1315 BOUGH BEECHES BLVD

MISSISSAUGA, ONTARIO

SHADOW STUDY

JUNE 2026

ARCADIS

1. INTRODUCTION

This report presents a shadow Study Analysis of a planned residential development comprising one 13 ST building located at 1315 Bough Beeches Boulevard in the City of Mississauga. This report has been prepared by Arcadis on behalf of the applicant 1315 Bough Beeches Boulevard Limited (2700 Dufferin Street, Unit 50, Toronto).

The report addresses the specific criteria contained in the City of Mississauga planning and Building Department's Standards for Shadow Studies (July 2024) and demonstrates that the proposed development will not cause undue impact with respect to shade.

1.1 Proposed Development

This 5.86-acre site, located at the corners of Dixie Road, Rathburn Road East and Bough Beeches Boulevard, currently includes an existing, 20 storey apartment building with surface parking and one level of below grade parking. The property is located North-West of the Rockwood Mall and is 14 minutes from the Dixie Transitway Station. It is also walking distance from an array of retail stores, restaurants, and entertainment venues.

Subject to planning approval, a purpose-built rental building comprised of one 13 storey tower with a 1 storey podium will be added to the southeastern portion of the site. The existing 20 storey building will be retained. The proposed building will be comprised of 144 units within 10,428 m^2 of residential GFA. The proposal includes surface parking and 2 levels of below grade parking.

A dedicated loading area is proposed at Ground level, to be accessed from Bough Beeches Blvd. The parking for visitors and residents is also accessed from Bough Beeches Blvd.

Residential indoor amenity space is provided at Ground Level. Outdoor amenity is provided at Ground Level, immediately adjacent to the indoor amenity spaces.

2. SUMMARY OF SHADOW STUDY ANALYSIS

The shadow Study Analysis demonstrates that the proposed development meets the City's standards for sun and daylight access on neighbouring properties and in the public realm as summarized on **Table 1** seen below, while detailed results for each of the five criteria are presented in Section 3. Supporting shadow study exhibits on June 21, September 21, and December 21 for the hourly test times specified in the city's "Standards for Shadow Studies" are provided in Appendix A.

Table 1) Shadow Study Analysis – 1315 Bough Beeches Blvd results

City Criteria No.	Scenario	Criteria Achieved
1	Residential Private Outdoor Amenity Spaces	
	i. June 21	Criteria Achieved
	ii. September 21	Criteria Achieved
2	Community Outdoor Amenity Area	
	iii. June 21	Criteria Achieved
	iv. September 21	Criteria Achieved
	v. December 21	Criteria Achieved
3	Public Realm	
	a. Low and Medium Residential Streets	Criteria Achieved
	b. Mixed-Use, Commercial, Employment and High-Density Residential Streets	Criteria Achieved
	c. Public Open Spaces, Parks, and Plazas	Criteria Achieved
4	Turf and Flower Gardens in Public Parks	Criteria Achieved
5	Building Faces to allow for the Possibility of using Solar Energy	Criteria Achieved

Notes:

a. The site latitude is 43.628N and longitude 79.606W

b. Astronomical north was based on the base mapping obtained from Survey Plan and Google Earth

c. The base mapping was amalgamation of Google Earth, Survey, and Open Data from the City of Mississauga

d. Base mapping includes a minimum coverage area of 4.0x the proposed building height to the north, east and west and 1.5x the proposed building height to the south

3. INDIVIDUAL CRITERIA RESULTS

This section provides the result of the shadow analysis related to each of the five criteria applicable to this site contained in the City of Mississauga's Standards for Shadow Studies (July 2024). We have cited the relevant City standard and provide a conclusion with respect to each along with back-up diagrams to support this conclusion. As noted above, supporting exhibits for all required hourly analysis are provided in Appendix A.

3.1 Residential Private Outdoor Amenity Spaces (Criterion 1)

Standard: To maximise the use of private residential amenity spaces during spring, summer and fall, shadow impacts from proposed developments should not exceed one hour in duration on areas such as private rear yards, decks, patios, and pools of surrounding residential dwellings on June 21 and September 21. This criterion is met if there is shadow impact for no more than two consecutive hourly test times within the space between the exterior wall of the dwelling that abuts the amenity space and the line of impact assessment ("No Impact Zone"). The line of impact assessment shall be a line 7.5m minimum from the rear wall or other appropriate exterior building wall of the dwelling that abuts the private amenity space.

Conclusion: The criteria for Residential Private Outdoor Amenity Spaces is met for June 21 and September 21, as there is no shadow impact for more than two consecutive hourly test times.

3.2 Communal Outdoor Amenity Areas (Criterion 2)

Standard: Ensure adequate sunlight on existing or proposed communal outdoor amenity areas including children's play areas, school yards, tot lots, and park features such as sandboxes, wading pools, etc., and outdoor amenity areas by seniors and those associated with commercial and employment areas during spring, summer, and fall. The criteria are met if the "sun access factor" is at least 50% on each of the required test dates.

The following communal outdoor amenity area was identified within the study area:

Outdoor Amenity at grade – 1315 Bough Beeches

Proposal shadows only:

Area of space: 343 m^2

Average area in sunshine: 250 m^2

Sun Access Factor: 0.73

Existing (Building on Site – 1315 Bough Beeches) shadows and proposal shadows:

Area of space: 343 m^2

Average area in sunshine: 203 m^2

Sun Access Factor: 0.59

Conclusion: The criteria is met for this proposed outdoor amenity space as the current condition achieves a "sun access factor" of at least 50% / 0.5 or more. The criteria is met when factoring proposal shadows only, (currently AT = 343m^2, As (ave)=250m^2, SAF 0.73) with a sun access factor of 0.73. *See Figure 1*. The criteria is also met when factoring proposal shadows and existing shadows, (currently AT = 343m^2, As (ave)=203m^2, SAF 0.59) with a sun access factor of 0.59. *See Figure 2*.

3.3 Public Realm (Criterion 3)

3.3a) Low and Medium Residential Streets

Standard: Developments should be designed to allow full sunlight on the opposite boulevard including the full width of the sidewalk on September 21 for the total of at least 4 hours between 9:12am and 11:12am and between 3:12pm and 5:12pm

Conclusion: The criterion is met as there are no incremental shadows on the opposite boulevard on the low-density residential streets between the time periods noted in the standard above.

3.3b) Mixed Use, Commercial, Employment and High Density Residential streets

Standard: Developments should be designed to allow full sunlight on the opposite boulevard including the full width of the sidewalk on September 21 as follows: For a total of at least 5 hours that must include the 2-hour period between 12:12 p.m. and 2:12 p.m., and an additional 2-hour period from either 9:12 a.m. to 11:12 a.m. or from 3:12 p.m. to 5:12 p.m.

Conclusion: The criterion is met as the opposite southeast boulevard for the Mixed Use, Commercial, Employment and High-Density Residential streets receive full sunlight for at least 5 hours between the time periods noted in the standards above.

3.3c) Public Open Spaces, Parks, and Plazas

Standard: Developments should be designed to provide a sun access factor of at least 50% on public open spaces, parks, and plazas on September 21.

Conclusion: This criterion is met but not applicable as the development does not cast incremental shadows on any nearby public open spaces, parks or plazas. Therefore, the Sun Access Factor remains unchanged by the proposed development.

3.4 Turf and Flower Gardens in the Public Parks (Criterion 4)

Standard: Proposed developments should allow for adequate sunlight during the growing season from March to October by allowing for a minimum of 6 hours of direct sunlight on September 21.

Conclusion: This criterion is met but not applicable as the development does not cast shadows on any nearby turf, flower gardens, or public parks.

3.5 Building Faces to Allow for the possibility of using solar energy (Criterion 5)

Standard: Shadow impacts from proposed developments should not exceed 2 consecutive hours in duration on the roofs, front, rear and exterior side walls of adjacent low rise (one to four storeys) residential buildings including townhouses, detached and semi-detached dwellings on September 21, to allow for the possibility of harvesting solar energy.

Conclusion: The criterion is met as there is no shadow impact for more than two consecutive hours in the 3m “No Impact Zone” of the surrounding low-rise residential buildings on September 21.

Figure 1) Sun Access Factor Calculation Chart – Proposal

Shadows Only

Date/Time	Outdoor Amenity (SM) AT	Outdoor Amenity (SF) AT	Deduction (SM)	Deduction (SF)	Area in Sunshine (SM) As	Area in Sunshine (SF) As	Sun Access Factor As / AT
21-Jun							
5:37	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
7:07	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
7:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
8:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
9:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
10:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
11:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
12:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
1:20	343 m²	3,688 ft²	70 m²	753 ft²	273 m²	2,934 ft²	0.8
2:20	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
3:20	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
4:20	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
5:20	343 m²	3,688 ft²	42 m²	447 ft²	301 m²	3,241 ft²	0.9
6:20	343 m²	3,688 ft²	192 m²	2,061 ft²	151 m²	1,626 ft²	0.4
7:20	343 m²	3,688 ft²	341 m²	3,675 ft²	1 m²	13 ft²	0.0
7:33	343 m²	3,688 ft²	339 m²	3,649 ft²	4 m²	39 ft²	0.0
9:03	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
21-Sep							
7:05	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
8:35	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
9:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
10:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
11:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
12:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
1:12	343 m²	3,688 ft²	145 m²	1,563 ft²	197 m²	2,125 ft²	0.6
2:12	343 m²	3,688 ft²	327 m²	3,518 ft²	16 m²	170 ft²	0.0
3:12	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
4:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
5:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
5:48	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
7:18	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
21-Dec							
7:49	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
9:19	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
10:17	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
11:17	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
12:17	343 m²	3,688 ft²	155 m²	1,663 ft²	188 m²	2,025 ft²	0.5
1:17	343 m²	3,688 ft²	293 m²	3,155 ft²	50 m²	533 ft²	0.1
2:17	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
3:15	343 m²	3,688 ft²	12 m²	125 ft²	331 m²	3,563 ft²	1.0
4:45	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0

Outdoor Amenity (SM) AT	Outdoor Amenity (SF) AT
343 m²	3,688 ft²

Average Area in Sunshine (SM) As (ave)	Average Area in Sunshine (SF) As (ave)	Sun Access Factor As (ave) / AT
250 m^2	2,687 ft²	0.73

Figure 2) Sun Access Factor Calculation Chart – Existing (Building on site - 1315 Bough Beeches) Shadows and Proposal Shadows

Date/Time	Outdoor Amenity (SM) AT	Outdoor Amenity (SF) AT	Deduction (SM)	Deduction (SF)	Area in Sunshine (SM) As	Area in Sunshine (SF) As	Sun Access Factor As / AT
21-Jun							
5:37	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
7:07	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
7:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
8:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
9:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
10:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
11:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
12:20	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
1:20	343 m²	3,688 ft²	70 m²	753 ft²	273 m²	2,934 ft²	0.8
2:20	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
3:20	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
4:20	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
5:20	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
6:20	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
7:20	343 m²	3,688 ft²	341 m²	3,675 ft²	1 m²	13 ft²	0.0
7:33	343 m²	3,688 ft²	339 m²	3,649 ft²	4 m²	39 ft²	0.0
9:03	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
21-Sep							
7:05	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
8:35	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
9:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
10:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
11:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
12:12	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
1:12	343 m²	3,688 ft²	145 m²	1,563 ft²	197 m²	2,125 ft²	0.6
2:12	343 m²	3,688 ft²	327 m²	3,518 ft²	16 m²	170 ft²	0.0
3:12	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
4:12	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
5:12	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
5:48	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
7:18	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
21-Dec							
7:49	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
9:19	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
10:17	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
11:17	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0
12:17	343 m²	3,688 ft²	155 m²	1,663 ft²	188 m²	2,025 ft²	0.5
1:17	343 m²	3,688 ft²	293 m²	3,155 ft²	50 m²	533 ft²	0.1
2:17	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
3:15	343 m²	3,688 ft²	343 m²	3,688 ft²	0 m²	0 ft²	0.0
4:45	343 m²	3,688 ft²	0 m²	0 ft²	343 m²	3,688 ft²	1.0

Outdoor Amenity (SM) AT	Outdoor Amenity (SF) AT
343 m²	3,688 ft²

Average Area in Sunshine (SM) As (ave)	Average Area in Sunshine (SF) As (ave)	Sun Access Factor As (ave) / AT
203 m²	2,187 ft²	0.59



JUNE 21 - 05:37am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

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JUNE 21 - 07:07am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 07:20am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
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- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 8:20am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

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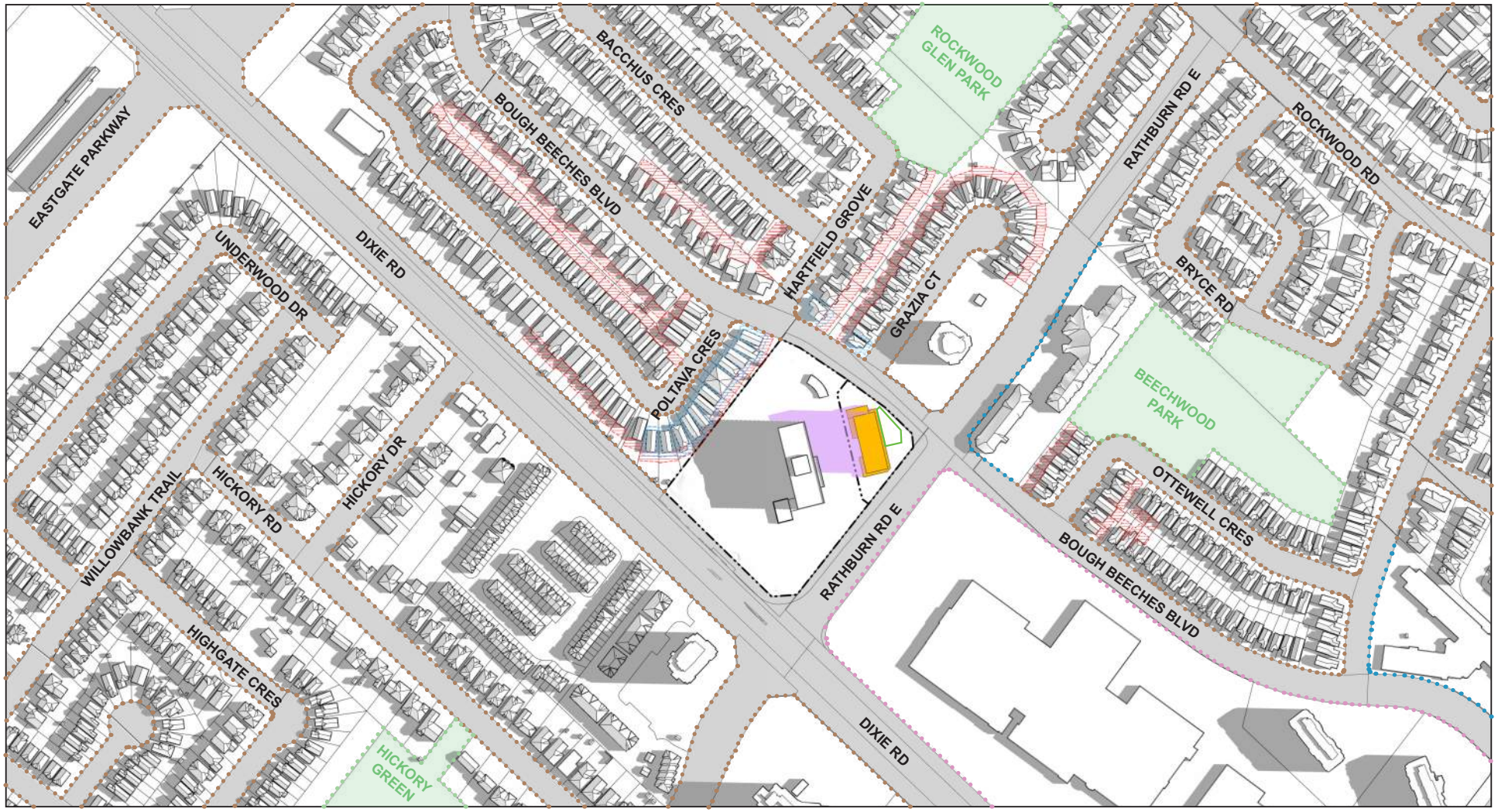

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- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

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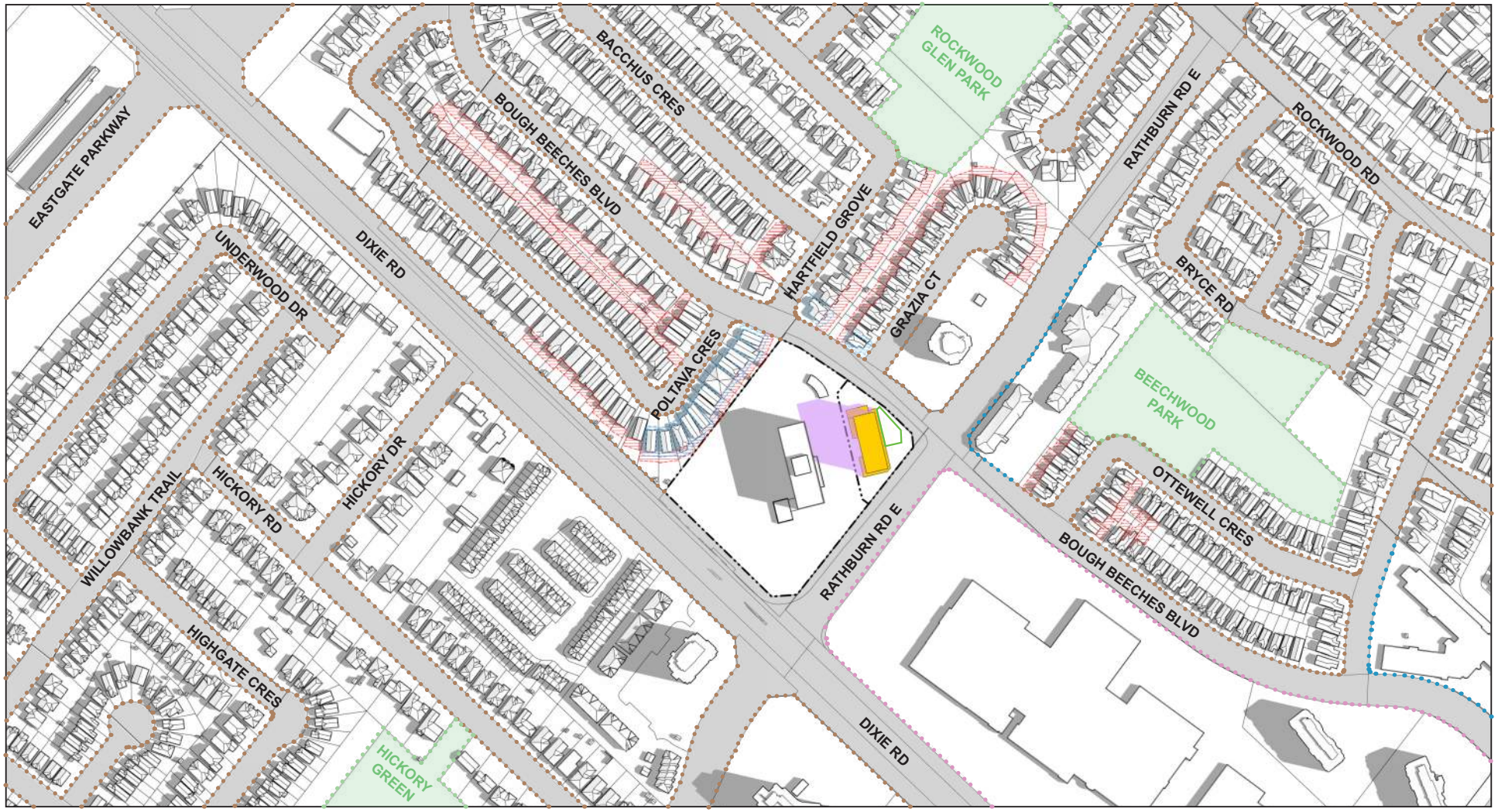

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- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

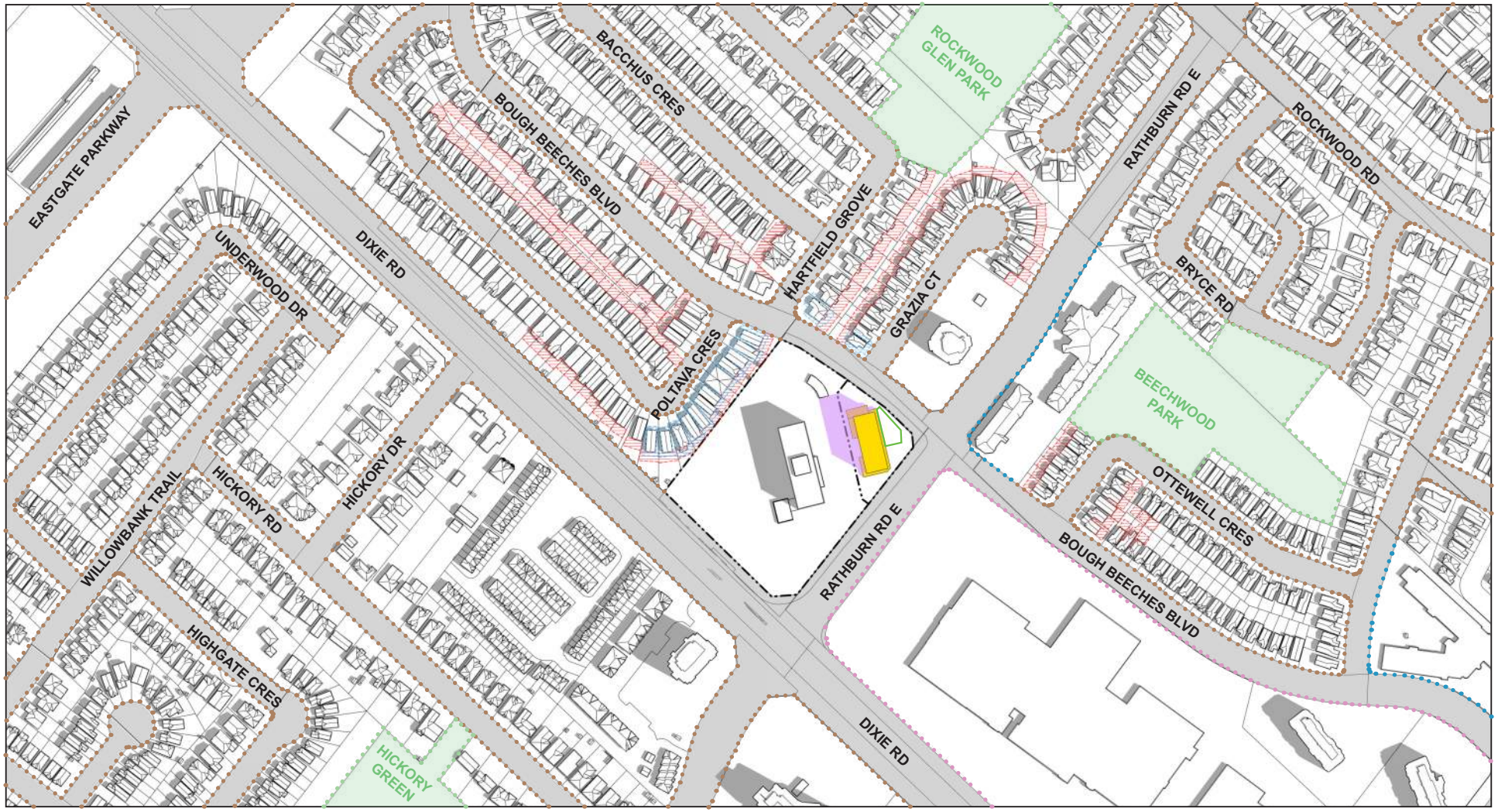
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



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- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

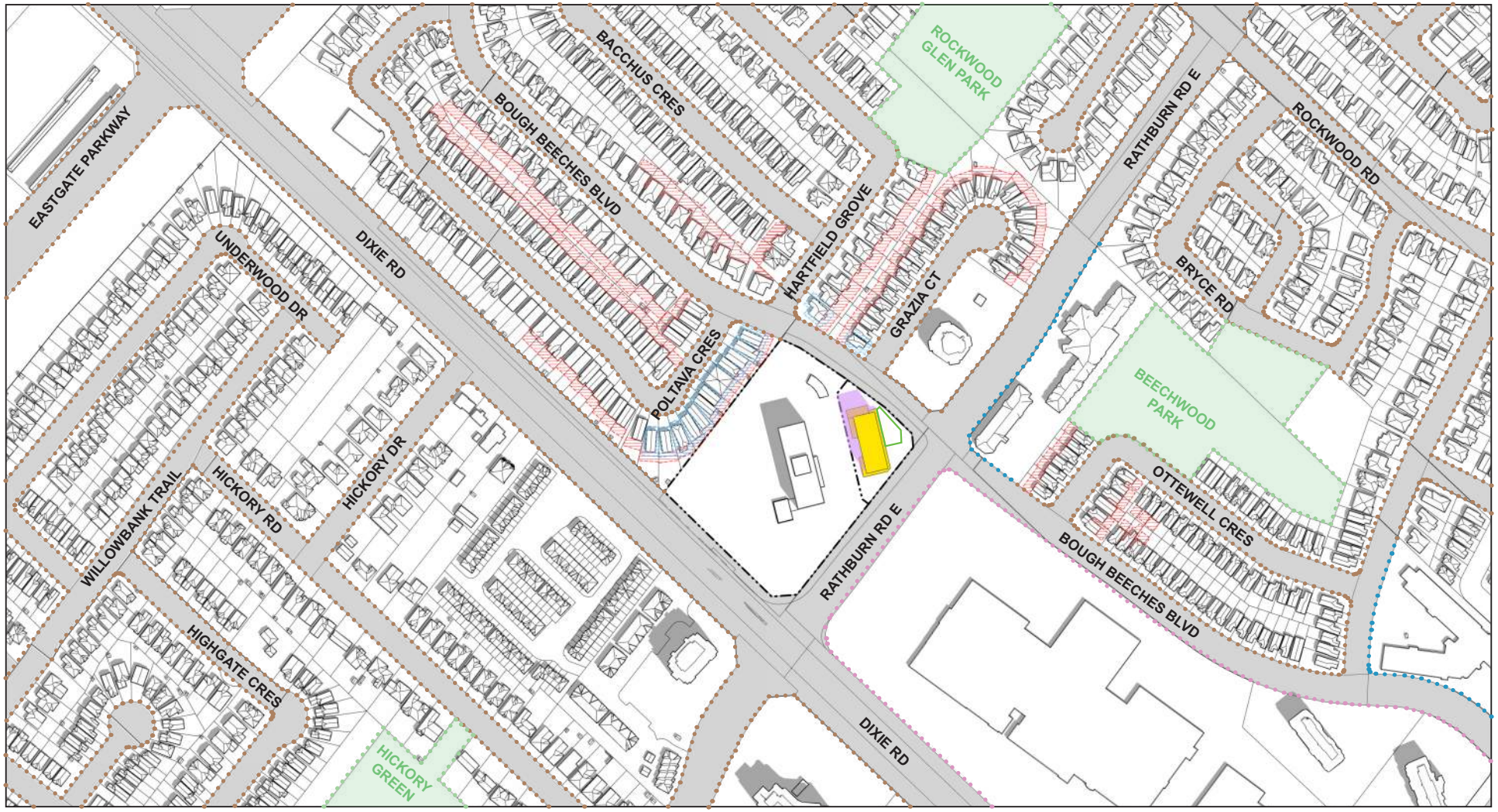
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



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- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

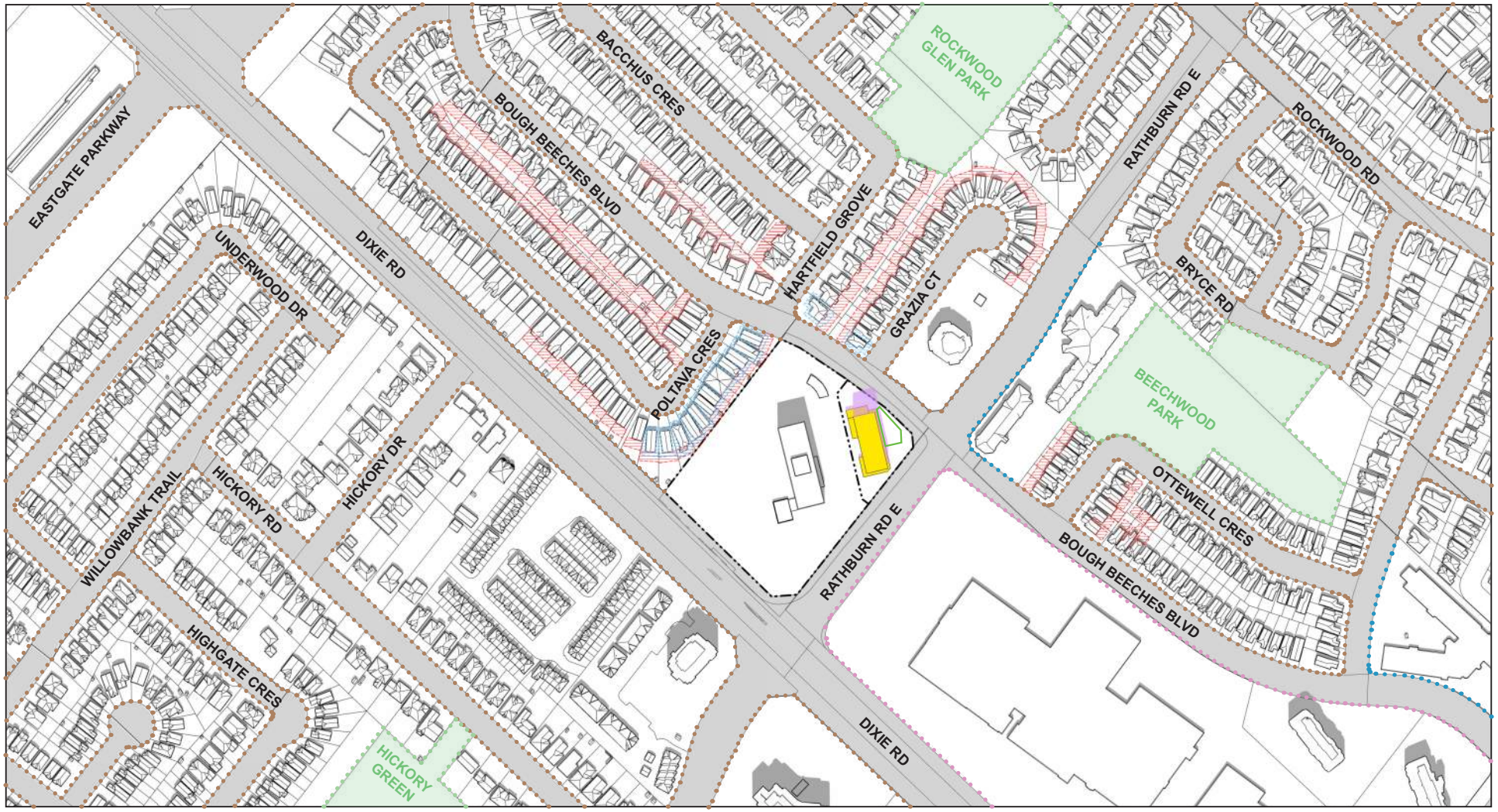
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



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- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

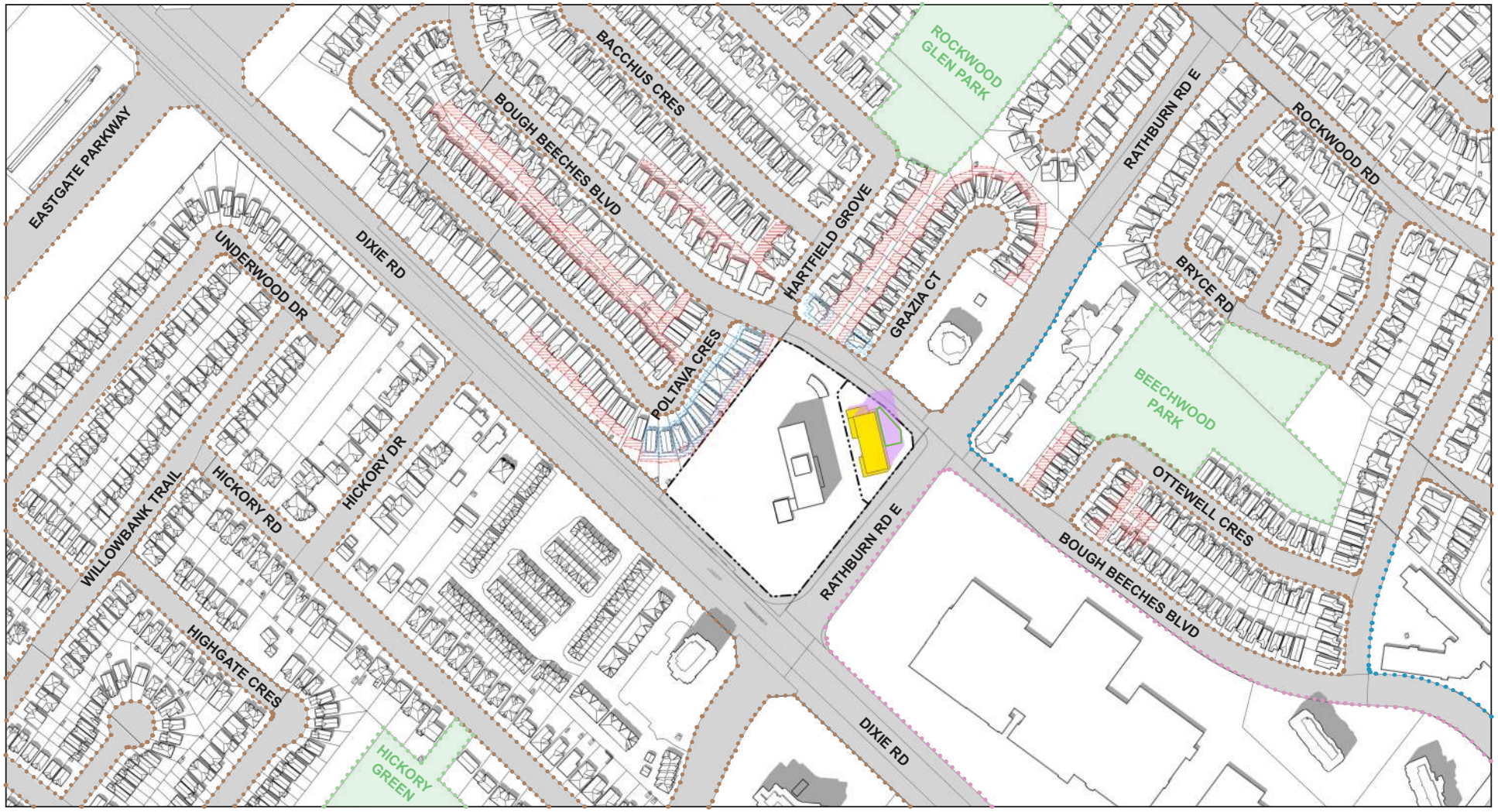
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



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- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
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- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

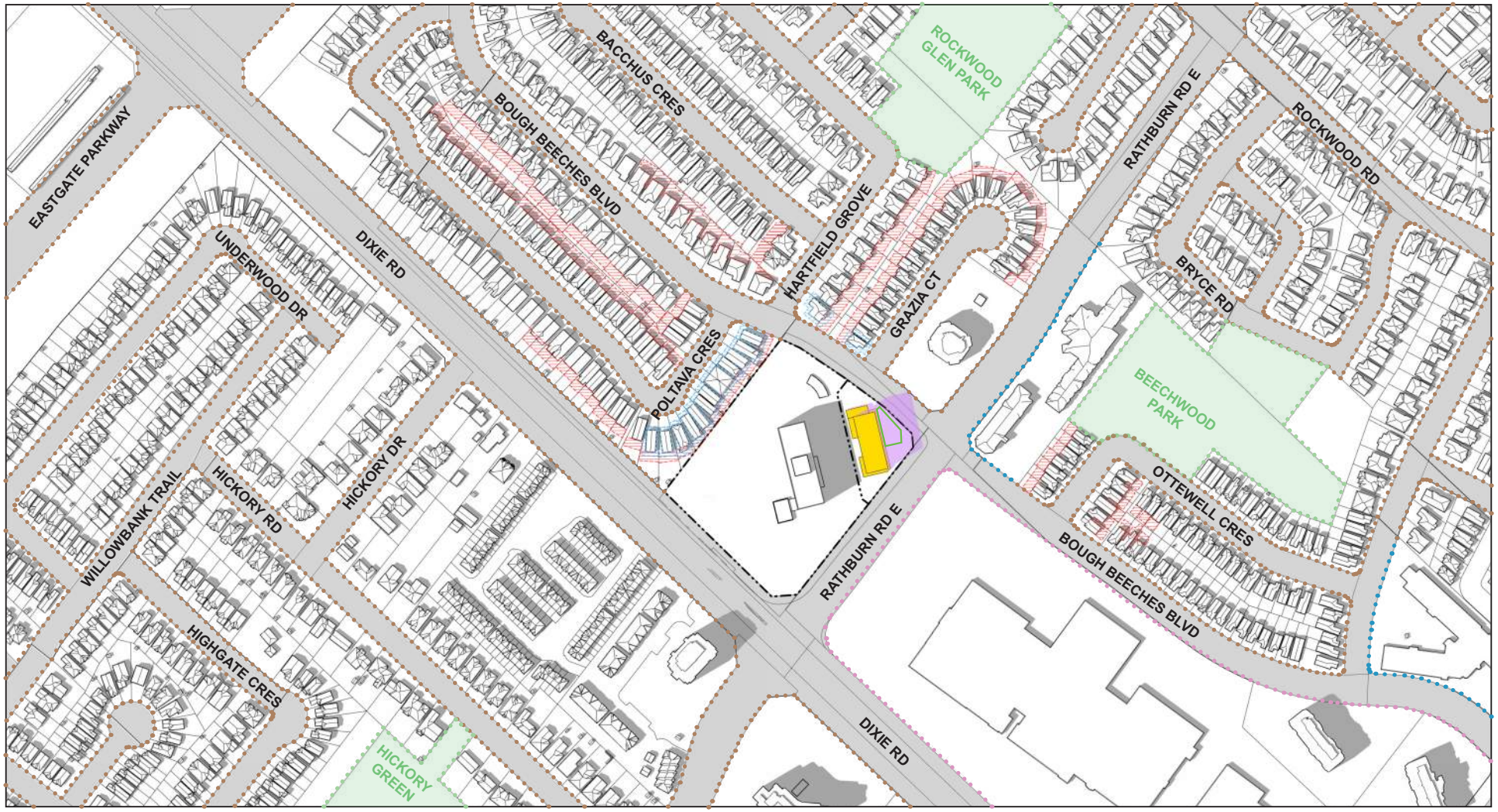
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 3:20pm

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- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

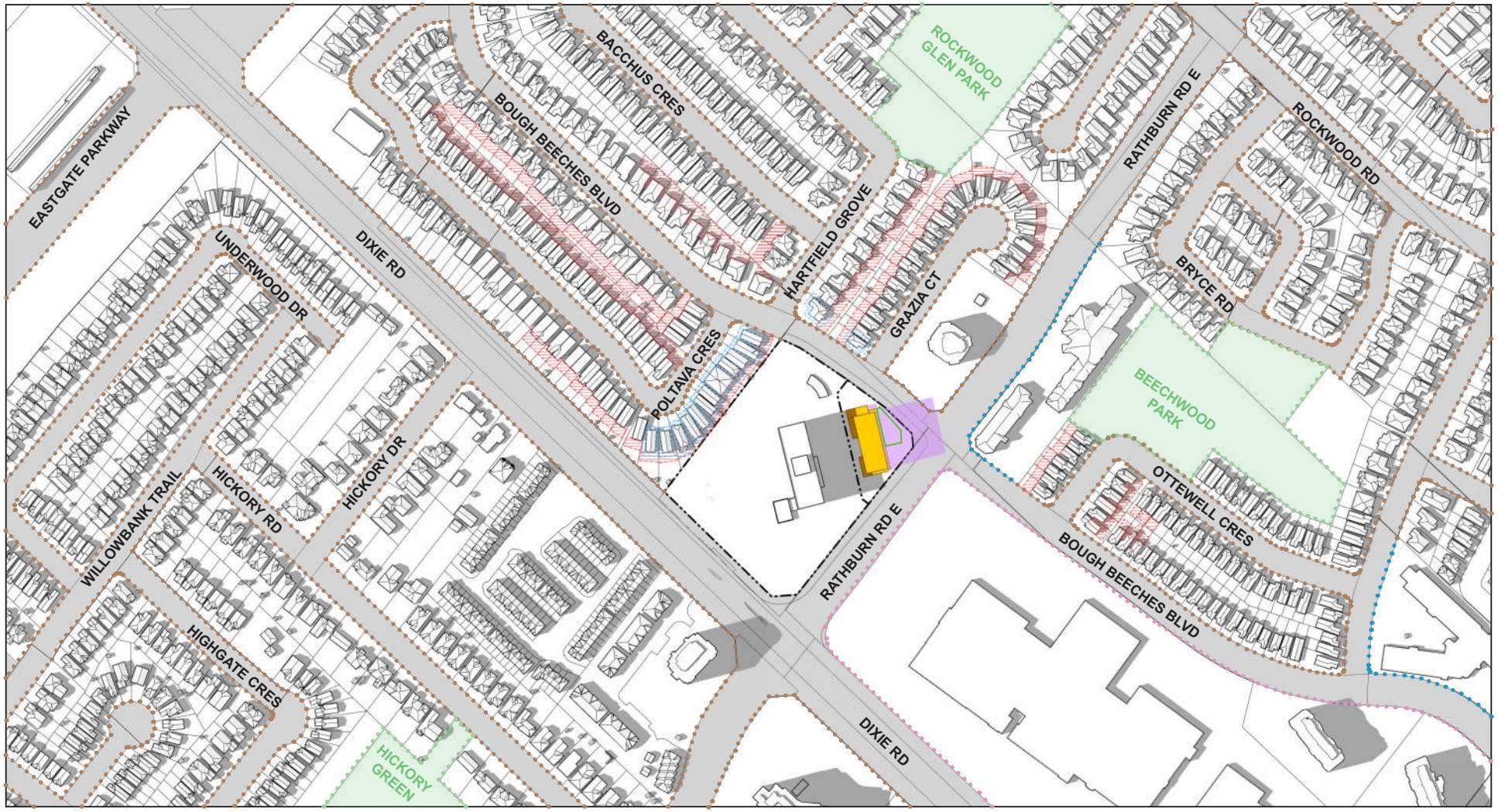
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 4:20pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

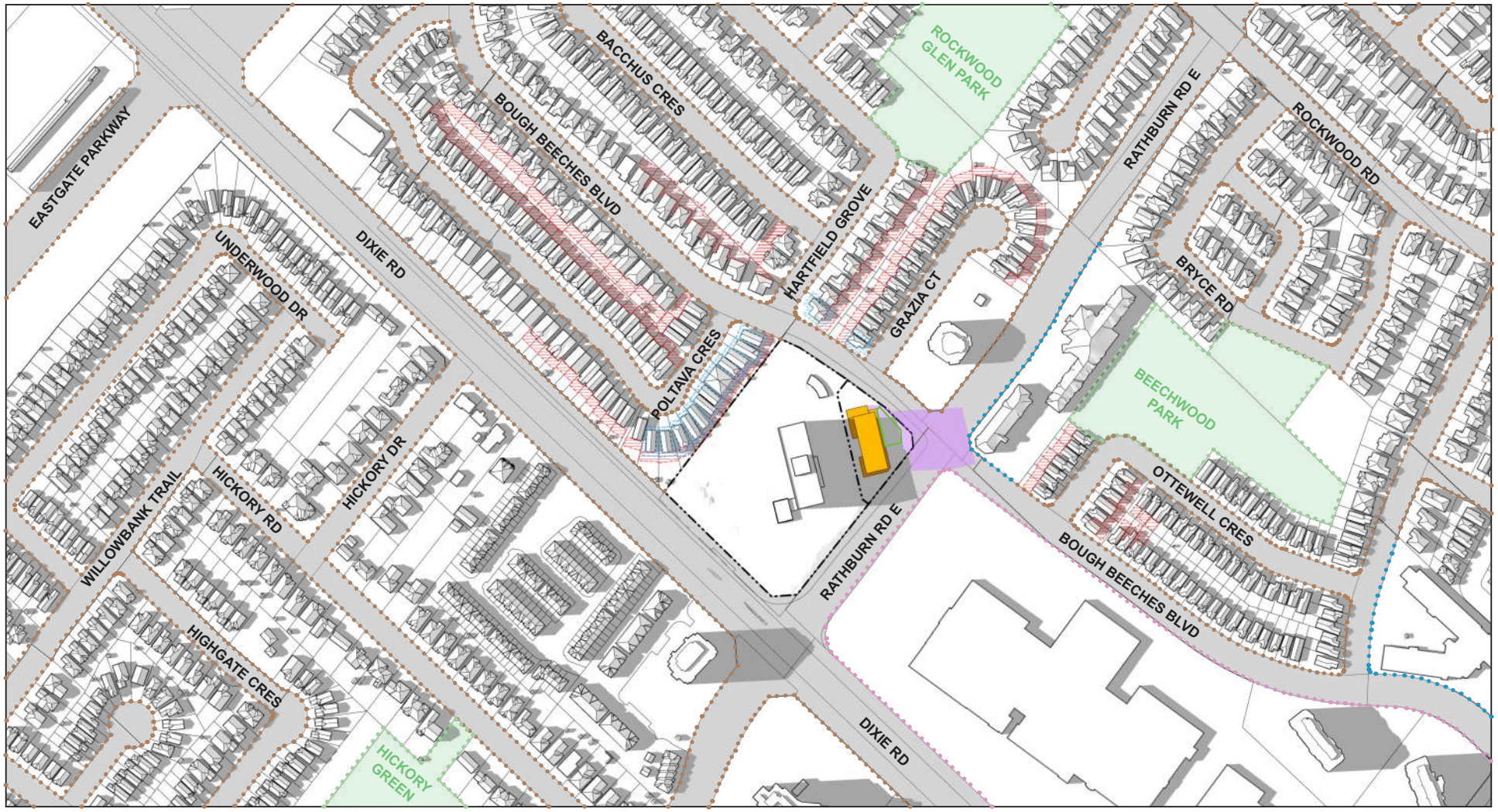
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 5:20pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

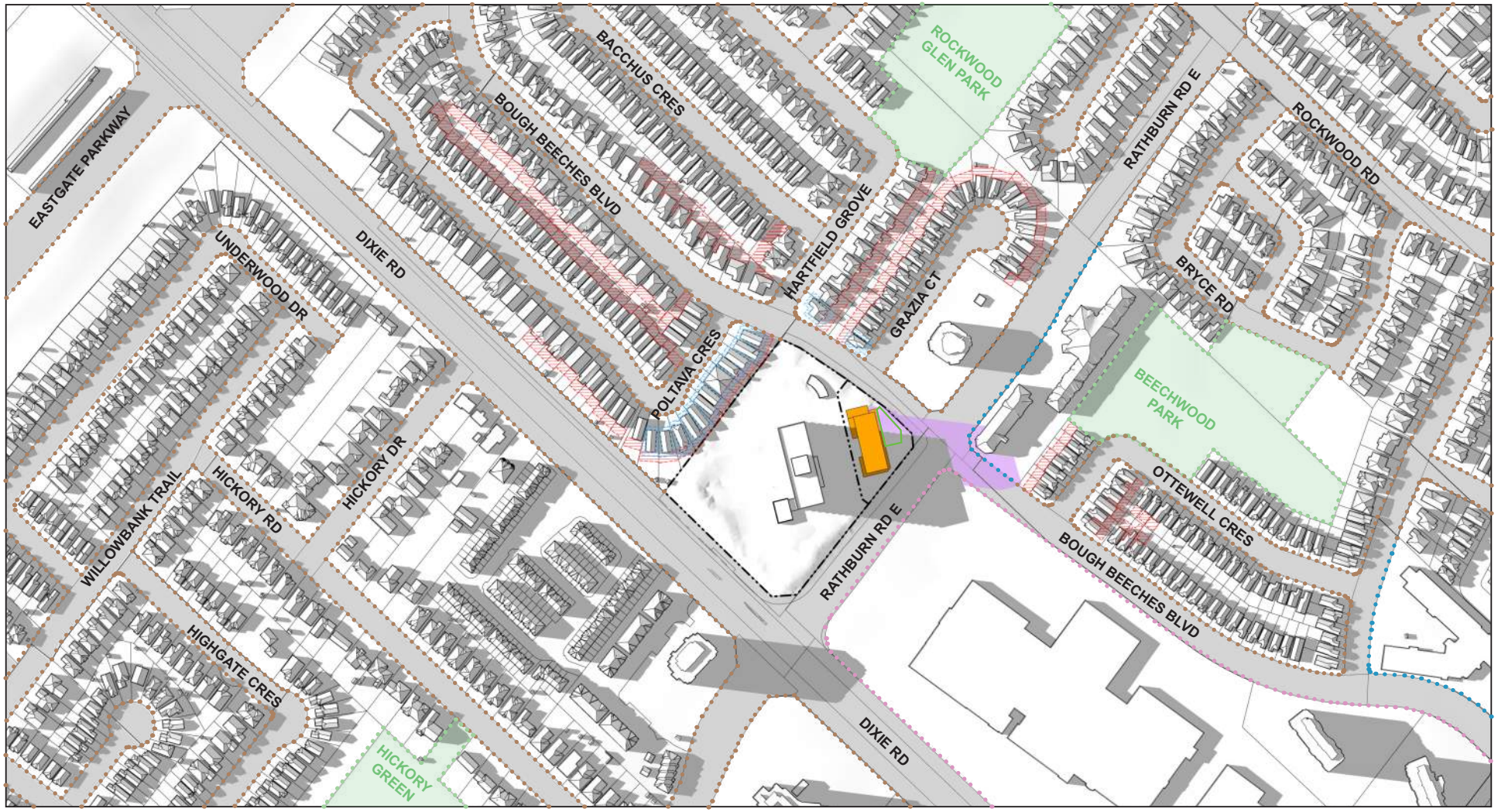
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 6:20pm

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- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 7:20pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 7:33pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



JUNE 21 - 9:03pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 7:05am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

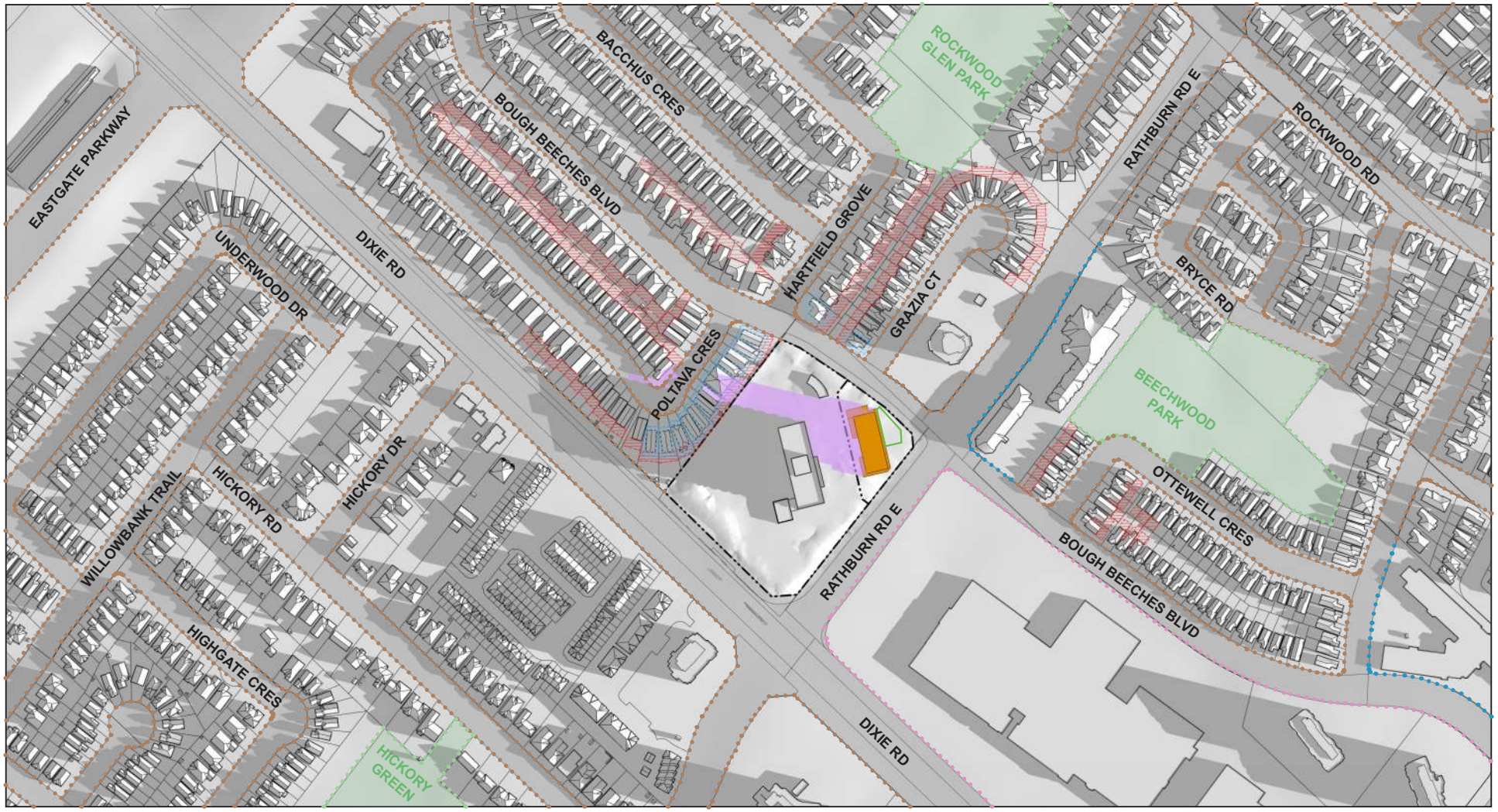
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 8:35am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

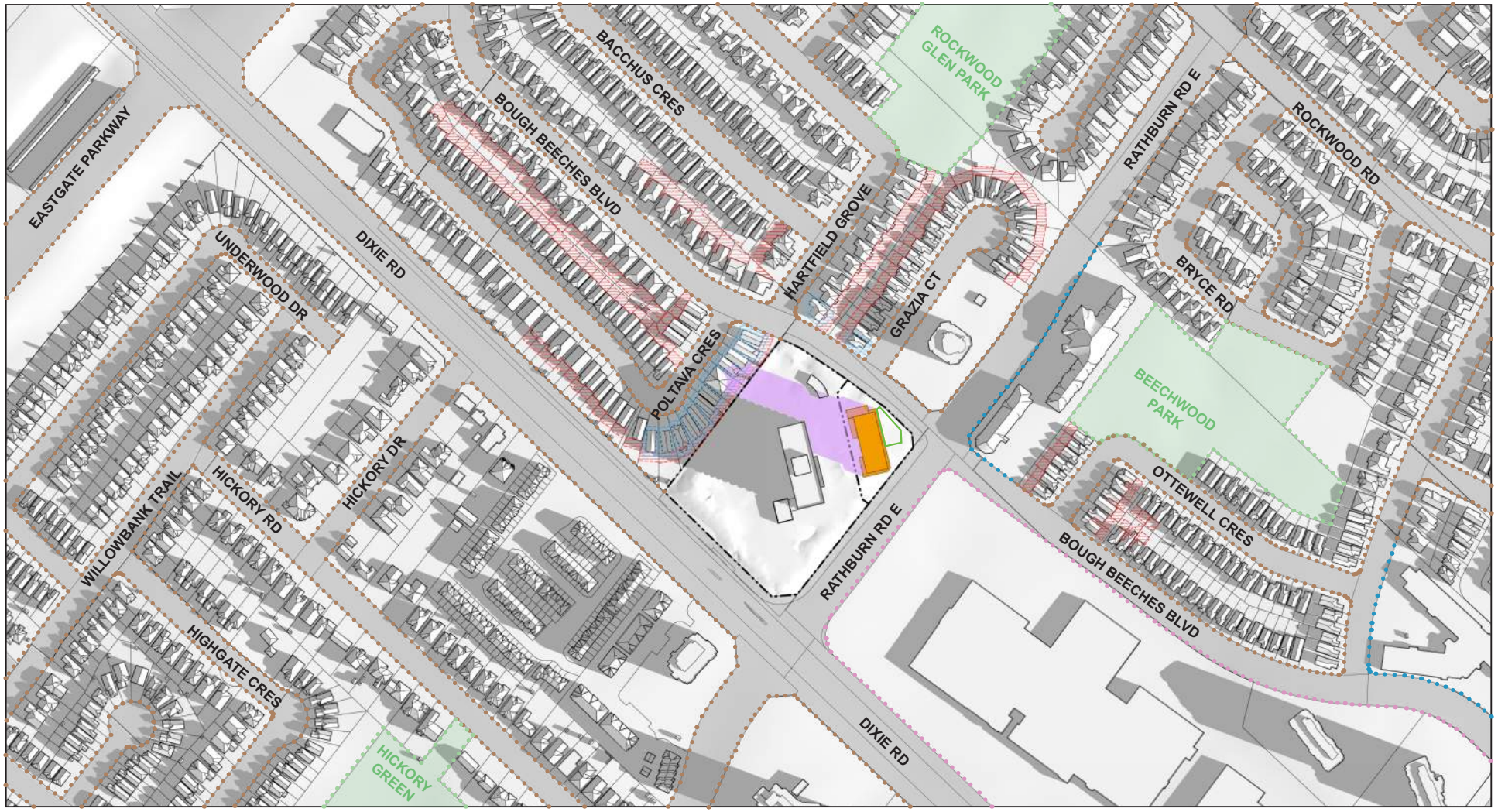
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 9:12am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

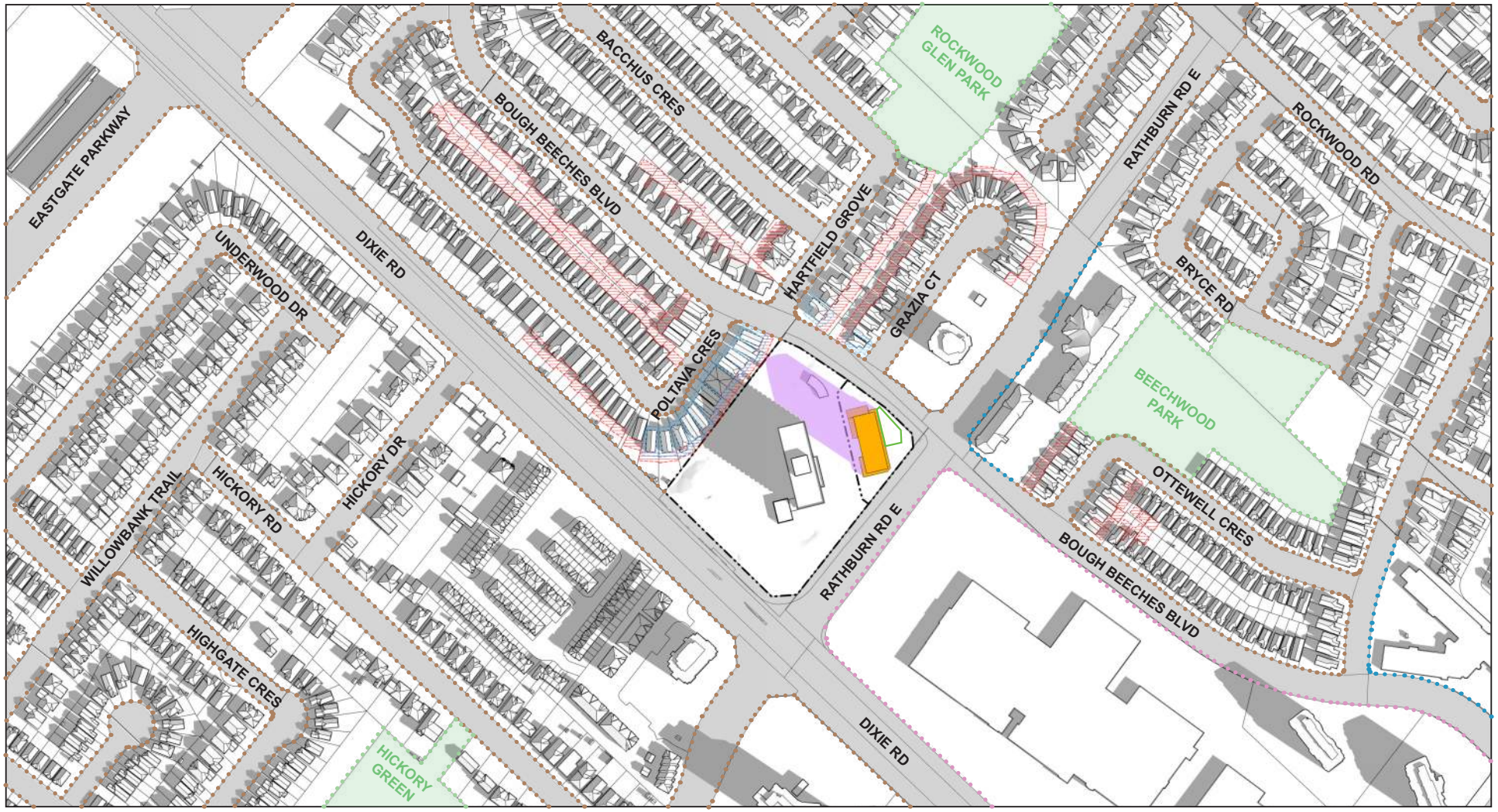
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 10:12am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

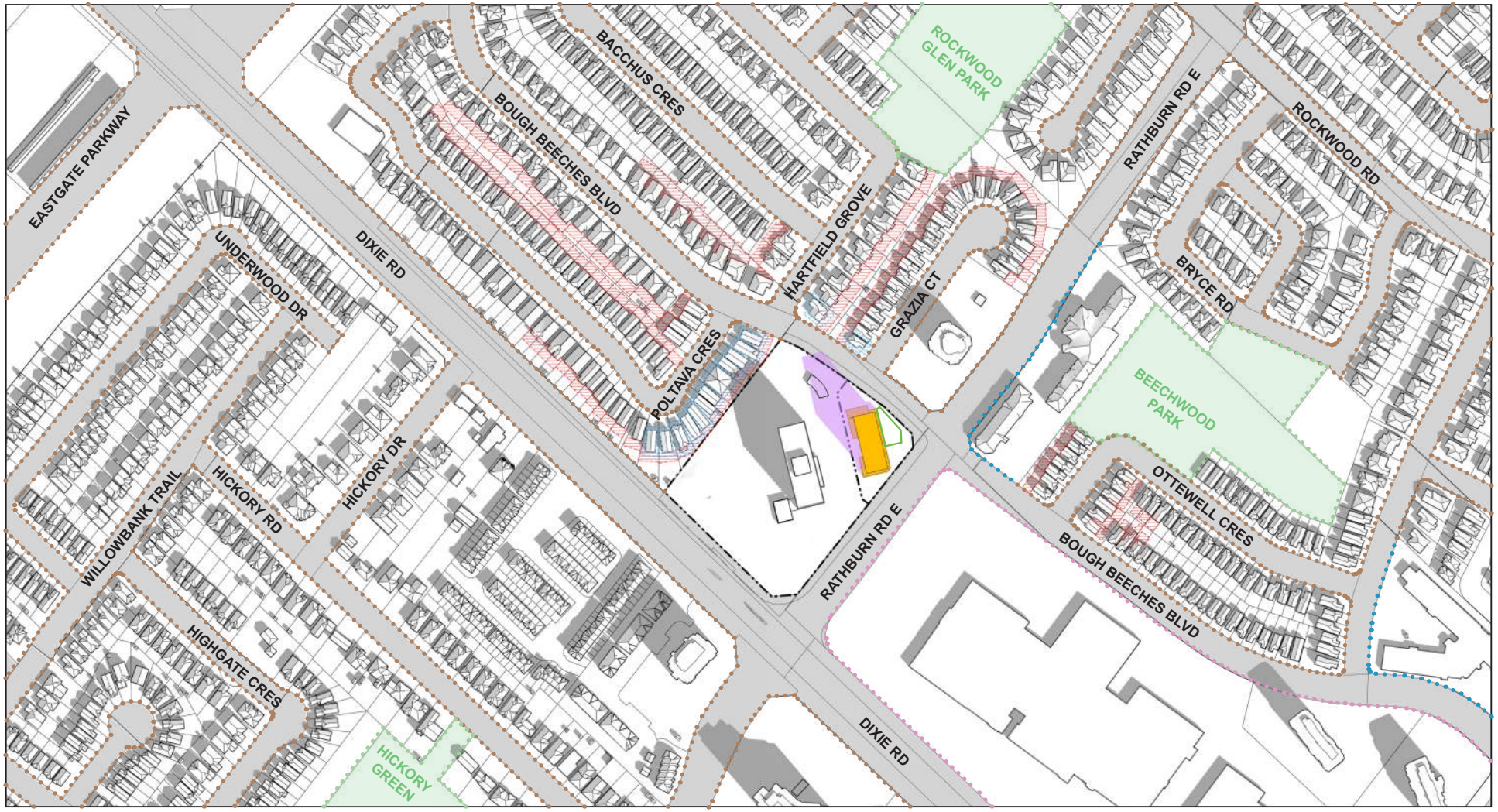
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 11:12am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

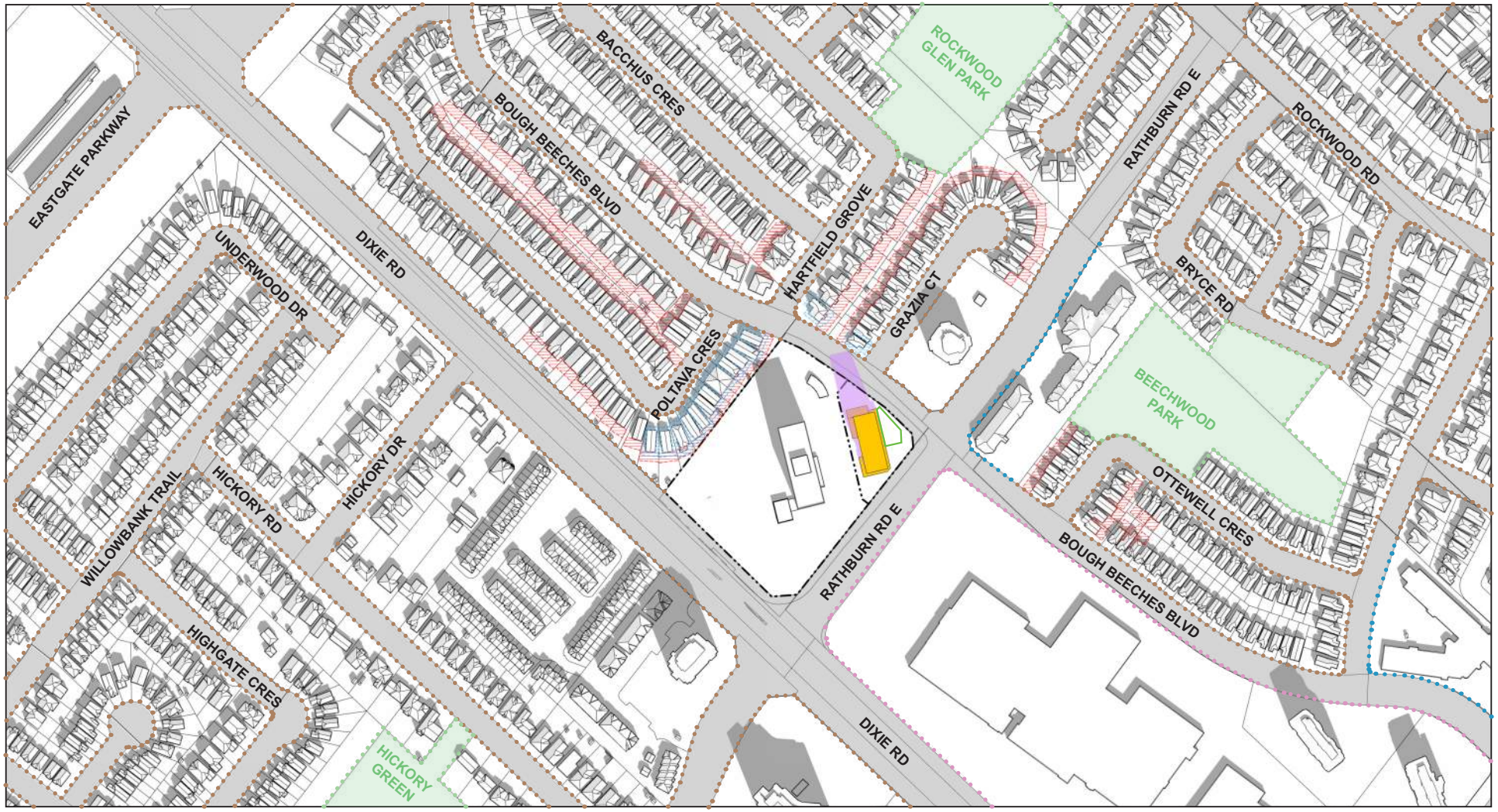
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 12:12pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

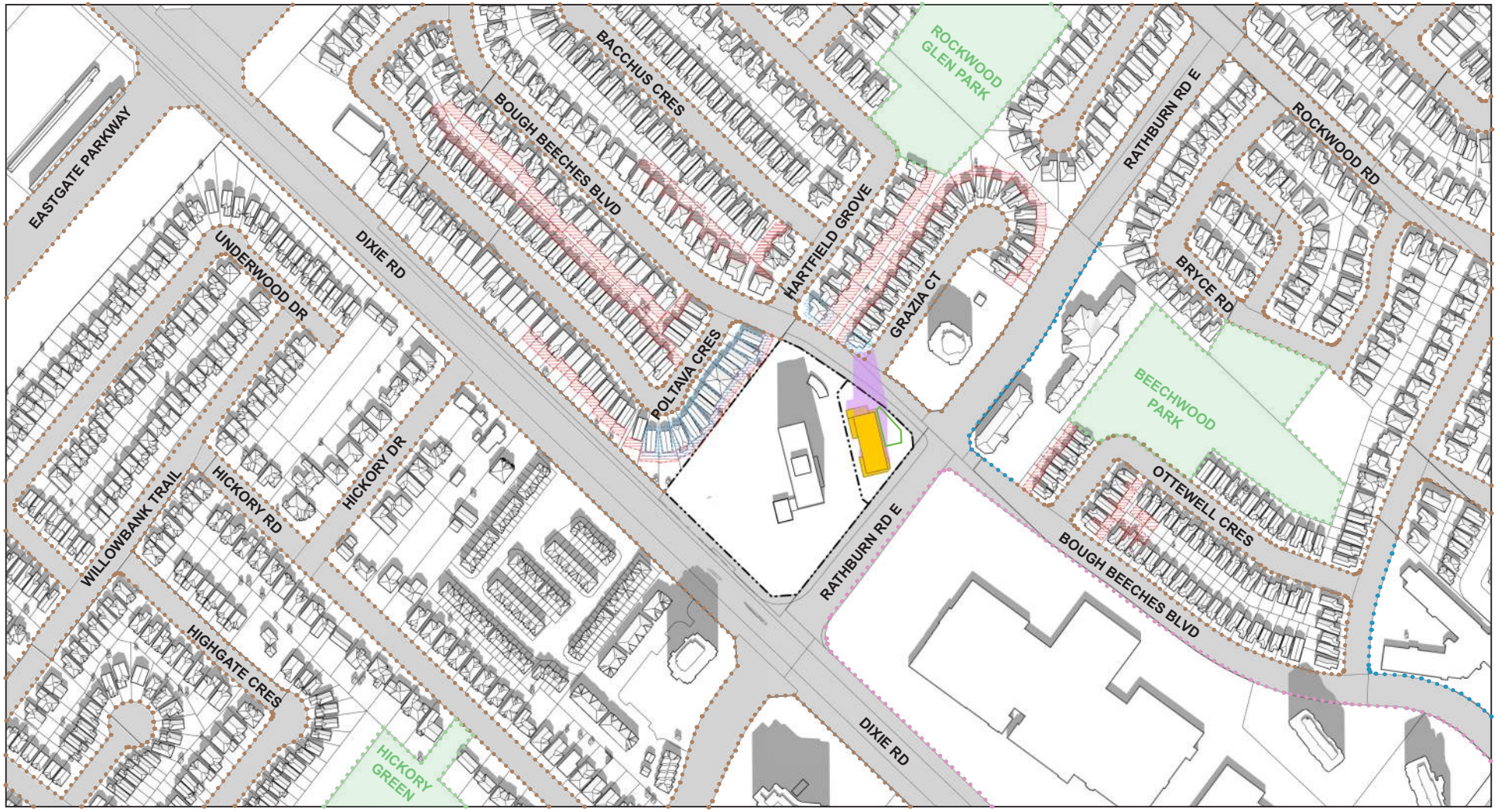
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 1:12pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

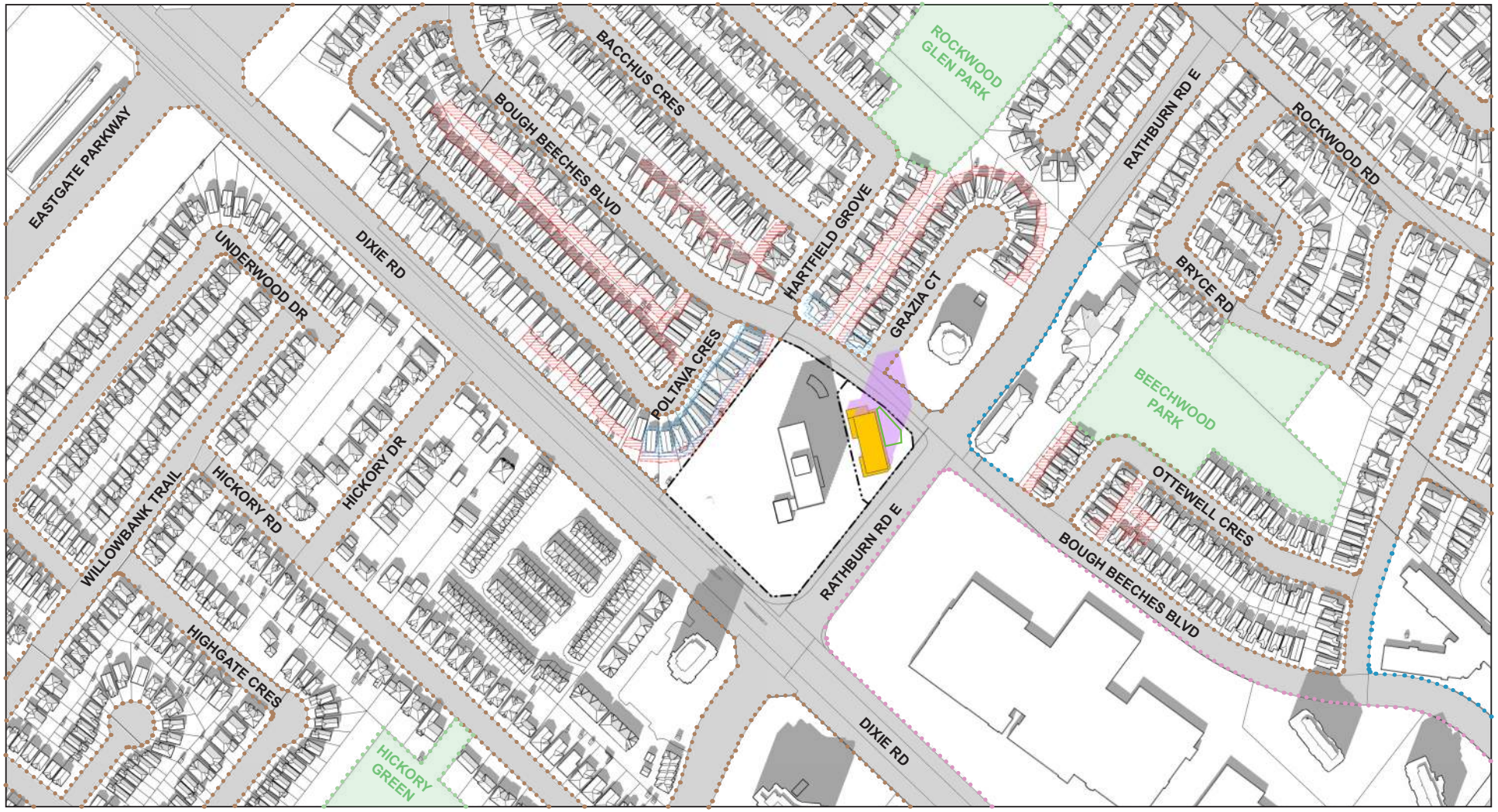
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 2:12pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

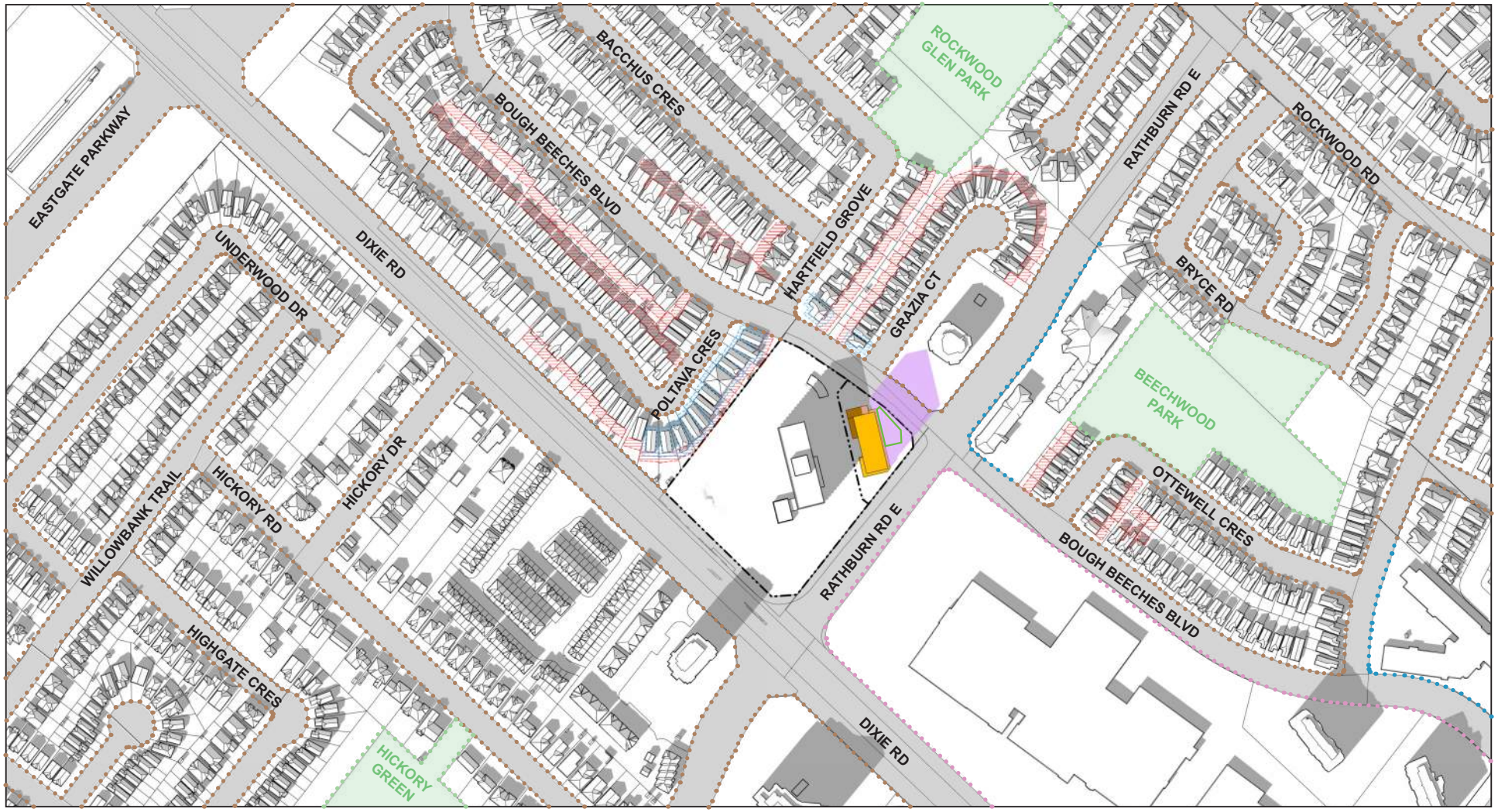
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 3:12pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

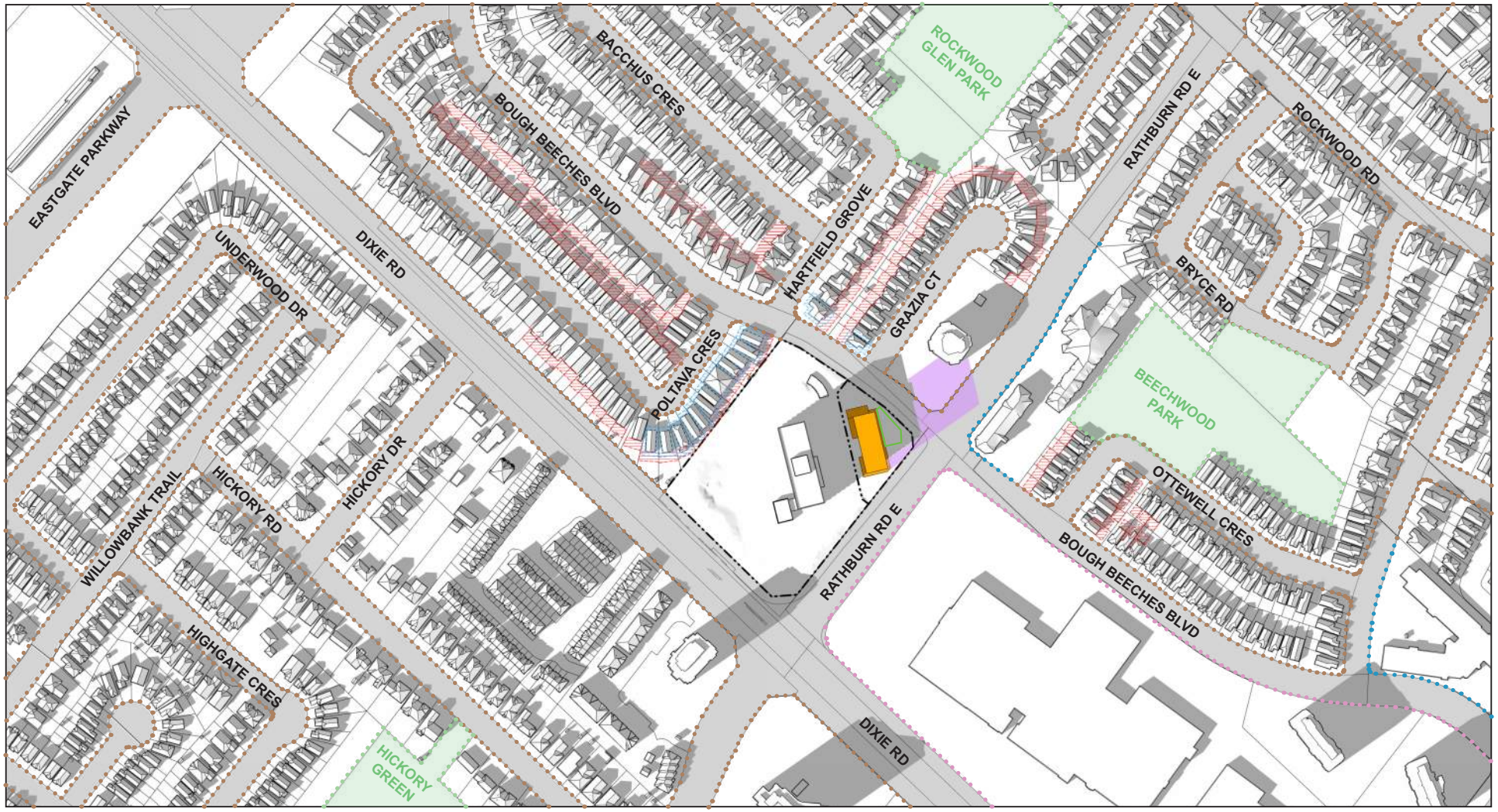
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 4:12pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

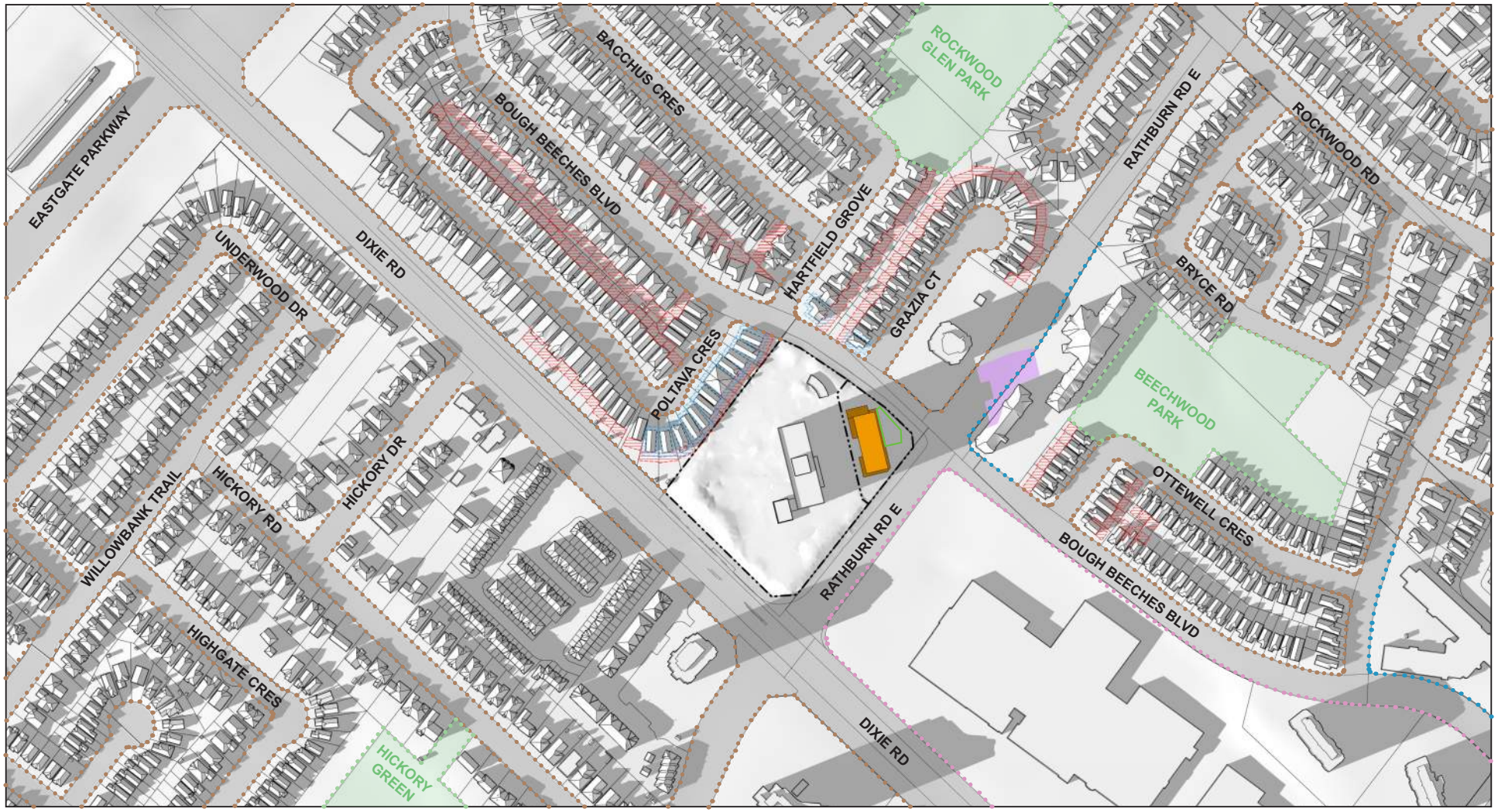
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 5:12pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 5:48pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



SEPT 21 - 7:18pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 7:49am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 9:19am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 10:17am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

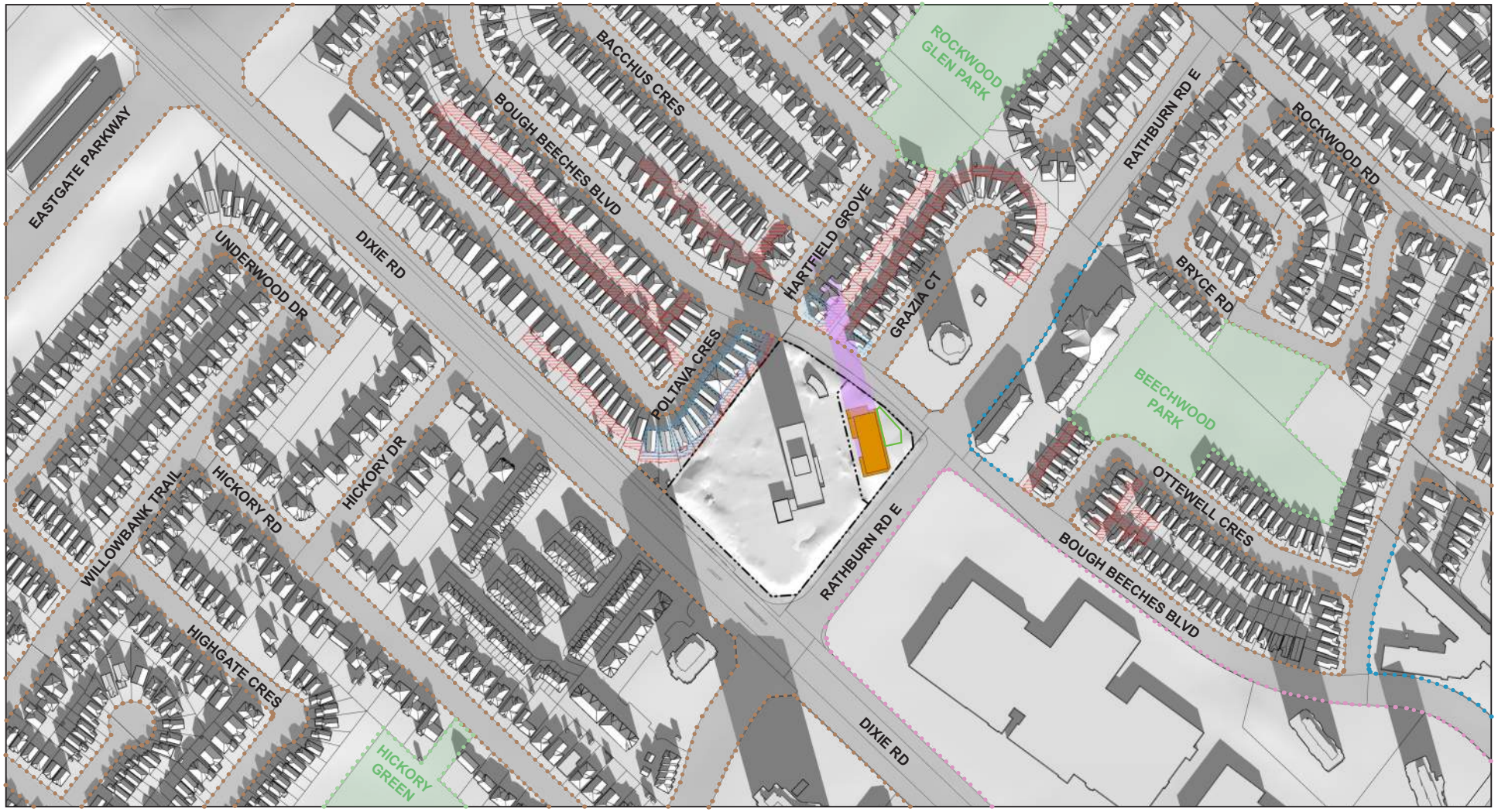
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 11:17am

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 12:17pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

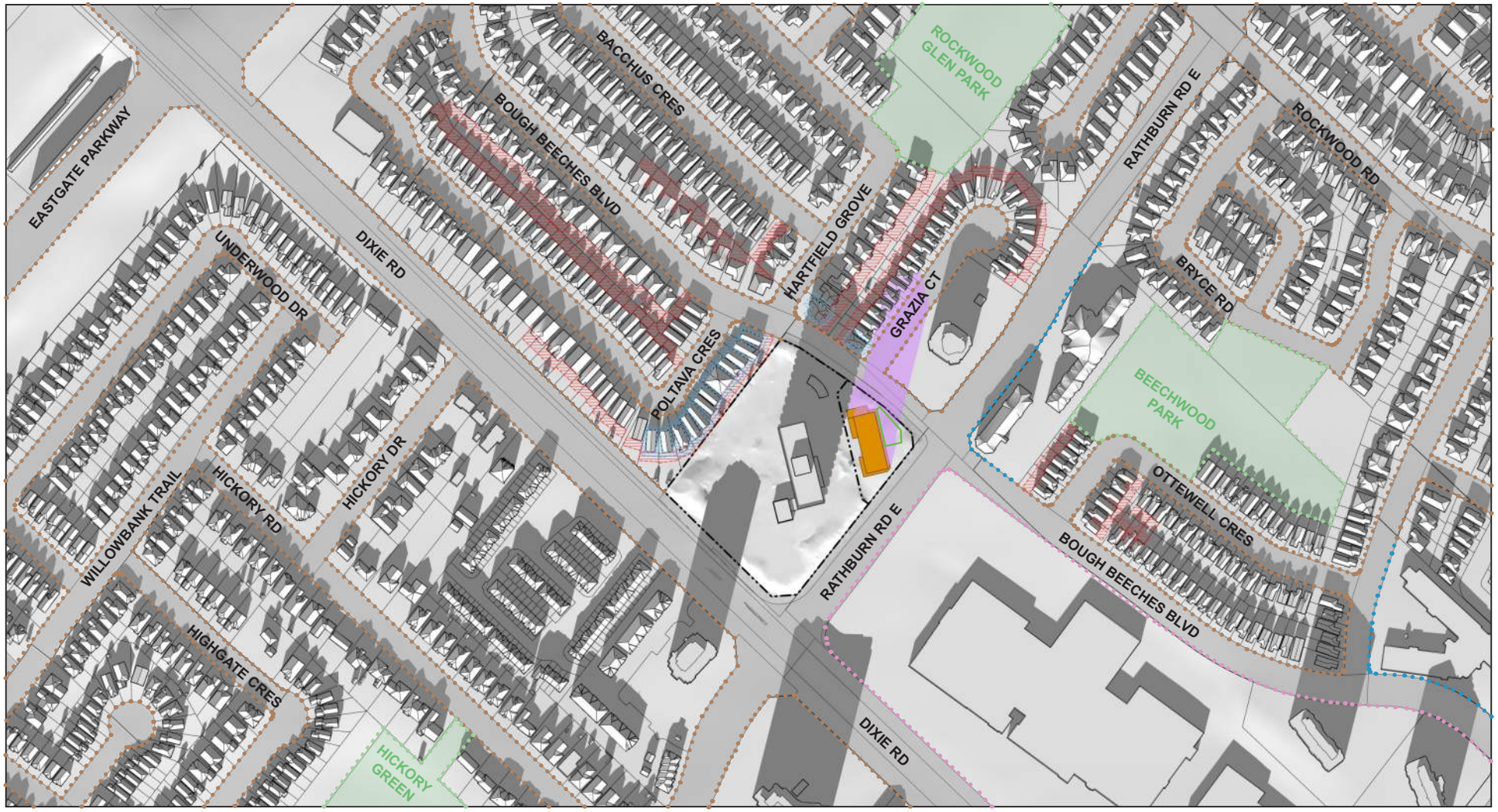
1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 1:17pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 2:17pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 3:15pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL
- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS



DEC 21 - 4:45pm

- 7.5m "NO IMPACT ZONE"
- 3m "NO IMPACT ZONE"
- COMMUNAL OUTDOOR AMENITY AREAS
- RESIDENTIAL
- SCHOOL / COMMUNITY PARK
- COMMERCIAL
- INSTITUTIONAL

- PROPERTY BOUNDARY
- 1315 BOUGH BEECHES - PROPOSAL
- 1315 BOUGH BEECHES -PROPOSED SHADOW

1315 BOUGH BEECHES BLVD

SHADOW STUDY | APPENDIX A

JUNE 2026

0m 50m 100m

ARCADIS