800 BURLOAK DRIVE

City of Burlington

Sun & Shadow Study

July 23rd, 2026

EMSHIH DEVELOPMENTS INC.

ZO1

Introduction and Purpose

This Sun/'Shadow Study (the "Shadow Study") has been prepared by ZO1 Architects, in behalf of Emshih Developments Inc., to demonstrate the general shadow impact for the proposed development at 800 Burloak Drive (the "subject site"). The subject site is located on the south side of Burloak Drive, just east of the Canadian National Railway lands and just north of Sherwood Forest Park.

ZO1 Architects has prepared this Shadow Study report in accordance with the City of Burlington Shadow Study Guidelines and Terms of Reference (June 2020). The purpose of the Shadow Study Guidelines (the “SSG”) is to provide a best practices approach to Shadow Studies to promote high-quality development proposals that ensure adequate access to sunlight is maintained for the enjoyment of public and private spaces. The SSG states that the document should be used by the development community to inform development proposals within the City of Burlington and that the document is a tool for City Staff to be used in the review and evaluation of development applications.

Site Latitude and Longitude

The latitude and longitude location of the Subject Site was defined by OpenStreetMap:

- Latitude: 43° 23’ 22.13”
- Longitude: 79° 45’ 1.44”

Time Zone

This Shadow Study has been prepared using the following time zone standards:

- Standard Time: Universal Time minus 5 hours (Winter Solstice - December 21st)
- Daylight Saving Time: Universal Time minus 4 hours (Vernal Equinox - March 21st; Summer Solstice - June 21st; and Autumnal Equinox - September 21st)

Software Used to Prepare Shadow Analysis

3-dimensional modelling was prepared in Autodesk Revit to simulate shadow conditions. Shadow Study diagrams, composite images and Sun Access Factor (SAF) calculations were prepared using AgileForm ShadowColour.

Identified Areas

As per Section 4.0 of the SSG, this Study identifies potential key areas surrounding the proposed development. It notes that the criteria cannot be applied universally due to unique site specific and surrounding built form and land attributes. Five unique Shadow Impact Criteria have been developed to respond to the desired uses, and, as such, each area will include unique evaluation criteria with different times, dates and standards as noted by the SSG. These include:

- Key Civic and Cultural Spaces
- Private Outdoor Amenity Spaces
- Open Space
- Places where Children Play
- Public Realm and Sidewalks



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Sun Shadow Study - Context

800 Burloak Dr. Burlington

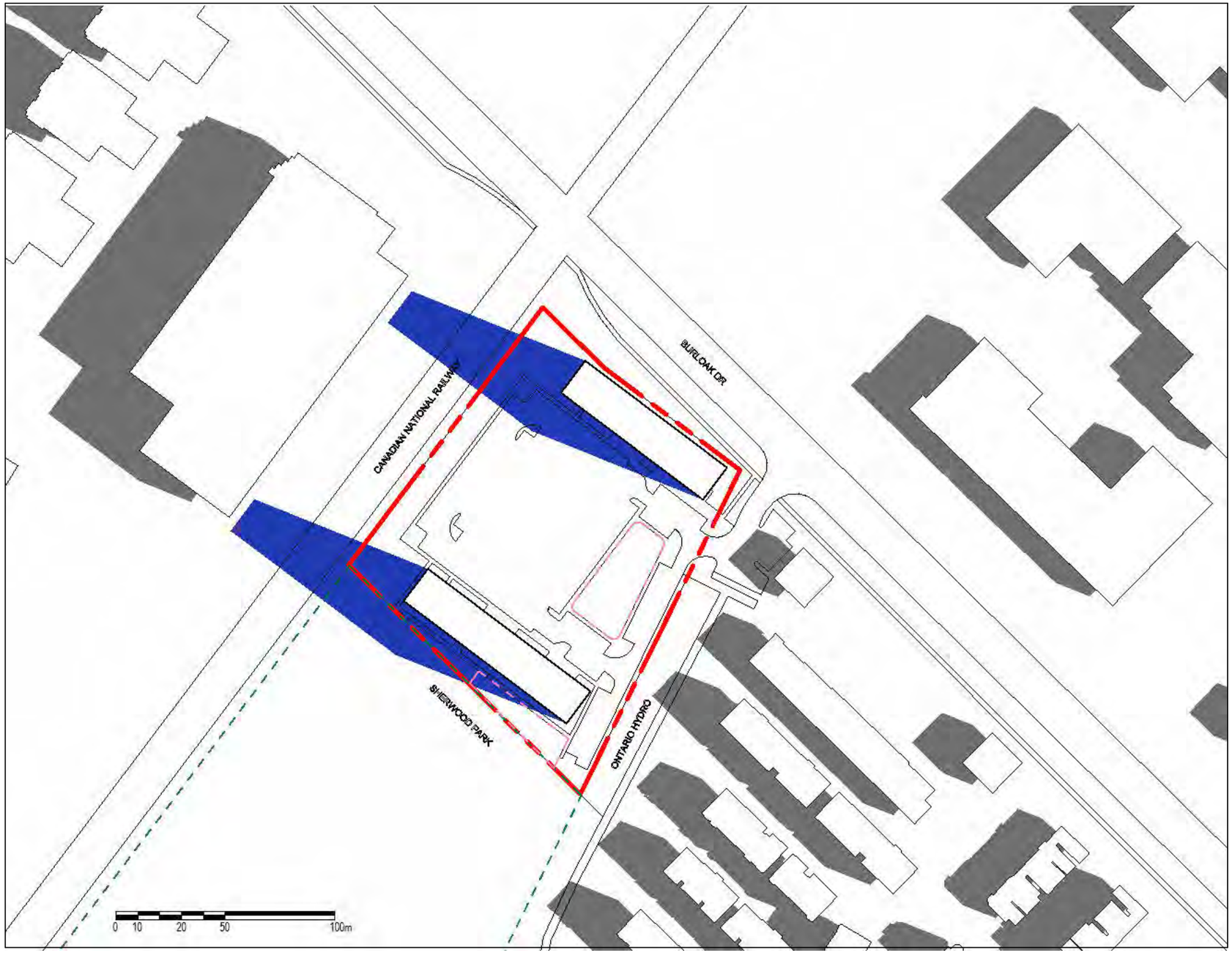
ZO1

SHADOW DRAWINGS

March 21st, 2026
09:00 - 18:00

EMSHIH
DEVELOPMENTS INC.

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
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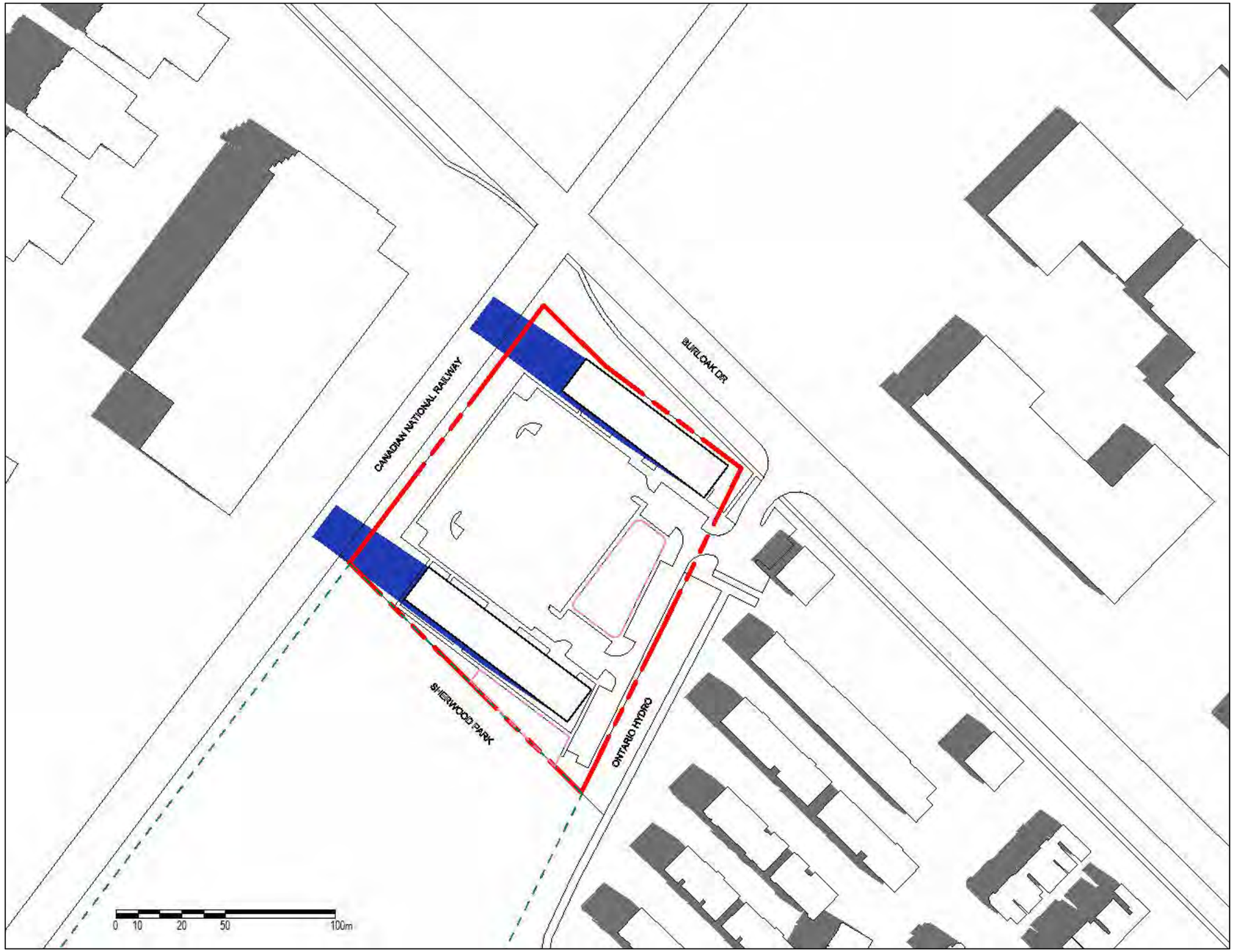
EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - March 21 - 09:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

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Sun Shadow Study - March 21 - 10:00

800 Burloak Dr. Burlington

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Sun Shadow Study - March 21 - 11:00

800 Burloak Dr. Burlington

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Sun Shadow Study - March 21 - 13:00

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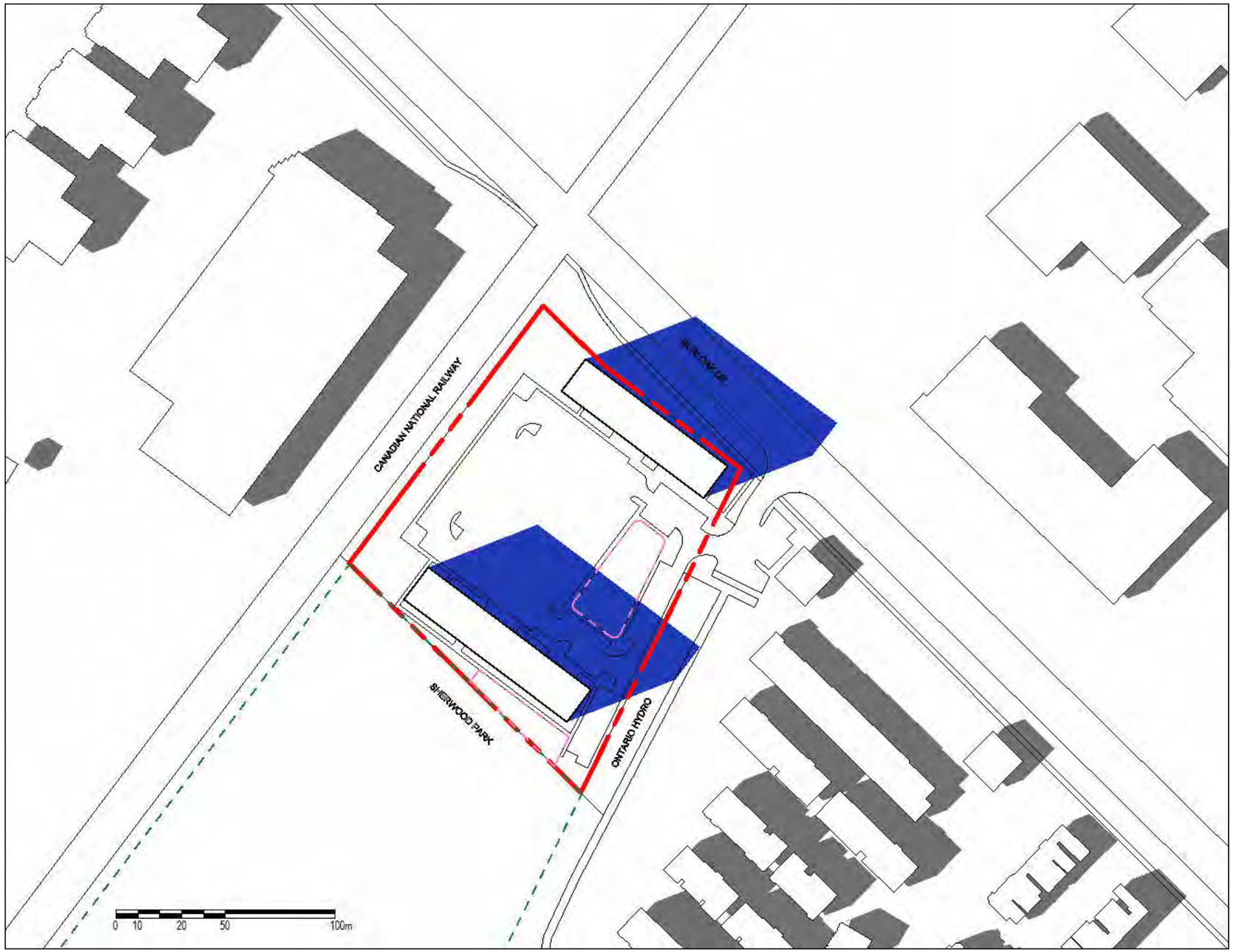
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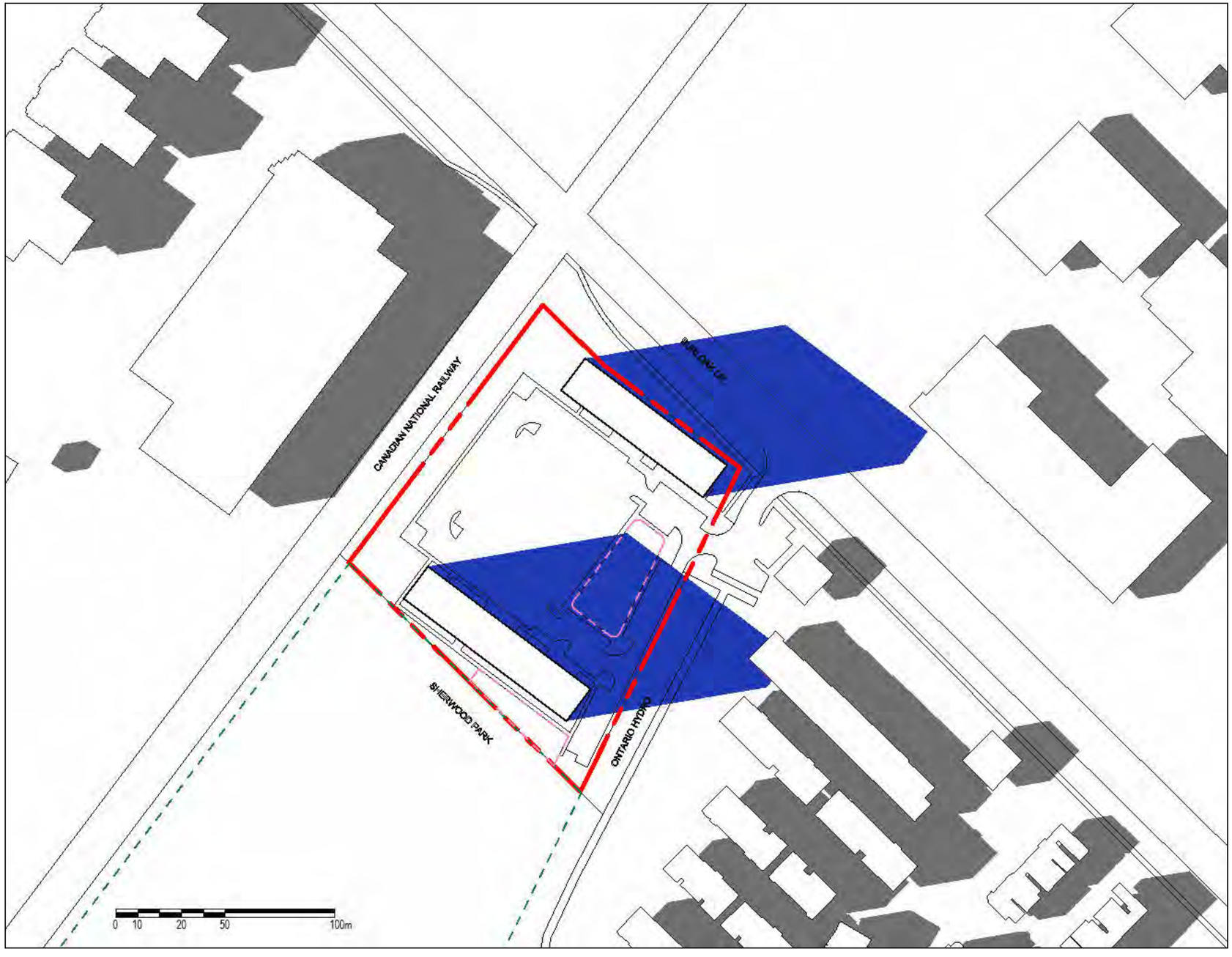
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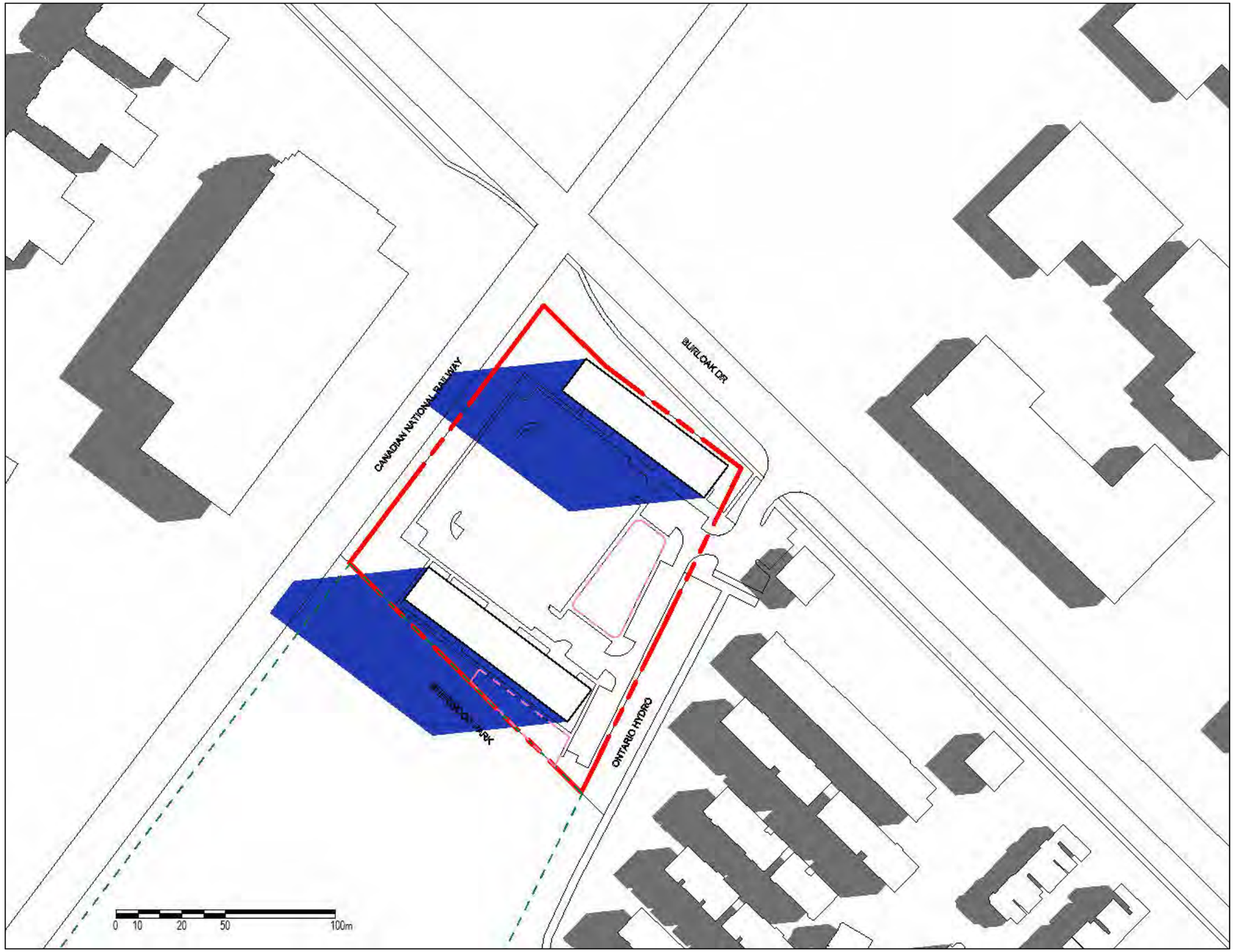
800 Burloak Dr. Burlington

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SHADOW DRAWINGS

June 21st, 2026

08:00 - 19:00



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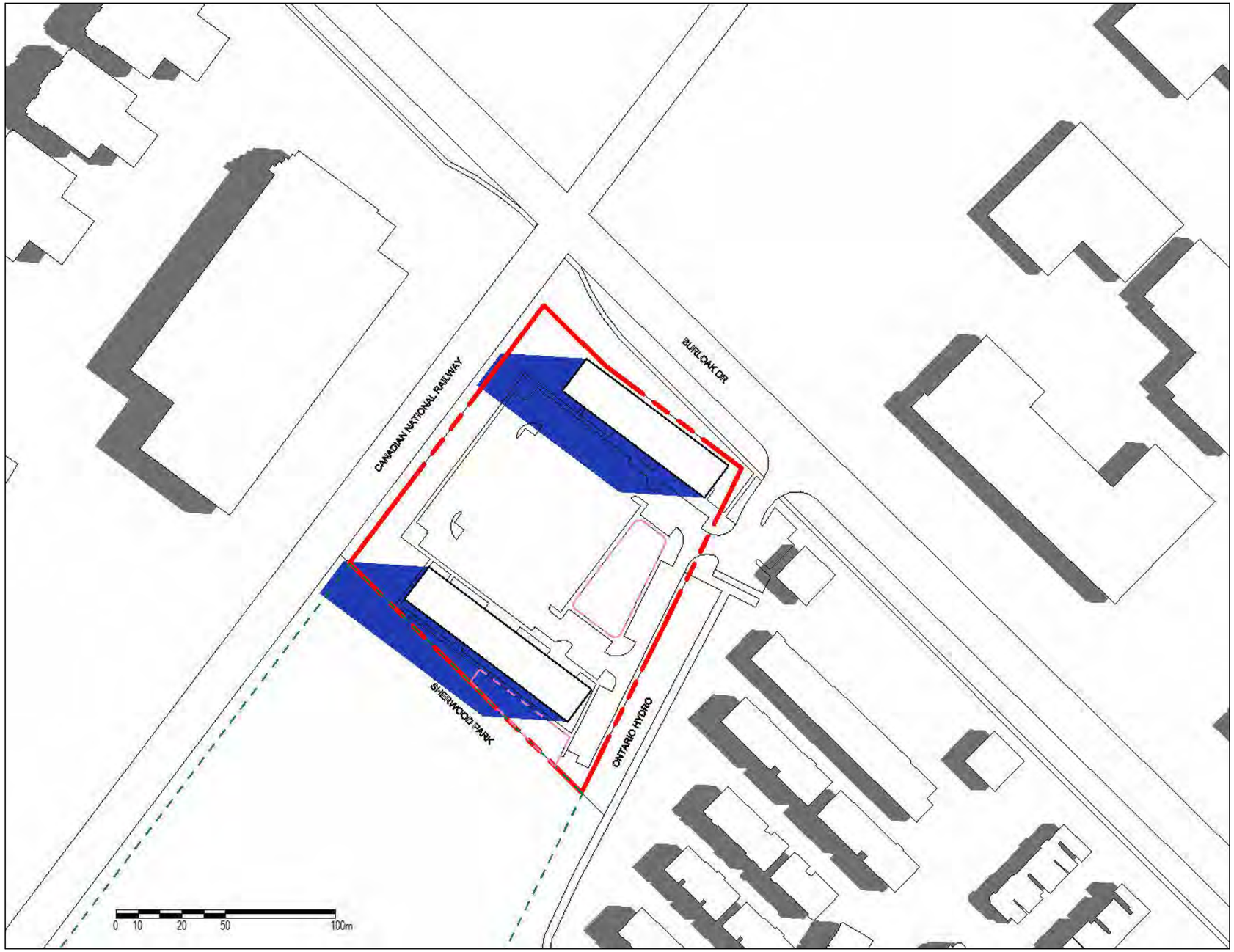
EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - June 21 - 08:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

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Sun Shadow Study - June 21 - 09:00

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800 Burloak Dr. Burlington

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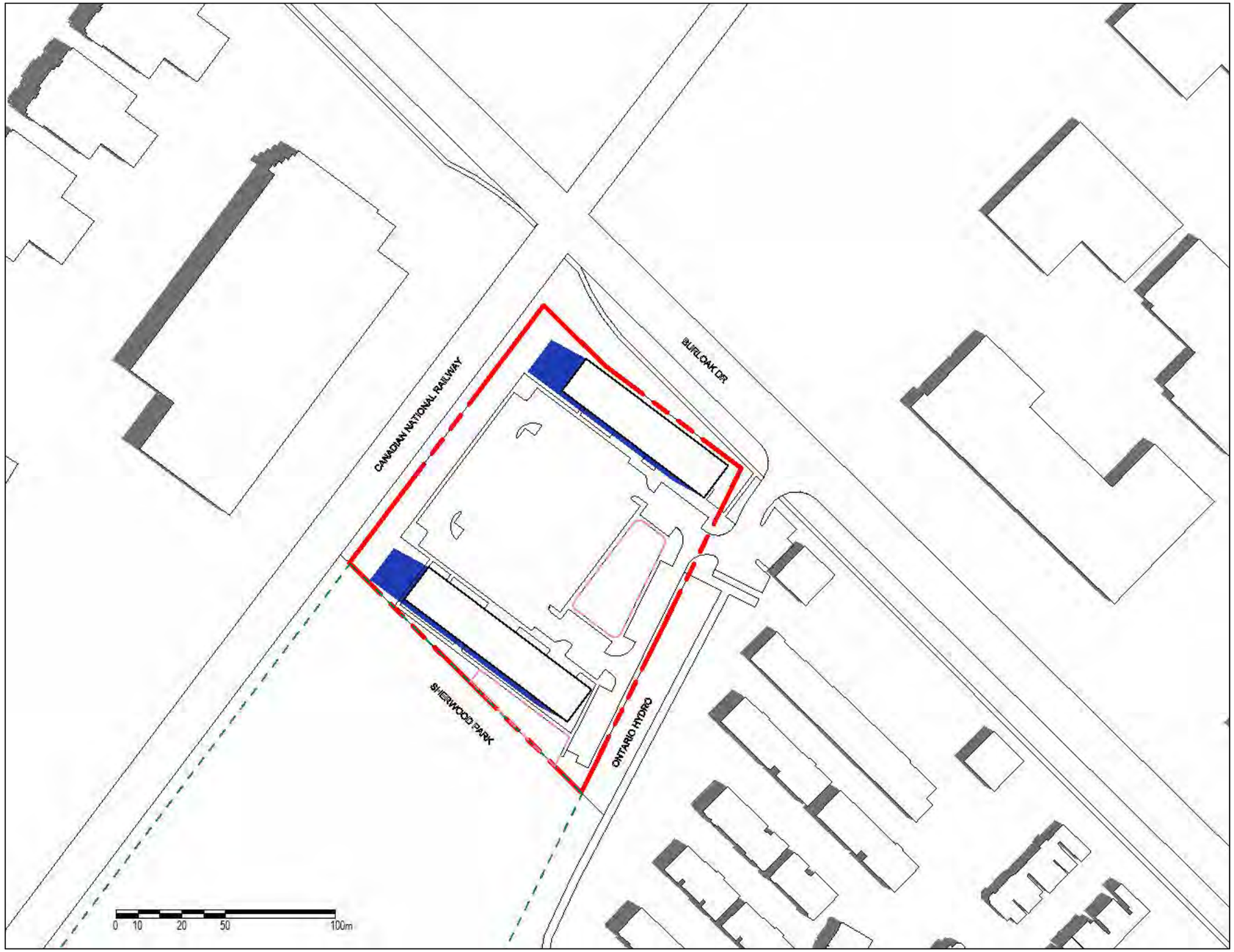
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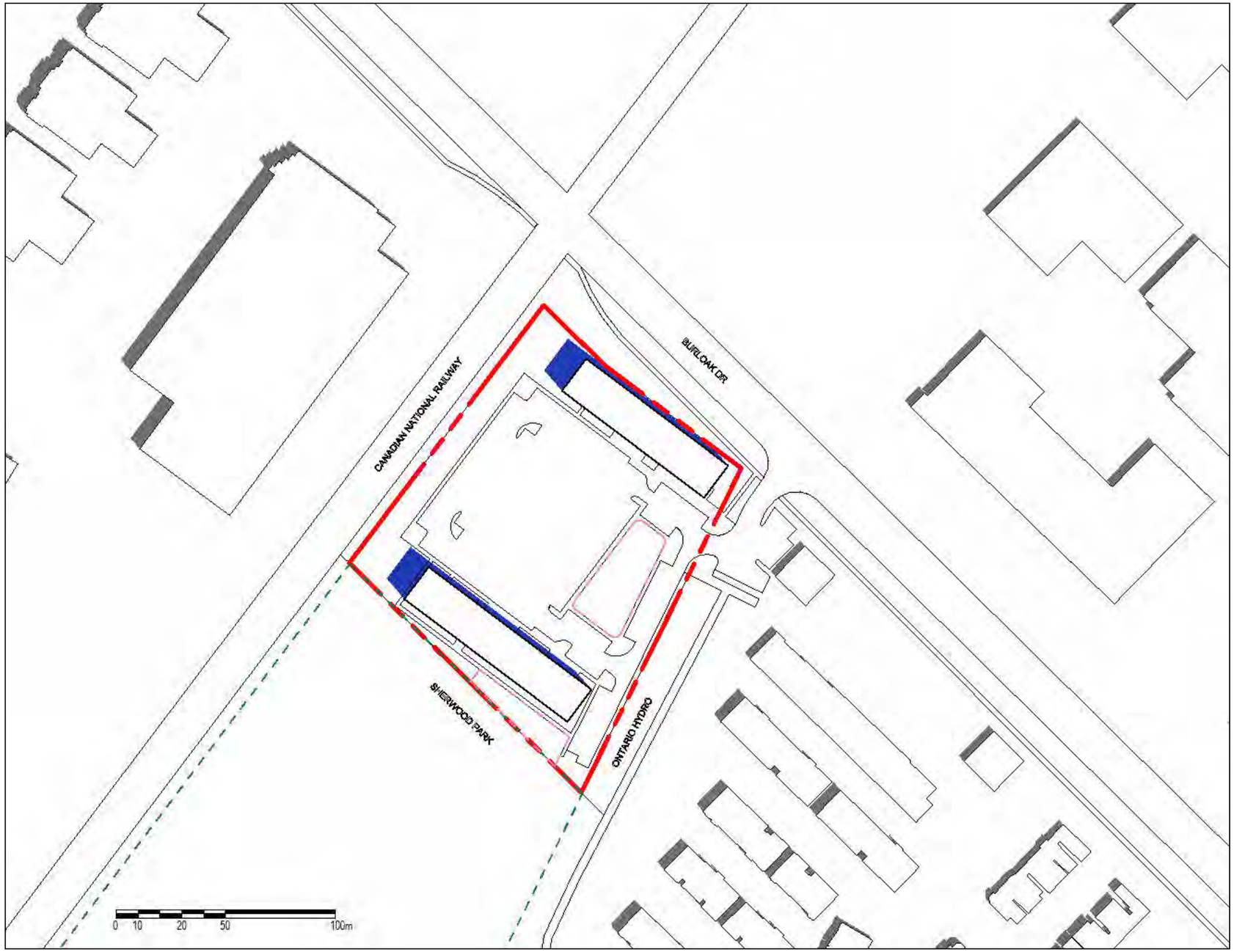
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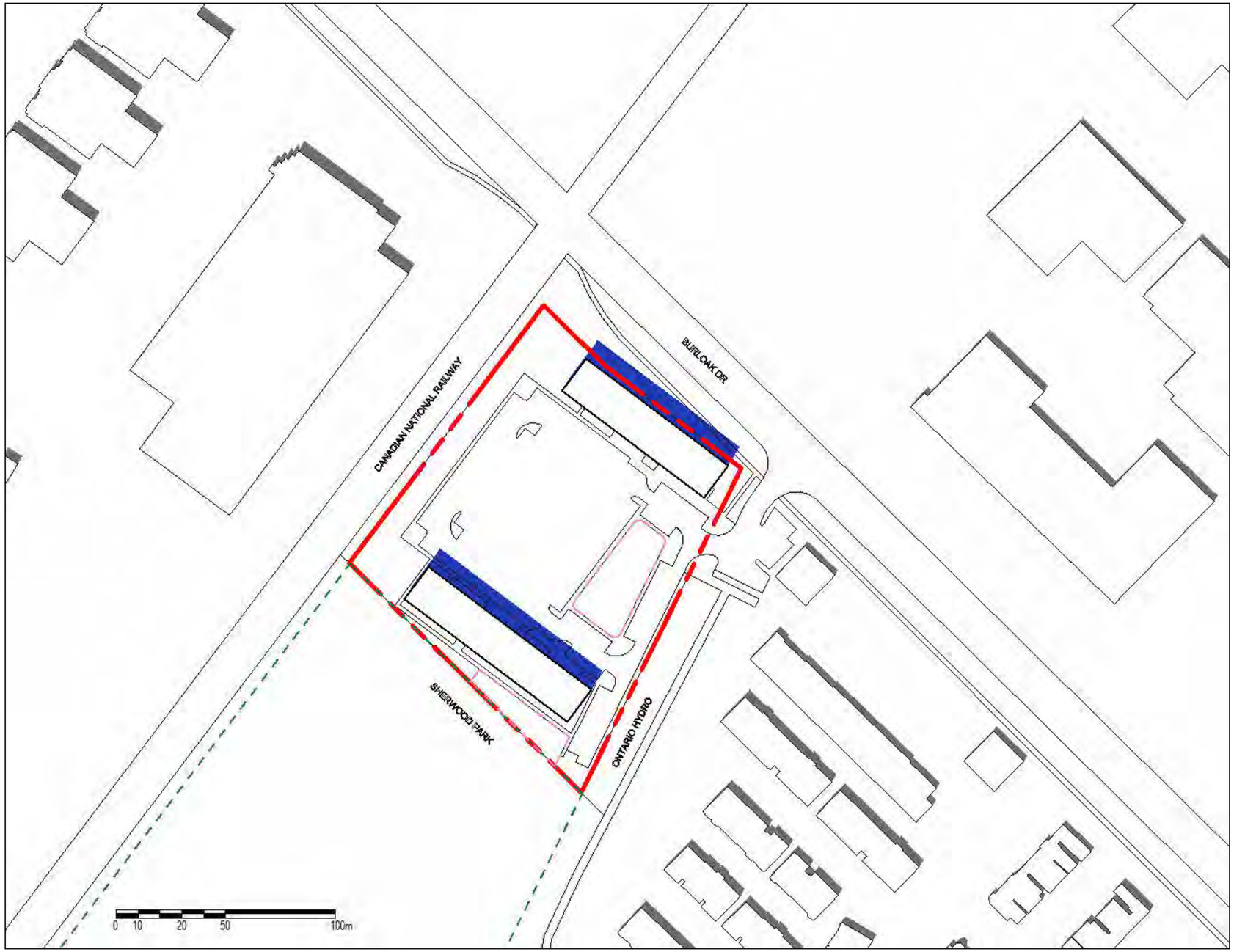
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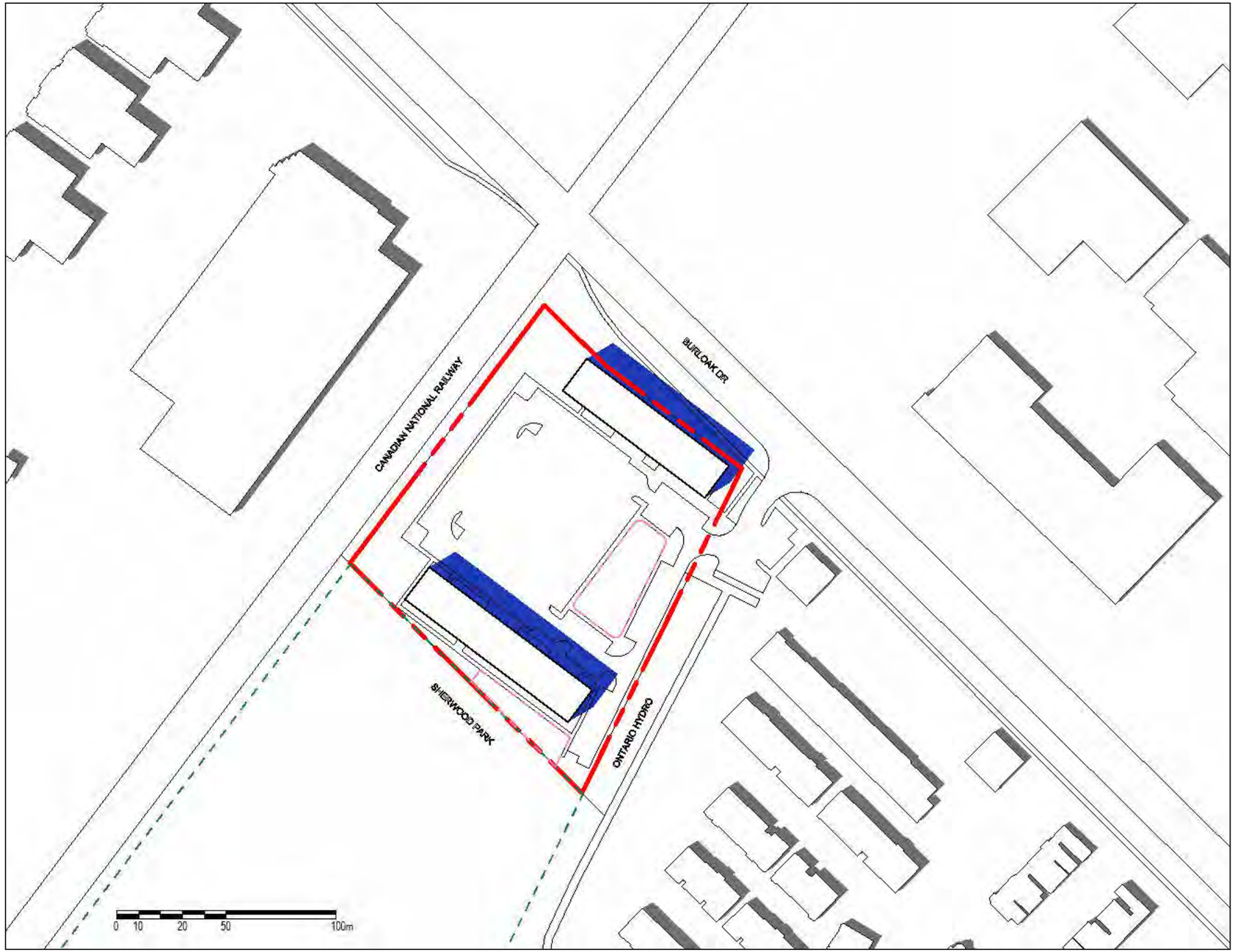
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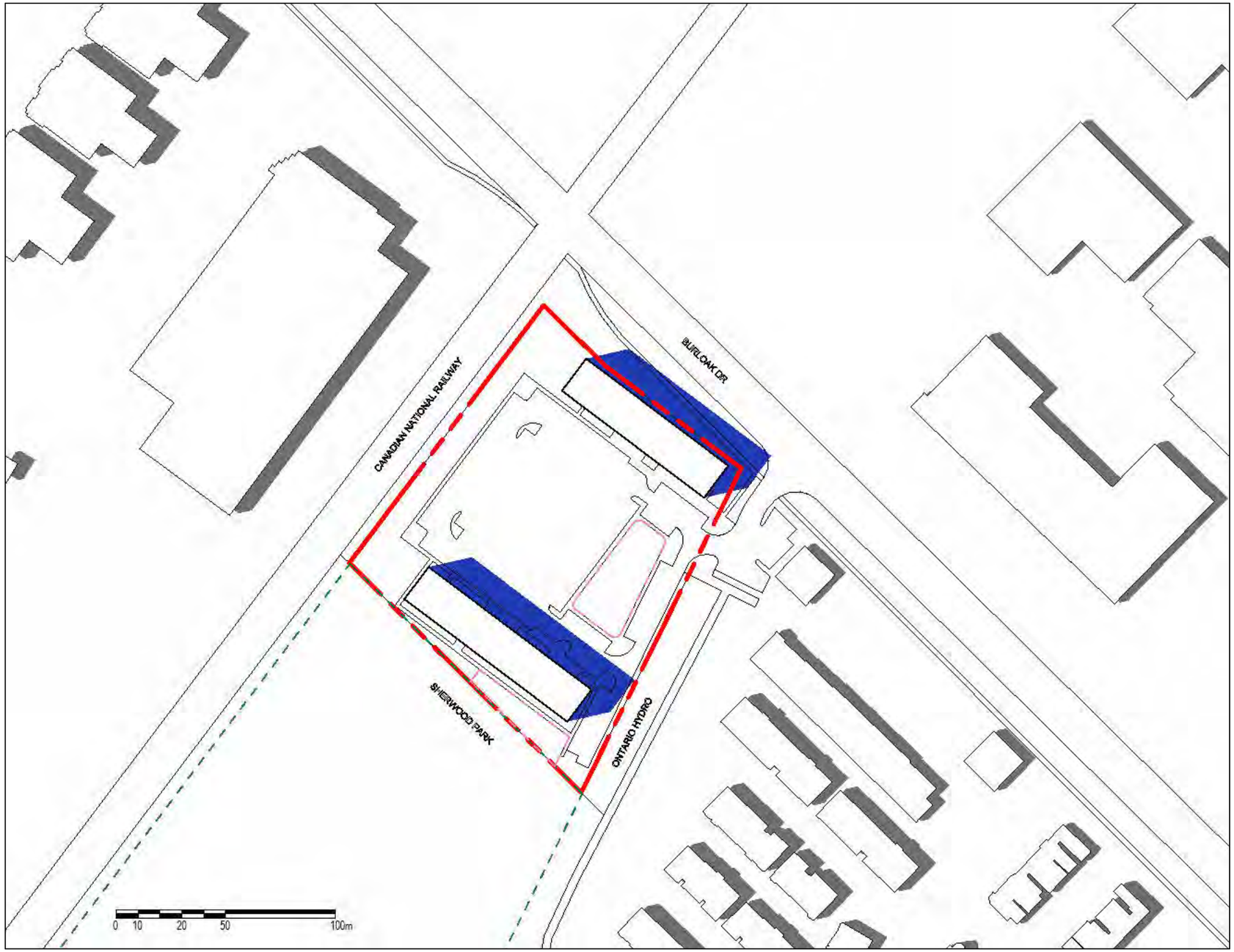
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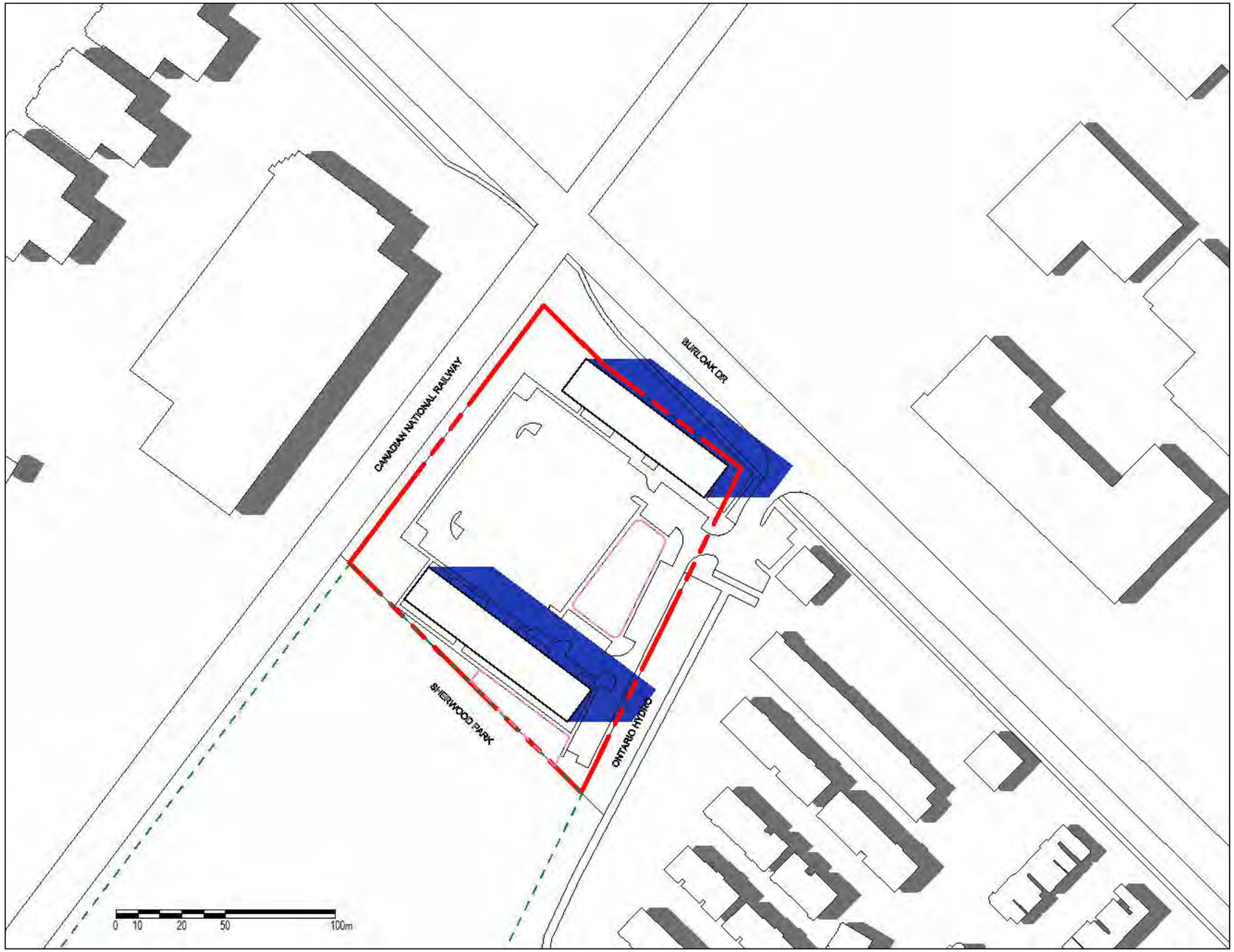
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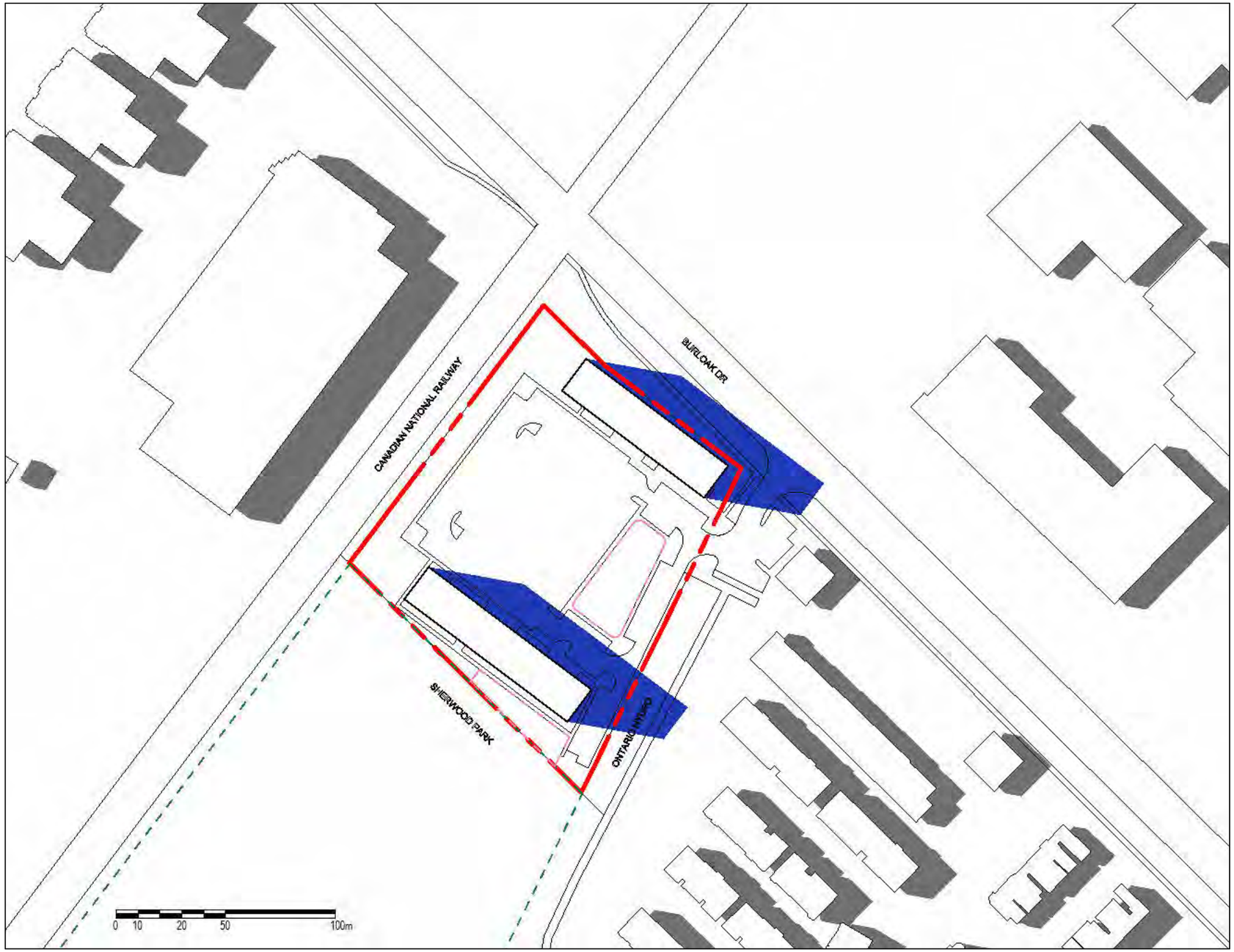
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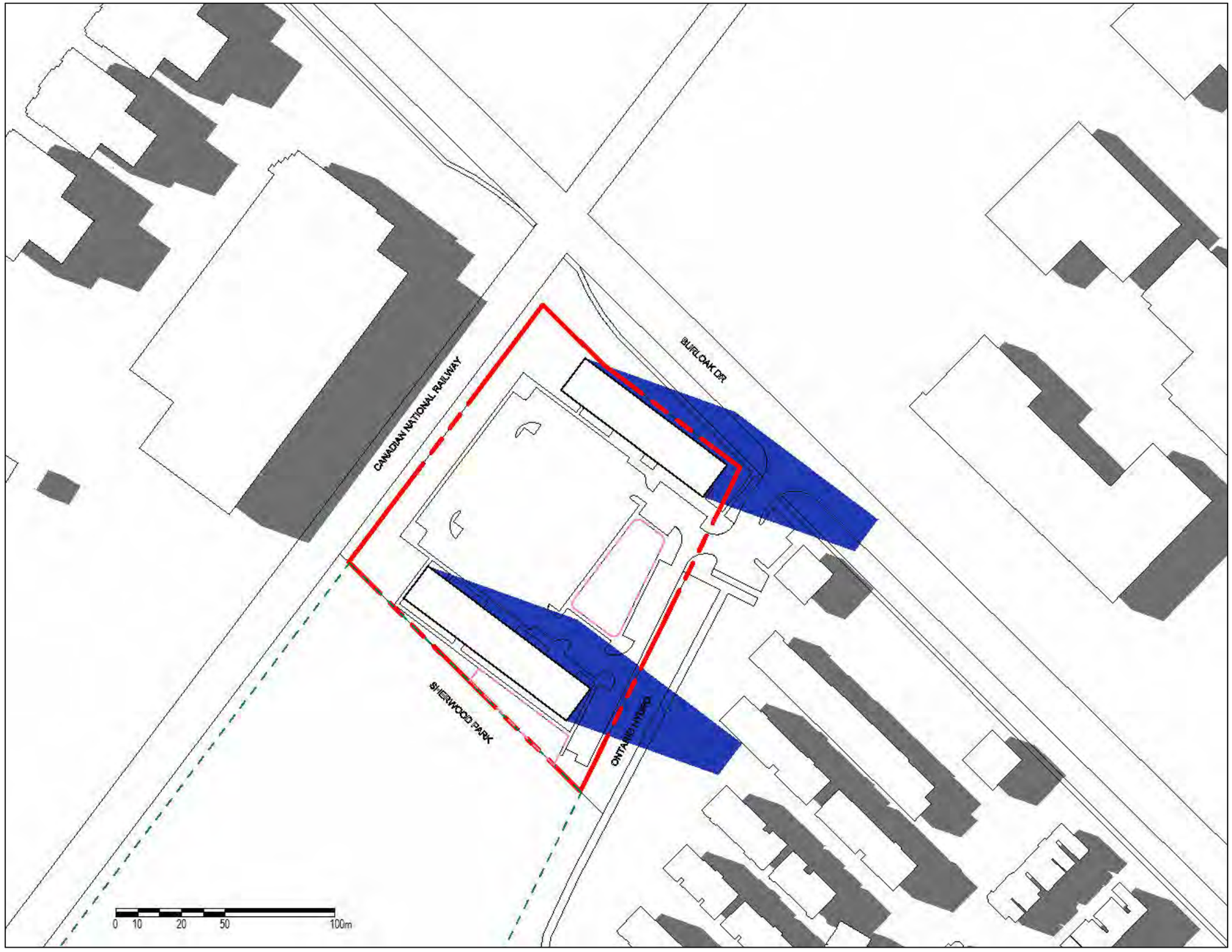
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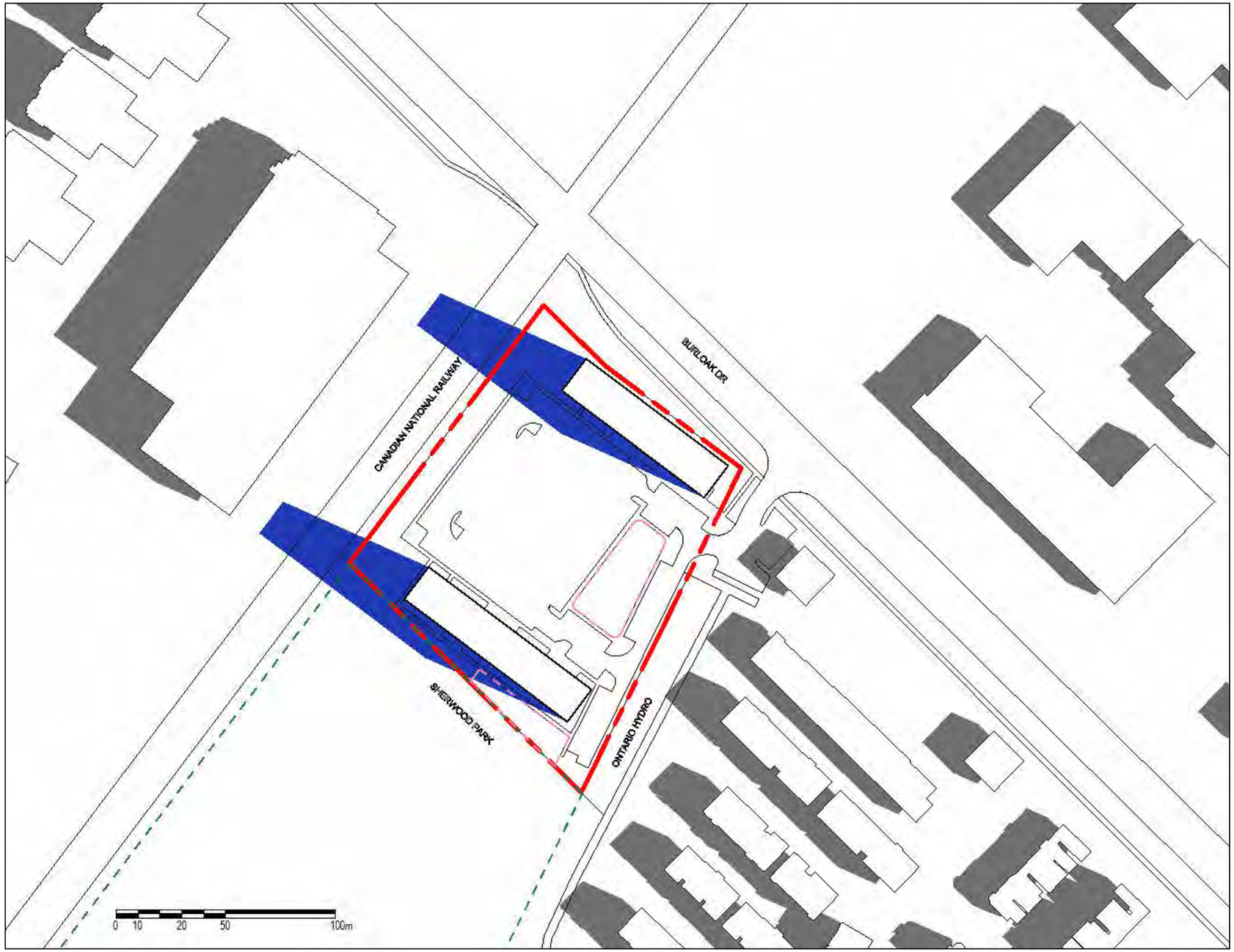
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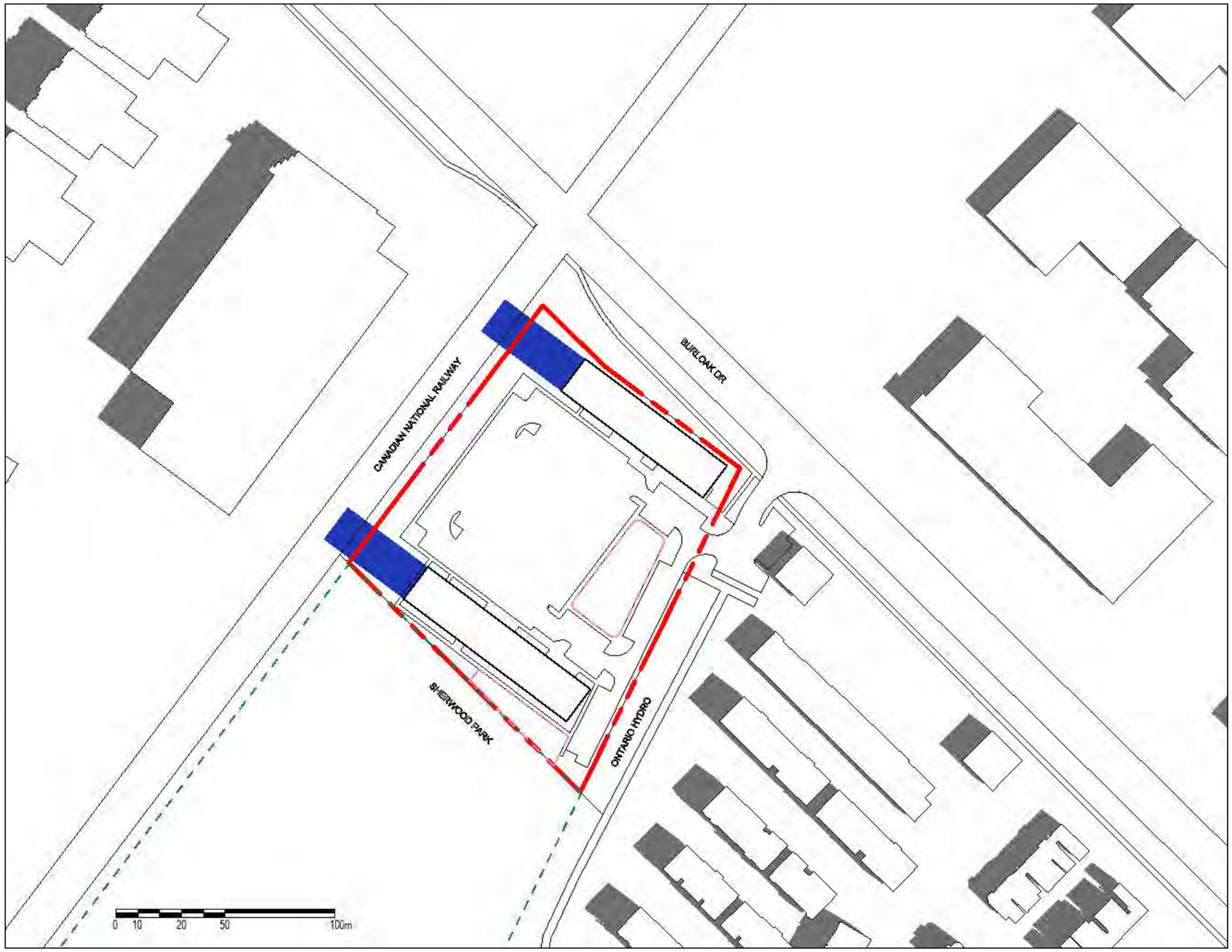
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- 1.5 times the building height to the south.

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 10:00

800 Burloak Dr. Burlington

N

SCALE: 1 : 2000

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

2. Study Area includes a minimum coverage area of
- 4 times the building height to the north;
- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 11:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

2. Study Area includes a minimum coverage area of
- 4 times the building height to the north;
- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 12:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

2. Study Area includes a minimum coverage area of
- 4 times the building height to the north;
- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 13:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

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- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 14:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

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- 4 times the building height to the north;
- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 15:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

2. Study Area includes a minimum coverage area of
- 4 times the building height to the north;
- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

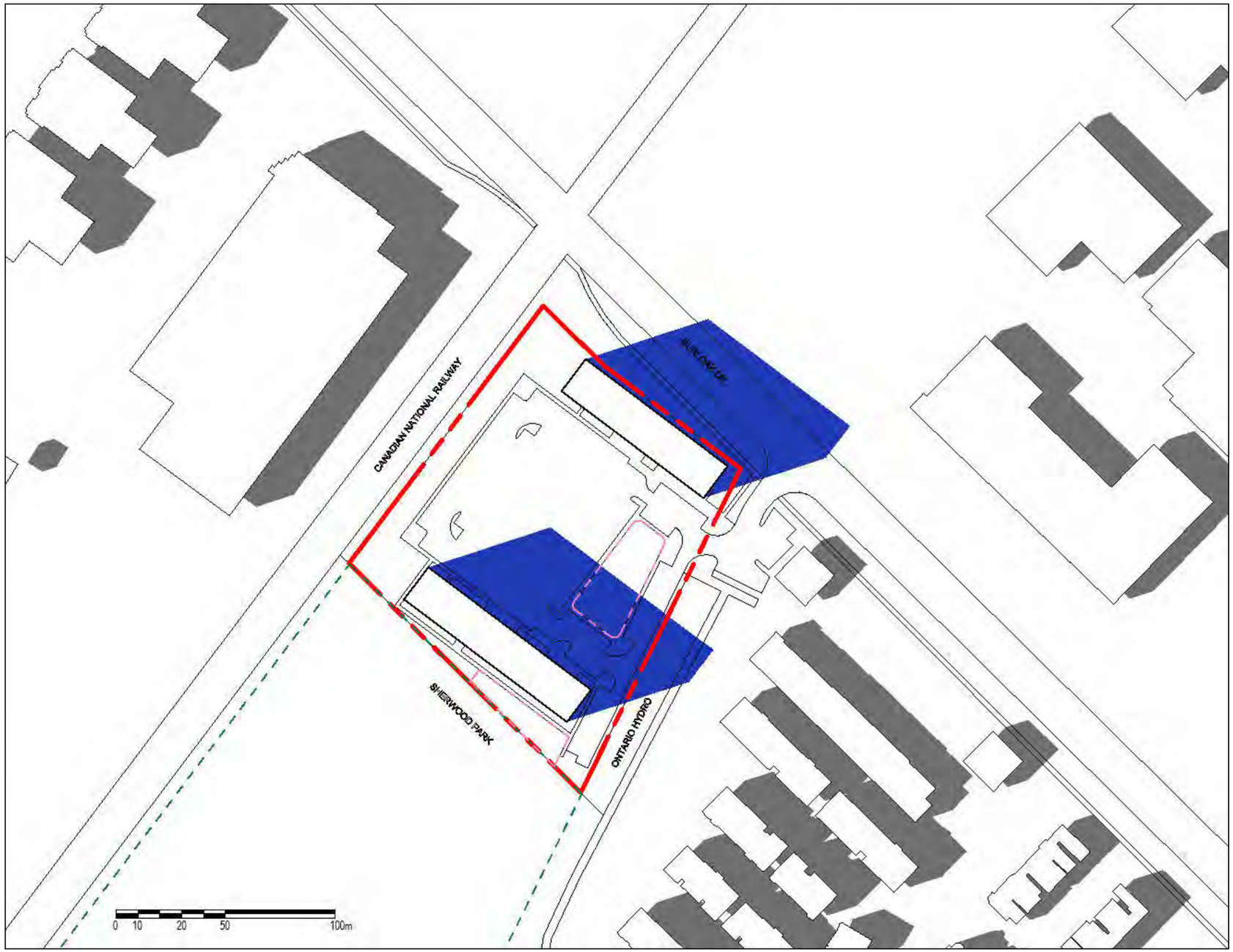
EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 16:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

2. Study Area includes a minimum coverage area of
- 4 times the building height to the north;
- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

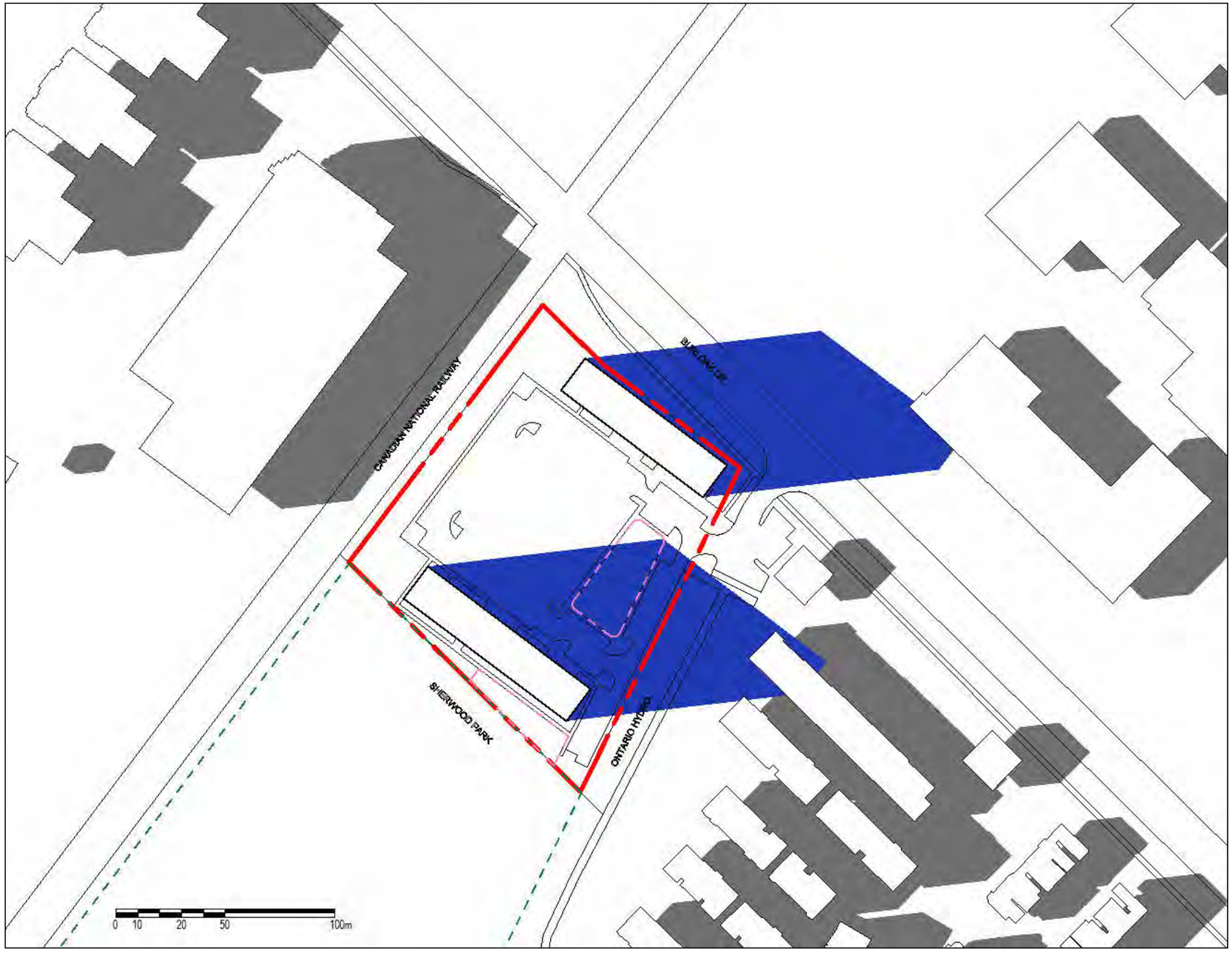
SCALE: 1 : 2000

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 17:00

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

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- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

SCALE: 1 : 2000

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - September 21 - 18:00

800 Burloak Dr. Burlington

ZO1

SHADOW DRAWINGS

December 21st, 2026

11:00 - 15:00

EMSHIH
DEVELOPMENTS INC.

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

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- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

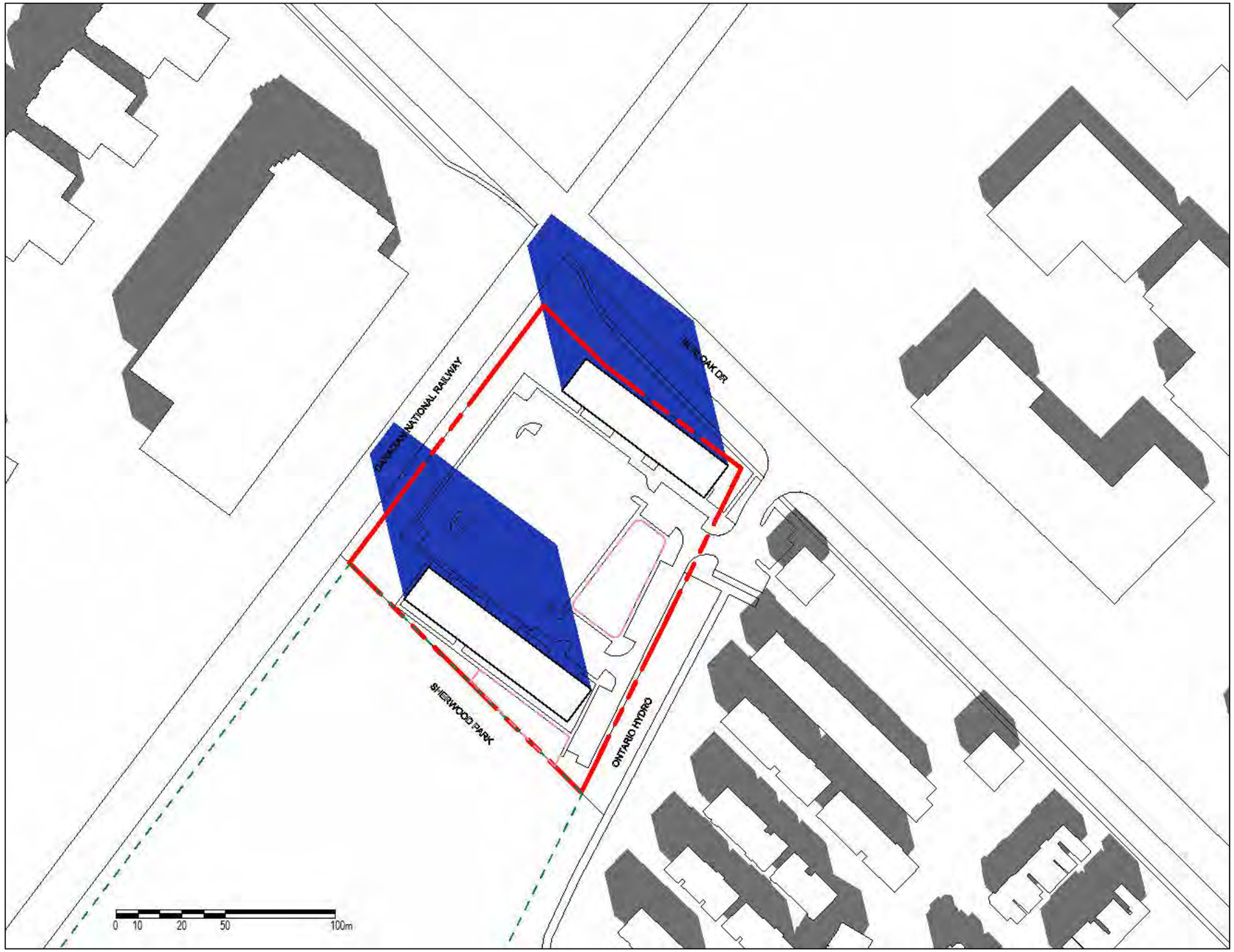
EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - December 21 - 11:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

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- 3 times the building height to the west; and
- 1.5 times the building height to the south.

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - December 21 - 12:00

800 Burloak Dr. Burlington

N

SCALE: 1 : 2000

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

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- 4 times the building height to the north;
- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - December 21 - 13:00

800 Burloak Dr. Burlington

SCALE: 1 : 2000

N

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

Notes:

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- 4 times the building height to the north;
- 6 times the building height to the east;
- 3 times the building height to the west; and
- 1.5 times the building height to the south.

N

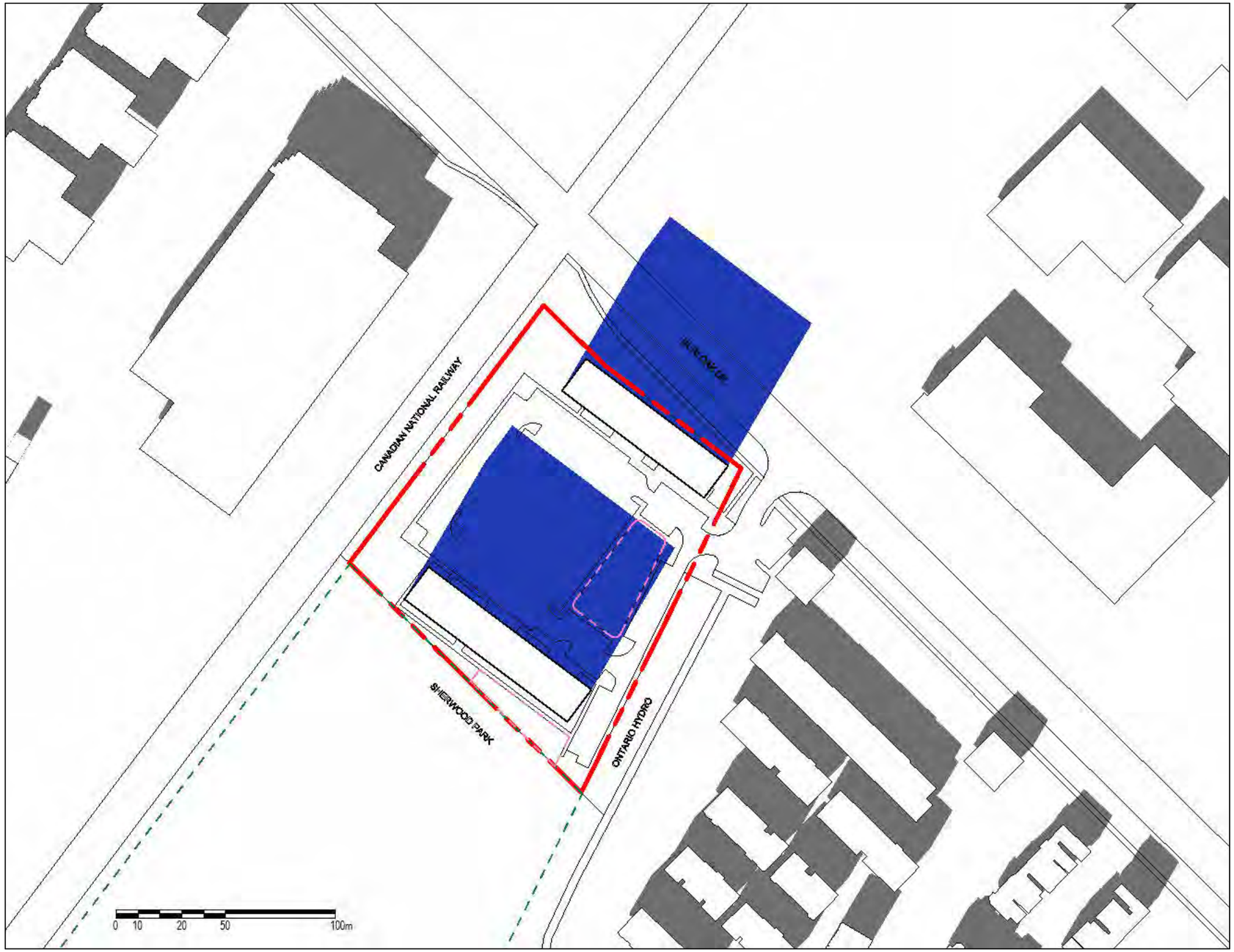
EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - December 21 - 14:00

SCALE: 1 : 2000

800 Burloak Dr. Burlington

ZO1



- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON ROOF SURFACES

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- 3 times the building height to the west; and
- 1.5 times the building height to the south.

EMSHIH DEVELOPMENTS INC.

Sun Shadow Study - December 21 - 15:00

800 Burloak Dr. Burlington

N

SCALE: 1 : 2000

ZO1

SUN ACCESS FACTOR

Private Outdoor Amenity



09:00 A_s = 1577.17 m²



10:00 A_s = 1667.54 m²



11:00 A_s = 1667.54 m²



12:00 A_s = 1667.54 m²



13:00 A_s = 1667.54 m²



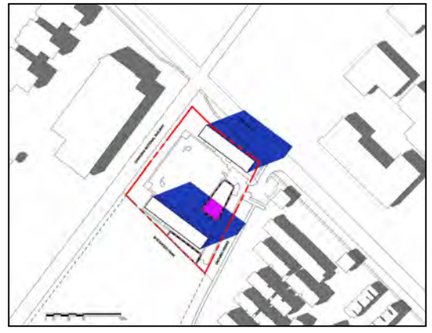
14:00 A_s = 1667.54 m²



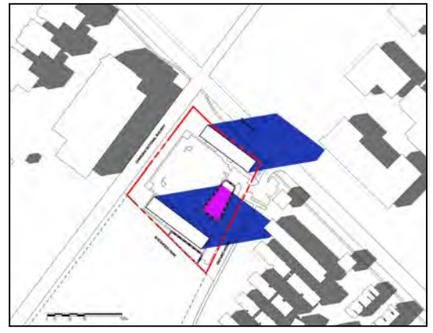
15:00 A_s = 1581.51 m²



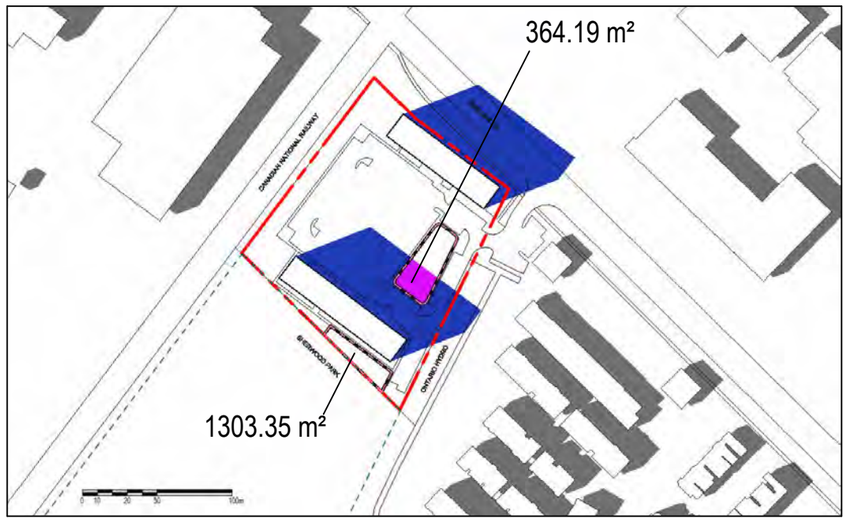
16:00 A_s = 1419.29 m²



17:00 A_s = 1303.35 m²



18:00 A_s = 975.91 m²



17:00

SITE BOUNDARY

OPEN SPACE[1]

PRIVATE OUTDOOR AMENITY AREA

EXISTING SHADOWS CAST ON GROUND SURFACES

NET NEW SHADOWS CAST ON GROUND SURFACES

NET NEW SHADOWS CAST ON PRIVATE OUTDOOR AMENITY

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

A_s = Area of Sunshine

Total Private Outdoor Amenity Space = 1667.54 m²

EMSHIH DEVELOPMENTS INC.

Private Outdoor Amenity Sun Access Factor Timelapse - March 21

800 Burloak Dr. Burlington

ZO1

TABLE 1

Total Private Outdoor Amenity Area (A_T) = 1667.54 m^2

Test Time	Areas in Sunshine ($A_{s(test)}$)	Per Hour ($A_{s(test)}$)/(A_t)	Sunshine Per Interval ($A_{s(test1 +test 2)}$)	Interval Average ($A_{s(interval)}$)
9:00	1577.17	0.95	3244.71	1622.36
10:00	1667.54	1.00	3335.08	1667.54
11:00	1667.54	1.00	3335.08	1667.54
12:00	1667.54	1.00	3335.08	1667.54
13:00	1667.54	1.00	3335.08	1667.54
14:00	1667.54	1.00	3249.05	1624.53
15:00	1581.51	0.95	3000.80	1500.40
16:00	1419.29	0.85	2606.71	1303.36
17:00	1187.42	0.71	1951.82	975.91
18:00	764.4	0.46	-	-
			Sum of ($A_{s(interval)}$)	**13696.71**
			Average Area in Sunshine ($A_{s(average)}$) = [sum of($A_{s(interval)}$)] /[# of intervals]	**1521.86**
			Sun Access Factor ($A_{s(average)}$)/A_T	**0.91**

Required SAF: 0.22

SUN ACCESS FACTOR

Open Space

EMSHIH
DEVELOPMENTS INC.

ZO1



09:00 A_s = 248,378.49 m²



10:00 A_s = 249,369.49 m²



11:00 A_s = 249,371.05 m²



12:00 A_s = 249,371.05 m²



13:00 A_s = 249,371.05 m²



14:00 A_s = 249,371.05 m²



15:00 A_s = 249,371.05 m²



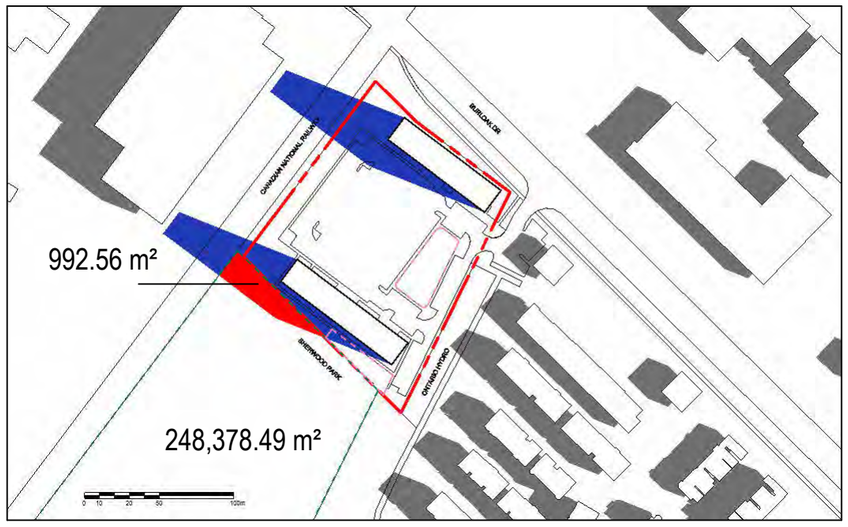
16:00 A_s = 249,371.05 m²



17:00 A_s = 249,371.05 m²



18:00 A_s = 249,371.05 m²



09:00

SITE BOUNDARY

OPEN SPACE[1]

PRIVATE OUTDOOR AMENITY AREA

EXISTING SHADOWS CAST ON GROUND SURFACES

NET NEW SHADOWS CAST ON GROUND SURFACES

NET NEW SHADOWS CAST ON OPEN SPACE

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

A_s = Area of Sunshine

Total Open Space = 249,371.05 m²

EMSHIH DEVELOPMENTS INC.

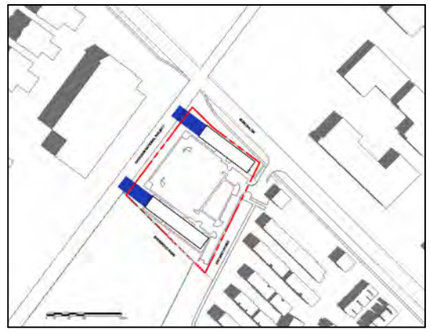
Open Space Sun Access Factor Timelapse - March 21

800 Burloak Dr. Burlington

ZO1



09:00 A_s = 248,769.68 m²



10:00 A_s = 249,371.05 m²



11:00 A_s = 249,371.05 m²



12:00 A_s = 249,371.05 m²



13:00 A_s = 249,371.05 m²



14:00 A_s = 249,371.05 m²



15:00 A_s = 249,371.05 m²



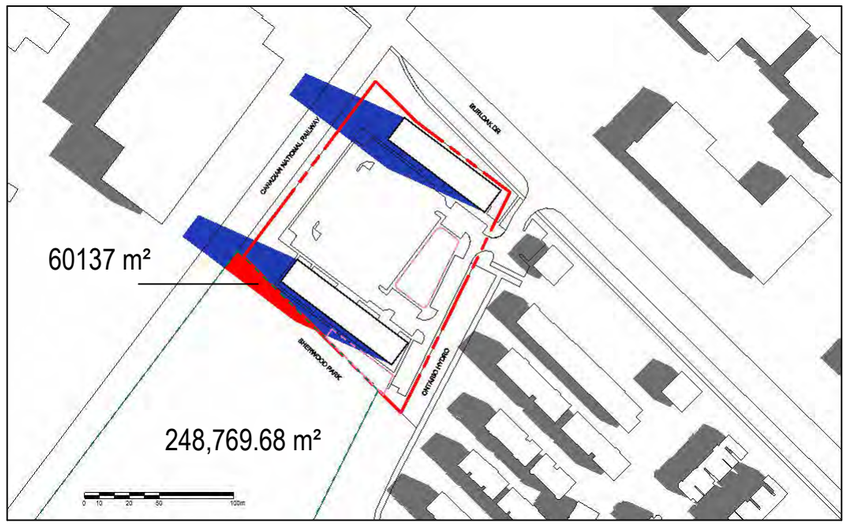
16:00 A_s = 249,371.05 m²



17:00 A_s = 249,371.05 m²



18:00 A_s = 249,371.05 m²



09:00

- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON OPEN SPACE

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

A_s = Area of Sunshine

Total Open Space = 249,371.05 m²

EMSHIH DEVELOPMENTS INC.

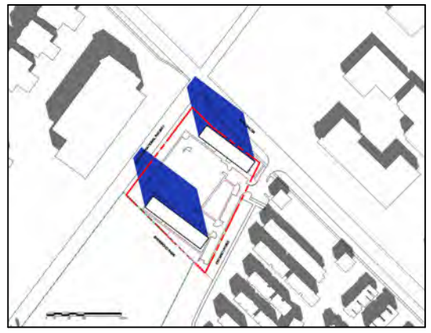
Open Space Sun Access Factor Timelapse - September 21

800 Burloak Dr. Burlington

ZO1



11:00 A_s = 249,371.05 m²



12:00 A_s = 249,371.05 m²



13:00 A_s = 249,371.05 m²



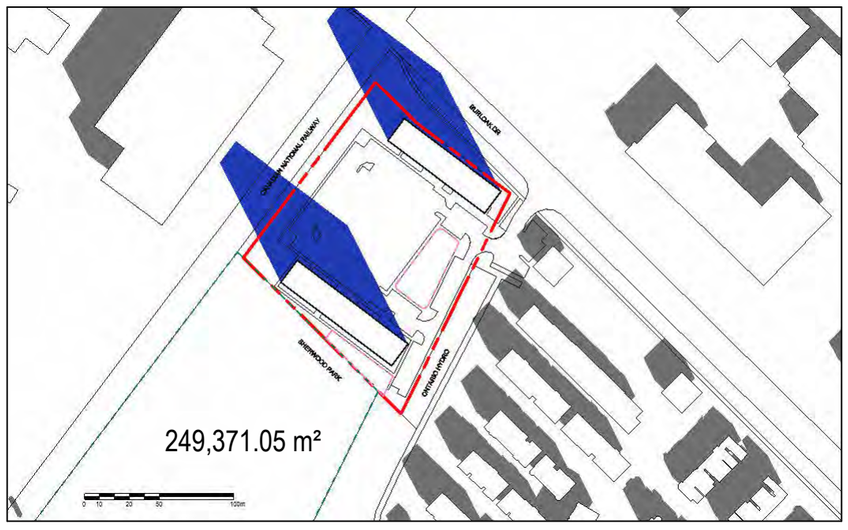
14:00 A_s = 249,371.05 m²



15:00 A_s = 249,371.05 m²

A_s = Area of Sunshine

Total Open Space = 249,371.05 m²



11:00

- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON OPEN SPACE

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

EMSHIH DEVELOPMENTS INC.

Open Space Sun Access Factor Timelapse - December 21

800 Burloak Dr. Burlington

ZO1

TABLE 2.3

Total Open Space Area (A_T) = 249,371.05 m^2

Test Time	Areas in Sunshine ($A_{s(test)}$)	Per Hour ($A_{s(test)}$)/(A_t)	Sunshine Per Interval ($A_{s(test1 +test 2)}$)	Interval Average ($A_{s(interval)}$)
9:00	248378.49	1.00	497748.42	248874.21
10:00	249369.93	1.00	498740.98	249370.49
11:00	249371.05	1.00	498742.10	249371.05
12:00	249371.05	1.00	498742.10	249371.05
13:00	249371.05	1.00	498742.10	249371.05
14:00	249371.05	1.00	498742.10	249371.05
15:00	249371.05	1.00	498742.10	249371.05
16:00	249371.05	1.00	498742.10	249371.05
17:00	249371.05	1.00	498742.10	249371.05
18:00	249371.05	1.00	-	-
			Sum of ($A_{s(interval)}$)	**2243842.05**
			Average Area in Sunshine ($A_{s(average)}$) = [sum of($A_{s(interval)}$)] /[# of intervals]	**249334.77**
			Sun Access Factor ($A_{s(average)}$)/A_T	**1.00**

Required SAF: 0.50

TABLE 2.2

Total Open Space Area (A_T) = 249,371.05 m^2

Test Time	Areas in Sunshine ($A_{s(test)}$)	Per Hour ($A_{s(test)}$)/(A_t)	Sunshine Per Interval ($A_{s(test1 +test 2)}$)	Interval Average ($A_{s(interval)}$)
9:00	248769.68	1.00	498140.73	249070.37
10:00	249371.05	1.00	498742.10	249371.05
11:00	249371.05	1.00	498742.10	249371.05
12:00	249371.05	1.00	498742.10	249371.05
13:00	249371.05	1.00	498742.10	249371.05
14:00	249371.05	1.00	498742.10	249371.05
15:00	249371.05	1.00	498742.10	249371.05
16:00	249371.05	1.00	498742.10	249371.05
17:00	249371.05	1.00	498742.10	249371.05
18:00	249371.05	1.00	-	-
			Sum of ($A_{s(interval)}$)	**2244038.77**
			Average Area in Sunshine ($A_{s(average)}$) = [sum of($A_{s(interval)}$)] /[# of intervals]	**249337.64**
			Sun Access Factor ($A_{s(average)}$)/A_T	**1.00**

Required SAF: 0.50

TABLE 2 (c)

Total Open Space Area (A_T) = 249,371.05 m^2

Test Time	Areas in Sunshine ($A_{s(test)}$)	Per Hour ($A_{s(test)}$)/(A_t)	Sunshine Per Interval ($A_{s(test1 +test 2)}$)	Interval Average ($A_{s(interval)}$)
11:00	249371.05	1.00	498742.10	249371.05
12:00	249371.05	1.00	498742.10	249371.05
13:00	249371.05	1.00	498742.10	249371.05
14:00	249371.05	1.00	498742.10	249371.05
15:00	249371.05	1.00	-	-
			Sum of ($A_{s(interval)}$)	**997484.20**
			Average Area in Sunshine ($A_{s(average)}$) = [sum of($A_{s(interval)}$)] /[# of intervals]	**249371.05**
			Sun Access Factor ($A_{s(average)}$)/A_T	**1.00**

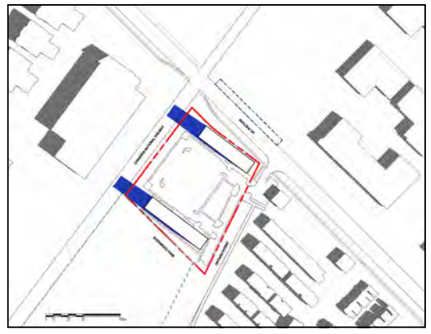
Required SAF: 0.50

SUN ACCESS FACTOR

Public Realm



09:00 A_s = 1161.78 m²



10:00 A_s = 1161.78 m²



11:00 A_s = 1161.78 m²



12:00 A_s = 1161.78 m²



13:00 A_s = 1161.78 m²



14:00 A_s = 1161.78 m²



15:00 A_s = 1161.78 m²



16:00 A_s = 1161.78 m²



17:00 A_s = 779.40 m²



18:00 A_s = 686.65 m²



17:00

- SITE BOUNDARY
- OPEN SPACE[1]
- PRIVATE OUTDOOR AMENITY AREA
- EXISTING SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON GROUND SURFACES
- NET NEW SHADOWS CAST ON PUBLIC REALM

Notes:

1. Open Space includes lands designated for Parks and Open Space, Key Civic and Cultural Spaces, or Places where Children Play.

A_s = Area of Sunshine

Total Public Realm = 1161.78 m²

EMSHIH DEVELOPMENTS INC.

Public Realm Sun Access Factor Timelapse - March 21

800 Burloak Dr. Burlington

ZO1

TABLE 3

Total Public Realm Area (A_T) = 1161.78 m^2

Test Time	Areas in Sunshine ($A_{s(test)}$)	Per Hour ($A_{s(test)}$)/(A_t)	Sunshine Per Interval ($A_{s(test1 +test 2)}$)	Interval Average ($A_{s(interval)}$)
9:00	1161.78	1.00	2323.56	1161.78
10:00	1161.78	1.00	2323.56	1161.78
11:00	1161.78	1.00	2323.56	1161.78
12:00	1161.78	1.00	2323.56	1161.78
13:00	1161.78	1.00	2323.56	1161.78
14:00	1161.78	1.00	2323.56	1161.78
15:00	1161.78	1.00	2323.56	1161.78
16:00	1161.78	1.00	1941.18	970.59
17:00	779.40	0.67	1466.05	733.03
18:00	686.65	0.59	-	-
			Sum of ($A_{s(interval)}$)	**9836.08**
			Average Area in Sunshine ($A_{s(average)}$) = [sum of($A_{s(interval)}$)] /[# of intervals]	**1092.90**
			Sun Access Factor ($A_{s(average)}$)/A_T	**0.94**

Required SAF: 0.50

Shadow Analysis

Key Civic and Cultural Spaces

Section 4.2 of the SSG states that proposed developments should not cast any net new shadows on Key Civic and Cultural Spaces between 10:00am and 4:00pm on March 21st and September 21.

Assessment:
No key civic and cultural spaces were identified within the extent of the proposed development's shadow cover.

The proposed development satisfies the SSG criteria.

Private Outdoor Amenity Spaces

Section 4.3 of the SSG states that in order to maximize the usability of private outdoor amenity areas such as rear yards, decks, and (rooftop) patios, including common outdoor amenity areas, shadows from proposed developments should not exceed 2 hours in duration, between 9:00am and 6:00pm on March 21st.

Where existing shadows limit access to sun during the times above, net new shadows resulting from proposed buildings should allow a minimum amount of sunlight to reach nearby private residential outdoor amenity areas, including common outdoor amenity areas, between the hours of 9:00am and 6:00pm on the specified day. The criterion is met if the Sun Access Factor is at least 0.22 on each of the test dates.

Sun Access Factor Calculations for Private Outdoor Amenity spaces are summarized in **Table 1.**

Assessment:
Required Sun Access Factor: **0.22**
Proposed Sun Access Factor: **0.91**

The proposed development satisfies the SSG criteria.

Parks and Open Space

Section 4.4 of the SSG provides that shadows cast by all existing buildings and proposed developments onto lands designated or used for Parks and Open Spaces must allow for either: a) full sunlight 50 per cent of the time; or b) 50 per cent sun coverage at all times during the specified periods. These times include:

- March 21st (9:00am to 6:00pm);
- September 21st (9:00am to 6:00pm); and,
- December 21st (11:00am to 3:00pm).

The purpose of this criterion is to ensure adequate access to sunlight at all times of the year. December 21st is included to encourage the use of lands designated or used for Parks and Open Spaces during the winter season. The criterion is met if the Sun Access Factor is at least 0.50 on each of the three test dates.

Sun Access Factor Calculations for Open Space are summarized in **Table 2.1, Table 2.2, and Table 2.3.**

Assessment:
The proposed development casts net new shadows on Sherwood Park at 9:00 and 10:00 on March 21st, 9:00 on September 21st and no net new shadows on December 21st.

Required Sun Access Factor: **0.50**
Proposed Sun Access Factor: **1.00**

The proposed development satisfies the SSG criteria.

Public Realm and Sidewalks

Section 4.6 of the SSG provides that shadows cast by all existing buildings and proposed developments onto the full extents of the boulevard and sidewalk on the opposite side of the adjacent right-of-way, must allow for either

a) full sunlight 50 per cent of the time; or
b) 50 per cent sun coverage at all times between 9:00am and 6:00pm on March 21st.

The criterion is met if the Sun Access Factor is at least 0.50 for the specified date.

Sun Access Factor Calculations for Private Realm and Sidewalks are summarized in **Table 3.**

Assessment:
As specified in the SSG, the boulevard area that is considered in this Study includes the area between the curb and the front property line or building face, defined by projected perpendicular lines from the subject site's property lines. The boulevard on the opposite side of Burloak Drive is considered in the Sun Access Factor Calculation.

Required Sun Access Factor: **0.50**
Proposed Sun Access Factor: **0.94**

The proposed development satisfies the SSG criteria.

Places Where Children Play

Section 4.5 of the SSG states that, shadows cast by all existing buildings and proposed developments onto places where children play including but not limited to school yards, playgrounds, and park features such as wading pools or other outdoor shadow-sensitive activity areas as identified by the City of Burlington, must allow for either a) full sunlight 50 per cent of the time; or b) 50 per cent sun coverage at all times during the specified periods. These time periods include:

- March 21st (9:00am to 6:00pm);
- September 21st (9:00am to 6:00pm); and,
- December 21st (11:00am to 3:00pm) - applies to school yards and playground areas only.

Assessment:
No school yards, playgrounds, and park features such as wading pools have been identified within the extent of the proposed development's shadow cover.

The proposed development satisfies the SSG criteria.