21

11:00 AM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

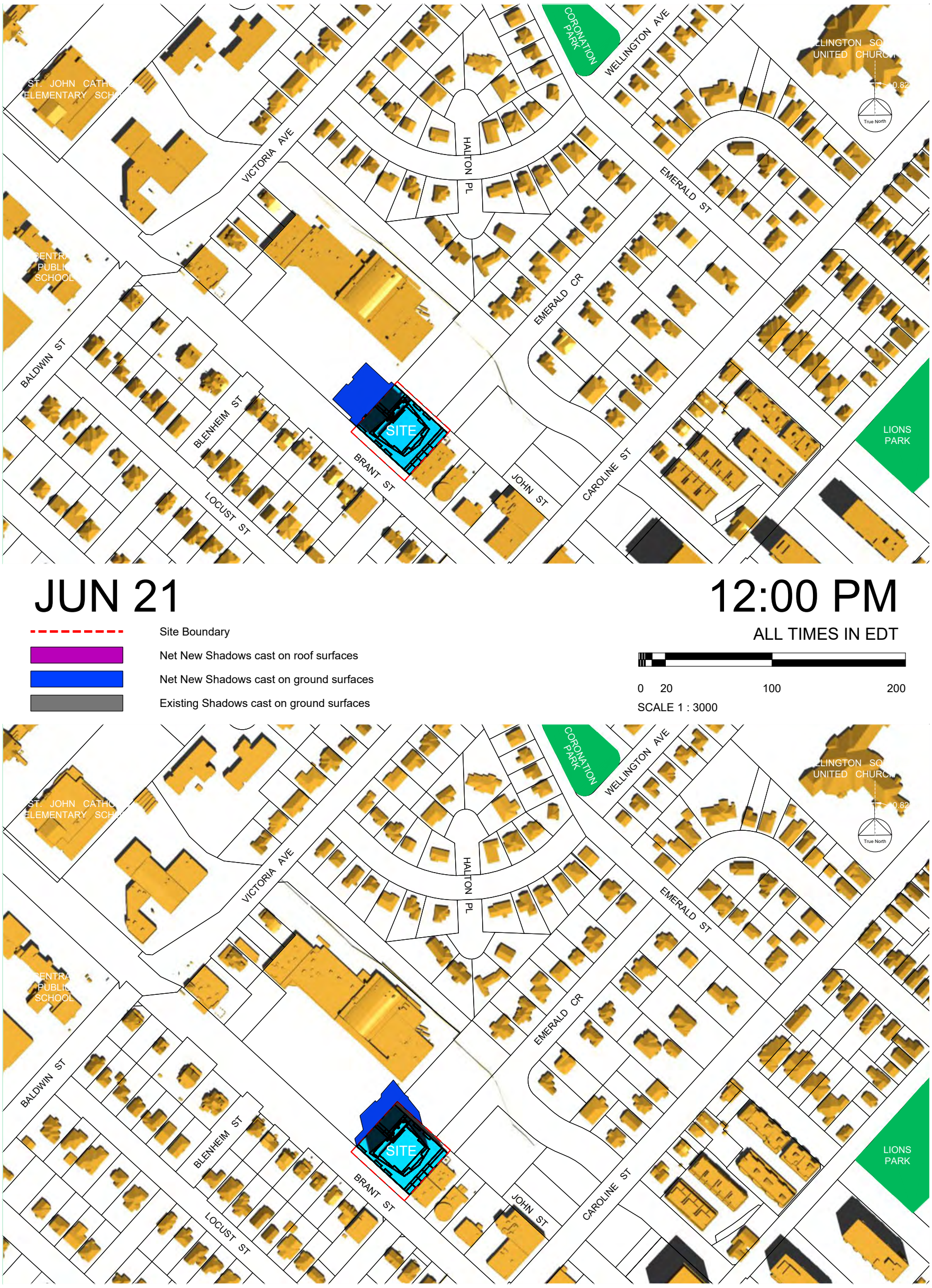
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City of Burlington

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-07
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



JUN 21

12:00 PM

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000

JUN 21

1:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

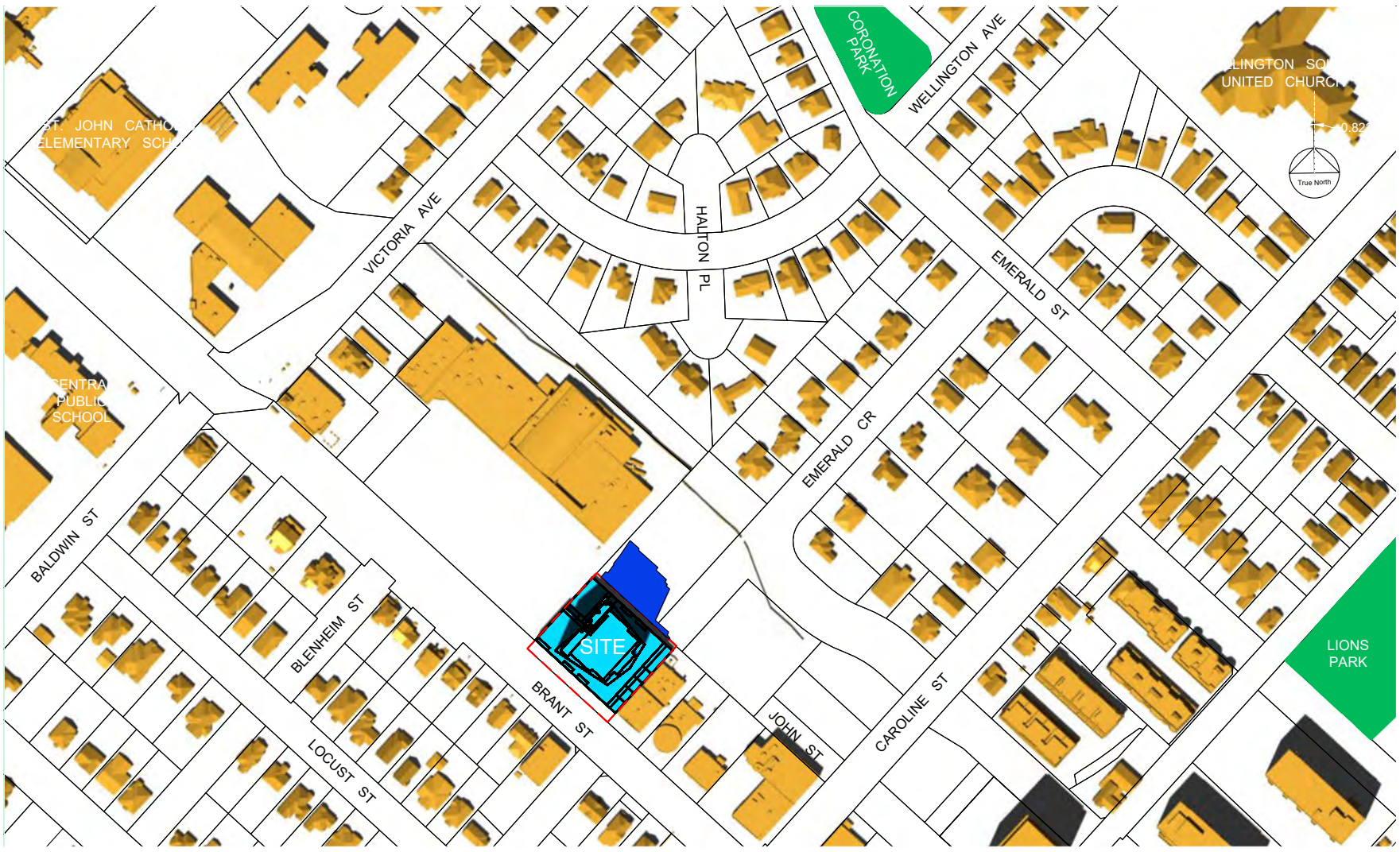
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Calculated by:	RB	Project:	S20006	Drawing No.: SS-08
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



JUN 21

2:00 PM

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



JUN 21

3:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

535 Brant

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-09
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



JUN 21

4:00 PM

ALL TIMES IN EDT

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

0 20 100 200

SCALE 1 : 3000



JUN 21

5:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-10
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



JUN 21

6:00 PM

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



JUN 21

7:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-11
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



SEP 21

9:00 AM

Site Boundary

Net New Shadows cast on roof surfaces

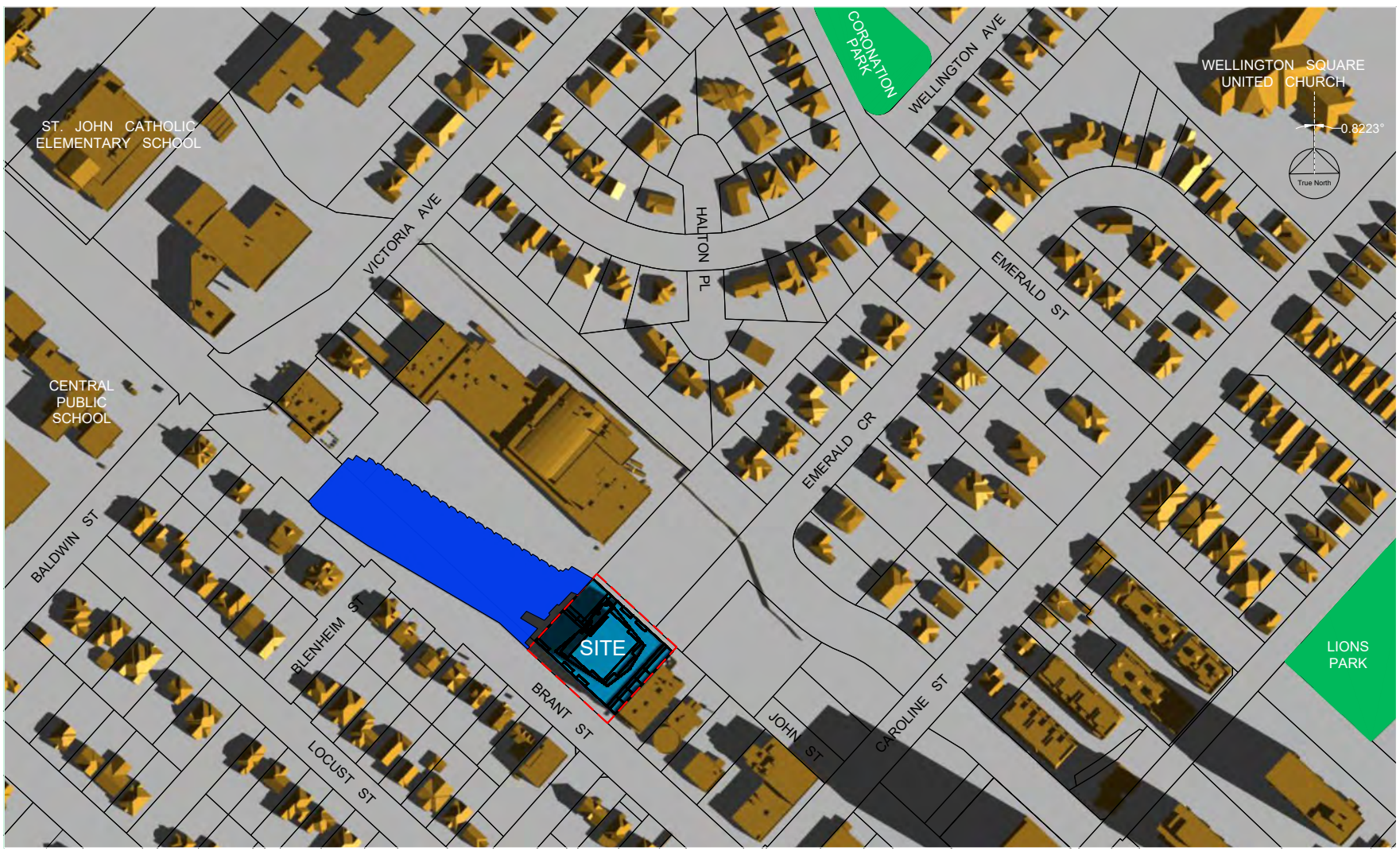
Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



SEP 21

10:00 AM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-12
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



SEP 21

11:00 AM

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



SEP 21

12:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-13
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



SEP 21

1:00 PM

ALL TIMES IN EDT

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

0 20 100 200

SCALE 1 : 3000



SEP 21

2:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-14
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



SEP 21

3:00 PM

ALL TIMES IN EDT

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

0 20 100 200

SCALE 1 : 3000



SEP 21

4:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.: SS-15
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



SEP 21

5:00 PM

Site Boundary

Net New Shadows cast on roof surfaces

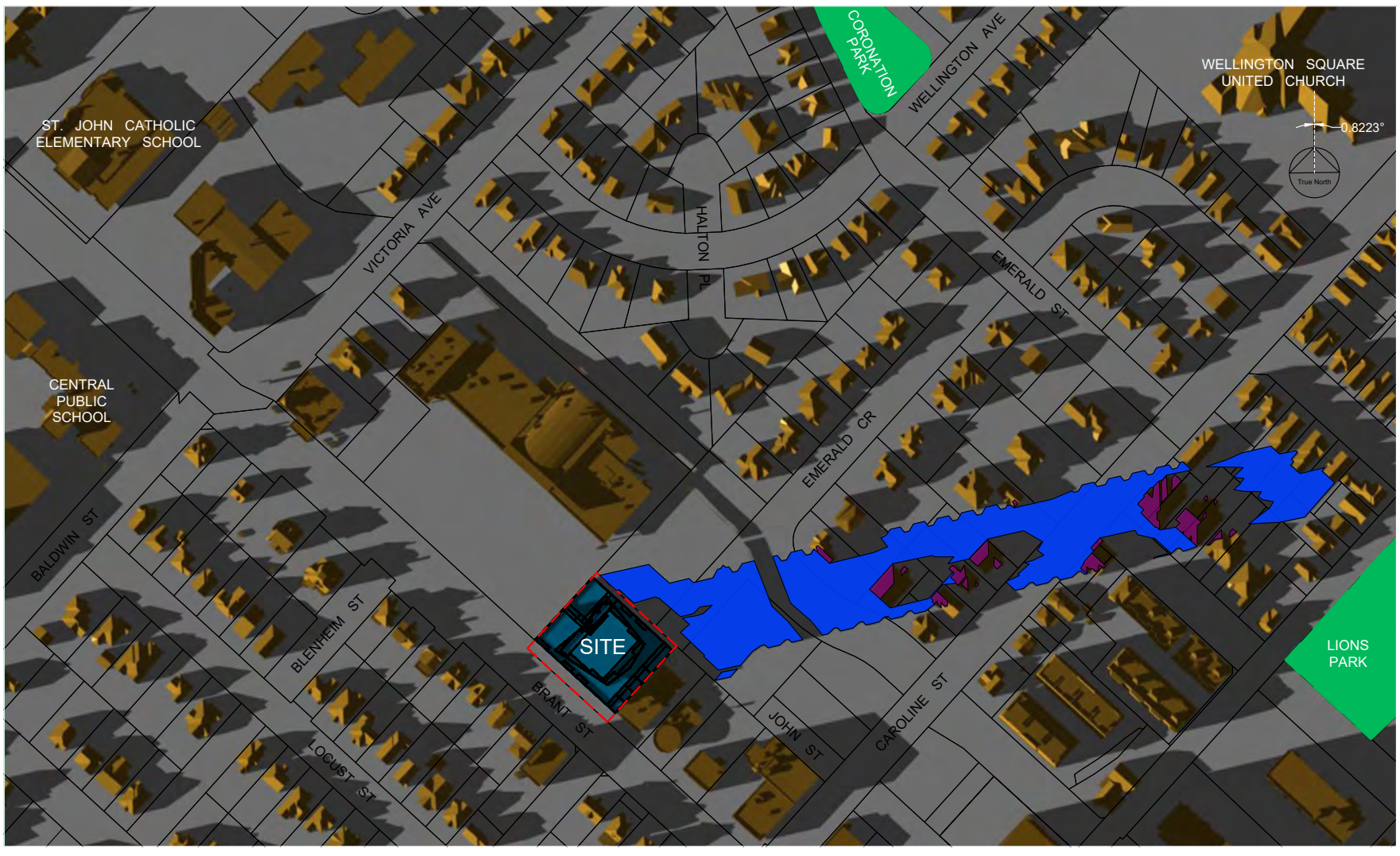
Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



SEP 21

6:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

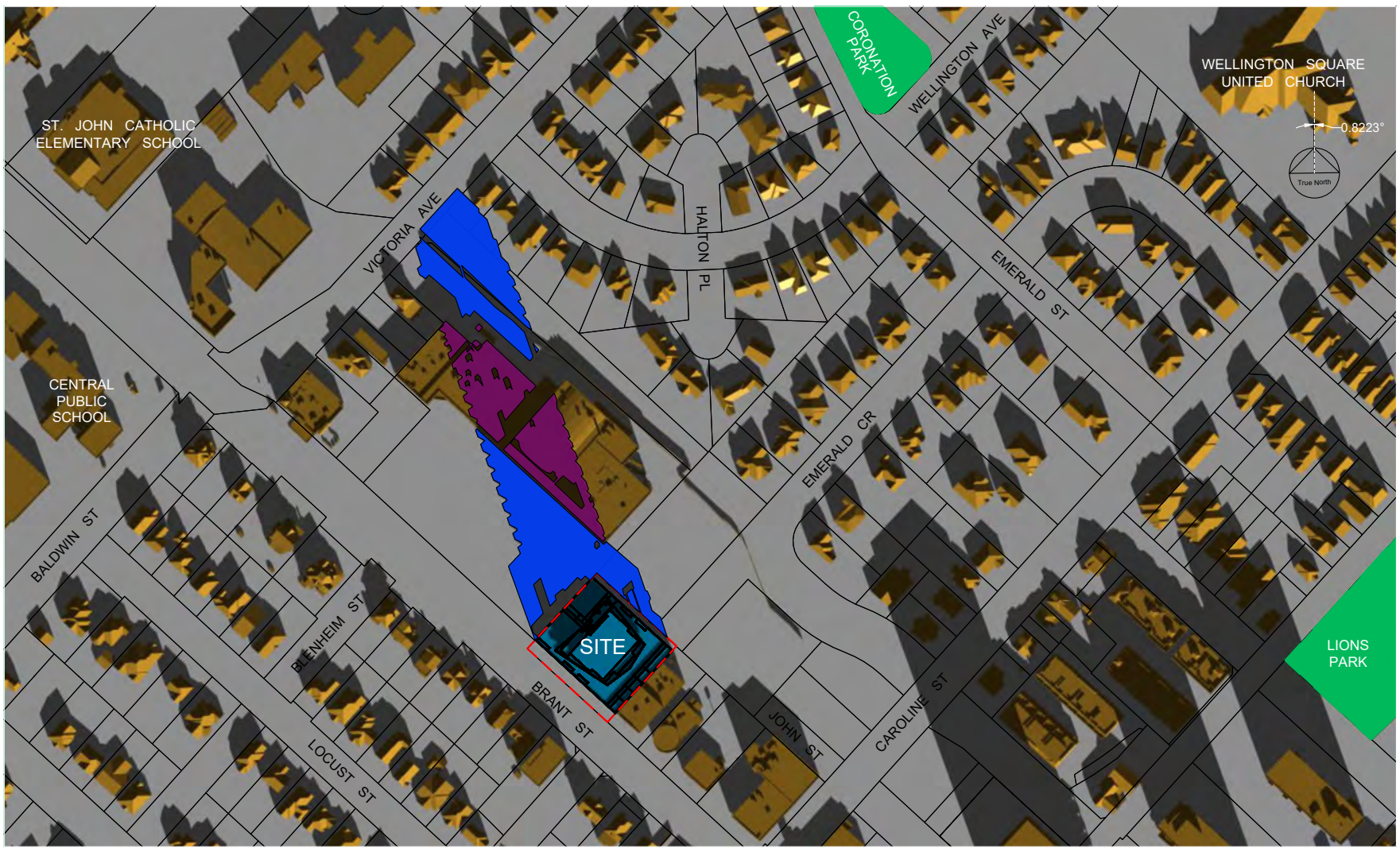
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Calculated by:	RB	Project:	S20006	Drawing No.: SS-16
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



DEC 21

11:00 AM

Site Boundary

Net New Shadows cast on roof surfaces

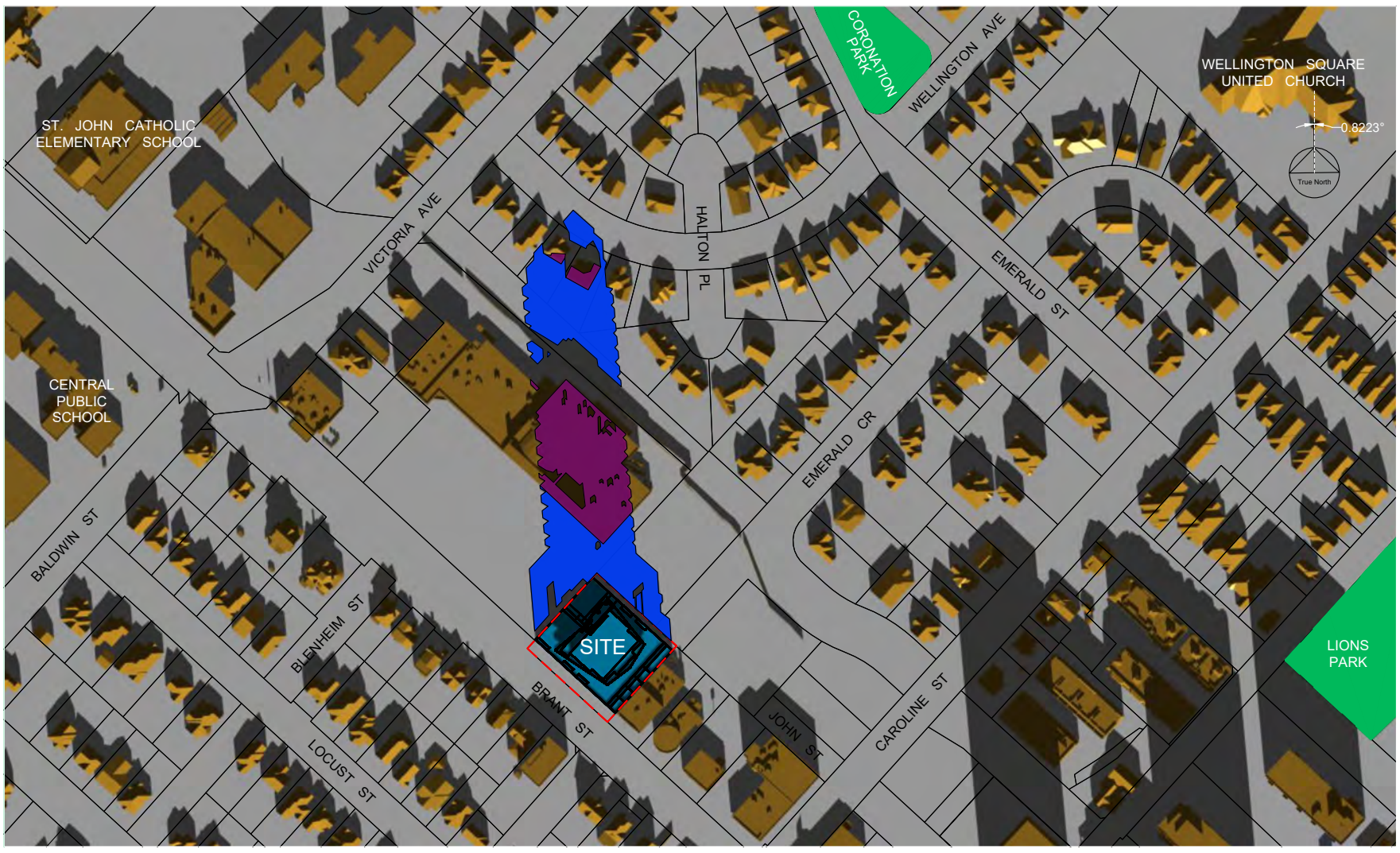
Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EST

0 20 100 200

SCALE 1 : 3000



DEC 21

12:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

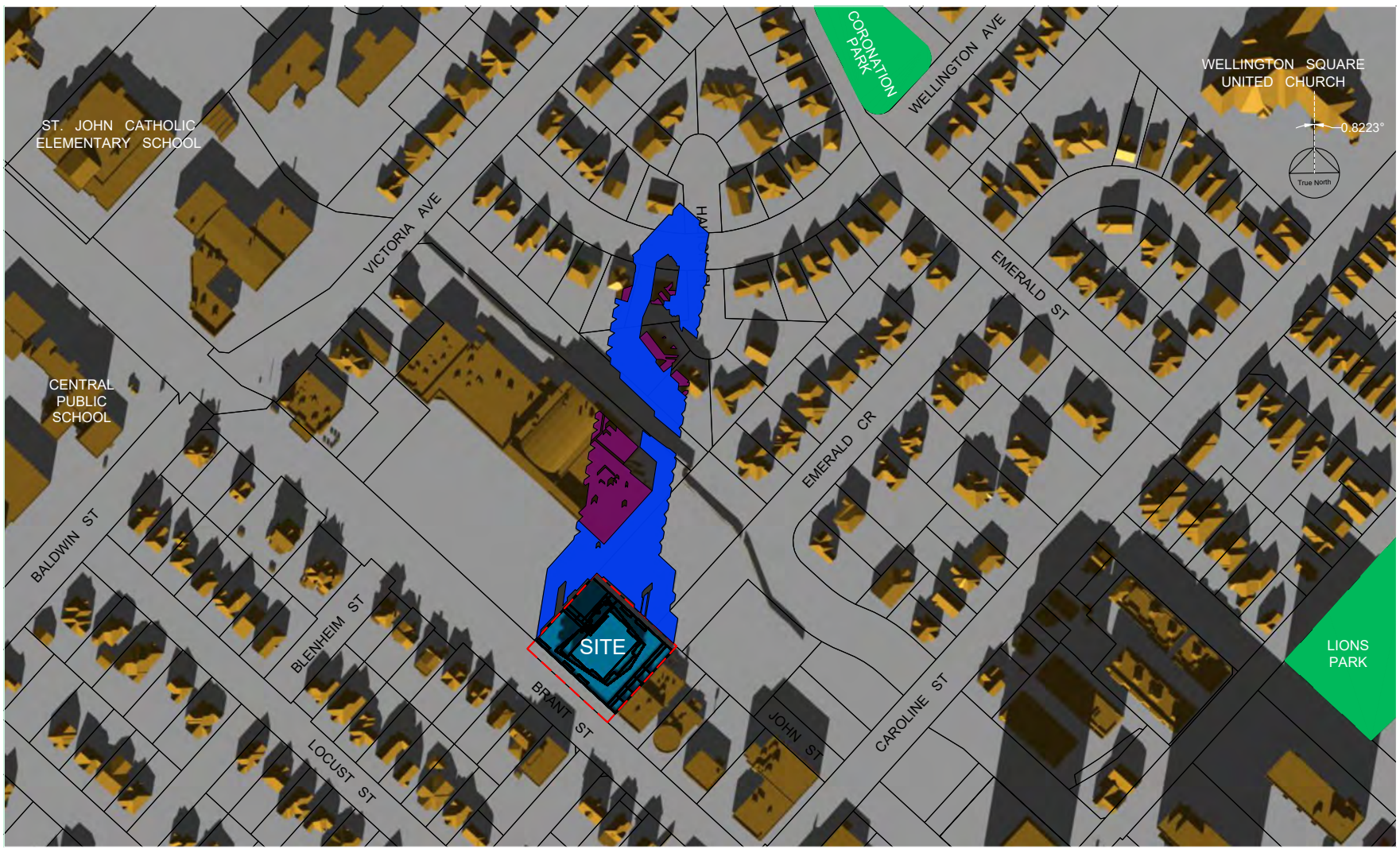
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Calculated by:	RB	Project:	S20006	Drawing No.: SS-17
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



DEC 21

1:00 PM

Site Boundary

Net New Shadows cast on roof surfaces

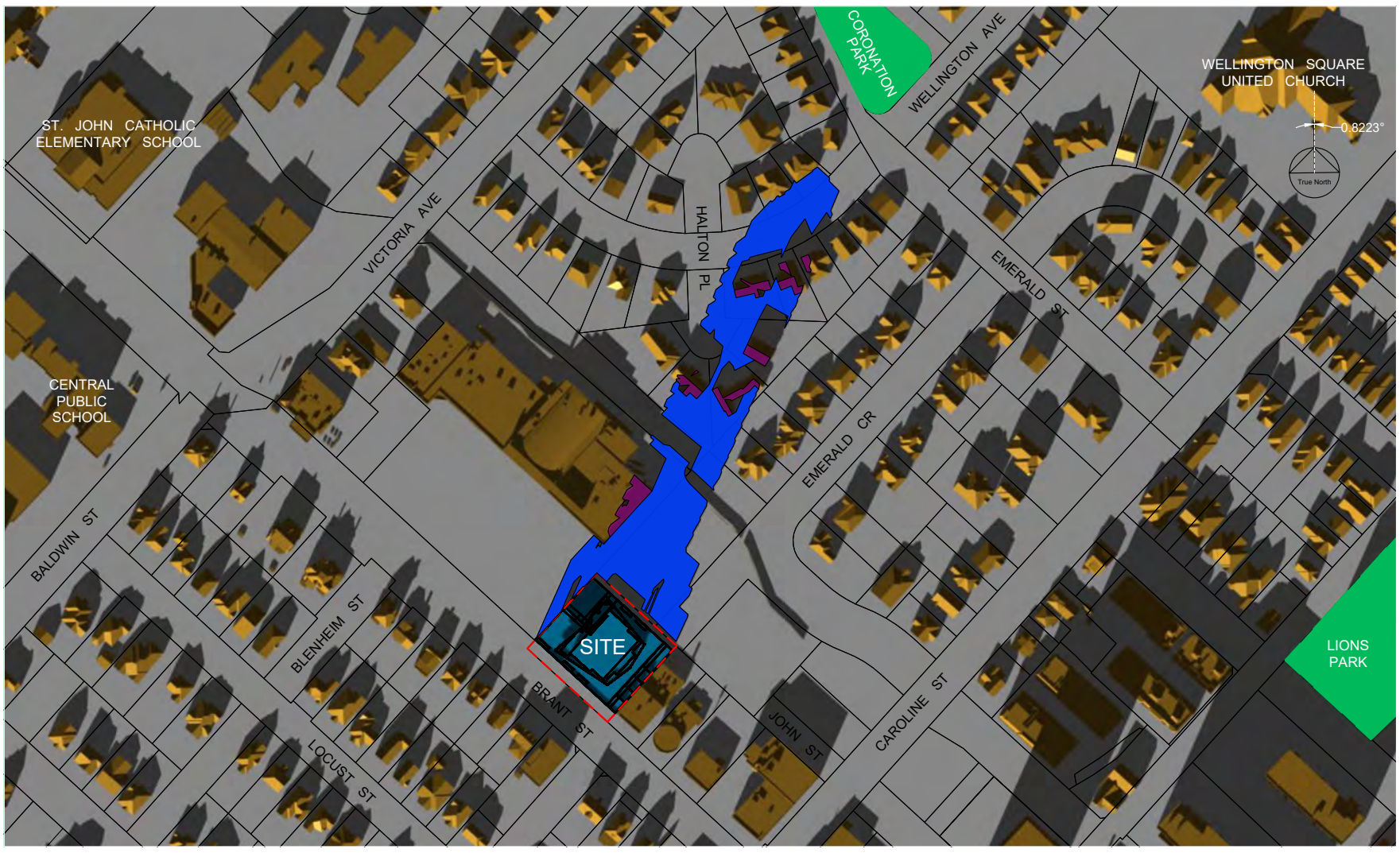
Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

ALL TIMES IN EST

0 20 100 200

SCALE 1 : 3000



DEC 21

2:00 PM

SUN / SHADOW STUDY

Proposed Mixed-Use Development

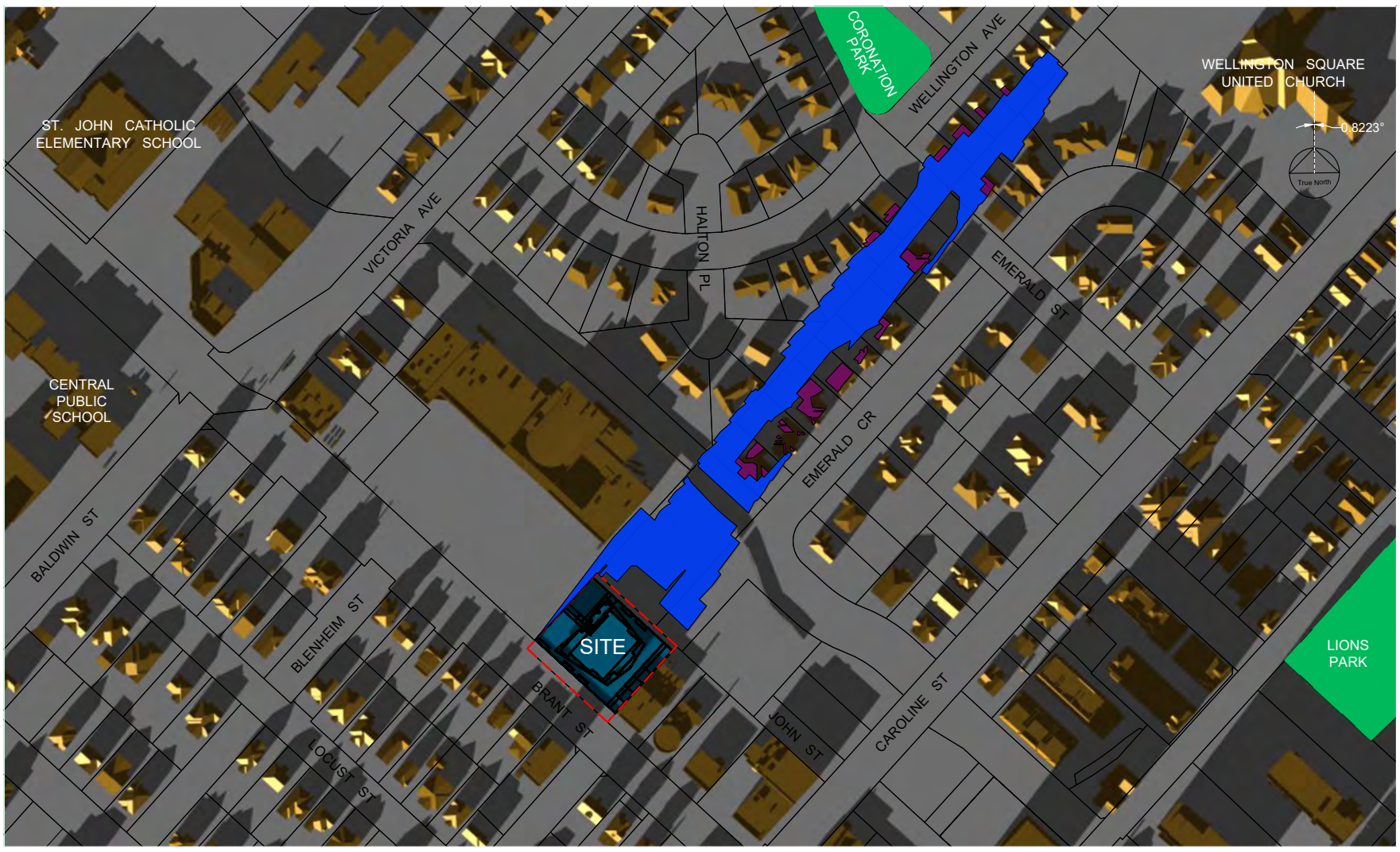
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Calculated by:	RB	Project:	S20006	Drawing No.: SS-18
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



DEC 21

3:00 PM

ALL TIMES IN EST

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces

0 20 100 200

SCALE 1 : 3000

SUN / SHADOW STUDY

Proposed Mixed-Use Development

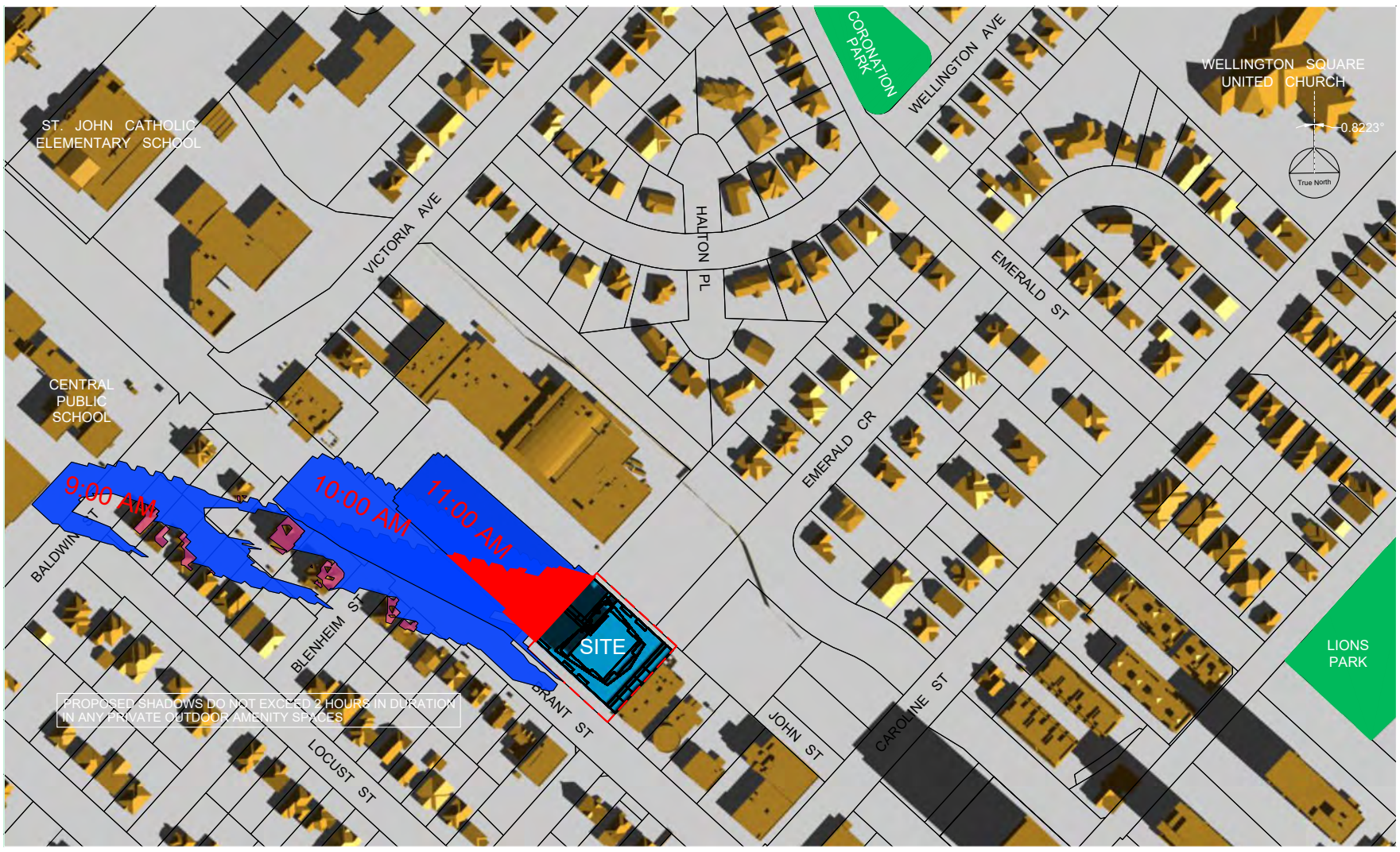
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Calculated by:	RB	Project:	S20006	Drawing No.: SS-19
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.3 - Private Outdoor Amenity Space

Area with > 2 hrs Net New Shadows

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

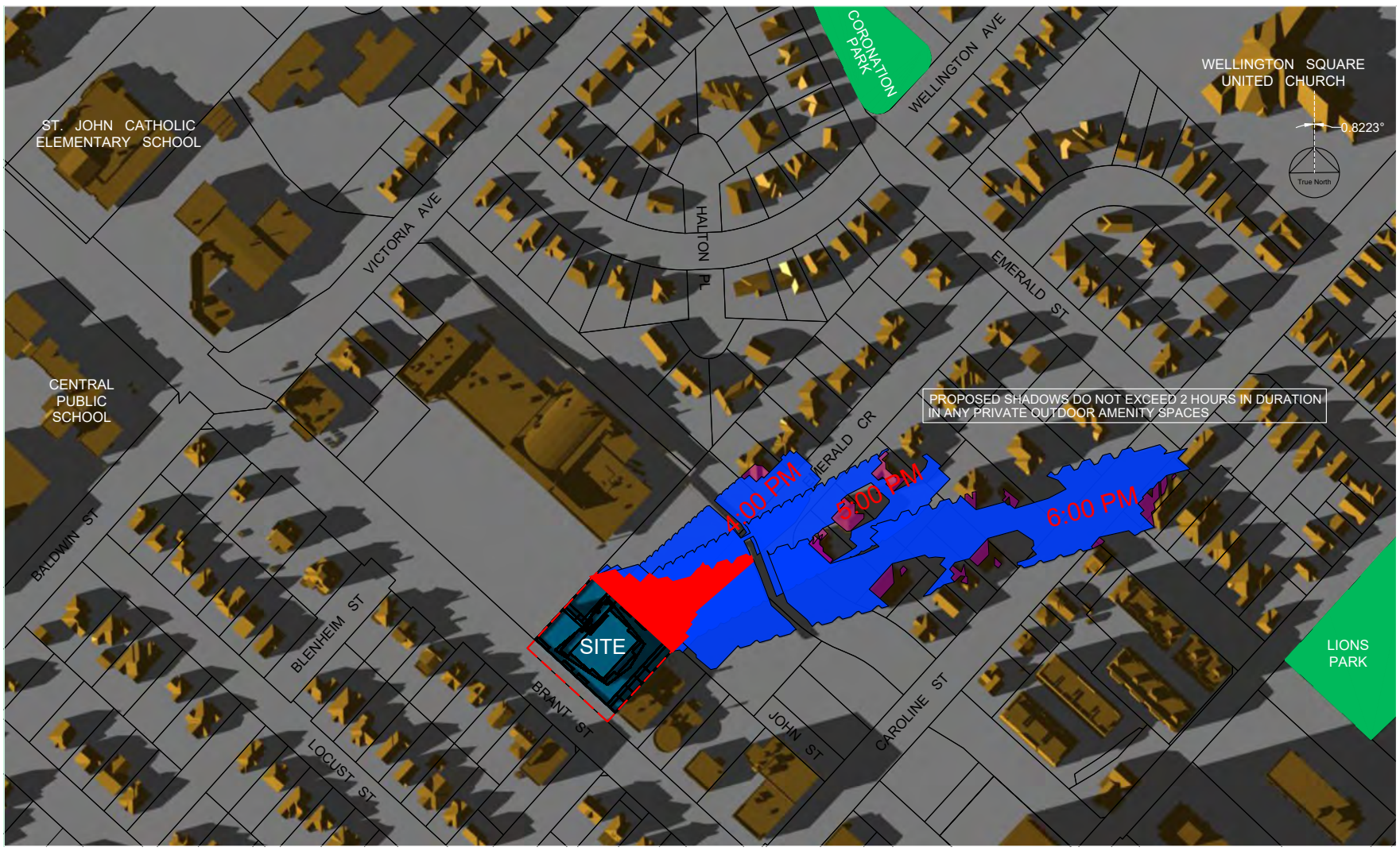
Existing Shadows cast on ground surfaces

9:00 AM - 11:00 AM *

ALL TIMES IN EDT

0 20 100 200

SCALE 1 : 3000



Criteria 4.3 - Private Outdoor Amenity Space

MAR 21

4:00 PM - 6:00 PM *

* Note:
Shadows do not reach off-site outdoor amenity spaces between 11:00 AM and 4:00 PM. For 12:00 PM to 3:00 PM test times see Drawings SS-02 to SS-04.

SUN / SHADOW STUDY

Proposed Mixed-Use Development

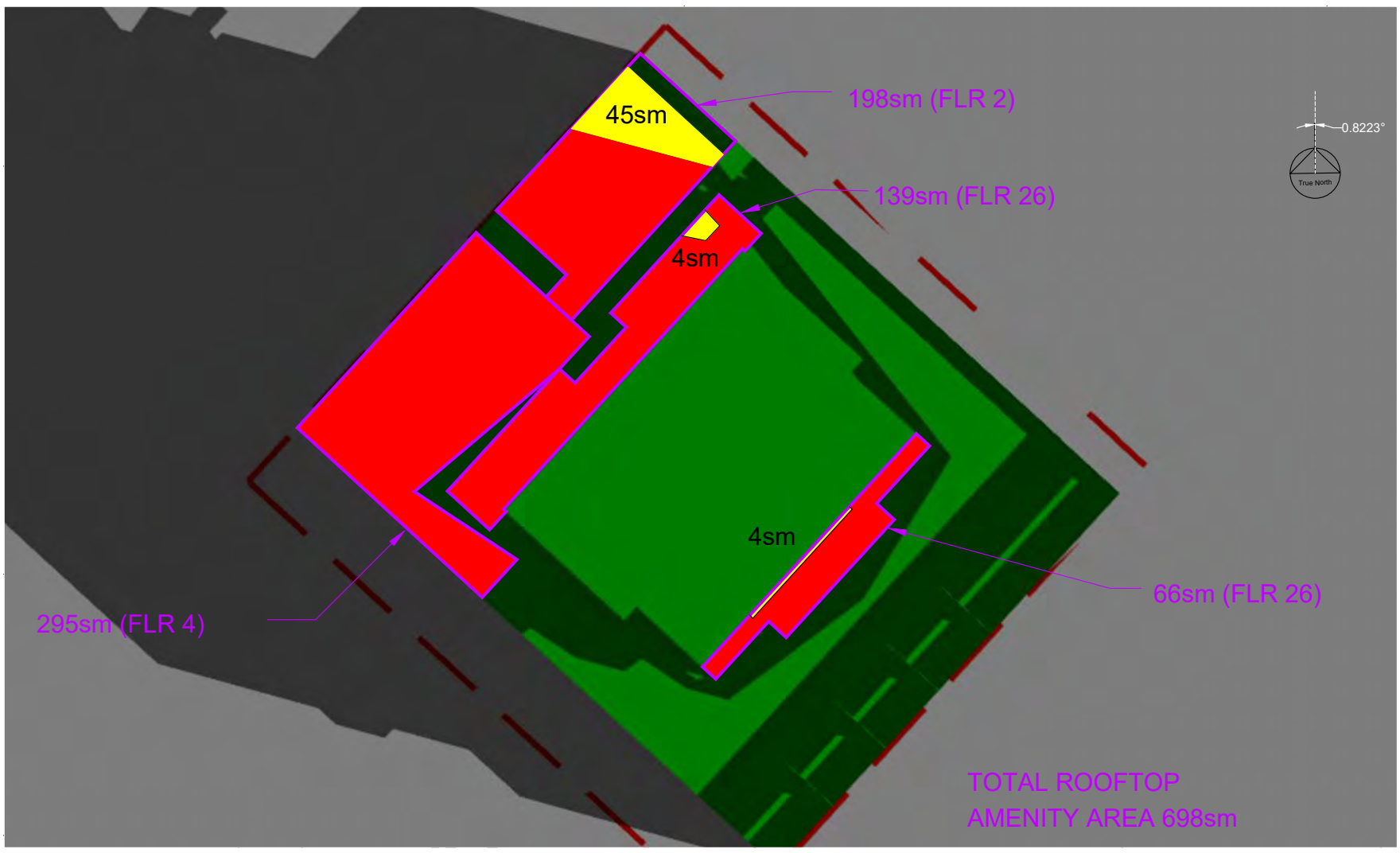
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165 Browning Trail, Barrie ON Tel/Fax (705) 726-3392
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.3-1
Drawn by:	RB	Scale:	1 : 3000	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.3 - Private Outdoor Amenity Space

9:00 AM

ALL TIMES IN EDT

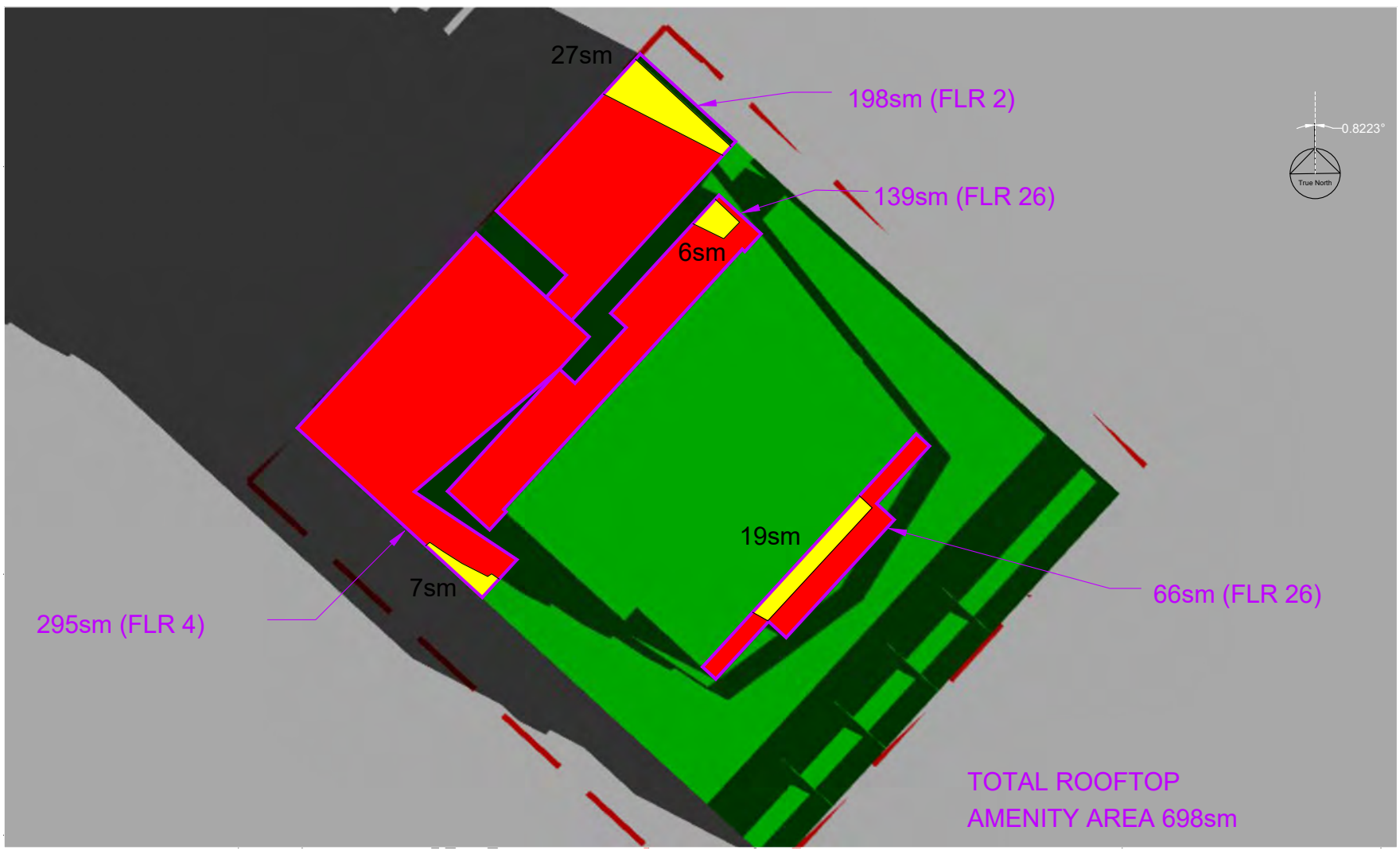
ROOFTOP AMENITY SPACE

AREA EXPOSED TO SUNSHINE

AREA IN SHADOW

0 5 25 50

SCALE 1 : 500



Criteria 4.3 - Private Outdoor Amenity Space

10:00 AM

MAR 21

SUN / SHADOW STUDY

Proposed Mixed-Use Development

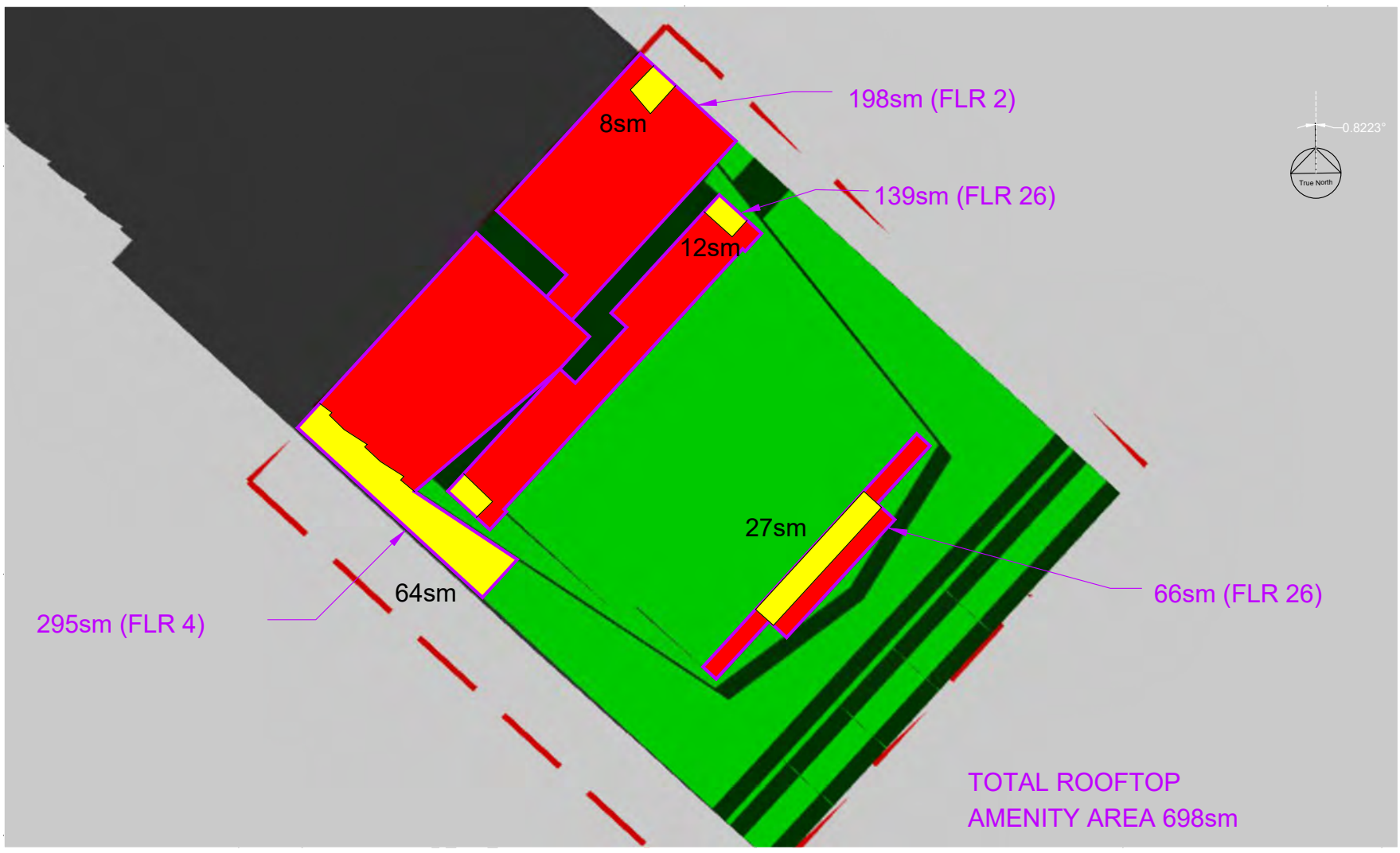
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.3-2
Drawn by:	RB	Scale:	1 : 500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.3 - Private Outdoor Amenity Space

11:00 AM

ALL TIMES IN EDT

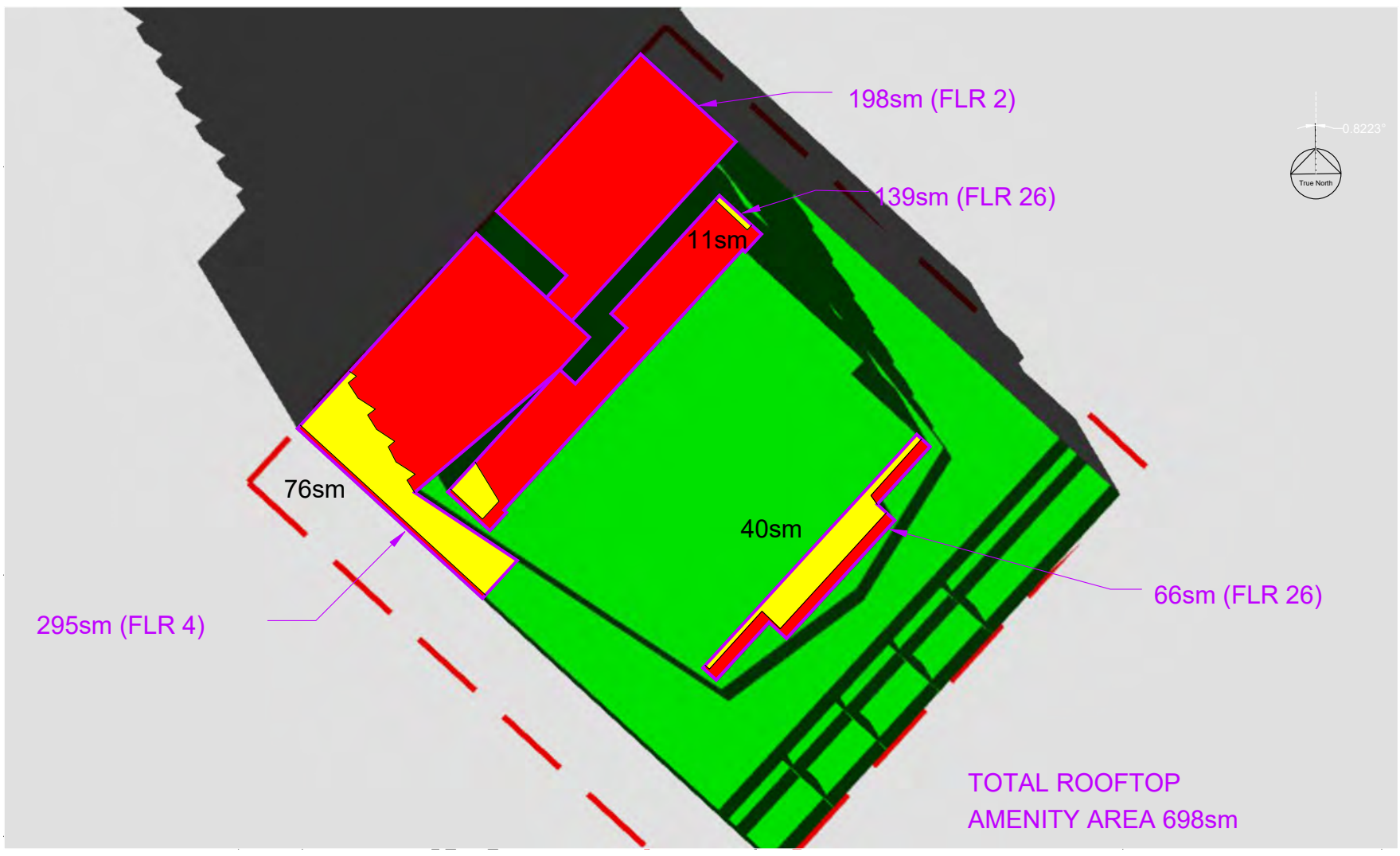
ROOFTOP AMENITY SPACE

AREA EXPOSED TO SUNSHINE

AREA IN SHADOW

0 5 25 50

SCALE 1 : 500



Criteria 4.3 - Private Outdoor Amenity Space

12:00 PM

MAR 21

SUN / SHADOW STUDY

Proposed Mixed-Use Development

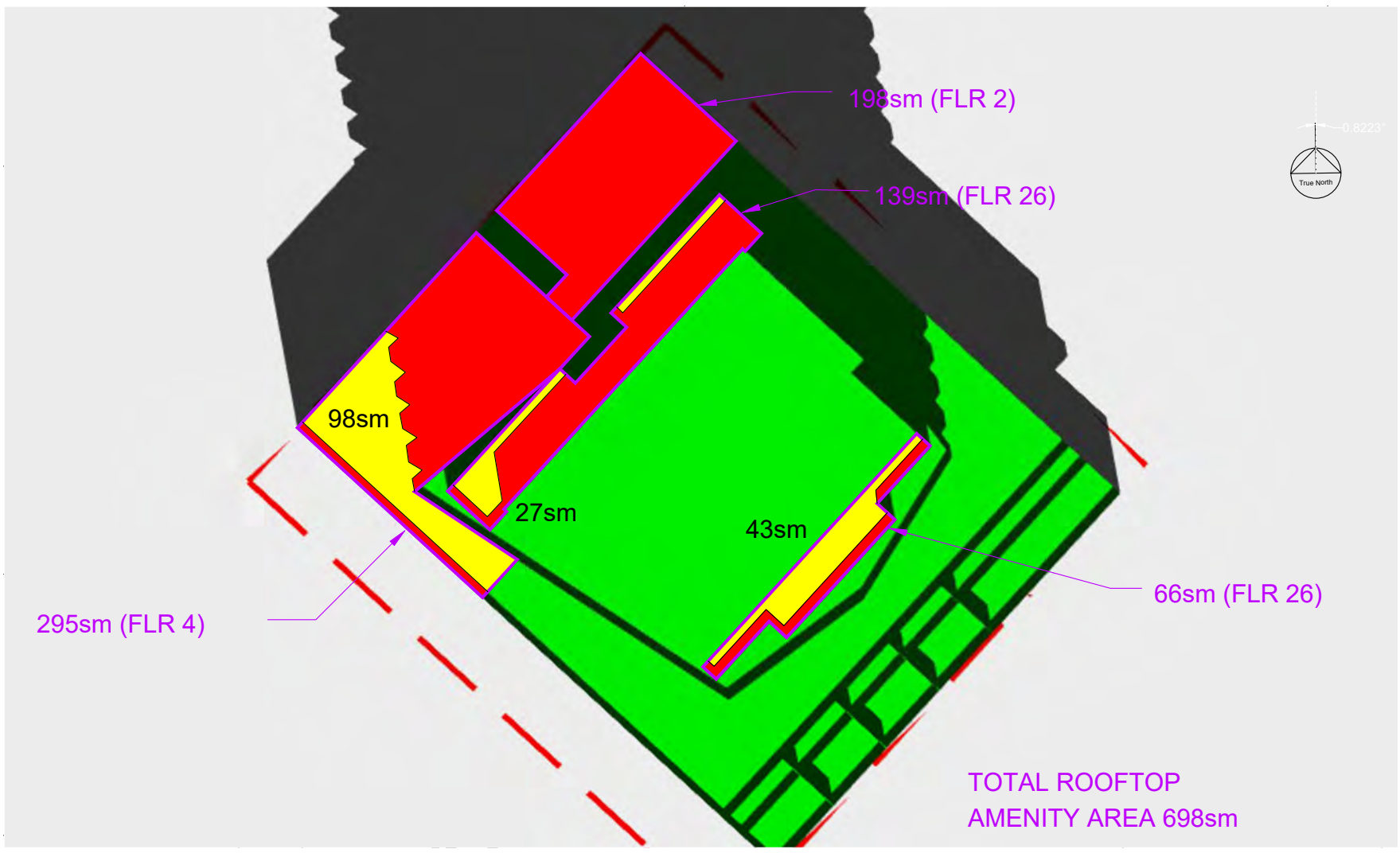
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City of Burlington

R. BOUWMEESTER & ASSOCIATES
Sun & Shadow Position Specialists
165 Browning Trail, Barrie ON Tel/Fax (705) 726-3392
Web: www.sunposition.com Email: rba@sunposition.com

Calculated by:	RB	Project:	S20006	Drawing No.: 4.3-3
Drawn by:	RB	Scale:	1 : 500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.3 - Private Outdoor Amenity Space

1:00 PM

ALL TIMES IN EDT

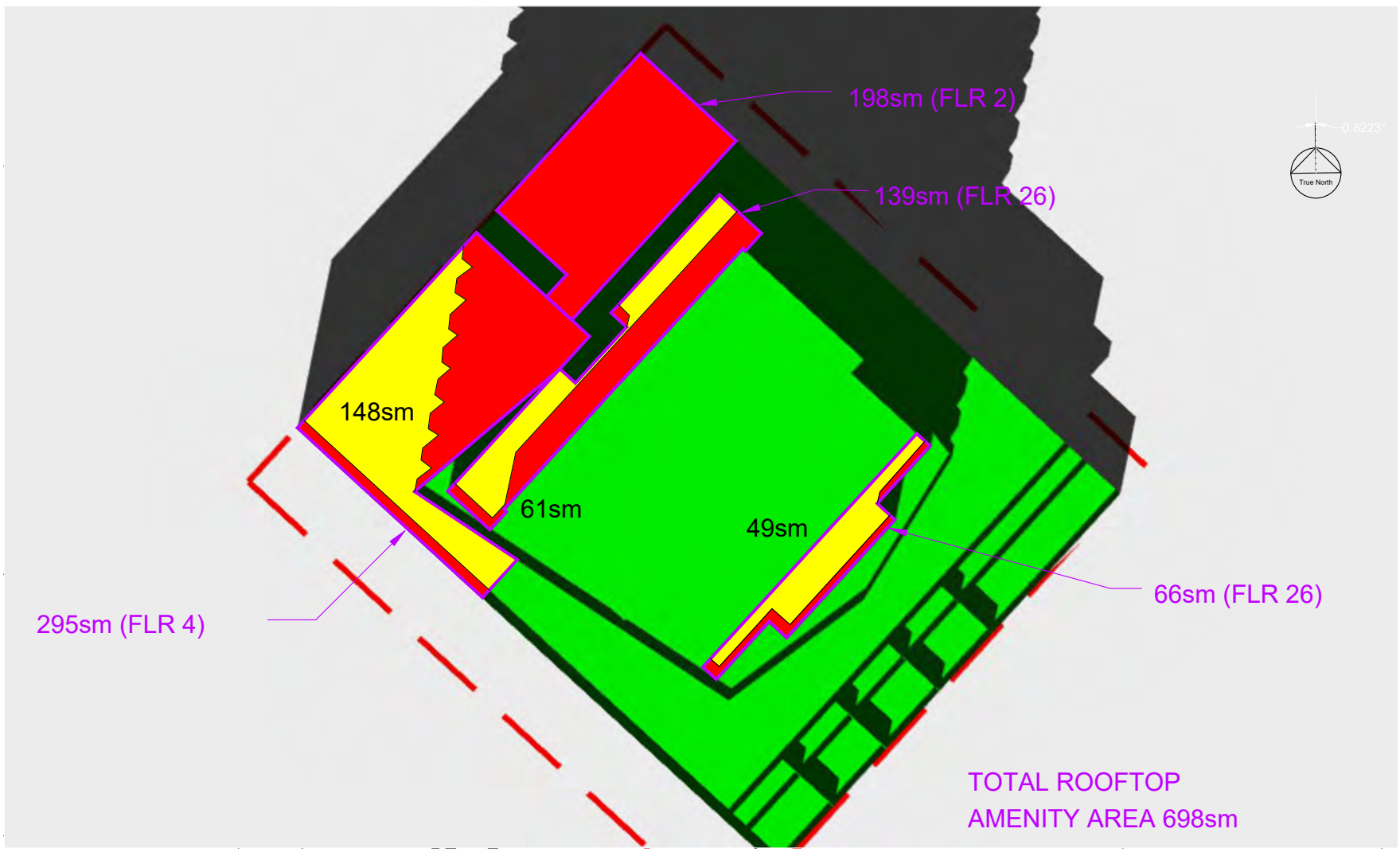
ROOFTOP AMENITY SPACE

AREA EXPOSED TO SUNSHINE

AREA IN SHADOW

0 5 25 50

SCALE 1 : 500



Criteria 4.3 - Private Outdoor Amenity Space

2:00 PM

MAR 21

SUN / SHADOW STUDY

Proposed Mixed-Use Development

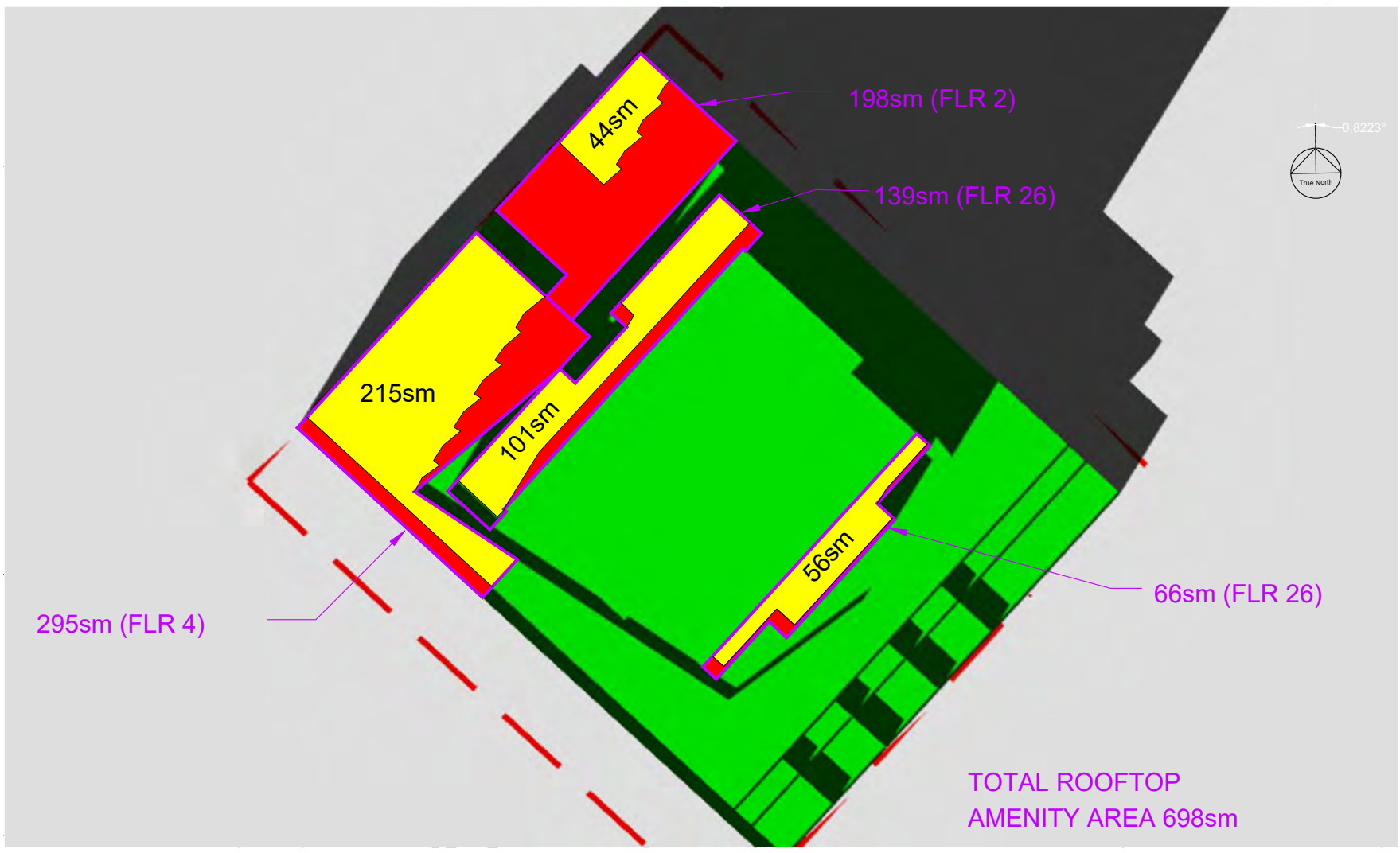
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.3-4
Drawn by:	RB	Scale:	1 : 500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.3 - Private Outdoor Amenity Space

3:00 PM

ALL TIMES IN EDT

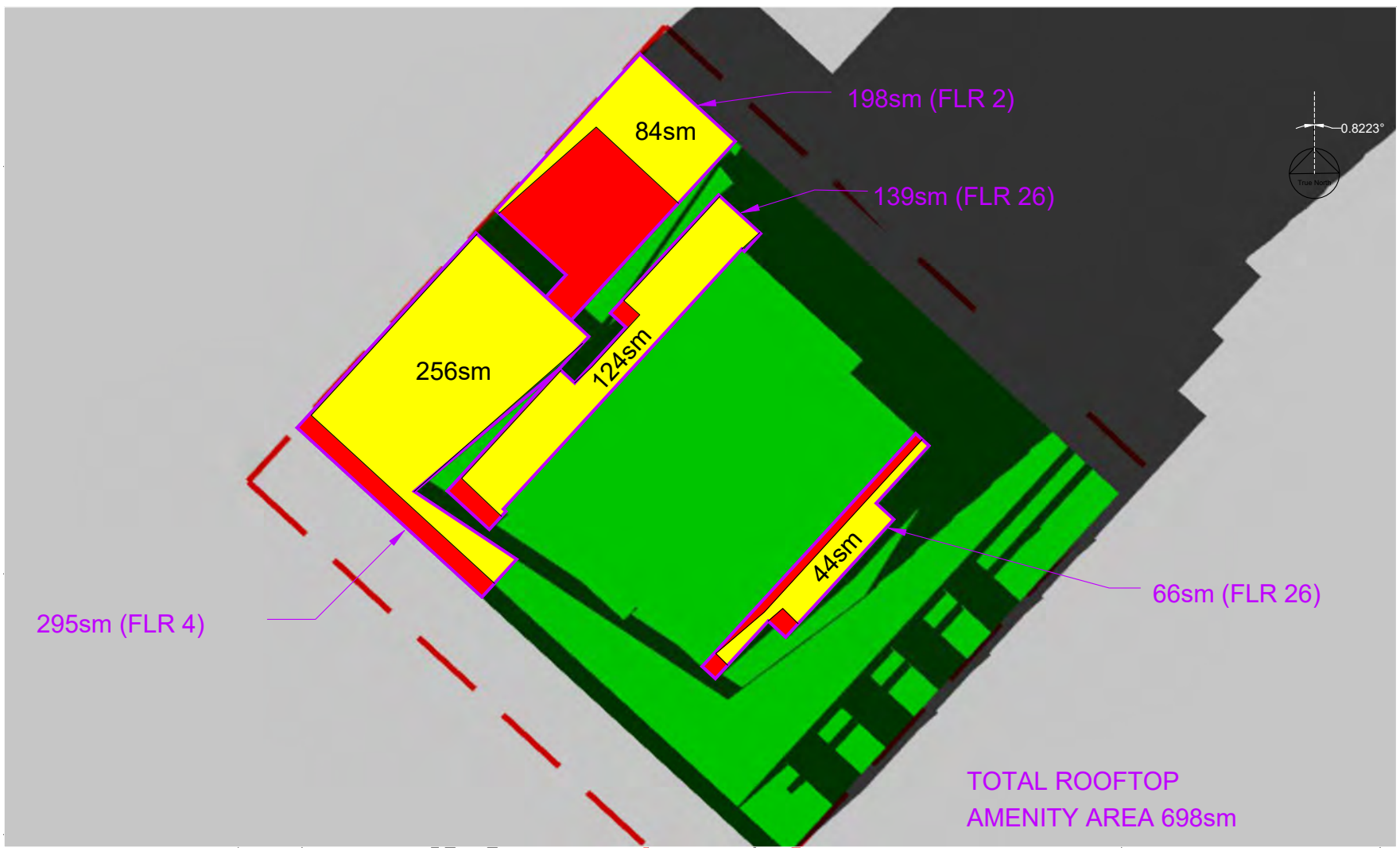
ROOFTOP AMENITY SPACE

AREA EXPOSED TO SUNSHINE

AREA IN SHADOW

0 5 25 50

SCALE 1 : 500



Criteria 4.3 - Private Outdoor Amenity Space

4:00 PM

MAR 21

SUN / SHADOW STUDY

Proposed Mixed-Use Development

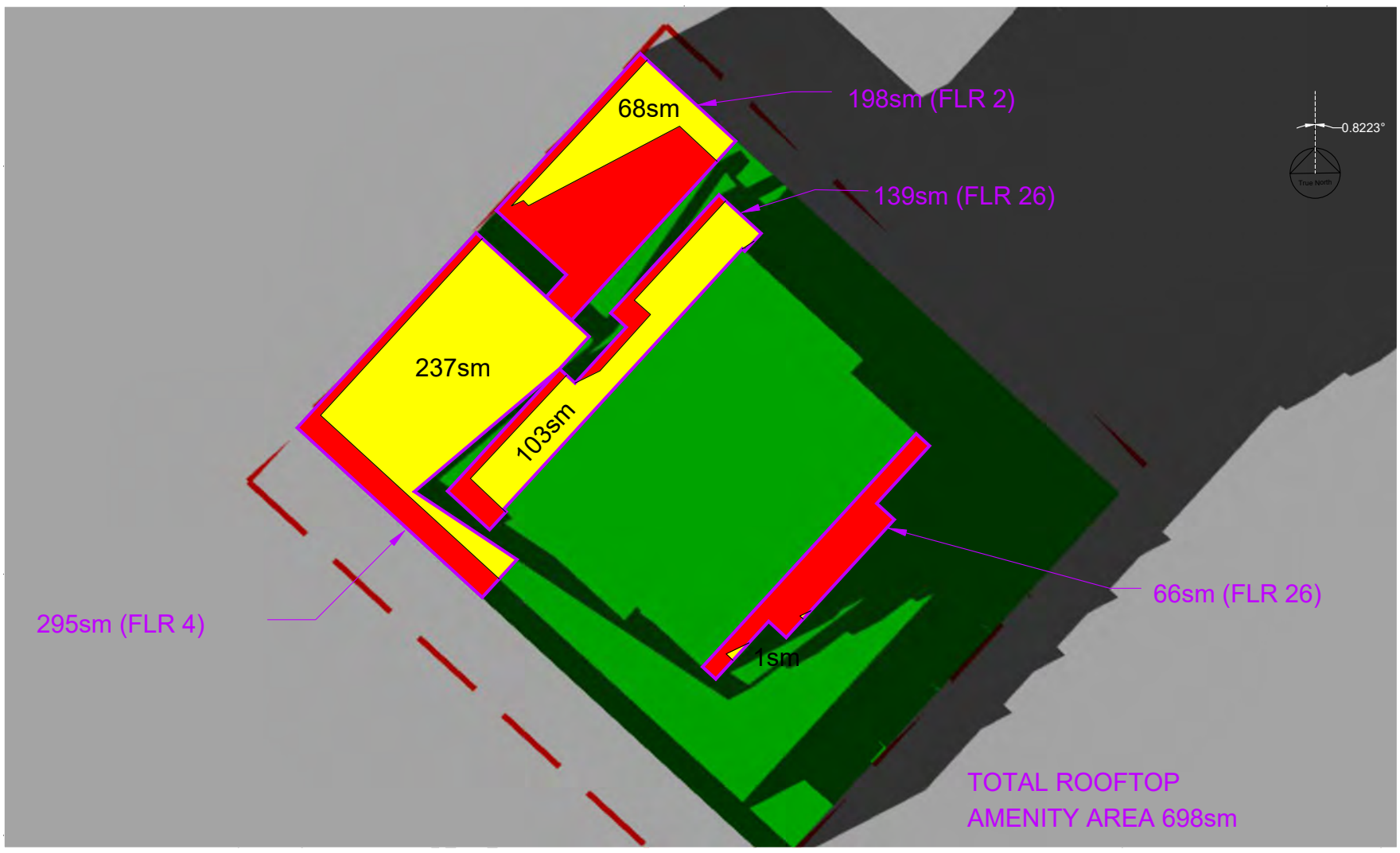
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Calculated by:	RB	Project:	S20006	Drawing No.:
Drawn by:	RB	Scale:	1 : 500	4.3-5
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.3 - Private Outdoor Amenity Space

5:00 PM

ALL TIMES IN EDT

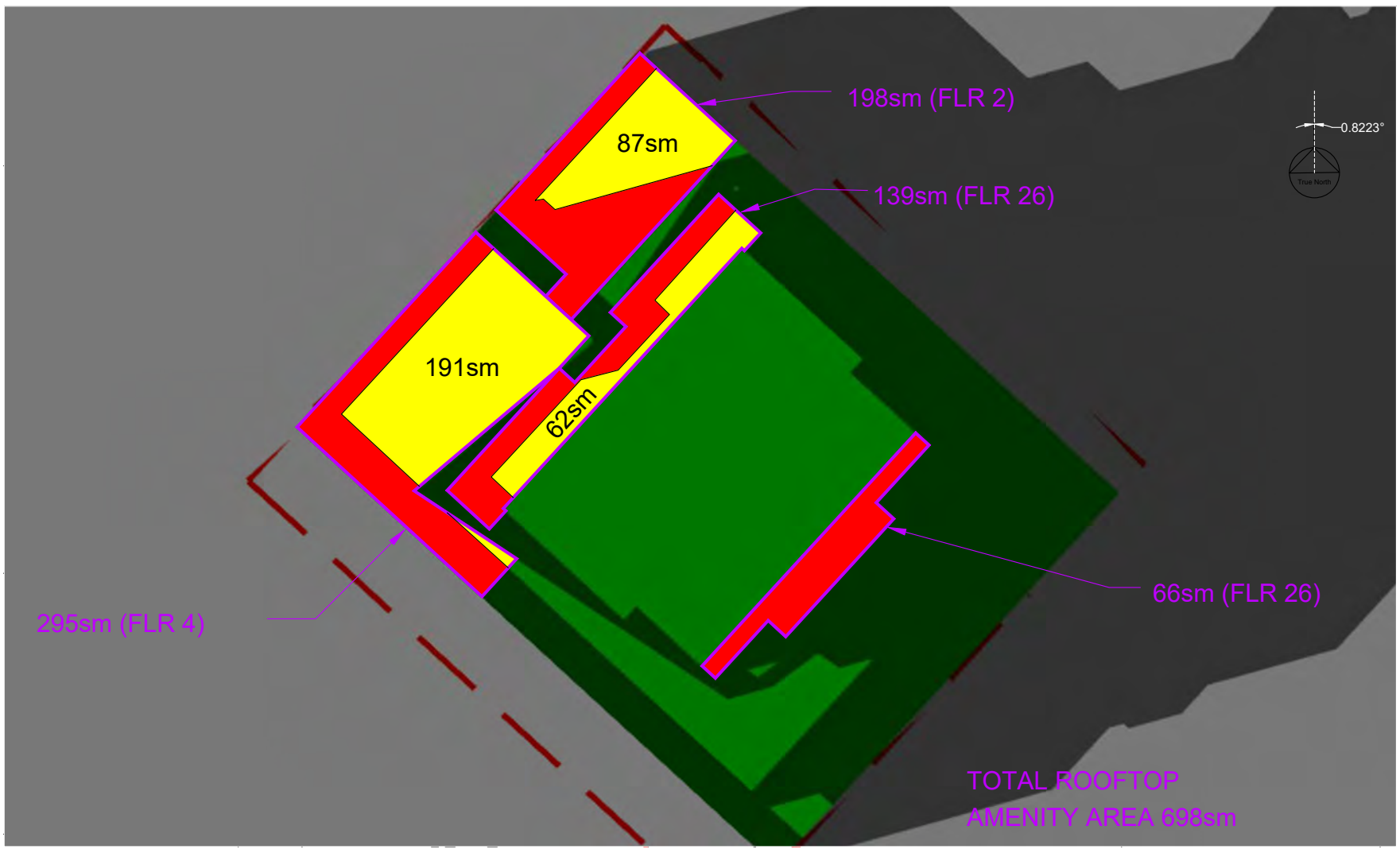
ROOFTOP AMENITY SPACE

AREA EXPOSED TO SUNSHINE

AREA IN SHADOW

0 5 25 50

SCALE 1 : 500



Criteria 4.3 - Private Outdoor Amenity Space

6:00 PM

MAR 21

SUN / SHADOW STUDY

Proposed Mixed-Use Development

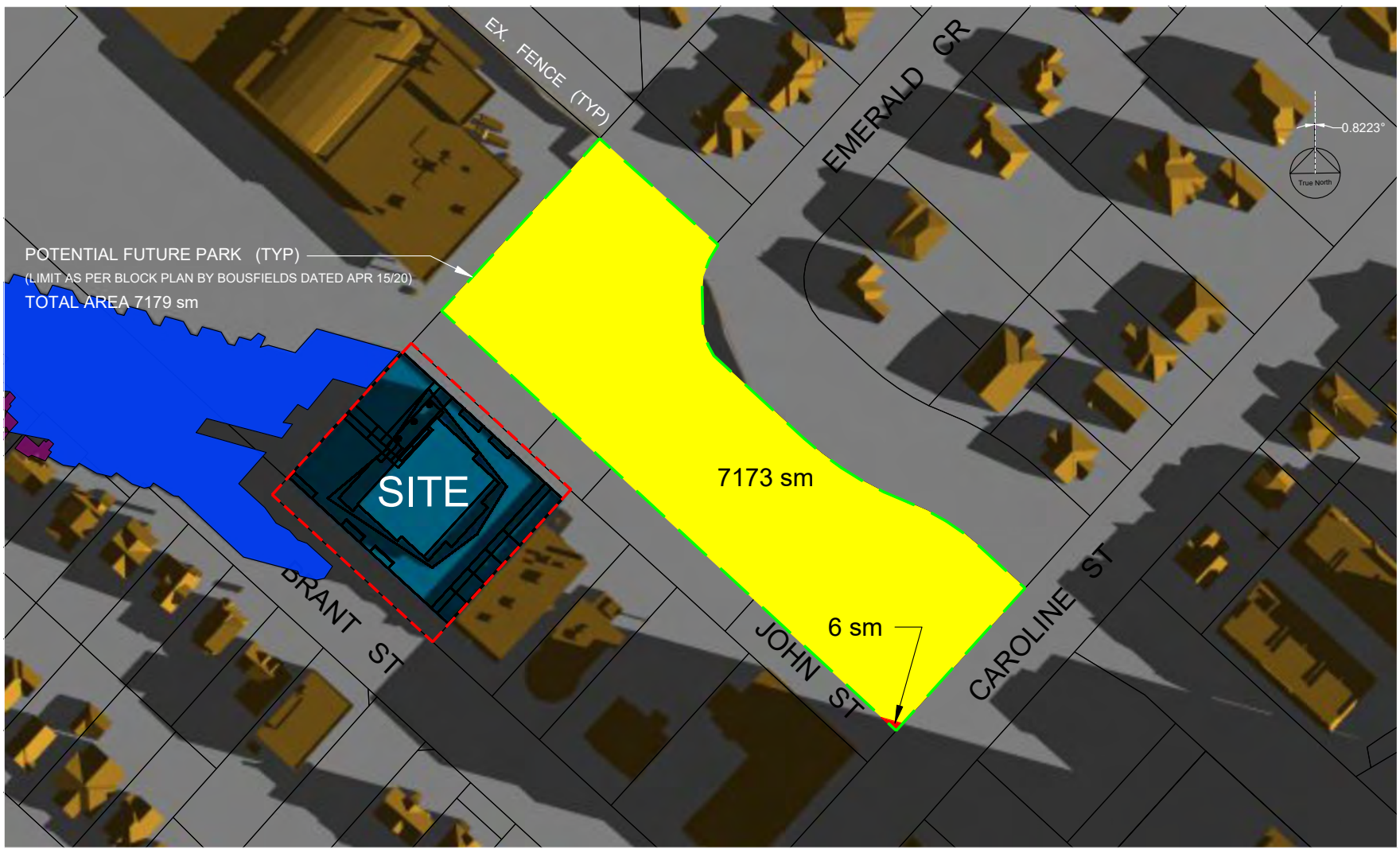
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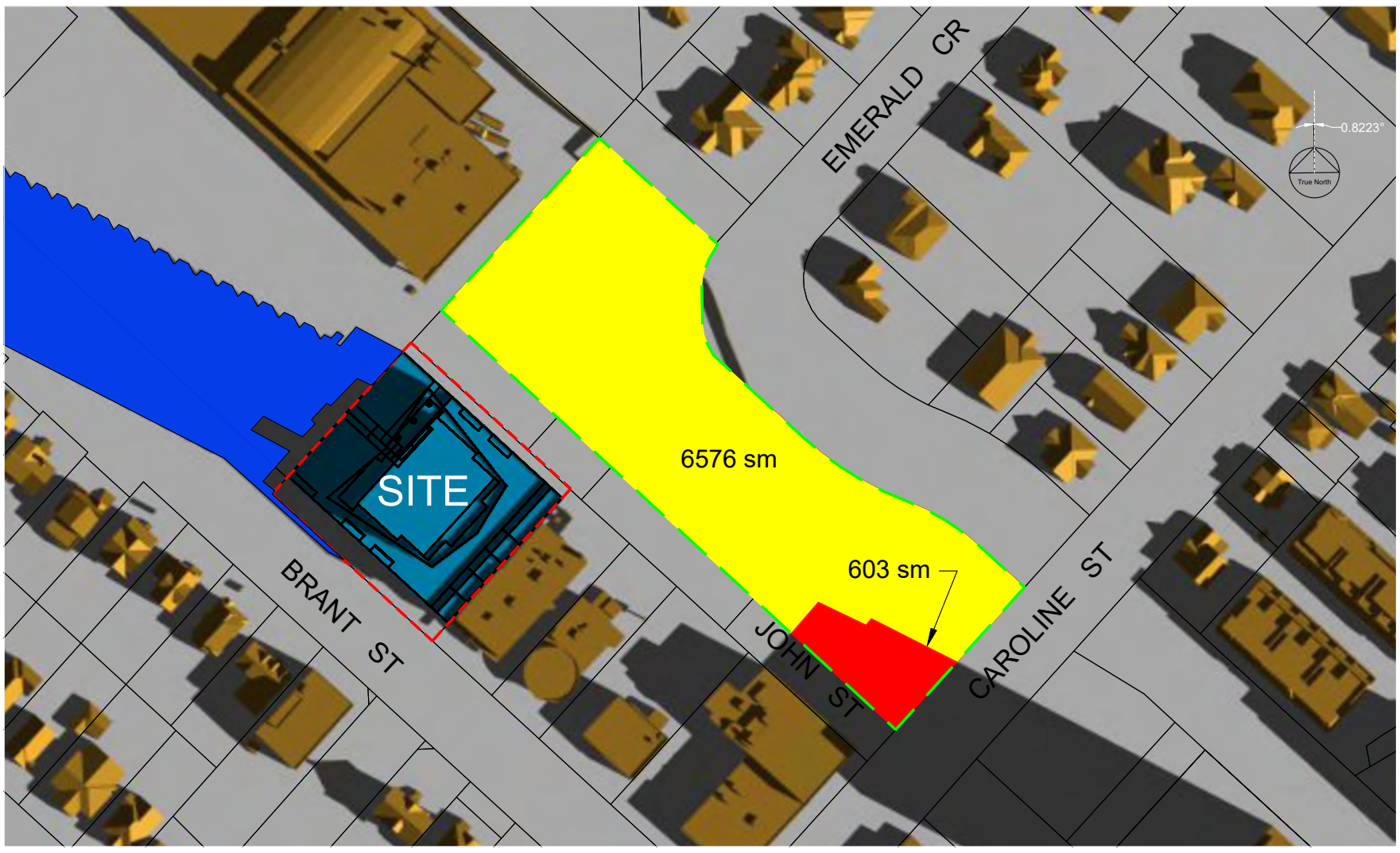
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Drawn by:	RB	Scale:	1 : 500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

9:00 AM

- Potential Future Park
- Area exposed to sunshine
- Area in shadow (existing + proposed)
- Site Boundary
- Net New Shadows cast on roof surfaces
- Net New Shadows cast on ground surfaces
- Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

10:00 AM
ALL TIMES IN EDT

0 10 50 100
SCALE 1 : 1500

SUN / SHADOW STUDY

Proposed Mixed-Use Development

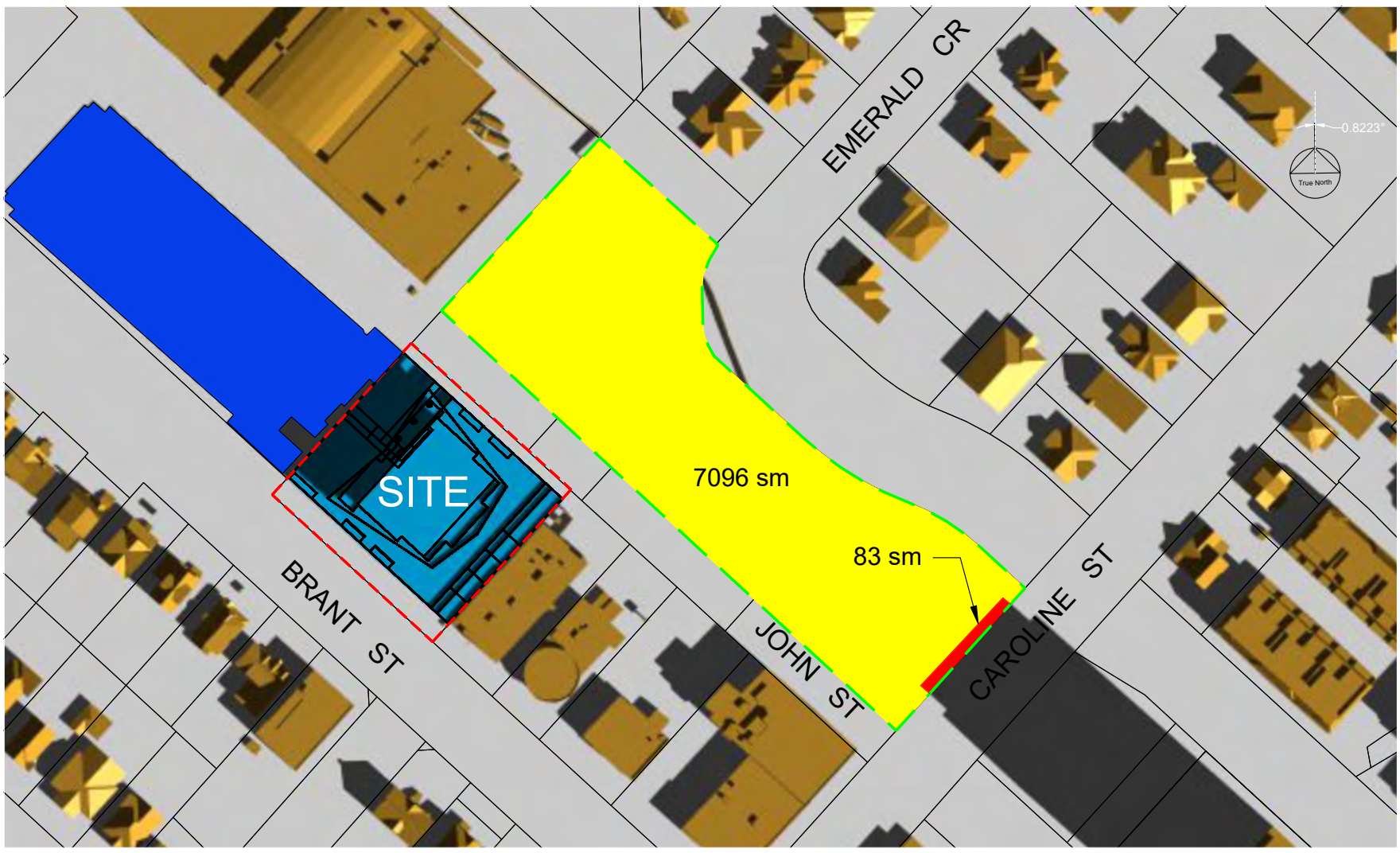
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Calculated by:	RB	Project:	S20006	Drawing No.:
Drawn by:	RB	Scale:	1 : 1500	4.4-1
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

11:00 AM

Potential Future Park

Area exposed to sunshine

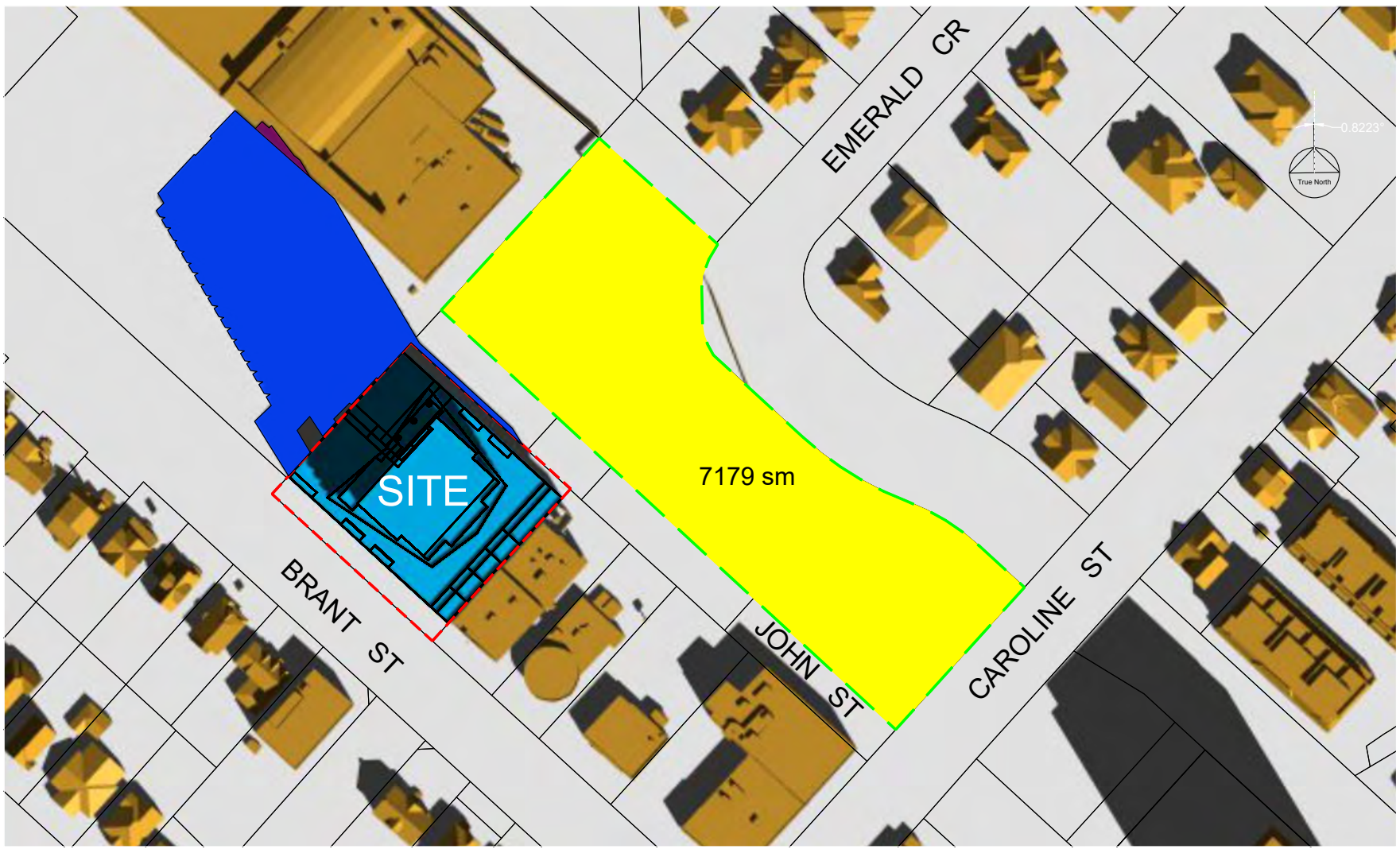
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

12:00 PM

ALL TIMES IN EDT

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

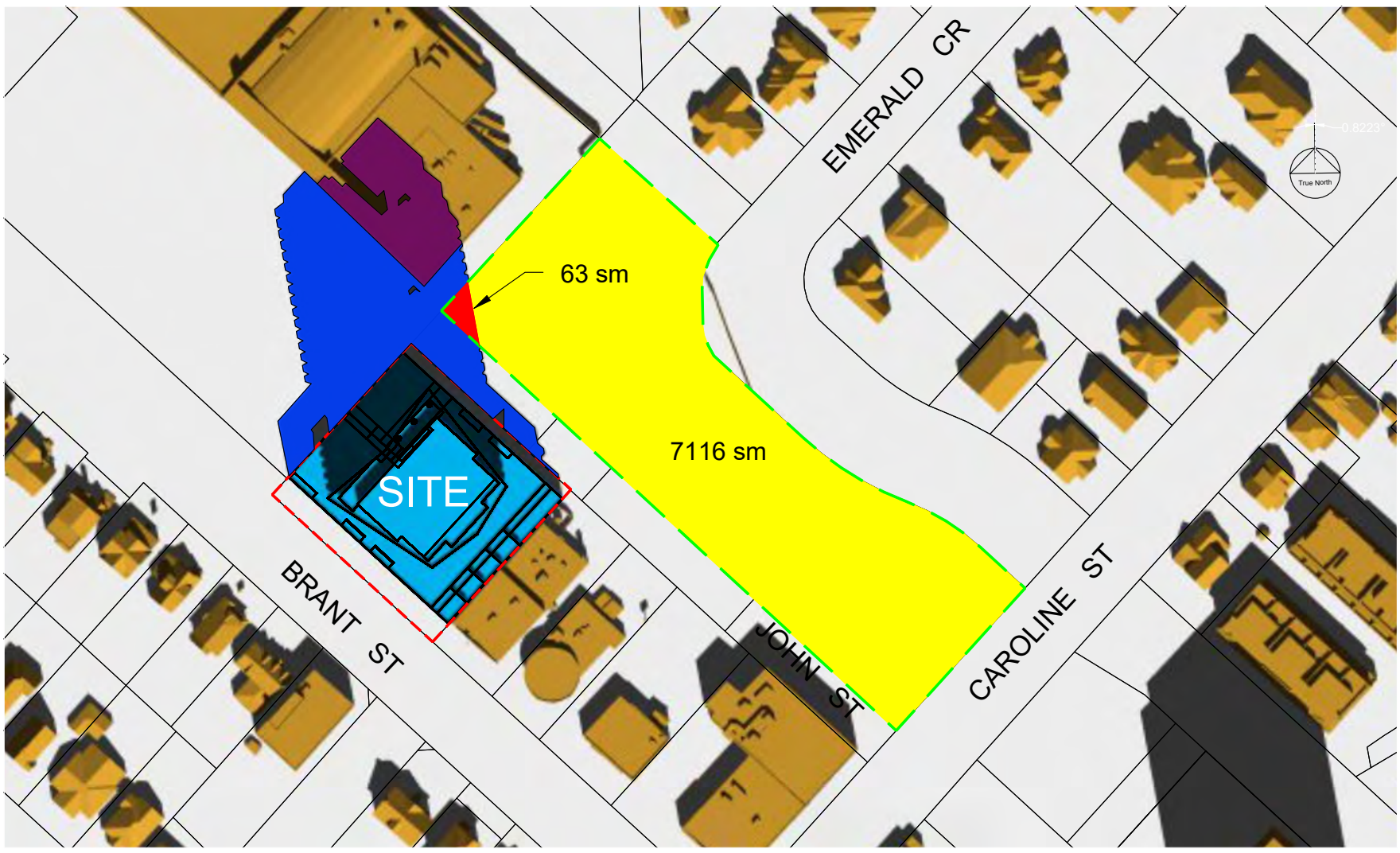
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.4-2
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

1:00 PM

Potential Future Park

Area exposed to sunshine

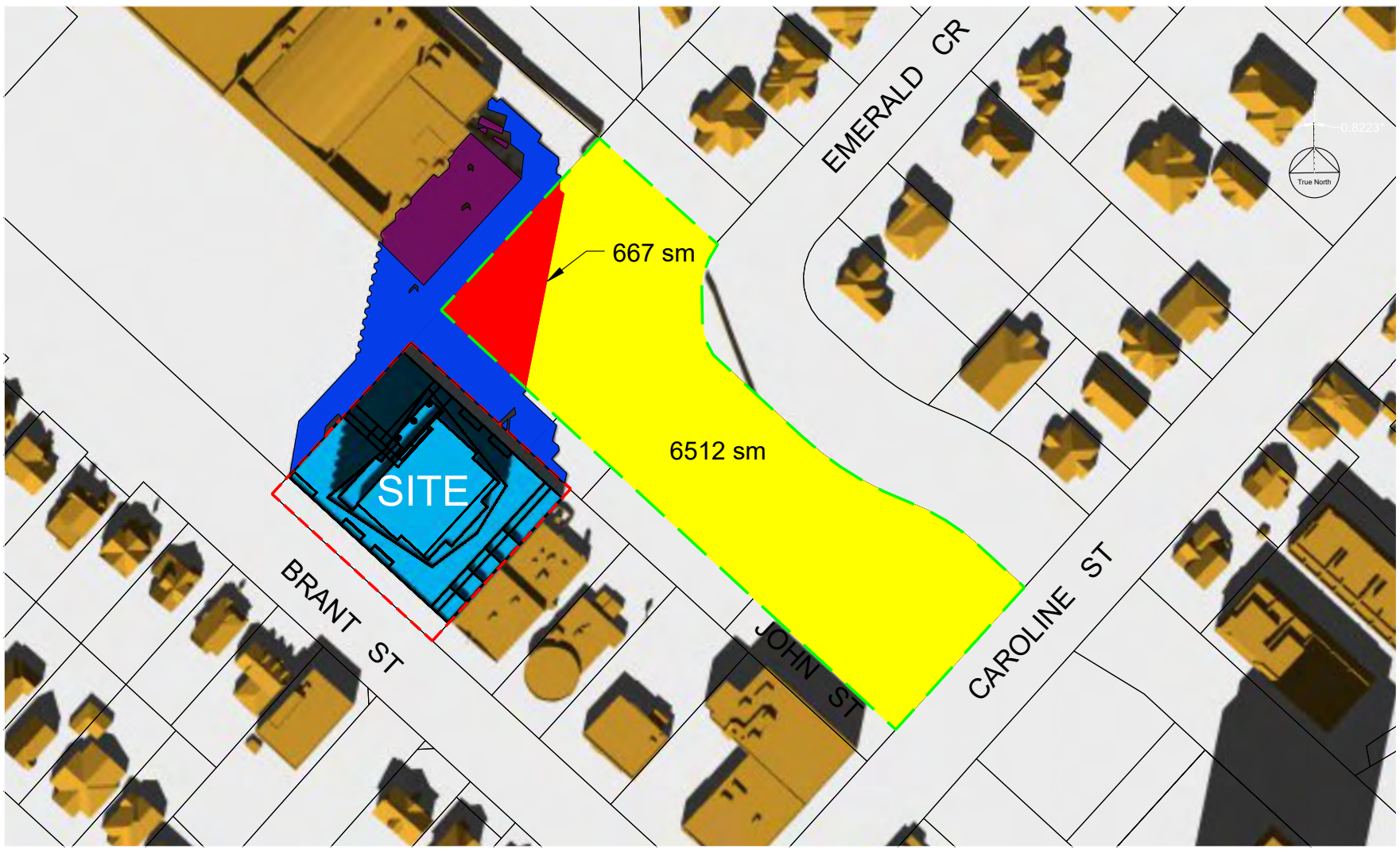
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

2:00 PM

ALL TIMES IN EDT

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

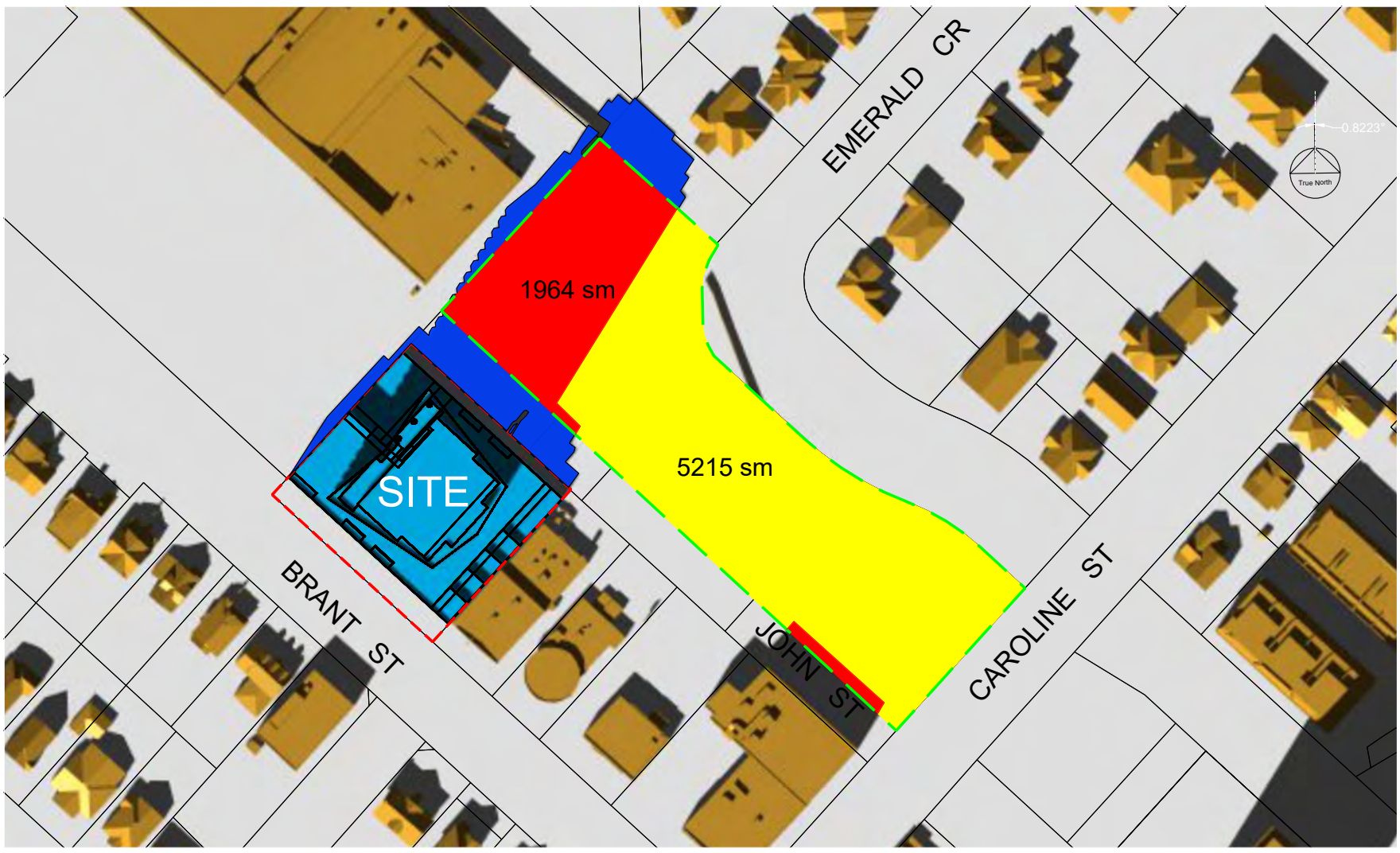
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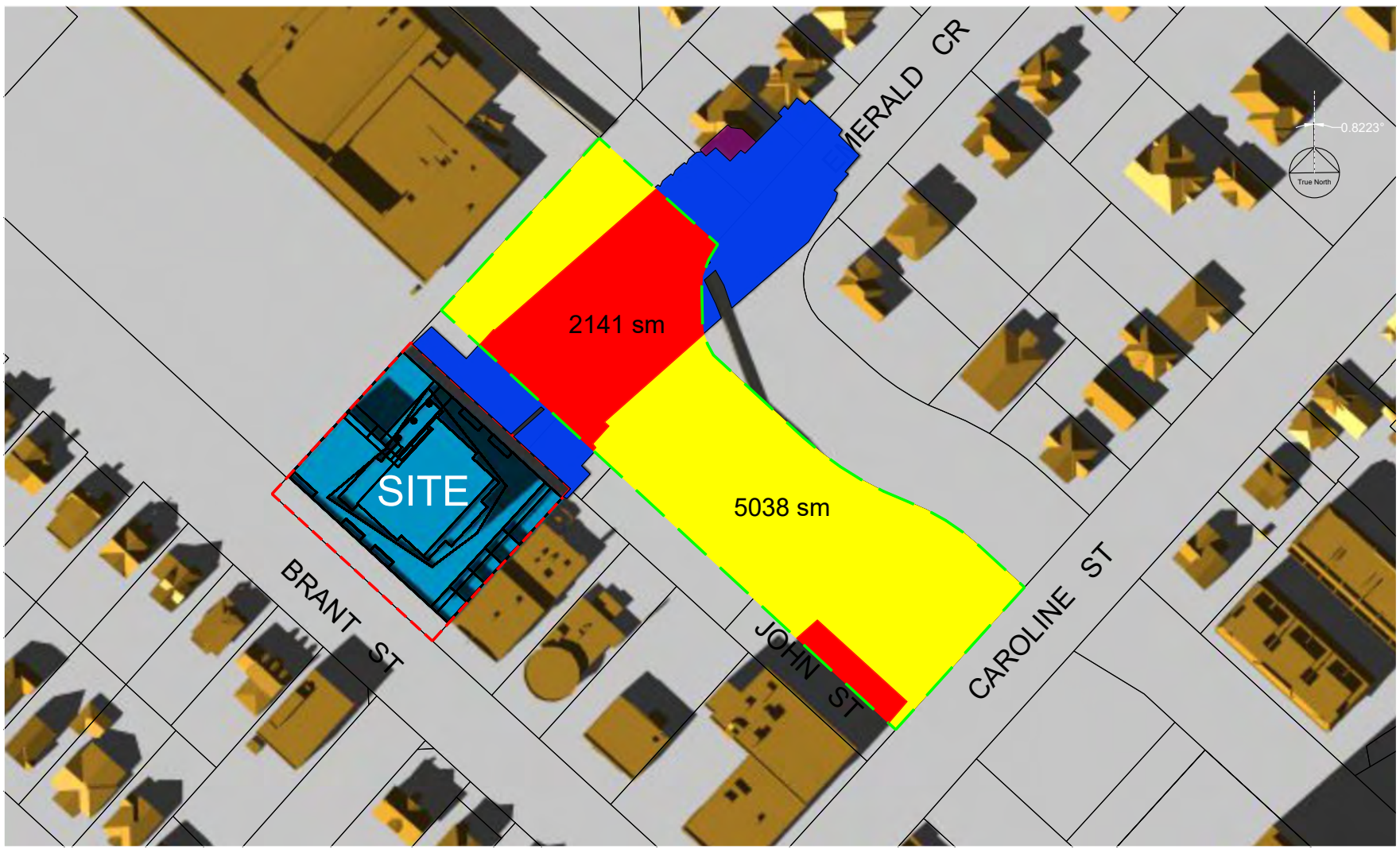
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Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

3:00 PM

- Potential Future Park
- Area exposed to sunshine
- Area in shadow (existing + proposed)
- Site Boundary
- Net New Shadows cast on roof surfaces
- Net New Shadows cast on ground surfaces
- Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

4:00 PM

ALL TIMES IN EDT

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

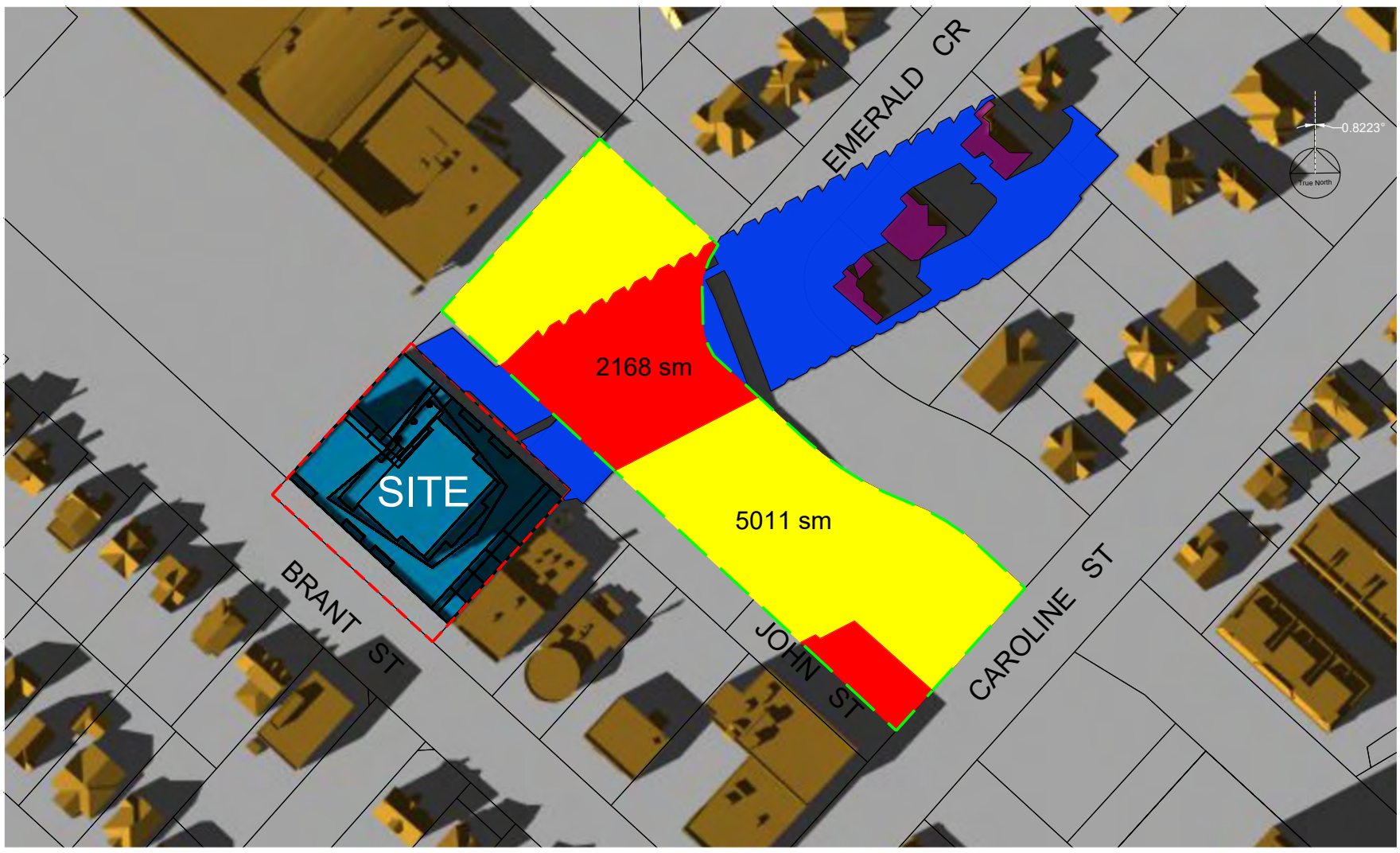
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.4-4
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

5:00 PM

Potential Future Park

Area exposed to sunshine

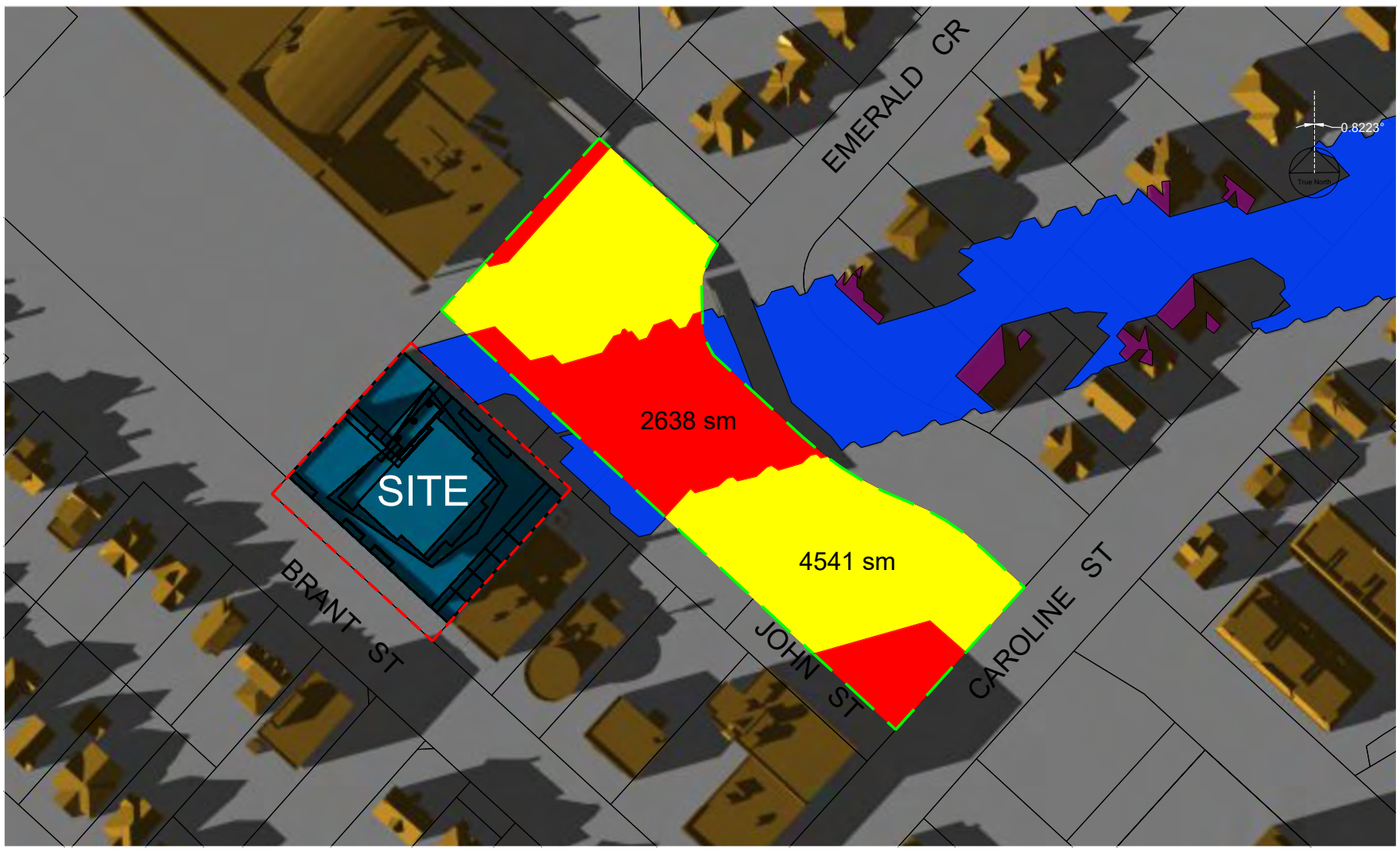
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

6:00 PM

ALL TIMES IN EDT

0 10 50 100

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

SUN / SHADOW STUDY

Proposed Mixed-Use Development

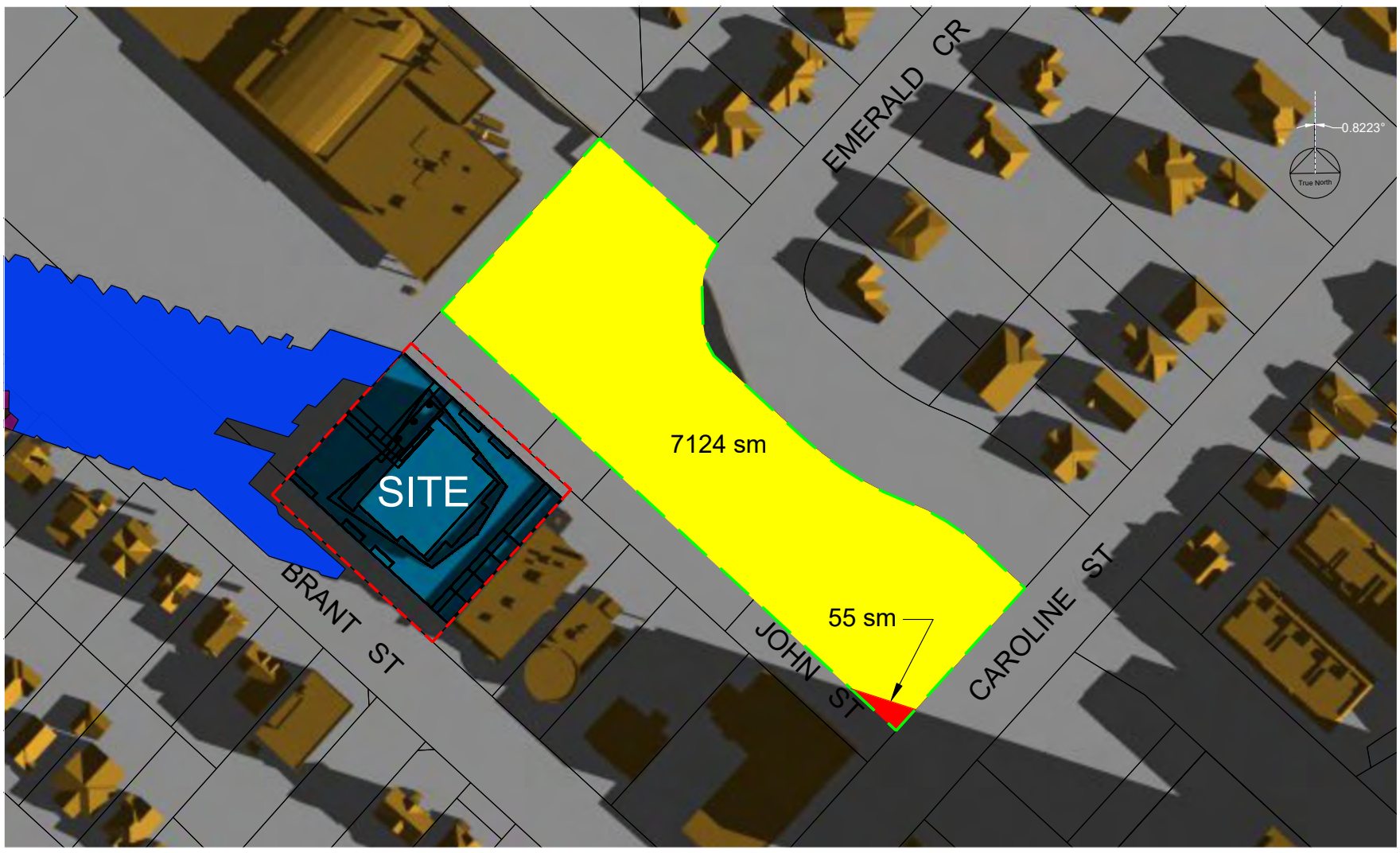
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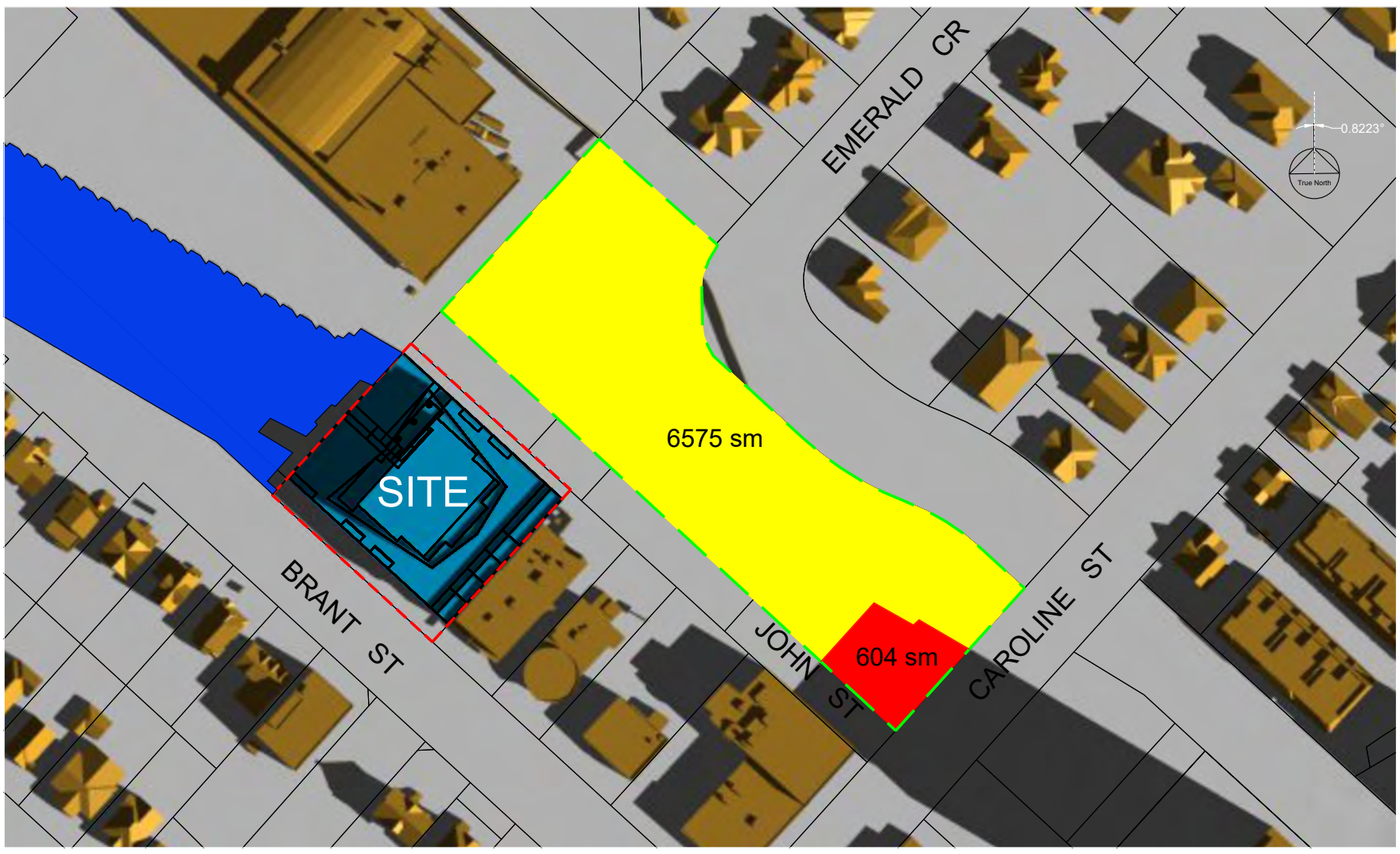
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Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

9:00 AM

- Potential Future Park
- Area exposed to sunshine
- Area in shadow (existing + proposed)
- Site Boundary
- Net New Shadows cast on roof surfaces
- Net New Shadows cast on ground surfaces
- Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

SEP 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

10:00 AM
ALL TIMES IN EDT

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

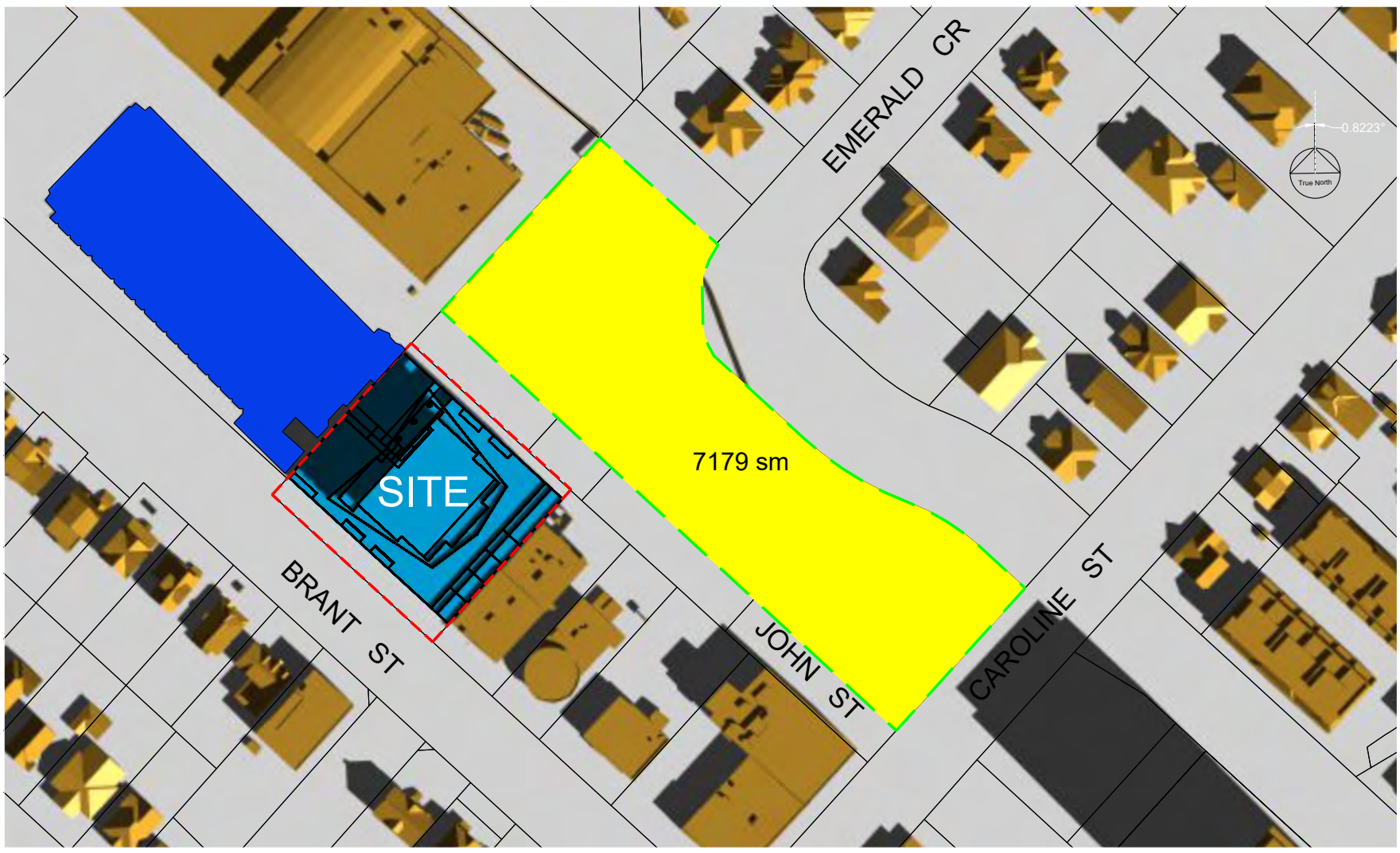
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.4-6
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

11:00 AM

Potential Future Park

Area exposed to sunshine

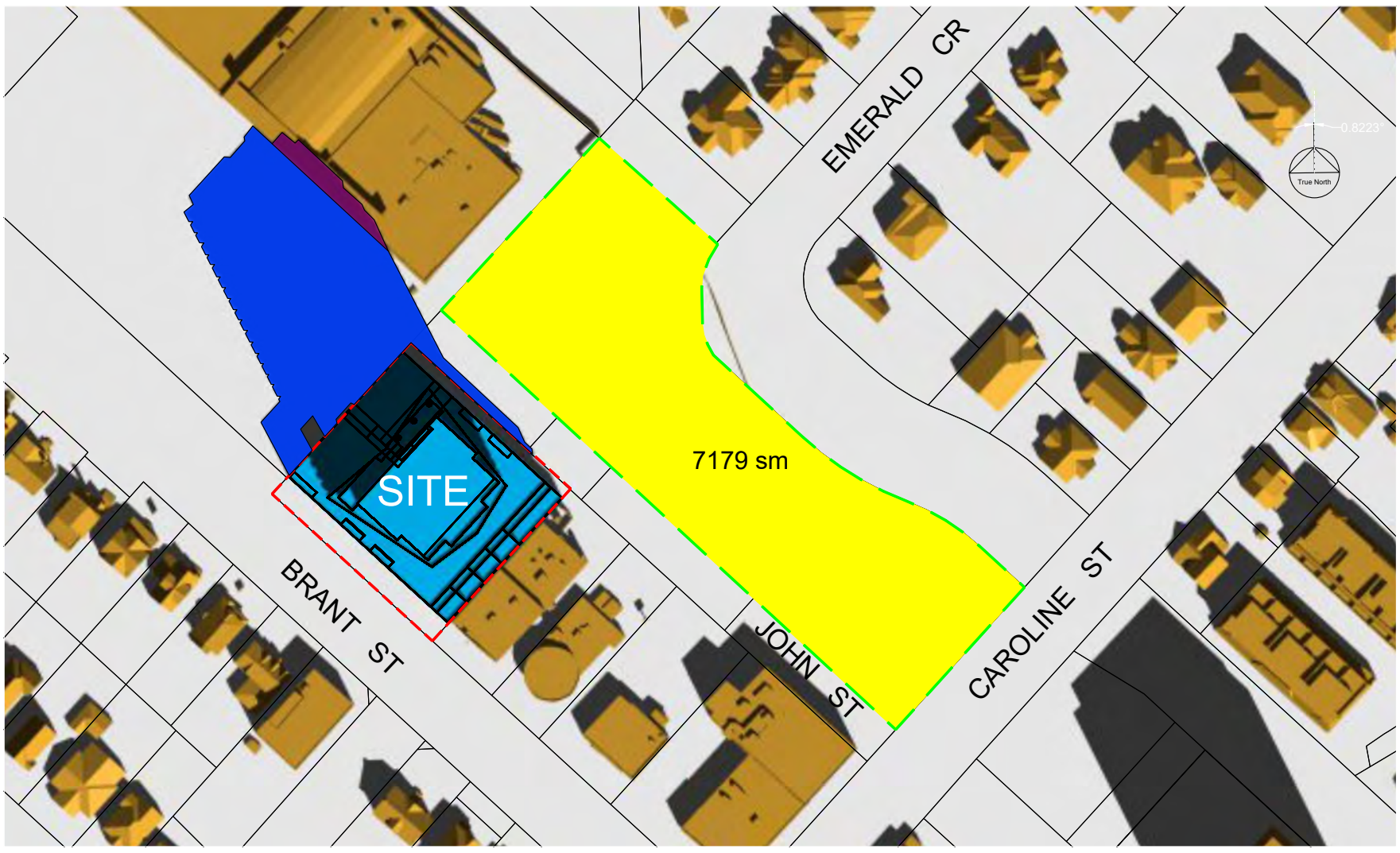
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

SEP 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

12:00 PM

ALL TIMES IN EDT

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

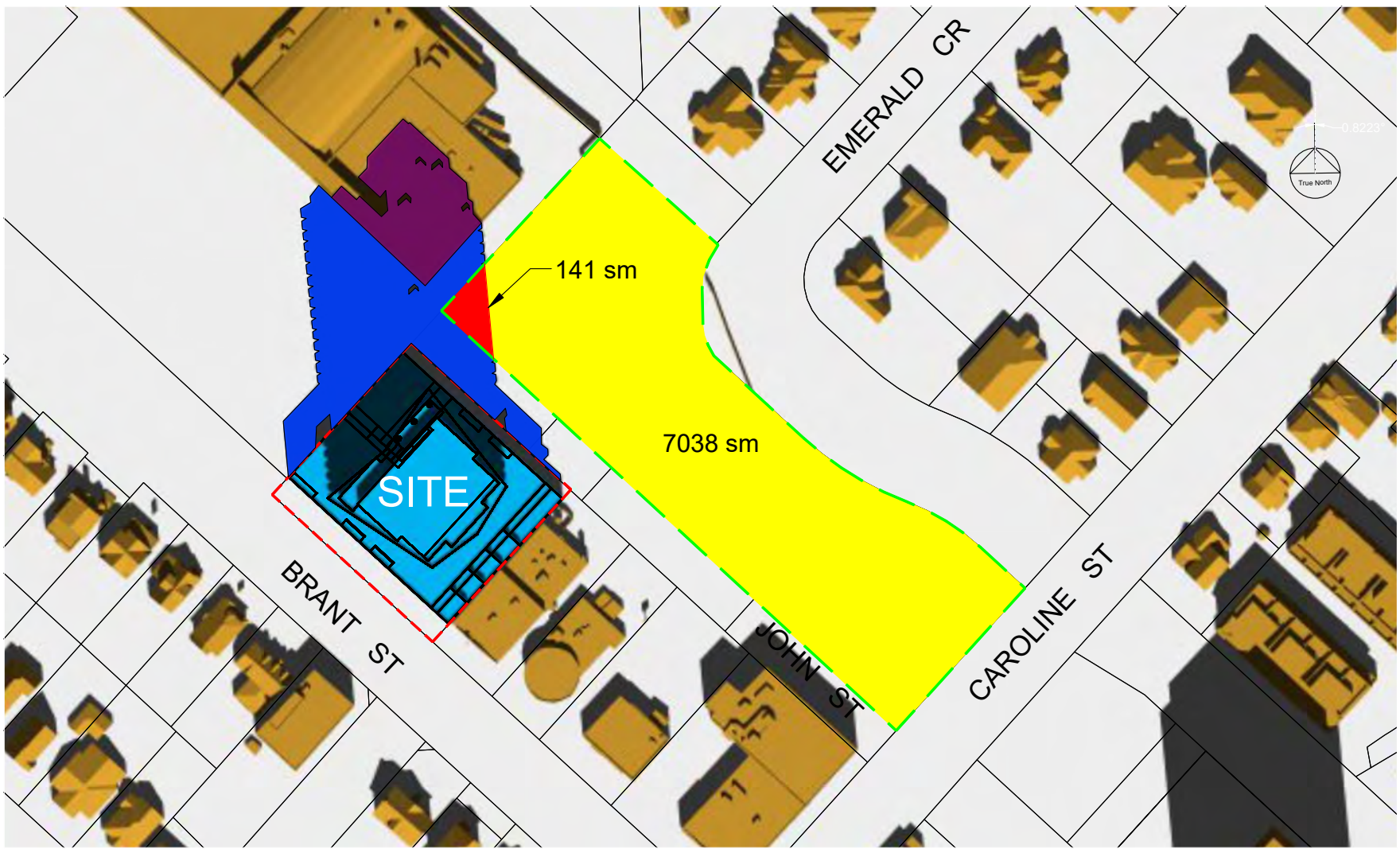
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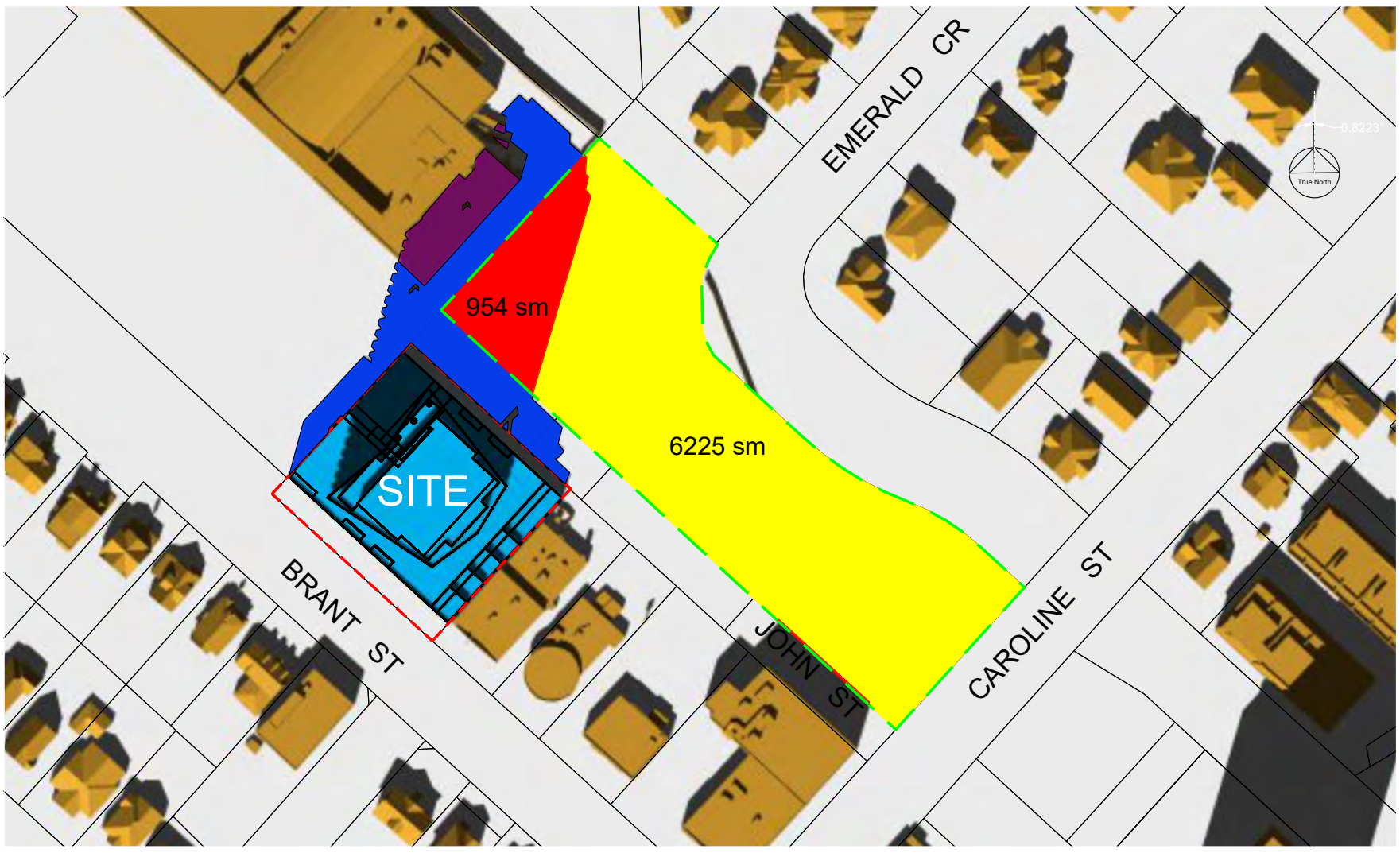
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Criteria 4.4 - Parks and Open Space

1:00 PM

- Potential Future Park
- Area exposed to sunshine
- Area in shadow (existing + proposed)
- Site Boundary
- Net New Shadows cast on roof surfaces
- Net New Shadows cast on ground surfaces
- Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

SEP 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

2:00 PM

ALL TIMES IN EDT

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

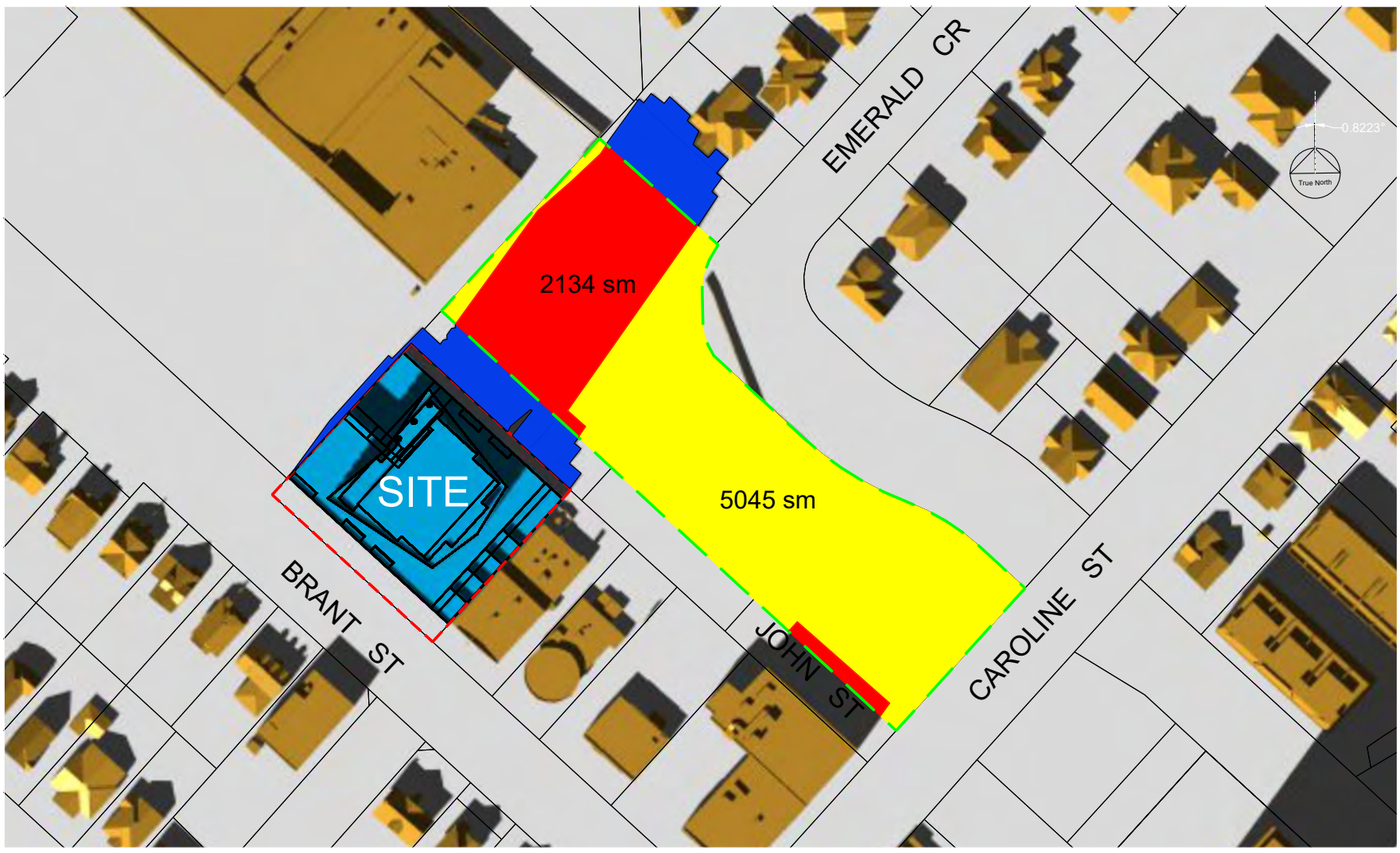
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.4-8
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

3:00 PM

Potential Future Park

Area exposed to sunshine

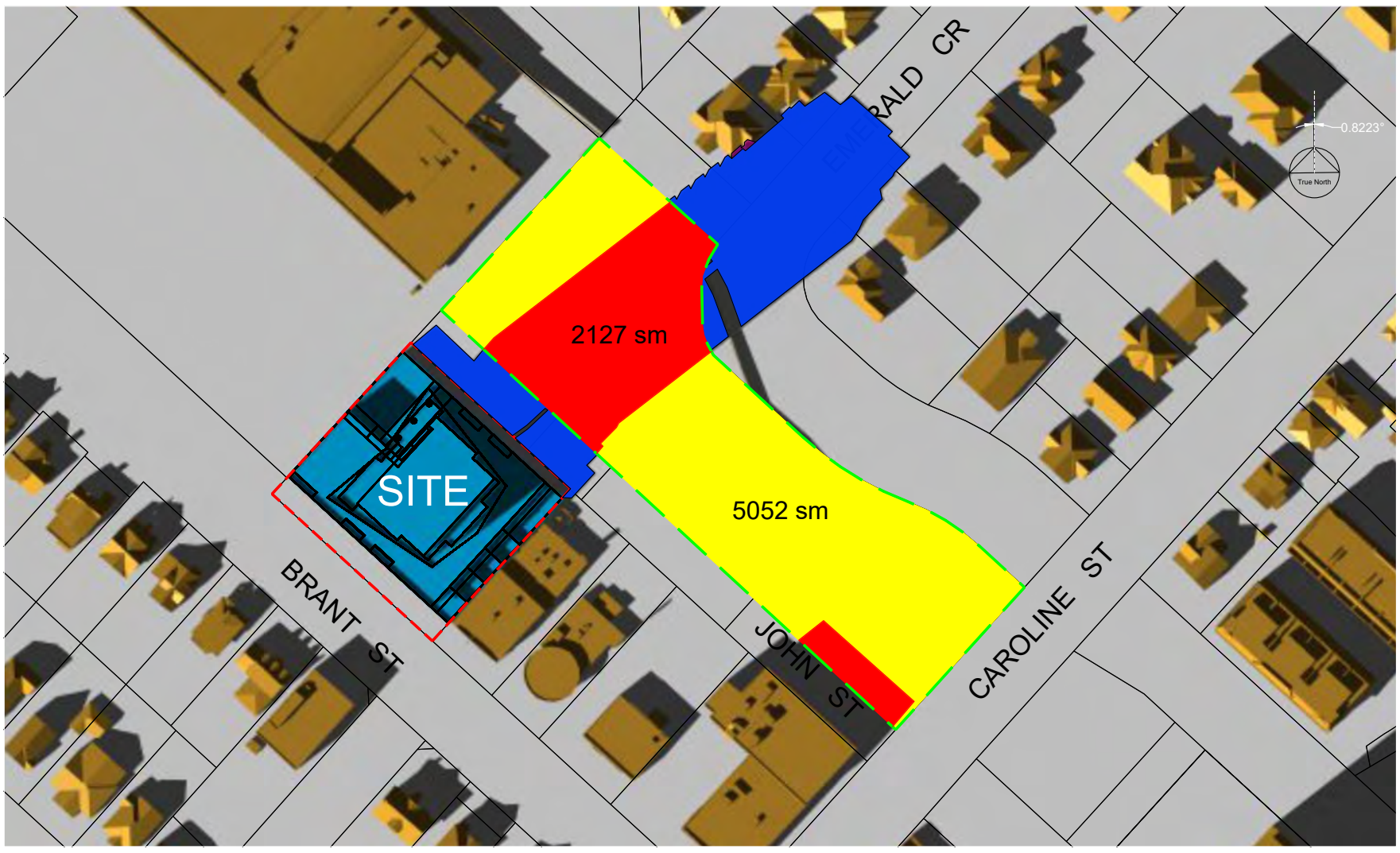
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

4:00 PM

ALL TIMES IN EDT

0 10 50 100

SEP 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

SUN / SHADOW STUDY

Proposed Mixed-Use Development

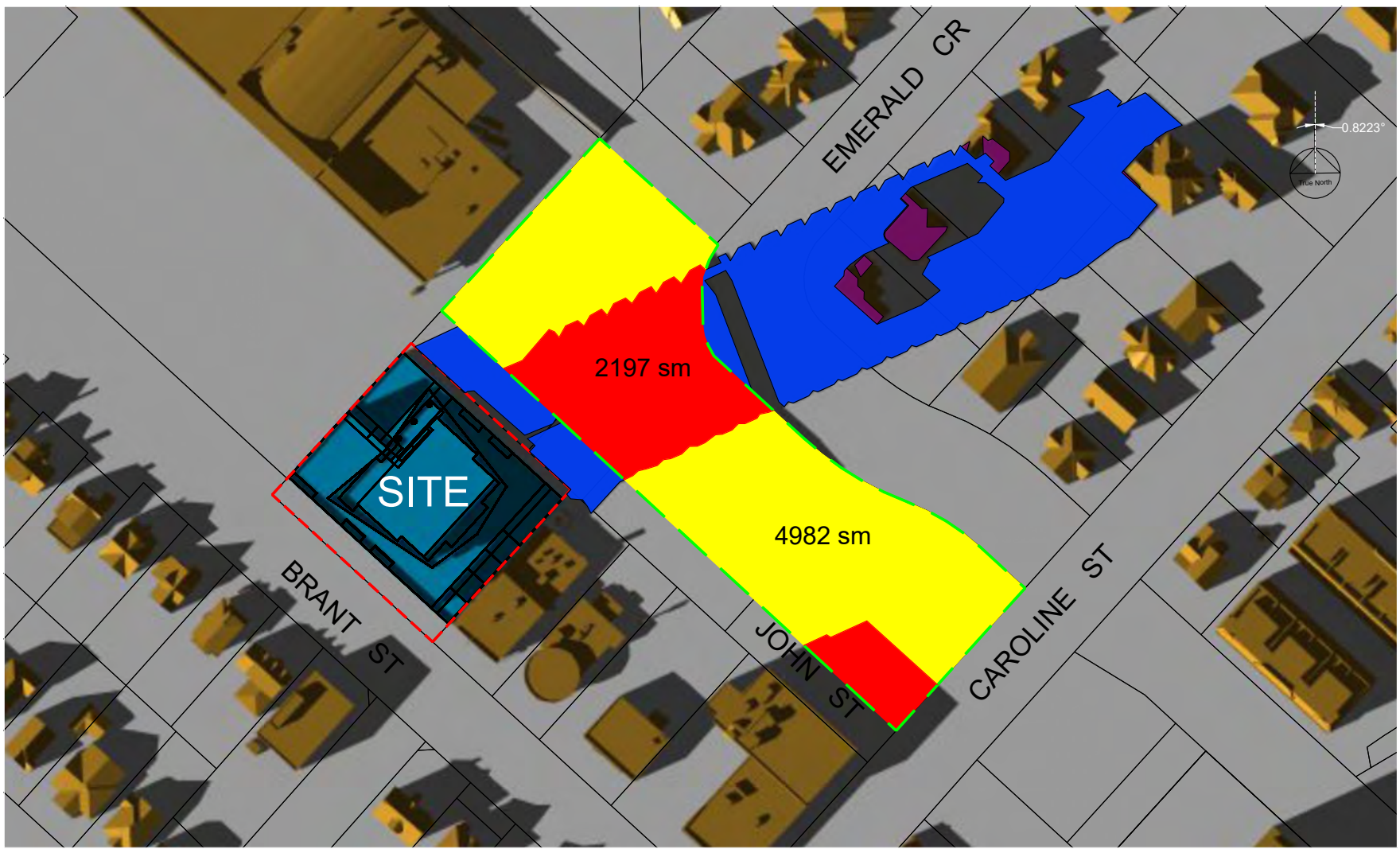
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.4-9
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

5:00 PM

Potential Future Park

Area exposed to sunshine

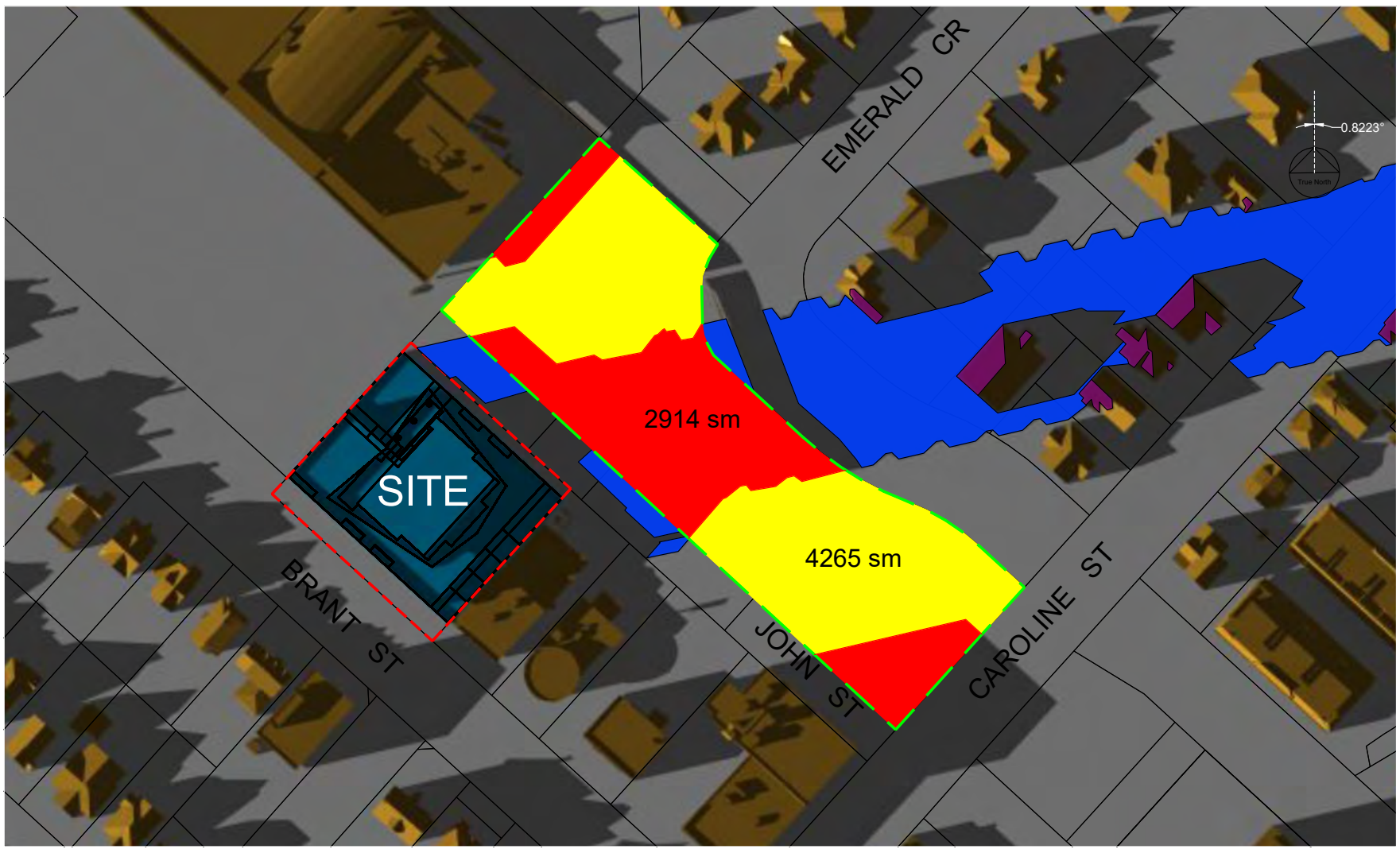
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

6:00 PM

ALL TIMES IN EDT

SEP 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

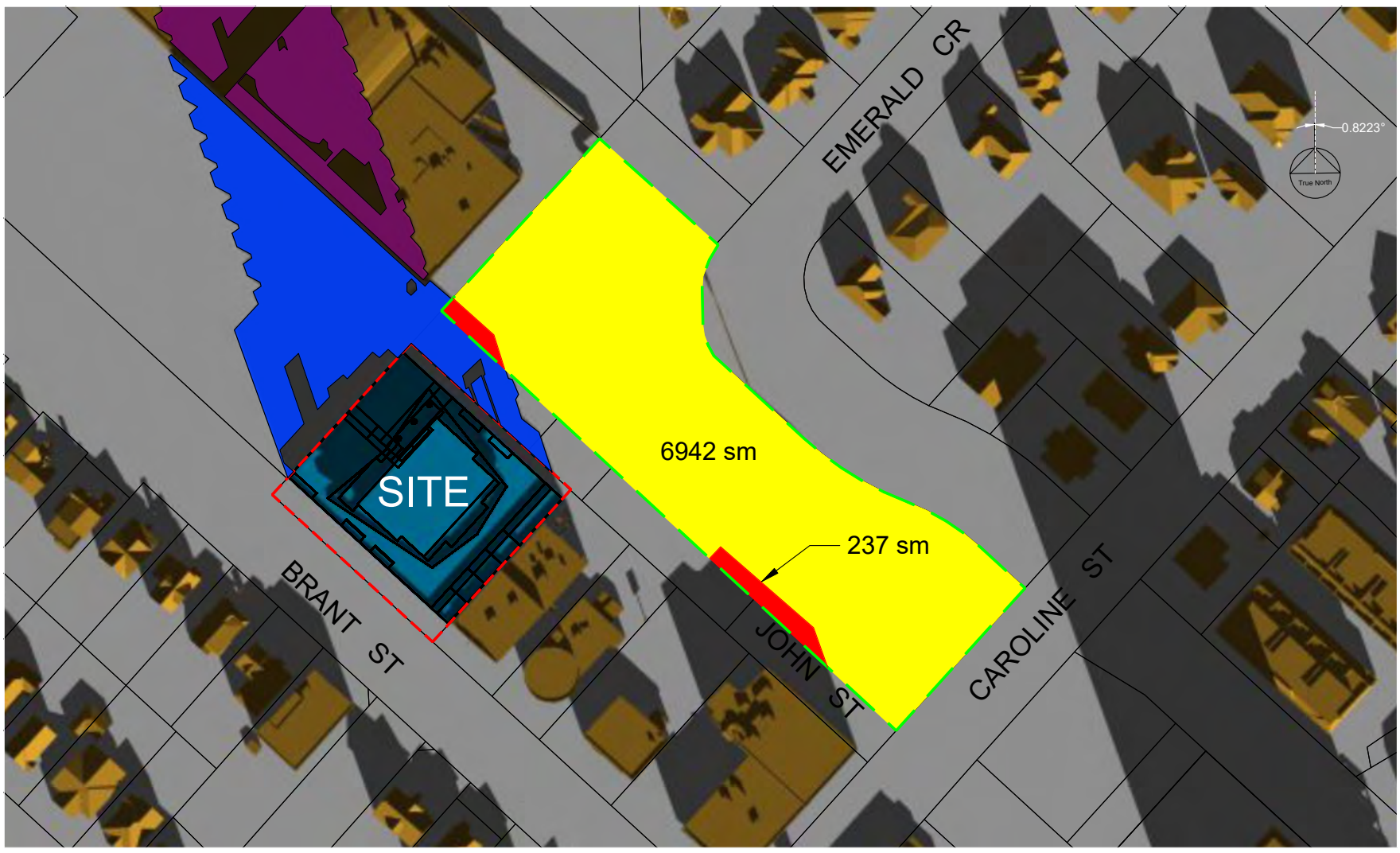
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.4-10
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

11:00 AM

Potential Future Park

Area exposed to sunshine

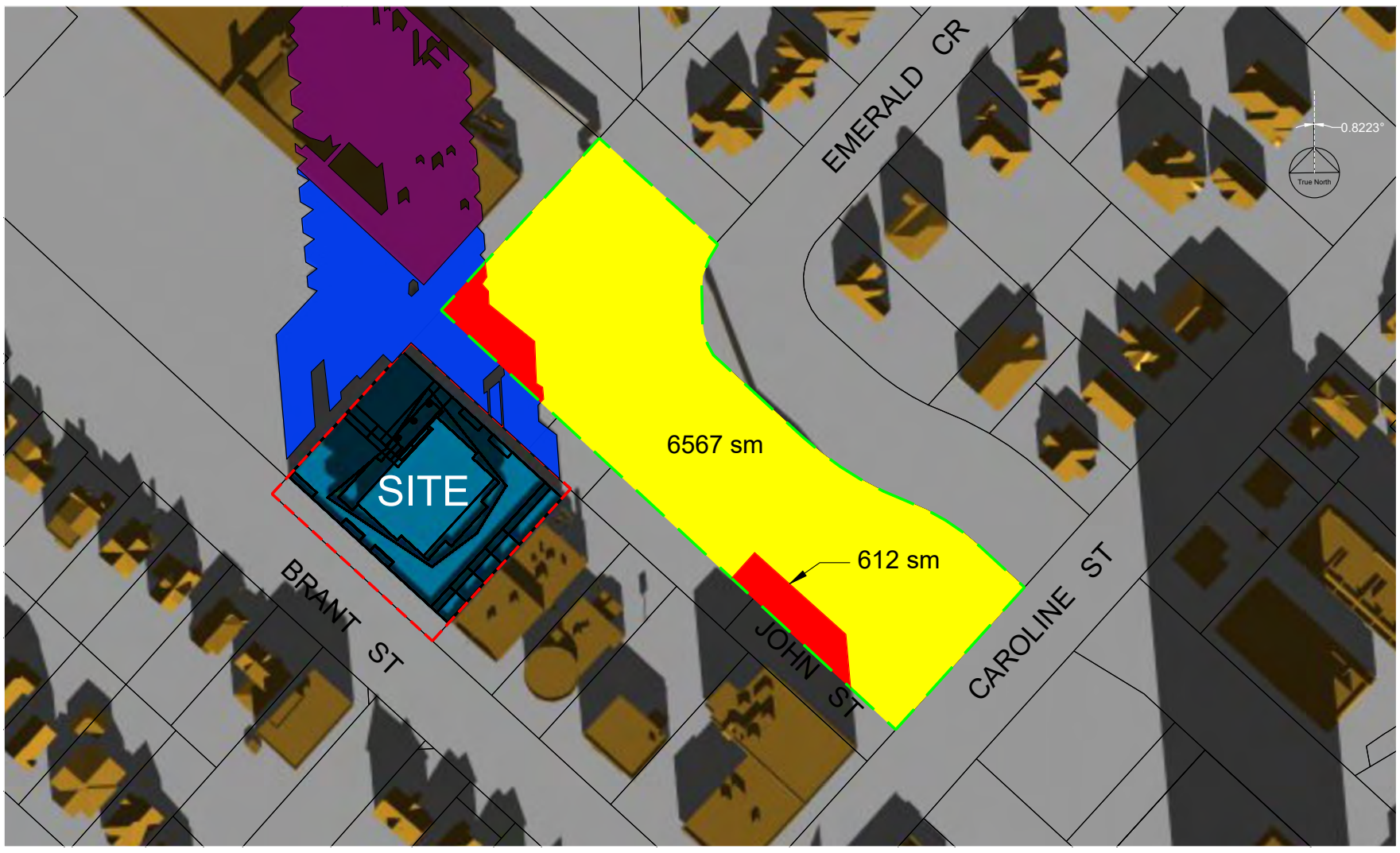
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

12:00 PM

ALL TIMES IN EDT

0 10 50 100

DEC 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

SUN / SHADOW STUDY

Proposed Mixed-Use Development

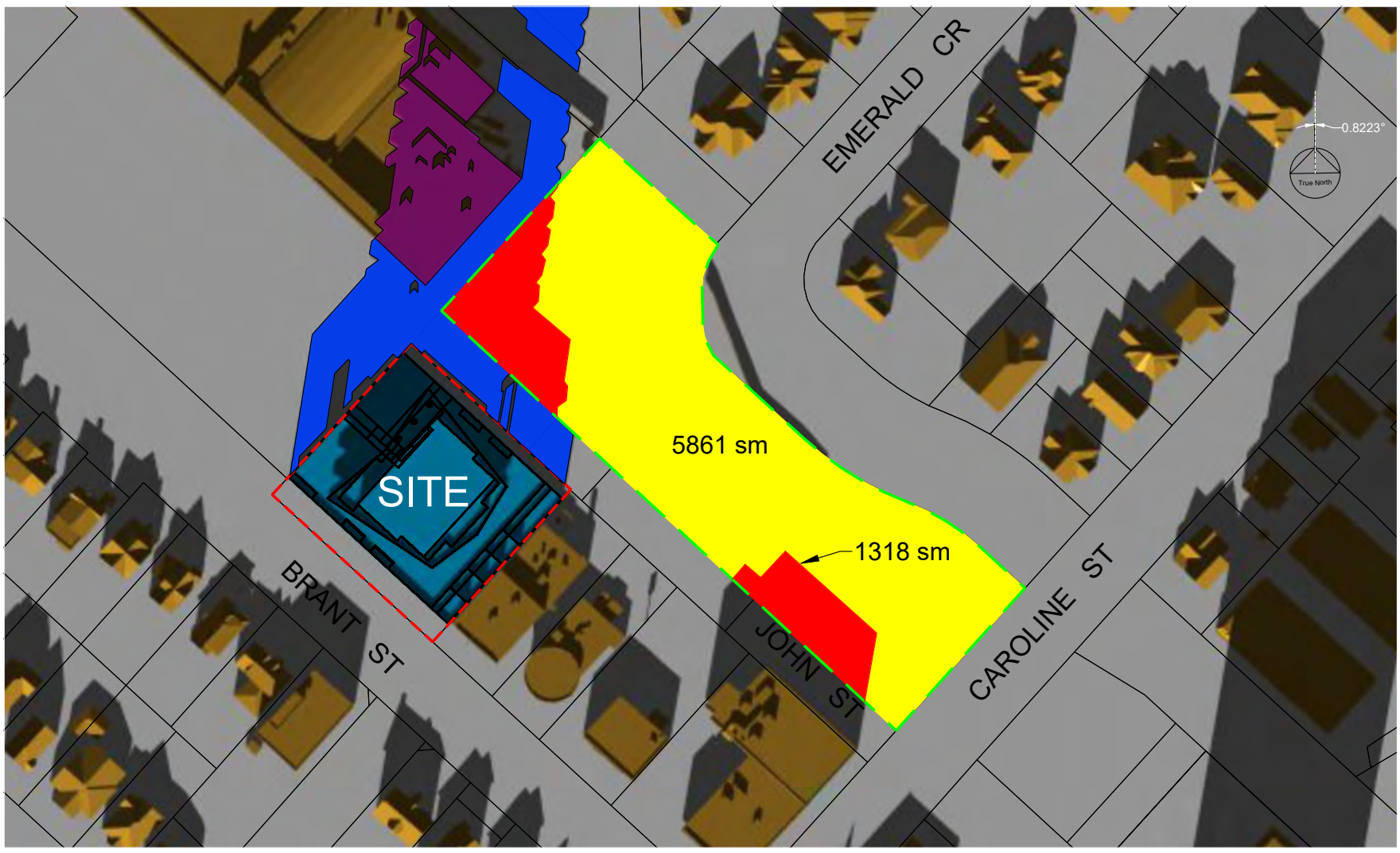
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.4-11
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

1:00 PM

Potential Future Park

Area exposed to sunshine

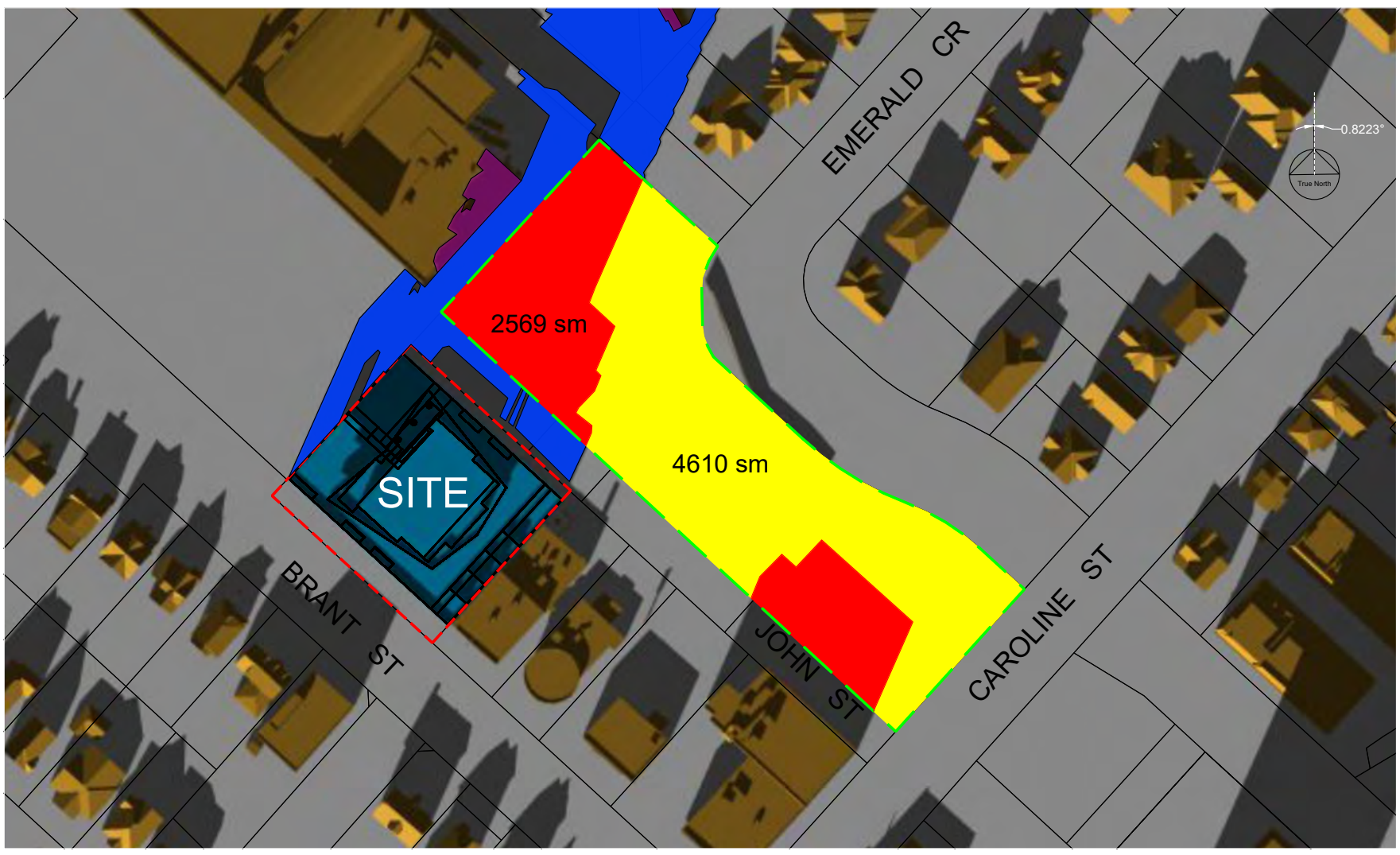
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.4 - Parks and Open Space

DEC 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

2:00 PM

ALL TIMES IN EDT

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

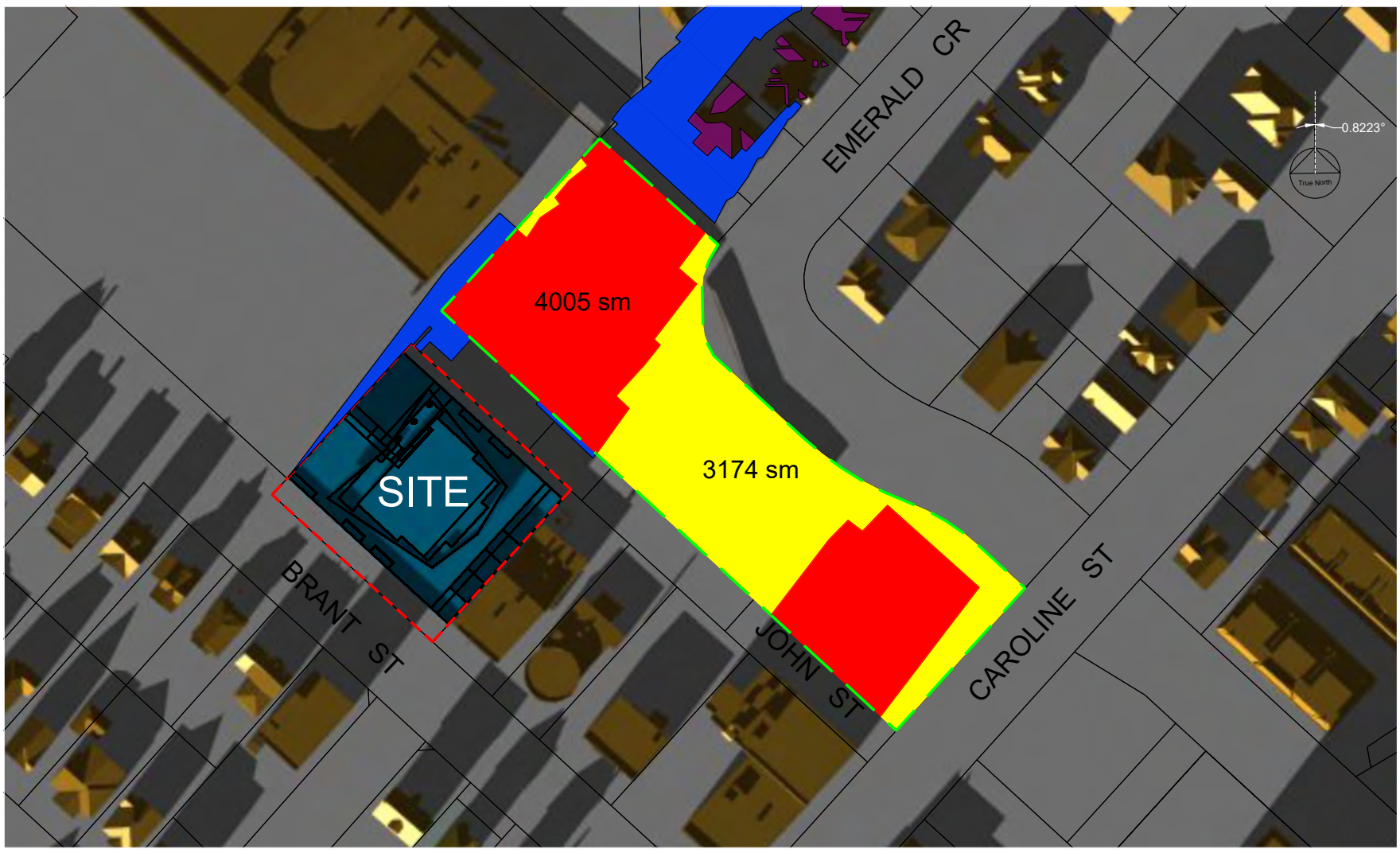
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.4-12
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.4 - Parks and Open Space

3:00 PM

- Potential Future Park
- Area exposed to sunshine
- Area in shadow (existing + proposed)
- Site Boundary
- Net New Shadows cast on roof surfaces
- Net New Shadows cast on ground surfaces
- Existing Shadows cast on ground surfaces

DEC 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

ALL TIMES IN EDT

0 10 50 100

SUN / SHADOW STUDY

Proposed Mixed-Use Development

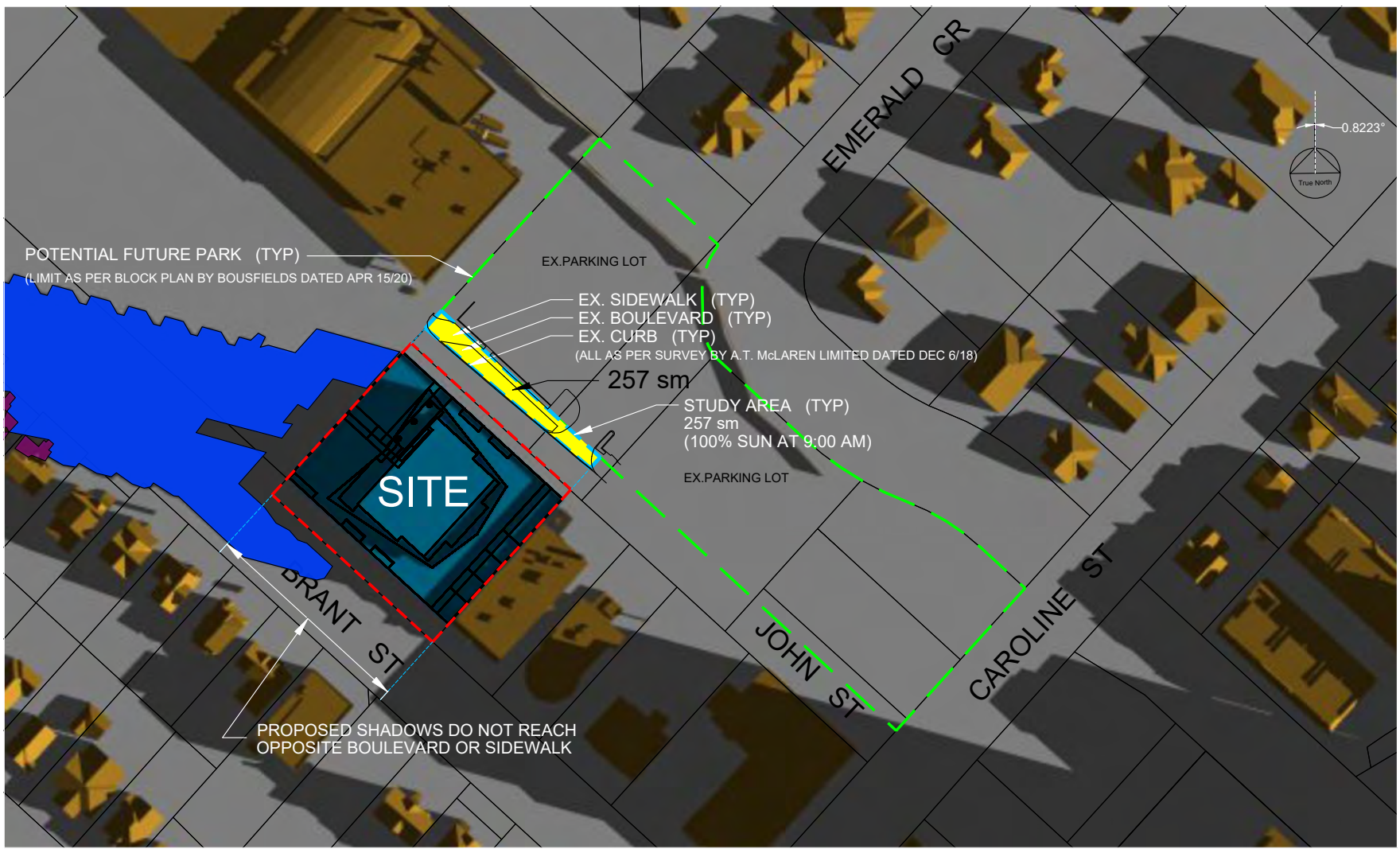
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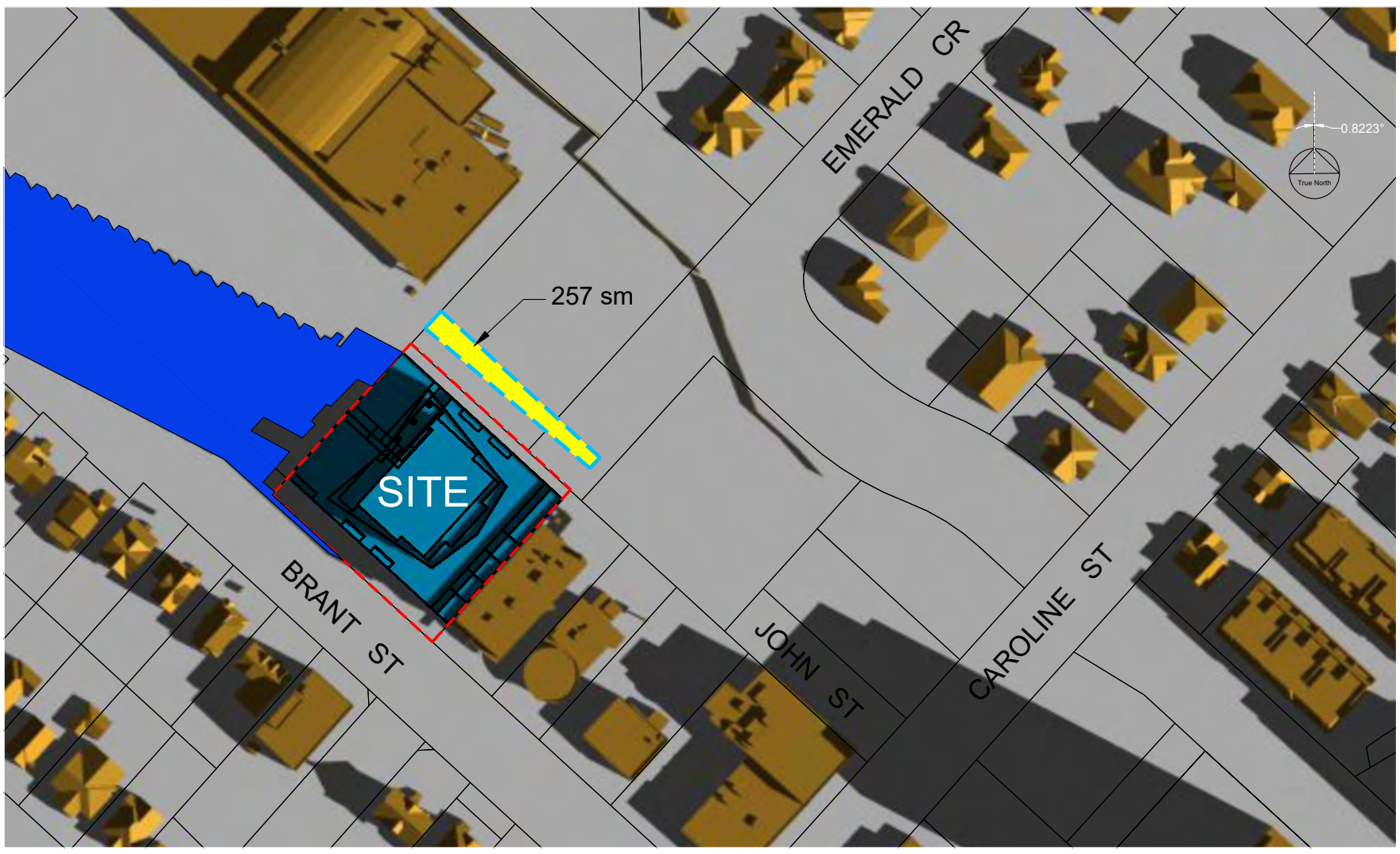
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Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.6 - Public Realm and Sidewalks

9:00 AM

- Existing boulevard and sidewalk area
- Area exposed to sunshine
- Area in shadow (existing + proposed)
- Site Boundary
- Net New Shadows cast on roof surfaces
- Net New Shadows cast on ground surfaces
- Existing Shadows cast on ground surfaces



Criteria 4.6 - Public Realm and Sidewalks

10:00 AM

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

ALL TIMES IN EDT

0 10 50 100

SCALE 1 : 1500

SUN / SHADOW STUDY

Proposed Mixed-Use Development

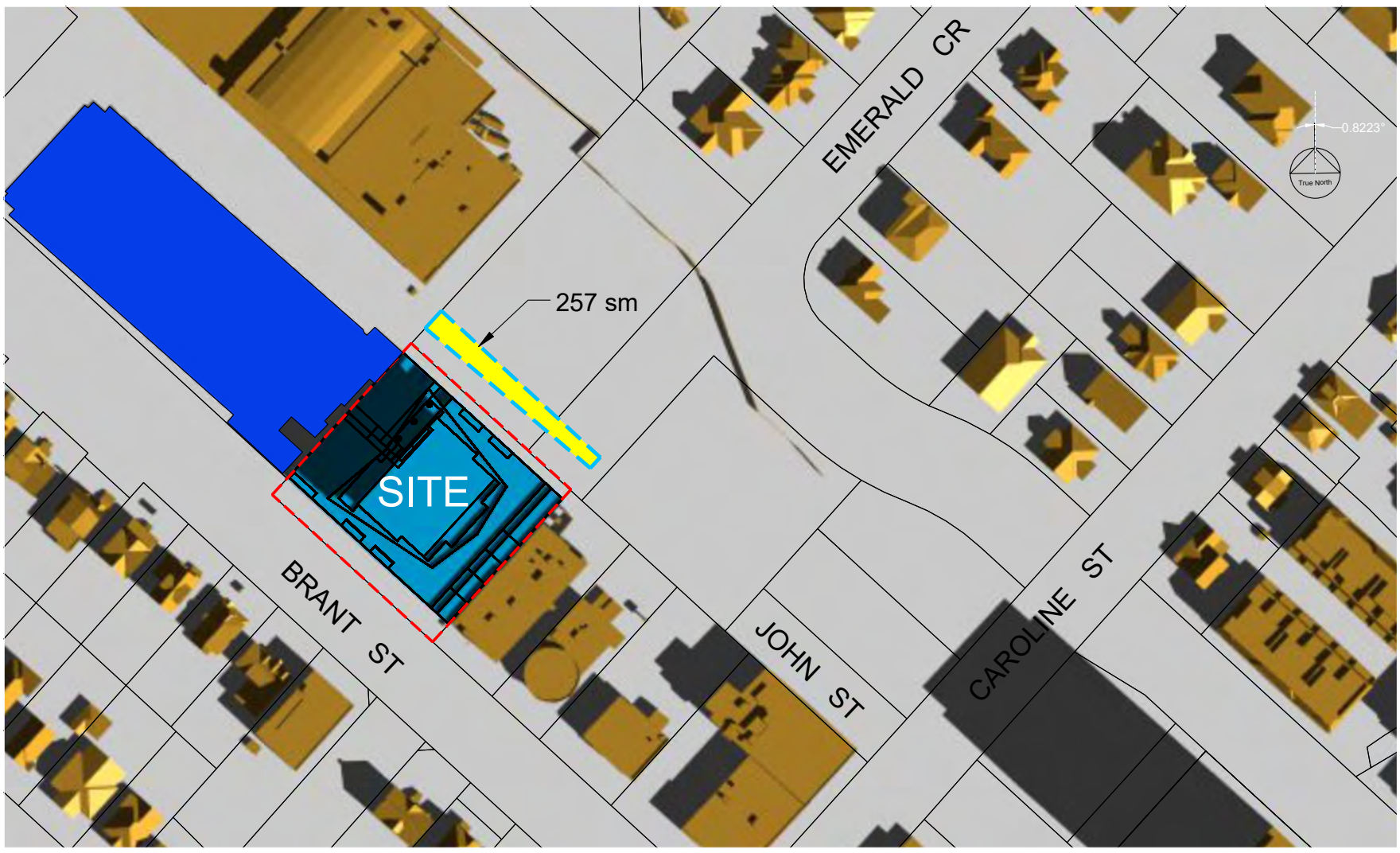
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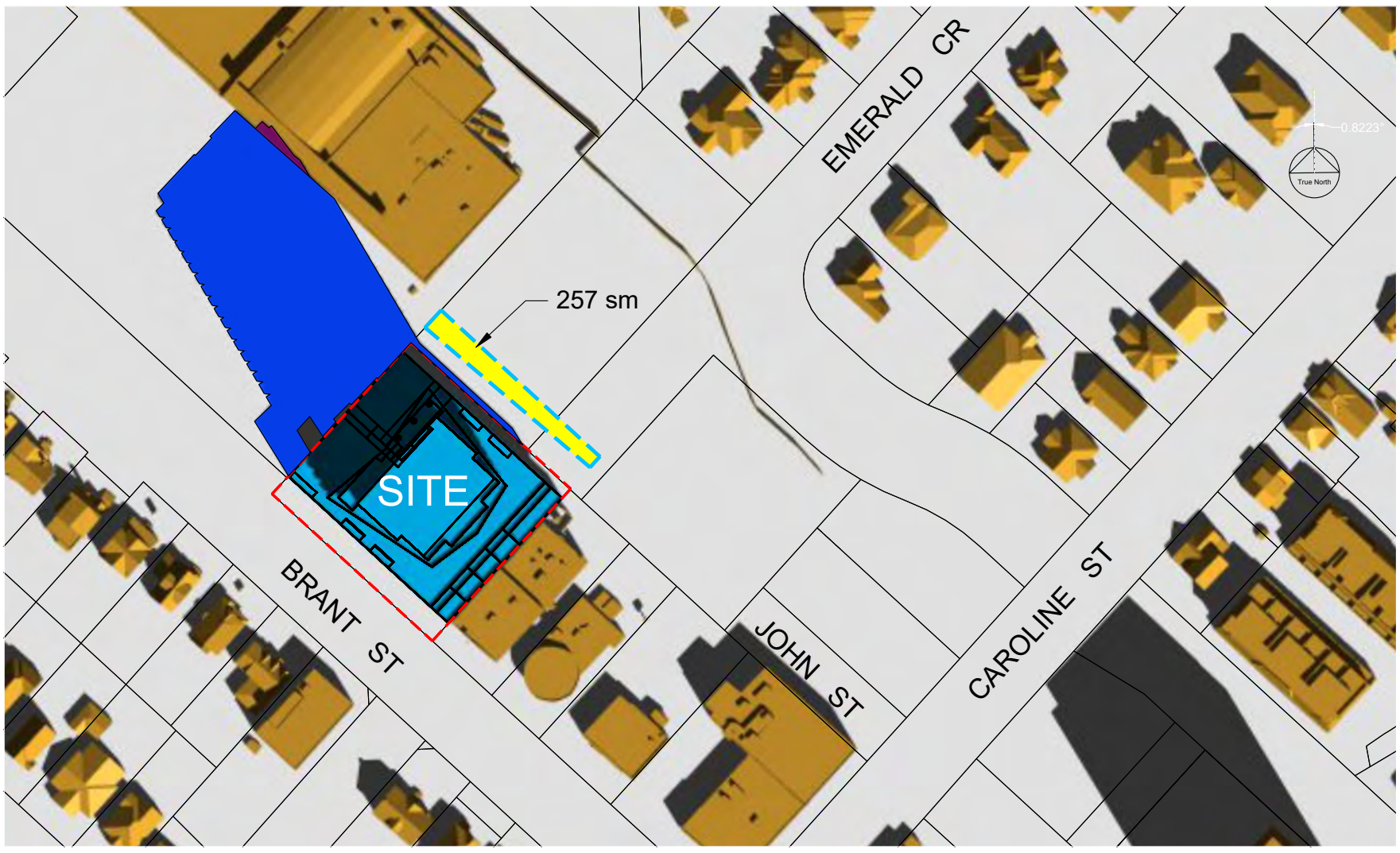
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Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.6 - Public Realm and Sidewalks

11:00 AM

- Existing boulevard and sidewalk area
- Area exposed to sunshine
- Area in shadow (existing + proposed)
- Site Boundary
- Net New Shadows cast on roof surfaces
- Net New Shadows cast on ground surfaces
- Existing Shadows cast on ground surfaces



Criteria 4.6 - Public Realm and Sidewalks

12:00 PM

ALL TIMES IN EDT

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

0 10 50 100

SCALE 1 : 1500

SUN / SHADOW STUDY

Proposed Mixed-Use Development

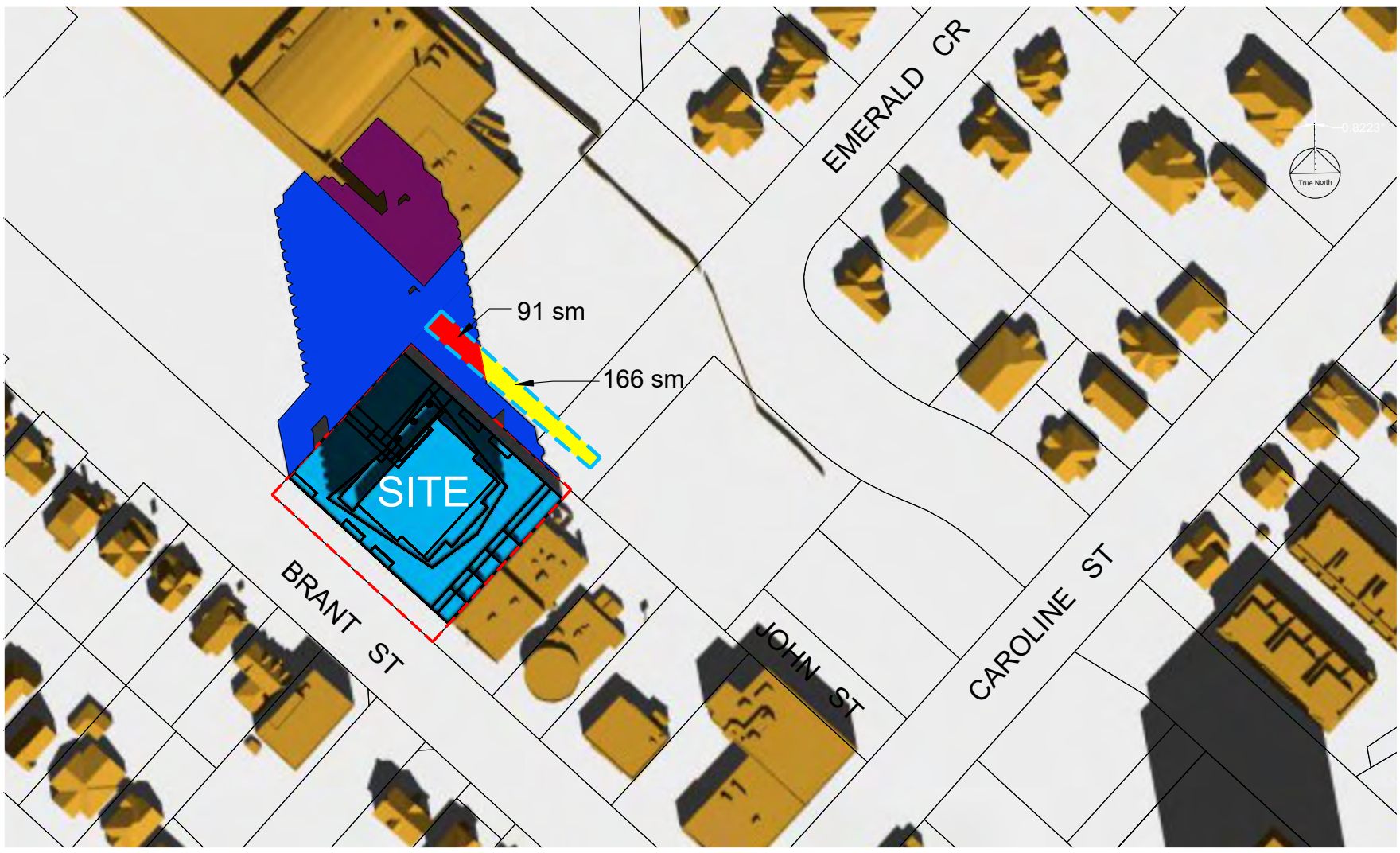
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Calculated by:	RB	Project:	S20006	Drawing No.:
Drawn by:	RB	Scale:	1 : 1500	4.6-2
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.6 - Public Realm and Sidewalks

1:00 PM

Existing boulevard and sidewalk area

Area exposed to sunshine

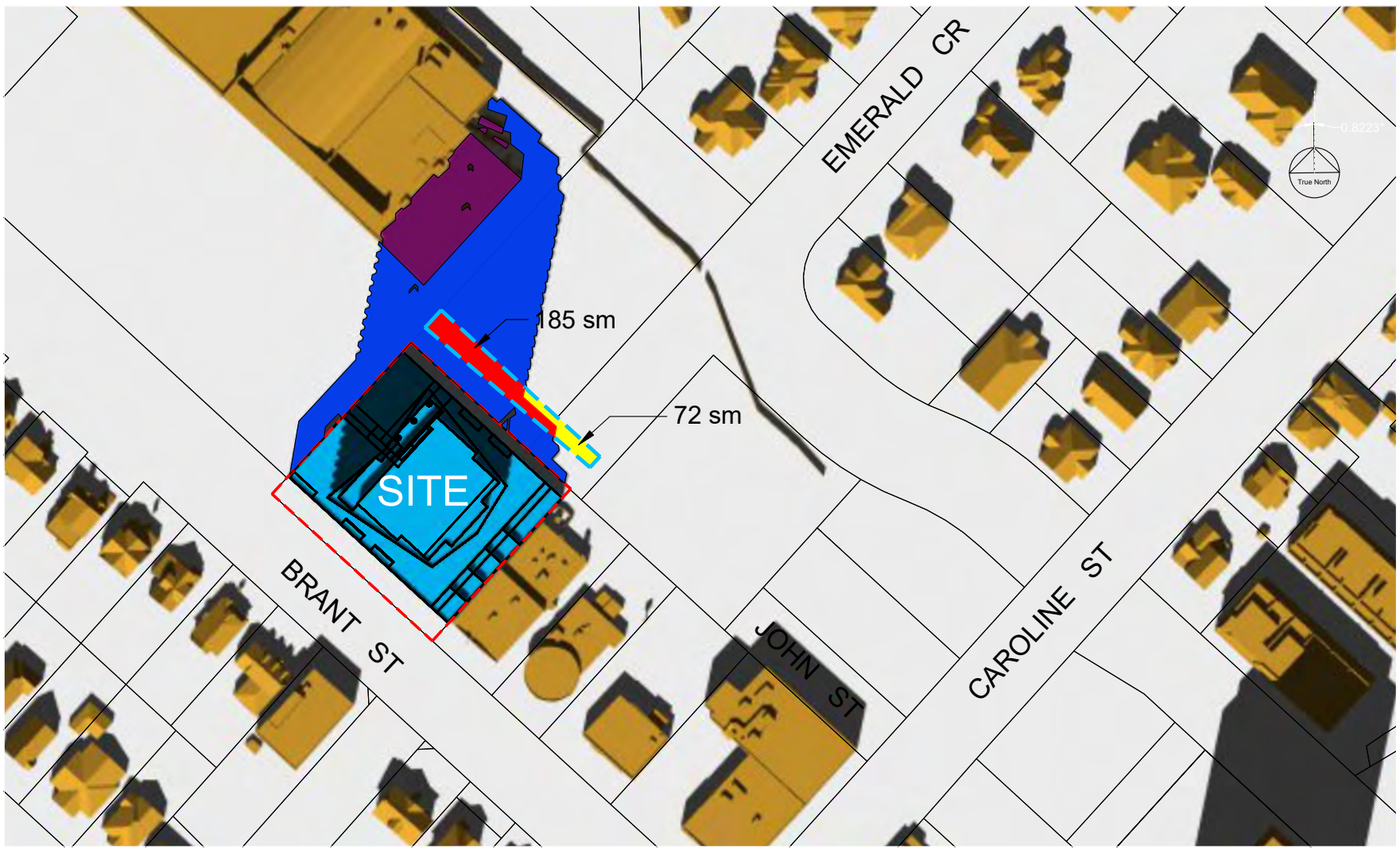
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.6 - Public Realm and Sidewalks

2:00 PM

ALL TIMES IN EDT

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

0 10 50 100

SCALE 1 : 1500

SUN / SHADOW STUDY

Proposed Mixed-Use Development

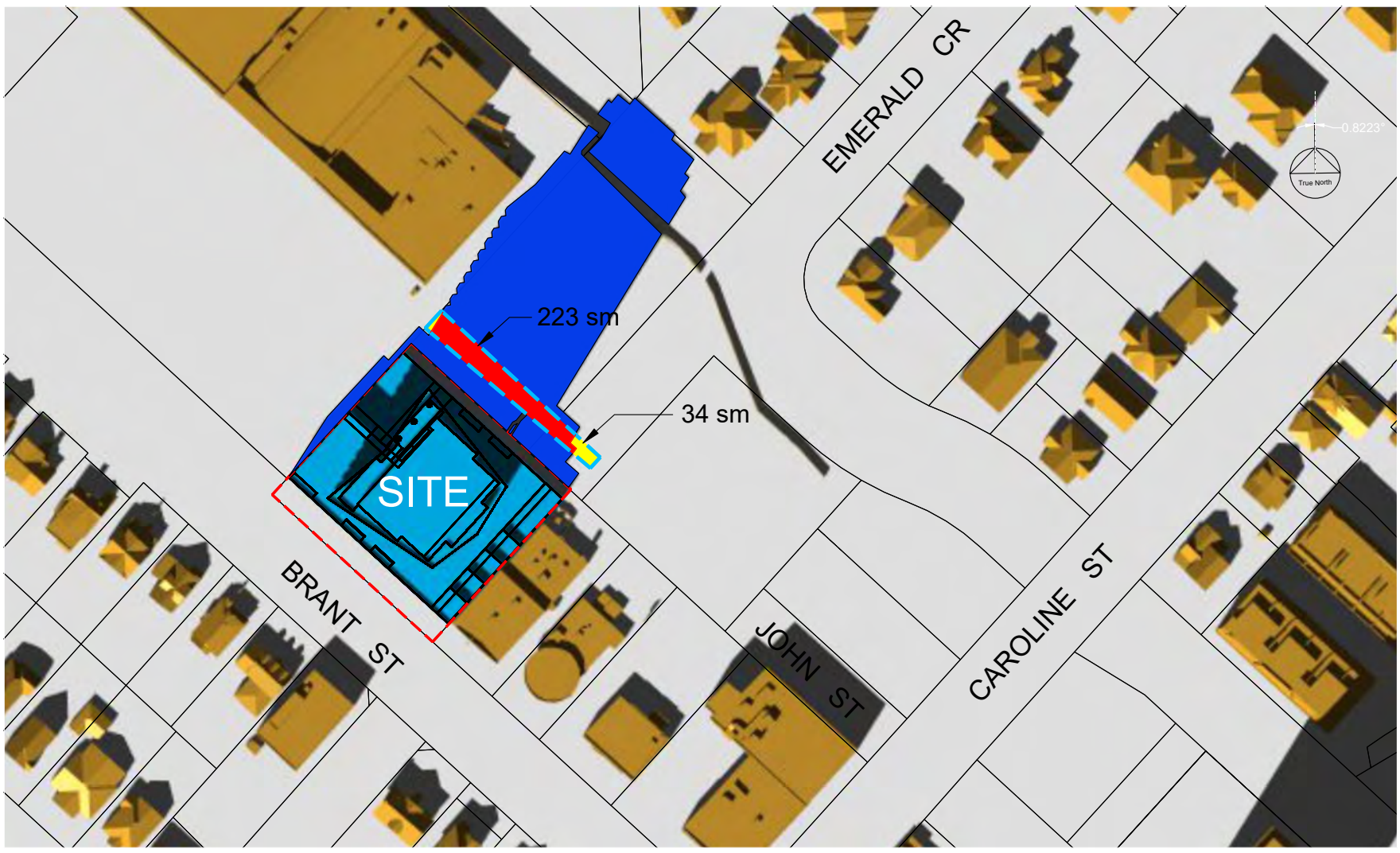
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.6-3
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.6 - Public Realm and Sidewalks

3:00 PM

Existing boulevard and sidewalk area

Area exposed to sunshine

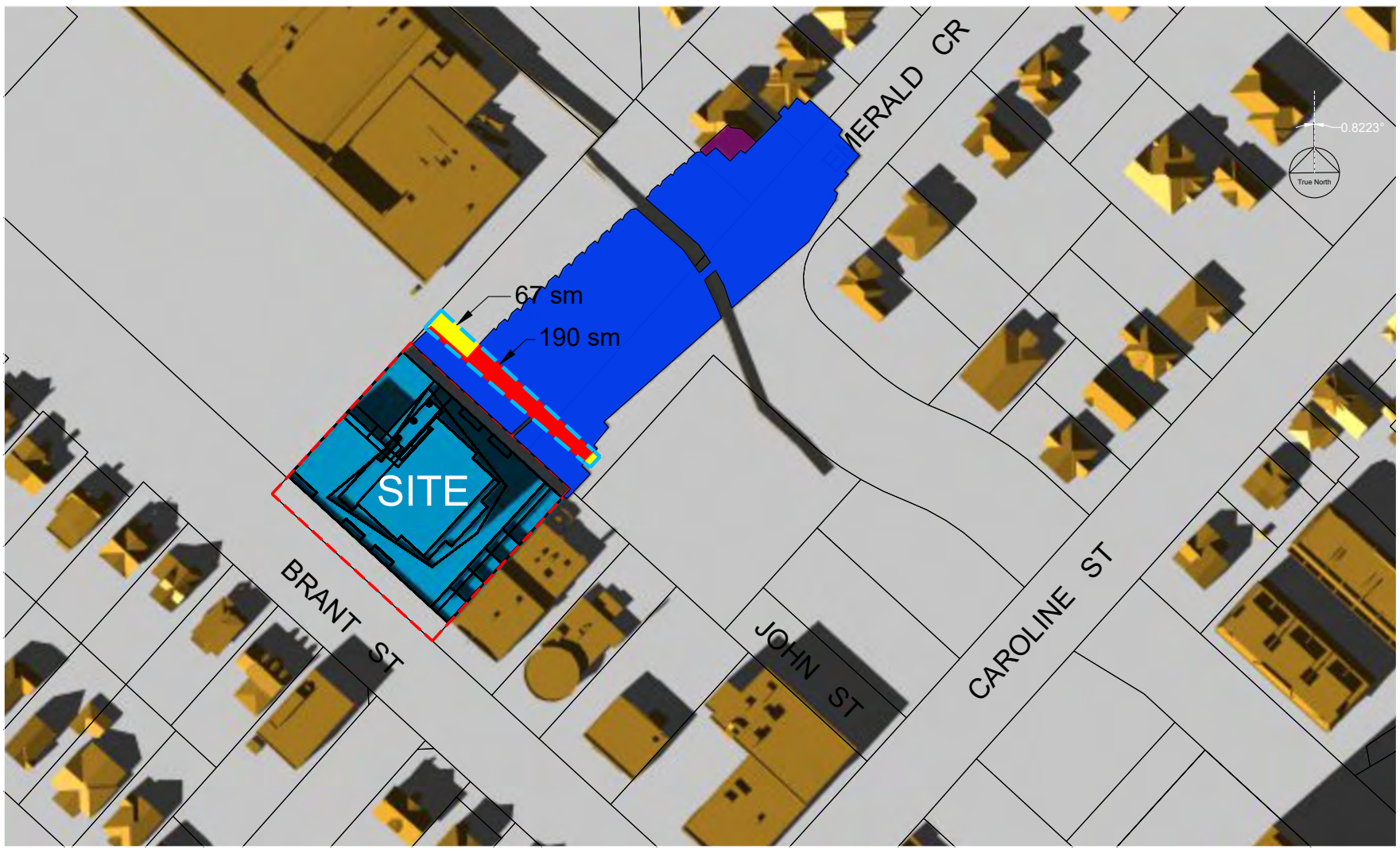
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.6 - Public Realm and Sidewalks

4:00 PM

ALL TIMES IN EDT

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

0 10 50 100

SCALE 1 : 1500

SUN / SHADOW STUDY

Proposed Mixed-Use Development

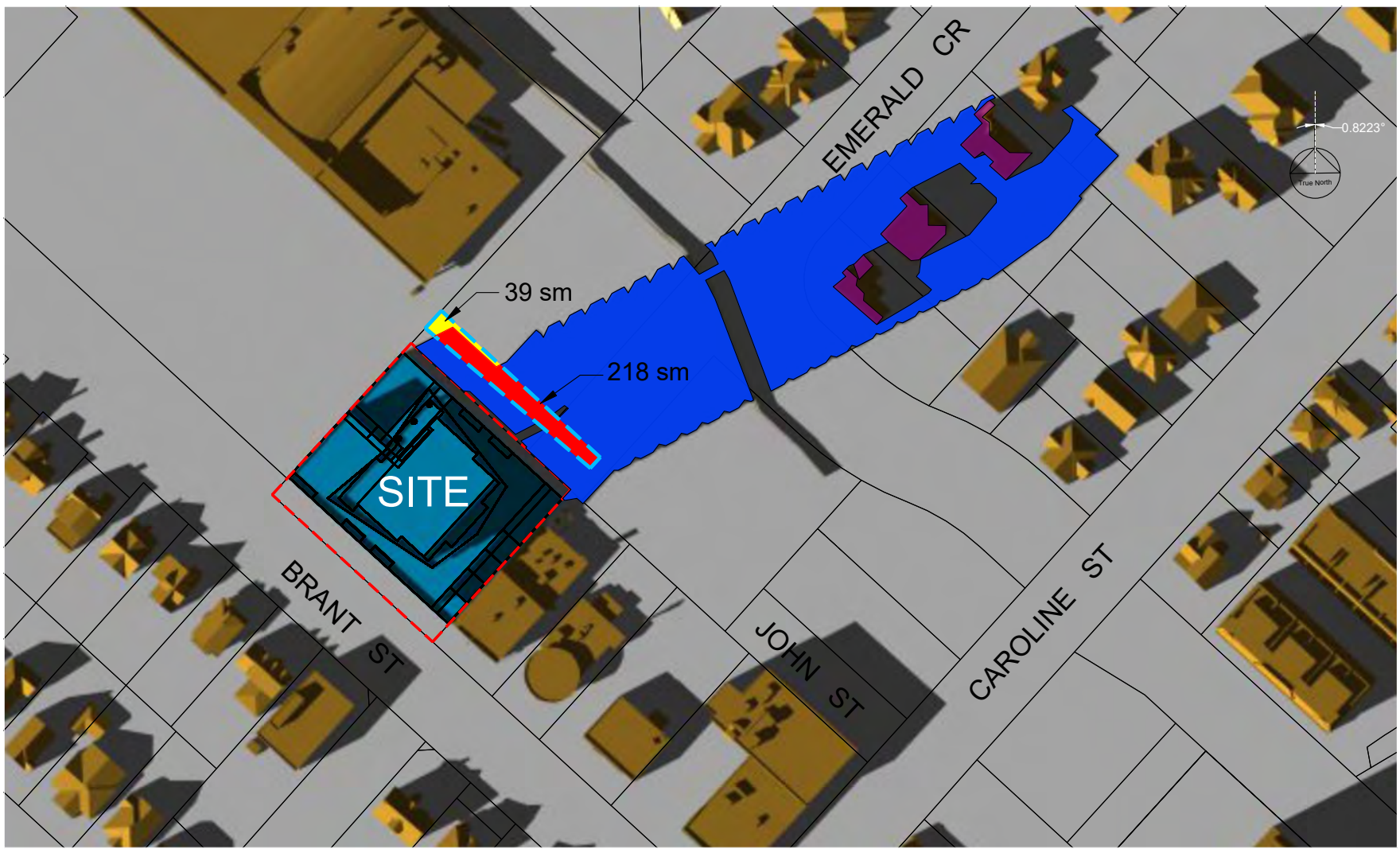
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Calculated by:	RB	Project:	S20006	Drawing No.: 4.6-4
Drawn by:	RB	Scale:	1 : 1500	
Checked by:	RB	Date:	MAR 2/21	



Criteria 4.6 - Public Realm and Sidewalks

5:00 PM

Existing boulevard and sidewalk area

Area exposed to sunshine

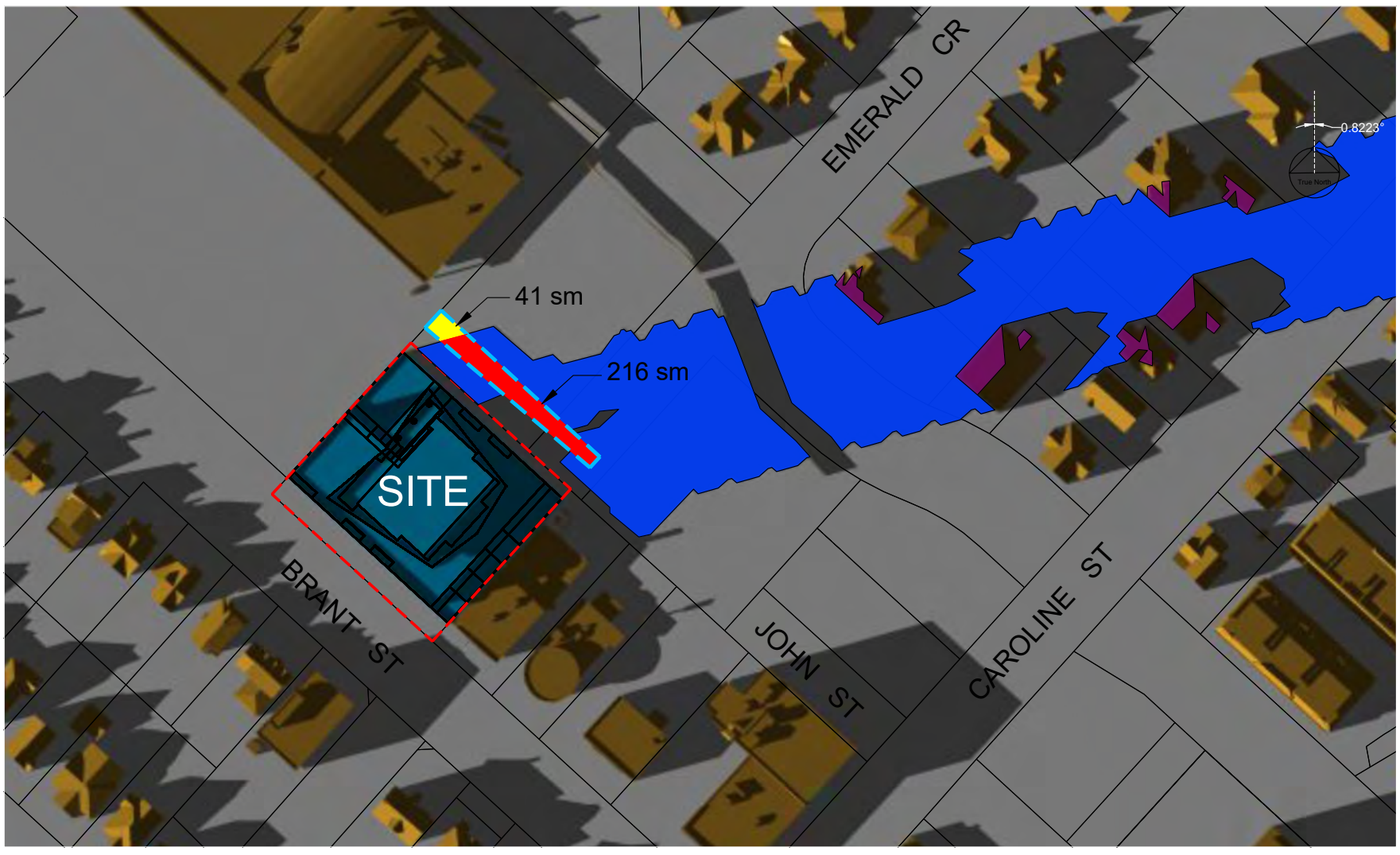
Area in shadow (existing + proposed)

Site Boundary

Net New Shadows cast on roof surfaces

Net New Shadows cast on ground surfaces

Existing Shadows cast on ground surfaces



Criteria 4.6 - Public Realm and Sidewalks

6:00 PM

ALL TIMES IN EDT

MAR 21

(NOTE: AREA FIGURES DENOTE TOTAL FOR THE TEST TIME)
(NOTE: EXISTING FENCE SHADOWS IGNORED)

0 10 50 100

SCALE 1 : 1500

SUN / SHADOW STUDY

Proposed Mixed-Use Development

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Calculated by:	RB	Project:	S20006	Drawing No.:
Drawn by:	RB	Scale:	1 : 1500	4.6-5
Checked by:	RB	Date:	MAR 2/21	