Court File No.: BK-25-03281116-0032

ONTARIO
SUPERIOR COURT OF JUSTICE
(IN BANKRUPTCY AND INSOLVENCY)
COMMERCIAL LIST

IN THE MATTER OF *THE BANKRUPTCY AND INSOLVENCY ACT*,
R.S.C. 1985, c. B-3, AS AMENDED

IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE A PROPOSAL OF 177 CROSS ARGUS DEVELOPMENT INC., OF THE CITY OF BURLINGTON, IN THE PROVINCE OF ONTARIO

MOTION RECORD OF 177 CROSS ARGUS DEVELOPMENT INC.

October 28, 2025

BE LAW LLP
30 St. Patrick Street, Suite 700
Toronto, ON M5T 3A3

Sara J. Erskine (LSO# 46856G)
Email: sara@be-law.ca
Tel: 416-597-5408

Adrienne Zaya (LSO# 79215K)
Email: Adrienne.zaya@be-law.ca
Tel: 416-306-8026

Lawyers for 177 Cross Argus Development Inc.

TO: **MCCARTHY TETRAULT LLP**
66 Wellington St W Suite 5300
Toronto, ON M5K 1E6

Heather Meredith (LSO#48354R)
Email: hmeredith@mccarthy.ca
Tel: 416-601-8342

Lawyers for 915643 Ontario Inc. (First and Second Mortgagee)

AND TO: **SCALZI CAPLAN LLP**
3100 Rutherford Road, Unit #105
Vaughan, ON L4K 0G6

Derek Ketelaars (LSO# 67154R)
Email: derek@sclawpartners.com
Tel: 437-242-4088

Lawyers for Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. (Third Mortgagee)

AND TO: **CAPSTONE LEGAL**
1370 Hurontario Street
Mississauga, ON L5G 3H4

Danny M. Nunes (LSO# 53802D)
Email: dn@capstonelegal.ca
Tel: (416) 414-3311

Lawyers for the Proposal Trustee

INDEX

TAB	DOCUMENT
1	Notice of Motion
2	Affidavit of Samard (Sam) Ganni, affirmed October 28, 2025
A	NOI and the Certificate of Filing of a Notice of Intention to Make a Proposal
B	Default Judgement dated March 5, 2025
C	Notice of Intention to Enforce a Security
D	Email correspondence between Mr. Zeldin and Mr. Ketelaars dated October 3, 2025
E	Email correspondence between Mr. Ketelaars to Ms. Erskine dated October 3, 2025 and attached receipts
F	Notices of Attornment of Rents
G	Email correspondence from Ms. Erskine dated October 9, 2025
H	Pre-Consultation Comments Report dated January 17, 2024
I	Tree Inventory and Preservation Plan dated June 26, 2024
J	First submission of report by Urban Tech dated July 2024
K	Soil Investigation for Proposed High Rise Buildings 177 Cross Avenue, Oakville, Ontario dated September 1, 2023
L	Preliminary Hydrogeological Assessment dated May 2024
M	Phase One Environmental Site Assessment (ESA) dated May 5, 2023
N	Phase Two ESA dated March 1, 2024
O	Draft report of ORTECH Consulting Alliance Inc. dated July 11, 2024
P	Traffic Impact Study (TIS) draft report dated July 2024
Q	Noise Impact Study (NIS) draft report dated July 2024
R	Draft report by Gradient Wind Engineers & Scientists dated June 10, 2024
3	Draft NOI Process Order

TAB 1

Court File No.: BK-25-03281116-0032

ONTARIO
SUPERIOR COURT OF JUSTICE
(IN BANKRUPTCY AND INSOLVENCY)
COMMERCIAL LIST

IN THE MATTER OF *THE BANKRUPTCY AND INSOLVENCY ACT*, R.S.C. 1985, c. B-3, AS AMENDED

IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE A PROPOSAL OF 177 CROSS ARGUS DEVELOPMENT INC., OF THE CITY OF BURLINGTON, IN THE PROVINCE OF ONTARIO

NOTICE OF MOTION

177 Cross Argus Development Inc. (the "**Company**" or "**177 Cross**"), will make a motion before the Honourable Justice Dietrich of the Ontario Superior Court of Justice (Commercial List) on October 30, 2025 at 12:30 p.m. or as soon after that time as the motion can be heard.

PROPOSED METHOD OF HEARING: The Motion is to be heard by videoconference.

THE MOTION IS FOR

1. An order substantially in the form attached at Tab 3 of the motion record (the "**NOI Process Order**"), *inter alia*:

   (a) abridging the time for service of this notice of motion and the motion record and dispensing with service on any person other than those served;

   (b) approving a super-priority administration charge in the aggregate amount of $250,000 on the current and future assets, undertakings and property of the

Company in favour of the Proposal Trustee (as defined below), counsel to the Proposal Trustee and counsel to the Company (the "**Administration Charge**")'

(c) extending the time for the Company to file a proposal under the BIA (as defined below) and the corresponding stay of proceedings (the "**Stay Extension**") to and including December 16, 2025;

(d) declaring that the Third Mortgagee (as defined below) is subject to the stay under sections 69 and 69.1 of the *Bankruptcy and Insolvency Act*, RSC 1985, c B-3 ("**BIA**");

(e) declaring that the Notices of Attornment of Rents and Direction to Pay delivered by the Third Mortgagee to the tenants of the Company are null and void;

(f) directing the Third Mortgagee to deliver to the Company all rents collected pursuant to the Notices of Rents and Direction to Pay;

(g) approving the payment of $267,157 in pre-filing development charges and expenses incurred by the Company in accordance with the cash flow statements appended to the first report of the Proposal Trustee;

(h) approving the Proposal Trustee's first report, to be filed, and the activities set out therein (the "**First Report**"); and

(i) such further and other relief as to this Honourable Court may seem just.

THE GROUNDS FOR THE MOTION ARE:

Background

2. The Company is a privately held corporation incorporated under the *Business Corporations Act* (Ontario), R.S.O. 1990, c. B16 and headquartered in Burlington, Ontario;

3. The Company acquired an approximately 2.5-acre site located at the municipal address 177-185 Cross Ave & 580 Argus Road in Oakville, Ontario and bearing the legal description:

> LT 3, PL 1333; PT LT 1, PL 1333, AS IN 7550077; PT LT 14, CON 3 TRAF SDS, AS IN 755007 TOWN OF OAKVILLE

(the "**Property**");

4. The Company acquired the Property subject to two vendor-take-back ("**VTB**") mortgages in favour of 915643 Ontario Inc. The value of the first VTB mortgage is $31,800,000 and the value of the second VTB mortgage is $5,300,000;

5. The Company acquired the Property for the purpose of development into a residential mixed-use development with 4 towers (A: 55-storey, B: 60-storey, C 50-storey, D: 6-storey) with 1,895 condominium units and a gross floor area of 1,431,222 square feet, including 9,300 square feet of retail space at grade. The buildings will be served by 6-level underground parking with 1,013 parking spaces;

6. According to an appraisal dated January 2023, the Property was valued at $55,300,000 after development and zoning applications are approved;

7. A significant degree of work and resources have been dedicated to development of the Property and preparation for the development and zoning applications, including meetings with

Town staff and commenting agencies and obtaining, among other things, architectural/site plans, topographical surveys, hydrogeological assessments, Phase One and Phase Two Environmental Site Assessments, and traffic impact studies and noise impact studies, with a view to submitting a Rezoning and Official Plan Amendment application;

8. To date, the Company has not submitted the development and zooming applications due to lack of liquidity;

9. In addition to the VTB mortgages, 177 Cross was required to secure additional financing. A third mortgage was obtained in the amount of approximately $5,000,000 (the "**Third Mortgage**") and registered against title to the Property in favour of Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. (together, the "**Third Mortgagee**");

10. 177 Cross was unable to repay the Third Mortgage, when it came due and attempted to refinance the Third Mortgage. Due to the downfall in the real estate market beginning in 2024, 177 Cross was unable to secure refinancing;

11. The Company negotiated an agreement with the Third Mortgagee, the terms of which included that the Third Mortgagee would not enforce a claim under the Third Mortgage in exchange for a collateral mortgage for the same amount of $5,000,000. The $5,000,000 collateral charge was registered against five (5) other parcels of land (referred to as the "**Sheppard Assembly Property**") which are owned by entities related to 177 Cross and Double Diamond Capital Inc.;

12. Notwithstanding the agreement, the Third Mortgagee enforced its claim and obtained a default judgment against 177 Cross on March 5, 2025;

13. The Third Mortgagee served a Notice of Intention to Enforce a Security ("**Notice to Enforce**") under the BIA on 177 Cross by registered mail on Monday, September 22, 2025.

14. To address its liquidity crisis the Company filed a notice of intention to make a proposal (the "**NOI**") on October 2, 2025 pursuant to section 50.4 of the BIA. Albert Gelman Inc. was appointed as the proposal trustee under the NOI (in such capacity, the "**Proposal Trustee**");

15. The Company believes that these NOI proceedings, supplemented by the additional relief within the proposed NOI Process Order, provide the best means of completing the development activities necessary to advance the project and maximize its value for the benefit of all stakeholders, including submitting the development and zoning applications. After the development and zoning applications are submitted and the value of the project is maximized, the Company intends to come back to the Court for an order to pursue a SISP or deliver a Proposal;

The Administration Charge

16. The beneficiaries of the proposed Administration Charge will each play distinct and critical roles in the Company's NOI proceedings and restructuring steps, including the development of a proposal, and it is unlikely that they will participate in these NOI proceedings unless the Administration Charge is granted to secure their fees and disbursements, particularly given that the beneficiaries of the proposed Administration Charge do not have the benefit of retainers in light of the Company's dire liquidity situation;

17. The quantum of the proposed Administration Charge is reasonable in light of the complexity of the Company's business;

18. It is proposed that the Administration Charge will be in priority to all other interests and encumbrances;

19. The Company and the Proposal Trustee are supportive of the Administration Charge and its quantum;

DIP Loan

20. The Company is currently in discussions with potential DIP lenders and anticipates securing DIP lending to fund the cost of its day-to-day operations, and completing the development and zoning applications to maximize the value of the project for the benefit of its stakeholders;

21. The Company will return to the Court upon securing a DIP loan for approval of the DIP loan and a DIP lender's charge;

The Stay Extension

22. The time for the Company to file a proposal and the corresponding stay of proceedings expires on November 1, 2025;

23. The Company has acted and is acting in good faith and with due diligence in seeking to preserve its business on a going concern basis for the benefit of all stakeholders;

24. The Stay Extension will enhance the prospects of the Company being able to make a viable proposal and will not materially prejudice any creditor if granted;

25. The Proposal Trustee supports the granting of the Stay Extension;

OTHER GROUNDS:

26. The Proposal Trustee supports all of the relief sought by the Company on this motion;

27. The provisions of the BIA, including sections 50.4, 62(1), 64.1, 64.2, 65.13, 69, and 69.1 and the inherent and equitable jurisdiction of this Honourable Court;

28. Rules 1.04, 1.05, 2.03, 3.02, 16, 37 and 39 of the Ontario *Rules of Civil Procedure*, R.R.O. 1990, Reg. 194; and

29. Such further and other grounds as counsel may advise and this Honourable Court may permit;

DOCUMENTARY EVIDENCE:

30. The following documentary evidence will be sued at the hearing of the motion:

(a) the Affidavit of Sarmad Nahidh Ganni, affirmed October 28, 2025, and the exhibits attached thereto;

(b) the First Report of the Proposal Trustee; and

(c) such further and other evidence as the lawyers may advise and this Honourable Court may permit.

October 28, 2025

BE LAW LLP
30 St. Patrick Street, Suite 700
Toronto ON M5T 3A3

Sara J. Erskine (LSO# 46856G)
Email: sara@be-law.ca
Tel: (416) 597-5408

Adrienne Zaya (LSO# 79215K)
Email: adrienne.zaya@be-law.ca
Tel : (416) 306-8026

Lawyers for 177 Cross Argus Development Inc.

TO: **MCCARTHY TETRAULT LLP**
66 Wellington St W Suite 5300
Toronto, ON M5K 1E6

Heather Meredith (LSO#48354R)
Email: hmeredith@mccarthy.ca
Tel: 416-601-8342

Lawyers for 915643 Ontario Inc. (First and Second Mortgagee)

AND TO: **SCALZI CAPLAN LLP**
3100 Rutherford Road, Unit #105
Vaughan, ON L4K 0G6

Derek Ketelaars (LSO# 67154R)
Email: derek@sclawpartners.com
Tel: 437-242-4088

Lawyers for Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. (Third Mortgagee)

AND TO: **CAPSTONE LEGAL**
1370 Hurontario Street
Mississauga, ON L5G 3H4

Danny M. Nunes (LSO# 53802D)
Email: dn@capstonelegal.ca
Tel: (416) 414-3311

Lawyers for the Proposal Trustee

IN THE MATTER OF THE BANKRUPTCY AND INSOLVENCY ACT, R.S.C. 1985, c. B-3, AS AMENDED
IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE A PROPOSAL OF 177 CROSS ARGUS DEVELOPMENT INC., OF THE CITY OF BURLINGTON, IN THE PROVINCE OF ONTARIO

Court File No.: BK-25-03281116-0032

ONTARIO
SUPERIOR COURT OF JUSTICE
(IN BANKRUPTCY AND INSOLVENCY)
COMMERCIAL LIST

PROCEEDINGS COMMENCED IN TORONTO

NOTICE OF MOTION

BE LAW LLP
30 St. Patrick Street, Suite 700
Toronto, ON M5T 3A3

Sara J. Erskine (LSO# 46856G)
Email: sara@be-law.ca
Tel: 416-597-5408

Adrienne Zaya (LSO# 79215K)
Email: Adrienne.zaya@be-law.ca
Tel: 416-306-8026

Lawyers for 177 Cross Argus Development Inc.

TAB 2

Estate / Court File No.: BK-25-03281116-0032

ONTARIO
SUPERIOR COURT OF JUSTICE
(IN BANKRUPTCY AND INSOLVENCY)
COMMERCIAL LIST

IN THE MATTER OF *THE BANKRUPTCY AND INSOLVENCY ACT*, R.S.C. 1985, c. B-3, AS AMENDED

IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE A PROPOSAL OF 177 CROSS ARGUS DEVELOPMENT INC., OF THE CITY OF BURLINGTON, IN THE PROVINCE OF ONTARIO

AFFIDAVIT OF SARMAD GANNI

I, Sarmad (Sam) Ganni, of the city of Toronto, in the Province of Ontario, AFFIRM AND SAY:

1. This Affidavit is made in support of a motion by 177 Cross Argus Development Inc. (the "**Company**" or "**177 Cross**") for an Order (the "**NOI Process Order**") granting relief under the *Bankruptcy and Insolvency Act*, R.S.C., 1985, c. B-3 as amended (the "**BIA**").

2. I am a Director of 177 Cross and have served in this role since March 2023. As such, I have personal knowledge of the matters contain in this Affidavit. Where I have relied on other sources for information, I have stated the source of that information, and I believe it to be true. In preparing this Affidavit, I have also consulted with 177 Cross's senior management team and 177 Cross's legal and financial advisors.

3. All references to monetary amounts in this Affidavit are in Canadian dollars unless noted otherwise.

A. INTRODUCTION AND BACKGROUND

4. On October 2, 2025, 177 Cross filed a Notice of Intention to Make a Proposal (the "**NOI**") pursuant to section 50.4 of the *Bankruptcy and Insolvency Act*, R.S.C. 1985, c. B-3, as amended (the "**BIA**"). Albert Gelman Inc. was appointed as the proposal trustee under the NOI (in such capacity, the "**Proposal Trustee**"). A copy of the NOI and the Certificate of Filing of a Notice of Intention to Make a Proposal are attached hereto as **Exhibit "A"**.

5. 177 Cross is a privately held corporation that was incorporated under the *Business Corporations Act* (Ontario), R.S.O. 1990, c.B.16 (the "***OBCA***") on March 10, 2023 under the name 177 Cross Argus Development Inc.

6. 177 Cross owns a 2.5-acre property, located at 177-185 Cross Ave & 580 Argus Road, Oakville (the "**Subject Property**"), for the purpose of developing a mixed-use condominium/redevelopment project. The legal description of the Subject Property is LT 3, PL 1333; PT LT 1, PL 1333, AS IN 755007; PT LT 14, CON 3 TRAF SDS, AS IN 755007 TOWN OF OAKVILLE.

7. 177 Cross is planning a large-scale, mixed-use condominium development project in Oakville, Ontario located at the intersection of Cross Avenue and Argus Road, across from the Oakville GO Station, but liquidity issues have impacted its ability to complete development activities necessary to advance the project. In addition, as a result of current market conditions, the Company is facing market headwinds in its efforts to solicit interest from lenders and investors to generate liquidity.

8. The Subject Property is a 2.491-acre site improved with two single-storey, multi-tenant retail buildings and one single-storey commercial building with a day care centre. 177 Cross proposed a residential mixed-use development with 4 towers (A: 55-storey, B: 60-storey, C 50-storey, D: 6-storey) with 1,895 condominium units and a gross floor area of 1,431,222 square feet, including 9,300 square feet of retail space at grade. The buildings will be served by a 6-level underground car park with 1,013 spaces.

9. As further detailed below, 177 Cross filed the NOI in response to the Third Mortgagee (as defined below) serving a Notice of Intention to Enforce Security pursuant to section 244 of the BIA. 177 Cross has been unable to complete the development process on the Subject Property and refinance the third mortgage due to current market conditions and lack of liquidity. Through these proceedings, 177 Cross intends to address its immediate liquidity crisis through restructuring the company and the completion of development and zoning applications for the Subject Property to maximize the value of the Subject Property for creditors and stakeholders through a sale and investor solicitation process (the "**SISP**").

10. The proposed NOI process will be for the benefit of all stakeholders of 177 Cross including the contracting parties, creditors and shareholders.

B. CORPORATE STRUCTURE

11. 177 Cross is incorporated under the OBCA with its registered head office located in Burlington, Ontario.

12. 177 Cross's management team is comprised of:

(a) Nawar Mahfooth - Co-Founder and Managing Director – Nawar is an

engineer and entrepreneur. He holds a BEng and MASc in Electrical Engineering from Ryerson University. Nawar has published multiple research articles, registered a patent, formed strategic partnerships, and raised funds for development and other projects. Nawar is the managing director of Double Diamond Capital Inc. where he raises funds for various real estate development projects.

(b) Sam Ganni – Director – I have more than 20 years of extensive commercial retail experience. I identify up-and-coming real estate opportunities for development. I am well-versed on market research and understanding buyer demand. Further, I have a strong track record of building and developing successful retail businesses.

C. 177 CROSS'S BUSINESS

(a) The Subject Property

13. As set out above, 177 Cross purchased the property with the intent of developing it. 177 Cross proposed a residential mixed-use development with 4 towers (A: 55-storey, B: 60-storey, C 50-storey, D: 6-storey) with 1,895 condominium units and a gross floor area of 1,431,222 square feet, including 9,300 square feet of retail space at grade. The buildings will be served by a 6-level underground car park with 1,013 parking spaces.

14. The Subject Property is located north of Cross Avenue, between the Oakville Via Rail / GO Train station and QEW, west of Trafalgar Road. The area is generally characterized by predominantly commercial uses, with one large high-density residential development between Cornwall Road and the train tracks. The area is bounded by QEW (to the north), Trafalgar Road (to the east), Cornwall Road (to the south), and Sixteen Mile

Creek (to the west). Across from QEW is Oakville Place, a regional indoor shopping mall.

15. The purchase price of the Subject Property back on or around March 15, 2023 was $53,000,000 and it was transferred from 915643 Ontario Inc. to 177 Cross.

16. There are two related Vendor-Take-Back **("VTB"**) mortgages over the Subject Property being the first and the second mortgage on the Subject Property. The value of the first VTB mortgage is $31,800,000. The value of the second VTB mortgage is $5,300,000. The current amount owing on the VTB mortgages is approximately $39,622,030 with accrued interest.

17. An appraisal by Colliers International on or around January 31, 2023 estimated that the value of the Subject Property once the development and zoning applications are approved is to be valued at $55,300,000. More than 2 years have passed since this appraisal was completed and in my experience, the value of the Subject Property once the development and zoning applications are approved is likely to be higher. More recently Cushman and Wakefield has prepared a draft appraisal of value once the proposed development set out is completed and the property is fully developed to be in the range of $65,000,000 to $70,000,000.

(b) The Third Mortgage

18. Upon closing, 177 Cross entered into a third mortgage with Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. (collectively, the "**Third Mortgagee**") in the amount of approximately $5,000,000. Originally, the idea was for the Third Mortgagee to become an equity partner in this project and convert its mortgage to equity, However, a few months later, the Third Mortgagee decided not to convert it.

19. The Third Mortgage matured in 2024. When 177 Cross was unable to repay the mortgage, 177 Cross attempted to take the Third Mortgage out with refinancing, but due to the downturn in the real estate market beginning in 2024, 177 Cross was unable to secure refinancing.

20. The Third Mortgagee commenced enforcement steps against 177 Cross and guarantors of the mortgage, including me, Nawar and Double Diamond Capital Inc. to recover the $5,000,000 mortgage plus interest and costs.

21. 177 Cross negotiated with the Third Mortgagee on holding off pursuing the claim to give 177 Cross more time to secure refinancing. In exchange, Double Diamond Capital Inc., Nawar and I agreed to provide the Third Mortgagee with a collateral mortgage for the same amount of $5,000,000 registered against five other parcels of land in other companies related to Double Diamond Capital Inc., which is referred to as the Sheppard Assembly.

22. The Sheppard Assembly consists of the properties municipally known as:

(a) 287 Maplehurst Ave, North York, Ontario M2N 3C5;

(b) 295 Maplehurst Ave, North York, Ontario M2N 3C5;

(c) 293 Maplehurst Ave, North York, Ontario M2N 3C5;

(d) 288 Shepphard Ave E, North York, Ontario M2N 3B1; and

(e) 280 Sheppard Ave E, Toronto, Ontario M2N 3B1.

23. Despite obtaining the collateral mortgage, the Third Mortgagee did not hold off on this claim and proceeded to obtain a default judgement against 177 Cross on March 5,

2025. A copy of the Default Judgement dated March 5, 2025 is attached as **Exhibit "B"**.

24. Since March 5, 2025, 177 Cross has continued to work diligently to try and secure refinancing to pay out the Third Mortgagee and to satisfy the Default Judgment.

25. As set out above, the Third Mortgagee served a Notice of Intention to Enforce a Security ("**Notice to Enforce**") under section 244 of the BIA on 177 Cross by registered mail on Monday, September 22, 2025. Attached as **Exhibit "C"** is a copy of the Notice to Enforce served on 177 Cross on September 22, 2025.

26. On October 2, 2025, 177 Cross filed the NOI, thereby staying the Third Mortgagee's enforcement efforts.

27. On October 3, 2025, Adam Zeldin of Albert Gelman Inc. sent an email to counsel for the Third Mortgagee, Derek Ketelaars at Scalzi Caplan LLP, confirming that 177 Cross had informed the Proposal Trustee that the Notice to Enforce was served on September 22, 2025 and, therefore, pursuant to the BIA, the Third Mortgagee was stayed from taking further enforcement steps under sections 69 and 69.1 of the BIA.

28. On October 3, 2025, Mr. Ketelaars responded to Mr. Zeldin asserting that the Notice to Enforce was issued and served on September 18, 2025, and therefore, the Third Mortgagee was not subject to the stay of proceedings. Attached as **Exhibit "D"** is a copy of the October 3, 2025 email correspondence between Mr. Zeldin and Mr. Ketelaars.

29. After receiving Mr. Ketelaars' response, counsel for 177 Cross, Sara J. Erskine, requested that Mr. Ketelaars provide proof of service of the Notice to Enforce on September 18, 2025. Mr. Ketelaars responded correcting that the Notice to Enforce was

sent by registered mail on September 19, 2025 and that the 10 day period expired on September 29, 2025. Mr. Ketelaars attached to his email copies of the receipts from Canada Post for the registered mail. Mr. Ketelaars' October 3, 2025 email to Ms. Erskine and attached receipts is attached as **Exhibit "E"**.

30. The Canada Post receipts demonstrate that the Notice to Enforce was dropped off at Canada Post on Friday, September 19, 2025, after 6:18 pm to be sent by registered mail.

31. The Notice to Enforce was not delivered to 177 Cross until Monday, September 22, 2025. Therefore, 10 days from this date is October 2, 2025, when the NOI was filed.

32. On September 30, 2025, the Third Mortgagee delivered Notices of Attornment of Rents and Direction to Pay on all tenants at the Subject Property. Attached at **Exhibit "F"** are the Notices of Attornment of Rents.

33. On October 9, 2025, Ms. Erskine sent an email to Mr. Ketelaars setting out 177 Cross' position that the effective date of service for the commencement of the 10-day period was the date the Company received the Notice to Enforce by registered mail. Therefore, the Third Mortgagee was captured by the stay under sections 69 and 69.1 of the BIA and did not have the right to enforce its security on September 30, 2025. A copy of Ms. Erskine's email of October 9, 2025 is attached as **Exhibit "G"**.

34. Since September 30, 2025, the Third Mortgagee has collected the rents from the tenants at the Subject Property. These rents are needed for 177 Cross's operations to pay expenses relating to the Subject Property including utilities, taxes and the development and zoning applications.

(c) **Proposed Development**

35. Weston Consulting was retained as the authorized planning consultant for the registered owners of the lands at the Subject Property.

36. The proposed development consisted of the following uses:

(a) Building 1 - Towers A & B: A mixed-use building with 6-storey podium, two towers with heights of 55, and 60 storeys, retail space on the ground floor, and residential units above on the west of the Site. The proposed retail area of this building is 349 sq.m.

(b) Building 2 - Tower C: A mixed-use building along Cross Avenue with 6-storey podium, one tower and height of 50 storeys, retail space on the ground floor, and residential units above. The proposed retail area of this building is 418 sq.m.

(c) Building 3 - Building D: A mixed-use 6-storey on the northeast of the site with retail use along Argus Road. The proposed retail area for this building is 97 sq.m.

37. A total number of 1,895 residential units were proposed with a total of 1,013 parking spaces provided in 6 levels of underground parking. The development was proposed to include a total of 864 sq. m of commercial space along the Argus Rd. and Cross Ave. frontages. The proposed total GFA for residential use is 127,875 sq. m.

38. Weston Consulting submitted a Pre-Consultation Application to facilitate the redevelopment of the subject lands to permit three towers (50, 55, and 60 storeys), consisting of 1870 residential units and 1061 sq.m of commercial space and 1030 parking

spaces. A meeting with Town staff and commenting agencies was held on April 21, 2023.

39. On January 17, 2024, another Pre-Consultation for this site was held, following the revisions to the Site Plan. A Comments Report and Pre-Consultation Checklist was issued which outlines staff comments in further detail and lists the required reports/studies to be undertaken for complete Official Plan Amendment ("**OPA**"), Rezoning ("**ZBA**") and Draft Plan of Subdivision applications. Attached at **Exhibit "H"** is a copy of the Pre-Consultation Comments Report dated January 17, 2024.

40. This proposed development will significantly increase the value of the Subject Property for 177 Cross and all of its stakeholders and creditors.

(d) **Completed Work**

41. Significant work and efforts have been placed into the development of the Subject Property including work that has been done for OPA and ZBA applications in preparation for the submission of the applications to the Town of Oakville (referred to herein as the "development and zoning applications").

42. Kuntz Forestry Consulting Inc. was retained by 177 Cross to complete a Tree Inventory and Preservation Plan as part of the development application for the Subject Property. A copy of the Tree Inventory and Preservation Plan dated June 26, 2024 is attached at **Exhibit "I".** The work plan for the tree preservation study included the following:

(a) Prepare an inventory of tree resources measuring 10cm diameter at breast height (DBH) and greater on and within six metres of the subject site and

trees of all sizes within the road right-of-way;

(b) Evaluate potential tree saving opportunities based on the proposed development plans; and,

(c) Document the findings in a Tree Inventory and Preservation Plan.

43. Urban Tech was retained by 177 Cross to provide functional servicing design and stormwater management information in support of the OPA and ZBA applications. The ZBA/OPA, when approved, would permit the construction of four (4) mixed-use condominium towers. A copy of the first submission of the report dated July 2024 is attached at **Exhibit "J".**

44. This report was obtained to demonstrate the feasibility of site servicing for the proposed development, including water, sanitary and stormwater management. Site grading, and preliminary erosion /sediment control information was also included. The design information in the report considered both the guidelines per the Town of Oakville Development Engineering Procedures and Guidelines (2023) and the Regional Municipality of Halton Water and Wastewater Linear Design Manual (2019).

45. Azure Group was retained to carry out a geotechnical investigation for the proposed development at the Subject Property. The geotechnical investigation was completed concurrently with environmental and hydrogeological investigation. The purpose of the geotechnical investigation was to determine the subsurface conditions at the site by means of nine (9) boreholes to provide geotechnical parameters and recommendations for the design of the proposed building. The geotechnical boreholes were drilled to the surface of

the sound bedrock. The bedrock was then cored at three borehole locations to determine the quality of the bedrock. Six (6) monitoring wells were installed at various locations and various depths to determine the groundwater table at the proposed location of the boreholes. The investigation was carried out on May 3, 4 and 5, 2023. A complete copy of the Soil Investigation for Proposed High Rise Buildings 177 Cross Avenue, Oakville, Ontario dated September 1, 2023, is attached as **Exhibit "K".**

46. Azure Group was also retained to conduct a Hydrogeological Assessment at the Subject Property. The evaluation focused on the existing soil and ground water regime underlying the Site and the potential for the proposed mixed commercial /residential development to impact the existing conditions. A copy of the Preliminary Hydrogeological Assessment dated May 2024 is attached at **Exhibit "L".**

47. Azure Group was also retained to conduct a Phase One Environmental Site Assessment (ESA) on an irregularly shaped parcel of land located at 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville, Ontario. This Phase One ESA report was conducted for the Subject Property as a requirement for the Region of Halton. A copy of the Phase One ESA dated May 5, 2023 is attached at **Exhibit "M".**

48. A Phase Two ESA was conducted and produced by Azure Group to address the findings from the previous Phase One ESA conducted by Azure Group. At the time of the investigation, the Phase Two Property consisted of a mixed commercial/ residential property. A copy of the Phase Two ESA dated March 1, 2024 (revised on May 21, 2024) is attached at **Exhibit "N".**

49. ORTECH Consulting Alliance Inc. was retained to conduct an air quality-based land use compatibility study for a proposed high-rise mixed-use development at the Subject Property. This study was completed in support of the OPA and ZBA applications for the proposed development, which includes three high-rise towers and one low-rise building. The purpose of this study was to assess the impact at the Subject Property due to air emissions from land uses within 1 km of the Subject Property, such as industrial facilities, road traffic, rail lines, etc. A copy of the draft report dated July 11, 2024 is attached at **Exhibit "O".**

50. LEA Consulting Ltd. (LEA) was retained by 177 Cross to undertake a Traffic Impact Study (TIS) for the proposed mixed-use development located at the Subject Property. The TIS report was prepared in support of the OPA and ZBA applications for the Subject Property. The purpose of the study was to assess the proposed development from a transportation perspective, to determine the traffic impacts to the adjacent road network over a five-year and 10-year horizon, and to identify any required mitigation measures. A copy of the draft report dated July 2024 is attached at **Exhibit "P".**

51. LEA was also retained by 177 Cross to prepare a Noise Impact Study (NIS) in support of the proposed mixed-use development at the Subject Property. The study examined the future noise environment in the development area and evaluated its impact potential on the future noise-sensitive receptors. This report investigated the noise control measures that are required for the development to meet the noise guidelines of the Ontario Ministry of the Environment, Conservation and Parks (MECP) and to satisfy the requirements of the Town of Oakville and Halton Region. A copy of the draft report dated July 2024 is attached at **Exhibit "Q".**

52. Gradient Wind Engineers & Scientists were retained to prepare a pedestrian level wind study. This report describes a wind tunnel pedestrian level wind (PLW) study undertaken to assess wind conditions for a proposed mixed-use development located at the Subject Property. The principal objectives of the study were to (i) determine pedestrian level wind comfort and safety conditions at key areas within and surrounding the development site; (ii) identify areas where wind conditions may interfere with the intended uses of outdoor spaces; (iii) recommend suitable mitigation measures, where required; and (iv) evaluate the influence of the proposed development on the existing wind conditions. A copy of the draft report dated June 10, 2024 is attached at **Exhibit "R".**

53. As set out above, a significant amount of work and money has gone into retaining experts in preparation for the submission of the application to the Town of Oakville. Approximately $267,157 is still owed to these professionals that completed the development work to date. These amounts need to be paid before 177 Cross can complete and submit the development and zoning applications. As set out in the Cash Flow Statement filed by 177 Cross (and appended to the first report of the Proposal Trustee), 177 Cross is proposing, subject to the Proposal Trustee's review and approval, paying the pre-filing amount of $267,157 in week 6 when 177 Cross expects to secure debtor in possession ("**DIP**") financing.

54. 177 Cross has estimated that an additional $150,000 will be needed to complete and submit the development and zoning applications. This amount is also set out in the cashflow statement.

D. SUMMARY OF THE PROPOSED PLAN

55. 177 Cross has estimated that it will require interim or DIP financing in the amount of $500,000. The proceeds of a DIP loan will be used during the pendency of 177 Cross' proceedings under the BIA for the following purposes: (i) to fund professional fees (including the fees of the Proposal Trustee and the legal fees of the Proposal Trustee and the Company); (ii) to fund the payment of amounts that may be payable under the mortgages; and (iii) to finance operating expenses, costs for consultants to complete and file the development and zoning applications and restructuring costs in these proceedings.

56. 177 Cross is currently in discussions with potential DIP lenders and anticipates arriving at a proposed term sheet for a DIP loan on or before week 6 (as set out in the Cash Flow Statement appended to the Proposal Trustee's report). When 177 Cross secures a proposed term sheet, it will promptly bring a motion for approval of the DIP loan and a DIP charge in favour of the DIP lender.

RELIEF SOUGHT

(a) Stay Extension

57. 177 Cross is seeking an extension of the time required to complete the development and zoning applications to then run a SISP and the stay of proceedings to December 15, 2025.

58. The extension will preserve the value of 177 Cross' business and provide it with the breathing space it needs to finalize and submit the development and zoning applications to maximize the value of the Subject Property. This will help to protect the interests of 177 Cross' stakeholders. Having regard to the circumstances, and in an effort to preserve and maximize the value of the Subject Property, the granting of the extension is in the best interests of 177 Cross and its stakeholders, and I do not believe any creditor would be materially prejudiced by the extension. 177 Cross has been, and continues to, act in good faith and with due diligence in completing the development and zoning applications to then run a SISP for the benefit of its stakeholders.

59. 177 Cross is in the process of obtaining an "as is where is" appraisal of the Subject Property and will provide a copy of the appraisal as soon as it is completed. However, based on my 20 years of experience in real estate development, I estimate that if 177 Cross is forced to shut down and sell the Subject Property prior to the submission and approval of the development and zoning applications, that the sale price of the property will be significantly less than the sale price after the applications are submitted and approved.

(b) Administration Charge

60. It is proposed that the Proposal Trustee, along with its counsel and 177 Cross's counsel, be granted a Court-ordered charge as security for their respective fees and disbursements (incurred at their standard rates and charges) relating to services rendered in respect of 177 Cross's NOI proceedings up to a maximum of $250,000 (the "**Administration Charge** "). The Administration Charge is proposed to have first ranking priority over all other charges and encumbrances.

61. It is important to the success of these proceedings to have the Administration Charge in place to ensure the continued involvement of critical professionals. The proposed beneficiaries are performing distinct functions and there is no duplication of roles. In addition, given its liquidity situation, 177 Cross has limited means to obtain professional assistance. To date, the proposed beneficiaries of the Administration Charge have expended considerable effort without the benefit of retainers.

62. 177 Cross has worked with the Proposal Trustee to estimate the proposed quantum of the Administration Charge.

(c) Cash Flow Statement

63. I understand that the projected consolidated cash flow statement for 177 Cross for the 13-week period from the week ending October 6, 2025, to the week ending January 4, 2026 (the "**Cash Flow Statement**"), will be appended to the Proposal Trustee's report. The cash flow projections demonstrate that DIP financing is urgently required to provide 177 Cross with the required liquidity necessary to complete the submission of the development and zoning applications to maximize the value of the Subject Property. As such, and as set out above, 177 Cross is seeking interim financing through a DIP loan.

64. The Cash Flow Statement has been prepared with the assistance of the Proposal Trustee and is accompanied by the prescribed representations in accordance with the BIA.

(d) Stay of Third Mortgagee

65. The Third Mortgagee should be captured by the stay under the BIA. The Third Mortgagee served the Notices to Enforce under the BIA by dropping them off at the post office on Friday, September 19, 2025, after 6:18 pm to be sent by registered mail. As such, the notices were not delivered to 177 Cross until Monday, September 22, 2025. Therefore,

10 days from this date is October 2, 2025, when the NOI was filed and the Third Mortgagee should be captured by the stay under the BIA. It also did not have the right to enforce its security on September 30, 2025.

66. I verily believe that an order for the Third Mortgagee to be stayed from enforcing and retaining rents from its Notices of Attornment is needed in these circumstances. These rents are needed by 177 Cross for the purposes of paying its various expenses to continue development, for its day-to-day business operations, and for the continued restructuring process.

E. CONCLUSION

67. The NOI Process Order sought by 177 Cross is in the best interests of 177 Cross as well as its stakeholders.

68. 177 Cross is actively engaging with, and has the support of, Albert Gelman Inc, and is entering these proceedings with the primary goal of maximizing the value of the Subject Property to run a SISP for its creditors, operating the business as a going concern and maintaining value for all stakeholders. I believe that these proceedings provide a process to restructure 177 Cross 's business for the benefit of all stakeholders, and that the relief sought in the NOI Process Order is necessary at this time to ensure the continued operations of 177 Cross in the ordinary course of business.

69. I swear this affidavit in support of this motion, and for no other or improper purpose.

AFFIRMED REMOTELY by Sarmad Ganni stated as being located in the City of Toronto, before me at the City of Toronto, in the Province of Ontario, on October 28, 2025, in accordance with O. Reg. 431/20, Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits
(or as may be)
SARA ERSKINE



SARMAD GANNI

This is Exhibit “A” referred to in
the Affidavit of Sarmd (Sam) Ganni sworn by Sarmd (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Industry Canada | Industrie Canada

Office of the Superintendent of Bankruptcy Canada | Bureau du surintendant des faillites Canada

District of: Ontario
Division No.: 09 - Mississauga
Court No.: 32-3281116
Estate No.: 32-3281116

In the Matter of the Notice of Intention to make a proposal of:

177 Cross Argus Development Inc.

Insolvent Person

ALBERT GELMAN INC.

Licensed Insolvency Trustee

Date of the Notice of Intention: October 02, 2025

CERTIFICATE OF FILING OF A NOTICE OF INTENTION TO MAKE A PROPOSAL
Subsection 50.4 (1)

I, the undersigned, Official Receiver in and for this bankruptcy district, do hereby certify that the aforenamed insolvent person filed a Notice of Intention to Make a Proposal under subsection 50.4 (1) of the Bankruptcy and Insolvency Act;

Pursuant to subsection 69. (1) of the Act, all proceedings against the aforenamed insolvent person are stayed as of the date of filing of the Notice of Intention.

Date: October 03, 2025, 09:51

E-File/Dépôt Electronique

Official Receiver

Federal Building - Hamilton, 55 Bay Street N, 9th Floor, Hamilton, Ontario, Canada, L8R3P7, (877)376-9902

Canada

This is Exhibit “B” referred to in
the Affidavit of Sarmd (Sam) Ganni sworn by Sarmd (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Court File No.: CV-24-00004544-0000

ONTARIO
SUPERIOR COURT OF JUSTICE

BETWEEN:

AARTI REAL ESTATE ENTERPRISES INC. and MAYURI VENTURES INC.

Plaintiffs

- AND -

177 CROSS ARGUS DEVELOPMENT INC. and DIANE BERTOLIN a.k.a. DIANE FRANCIS BERTOLIN and SARMAD GANNI a.k.a. SARMAD NAHIDH GANNI and NAWAR MAHFOOTH a.k.a. NAWAR BADIE FDHAL MAHFOOTH and BASSMA GHALI a.k.a. BASSMA GHASSAN B GHALI and DOUBLE DIAMOND CAPITAL INC.

Defendants

DEFAULT JUDGMENT

On reading the statement of claim in this action and proof of service of the statement of claim on the Defendants, 177 CROSS ARGUS DEVELOPMENT INC. and DIANE BERTOLIN a.k.a. DIANE FRANCIS BERTOLIN and SARMAD GANNI a.k.a. SARMAD NAHIDH GANNI and NAWAR MAHFOOTH a.k.a. NAWAR BADIE FDHAL MAHFOOTH and BASSMA GHALI a.k.a. BASSMA GHASSAN B GHALI and DOUBLE DIAMOND CAPITAL INC. (collectively, the "**Defendants**"), filed, and the said Defendants having been noted in default,

1. **IT IS ORDERED AND ADJUDGED** that the Defendants pay to the Plaintiffs the sum of $5,848,876.71, together with interest from the date of this judgment at the rate of 28.00% per annum.

2. **IT IS ORDERED AND ADJUDGED** that the Defendants deliver to the Plaintiffs possession of the mortgaged lands described in **Schedule "A"** attached.

3. **IT IS ORDERED AND ADJUDGED** that the Defendants pay to the Plaintiffs the costs of this action to be assessed.

Date: March 5, 2025

Issued by _____

Local Registrar
Superior Court of Justice
491 Steeles Ave E.
Milton, Ontario
L9T 1Y7

SCHEDULE "A"

The following is a description of the mortgaged lands:

LT 3, PL 1333; PT LT 1, PL 1333, AS IN 755007; PT LT 14, CON 3 TRAF SDS, AS IN755007; TOWN OF OAKVILLE
PIN 24816-0031 (LT)
Address: **177-185 Cross Avenue, Oakville & 580 Argus Road, Oakville**

AARTI REAL ESTATE ENTERPRISES INC. et al.	**and**	**177 CROSS ARGUS DEVELOPMENT INC. et al.**
Plaintiffs		Defendants

COURT FILE NO.: CV-24-00004544-0000

ONTARIO SUPERIOR COURT OF JUSTICE

Proceeding commenced at Milton.

DEFAULT JUDGMENT

KANDIAH LAW PROFESSIONAL CORPORATION
Barristers & Solicitors
210-80 Nashdene Road
Toronto, ON M1V 5E4
Tel: 416-333-1001
Fax: 416-335-1002

Thaya PK Kandiah LSO #: 72596M
pk@kandiahlaw.com

Lawyer for the Plaintiffs

Our File No.: 2024-1621

This is Exhibit “C” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

BANKRUPTCY AND INSOLVENCY ACT (CANADA)
NOTICE OF INTENTION TO ENFORCE A SECURITY

TO: 177 Cross Argus Development Inc.
3190 Harvester Road, Suite 201a,
Burlington, Ontario,
L7N 3T1, Canada
Delivered via Registered Mail

AND TO: SAM GANNI
c/o 177 Cross Argus Development Inc.
3190 Harvester Road, Suite 201a,
Burlington, Ontario,
L7N 3T1, Canada
Delivered via Registered Mail

AND TO: NAWAR MAHFOOTH
c/o 177 Cross Argus Development Inc.
3190 Harvester Road, Suite 201a,
Burlington, Ontario,
L7N 3T1, Canada
Delivered via Registered Mail

TAKE NOTICE THAT:

1. Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. ("**Lenders**") a secured creditor, intends to enforce its security on the property of the insolvent party 177 Cross Argus Development Inc. (the "**Debtor**") described below:

    a) The real property municipally known as 177-185 CROSS AVE & 580 ARGUS RD. OAKVILLE (the "**Lands**") being made up of the following parcel of land:

        i. **177-185 Cross Ave & 580 Argus Road Oakville:** All of PIN 24816-0031 (LT) in the Land Titles Division of Halton (No. 20) and legally described as LT 3, PL 1333; PT LT 1, PL 1333, AS IN 755007; PT LT 14, CON 3 TRAF SDS, AS IN 755007; TOWN OF OAKVILLE

2. The security that is to be enforced is in the form of:

    a) A charge/mortgage from the Debtor, as chargor, in favour of the Creditor, as chargee, registered on the above Lands as Instrument No. HR1953703.

    b) A notice of assignment of rents from the Debtor, as charger, in favour of the Creditor, as chargee, registered on the above Lands as Instrument No. HR1953704.

3. The total amount of indebtedness secured by the security is $5,987,297.26

4. The secured creditor will not have the right to enforce the security until after the expiry of the ten-day period following the sending of this notice unless the insolvent person consents to an earlier enforcement.

DATED at Vaughan this 18th day of September 2025.

Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc., the Mortgagees, by their lawyers,

Scalzi Caplan LLP
3100 Rutherford Road, Unit 105
Vaughan, Ontario, L4K 0G6

Derek Ketelaars (67154R)
Tel: (437) 242-4088
Fax: (416) 548-7969
Email: derek@sclawpartners.com

Per: _____
Derek Ketelaars

SCHEDULE "A"

LIST OF ADDITIONAL PARTIES RECEIVING NOTICE

TO	Nawar Mahfooth 3173 Trailside Dr. Oakville, Ontario L6M 0P3 *By Registered Mail*
AND TO	Sarmad Ganni 211 – 300 Randall Street Oakville, Ontario L6J 0G2 *By Registered Mail*

This is Exhibit “D” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

From: Derek Ketelaars
To: Adam Zeldin
Cc: Sara Erskine; Bryan Gelman; Nawar Mahfooth; Sam Ganni; Jawad Quader; Shashwat Prakash
Subject: Re: 177 Cross Argus Development Inc.
Date: Friday, October 3, 2025 12:12:24 PM

CAUTION: This email originated from outside of your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Adam,

Thank you for the update. I confirm receipt of the notice of intention on behalf of my clients.

Please note, my clients issued and served their s. 244 notice on September 18, 2025, and so they are not subject to the stay of proceedings. If your office is going to take a different view, please let me know and we can discuss how to address that.

As an additional update, I can tell you that my clients attorned the rents at the mortgaged property on September 30, 2025, and we are in active discussions with several tenants regarding their October 1 rent payments. Our intention is to continue that attornment process. We will keep you

Notwithstanding, and on a without prejudice basis to my clients' position that they are not subject to the stay, I think it would be helpful to have a call to discuss the debtor's intentions here. I am not available today, but let me know your availability and we can set up a call for early next week. Do you have any idea on when you anticipate having a proposal or draft proposal out to the creditors, and when you anticipate holding the first meeting?

Thanks,

DEREK KETELAARS

LAWYER

SCALZI CAPLAN LLP
3100 Rutherford Road, Unit #105
Vaughan, Ontario, L4K 0G6

Cell +1 437.242.4088

Fax +1 416.548.7969

derek@sclawpartners.com

www.sclawpartners.com

Challenging the *Status Quo*

Confidentiality Notice:

The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and privileged information legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed in error, please immediately alert the sender by replying to this email and then delete this message and any attachments. If you are not the intended recipient, please note that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

On Fri, Oct 3, 2025 at 11:22 AM Adam Zeldin <azeldin@albertgelman.com> wrote:

> Hi Derek,
>
> On October 2, 2025, 177 Cross Argus Development Inc. filed a notice of intention to make a proposal ("**NOI**") pursuant to the *Bankruptcy and Insolvency Act* (the "**BIA**"). Albert Gelman Inc. has consented to act as proposal trustee (in such capacity, the "**Trustee**") under the Company's NOI proceedings and we write to you in that capacity. A copy of the certificate of filing issued by the Office of the Superintendent of Bankruptcy is attached for your reference.
>
> We are in receipt of your letter dated September 18, 2025 and the accompanying notice of intention to enforce security (also attached, "**Demand Letter/NITES**"). The Company and its counsel informed the Trustee that the Demand Letter/NITES was served on September 22, 2025.
>
> Pursuant to the BIA, in light of the Company's NOI filing, among other things,
>
> - no person may terminate or amend any agreement with the Company, or claim an accelerated payment, or a forfeiture of the term, under any agreement with the Company, by reason only that the Company is insolvent or by reason of the filing of the NOI, pursuant to Section 65.1(1) of the BIA; and,
> - no creditor has any remedy against the Company or its property or shall commence or continue any action, execution, or other proceedings against the Company, pursuant to Section 69.1(1) of the BIA.
>
> We appreciate you/your client may have questions regarding these proceedings and the Company's intentions with respect to same. As such, we welcome the opportunity for a call to discuss.

Thanks,

Adam

Adam Zeldin, *CPA, CA, CIRP, LIT*

Managing Director (Ontario)

ALBERT GELMAN

SOLVING INSOLVENCY

Albert Gelman Inc. | T: 416.504.1650 ext. 129 | E: azeldin@albertgelman.com | A: 150 Ferrand Dr., Suite 1503, Toronto, ON, M3C 3E5 www.albertgelman.com

****

This message and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use, or distribution of the information included in this message and any attachments is prohibited. If you have received this communication in error, please notify us by reply e-mail and immediately and permanently delete this message and any attachments. Thank you.

This is Exhibit “E” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

From:	Derek Ketelaars
To:	Sara Erskine
Cc:	Adam Zeldin; Bryan Gelman; Nawar Mahfooth; Sam Ganni; Jawad Quader; Shashwat Prakash
Subject:	Re: 177 Cross Argus Development Inc.
Date:	Friday, October 3, 2025 12:58:26 PM
Attachments:	image001.png File 02921 - NOS Receipts .pdf

CAUTION: This email originated from outside of your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Sara,

Sorry, it was sent by registered mail on September 19, 2025. The registered mail receipts are attached. The ten day notice period expired on the 29th, which is why we proceeded to attorn rents on the 30th.

Again, notwithstanding and without prejudice, what are your client's intentions here? Is there a plan? Do your clients have any financing lined up? We can have a fight over service and whether my clients are subject to the stay, but I am hoping we can have a more productive conversation on how to get everything restructured and my clients repaid. Please let me know.

Thanks,

DEREK KETELAARS

LAWYER

SCALZI CAPLAN LLP
3100 Rutherford Road, Unit #105
Vaughan, Ontario, L4K 0G6

Cell +1 437.242.4088

Fax +1 416.548.7969

derek@sclawpartners.com

www.sclawpartners.com

Challenging the *Status Quo*

Confidentiality Notice:

The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and privileged information legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed in error, please immediately alert the sender by replying to this email and then delete this message and any attachments. If you are not the intended recipient, please note that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

On Fri, Oct 3, 2025 at 12:29 PM Sara Erskine <Sara@be-law.ca> wrote:

> Hi Derek,
>
> The Notice was issued on September 18, 2025. The Company received it on September 22, 2025.
>
> Do you have proof of service on September 18, 2025? The Notice says that it was served by Registered Mail. Do you have the receipt card for the delivery?
>
> Thanks very much,
>
> Sara
>
> Sara J. Erskine
>
> Founding Partner
>
> Direct: (416) 597-5408 | Email: sara@BE-Law.ca
>
> **BE LAW LLP**
>
> 30 St. Patrick St, Suite 700, Toronto, ON M5T 3A3
>
> *IMPORTANT NOTICE: This e-mail message is intended to be received only by persons entitled to receive the confidential information it may contain. E-mail messages to clients of BE Law LLP may contain information that is confidential and legally privileged. Please do not read, copy, forward, or store this message unless you are an intended recipient of it. If you have received this message in error, please forward it to the sender and delete it completely from your computer system.*

Please note that our firm name has changed to BE Law LLP and our offices have moved to 30 St. Patrick Street, Suite 700, Toronto ON M5T 3A3

From: Derek Ketelaars <derek@sclawpartners.com>
Sent: Friday, October 3, 2025 12:12 PM
To: Adam Zeldin <azeldin@albertgelman.com>
Cc: Sara Erskine <Sara@be-law.ca>; Bryan Gelman <bgelman@albertgelman.com>; Nawar Mahfooth <nawar@ddcapital.ca>; Sam Ganni <sam@ddcapital.ca>; Jawad Quader <jawad@sclawpartners.com>; Shashwat Prakash <shashwat@sclawpartners.com>
Subject: Re: 177 Cross Argus Development Inc.

CAUTION: This email originated from outside of your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Adam,

Thank you for the update. I confirm receipt of the notice of intention on behalf of my clients.

Please note, my clients issued and served their s. 244 notice on September 18, 2025, and so they are not subject to the stay of proceedings. If your office is going to take a different view, please let me know and we can discuss how to address that.

As an additional update, I can tell you that my clients attorned the rents at the mortgaged property on September 30, 2025, and we are in active discussions with several tenants regarding their October 1 rent payments. Our intention is to continue that attornment process. We will keep you

Notwithstanding, and on a without prejudice basis to my clients' position that they are not subject to the stay, I think it would be helpful to have a call to discuss the debtor's intentions here. I am not available today, but let me know your availability and we can set up a call for early next week. Do you have any idea on when you anticipate having a proposal or draft proposal out to the creditors, and when you anticipate holding the first meeting?

Thanks,

DEREK KETELAARS

LAWYER

SCALZI CAPLAN LLP
3100 Rutherford Road, Unit #105
Vaughan, Ontario, L4K 0G6

Cell +1 437.242.4088

Fax +1 416.548.7969

derek@sclawpartners.com

www.sclawpartners.com

Challenging the *Status Quo*

Confidentiality Notice:

The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and privileged information legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed in error, please immediately alert the sender by replying to this email and then delete this message and any attachments. If you are not the intended recipient, please note that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

On Fri, Oct 3, 2025 at 11:22 AM Adam Zeldin <azeldin@albertgelman.com> wrote:

> Hi Derek,
>
> On October 2, 2025, 177 Cross Argus Development Inc. filed a notice of intention to make a proposal ("**NOI**") pursuant to the *Bankruptcy and Insolvency Act* (the "**BIA**"). Albert Gelman Inc. has consented to act as proposal trustee (in such capacity, the "**Trustee**") under the Company's NOI proceedings and we write to you in that capacity. A copy of the certificate of filing issued by the Office of the Superintendent of Bankruptcy

is attached for your reference.

We are in receipt of your letter dated September 18, 2025 and the accompanying notice of intention to enforce security (also attached, "**Demand Letter/NITES**"). The Company and its counsel informed the Trustee that the Demand Letter/NITES was served on September 22, 2025.

Pursuant to the BIA, in light of the Company's NOI filing, among other things,

- no person may terminate or amend any agreement with the Company, or claim an accelerated payment, or a forfeiture of the term, under any agreement with the Company, by reason only that the Company is insolvent or by reason of the filing of the NOI, pursuant to Section 65.1(1) of the BIA; and,
- no creditor has any remedy against the Company or its property or shall commence or continue any action, execution, or other proceedings against the Company, pursuant to Section 69.1(1) of the BIA.

We appreciate you/your client may have questions regarding these proceedings and the Company's intentions with respect to same. As such, we welcome the opportunity for a call to discuss.

Thanks,

Adam

Adam Zeldin, *CPA, CA, CIRP, LIT*

Managing Director (Ontario)

ALBERT GELMAN

SOLVING INSOLVENCY

Albert Gelman Inc. | T: 416.504.1650 ext. 129 | E: azeldin@albertgelman.com | A: 150 Ferrand Dr., Suite 1503, Toronto, ON, M3C 3E5 www.albertgelman.com

****

This message and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use, or distribution of the information included in this message and any attachments is prohibited. If you have received this communication in error, please notify us by reply e-mail and immediately and permanently delete this message and any attachments. Thank you.

IMPORTANT NOTICE: *The information transmitted by this email is intended only for the person or entity to which it is addressed. This email may contain personal, proprietary, business-confidential and/or privileged material. Please do not read, copy, forward, or store this message unless you are an intended recipient of it. If you have received this message in error, please forward it to the sender and delete it completely from your computer system. Please note that electronic communications may not be secure or free of viruses and care should be taken to check the email and any links for threats with proper software. This email does not form a lawyer-client relationship; all contracts must be in writing and signed by an authorized representative of Book Erskine LLP. Book Erskine LLP cannot accept wire transfer instructions by email.*

CANADA POST / POSTES CANADA

REGISTERED DOMESTIC
CUSTOMER RECEIPT

RECOMMANDÉ RÉGIME INTÉRIEUR
REÇU DU CLIENT

R

To / Destinataire
Name / Nom: Sasmad Ganni
Address / Adresse: 211-300 Randall St.
City / Prov. / Postal Code / Ville / Prov. / Code postal: Oakville, Ontario L6J-0G2

FOR DELIVERY CONFIRMATION / CONFIRMATION DE LA LIVRAISON
canadapost.ca / postescanada.ca
or/ou
1 888 550-6333

CPC Tracking Number / Numéro de repérage de la SCP
RN 866 069 822 CA

Declared Value / Valeur déclarée: $

33-086-584 (17-12)

CANADA POST / POSTES CANADA

REGISTERED DOMESTIC
CUSTOMER RECEIPT

RECOMMANDÉ RÉGIME INTÉRIEUR
REÇU DU CLIENT

R

To / Destinataire
Name / Nom: 177 Gross Argus Development Inc.
Address / Adresse: 3190 Harvester Rd., Suite 201A
City / Prov. / Postal Code / Ville / Prov. / Code postal: Burlington, Ontario L7N-3T1

FOR DELIVERY CONFIRMATION / CONFIRMATION DE LA LIVRAISON
canadapost.ca / postescanada.ca
or/ou
1 888 550-6333

CPC Tracking Number / Numéro de repérage de la SCP
RN 866 069 782 CA

Declared Value / Valeur déclarée: $

33-086-584 (17-12)

CANADA POST / POSTES CANADA

REGISTERED DOMESTIC
CUSTOMER RECEIPT

RECOMMANDÉ RÉGIME INTÉRIEUR
REÇU DU CLIENT

R

To / Destinataire
Name / Nom: Sam Gravina c/o 177 Gross Argus Dev. Inc.
Address / Adresse: 3190 Harvester Rd, Suite 201A
City / Prov. / Postal Code / Ville / Prov. / Code postal: Burlington, Ontario L7N-3T1

FOR DELIVERY CONFIRMATION / CONFIRMATION DE LA LIVRAISON
canadapost.ca / postescanada.ca
or/ou
1 888 550-6333

CPC Tracking Number / Numéro de repérage de la SCP
RN 866 069 796 CA

Declared Value / Valeur déclarée: $

33-086-584 (17-12)

CANADA POST / POSTES CANADA

REGISTERED DOMESTIC
CUSTOMER RECEIPT

RECOMMANDÉ RÉGIME INTÉRIEUR
REÇU DU CLIENT

R

To / Destinataire
Name / Nom: Navas Markfourth c/o 177 Gross Argus Dev. Inc.
Address / Adresse: 3190 Harvester Rd, Suite 201A
City / Prov. / Postal Code / Ville / Prov. / Code postal: Burlington, Ontario L7N-3T1

FOR DELIVERY CONFIRMATION / CONFIRMATION DE LA LIVRAISON
canadapost.ca / postescanada.ca
or/ou
1 888 550-6333

CPC Tracking Number / Numéro de repérage de la SCP
RN 866 069 805 CA

Declared Value / Valeur déclarée: $

33-086-584 (17-12)

CANADA POST / POSTES CANADA

REGISTERED DOMESTIC
CUSTOMER RECEIPT

RECOMMANDÉ RÉGIME INTÉRIEUR
REÇU DU CLIENT

R

To / Destinataire
Name / Nom: Navas Markfourth
Address / Adresse: 3173 Trails de Dr.
City / Prov. / Postal Code / Ville / Prov. / Code postal: Oakville, Ontario L6M-0P3

FOR DELIVERY CONFIRMATION / CONFIRMATION DE LA LIVRAISON
canadapost.ca / postescanada.ca
or/ou
1 888 550-6333

CPC Tracking Number / Numéro de repérage de la SCP
RN 866 069 819 CA

Declared Value / Valeur déclarée: $

33-086-584 (17-12)

REGISTERED

Fragile and perishable articles are not indemnified against damage. Indemnity and fees information is available on request at your postal outlet.

Instructions

1) Complete any declared value on receipt, tear on perforated line, date stamp on reverse and give receipt to customer.

2) Remove label from backing (except area indicated) and apply the label to front of item adjacent to address.

Apply label here
Veuillez placer l'étiquette ici

RECOMMANDÉ

Aucune indemnité ne sera versée pour l'avarie d'un objet fragile ou périssable. Des renseignements sur les indemnités et les droits sont disponibles à votre comptoir postal.

Instructions

1) Indiquez la valeur déclarée dans la section Reçu, détachez le long du pointillé, apposez le timbre à date au verso et remettez le reçu au client.

2) Décollez la pellicule protectrice (sauf la région indiquée) de l'étiquette. Apposez l'étiquette sur le dessus de l'envoi, près de l'adresse.

ACCEPTING LOCATION

LIEU D'ACCEPTATION

CANADA POST POSTES CANADA

101191

19 -09- 2025

Plazza Villagio PO
Woodbridge, ON
L4H 2P0

REGISTERED

Fragile and perishable articles are not indemnified against damage. Indemnity and fees information is available on request at your postal outlet.

Instructions

1) Complete any declared value on receipt, tear on perforated line, date stamp on reverse and give receipt to customer.

2) Remove label from backing (except area indicated) and apply the label to front of item adjacent to address.

Apply label here
Veuillez placer l'étiquette ici

RECOMMANDÉ

Aucune indemnité ne sera versée pour l'avarie d'un objet fragile ou périssable. Des renseignements sur les indemnités et les droits sont disponibles à votre comptoir postal.

Instructions

1) Indiquez la valeur déclarée dans la section Reçu, détachez le long du pointillé, apposez le timbre à date au verso et remettez le reçu au client.

2) Décollez la pellicule protectrice (sauf la région indiquée) de l'étiquette. Apposez l'étiquette sur le dessus de l'envoi, près de l'adresse.

ACCEPTING LOCATION

LIEU D'ACCEPTATION

CANADA POST POSTES CANADA

101191

19 -09- 2025

Plazza Villagio PO
Woodbridge, ON
L4H 2P0

REGISTERED

Fragile and perishable articles are not indemnified against damage. Indemnity and fees information is available on request at your postal outlet.

Instructions

1) Complete any declared value on receipt, tear on perforated line, date stamp on reverse and give receipt to customer.

2) Remove label from backing (except area indicated) and apply the label to front of item adjacent to address.

Apply label here
Veuillez placer l'étiquette ici

RECOMMANDÉ

Aucune indemnité ne sera versée pour l'avarie d'un objet fragile ou périssable. Des renseignements sur les indemnités et les droits sont disponibles à votre comptoir postal.

Instructions

1) Indiquez la valeur déclarée dans la section Reçu, détachez le long du pointillé, apposez le timbre à date au verso et remettez le reçu au client.

2) Décollez la pellicule protectrice (sauf la région indiquée) de l'étiquette. Apposez l'étiquette sur le dessus de l'envoi, près de l'adresse.

ACCEPTING LOCATION

LIEU D'ACCEPTATION

CANADA POST POSTES CANADA

101191

19 -09- 2025

Plazza Villagio PO
Woodbridge, ON
L4H 2P0

REGISTERED

Fragile and perishable articles are not indemnified against damage. Indemnity and fees information is available on request at your postal outlet.

Instructions

1) Complete any declared value on receipt, tear on perforated line, date stamp on reverse and give receipt to customer.

2) Remove label from backing (except area indicated) and apply the label to front of item adjacent to address.

Apply label here
Veuillez placer l'étiquette ici

RECOMMANDÉ

Aucune indemnité ne sera versée pour l'avarie d'un objet fragile ou périssable. Des renseignements sur les indemnités et les droits sont disponibles à votre comptoir postal.

Instructions

1) Indiquez la valeur déclarée dans la section Reçu, détachez le long du pointillé, apposez le timbre à date au verso et remettez le reçu au client.

2) Décollez la pellicule protectrice (sauf la région indiquée) de l'étiquette. Apposez l'étiquette sur le dessus de l'envoi, près de l'adresse.

ACCEPTING LOCATION

LIEU D'ACCEPTATION

CANADA POST POSTES CANADA

101191

19 -09- 2025

Plazza Villagio PO
Woodbridge, ON
L4H 2P0

REGISTERED

Fragile and perishable articles are not indemnified against damage. Indemnity and fees information is available on request at your postal outlet.

Instructions

1) Complete any declared value on receipt, tear on perforated line, date stamp on reverse and give receipt to customer.

2) Remove label from backing (except area indicated) and apply the label to front of item adjacent to address.

Apply label here
Veuillez placer l'étiquette ici

RECOMMANDÉ

Aucune indemnité ne sera versée pour l'avarie d'un objet fragile ou périssable. Des renseignements sur les indemnités et les droits sont disponibles à votre comptoir postal.

Instructions

1) Indiquez la valeur déclarée dans la section Reçu, détachez le long du pointillé, apposez le timbre à date au verso et remettez le reçu au client.

2) Décollez la pellicule protectrice (sauf la région indiquée) de l'étiquette. Apposez l'étiquette sur le dessus de l'envoi, près de l'adresse.

ACCEPTING LOCATION

LIEU D'ACCEPTATION

CANADA POST POSTES CANADA

101191

19 -09- 2025

Plazza Villagio PO
Woodbridge, ON
L4H 2P0

Canada Post/Postes Canada
SHOPPERS DRUG MART #0746
9200 WESTON RD
VAUGHAN, ON L4H 2P0
GST/TPS#813984754

02921

2025/09/19 18:16:28 POOJA
CC101191 W/G 1

ONH 1 @ $1.44 $1.44
LETTERMAIL STD/LET STANDARD

Item Weight/Poids de l'article: 0.016 kg
Volumetric Equivalent (VE)/ Équivalent volumétrique (EV): 0.000 Kg
Destination: Canada
Postal code - ZIP Code/Code postal - ZIP: L7N3T1

After cut-off. Add 1 business day (excluding holidays) to your delivery./
Heure limite dépassée; ajoutez un jour ouvrable pour la livraison (à l'exception des jours fériés).


RN866069782CA

ONH $13.15
REG DOMESTIC/COURRIER RECOMMANDE

ONH $0.00
INSUR. PARC XP P/C/COLIS ASSUR XP P/C

Amount covered/Montant de la couverture: $100.00

ONH 1 @ $1.44 $1.44
LETTERMAIL STD/LET STANDARD

Item Weight/Poids de l'article: 0.016 kg
Volumetric Equivalent (VE)/ Équivalent volumétrique (EV): 0.000 Kg
Destination: Canada
Postal code - ZIP Code/Code postal - ZIP: L7N3T1

After cut-off. Add 1 business day (excluding holidays) to your delivery./
Heure limite dépassée; ajoutez un jour ouvrable pour la livraison (à l'exception des jours fériés).


RN866069796CA

ONH $13.15
REG DOMESTIC/COURRIER RECOMMANDE

ONH $0.00
INSUR. PARC XP P/C/COLIS ASSUR XP P/C

Amount covered/Montant de la couverture: $100.00

ONH 1 @ $1.44 $1.44
LETTERMAIL STD/LET STANDARD

Item Weight/Poids de l'article: 0.016 kg
Volumetric Equivalent (VE)/ Équivalent volumétrique (EV): 0.000 Kg
Destination: Canada
Postal code - ZIP Code/Code postal - ZIP: L7N3T1

After cut-off. Add 1 business day (excluding holidays) to your delivery./
Heure limite dépassée; ajoutez un jour ouvrable pour la livraison (à l'exception des jours fériés).


RN866069805CA

ONH $13.15
REG DOMESTIC/COURRIER RECOMMANDE

ONH $0.00
INSUR. PARC XP P/C/COLIS ASSUR XP P/C

Amount covered/Montant de la couverture: $100.00

ONH 1 @ $1.44 $1.44
LETTERMAIL STD/LET STANDARD

Item Weight/Poids de l'article: 0.016 kg
Volumetric Equivalent (VE)/ Équivalent volumétrique (EV): 0.000 Kg
Destination: Canada
Postal code - ZIP Code/Code postal - ZIP: L6M0P3

After cut-off. Add 1 business day (excluding holidays) to your delivery./
Heure limite dépassée; ajoutez un jour ouvrable pour la livraison (à l'exception des jours fériés).

RN866069819CA

ONH $13.15
REG DOMESTIC/COURRIER RECOMMANDE

ONH $0.00
INSUR. PARC XP P/C/COLIS ASSUR XP P/C

Amount covered/Montant de la couverture: $100.00

ONH 1 @ $1.44 $1.44
LETTERMAIL STD/LET STANDARD

Item Weight/Poids de l'article: 0.016 kg
Volumetric Equivalent (VE)/ Équivalent volumétrique (EV): 0.000 Kg
Destination: Canada
Postal code - ZIP Code/Code postal - ZIP: L6J0G2

After cut-off. Add 1 business day (excluding holidays) to your delivery./
Heure limite dépassée; ajoutez un jour ouvrable pour la livraison (à l'exception des jours fériés).

RN866069822CA

ONH $13.15
REG DOMESTIC/COURRIER RECOMMANDE

ONH $0.00
INSUR. PARC XP P/C/COLIS ASSUR XP P/C

Amount covered/Montant de la couverture: $100.00

SUBTL/SOUS-TOTAL $72.95
HST/TVH $9.50
TOTAL $82.45

Visa $82.45

For complete terms and conditions consult the Canada Postal Guide at WWW.CANADAPOST.CA or any Post Office./
Pour connaître les modalités complètes consultez le Guide des postes du Canada a l'adresse WWW.POSTESCANADA.CA ou a votre bureau de poste.
Sender warrants that the shipped item(s) do(es) not contain non-mailable matter./
L'expéditeur confirme que l'article expédie ne contient aucun objet inadmissible.
Track your item by web or mobile app: Some exceptions apply./
Repérer votre article par le web ou l'appli mobile: Certaines conditions s'appliquent.

2124-10101191-1-3638787-161

WWW.CANADAPOST.CA/WWW.POSTESCANADA.CA

This is Exhibit “F” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam) Ganni of the City of Toronto, in the Province of Ontario, before me at the City of Toronto, in the province of Ontario, on October 28, 2025, in accordance with O. Reg. 431/20, Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

NOTICE OF ATTORNMENT OF RENTS AND DIRECTION TO PAY

PROPERTY: 177-185 Cross Ave. & 580 Argus Road, Oakville, Ontario (the "**Property**")

TO: Each Tenant of the Property
177-185 Cross Ave. & 580 Argus Road, Oakville, Ontario

COPY TO: 177 Cross Argus Development Inc. (the "**Mortgagor**")
3190 Harvester Road, Suite 201a, Burlington, Ontario, L7N 3T1
By registered mail

RE: Attornment of Rents pursuant to a Notice of Assignment of Rents – General registered on title of the Property from the Mortgagor in favour of Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. as Instrument No. HR1953704 on March 15, 2023.

TAKE NOTICE THAT default has been made in payment of an amount due under a third mortgage (the "**Mortgage**") from the Mortgagor to Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. (collectively the "**Mortgagee**").

THE MORTGAGE was registered against the Property as Instrument HR1953703 in the Land Titles Division of Halton (No. 20) on March 15, 2023, and secures the principal sum of $5,000,000.00. The Mortgage was further secured by a Notice of Assignment of Rents – General registered against the Property on March 15, 2023, as Instrument No. HR1953704.

IN ACCORDANCE WITH ITS RIGHTS UNDER THE MORTGAGE AND THE ASSIGNMENT OF RENTS, THE MORTGAGEE HEREBY DIRECTS THAT YOU PAY TO IT ALL RENTS NOW OWING OR WHICH MAY HEREAFTER BECOME DUE IN RESPECT OF THAT PORTION OF THE PROPERTY OCCUPIED BY YOU.

UNLESS OTHERWISE DIRECTED by the Mortgagee, all payments of rent are to be made payable to "Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc." by one of the following options:

Option 1: by cheque, bank draft, or certified cheque, delivered to the Mortgagee's property manager Naresh Aggarwal as follows:

Naresh Aggarwal
Unit No 3-120, Jevlan Drive,
Vaughan, ON, L4L 8G3
Email: Naresh@aartiinc.com
Mobile: (+1) 647-988-8137

Option 2: by wire transfer, as follows:

1. Please wire all funds to the following account:

Beneficiary Name	Aarti Real Estate Enterprises Inc.
Beneficiary Address	22 Kelways Circle, Brampton, ON L6T0G6
Beneficiary Bank	Bank of Montreal
Bank Address	6605 Hurontario St. Mississauga, ON L5T0A4
Institution No.	001
Transit No.	38582
Account No.	1966578

2. After making your payment, please send a copy of the wire confirmation receipt to Naresh Aggarwal by email, regular mail, or hand delivery to the address noted above.

3. Please note, your rent payment will not be received by Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. unless and until the above documents are delivered to Naresh Aggarwal and they have confirmed receipt of same in writing.

PLEASE IDENTIFY THE PROPERTY ADDRESS AND THE RENTAL PERIOD ON ALL CORRESPONDENCE, CHEQUES, AND WIRE CONFIRMATIONS

AND FURTHER TAKE NOTICE THAT you must not pay the mortgagor or its agents any portion of the rent or other monies now owing or to become due by you on account of your tenancy. Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc. will hold you personally responsible for all costs or damages which it may sustain through your neglect or failure to comply with the terms of this notice.

Dated at Vaughan this 30th day of September, 2025.

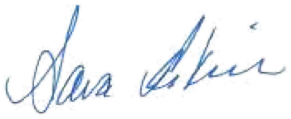
Aarti Real Estate Enterprises Inc. and Mayuri Ventures Inc., the Mortgagees, by its lawyers,

Scalzi Caplan LLP
3100 Rutherford Road, Unit 105
Vaughan, Ontario, L4K 0G6

Attn: Derek Ketelaars (67154R)
Tel: (437)-242-4088
Email: derek@sclawpartners.com

Per: _____
Derek Ketelaars

This is Exhibit “G” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam) Ganni of the City of Toronto, in the Province of Ontario, before me at the City of Toronto, in the province of Ontario, on October 28, 2025, in accordance with O. Reg. 431/20, Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

From: Sara Erskine
To: Derek Ketelaars
Cc: Adam Zeldin; Bryan Gelman; Nawar Mahfooth; Sam Ganni; Jawad Quader; Shashwat Prakash
Subject: 177 Cross Argus Development Inc.
Date: Thursday, October 9, 2025 1:45:00 PM
Attachments: image001.png
Trez Capital v UC Investments 2013nssc381.pdf

Derek,

I wanted to follow up with our discussion yesterday concerning the issue of the application of the stay against your client.

As we discussed yesterday, the purpose of the 10 day period in section 244 of the BIA is to give the debtor 10 clear days of breathing space to make a decision on whether or not to file an NOI. As a result, the 10 day period begins when the debtor is served with the section 244 notice, not when it is dropped off with Canada Post. Particularly in the circumstances of this case where the Notice was dropped off with Canada Post at 6:18 pm on a Friday evening. The Notice would not be delivered to the Debtor until 3 days later leaving the debtor will only 7 days and not 10 days.

We have considered the issue and consulted with others in the industry who agree that the 10 day period under the BIA does not begin to run until the Debtor receives the notice.

I am also attaching a case, *Trez Capital Corporation v. UC Investments Inc.,* 2013 NSSC 381. In the case, the court held that an email attaching the Notice was not proper service and that the only effective service was by courier. The effective date of service for the commencement of the 10 day period was the date the Debtor received the courier.

Here, the company received the registered mail on September 22, 2025 and therefore the 10 day period did not expire until October 2, 2025. The NOI was filed on October 2, 2025 and your client is captured by the stay of proceedings.

In light of the above, I ask that you reconsider your position that the 10 day period expired on September 29, 2025 and that your client is not captured by the stay. If your client continues to assert this position, the Debtor will bring a motion for a court order that the stay is in effect against your client and seek its costs of the motion.

I look forward to hearing from you,

Sara

Sara J. Erskine
Founding Partner
Direct: (416) 597-5408 | Email: sara@BE-Law.ca

BE LAW LLP
30 St. Patrick St, Suite 700, Toronto, ON M5T 3A3

IMPORTANT NOTICE: This e-mail message is intended to be received only by persons entitled to receive the confidential information it may contain. E-mail messages to clients of BE Law LLP may contain information that is confidential and legally privileged. Please do not read, copy, forward, or store this message unless you are an intended recipient of it. If you have received this message in error, please forward it to the sender and delete it completely from your computer system.

Please note that our firm name has changed to BE Law LLP and our offices have moved to 30 St. Patrick Street, Suite 700, Toronto ON M5T 3A3

SUPREME COURT OF NOVA SCOTIA

Citation: Trez Capital Corporation v. UC Investments Inc., 2013 NSSC 381

Date: 20131129
Docket: Hfx. No. 421567
Registry: Halifax

2013 NSSC 381 (CanLII)

Between:

Trez Capital Corporation, Trez Capital Limited Partnership, TCC Mortgage Holdings inc., Computershare Trust Company of Canada and WBLI, Inc.

Applicants

v.

UC Investments Inc., Edge Marketing Inc., 3214113 Nova Scotia Limited and PricewaterhouseCoopers Inc.

Respondents

LIBRARY HEADING

Judge: The Honourable Justice Arthur W.D. Pickup

Heard: November 20, 2013 in Halifax, Nova Scotia

Written Decision: November 29, 2011

Subject: Application for a declaration that the Lender's appointment of a receiver pursuant to two appointment letters is not stayed pursuant to s. 69(1) of the *Bankruptcy and Insolvency Act* and, in the alternative, an order appointing an interim receiver of the properties pursuant to s. 47.1 of the *Act*.

Summary: The respondents agreed to borrow funds totalling $63,788,217 from the applicants.

The respondents own lands which contain large residential apartment buildings in Nova Scotia and New Brunswick. As security for the loans the respondents granted security to the applicants. After the respondents failed to make the necessary payments for two months, the applicants sent a Notice of Intention to Enforce Security by email on October 16, 2013, at 6:21 pm to the respondents. Notice was also sent by courier and delivered on October 17, 2013.

2013 NSSC 381 (CanLII)

Issue: Did the parties agree that Notice of Intention to Enforce Security could be provided by email?

Should an interim receiver be appointed?

Result: The applicants rely on a provision contained in commitment letters signed by the respondents to evidence the agreement of the respondents to receive notice under the *BIA* by email.

It was determined that the notice provisions under the various commitment letters did not operate to satisfy the notice provisions under the *BIA* and, therefore, email notice was not sufficient.

The applicants' request to appoint an interim receiver was dismissed as the applicants had not met their burden of proving necessity.

2013 NSSC 381 (CanLII)

THIS INFORMATION SHEET DOES NOT FORM PART OF THE COURT'S DECISION. QUOTES MUST BE FROM THE DECISION, NOT THIS LIBRARY SHEET.

SUPREME COURT OF NOVA SCOTIA

Citation: Trez Capital Corporation v. UC Investments Inc., 2013 NSSC 381

Date: 20131129

Docket: Hfx. No. 421567
Registry: Halifax

2013 NSSC 381 (CanLII)

Between:

Trez Capital Corporation, Trez Capital Limited Partnership, TCC Mortgage Holdings inc., Computershare Trust Company of Canada and WBLI, Inc.

Applicants

v.

UC Investments Inc., Edge Marketing Inc., 3214113 Nova Scotia Limited and PricewaterhouseCoopers Inc.

Respondents

Judge: The Honourable Justice Arthur W.D. Pickup

Heard: November 20, 2013, in Halifax, Nova Scotia

Written Decision: November 29, 2013

Counsel: Jeffrey R. Hunt and Joel Henderson, for the Applicants

Robert G. MacKeigan, Q.C., and Sheree L. Conlon, for UC Investments Inc., Edge Marketing Inc., 3214113 Nova Scotia Limited

Joshua J. Santimaw, for Harbour Edge Mortgage Investment Corporation

Tim Hill, for Green-Starlight GP Limited

Josh J.B. McElman and Gavin D.F. MacDonald, for BMO

D. Bruce Clarke, Q.C., for PricewaterhouseCoopers Inc.

Adam D. Crane, for First National GP Corporation

Diane P. Rowe, for Housing Nova Scotia

2013 NSSC 381 (CanLII)

By the Court: **Orally**

I. This is an application by Trez Capital Corporation, Trez Capital Limited Partnership, TCC Mortgage Holdings Inc., Computershare Trust Company of Canada and WBLI, Inc., seeking the following remedies:

i. a declaration that the Lender's appointment of the Receiver pursuant to two appointment letters dated October 28, 2013 is not stayed pursuant to section 69(1) of the *Bankruptcy and Insolvency Act*, R.S.C. 1985, c. B-3 (the "*Act"*)'

ii. an order for directions requiring the Borrowers to account for and pay to the Receiver all rents received from the Properties after October 28, 2013;

or in the alternative,

iii. an order that PricewaterhouseCoopers Inc. (The "Trustee") be appointed as interim receiver of the Properties pursuant to s. 47.1 of the *Act*; and

iv. an order directing the Trustee to preserve all rents received from the Properties.

II. Submissions were received from the applicants and the respondents, and from Green-Starlight LP, a Second Mortgage Lender. Counsel for PricewaterhouseCoopers Inc. also made submissions. Several other security holders attended by counsel, some of whom had first

2013 NSSC 381 (CanLII)

mortgage security on some of the properties involved in this application. Apparently, they received no formal notice of this proceeding.

III. Counsel for PricewaterhouseCoopers Inc. argues that they should not be named as a respondent in this proceeding. Counsel for the applicants did not take exception to counsel's argument and, as a result, for purposes of my decision when I refer to "respondents" in this decision, this does not include PricewaterhouseCoopers Inc.

Background facts

IV. Between December 7, 2011 and February 6, 2013 the respondents agreed to borrow funds totalling $63,788,217 from the applicants.

V. The respondents are the registered owner of property which contains large residential apartment buildings in Nova Scotia and New Brunswick. As security for the loans, the respondents, along with guarantors, granted security to the applicants including mortgages and general assignment of rents and leases.

VI. It became apparent at the hearing that there were other secured lenders who had not been notified of the proceeding. For example, BMO, by way of affidavit, sets out its first ranking security interest in certain properties of the respondents. Despite having this first mortgage security, BMO was not notified of the proceeding, although the applicants sought

2013 NSSC 381 (CanLII)

remedies which would affect their security and, in particular, have rents diverted to a receiver.

VII. Green-Starlight GP Ltd. is the general partner of Green-Starlight LP (the "Second Mortgage Lender"). The Second Mortgage Lender sold the property to the respondents and, at the time, took back a second mortgage in the original amount of $8,000,000. As of October 17, 2013 the amount due to the Second Mortgage Lender was $7,276,218.74, including principal interest and costs.

VIII. The terms and conditions of the loans between the applicants and respondents were set out in various commitment letters which are attached as Exhibit 7 through 14 of the affidavit of Paul Bowers.

IX. The respondents have defaulted on the loans by failing to make the necessary interest payments for the months of August and September, 2013, due September 7, 2013 and October 7, 2013, respectively, in the amount of $570,113.73.

X. Following the default, the applicants and respondents engaged in discussions which caused the applicants to determine the respondents were not able to meet their obligations under the loans. The applicants lost confidence in the respondents and allege that the respondents may be directing the monthly rents away from their intended purpose of paying the respondents' financial obligations to the applicants.

2013 NSSC 381 (CanLII)

XI. On October 16, 2013 at 6:21 pm (approximately), the applicants sent a Notice of Intention to Enforce Security under the *Bankruptcy and Insolvency Act* by email to the respondents. This notice was also sent to the respondents by courier on October 16, 2013 and was received on October 17, 2013.

XII. According to the respondents, they and the applicants entered into negotiations over the potential terms of a Forbearance Agreement that would avoid the need for the respondents to file a Notice of Intention to File a Proposal pursuant to s. 50.4 of the *BIA*. They say these negotiations took place up to and including October 27, 2013. As the parties were unable to reach an agreement on the terms of the Forbearance Agreement, the respondents filed the Notice of Intention to File a Proposal with the Superintendent of Bankruptcy.

XIII. According to the respondents at no point prior to October 28, 2013 did the applicants or their counsel advise they considered the deadline for the companies to file a Notice of Intention to File a Proposal to have expired on Saturday, October 26, 2013.

XIV. Despite these negotiations, the applicants maintain the 10 day notice period provided for by s. 244(1) of the *Bankruptcy and Insolvency Act*, R.S.C., 1985, c. B-3 ("BIA") expired at midnight October 26, 2013. The applicants rely on the email of their Notice of Intention to Enforce Security on October 16, 2013, which was transmitted at approximately 6:21 pm on that date.

2013 NSSC 381 (CanLII)

XV. On Monday, October 28, 2013 the applicants appointed WBLI Inc. as receiver over the security. WBLI Inc. immediately contacted the respondents to obtain their cooperation to proceed with the receivership. WBLI received correspondence from counsel for the respondents advising that notices of intention to file a proposal would be filed by days' end, and that no steps should be taken to enforce security.

XVI. Subsequently, each respondent filed a "Notice of Intention to File a Proposal" pursuant to s. 50.4 of the *BIA*, naming PricewaterhouseCoopers Inc., ("PwC") as trustee on Monday, October 28, 2013.

XVII. The Second Mortgage Lender joins in this application to support the applicants' position and indicates by affidavit that the Second Mortgage Lender sent a Notice of Intention to Enforce Security to the respondents on October 17, 2013.

Issues

XVIII. The issues to be determined are as follows:

i. Did the borrowers' Notice of Intention to File a Proposal operate to stay the lenders enforcement of its security and the appointment of WBLI Inc. as receiver?

a) Was the Notice of Intention to Enforce Security served in the appropriate manner?

2013 NSSC 381 (CanLII)

b) When did the 10 day notice period for the Notice of Intention to Enforce Security expire?

ii. In the alternative, is an interim receiver necessary to protect the interest of the applicants or of creditors generally?

i. Did the borrowers' Notice of Intention to File a Proposal operate to stay the lenders' enforcement of its security and the appointment of WBLI Inc. as receiver?

a) Was the Notice of Intention to Enforce Security served in the appropriate manner?

Applicants' Argument

XIX. Sub-section 244(1) of the *Bankruptcy and Insolvency Act* is as follows:

> 244. (1) A secured creditor who intends to enforce a security on all or substantially all of
>
> (a) the inventory,
>
> (b) the accounts receivable, or
>
> (c) the other property

2013 NSSC 381 (CanLII)

> of an insolvent person that was acquired for, or is used in relation to, a business carried on by the insolvent person **shall send to that insolvent person**, in the prescribed form and manner, a notice of that intention.
>
> (2) Where a notice is required to be sent under subsection (1), the secured creditor shall not enforce the security in respect of which the notice is required **until the expiry of ten days after sending that notice**, unless the insolvent person consents to an earlier enforcement of the security.
>
> [emphasis added]

XX. The applicants acknowledge that s. 244 of the *BIA* requires that a Notice of Intention to Enforce Security be sent 10 days prior to enforcing its security in respect of which the notice is required.

XXI. Notice was provided by the applicants by email and courier.

XXII. First, dealing with the email notice, Rule 124 of the *Bankruptcy and Insolvency General Rules* (C.R.C., c. 368), states:

> 124. The notice of intention to enforce a security pursuant to subsection 244(1) of the *Act* shall be in prescribed form and shall be served, or sent by registered mail or courier, or, **if agreed to by the parties, by electronic transmission**.
>
> [emphasis added]

XXIII. The applicants argue that, as lenders, they had provided a commitment letter which was signed by the respondents that contained a provision allowing the notice to be sent by email and, as a result, the parties agreed to email service as provided for in Rule 124 of the *Bankruptcy and Insolvency General Rules*. This provision allegedly allowing notice to be

2013 NSSC 381 (CanLII)

sent by email was contained in each loan commitment letter. For example, the Herring Cove Loan commitment letter between Trez Capital Corporation and Edge Marketing December 7, 2011 is attached to the affidavit of Paul Bowers at Tab 7. It states:

> 42 Communication
>
> **All communications provided for hereunder shall be in writing, personally delivered, or sent by prepaid first class mail or telecommunications,** and if to the Lender addressed to the address above noted, to the attention of the President, and if to the Borrower to the addressed [sic] noted above. The date of receipt of any such communication should be deemed to the date of delivery, if delivered as aforesaid, or on the third business day following the date of mailing, as aforesaid. Any party hereto may change its address for service from time to time by notice in the manner herein provided. In the event of a postal disruption or an anticipated postal disruption, prepaid first class mail will not be an acceptable means of communication.
>
> [emphasis added]

XXIV. The question is whether the email sent by the applicants on October 16, 2013 containing the Notice of Intention to Enforce Security is a "telecommunication" and a form of notice "agreed to by the parties". The applicants argue this provision in the commitment letter evidenced such agreement.

XXV. The applicants also sent a notice by courier on October 16, 2013 as permitted by Rule 124 of the *Bankruptcy and Insolvency General Rules.* This couriered notice was received by the borrowers on October 17.

Respondents' Position

2013 NSSC 381 (CanLII)

XXVI. The respondents say that the parties did not agree to electronic communication of the s. 244 notice. They submit that para. 42 of the various commitment letters refers to notice provisions in the commitment letters and cannot be expanded to cover the notice provisions under the *BIA*.

XXVII. For the reasons which follow, I substantially agree with the respondents' position.

Analysis

XXVIII. The parties must agree that email delivery is appropriate service under s. 244(1) of the *BIA*. Section 124 of the *Bankruptcy and Insolvency General Rule* states:

> The notice of intention to enforce security pursuant to subsection 244(1) of the *Act* shall be in the prescribed form and shall be served, or sent by registered mail or courier, **or, if agreed to by the parties, by electronic transmission.**
>
> [emphasis added]

XXIX. Therefore, notice under s. 244 can only be served by personal service or by registered mail or courier service, unless the parties agree to email service.

XXX. Did the parties agree to service of the s. 244 notice by email?

2013 NSSC 381 (CanLII)

XXXI. The applicants rely on para. 42 of the commitment letters documenting each loan. As quoted earlier, para. 42 reads in part as follows:

> 42. All communications **provided for <u>hereunder</u>** shall be in writing, personally delivered or sent by prepaid first class mail or **telecommunications,**...
>
> [emphasis added]

XXXII. Notice pursuant to the *BIA* is not specifically provided for in the commitment letters. In fact, there is no reference at all to the *BIA* or any other statutory provisions.

XXXIII. Paragraph 42 refers to communications "provided for hereunder". I agree with the respondents that reference to "communication provided for hereunder" would be a reference to notice provisions contained in the commitment letter. For example, para. 22 of the commitment letter is as follows:

> All property tax payments, utilities and like amounts due and owing in relation to the Subject Property, or any other taxes charged against the Subject Property, shall be paid prior to or coincide with the Advance (as hereinafter defined). The Borrower shall make arrangements to have the taxes paid by monthly installments to the appropriate taxing authority in order to have them paid in full on their due date. The Borrower is to provide evidence of same to the Lender on a quarterly basis.
>
> In the Event of Default (as hereinafter defined) under the Mortgage Security, the Lender shall have the right to require the establishment of a tax reserve by way of monthly payments representing 1/12 of the estimated taxes payable. The Lender shall not be responsible for the payment of any tax arrears.

2013 NSSC 381 (CanLII)

XXXIV. Under this provision, the borrowers are required to provide evidence of payment of property taxes on a quarterly basis. I am satisfied that notice under para. 22 permits notice by telecommunication, as it is communication "provided for hereunder" as provided for in para. 42. A further example of "communication provided for hereunder" where notice can be given by telecommunication is clause 25. This clause requires five business days notice of funding. Again, this notice could be by telecommunication pursuant to para. 42.

XXXV. A plain common sense reading of para. 42 would suggest that this paragraph provides for nothing more than a telecommunication form of notice pursuant to provisions contained in the commitment letter requiring notice.

XXXVI. Consistent with this interpretation is para. 49(f) of the commitment letter which states:

> Interpretation
>
> (f) The words "hereto", "herein", "hereunder", "hereby", "Commitment Letter, "this agreement", and similar expressions used in this Commitment Letter, including the schedules attached hereto, mean or refer to this Commitment Letter and not to any particular provision, section or paragraph or other portion of this Commitment Letter and include any instruments supplemental or ancillary hereto.
>
> [emphasis added]

XXXVII. Further, at para. 42 after stating "All communications provided for hereunder shall be in writing, personally delivered, or sent by pre-paid

2013 NSSC 381 (CanLII)

first class mail or telecommunications...," goes on to state "...and if to the lender addressed to the address above noted, to the attention of the President, and if to the Borrower to the addressed [sic] noted above..." Both of these addresses are provided for in the commitment letters. There is no reference to an email address which would suggest that email notice was not contemplated under the commitment letter.

XXXVIII. I am satisfied that the parties did not agree to email service pursuant to the *BIA* and, therefore, the email sent by the applicants on October 16, 2013 was not proper service.

XXXIX. As a result, the only effective notice was served by courier on October 17, 2013. The 10 day period began to run after the s. 244 notice was served on October 17, 2013. It is not disputed that the 10 day notice period expired on Sunday, October 27, 2013. Sunday being defined as a holiday under s. 35 of the *Federal Interpretation Act*, R.S.C. 1985, C. I-21, the respondents, therefore, had until Monday, October 28, 2013, to file a Notice of Intention to File a Proposal, which they did on that date.

XL. The respondents having filed their Notice of Intention to File a Proposal within the appropriate time, the applicants' motion for a stay of the lender's appointment of the receiver pursuant to two appointment letters dated October 28, 2013 is hereby dismissed.

XLI. In the event I am wrong and the effect of para. 42 of the commitment letter is to allow service by email pursuant to the *BIA*, the question is whether the word "telecommunication" referred to in para. 42

2013 NSSC 381 (CanLII)

refers to email. The respondents argue in the alternative that even if email notice is permitted under the *BIA*, the reference to telecommunication in para. 42 of the commitment letter does not refer to email.

XLII. Is an email a "telecommunication"?

XLIII. The *Federal Interpretation Act* defines "telecommunications" at s. 35 as:

> ...the emission, transmission or reception of signs, signals, writing, images, sounds or intelligence of any nature by any wire, cable, radio, optical or other electromagnetic system, or by any similar technical system;

XLIV. The applicants submit that email is a "telecommunication" and that the parties clearly intended for communications between them with regard to each of the loans to be facilitated by different means, including telecommunications.

XLV. Despite the applicants' argument, no email addresses were provided for the parties. If email communication was contemplated, then it would seem likely that email addresses would be provided.

XLVI. The respondents' argument is that even if the para. 42 contemplates email service of the s. 244 notice under the *BIA*, the term "telecommunication", is not specific enough to refer to email.

2013 NSSC 381 (CanLII)

XLVII. Upon reviewing the commitment letters, I note that in a separate clause, dealing with execution of the commitment letter, the parties explicitly contemplated delivery by electronic transmission. In para. 51:

> This agreement may be executed in any number of counterparts and by facsimile, **electronic transmission** or pdf copy, each of which when so executed is deemed to be an original and all of which together shall constitute one and the same agreement.
>
> [emphasis added]

XLVIII. I am satisfied that the parties to the commitment letters intended that the execution of the agreements themselves could be done by way of electronic transmission, but must have intended something different when they used the term "telecommunication" in para. 42.

XLIX. I also agree with respondents' submission that the applicants own conduct is consistent with the respondents' interpretation. For example, if the applicants considered service of the s. 244 notice to effected on October 16, 2013 (by email), it is inconsistent that they did not state the 10 day deadline to be October 26, 2013, rather than October 28, 2013.

L. The applicants not having met their burden of proving that "telecommunication" in para. 42 of the commitment letter includes email, I dismiss the application before me for a stay on that basis as well.

LI. In summary, I would dismiss the application on the following grounds:

2013 NSSC 381 (CanLII)

i. That para. 42 of the various commitment letters does not extend to notice under the *BIA*, but rather refers to internal notice under the commitment letter.

ii. In the alternative, even if para. 42 constitutes agreement between the parties as to email service under s. 244 of the *BIA*, I am not satisfied that the term "telecommunication" would include email.

2013 NSSC 381 (CanLII)

ii. In the alternative, is an interim receiver necessary to protect the interest of the lenders or of creditors generally?

Applicants' Position

LII. The applicants argue in the alternative that an interim receiver should be appointed to protect the interests of the applicant lenders and of creditors generally. They initially sought the appointment of PricewaterhouseCoopers Inc., but it is clear from the filed documentation that PricewaterhouseCoopers Inc. do not consent to act. Therefore, during the hearing the applicants proposed that WBLI should be appointed as interim receivers.

LIII. The applicants submit that it is necessary for the protection of the interests of the applicants and of the respondents' creditors generally that an interim receiver be appointed pursuant to 47.1(1)(a) of the *BIA*. They say the monthly income from the properties is approximately $890,000, yet they have not received the required interest payments from the borrowers in over three months. Moreover, they say the borrowers have permitted other

obligations such as utilities, heating oil, property tax and necessary maintenance to be neglected.

LIV. Despite the applicants' argument that the appointment of a receiver is necessary for the protection of creditors generally, it is apparent from the appearances at the hearing of this matter that some secured creditors were not advised of the hearing.

LV. The applicants say there is evidence that the substantial rental income of the respondents is not being applied to even the most elementary of obligations. They say they have lost all confidence in the borrowers to conduct their business affairs. In these circumstances, they say, an interim receiver is necessary to protect the interests of not only the lenders, but of other secured and unsecured creditors as well.

LVI. Section 47.1 of the *BIA* reads:

> Appointment of interim receiver
>
> 47.1 (1) If a notice of intention has been filed under section 50.4 or a proposal has been filed under subsection 62(1), the court may at any time after the filing, subject to subsection (3), appoint as interim receiver of all or any part of the debtor's property,
>
> (a) the trustee under the notice of intention or proposal;
>
> ...
>
> When appointment may be made

2013 NSSC 381 (CanLII)

(3) An appointment of an interim receiver may be made under subsection **(1) only if it is shown to the court to be necessary for the protection of**

(a) the debtor's estate; or

(b) the interests of one or more creditors, or of the creditors generally.

[emphasis added]

LVII. The burden under s. 47.1(3)of the *BIA* is on the applicants to show that the appointment is necessary to either protect the respondents' estate or to protect the interests of one or more creditors, or of creditors generally.

LVIII. The Second Mortgage Lender joins the applicants in submitting that the appointment of an interim receiver would be in the interests of creditors. They point out that to date $890,000 stands to be collected by the respondents in rent, without the creditors having any idea what is happening to those funds. The amount of $890,000 is collected each month.

LIX. The Second Mortgage Lender also refers to case law to support its position. They provide at p. 12 of their brief:

> *Royal Bank of Canada v. Zutphen Brothers Construction Ltd.*, [1993] N.S.J. No. 640, 17 C.B.R. (3d) 314 (Registrar) was a very early case dealing with the appointment of an interim receiver following the filing of a Notice of Intention to Make a Proposal. In that case Registrar Smith remarked:
>
> > 20 It is well established law, that in order to support an application for the appointment of an interim receiver, the danger

2013 NSSC 381 (CanLII)

> of dissipation of assets must be actual and immediate and not one based on suspicion and speculation.

LX. *Zutphen*, was followed in *Re*: *Atsana Semiconductor Corp.*, 2005 CarswellOnt 3304 (S.C.):

> 3. Atsana opposes the Applicant's motion on the grounds that (1) the appointment of an interim receiver would be redundant in that KMPG [sic] has already been identified as the proposal trustee in Atsana's Notice of Intention; (2) there are existing safeguards under the *BIA* following the filing of a Notice of Intention to Make a Proposal to adequately protect the Applicant and other creditors; (3) the disclosure of more specific information about the potential sale transaction to the Applicant and other creditors at this time could irreparably hurt the integrity of the sale of the negotiations to the detriment of Atsana and its creditors; and (4) the Applicant is not coming to court with clean hands and should therefore not be granted equitable relief.

LXI. The court applied the test set out in *Zutphen, supra,* and commented as follows on the burden the Applicant must meet under s. 47.1:

> 18 The word "dissipate" implies something more than a sale. In regard to money or property, "dissipate" means to squander, fritter away or waste. It implies that after the dissipating event, there will be less available than there was before; in other words, there will not be a transfer of one form of value for another of equal worth - there will be a reduction in value at the end of the day. There is no evidence before me that the proposed sale will involve a dissipation of Atsana's assets.
>
> 19 ...As has been noted above, suspicion and speculation are inadequate reasons to justify the granting of an extraordinary remedy such as the appointment of an interim receiver.
>
> 20 There are other reasons why the appointment of an interim receiver must fail. First, such an appointment, in the present circumstances, would be largely redundant and therefore would entail an unnecessary expense. There is already a proposal trustee who will be maintaining a close eye on the management of Atsana's assets and on any proposed sale of those assets.

2013 NSSC 381 (CanLII)

> 21 No sale shall occur without the support of the proposal trustee and the approval of the court. Creditors will have the opportunity to challenge any proposed sale that would be prejudicial to their interests.
>
> 22 It would not be beneficial to Atsana's creditors if money were diverted to fund the appointment of an interim receiver, when one is not necessary to protect the creditors' valid interests.

LXII. The court concluded there was no evidence the assets would be dissipated and the applicant had failed to prove an interim receiver was necessary and the motion was dismissed.

LXIII. PricewaterhouseCoopers Inc. has not consented to be an interim receiver and, in fact, considers such an appointment to be redundant given its role as proposed trustee and cites the expense of being so appointed, the practical result of which is that there will be less money for creditors.

LXIV. The applicants support their motion to appoint an interim receiver by affidavit evidence found at paras. 15 - 17 of the Bower affidavit and argue that the companies were behind on their payment to unsecured creditors and some of the properties' maintenance.

Analysis

LXV. There should be no surprise that in an insolvency case such as this one, the respondent companies owed money to unsecured creditors and missed two interest payments. I agree with the respondents that if this was enough to satisfy the burden on the applicants, virtually every insolvency

2013 NSSC 381 (CanLII)

case would require the appointment of an interim receiver. The appointment of an interim receiver is an extraordinary remedy and I am satisfied that something more is required than evidence that the respondents owe money to contractors and utilities at the time of filing. It is necessary for the applicants to provide evidence that the appointment of a receiver is necessary. I am not satisfied that the applicants have met their burden of providing this evidence.

LXVI. I note that information filed by the respondents indicates that neither property taxes, nor insurance were in arrears at the date of filing.

LXVII. In both the affidavit evidence provided by Mr. Johnston, who is the President of the respondents, and the Trustee's Report dated November 15, 2013, there is evidence that the companies are meeting their operational expenses, including taxes, insurance, utilities, repairs and maintenance, during the proposal process. There is a lack of evidence from the applicants to counter this evidence.

LXVIII. As to the second issue raised by the applicants, as to the lack of repairs and maintenance to the property, I am satisfied, by evidence before me, that the applicants approved a five year work plan and the respondents are at the end of year one and have four more years to complete upgrades.

LXIX. PrincewaterhouseCoopers, the trustee, prepared a first report to the court on November 15, 2013 and made a recommendation as follows:

2013 NSSC 381 (CanLII)

32. The Trustee recommends that this Court does NOT issue an Order appointing PwC Inc. as Interim Receiver of the Companies pursuant to Section 47.1(1)(a) of the *BIA*, as such an order is not in the interest of any of the creditors for the following reasons:

(i.) The Companies have acted, and are acting, in good faith and with due diligence;

(ii.) No creditor will be materially prejudiced;

(iii.) The duties being requested of an Interim Receiver are similar to the statutory duties of a Trustee under a NOI;

(vi.) The Companies are required to receive and account to the Court for all income generated by the property under the NOI making an Interim Receiver redundant;

(v.) The Companies are taking commercially reasonable measures to protect and preserve the property, and to operate the Companies during the NOI period.

(vi.) PwC Inc. has not consented to be appointed as Interim Receiver;

(vii.) Additional costs of any Interim Receiver do not outweigh any possible benefit.

LXX. PricewaterhouseCoopers is already carrying out many of the same duties that a receiver would be mandated to carry out. The duties are set out under s. 54(7) of the *BIA*.

LXXI. This duplication of duties would increase the costs and mean less money for the general creditors.

2013 NSSC 381 (CanLII)

LXXII. With respect, the test is not whether the respondents were having financial difficulties prior to the filing. The test is one of necessity during the proposal period.

LXXIII. I am not satisfied that the applicants have met their burden of proving that the appointment of an interim receiver is necessary for the protection of the debtors estate, or the protection of some or all of the creditors. It is interesting that many of the creditors, some holding first position security on some of the applicant's property, were not even notified of the hearing by the applicants.

LXXIV. In any event, to appoint an interim receiver will serve to increase the costs of the proposal process substantially, and I see no necessity to so appoint an interim receiver.

LXXV. The applicants' motion to appoint an interim receiver is dismissed.

LXXVI. I will hear the parties as to costs.

Pickup, J.

2013 NSSC 381 (CanLII)

This is Exhibit “H” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Pre-Consultation Comments Report

Date:	January 17, 2024	
To: **cc:**	**Martin Quarcoopome**, Weston Consulting	mquarcoopome@westonconsulting.com
From:	**Leigh Musson**, Manager, Planning Services	
Contact Info:	T: 905-845-6601 ext. 3371 E: leigh.musson@oakville.ca	
Application:	**OPA/ZBA/SUB**	
Address:	**177-187 Cross Ave and 156-580 Argus Road**	
Description:	**To permit towers (50, 55 and 60 storeys), consisting of 1870 residential units and 1061 m2 of commercial space and 1030 parking spaces.**	
Meeting Date:	**January 17, 2024**	

NOTE: 2024 Planning application fees come into effect on January 1, 2024.

Applicants should review the Terms of Reference for supporting studies and Guidance documents prior to submitting the application.

Terms of References/Guidelines can be found: https://www.oakville.ca/business/terms-of-reference.html

Applications will be deemed complete when the following items have been provided to the Town:

- a completed application form,
- cover letter,
- comment response matrix that addresses pre-consultation comments,
- all information and materials prescribed by statute,
- an executed Pre-consultation Agreement,
- all supporting information and materials required to be provided with the initial submission pursuant to the Pre-consultation agreement in a digital format (PDF),
- the prescribed application fee(s).

General Information:

Revised and coordinated plans and documents which fully address the attached comments must be submitted according to the process outlined in the Step by Step Digital Submissions Guide on the Town of Oakville Website.

Other Applications:

Additional applications to other public agencies and governments, including, Provincial, Regional, Conservation Authority, and/or other Town Departments, may be necessary depending on the nature of the application.

File Naming:

Digital materials must be named in an organized and descriptive manner according to format outlined in Planning's Digital Submission Naming Conventions document.

Submission materials must be named according to the following format:

- **FileNumber_CondensedName_VersionNumber_Date (with no spaces)**

For example, your set of files should look like the following list:

- 00_CoverLetter_v1_2022-10-18
- 01_CRM_v1_2022-10-24
- 02_Aerial_v1_2022-03-05
- 03_Survey_v1_2021-02-23
- 04_SitePlan_v1_2022-10-15
- 05_SitePlanDetails_v1_2022-10-15
- Etc.

Requirements:

- NO spaces in the file name.
- NO special characters within the file name (e.g. @,#,$,%,&,*, /, \, |)
- ONLY Letters, Numbers, Dashes, Underscores and Periods are permitted in the file name.

Furthermore, all reports, documents and drawings submitted must:

- be presented in metric measure that can be accurately scaled
- be prepared, stamped and signed by a qualified professional architect (for site plan and architectural drawings), engineer (for site plan and engineering drawings/reports), or landscape architect (for landscape and tree protection drawings/reports)
- All submission of plans and/or studies must be clearly labelled and in a larger font size in the title block as the next submission by number, corresponding to the version number and date in the file name

Circulation Comments:

NOTE: The comments below are **preliminary** and additional comments may be provided once a formal application is submitted.

Oakville Departments

1 Planning Services
Leigh Musson, leigh.musson@oakville.ca

Pre-Consultation

The pre-consultation form is valid for 6 months, any extension request must be received BEFORE the approval lapses with the appropriate fee.

As part of your application, please include the pre-consultation form (executed by yourself and your client if relevant).

Please ensure all reports/plans follow the Town's Terms of reference/guidelines. Additionally, you can obtain information about the submission process on our website here.

Also consider the **pre-submission review** process which would allow staff to review your proposal in advance of the formal application. The pre-submission review fee will be credited toward the formal application fee if the application is submitted within 2-years of the start of the pre-submission review.

Submission without a pre-submission review:
Several issues were identified as part of the pre-consultation meeting. It is important to address these issues before submission, as there will not be an opportunity to resubmit the proposal to address issues. Planning staff will determine within 120 days of submitting a complete application if we will recommend to Council support or denial of the OPA/ZBA/SUB applications as submitted.

The applicant is also encouraged to 'uncouple' the OPA/SUB from the ZBA and submit the OPA/SUB independently of the ZBA. Stand-alone Official Plan Amendments/Draft Plan of Subdivisions are not caught under the Bill 109 refund timelines and by uncoupling the OPA/SUB, multiple circulations would be permitted. At the appropriate time when all issues have been addressed the ZBA can be submitted and the applications can proceed together for a decision.

Additional comments:

- Planning staff have consistently required the submission of a draft plan of subdivision with the OPA/ZBA applications. This will allow us to review the road layouts in conjunction with the other application under review.
- The applicant is strongly encouraged to continue discussions to acquire the garage site so that the block can be developed comprehensively.
- Context Plan/Area Design Plan (also see UD comments): Include Distrik's Argus/Cross, Hikers Haven (166 South Service Road) and Holiday Inn (590 Argus) sites and the subject lands. The context plan should also include (conceptually) how the garage property and the lands to the north could be developed
- Please consider a mix of uses (services/businesses/office space) at grade and within the second/third floor of the podium. Community uses such as grocery stores, schools are also encouraged.
- The applicant is encouraged to include more three-bedroom units for families.
- The applicant is encouraged to contact Oakville Hydro and Urban design to discuss transformer locations early in the process.
- The PJR should include an analysis on the current zoning permissions and the evolving Midtown Study work.
- ROW/daylight triangle sizes will be reviewed as part of the implementation work associated with the Midtown Study.

2 Planning Services, Urban Design
Nada Almasri and Philip Wiersma; nada.almasri@oakville.ca, philip.wiersma@oakville.ca

Pre-Consultation

List of Resources:

In framing our review and drafting our comments, we have utilized and relied upon the following:

- *Livable Oakville Official Plan*; including
  - Section 6 Urban Design (Part C (oakville.ca)) [pages C-15 to C-23]
  - Existing Midtown Oakville Policies
  - Draft Midtown OPA 2022
- Livable by Design Urban Design Manual (LbDM); specifically
  - Urban Design Direction for Oakville
  - Site Design and Development Standards(Livable by Design Manual (Part C) (oakville.ca)) [referenced to ensure site functionality]
- Development Application Guidelines / Terms of Reference

Matters to be addressed:

Horizontal Plane Shifts:

- An Area Design Plan is required as part of this development application in order to address coordination issues between landowners and phasing of developments, including the holdout parcel on the block. The scope of the Area Design Plan is to be discussed with staff.

  The Area Design Plan and Conceptual Block Plan should ensure that the proposed development does not landlock or compromise future development of these parcels. Further, the Area and Block Plans must demonstrate how the proposal complements and improves the community urban structure, provides functional site servicing, and reduces/mitigates any adverse impacts on the surrounding areas. It should also provide guidance on built form, access points, pedestrian midblock connections and overall compatibility.

- An east-west Promenade along the northern edge of Cross Avenue to the west of Trafalgar Road may be envisioned.
  - Design the promenade as a landscaped setback between the public sidewalk and building face characterized by hard or soft landscape treatment.
  - Treat the promenade as an extension of the public sidewalk and boulevard to create opportunities for people for activities and gatherings.
  - Provide entrances, active uses, and animated streetscape with architectural interest along the entire promenade frontage.

- Privately-Owned Publicly Accessible Spaces (POPS) play a great role providing much needed amenity space and should be designed as an integral part of the public realm and open spaces.
  - Enhance the legibility of the public nature of POPS to increase its usability by providing inviting and welcoming edges along the public frontage.
  - Include high-quality, universally accessible, and environmentally sustainable materials, four season landscaping, seating, pedestrian-scale lighting, trees, shade structures, weather protection, and screening, as appropriate.
  - Provide comfortable wind and shadow conditions for sitting out during spring, summer and fall months.
  - Include flexible spaces with features and programming opportunities to encourage year-round use.
  - Create attractive views and focal points within the POPS with opportunities for public art.

- Use POPS to provide midblock pedestrian connections to the surrounding blocks within the Midtown.
- Provide at least one side with a greater exposure to the street for the proposed central courtyard.
- Provide a meaningful proportion of length to width with a minimum size to include tree plantings and seating areas.
- Provide at least two points of access to a courtyard through increased frontages and midblock connections.
- Consider predictable pedestrian movement through the site and the adjacent or nearby public uses.
- Encourage south-facing POPS, as they maximize the space's exposure to direct sunlight.
- Locate services and back of house (BOH) away from the POPS edges to lessen any potential negative impacts.

- Midblock pedestrian connections are required to enhance pedestrian connectivity between the blocks.
  - Open the midblock connections to the sky, fully or partially, with appropriate scale and height of enclosing walls to provide for adequate sun and sky views.
  - Align midblock connections with the others in the surrounding blocks and the important view corridors, and locate pedestrian crossings at midblock locations where warranted
  - Provide a minimum width of 10 metres between building walls to achieve a true physical and visual connection. This condition must be enhanced in the transition between the promenade and courtyard POPS.
  - Provide a minimum width of 4 metres for the paved surface of the walkways within the midblock connections.
  - Animate building flankage along the connections with openings, active uses and architectural detailing to provide interest and enhance safety.

- Private shared amenity spaces are required at grade and on rooftops to address residents needs within the development.
  - Locate and design shared private outdoor amenity space to maximize access to sunlight and minimize noise and air quality impacts from site servicing.
  - Include high-quality, universally accessible, and environmentally sustainable materials, four season landscaping, seating, pedestrian-scale lighting, trees, shade structures, weather protection, screening, and programming opportunities, as appropriate.
  - Connect shared interior amenity spaces to shared outdoor amenity areas and provide windows and doors for direct physical and visual access, at grade and rooftops.

- The urban design brief should discuss how a pedestrian oriented environment is achieved, specifically in relation to the ground plane transition from the site to the public right-of-way. It is expected that a proposed flush transition will provide equitable access for people of all ages and abilities. The public / private realm transition should not be significantly reliant on ramps, stairs, or retaining walls.

- Ensure the submission materials show the conceptual streetscape right-of-ways, with current proposed right-of-way widths. Where retail abuts the right-of-way, strategic setbacks from the future property lines should be provided for a ground floor exterior marketing zone and outdoor dining.

- Primary residential and retail entrances should be oriented towards the public right-of-way and not towards the sites interior. Flush retail access from Cross Avenue is a priority.

- Tree canopy cover target for the site is 20%. Materials should discuss how this target could be achieved.

Vertical Plane Shifts:

- Provide a minimum base building/podium height between 10.5 metres and 80% of the adjacent street right-of-way (ROW) width up to a maximum of 6-storeys. Above the maximum height, stepback the building at a 45 degree angle from the main wall to maintain access to sunlight on the opposite side of the street.

- Vary the height and form of the base building to respect and respond appropriately to differences in adjacent building height, built-form character, open space size, and street width for each facing condition.

- Limit the tower floor plate size to a maximum of 750 square metres per floor, including all floor area within the main walls of the building, but excluding projected balconies. However, where the projecting balconies are contiguous and wrap around the entire tower or significant portions thereof, the massing may appear larger, therefore a decrease in floor plate size or increase in separation distances may be required to mitigate this impact.

- Multiple towers within a block, development site, or within close proximity to each other on abutting sites should vary in height from one another by a minimum of 25 metres in order to create variation in building height and a distinct skyline.
    - Provide greater separation distances proportionate to increases in building size and height for enhanced privacy, daylighting and sky views (given the proposed tower heights, the separation distance must be greater than 25m)
    - Provide variation in tower stepbacks and orientation to increase perceived and actual separation distance.
    - Minimize wind and shadow impact conditions through appropriate tower placement and heights.

- For the building base, provide a minimum separation of 20 meters for buildings with primary windows facing each other, and 15 meters for buildings with secondary windows facing each other, to protect for privacy and daylight and sky views. This is especially critical for the residential units fronting onto and overlooking the pedestrian mews.

- Stepback the tower component a minimum of 5 metres from the main wall of the building base to limit the visual impact of the tower at grade, improve wind conditions and access to sunlight and sky view in the surrounding area.

- On corner lots, at gateways, or within a view terminus, the building middle (tower) may extend down to ground level without a distinct building base.

- Some building frontages exceeds 55 metres in length with no significant breaks. A multi-storey major vertical continuous break is required to lessen the impact of this long massing along the public realm.

Materials needed for submission:

- [x] Urban Design Brief
- [x] Concept Plan
- [x] Shadow Impact Analysis
- [x] Area Design Plan
- [x] Wind Study
- [x] 3D SketchUp Model (simplified massing including some of the surrounding context)
- [x] Site Plan & Site Plan Details
- [x] Building Elevations & Renderings
- [x] Building Floor Plans (including roof Plan)
- [x] Landscape Plan & Details
- [ ] Pedestrian Circulation Plan
- [x] Streetscape Plan
- [ ] Site Servicing Plan
- [x] Grading & Drainage Plan
- [ ] Lighting Plan &/or Photometric Plan
- [x] Tree Canopy Cover Plan & calculation

3 Development Services, Development Engineer
Richard Renaud, richard.renaud@oakville.ca

Pre-Consultation

All drawings, reports and studies are to be prepared by a qualified professional.

1. **Topographic Survey – OPA/ZA**

- 5.0m beyond the property extents to determine external features and drainage patterns
- Determine and investigate any public or private servicing, utility, and access easements.
- No permanent structures as part of this development are to be in the easements.

2. **Functional Servicing Report (FSR)**

   a. **Site Servicing and Grading Plan – High level detail for OPA/ZA, more detail at subdivision engineering submission.**

- Sites shall be designed with a sewer network capable of capturing the 5 year storm event.
- Existing elevations along property line are to be maintained.

b. Stormwater Management Report

- Quantity controls will be required. Post development flow rates are to meet the pre-development flow rates (5 year storm) up to and including the 100 year storm event.
- Quality control to achieve Level 1 (enhanced)
- Investigate external drainage contribution. Existing drainage patterns are to be maintained or if altered, shall be accommodated without impacts to upstream lands.
- This site is within the midtown area. See midtown stormwater criteria below. These criteria will be updated shortly.
- Be advised that that there is a spill from the Morrison-Wedgewood Diversion Channel that has not been defined south/downstream of the QEW. The work to define the spill is underway and preliminary results are expected to be available within the next 4-5 months. There is a possibility that the spill will result in limitations to the development of parcels affected. The applicant can discuss this with CH, but at this time, be aware that the spill will be regulated and there may be impacts as to what is permitted from a development perspective.

3. Hydro geotechnical Report – OPA/ZA

- The hydro geotechnical report shall provide any temporary dewatering measures including any construction dewatering. No permanent dewatering is permitted. Perpetual groundwater discharges to the town's storm sewer are not permitted, and management of groundwater is required. Justification and details of the proposed management plan is required.
- See the temporary dewatering requirements below.

If you have any question about the information provided above, please do no hesitate to contact Richard Renaud at richard.renaud@oakville.ca

4. Urban Forestry – with OPA/ZA or with Site Plan application

- See attached declaration letter for the arborist to sign.

Please refer to the Town's Development Engineering Procedures and Guidelines manual for further direction. DEVELOPMENT ENGINEERING (oakville.ca)

If you have any question about the information provided regarding urban forestry, please do no hesitate to contact Tony Molnar at tony.molnar@oakville.ca

Midtown Stormwater Management Requirements

Thank you for your inquiry on the property at 177-187 Cross Avenue and 568-580 Argus Road. The following letter outlines stormwater management concerns and requirements for any stormwater management reports supporting development within Midtown Oakville.

Midtown Oakville has been designated as a growth area in the Town of Oakville via Livable Oakville, the town's Official Plan, as a result of the Places to Grow Act and Halton Region's Official Plan. As a result, the town has recently completed the Midtown EA that outlines road network improvements and stormwater management (SWM) criteria to support the growth in population and employment for this area. The details of

the Midtown EA are available on the town's Website via the following link: https://www.oakville.ca/getmedia/b001fc8a-b40c-4043-abbb-f680704aebc1/transportation-roads-midtown-oakville-ea-appendix-j.pdf

Areas of known drainage, erosion and flooding concerns exist within and downstream of Midtown Oakville. Preliminary SWM criteria have been developed with the intent of improving SWM practices in the area while preventing further exacerbation of existing issues.

Preliminary SWM criteria for future development within Midtown Oakville include the following:

- Any future development within the Midtown Oakville study area is to utilize the Midtown Oakville EA Study hydrology model to demonstrate that the target flows are met. The Regional storm event is also to be modeled in order to determine the downstream impacts of any future development within the Midtown Oakville study area.

- Minimum storage is to be provided by any future developments as follows:

    - Lower Morrison Creek 280.9 m^3/ha
    - Lower Wedgewood Creek 250.4 m^3/ha
    - 16 Mile Creek 68.2 m^3/ha

  These targets shall be applied to the entire site area.

- Any future development within the Midtown Oakville study area is to achieve Enhanced Level 1 Protection. A treatment train approach incorporating both source and lot level controls shall be considered and will likely be necessary to comprehensively achieve the SWM criteria.

- Any future development within the Midtown Oakville study area shall consider water balance by achieving the greater of either of the two (2) following requirements:

    - Provide a 25 mm retention on site as per the Stormwater Master Plan over the entire area of the proposed development (no initial abstractions); or
    - Retain stormwater on-site to achieve an equivalent annual volume of infiltration as predevelopment conditions, as per Section 3.2 of the MOE Stormwater Management Planning and Design Manual (March 2003).

  The above water balance can be achieved using a variety of low impact development (LID) measures including but not limited to:

    • Rainwater harvesting;

    • Green roofs;

    • Infiltration trenches and soakaway pits;

    • Bioretention;

    • Permeable pavement; and

    • Perforated pipe systems.

If you have any question about the information SWM criteria provided, please do no hesitate to contact Kristina Parker at kristina.parker@oakville.ca

Short Term Dewatering

For short-term water/groundwater discharges, the town does not have a formal permit for dewatering water/groundwater during construction; however, a consent from the town is required prior to the discharges. The following outlines the process and the requirements in general.

The short-term discharges must meet all the town's Storm Sewer By-law (2009-031) requirements **at all time** and the discharge activity will have no negative impact to the storm sewer system, not interfere with the proper operation of a storm sewer, not impair the water quality and the environment, and/or cause a nuisance in Oakville.

The bylaw can be found at: https://assets.oakville.ca/blis/BylawIndexLibrary/2009-031.pdf

Development Services staff would review the following information: flowrate, duration/extent of discharge, timing. We need the information to determine if the storm sewer system has capacity issues in relation to the discharge.

Discharge information related to the capacity.

- Maximum Daily Discharge Volume
- Expected Maximum Discharge Rate
- Expected Total Volume
- Estimated Discharge Period
- Frequency of Discharge
- Contingency plan for handling rain events for no discharge to the stormwater system scenario
- Locations identify where the water will be generated (with the site)
- Location/connection of the storm sewer system for the discharge – If first discharged at a private system, then where would it connect to the town system?
- Identify to the closest storm sewer outlet to a watercourse
- As to the town system (or to the connection from private to town system), identify the pipe size of storm sewer.

Water Quality and Treatment System information

As mentioned before the discharge is required to meet the storm sewer by-law limits at all time, if the site or the discharge water is either contaminated or the water require treatment to meet the by-law's limits. Additional information is required:

- If the site has a record of site conditions or contamination has been identified
- List of parameters that do not meet the storm sewer by-law limits
- Quality of the treated water: before and after treatment
- Other standards the treated water is in compliance? (MECP, the town's storm sewer, and/or others)
- Is there any residual odour after treatment

- Type of treatment system will be operated to comply with the storm sewer by-law limits. Does the treatment system have an ECA for its operation? Who will be operating the system?
- Location of the system related to the site
- Protocol/procedure for treatment process upset or system failure, especially for the continuous flow system
- Protocol/procedure for dealing with exceedance of the treated water
- Protocol/procedure for ensuring the storm sewer by-law is met at all times before discharge, including contingency plan, preventative and/or corrective actions during the treatment system failure

Flow and Water Quality Monitoring Plan

- Monitoring Plan for flowrates (groundwater and surface water, if separated) and water quality for the whole duration of the short-term discharge period, including parameters and frequency that adapted to changes at different circumstances

We would appreciate to include all the information requested into **one** document (in a letter or report format rather than through multiple emails and attachments). It will definitely assist staff to review your request more efficiently.

Lastly, an MECP ECA/EASR may be required for the discharge. Please contact Tim Edwards, District Engineer, MECP Halton-Peel District Office at Tim.Edwards@ontario.ca for more details about the MECP requirements for discharging to the storm sewer.

ESA – with OPA/ZA

a) An Environmental Site Assessment (ESA) will be required to demonstrate the any lands that will be transferred to the town are certified for environmentally clean. An Environmental Certification of Land to be transferred to Town will be required.

If you have any question about the information provided regarding the dewatering or the ESA, please do no hesitate to contact Jeffrey Lee at jeffrey.lee@oakville.ca

Road Corridor and Transportation

Current requirements

The Transportation and Engineering department have reviewed the road widening requirements for the property known as 177-187 Cross Avenue and 580 Argus Rd. The Midtown study lists Cross Avenue as an arterial with a width of 35 meters.

Transportation and Engineering require any lands within **17.50** metres of the centreline of Cross Avenue. This will require a road widening of **4.50** meters across the frontage of 177 - 187 Cross Avenue.

Daylight Triangle widening –The daylight corner for an arterial road meeting a local road should be a 15.0 metre x 15.0 metre. As such, the Town of Oakville require a 15 meter x 15 meter daylight triangle widening at the corner of Cross Avenue and Argus Road.

The above described lands shall be dedicated with clear title, free and clear of encumbrances and therefore, all encroachments within the road allowance should be removed. The present parking lot configuration has

constructed a parking space within the existing daylight corner at Cross and Argus. Please have the applicant remove the encroachment from municipal property.

If you have any question about the information provided regarding the dewatering or the ESA, please do no hesitate to contact Vince Blosser at vince.blosser@oakville.ca

Schedule A

Town of Oakville

Tree Declaration Letter

This letter will serve as confirmation of the matters with regards to trees and the development site. Applicants are required to complete and submit this Declaration Letter to Urban Forestry Section of Development Services if all the following conditions apply. This document is to be completed by a Qualified Tree Consultant.

1. **NO** trees are located (all sizes) on the municipal property being within 6 metres of the development site.

2. **NO** trees are present on the development site, trees possessing a diameter (measured at 1.4 metres above ground level) of 15 centimetres or greater.

3. **NO** "Boundary Line Trees" are present, being co-owned trees positioned on the lot line (i.e. shared).

4. **NO** trees are present on abutting private properties within 6 metres of the subject site.

_____ _____

Municipal address of property under review | Name(s) of property owner (s)

_____ _____

Print Name of Qualified Tree Consultant (Include Credentials) | Signature

_____ _____

Submissions

Please be advised that the submission of the Declaration Letter with an original signature is to be submitted to the Town of Oakville, Development Services - Urban Forestry:

Present Contacts: serviceoakville@oakville.ca or tony.molnar@oakville.ca or michelle.drmanic@oakville.ca

4 Transportation Services, Transportation Engineer

Aquisha Khan, aquisha.khan@oakville.ca

Pre-Consultation

Preliminary Comments are based on the submitted documents:

- Applicant to ensure entrance width at the property line of the development should meet the minimum widths for access onto:
  - Municipal Roads as per the Town of Oakville Access Guideline – By-law 1988-220.
  - Regional Roads as per the Region's Access Management Guidelines.
- Applicant to identify the boundary roads surrounding the proposed site.
  - Illustrate the east-west road north of the development from the E-W Argus Road.
  - Illustrate the north-south road west of the development from Cross Avenue.
  - Clarify the Illustration of the access connectivity to the exiting/proposed network.
- Applicant to provide north arrows on all site concept drawings as well as include dimensions for the site drive aisle and the future road ROW that is being protected for future local road.
- Applicant to confirm that the west/east proposed accesses maintain a corner clearance of at least 70 m from the signalized intersections at Cross Avenue.
- Applicant to confirm that the north proposed access maintains a corner clearance of at least 55 m from N/S Argus Road.
- Ensure that daylight/sight triangles are 15 x 15 m for the following intersection:
  - Cross Avenue & Argus Road
  - Cross Avenue & Future Road
- Ensure that daylight/sight triangles are 7.5 x 7.5 m for all accesses onto the future local roads.
- Ensure a pick-up drop off area for paratransit is available.
- Confirm the bicycle parking locations.
- Applicant is advised to reach out and coordinate with the adjacent development applications owners and Metrolinx to ensure the proposed network is consistent with their proposed development.
- Applicant is advised that things are changing with respect to the road network and the ROW requirements within the Midtown Area, and it is suggested they wait for the results of the process and amend the proposal accordingly.

Submission Requirements:

The following would be required at this time:

- Transportation Impact Study (TIS) with an approved scope of work from the Town/Region/Provincial.
- Turning Movement Plans for all anticipated vehicle types.
- Parking Justification Plan
- Transportation Demand Management Plan with an approved scope of work from town staff.

For future submission:

- Bicycle/Pedestrian Connectivity Plan (provide/illustrate the impacts to existing trails and sidewalk)
- Construction Mitigation Plan/Traffic Control Plan (to be provided at the time of building application)

5 Building Services, Zoning Examiner

Matt Rubic, matt.rubic@oakville.ca

Pre-Consultation

The following preliminary comments are based on the material provided for discussion purposes only and should not be construed as formal zoning comments on the proposal.

Zoning By-law Amendment

1. The property is currently zoned MTC sp: 369. The proposal of up to 60 storeys exceeds the current maximum of 12-20 storeys. The proposal also deviates from the required parking and required building locations under the current regulations. It is recommended to review the current regulations in detail and provide a draft by-law based on the changes needed to accommodate the proposal. Further comments will be provided when the draft by-law is circulated with the application for the Zoning by-law Amendment.

External Agencies

6 Conservation Halton
Sean Stewart, sstewart@hrca.on.ca

Pre-Consultation

- The subject property may be regulated by CH as it may contain a flood hazard (spill) associated with the Morrison-Wedgewood Diversion Channel. Until the nature and extent of the spill in the area of the subject property is defined through a specific Flood Hazard Assessment, CH's spill policy is updated or further direction on the regulation of spills is provided by the Province, formal permission under Ontario Regulation 162/06 will not be required from CH to develop in this area.
- CH defers SWM review to the Town.
- Given the above, CH does not need to be circulated on the forthcoming application.

CH will not attend the meeting, however, any inquiries can be directed to Sean Stewart sstewart@hrca.on.ca

7 Region of Halton, Planning & Public Works Dept
Michael Bohdanowicz, michael.bohdanowicz@halton.ca

Pre-Consultation

Halton REGION

Date of Pre-Consultation Meeting: January 17, 2024.

Subject Lands: 177-187 Cross Ave. & 580 Argus Rd.

Type of Application: OPA/ZBA.

Proposal: Proposal for a mixed-use development composed 3 mixed-use buildings.

- Building 1: 7 storey podium, two towers (55 and 60 storeys), retail space and residential units.
- Building 2: 7 storey podium, one tower (50 storeys), retail space and residential units.
- Building 3: 7 storey, retail use, connected through an enclosed pedestrian bridge to Building 1.

Previous Pre-Consultation Meeting: N/A.

Regional staff has reviewed the Pre-Consultation for 177-187 Cross Ave. & 580 Argus Rd. and offer the following comments:

Premature:

- It is Regional Staff's opinion that OPA/ZBA applications are premature at this time and until the recommendations of the Town of Oakville's Midtown Implementation Strategy and other municipal works are finalized.

Designation:

- The subject lands are designated "Urban Area" according to the 2009 Regional Official Plan (ROP).

ROPA 49:

- Regional Official Plan Amendment (ROPA) 49 was adopted by Regional Council on June 15, 2022 and was approved by the Minister on November 4, 2022 with modifications. Please have consideration for ROPA 49 when preparing your submission.

Site Contamination:

- In accordance with S.147(17) of the Region's Official Plan states that a property is to be free of contamination prior to any development/change of use taking place. Staff require the submission of a Phase I ESA, at minimum to OREG standards (completed within the past 18 months), with a letter of reliance (according to Halton Region's template). Additional Environmental Site Assessments may be required depending upon the recommendation of the Phase 1 ESA. Staff note it appears that a mandatory record of site condition (RSC) may be required, as the proposed development proposes to go to a more sensitive land use.
- Submission of a Regional Environmental Site Screening Questionnaire (ESSQ) is required. Please note that the response to Question 1 of the ESSQ should be revised as the proposed development involves changing to a more sensitive land use.

Regional Municipality of Halton
HEAD OFFICE: 1151 Bronte Rd, Oakville, ON L6M 3L1
905-825-6000 | Toll free: 1-866-442-5866

Land Use Compatibility:

- Land use compatibility assessment is required that explains the existing surrounding land uses and to address how the proposed land use would be impacted by the adjacent land uses and how the proposed land use would impact the adjacent land uses. Please make mention to Halton Region's land use compatibility and the Ministry's guidelines and any mitigation measures that are being proposed to minimize the adverse effects of noise, vibration and odour to the surrounding sensitive land uses.

Noise:

- In accordance with Section 143 (9) a) of the ROP, a Noise Study is required to satisfaction of the applicable rail authority. Regional staff will require confirmation from rail authority that the study has been completed to their satisfaction and there are no outstanding concerns in relation to the subject lands proximity to the rail corridor. The Nosie Study would typically identify what type of features the applicant needs to incorporate into the development.

Regional Infrastructure:

- A Functional Servicing Report (FSR) would be required to be submitted with the application that demonstrates that the existing water system in the area can support the proposed development and that the existing downstream sewer system can accommodate the development.
- There are downstream sanitary sewer capacity issues that will impact the development of this property.
- The FSR should demonstrate how municipal services will be provided and/or upgraded in order to service this site.
- Please be aware that the subject property is located in an area that was subject to a recent Area Servicing Plan (ASP) completed by the Region. The servicing of the subject property may be impacted by the recommendations of servicing in the ASP. The applicants consulting engineer should review the ASP in relation to this development.
- The FSR should address the existing downstream sanitary sewer capacity issues.

Waste Management:

- The residential portion of waste (recycling, organics and garbage) may be eligible for Region waste collection, providing the requirements be met as outlined in Development Design Guidelines for Source Separation of Solid Waste.
- This location is not eligible for commercial waste collection for any commercial units proposed. These must be on private collection for waste materials; however, the Supplementary Waste Plan must demonstrate how waste will be managed, stored and collected in a manner that is safe, functional and accessible.
- Section 1.4 Development Application Requirements
  - Please ensure that a detailed Supplementary Waste Plan is submitted with the application per tower in regards to waste collection. The waste plan for the site must show how Residential waste will be managed, stored and collected. Region waste will not service commercial or non-residential space for waste collection. This must be on private waste collection.
- Building 1- Towers A & B – 55-60 Stories
  - Minimum requirements are outlined in the Development Design Guidelines for Source Separation of Solid Waste.

- Turning Radius: Minimum 13 m turning radius from centre line required throughout site and when entering or exiting loading area for waste collection. This must be shown on auto turn plans.
- Centre line turning radius not indicated. Please confirm minimum turning radius has been met. Please submit a detailed vehicle traffic plan to clarify the turning radius, length of the head-on approach (minimum 18 m) and the length the truck will be required to reverse.
- Vertical Clearance for Loading area:
  - The plans indicate where the common collection point will be located, which is internal to Tower A loading area.
  - Please submit a scaled drawing indicating how the bins will be configured (staging area) including dimensions, grade, waste receptacle placement, proposed doors. No containers are shown in staging area currently.
- Considerations include:
  - Sufficient space for a Front End collection truck and a side Loader collection truck to operate safely.
  - Occupants of the vehicle must be able to open both doors and exit the vehicle, and be able to walk the perimeter of the vehicle unhindered. Ensure there is sufficient space to accommodate the length of the truck with the forks extended to carry out waste collection of all waste receptacles.
  - Vertical clearance required for loading regional collection vehicles is 7.5 m. Loading area required width is 6.0 m. Vertical clearance within the loading area currently is 6.1 m. This needs to change to 7.5 m for regional collection vehicles to collect waste materials. The overhead garage door height can be 5.0 min in height.
- Section 1.9 Storage and Internal Handling Requirements
  - Bulky Waste Storage: Bulk room is not indicated on the site plan.
  - The garbage compactor rooms and recycling areas are indicated. Submit scaled drawings showing the dimensions and configurations of these areas, including how the bins and diversion equipment will be placed in the rooms.
  - Region waste recommends 3 separate waste chutes for buildings for diversion.
  - Please indicate all green organic carts in waste room. None are shown. Halton Region only collects 360 L Carts (95 gal.) for organics collection.
  - Please show doors entering and exiting the waste room. None are indicated. Doors must be 2.2 m wide.

- Section 1.8.1 Waste Capacity Requirements for residential waste
  - Building 1 – Towers A & B – 55 and 60 Stories
    - Regional staff request that the number of residential units are clarified.
    - Regional staff note that Regional waste collection would utilize 3 to 6 yard loose recycling front end bins, 360 L Organics Carts, and 3 yard compacted garbage front end bins (space for extra bin recommended). Please ensure that there is adequate space for all containers.
    - Waste collection frequencies vary.
  - Building 2 – Tower C – 50 Stories
    - Regional staff request that the number of residential units are clarified.
    - Regional staff note that Regional waste collection would utilize 3 to 6 yard loose recycling front end bins, 360 L Organics Carts, and 3 yard compacted garbage front end bins (space for extra bin recommended). Please ensure that there is adequate space for all containers.
    - Waste collection frequencies vary.

- Minimum requirements are outlined in the Development Design Guidelines for Source Separation of Solid Waste.
- Turning Radius: All loading and truck movements will be completed from Tower A loading space.
- Vertical Clearance for Loading Area: All loading of waste materials will be completed from Tower A loading space.

- Section 1.9 Storage and Internal Handling Requirements:
  - Bulky Waste Storage: Bulk room is not indicated for Tower B. Please indicate where bulk waste storage will be for Tower B.
  - The garbage compactor rooms and recycling areas are indicated. Submit scaled drawings showing the dimensions and configurations of these areas, including how the bins and diversion equipment will be placed in the rooms.
  - Region waste recommends 3 separate waste chutes in Building.
  - Please indicate all green organic carts in waste room. None are shown. This is to determine if waste room is large enough to store all organics carts. Halton Region only collects 360 L Carts (95 gal.) for organics collection.
  - Please show doors entering and exiting the waste room. Doors must be 2.2 m wide to account for movement of bins.
  - Please indicate how bins will be brought form Garbage Room 2 to Tower A loading area. Please show path of waste container movement.
- Section 1.8.1 Waste Capacity Requirements for Residential Waste
  - Building 3 – Building D
    - Regional staff request that the number of residential units are clarified.
    - Regional staff note that Regional waste collection would utilize 3 to 6 yard loose recycling front end bins, 360 L Organics Carts, and 3 yard compacted garbage front end bins (space for extra bin recommended). Please ensure that there is adequate space for all containers.
    - Waste collection frequencies vary.
- Any structures that will be driven over (i.e. the parking garage) should have an indication that these have been certified by a Professional Engineer that they are rated for 35 tonnes minimum.
- A completed drive through agreement must be submitted before collection is to commence.

Transportation:

- A Transportation Impact Study (TIS) in support of a development within Midtown Oakville is to be completed in consideration of the recommendations of the Town of Oakville's Midtown Implementation Strategy including the phasing of required infrastructure to support the site and allow for the successful progression of development.
- Given the scale and impact of a potential development on the Transportation Network the detailed phasing and availability of supporting infrastructure must be clearly outlined at the outset of the application and documented in the Transportation Impact Study. It must be clearly outlined what existing and future transportation network improvements will be required to support the development.
- A Transportation Study terms of reference must be submitted to Halton Region, Town of Oakville and the Ministry of Transportation, prior to the start of the Study.

Region of Halton Economic Development Services Advisory Note: Halton Region Employment Land Concierge

- In order to assist and facilitate industrial, commercial and institutional development, the Halton Employment Land Concierge is a complimentary service offered by Economic Development and other Regional departments specifically with:
  - facilitating internal discussions at the Region during the development process;
  - liaising between internal departments and other relevant government agencies; and
  - providing guidance on strategic partnerships with industry contacts and local businesses.
- For more information, please visit https://www.halton.ca/For-Business/Invest-Halton/Employment-Land-Concierge or contact Stephanie Mazhari, Manager – Entrepreneurship Services by email Stephanie.Mazhari@halton.ca or phone 905-825-6000 ext. 7229.

Submission Requirements:

- Cover letter.
- Applicable Regional Fee.
  - Information on how to pay Regional development application fees available here.
- Complete Application Forms.
- Site Plan Drawings.
- Environmental Site Screening Questionnaire (ESSQ). Please note Halton Region has a new ESSQ to be completed by the Applicant within the updated Site Contamination Protocol.
- Phase One Environmental Site Assessment (ESA) report (at minimum) with LoR and RSC.
- FSR.
- Noise Study (completed to satisfaction of rail authority).
- Land-Use Compatibility Assessment.
- Transportation Impact Study (with approved Terms of Reference).
- Noise Assessment Study (with approved Terms of Reference).
- Waste Management Plan and Supplementary Waste Plan.

Pre-Submission Requirements:

Regional staff would encourage the applicant to submit and resolve any potential issues with the submission requirements listed above within the Town's pre-submission process.

Halton Region Economic Development
December 8, 2020

Message for all Non-Residential Pre-Consultation Notes on the Halton Employment Land Concierge

Halton Region Employment Land Concierge (Economic Development)

Pursuant to the 2019-2022 Halton Region Strategic Business Plan, Economic Development launched an Employment Land Concierge function in early 2020 to assist and facilitate non-residential development and to support businesses interested in locating or expanding in Halton.

The Halton Employment Land Concierge is a complimentary service offered by Economic Development, working closely with other Regional departments, which assist industrial, commercial and institutional (ICI) development applicants with:

- facilitating internal discussions at the Region during the development process;
- liaising between internal departments and other relevant government agencies; and
- providing guidance on strategic partnerships with industry contacts and local businesses.

The function is among Economic Development's range of service offerings to support investment, development and the broader business community in Halton that includes entrepreneurship, small business support and export assistance.

For more information, please visit https://www.halton.ca/For-Business/Invest-Halton/Employment-Land-Concierge

Contact:
Christopher James, Economic Development Officer
Email: Christopher.James@halton.ca
Phone: 905-825-6000 ext. 7828

[Letterhead of Consultant]

[Date]

TO: The Corporation of the Town of Oakville
1225 Trafalgar Road
Oakville, ON L6H 0H3
Attention: **Planner name**

TO: The Regional Municipality of Halton
1151 Bronte Road
Oakville, ON L6M 3L1
Attention: Ryan Veenendaal

Re: Reliance Letter for [Property Information e.g., municipal address and/or Legal Description, Town's reference number] (the "Property")

[Name of consultant] (the "Consultant") has prepared the following report(s) on behalf on [**Name of developer/ owner]** (the "Client"):

• Insert title, date and file number of report(s) (the "Report")

We confirm the Report including the representations, assumptions, findings, opinions and recommendations contained in the Report, can be relied on by The Corporation of the Town of Oakville (the "Town"), The Regional Municipality of Halton (the "Region") and their peer reviewers as if the Report was prepared for the use and benefit of the Town and the Region notwithstanding any statement to the contrary contained in the Report and excluding any limitation on liability agreed to by the Client. The Consultant further agrees that in the case of any inconsistency between this Reliance Letter and any limitations within the Report provided to the Town, the provisions in this Reliance Letter shall prevail.

We acknowledge and agree that the Town and the Region will utilize the Report for the purposes of assessing the environmental risk of the Property. We confirm that the Report was prepared, and completed by or under the supervision of a Qualified Person as defined under Ontario Regulation 153/04 (as amended), and in accordance with environmental laws and regulations applicable at the time of the investigation.

The Consultant has and will maintain Professional Liability insurance coverage of no less than $2,000,000 and attached to this letter is proof of the insurance.

Yours truly,

[Name of Consultant with Qualified Person designation, title, and contact information]

Halton Region
Planning Services
Tel: 905-825-6000 Fax: 905-825-8822
Toll Free: 1-866-4HALTON (1-866-442-5866)
www.halton.ca

Site-Screening Questionnaire

Legal Description and Municipal Address: _____

Applicant/Corporate Name: _____

1	Does this development proposal require a change in property use that is prescribed under the Environmental Protection Act and Section 14 of O. Reg. 153/04 (see Protocol Table 1)? If yes, then a Record of Site Condition must be filed on the Provincial Environmental Site Registry.	☐ Yes	☐ No	☐ Uncertain
2	Has the property or any adjacent lands ever been used as an Enhanced Investigation Property as defined in O. Reg. 153/04 (e.g., industrial uses; chemical warehousing; automotive repair garage; bulk liquid dispensing facility, including a gasoline outlet and/or a dry-cleaning equipment)?	☐ Yes	☐ No	☐ Uncertain
3	Has landfilling or waste dumping or fill of unknown quality ever been placed on or immediately adjacent to the property?	☐ Yes	☐ No	☐ Uncertain
4	Has there ever been any above ground or underground storage tanks for fuels or chemicals on the property?	☐ Yes	☐ No	☐ Uncertain
5	Have any of the buildings on the subject property been heated by fuel oil?	☐ Yes	☐ No	☐ Uncertain
6	Has the property ever used for agricultural operation where herbicide, fungicides, or pesticides have been applied?	☐ Yes	☐ No	☐ Uncertain
7	Do or have the subject lands or lands abutting it previously or currently supported one or more of the Potentially Contaminating Activities identified in Table 2 of Schedule D of O. Reg. 153/04, as amended (see Table 4, attached)?	☐ Yes	☐ No	☐ Uncertain
8	Has the property ever stored, generated, or accepted hazardous materials requiring Hazardous Waste Information Network (HWIN) registration or other permits?	☐ Yes	☐ No	☐ Uncertain
9	Have any designated substances (e.g., asbestos containing materials, lead-based paint, PCB-based paints, urea formaldehyde foam insulation, etc.) been stored and/or utilized on the property (including within structures)?	☐ Yes	☐ No	☐ Uncertain
10	Will lands be dedicated to the Region or a Local Municipality as part of this application (including road allowances)?	☐ Yes	☐ No	☐ Uncertain
11	Have any environmental documents (e.g., Phase One and Two Environmental Site Assessments, Records of Site Condition, etc.) ever been prepared for the subject property? If yes, please submit these documents in digital and hardcopy format with your application together with a letter of reliance granting third party reliance on the documents to the Region of Halton[1].	☐ Yes	☐ No	☐ Uncertain

[1] Information from previous environmental documents will be taken into account for application review. However, as required by the Protocol, only ESA reports prepared in compliance with O. Reg. 153/04 will count towards approval requirements.

Certification

I, _____ am the registered owner/authorized agent or Qualified Person (as defined in O. Reg. 153/04) for the owner of the land that is the subject of this document and to the best of my knowledge, the information provided in this questionnaire is true.

Sworn (or declared) and stamped before me _____
Commissioner of Oaths (Print Name)

in the _____, this _____ day of _____ 20____
City/Town/Municipality Day Month Year

_____
Commissioner of Oaths
(signature)

_____
Registered Owner/Authorized Agent
(signature)

_____
Name of the Company (if applicable)

_____
Owner / Authorized Agent Contact information

_____
Qualified Person (if applicable)
(signature)

_____
Designation of Qualified Person

_____
Qualified Person Contact information

Regional File #: _____ Local Municipal File #: _____

Halton

Halton.ca 311

B-3

Table 4: Potentially contaminating activities. From Table 2, Schedule D of O. Reg. 153/04.

Item	Potentially Contaminating Activity
1	Acid and Alkali Manufacturing, Processing and Bulk Storage
2	Adhesives and Resins Manufacturing, Processing and Bulk Storage
3	Airstrips and Hangars Operation
4	Antifreeze and De-icing Manufacturing and Bulk Storage
5	Asphalt and Bitumen Manufacturing
6	Battery Manufacturing, Recycling and Bulk Storage
7	Boat Manufacturing
8	Chemical Manufacturing, Processing and Bulk Storage
9	Coal Gasification
10	Commercial Autobody Shops
11	Commercial Trucking and Container Terminals
12	Concrete, Cement and Lime Manufacturing
13	Cosmetics Manufacturing, Processing and Bulk Storage
14	Crude Oil Refining, Processing and Bulk Storage
15	Discharge of Brine related to oil and gas production
16	Drum and Barrel and Tank Reconditioning and Recycling
17	Dye Manufacturing, Processing and Bulk Storage
18	Electricity Generation, Transformation and Power Stations
19	Electronic and Computer Equipment Manufacturing
20	Explosives and Ammunition Manufacturing, Production and Bulk Storage
21	Explosives and Firing Range
22	Fertilizer Manufacturing, Processing and Bulk Storage
23	Fire Retardant Manufacturing, Processing and Bulk Storage
24	Fire Training
25	Flocculants Manufacturing, Processing and Bulk Storage
26	Foam and Expanded Foam Manufacturing and Processing
27	Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles
28	Gasoline and Associated Products Storage in Fixed Tanks
29	Glass Manufacturing
30	Importation of Fill Material of Unknown Quality
31	Ink Manufacturing, Processing and Bulk Storage
32	Iron and Steel Manufacturing and Processing
33	Metal Treatment, Coating, Plating and Finishing
34	Metal Fabrication
35	Mining, Smelting and Refining; Ore Processing; Tailings Storage
36	Oil Production
37	Operation of Dry Cleaning Equipment (where chemicals are used)
38	Ordnance Use
39	Paints Manufacturing, Processing and Bulk Storage
40	Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
41	Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage
42	Pharmaceutical Manufacturing and Processing
43	Plastics (including Fibreglass) Manufacturing and Processing
44	Port Activities, including Operation and Maintenance of Wharves and Docks
45	Pulp, Paper and Paperboard Manufacturing and Processing
46	Rail Yards, Tracks and Spurs
47	Rubber Manufacturing and Processing
48	Salt Manufacturing, Processing and Bulk Storage
49	Salvage Yard, including automobile wrecking
50	Soap and Detergent Manufacturing, Processing and Bulk Storage
51	Solvent Manufacturing, Processing and Bulk Storage
52	Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems
53	Tannery
54	Textile Manufacturing and Processing
55	Transformer Manufacturing, Processing and Use
56	Treatment of Sewage equal to or greater than 10,000 litres per day
57	Vehicles and Associated Parts Manufacturing
58	Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners
59	Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products

The Regional Municipality of Halton 2024

COMMUNITY PLANNING
DEVELOPMENT APPLICATION REQUIREMENTS

Pre-Consultation	Applicants are strongly encouraged to consult with Regional Staff prior to the submission of an application to discuss specific Regional requirements. The checklists below may only represent a portion of the supporting information required by Halton Region. Incomplete applications will not be processed.
Assisted Housing	Applications for Assisted Housing projects are exempt from Regional Development Application fees. Proposals that incorporate an Assisted Housing component may be eligible for a pro-rated reduction in Regional fees. Projects must conform to the "Assisted Housing" definition in the current Regional Official Plan. Approval is at the sole discretion of the Chief Planning Official of the Region of Halton.
Other Requirements	Other Regional Sections/Divisions/Departments may have additional requirements and fees.
Fee Payment	Please contact Planning Services for payment options at planningFees@halton.ca Fees include all applicable taxes unless otherwise noted. HST Number 12360 9950 RT0001

Health Department - Lot Assessment Fee

* Applications requiring Health Dept. lot assessment must add $142.00 per lot to the application fee.

Regional Official Plan Amendment Application

$11,273.50

Regional Official Plan Amendment (Pits and Quarries)

$158,775.31

- ❑ 15 copies of the completed Regional Official Plan Amendment Application form
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 15 copies of the Proposed Regional Official Plan Amendment
- ❑ 3 copies of any accompanying plans/technical reports
  e.g. Planning Justification, Noise, Traffic, Environmental Impact Assessment, Agricultural Impact Assessment, Functional Servicing Reports
- ❑ 1 copy of Phase I/II Environmental Site Assessment report

Public Meeting Advertising Fee

$ Actual Cost

Local Official Plan Amendment (Applicant Initiated)

$9,526.05

- ❑ 3 copies of the completed Application form and, if applicable
- ❑ 3 copies of the Official Plan Amendment Application
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 3 copies of the Proposed Plans & Key Maps
- ❑ 3 copies of any accompanying plans/technical reports
  e.g. Planning Justification, Noise, Traffic, Environmental Impact Assessment, Agricultural Impact Assessment, Functional Servicing Reports
- ❑ 1 copy of Phase I/II Environmental Site Assessment report

Applicant Initiated Revision

$4,763.04

Local Official Plan Amendment Requiring Regional Approval (Applicant Initiated)

$9,526.13

Same requirements as above.

Applicant Initiated Revision

$4,763.04

Local Official Plan Amendment (Municipally Initiated)

- ❑ 3 copies of the completed Application form and, if applicable
- ❑ 3 copies of the Official Plan Amendment Application
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 3 copies of the Proposed Plans & Context Maps
- ❑ 3 copies of the Draft Amendment
- ❑ 3 copies of any accompanying plans/technical reports
  e.g. Planning Justification, Traffic, Environmental Impact Assessment, Agricultural Impact Assessment, Functional Servicing Reports
- ❑ 1 copy of Phase I/II Environmental Site Assessment report

Minor Variance Application

$39.71 *additional Health Dept. lot assessment fee may be required

- ❑ 1 copy of the completed Application form or 2 copies if the development is not within the Urban Area

Zoning By-Law Amendment (Applicant Initiated)

$1,123.65

- ❑ 3 copies of the completed Application form, and if applicable
- ❑ 3 copies of the completed Re-Zoning Application
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 2 copies of the detailed Landscape Plan (if abutting a Regional Road)
- ❑ 2 copies of any accompanying plans/technical reports
  e.g. Planning Justification, Traffic, Functional Servicing Reports
- ❑ 1 copy of Phase I/II Environmental Site Assessment report

Holding By-law Removal

- ❑ $396.82

Temporary Use By-law Permits and Renewals

$634.90

Revisions to Application

$561.85

Zoning By-Law Amendment (Municipally Initiated)

- ❑ 3 copies of the completed Application form, and if applicable
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 3 copies of the completed Re-Zoning Application
- ❑ 2 copies of the detailed Landscape Plan (if abutting a Regional Road)
- ❑ 2 copies of any accompanying plans/technical reports
  e.g. Planning Justification, Traffic, Functional Servicing Reports
- ❑ 1 copy of Phase I/II Environmental Site Assessment report

Subdivision Application

$11,590.95

- ❑ 3 copies of the completed Application form
- ❑ 3 copies of the Proposed Plan of Subdivision Map
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 2 copies of the detailed Landscape Plan (if abutting a Regional Road)
- ❑ 3 copies of any accompanying plans/technical reports
  e.g. Planning Justification, Noise, Traffic, Functional Servicing Reports
- ❑ 1 copy of Phase I/II Environmental Site Assessment report

Plan Revision (pre-Draft Approval) Applicant Initiated
$833.24

Plan Revision (post Draft Approval) Applicant Initiated
$2,382.25

Phased Draft Approval Fee
$11,420.01

Phase Revision Requiring Circulation
$5,710.71

Sub-Phasing Requiring Circulation
$3,426.17

Phase Revision & Sub-Phasing Not Requiring Circulation
$833.24

Emergency Extension of Draft Approval - 3 Months
$332.74

Extension of Draft Approval - 1 Year
$952.33

Subdivision -Final Approval / Registration
$2,382.25

Effective January 01, 2024

Site Plan Application (Applicant Initiated)

$1,269.72

- ❑ 3 copies of the completed Application form
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 1 Waste Management Plan
- ❑ 3 copies of the Proposed Site Plan
- ❑ 2 copies of the detailed Grading and Landscape Plan (if abutting a Regional Road)
- ❑ 1 Site Servicing Plan
- ❑ 3 copies of any accompanying plans/technical reports

Minor Development / Minor Modification

$795.11

Site Plan Revision (Applicant Initiated)

$795.11

Condominium Application

$3,349.90

- ❑ 3 copies of the completed Application form and Plan
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 1 Waste Management Plan
- ❑ 1 copy-Grading & Landscape Plan (abutting a Regional Road)

Plan Revision

$500.58

Vacant Land or Common Element

$492.96

Draft Approval Extension –1 Year or Emergency 3 Month

$332.74

Exemption Fee

$555.52

Condominium Conversion

$1,587.18

Condominium Final Approval / Registration

$810.33

Consent Application

$1,269.72 *add. Health Dept. lot assessment fee may be required

- ❑ 3 copies of the completed Application form
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 3 copies of any plans/technical reports e.g. Planning Justification, Noise, Traffic, Agricultural Impact Assessment
- ❑ 1 copy of Phase I/II Environmental Site Assessment report
- ❑ 1 Completed Environmental Site Screening Questionnaire
- ❑ **Consent - Revision** $332.74
  Validation of Title $332.74

Niagara Escarpment Plan Amendment

Major Files $11,273.50

Minor Files $3,175.88

Major Files may include Golf Courses, Aggregate uses and any other file as determined by the Chief Planning Official of the Region of Halton.

- ❑ 3 copies of the completed Application form

Green Energy Act Application or Ontario Power Authority Project Application $1,269.72

Engineering & Inspection Fees – Land Development Agreements

Based on Total Cost of Water and Wastewater Works

$0 - $100,000.00 Greater of 10% or $5,000*

$100,000.01 - $250,000.00 7%*

$250,000.01 - $500,000.00 6%*

$500,000.01 or more 5%*- To a maximum of $100,000.00*

Note: A NON- REFUNDABLE DEPOSIT OF $5,000.00* IS REQUIRED WITH THE FIRST ENGINEERING SUBMISSION.
*Add HST

Parkway Belt West Plan Amendment / MZO (Applicant Initiated)

$3,175.88

- ❑ 3 copies of the completed Application form
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 2 copies of any accompanying plans/technical reports e.g. Planning Justification, Noise, Traffic Reports
- ❑ 1 copy of Phase I/II Environmental Site Assessment report

Part Lot Control By-Law

$634.89

- ❑ 3 copies of the completed Application form
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 3 copies of the Plan of Survey
- ❑ 2 copies of the Engineer's Letter

Review of Major Applications Requiring Planning Act Approval in Bordering Municipalities

$23,816.80

- ❑ 3 copies of the completed Application form
- ❑ 1 copy of all reports, studies and plans in a digital format
- ❑ 3 copies of the Proposed Plans & Key Maps
- ❑ 3 copies of any accompanying plans/technical reports

Publications

Regional Official Plan (2009)	$79.38
Regional Official Plan (2006)	$79.38
Regional Plan Updates Subscription	$18.60 per yr
Regional Official Plan (1980)	$86.99
Maps (OP 1980)	$7.81
Aquifer Management Plan	$115.98
MOU HUSP	$64.08
MOU HASR	$119.03

Research/Analysis

Halton Region's Database Search for Environmental Source Information	$198.41
Development Assessments/Research	$238.07
DATS Computer Analysis	$238.07
DATS Continuing Reports	$45.56 per hour (min. 1 hr)
Old File Retrieval from Storage	$24.44
Special Data Requests quoted at cost.*	
Photocopies	$0.57/pg (min $3.00)
Reports	$0.07/pg (min $3.00)

NEW Applications Requiring Natural Heritage Review

Fees are in accordance with the Conservation Halton Interim Service Delivery Agreement for Ecological Review Service fees incurred by the Region of Halton.

These fees apply at the time of submission on a SIS/EIR/FSS and EIA reports or at the time of planning applications submitted by landowners and other development proponents.

Medium/Large and Small Scale developments are identified in the Region's Environmental Impact Study Guidelines (2020).

Applications requiring SIS/EIR/FSS Review
$9,266.00

Applications requiring scoped EIA-Major (medium/ large-scale development and/or large-scale site alterations)
$5,650.00

Applications requiring scoped EIA (small scale development)
$2,825.00

Applications requiring Terms of Reference Review (incl. Appendix D2 – Scoping & TOR Checklist of Region's EIA Guidelines)
$565.00

Applications requiring Waiving Checklist assessment (Appendix D1 of Region's EIA Guidelines)
$452.00

Effective January 01, 2024

Regional Standard for Digital Drawings

Drawing Files

- All drawing files shall be standard AutoCAD (Release 2000 or higher)
- Additionally a "MAPEXPORT" to an ESRI Shapefile (This consists of 5 or more file extensions (.shp, .prj, .shx, .dbf, .sbn, .sbx and .shx))

Drawing Scale

- Drawing units are to be metric and to scale

Co-ordinates

- The drawing co-ordinates shall be to real 6 degree UTM co-ordinates (Zone 17N), NAD 83 Datum
- This real co-ordinate registration shall conform to the following criteria:
- All information in plan view shall be registered to AutoCAD's World co-ordinate system and to the 6 degree UTM co-ordinate system
- Registration of the 6 degrees UTM co-ordinate system shall consist of a series of cross hairs drawn to the nearest 100 m interval
- The northing and easting co-ordinate shall be shown at the intersection of the coordinating lines
- Co-ordinate registration shall be indicated on all plan portions before the image is moved or rotated from its real co-ordinate location
- It is strongly recommended that all drawings not be rotated or moved.

For further information or payment instructions, please contact Halton Region's Planning Application Intake Clerk at:

PlanningFees@halton.ca

Halton Region
1151 Bronte Road
Oakville, ON L6M 3L1

www.halton.ca

8 Metrolinx

development.coordinator@metrolinx.com

Pre-Consultation

METROLINX

20 Bay St. #600, Toronto, ON M5J 2W3
647-248-8761 metrolinx.com

Attachment 1: Planning Circulation 'Complete Application' Criteria
Materials To Be Reviewed By Metrolinx

Document	For OPA/ZBLA		For Site Plan Control	
	Adjacent to or with direct exposure to Corridor	If within 300m of Metrolinx Corridor (Non-Adjacent)	Adjacent to or with direct exposure to Corridor	If within 300m of Metrolinx Corridor (Non-Adjacent)
Circulation Memo	YES	YES	YES	YES
Planning Justification Report	YES	YES	YES	YES
Noise Study	YES	YES	YES	YES
Vibration Study	YES	IF WITHIN 75m	YES	IF WITHIN 75m
Site Plan / Concept Plan	YES	YES	YES	YES
Architectural Drawings	YES - IF AVAILABLE	YES - IF AVAILABLE	YES	YES
Functional Service Report / Stormwater Management Report	YES	NO	YES	NO
Civil and Site Grading Plans	YES	NO	YES	NO
Transportation Impact Study	YES	YES – IF ADJACENT TO ANY METROLINX NON-CORRIDOR LANDS	YES	YES – IF ADJACENT TO ANY METROLINX NON-CORRIDOR LANDS
Risk Assessment / Rail Safety Report	YES	IF DIRECT EXPOSURE (I.e., NO INTERVENING USES BETWEEN CORRIDOR AND LANDS)	YES	IF DIRECT EXPOSURE (I.e., NO INTERVENING USES BETWEEN CORRIDOR AND LANDS)
Geotechnical Study	NO	YES – IF ADJACENT TO ANY METROLINX NON-CORRIDOR LANDS	YES	YES – IF ADJACENT TO ANY METROLINX NON-CORRIDOR LANDS
Hydrogeological Report	NO	NO	YES	NO
Landscape/Streetscape Plan	YES	NO	YES	NO
Site Servicing and Utility Design	NO	NO	YES	NO
Work Plan and Methodology *(SITE PLAN ONLY)*	NO	NO	YES	NO

This is Exhibit “I” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam) Ganniof the City of Toronto, in the Province of Ontario, before me at the City of Toronto, in the province of Ontario, on October 28, 2025, in accordance with O. Reg. 431/20, Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Tree Inventory and Preservation Plan
177 Cross Avenue
Oakville, Ontario

prepared for

177 Cross Argus Development Inc.
3190 Harvester Road, Suite 201A
Burlington, Ontario L7N 3T1

prepared by

KUNTZ
FORESTRY
CONSULTING Inc.

146 Lakeshore Road West
PO Box 1267 Lakeshore W PO
Oakville ON L6K 0B3
t: 289.837.1871 f: 866.693.6390
e: consult@kuntzforestry.ca

26 June 2024

KUNTZ FORESTRY CONSULTING INC. Project P4249

Table of Contents

1.0 INTRODUCTION 2

2.0 METHODOLOGY 2

2.1 TREE INVENTORY 2
2.2 TREE VALUATION 2

3.0 EXISTING SITE CONDITIONS 3

4.0 INDIVIDUAL TREE RESOURCES 3

5.0 PROPOSED WORKS 4

6.0 DISCUSSION 4

6.1 DEVELOPMENT IMPACTS / TREE REMOVALS 4
6.2 TREE PRESERVATION 4
6.3 TREE COMPENSATION 5
6.4 TREE VALUATION 6

7.0 SUMMARY AND RECOMMENDATIONS 6

1.0 Introduction

Kuntz Forestry Consulting Inc. was retained by 177 Cross Argus Development Inc. to complete a Tree Inventory and Preservation Plan as part of a development application for the subject site located at 177 Cross Avenue in Oakville, Ontario. The subject site is located on the west corner of the intersection between Cross Avenue and Argus Road, within a mixed-use area.

The work plan for this tree preservation study included the following:

- Prepare an inventory of tree resources measuring 10cm diameter at breast height (DBH) and greater on and within six metres of the subject site and trees of all sizes within the road right-of-way;
- Evaluate potential tree saving opportunities based on the proposed development plans; and,
- Document the findings in a Tree Inventory and Preservation Plan.

The results of the evaluation are provided below.

2.0 Methodology

2.1 Tree Inventory

The tree inventory occurred on 10 June 2024. Trees measuring 10cm DBH and greater on and within six metres of the subject site and trees of all sizes within the road right-of-way were included in the inventory. Trees were located using the topographic survey provided and estimations made from known points in the field. Individual trees included in the inventory were identified as Trees 847 – 857 and A – J. Where appropriate, trees were tagged with their identification numbers. Trees that were not tagged were identified using the alphabetic sequence. Where trees of the same species occurred in groups, they were inventoried as polygons. Two polygons were included in the inventory and were identified as Polygons P-1 and P-2.

Tree resources were assessed utilizing the following parameters:

Tree # – Number assigned to trees that corresponds to Figure 1.
Species – Common and botanical names provided in the inventory table.
DBH – Diameter (cm) at breast height, measured at 1.4m above the ground.
Condition – Condition of tree considering trunk integrity (TI), crown structure (CS) and crown vigor (CV). Condition ratings include poor (P), fair (F), and good (G).
Crown Dieback – Percentage of dead branches within the crown.
Dripline – Crown radius (m).
Comments – Any other relevant tree condition information.

Refer to Table 1 for the detailed tree inventory and Figure 1 for the locations of the trees and polygons.

2.2 Tree Valuation

A valuation was calculated for trees located within the road right-of-way. The value was calculated using the Trunk Formula Technique. This method is described in the Guide for

Plant Appraisal, 10th Edition (CTLA 2018). The Ontario Supplement (2021) provides regionally relevant data pertaining to species-specific basic costs for trees.

Trunk Formula Technique

This method is used for trees that are larger than what is commonly available for transplant from a nursery. The Unit Tree Cost of the replacement tree is derived from a survey of nurseries or supplied by the Regional Plant Appraisal Council and published within the Ontario Supplement (2021). For Ontario, the species-specific Unit Tree Costs have been calculated within the Ontario Supplement (2021) and these Unit Tree Costs have been used for the calculation.

The Basic Tree Cost is calculated by multiplying the Unit Tree Cost by the cross-sectional area of the subject tree. For multi-stemmed trees, the appraised trunk area considers the cross-sectional area of all stems. The Appraised Value is calculated by multiplying the Basic Reproduction Cost by the three depreciation factors (Condition Rating, Functional Limitation Rating, and External Limitation Rating, as described in the Guide).

The appraised value is therefore calculated using the following equation:

Basic Tree Cost = Appraised Tree Trunk Area X Unit Tree Cost

Appraised Value = Basic Tree Cost X Condition Rating X Functional Limitation Rating X External Limitation Rating

Functional Limitation Ratings and External Limitation Ratings are calculated according to the methods outlined in the guide. Condition Ratings were calculated based on the assessed condition of the trees on the site and in accordance with the guide. The final values were rounded to the nearest $100 for values greater than $2000, and to the nearest $5 for values less than $2000.

For trees with appraisal values less than $744.00, which is the Town of Oakville's minimum value per tree, their values were set to $744.00.

Refer to Table 2 for the individual tree value computations.

3.0 Existing Site Conditions

The subject property is currently occupied by three commercial buildings, surface parking areas, and walkways. Tree resources exist predominantly in the form of landscape trees. Refer to Figure 1 for the existing site conditions.

4.0 Individual Tree Resources

A total of 21 trees and two polygons were included in the inventory. Tree resources are comprised of Apple species (*Malus sp.*), Blue Spruce (*Picea pungens*), Eastern White Cedar (*Thuja occidentalis*), English Oak (*Quercus robur*), Green Ash (*Fraxinus pennsylvanica*), Japanese Flowering Lilac (*Syringa reticulata*), Little-leaf Linden (*Tilia cordata*), Norway Maple (*Acer platanoides*), Red Oak (*Quercus rubra*), Serviceberry species (*Amelanchier sp.*), Siberian Elm (*Ulmus pumila*), Thornless Honey Locust (*Gleditsia triacanthos* var. *inermis*), White Mulberry (*Morus alba*), White Spruce (*Picea glauca*), and Willow species (*Salix sp.*).

Refer to Table 1 for the full tree inventory and Figure 1 for the location of trees and polygons reported in the inventory. See Appendix A for site photographs.

5.0 Proposed Works

The proposed development includes the demolition of all existing buildings, surface parking areas, and walkways, and the construction of four towers ranging from six- to 60-storeys in height. A subsurface parking garage and the redesign of the adjacent Cross Avenue and Argus Road streetscapes are proposed. A new laneway is proposed along the southwest and northwest sides of the subject site. Refer to Figure 1 for the existing conditions and the proposed site plan.

6.0 Discussion

The following sections provide a discussion and analysis of tree impacts and tree preservation relative to the proposed development and existing conditions.

6.1 Development Impacts / Tree Removals

The removal of 13 trees and one polygon will be required to accommodate the proposed development. The trees and polygon identified for removal include Trees 847 – 857, I, and J, and Polygon P-1. Trees 847 – 850 and Polygon P-1 conflict with the anticipated site regrading and proposed laneway construction. Trees 851 – 857, I, and J conflict with the anticipated streetscape regrading and redesign.

The removal of one additional dead tree, identified as Tree E, is recommended regardless of the proposed development.

Trees 848 – 850 are located fully within the boundaries of the subject site. Tree 847 and Polygon P-1 are located along the property boundary between the subject site and a neighbouring property, and Tree E is located fully on a neighbouring property. As such, written permission from the respective neighbouring property owner will be required prior to the removal of Trees 847 and E, and Polygon P-1. Trees 847 – 850 and approximately seven trees within Polygon P-1 are 15cm DBH or greater and are located on private property. As such, a permit will be required prior to the removal of these trees.

Trees 851 – 857, I, and J are located within the adjacent road right-of-way and as such, permission from the Town of Oakville will be required prior to their removal.

Refer to Figure 1 for the locations of the trees and polygon identified for removal.

6.2 Tree Preservation

The preservation of the remaining seven trees and one polygon will be possible with the use of appropriate tree protection measures. The trees and polygon identified for preservation include Trees A – D and F – H, and Polygon P-2. Refer to Figure 1 for the locations of the trees and polygon identified for preservation, the locations of the required tree preservation fencing, the tree preservation fencing detail, and the general Tree Protection Plan Notes.

Where the minimum tree protection zone (mTPZ) of a tree cannot be fully respected, including for Trees B – D and F – H, and Polygon P-2, special mitigation measures have been prescribed and are outlined below.

Trees B – D and F – H, and Polygon P-2

Encroachment into the mTPZs of Trees B – D and F – H, and Polygon P-2 will be required to accommodate the removal of the existing hardscape features and the anticipated site regrading works. Tree preservation fencing has been prescribed at the anticipated limit of encroachment within the mTPZs of these trees. If the following mitigation measures are employed, long-term adverse effects are not anticipated for these trees.

1. Tree preservation fencing should be installed as shown on Figure 1 prior to the commencement of the proposed works.
2. The existing hardscape features should be removed carefully using small machinery (i.e. a skidsteer).
    a. Any roots encountered beneath the existing hardscape features should be left intact.
    b. Once the existing hardscape has been removed, no machinery use will be permitted within the mTPZ areas from which the hardscape was removed.
3. Where regrading is required within the softscape area of a tree's mTPZ, it should occur using small machinery (i.e. a skidsteer) and under the supervision of a Certified Arborist.
    a. Any roots exposed during the regrading works should be pruned by a Certified Arborist in accordance with Good Arboricultural Standards.
4. Any softscaping to occur within the mTPZs of these trees should occur by hand.

Tree preservation fencing has been prescribed along the subject site boundary adjacent to Trees B – D and F – H, and Polygon P-2. Should construction fence be installed along the subject site boundaries, it may serve as tree preservation fencing, pending approval by the Town of Oakville.

6.3 Tree Compensation

The Town of Oakville requires compensation plantings for healthy private tree removals. The ratio of required compensation plantings per individual tree is below:

DBH of Tree to Be Removed	**Number of Compensation Plantings**
First Tree 15cm – 24cm	1
Second and + Trees 15cm – 24cm	2
25cm – 34cm	3
35cm – 44cm	4
45cm – 54cm	5
55cm – 64cm	6
65cm – 74cm	7
75cm – 84cm	8
85cm – 94cm	9
95cm – 104cm	10
105cm – 114cm	11
>115cm DBH	12

Only individual trees identified as having good, fair-good, or fair trunk integrity, crown structure, and crown vigour were considered in the compensation calculation. Individual trees with poor or poor-fair trunk integrity, crown structure, or crown vigour were assigned a compensation value of zero.

A total of 23 plantings will be required within the boundaries of the subject site to compensate for the removal of healthy private trees. Additional plantings may be required to compensate for the removal of Town-owned trees, at the discretion of the Town of Oakville. Refer to Table 1 for the number of compensation plantings required for each tree and polygon removal.

6.4 Tree Valuation

A valuation was calculated for Trees 851 – 857, A, I, and J as they are located within the adjacent road right-of-way. The total appraised value of these Town-owned trees was calculated to be $11,443.00.

Refer to Table 2 for the tree valuation calculations.

7.0 Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by 177 Cross Argus Development Inc. to complete a Tree Inventory and Preservation Plan as part of a development application for the subject site located at 177 Cross Avenue in Oakville, Ontario. A tree inventory was conducted and reviewed in the context of the proposed site plan.

The findings of the study indicate a total of 21 trees and two polygons on and adjacent to the subject site. The removal of 13 trees and one polygon will be required to accommodate the proposed development. The removal of one additional dead tree is recommended regardless of the proposed development. The remaining seven trees and one polygon can be preserved with the use of appropriate tree protection measures.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for the location of the required tree preservation fencing, the general Tree Protection Plan Notes, and the tree preservation fence detail.

- Tree protection barriers and fencing should be erected at locations as prescribed on Figure 1. All tree protection measures should follow the guidelines as set out in the tree preservation plan notes and the tree preservation fencing detail.

- No construction activity including surface treatments, excavations of any kind, storage of materials or vehicles, unless specifically outlined above, is permitted within the area identified on Figure 1 as a tree protection zone (TPZ) at any time during or after construction.

- Special mitigation measures have been prescribed for select trees as outlined in the *Tree Preservation* section of this report.

- Branches and roots that extend beyond prescribed tree protection zones that require pruning must be pruned by a qualified Arborist or other tree professional. All pruning of tree roots and branches must be in accordance with Good Arboricultural Standards.

- Site visits pre, during, and post construction are recommended by either a certified consulting arborist (I.S.A.) or registered professional forester (R.P.F.) to ensure proper utilization of tree protection barriers. Trees should also be inspected for damage incurred during construction to ensure appropriate pruning or other measures are implemented.

Respectfully Submitted,

Kuntz Forestry Consulting Inc.



Kaylee Harper, B.Sc.Env. Ecology
Ecologist, ISA Certified Arborist #ON-2749A
Tree Risk Assessment Qualified
Email: kaylee.harper@kuntzforestry.ca
Office: 289-837-1871 ext. 24
Cell: 519-572-5949

Limitations of Assessment

Only the tree(s) identified in this report were included in the inventory. The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These may include a visual examination taken from the ground of all the above-ground parts of the tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree of lean (if any), the general condition of the trees and the identification of potentially hazardous trees or recommendations for removal (if applicable). Where trees could not be directly accessed (i.e. due to obstructions, and/or on neighbouring properties), trees were assessed as accurately as possible from nearby vantage points.

Locations of trees provided in the report are determined as accurately as possible based on the best information available. If official survey information is not provided, tree locations in the report may not be exact. Where KFCI's in-house GPS unit is used (if applicable), tree locations are accurate only to the extent that the technology allows, which can be variable based on satellite available, RTK network / cell coverage, canopy coverage, and/or projection transformation limitations. In this case, if trees occur on or near property boundaries, an official site survey may be required to determine ownership utilizing specialized survey protocol to gain precise location.

Furthermore, recommendations made in this report are based on the development plans that have been provided at the time of reporting. These recommendations may no longer be applicable should changes be made to the development plan and/or grading, servicing, or landscaping plans following report submission.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions or seasonal variations in the weather conditions. Any tree will fail if the forces applied to the tree exceed the strength of the tree or its parts.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.

Table 1. Tree Inventory

Location: 177 Cross Avenue, Oakville

Date: 10 June 2024 Surveyors: KNH

Tree #	Common Name	Scientific Name	DBH	Multistem DBH	TI	CS	CV	CDB	DL	Oakville Tree #	mTPZ	A. mTPZ	Comments	Action	Owner	Comp.
847	Green Ash	*Fraxinus pennsylvanica*	59	-	P	P	P	70	4.0	-	3.6	-	Emerald Ash Borer (H), epicormic branching (M), bark sloughing	Remove	Subject / Neighbour	0
848	Thornless Honey Locust	*Gleditsia triacanthos* var. *inermis*	46.5	-	G	FG	F	10	8.0	-	3.0	-	Previously tagged: #789	Remove	Subject	5
849	White Mulberry	*Morus alba*	14, 12, 11	21.5	F	F	F	10	4.0	-	2.4	-	V-union at base and 0.5m with included bark, asymmetrical crown (M)	Remove	Subject	1
850	Norway Maple	*Acer platanoides*	20, 13, 10	26	F	F	F	10	3.0	-	2.4	-	Union at base, v-union at 0.2m with included bark, exposed roots (L), epicormic branching (L), poor form (L)	Remove	Subject	3
851	Apple species	*Malus sp.*	27	-	PF	PF	PF	10	2.0	95718	2.4	-	V-union at 1.5m with included bark and decay (H) at union, lean (L), epicormic branching (M), poor form (L)	Remove	Town	-
852	Serviceberry species	*Amelanchier sp.*	13.5	-	PF	F	F	10	2.0	25061	2.4	-	Lean (M), epicormic branching (L), multiple branch attachments, girdling roots (M)	Remove	Town	-
853	Serviceberry species	*Amelanchier sp.*	14	-	FG	FG	F	10	2.0	89488	2.4	-	Lean (L)	Remove	Town	-
854	English Oak	*Quercus robur*	17	-	G	FG	FG		2.0	497942	2.4	-	Fastigiate growth form, epicormic branching (L)	Remove	Town	-
855	Apple species	*Malus sp.*	13.5	-	G	PF	PF	30	2.0	98596	2.4	-	Epicormic branching (M)	Remove	Town	-
856	Apple species	*Malus sp.*	14	-	FG	P	P	50	2.0	15215	2.4	-	Epicormic branching (M), bow (L)	Remove	Town	-
857	Apple species	*Malus sp.*	14.5	-	F	F	F	20	2.0	104112	2.4	-	V-union at 2m with included bark, epicormic branching (L)	Remove	Town	-
A	Red Oak	*Quercus rubra*	~38	-	G	G	G		3.0	489014	3.0	3.0		Preserve	Town	
B	White Spruce	*Picea glauca*	~14	-	G	G	G		2.0	-	2.4	0.9		Preserve (Injure)	Neighbour	
C	Willow species	*Salix sp.*	104	-	PF	F	PF	30	10.0	-	6.4	5.2	V-union at 2m with included bark and one stem dead, lean (L), decay (L) in trunk, epicormic branching (M), previously tagged: #779	Preserve (Injure)	Neighbour	
D	Little-leaf Linden	*Tilia cordata*	35	-	G	F	F		3.0	-	3.0	2.9	Previously tagged: #780, epicormic branching (M)	Preserve (Injure)	Neighbour	
E	Blue Spruce	*Picea pungens*	15	-	D	D	D	100	-	-	2.4	-	Dead	Remove (Condition)	Neighbour	0
F	Little-leaf Linden	*Tilia cordata*	21	-	PF	P	P	40	2.0	-	2.4	0.6	Top dead, decay (M) in trunk	Preserve (Injure)	Neighbour	
G	Little-leaf Linden	*Tilia cordata*	36.5	-	PF	PF	PF	20	3.0	-	3.0	1.3	V-union at 2m with included bark, poor branch unions, multiple branch attachments, epicormic branching (M)	Preserve (Injure)	Neighbour	

H	Little-leaf Linden	*Tilia cordata*	35.5	-	F	F	F		3.0	-	3.0	1.0	Epicormic branching (M), decay (L) in trunk, lean (L)	Preserve (Injure)	Neighbour	
I	Japanese Flowering Lilac	*Syringa reticulata*	5.5	-	FG	FG	F	10	1.0	522431	1.8	-	Stem wounds (L)	Remove	Town	-
J	Japanese Flowering Lilac	*Syringa reticulata*	6.5	-	FG	P	P	80	1.0	522432	1.8	-	Epicormic branching (M), bow (L)	Remove	Town	-
P-1	Siberian Elm	*Ulmus pumila*	~8 - 24	-	F	F	F	20	3.0	-	2.4	-	Ten trees, average DBH = ~18cm, some trees with v-unions at base, most trees with epicormic branching (L), approximately seven trees greater than or equal to 15cm DBH	Remove	Subject / Neighbour	14
P-2	Eastern White Cedar	*Thuja occidentalis*	15 - 20	-	F	F	F		3.0	-	2.4	1.0	Five trees, average DBH = ~20cm, most trees with lean (L) and asymmetrical crown (L)	Preserve (Injure)	Neighbour	

Codes		
DBH	Diameter at Breast Height	*(cm)*
TI	Trunk Integrity	*(G, F, P)*
CS	Crown Structure	*(G, F, P)*
CV	Crown Vigor	*(G, F, P)*
CDB	Crown Dieback	*(%)*
DL	Dripline (Radius)	*(m)*
mTPZ	Minimum Tree Protection Zone	*TPZ (m) based on Town of Oakville's Tree Protection During Construction (Procedure EN-TRE-001-001), as measured from base of tree*
A. mTPZ	Actual Minimum Tree Protection Zone	*Actual TPZ (m) achievable during construction, as measured from base of tree*
Owner	Ownership of Tree	*Subject, Neighbour, Town*
Comp.	Number of Compensation Plantings Required	*# of Trees*
~ = estimate; (L) = light; (M) = moderate; (H) = heavy; G = good; F = fair; P = poor, D = dead		

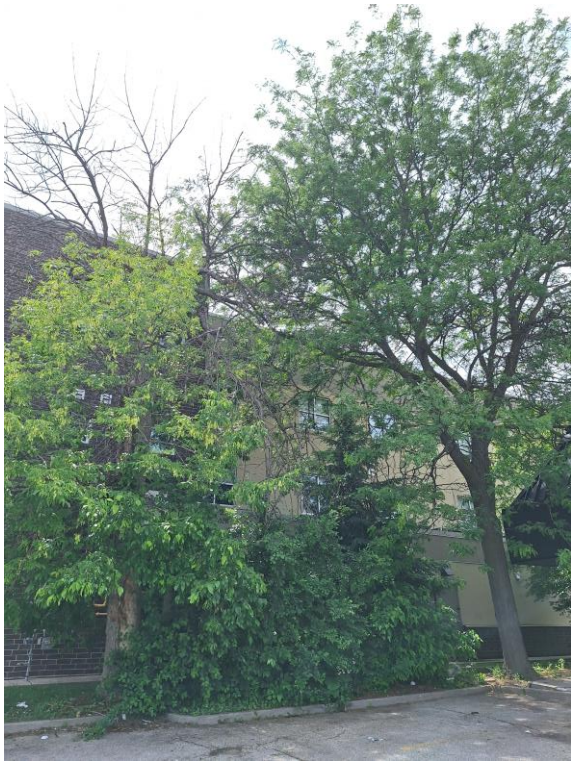
Table 2. Tree Valuation

Location: 177 Cross Avenue, Oakville

Tree #	Common Name	Scientific Name	DBH	OC	*Appraised Trunk Area (cm^2)*	*Unit Tree Cost (RPAC) ($/cm^2$)*	*Basic Tree Cost ($)*	Depreciation			***Appraised Tree Value***	***Adjusted Tree Value (Individual)***
								Condition Rating (%)	*Functional Limitation Rating (%)*	*External Limitation Rating (%)*		
851	Apple species	*Malus sp.*	27	PF	573	6.26	3584.20	0.375	0.9	0.7	$ 846.77	*$ 845.00*
852	Serviceberry species	*Amelanchier sp.*	13.5	PF	143	7.55	1080.70	0.375	0.9	0.8	$ 291.79	***$ 744.00***
853	Serviceberry species	*Amelanchier sp.*	14	F	154	7.55	1162.23	0.55	0.9	0.9	$ 517.78	***$ 744.00***
854	English Oak	*Quercus robur*	17	FG	227	7.41	1681.93	0.725	0.9	0.9	$ 987.71	*$ 990.00*
855	Apple species	*Malus sp.*	13.5	PF	143	6.26	896.05	0.375	0.9	0.9	$ 272.18	***$ 744.00***
856	Apple species	*Malus sp.*	14	P	154	6.26	963.65	0.2	0.9	0.9	$ 156.11	***$ 744.00***
857	Apple species	*Malus sp.*	14.5	F	165	6.26	1033.72	0.55	0.9	0.8	$ 409.35	***$ 744.00***
A	Red Oak	*Quercus rubra*	~38	G	1134	8.03	9106.02	0.9	0.9	0.6	$ 4,425.53	*$ 4,400.00*
I	Japanese Flowering Lilac	*Syringa reticulata*	5.5	F	24	6.47	153.72	0.55	0.9	0.8	$ 60.87	***$ 744.00***
J	Japanese Flowering Lilac	*Syringa reticulata*	6.5	P	33	6.47	214.69	0.2	0.9	0.9	$ 34.78	***$ 744.00***
											Total	**$ 11,443.00**

Codes		
DBH	Diameter at Breast Height	(cm)
OC	Overall Condition	(G, F, P)
G = good; F = fair; P = poor		

Appendix A: Site Photographs


Image 1. From left to right, Trees 847, B, and 848

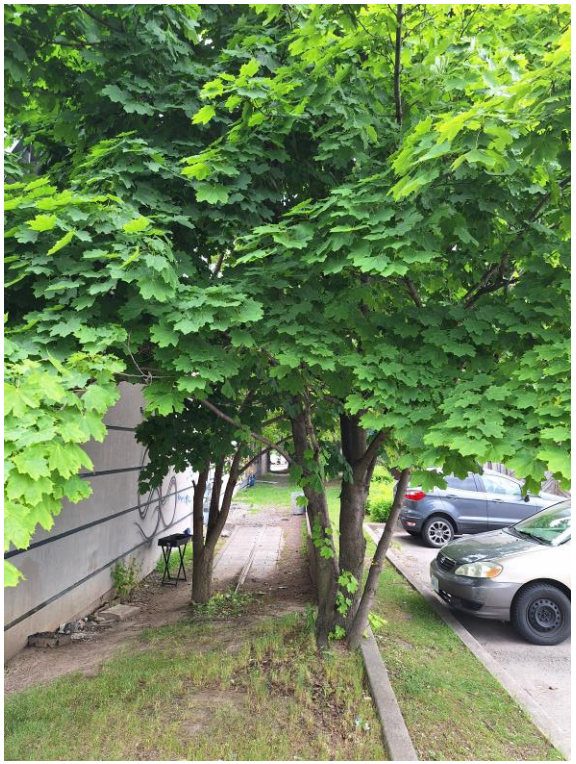

Image 2. Trees 849 (left) and 850 (right)


Image 3. Tree 851

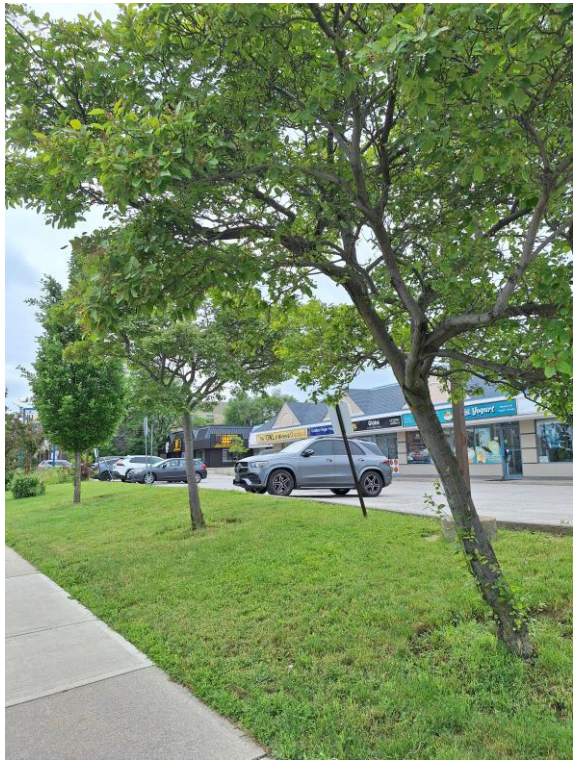

Image 4. From near to far, Trees 852 – 854


Image 5. From near to far, Trees 855 – 857


Image 6. Polygon P-1



Image 7. Polygon P-2


Image 8. Tree A


Image 9. Tree C



Image 10. Trees D (right) and E (left)

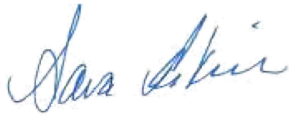

Image 11. Tree F


Image 12. Trees G (right) and H (left)



Image 13. Trees I (near) and J (far)

This is Exhibit “J” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

URBANTECH®

FUNCTIONAL SERVICING REPORT & STORMWATER MANAGEMENT STUDY
(In Support of ZBA/OPA)

177 Cross Avenue

Town of Oakville

REGION OF HALTON

PREPARED FOR
177 Cross Argus Developments Inc.

Urbantech File No.: 23-308

1st SUBMISSION – July 2024

Urbantech® Consulting, A Division of Leighton-Zec Ltd. | 3760 14th Avenue, Suite 301 · Markham · ON · L3R 3T7 | 905.946.9461
urbantech.com

TABLE OF CONTENTS

1 INTRODUCTION 3

1.1. SUBJECT SITE 3
1.2. MIDTOWN OAKVILLE BACKGROUND 4

2 EXISTING CONDITIONS & SITE GRADING DESIGN 5

2.1. EXISTING SOIL CONDITIONS 5
2.2. EXISTING GROUNDWATER CONDITIONS 5
2.3. SITE GRADING DESIGN 5

3 WATER SERVICING 7

3.1. EXISTING CONDITIONS - WATER 7
3.1.1. Existing Water Infrastructure 7
3.1.2. Existing Water Demand 8
3.2. PROPOSED CONDITIONS - WATER 8
3.2.1. Proposed Water Servicing Strategy 8
3.2.2. Proposed Water System Demands 8
3.2.3. Water System Capacity 9

4 SANITARY SERVICING 11

4.1. EXISTING CONDITIONS – WASTEWATER 11
4.1.1. Existing Wastewater Infrastructure 11
4.1.2. Existing Wastewater Demands 12
4.2. PROPOSED CONDITIONS – WASTEWATER (SANITARY) 13
4.2.1. Proposed Sanitary Servicing Strategy 13
4.2.2. Proposed Wastewater Generation 13
4.2.3. Wastewater System Capacity – Regional Capacity 13
4.2.4. Wastewater System Capacity – Local System Capacity 14

5 STORM DRAINAGE & STORMWATER MANAGEMENT 16

5.1. EXISTING STORM DRAINAGE 16
5.2. PROPOSED STORM DRAINAGE PLAN 16
5.3. STORMWATER MANAGEMENT 17
5.3.1. Stormwater Quantity Control (Peak Flow Control) 17
5.3.2. Stormwater Runoff Volume Reduction 19
5.3.3. Stormwater Quality Control 19
5.3.4. Spill Mitigation 19

6 EROSION & SEDIMENT CONTROL 20

7 CONCLUSIONS 21

Urbantech® Consulting, A Division of Leighton-Zec Ltd. | 3760 14th Avenue, Suite 301 • Markham • ON • L3R 3T7 | 905.946.9461

urbantech.com

APPENDICES

Appendix A: Background Information and Site Statistics

Appendix A1 Site Plan
Appendix A2 Site Statistics
Appendix A3 Topographic Survey

Appendix B: Design Information and Calculations

Appendix B1 Stormwater Management Calculations
Appendix B2 Existing and Proposed Domestic Water Demand and Fire Flow Calculations
Appendix B3 Existing and Proposed Sanitary Flow Calculations
Appendix B4 Sanitary Sewer Design Sheets (Scenario 1, Scenario 2, Scenario 3)

Appendix C: Drawings and Figures

Drawing 100 General Notes
Drawing 101 Servicing Plan
Drawing 102 Removal Plan
Drawing 201 Grading Plan
Drawing 301 Storm Drainage Plan
Drawing 302 Sanitary Drainage Plan
Drawing 303 Overall Existing Sanitary Drainage Plan
Drawing 304 Overall Proposed Sanitary Drainage Plan
Drawing 701 Standard Details
Drawing 801 Composite Utility Plan
Drawing 1001 Erosion & Sediment Control Plan
Drawing 1002 Erosion & Sediment Control Details

Urbantech® Consulting, A Division of Leighton-Zec Ltd. | 3760 14th Avenue, Suite 301 · Markham · ON · L3R 3T7 | 905.946.9461
urbantech.com

1 INTRODUCTION

This report provides functional servicing design and stormwater management information in support of Rezoning (ZBA) and Official Plan Amendment (OPA) for the 177 Cross Avenue property in the Town of Oakville (Town), Region of Halton (Region). The ZBA/OPA, when approved, will permit the construction of four (4) mixed-use condominium towers.

The servicing and development concepts presented in this report are based on the site plan prepared by Architects-Alliance (architectural plan and site statistics are available in **Appendix A)**, with input from the following reference reports:

- Preliminary Hydrogeological Assessment (Azimuth Environmental Consulting Inc., May 2024)
- Soil Investigation (Azure Group, September 2023)
- Livable Oakville Plan / Town of Oakville Official Plan (Town of Oakville, 2021 Consolidation)
- Midtown Oakville Class Environmental Assessment Study (Town of Oakville, 2014)
- Midtown Oakville Stormwater Management Report (Cole Engineering, 2014)
- Sustainable Halton Water and Wastewater Master Plan (AECOM, 2011)
- Region of Halton 2022 Development Charges Update Water/Wastewater Technical Report (GM BluePlan, September 2021)
- Water and Wastewater Area Servicing Plan for Midtown Oakville – Addendum (GM BluePlan, January 2021)
- Functional Servicing Report for 157-165 Cross Avenue (Trafalgar Engineering, February 2024)

Design information considers the following guidelines:

- Town of Oakville Development Engineering Procedures and Guidelines (2023)
- Regional Municipality of Halton Water and Wastewater Linear Design Manual (2019)

This report is intended to demonstrate the feasibility of site servicing for the proposed development, including water, sanitary and stormwater management. Site grading, and preliminary erosion / sediment control information is also included.

Supporting drawings are available in **Appendix C.** Drawings do not provide design information pertaining to the internal servicing of the proposed buildings. As part of the civil engineering design, a set of storm, sanitary and water connections will be provided for the proposed residential development, beyond which it will be the responsibility of the building mechanical engineer to design the internal servicing concept, in conformance with the servicing and grading design.

1.1. Subject Site

The subject site is approximately 1.02 hectares (ha), located west of Trafalgar Road, at the northwest corner of the intersection of Argus Road and Cross Avenue, in the Town of Oakville. The site is bound by existing commercial / retail buildings to the north and west, Argus Road to the east and Cross Road to the south. There are three (3) low-rise commercial / retail buildings and associated ground-level parking existing on the site today. A separate property (570 Argus Road) occupies the area between the southeast and northeast quadrants of the 177 Cross Avenue site. A copy of the topographic survey is provided in **Appendix A-3** for reference.

The lands to the north, east and west of 177 Cross Avenue are planned for similar high-rise re-development. On-going development applications are with the Town currently (Distrikt Developments). For continuity, the 177 Cross Avenue site plan has considered both the Town's on-

going planning work and the Distrikt plans when placing adjacent local roads, access locations and servicing requirements.

The proposed development includes four (4) mixed residential and commercial towers/buildings currently titled as Tower A, Tower B, Tower C and Building D and respectively have 60, 55, 50 and six (6) storeys. Tower A and B are connected by a six-storey podium where Tower C and Building D are both separate structures. The ground floors of each structure are a mix of residential and commercial space. The remaining floors for each structure are all reserved for residential units. The proposed development also includes six (6) levels of underground parking (connected), private access roads for residents, pedestrian mews and a promenade.

1.2. Midtown Oakville Background

As outlined in the Livable Oakville Plan (Town of Oakville Official Plan, 2021 Consolidation) the Town identifies Midtown Oakville as a key growth and redevelopment area, intended to be developed as a high density, mixed-use, transit supportive neighbourhood. The Midtown Oakville Class Environmental Assessment Study (Class EA), completed in 2014, provides further information on the proposed future road network and stormwater management requirements.

We acknowledge that the Town is currently undertaking an Official Plan review of the Midtown area along with the Midtown Oakville Program Implementation Project, led by Jacobs. This work is, ultimately, intended to create a detailed implementation framework for Midtown Oakville. From an infrastructure perspective, deliverables will include:

- Transportation Master Plan
- Stormwater Master Plan
- Municipal Infrastructure and Servicing Plan (Water / Wastewater)
- Utilities Infrastructure Plan
- Roadway Functional Design
- Phasing and Implementation Strategy
- Funding / Financing Strategy

This work is on-going, anticipated to be complete in the 2025 timeframe.

While the development application for 177 Cross Avenue is intended to conform with the current Livable Oakville OP and 2014 technical work for Midtown, Urbantech has considered the on-going work, where available and appropriate.

Urbantech® Consulting, A Division of Leighton-Zec Ltd. | 3760 14th Avenue, Suite 301 · Markham · ON · L3R 3T7 | 905.946.9461

urbantech.com

2 EXISTING CONDITIONS & SITE GRADING DESIGN

2.1. Existing Soil Conditions

A preliminary geotechnical investigation was conducted by Azure (available under separate cover). Nine (9) boreholes were drilled to provide geotechnical parameters and recommendations for the design of the proposed buildings.

The findings of the geotechnical investigation conclude that the soil stratigraphy of the site consists of asphalt, fill soil (from previous earthworks), loose to compact silty sand, sandy silt, clayey silt, or a mixture of these materials traced to some gravel. It is the opinion of the Geotechnical engineer that the existing fill on the site was not engineered and is not suitable for engineering purposes in the future. Bedrock was encountered at depths ranging from 4.0 m below grade to 7.9 m below grade (Georgian Bay Shale).

2.2. Existing Groundwater Conditions

A preliminary hydrogeological assessment was conducted by Azimuth Environmental Consulting (available under separate cover). Six (6) groundwater monitoring wells were installed on the site to depths ranging from 3.65 m to 17.74 m. Groundwater was encountered during borehole drilling and/or after monitoring well installation, save for one location.

Groundwater depths (measured on May 31, 2023), range from 0.65 m below grade to 6.94 m below grade. It is noted in the report that groundwater levels are seasonal and may vary from these measurements at other times of the year.

Given the depth of underground parking structures and footings (20+m below grade), the hydrogeological assessment concludes that buildings will be constructed below the groundwater table, and that groundwater control will be required during and after construction. The hydrogeological report recommends that the exterior and underground walls should be positively waterproofed with a perimeter and vertical drainage system.

Urbantech supports a waterproofing (“bathtub”) concept for groundwater control at this site, considering groundwater quality results currently show levels of PHC F1, toluene, acetone, methylene chloride, ethylbenzene, and xylenes above the Town of Oakville storm sewer discharge limits (per By-Law 2009-031). Per the hydrogeological report, further consultation with a de-watering contractor and environmental consultant is required to better understand construction de-watering and long-term management options. We acknowledge that the Town does not permit uncontrolled discharge of groundwater to the storm sewer regardless, but options can be further evaluated at the detailed design stage (including overcontrol of the stormwater tank discharge, etc.), depending on the environmental / water quality results.

2.3. Site Grading Design

The existing site ranges in elevation between approximately 102 masl (meters above sea level) and 104 masl, sloping from north to south (towards Cross Avenue). There are several existing stormwater catch-basins within the existing parking lot to capture surface water runoff, which discharge to the existing storm sewer on Cross Avenue.

The preliminary site grading design considers the following requirements and constraints:

- Conformance to the Town of Oakville's grading criteria.
- Minimizing cut to fill operations and work towards a balanced site.
- Matching existing boundary grading conditions.
- Maintaining required drainage boundaries.
- Providing minimum cover on proposed servicing.

Preliminary site grading is generally constrained by the Cross Avenue and Argus Road right-of-way grades to the south and east of the proposed development. New future roads to the north and west of the site were identified as part of the Midtown Oakville Class EA (approved 2014) and the Oakville Official Plan (adopted 2017). The future roads corridors have been incorporated into the grading plan per alignments and locations identified on the site plan. Note that further grading coordination will be required as design proceeds, as the final road alignments, grading of the future roads (including Cross Avenue and Argus Road), and street scape components to the existing ROWs are subject to change.

Refer to **Drawing 201** in **Appendix C** for further details.

Urbantech® Consulting, A Division of Leighton-Zec Ltd. | 3760 14th Avenue, Suite 301 · Markham · ON · L3R 3T7 | 905.946.9461
urbantech.com

3 WATER SERVICING

3.1. Existing Conditions - Water

3.1.1. Existing Water Infrastructure

Midtown Oakville (including 177 Cross Avenue) is located within Water Pressure Zone O2 (Oakville Zone 2), serviced by the Region's lake-based water treatment plants. There are a series of 300 mm Zone O2 local watermains on Argus Road, Cross Avenue, Lyons Lane, and Trafalgar Road, with a larger 500 mm feedermain along South Service Road. Water distribution infrastructure immediately adjacent to the property includes:

- 300 mm watermain (PVC) on the north side of Cross Avenue.
- 300 mm watermain (PVC) on Argus Road.
- 900 mm Zone O1 feeder main on Cross Avenue and Argus Road.

See **Figure 3-1** below and refer to **Drawing 101** in **Appendix C** for additional information.



Figure 3-1: Midtown Oakville Existing Water Distribution System

Water is supplied to Zone O2 via the Davis Road Booster Pumping Station (BPS), located east of the subject site at Davis Road and Trafalgar Road. Floating storage for Zone O2 is supplied by the Eighth Line Reservoir. Of note, there is an on-going state-of-good-repair (renewal) construction project at the Davis Road BPS which, when completed, will increase capacity from approximately 65 MLD to its rated capacity of 100 MLD.

The 900 mm feedermain on Cross Avenue and Argus Road is a Zone O1 watermain, originally recommended as part of the 2011 Sustainable Halton Water and Wastewater Master Plan. This pipe (completed in the 2018-2019 timeframe) provides a second feedermain to the Davis Road Booster Pump Station and is an important component for redundancy and security of supply for Midtown Oakville and for the broader Regional water system.

3.1.2. Existing Water Demand

Existing uses on the 177 Cross Avenue site are connected to the Region's 300 mm watermains adjacent to the property. Per the Region of Halton's Water and Wastewater Linear Design Manual (2019, Sections 2.3 and 2.4), the domestic water demand from the existing site is as follows (Light Commercial use):

Population:	92 people
Avg. Day Usage:	275 L/person/day
Average Day Demand (L/s):	0.29 L/s
Max Day Demand:	0.66 L/s
Max Hour Demand:	0.66 L/s

See **Appendix B2** for supporting calculations.

3.2. Proposed Conditions - Water

3.2.1. Proposed Water Servicing Strategy

The 177 Cross Avenue development is proposed to connect to the existing 300 mm watermains on both Cross Avenue and Argus Road (adjacent to the development) via new service lateral connections. The existing lateral connections will be decommissioned. The existing 300 mm watermains are intended to provide all domestic flow and fire protection to the 177 Cross Avenue buildings.

Per Region of Halton guidelines, a 200 mm diameter fire service and 150 mm diameter domestic (residential) service will be connected to the existing Cross Avenue watermain. A second 200 mm fire service will be connected to the Argus Road watermain (for redundancy and security of supply). This is typical of high-rise development but should be confirmed at detailed design with the mechanical engineer. The mechanical consultant will also be responsible for the design of all the internal water services.

Refer to **Drawing 101** in **Appendix C** for additional information.

The final location of the fire department connection (siamese connection) for the buildings will need to be located within 80 m of a municipal fire hydrant. Fire hydrant location will be determined at detailed design but will meet Region of Halton criteria for location and spacing.

3.2.2. Proposed Water System Demands

Proposed domestic water demand for the 177 Cross Avenue site has been calculated using the following information:

- Site Statistics (available in **Appendix A2**), including unit count / type and retail floor area.
- Region of Halton Water and Wastewater Linear Design Criteria (per capita usage, max day / peak hour factors)
- Region of Halton Built Boundary Housing Occupancy Rates (per the 2022 DC Background Study, Table A-4)
- Region of Halton Employment / Total Floor Area Forecast 2022-2031 (per the 2022 DC Background Study, Table A-8).

The domestic water usage projected for the site is as follows, with full supporting calculations available in **Appendix B2:**

- Population: 2,904 people, 23 jobs
- Avg. Day Usage: 275 L/person/day
- Average Day Demand: 9.3 L/s
- Max Day Demand: 21.0 L/s
- Max Hour Demand: 37.1 L/s

Fire flow has been estimated using the Fire Underwriters Survey (2020) methodology and typical assumptions regarding construction type, building use, sprinkler installation, and protection for vertical openings. Calculations will be refined as design evolves; findings in this report are considered preliminary.

- Site Fire Flow Requirement: 100 L/s
- Max Day + Fire: 121 L/s

3.2.3. Water System Capacity

The ability of the Regional water system to support short-term growth (i.e., to 2031) and long-term growth (i.e., to build-out) in Midtown Oakville area was evaluated as part of the 2021 Area Servicing Plan (ASP) by GM BluePlan. While population projections for Midtown continue to evolve through the Town and Region's Joint Best Planning Estimate process, the 2021 ASP assumptions (i.e., 11,300 people and 2,559 jobs to 2031) are similar to the Town of Oakville's growth projections (per August 10, 2023 Council Report) of 11,071 people and 1917 jobs (also to 2031).

The GM BluePlan ASP concludes that:

- There is sufficient pumping capacity at the Davis Road Booster Pump Station and sufficient storage capacity at the Eighth Line Reservoir to support growth in Midtown Oakville (Zone O2) to beyond 2031. Pump station and reservoir upgrades may ultimately be required to support longer term growth (i.e., full build-out).

- The existing 300 mm watermains on Cross Avenue and Argus Road provide sufficient flow and pressure to support growth projections to 2031 and build-out (i.e., there are no recommendations to replace the existing services on Cross or Argus). The broader local water system will be augmented with additional cross-connections on future north/south road alignments.

- Domestic flow / pressure and fire flow / pressure were within acceptable ranges under proposed 2031 and build-out scenarios (in accordance with Region of Halton level of service requirements), with the existing infrastructure in place.

The existing system is generally robust, with good distribution and looping. The south Halton water system is highly integrated; water treatment capacity is not dependent on a single plant. Midtown Oakville receives water predominantly from the Oakville WTP and Burloak WTP. There is an on-going re-rating project at the Oakville WTP (increasing the rated capacity from 109 MLD to 130 MLD) that is anticipated to be complete in the 2025 timeframe. An expansion is also planned at the Burloak WTP (from 55 MLD to 165 MLD). The Region has indicated through their recent infrastructure review as part of the 2023 Allocation Program that capacity exists in the treatment and transmission main system to meet the Town of Oakville's housing pledge of 33,000 units by 2031, without major

upgrades to treatment plants. The Town will rely on both greenfield and built-boundary growth (in key nodes like Midtown Oakville) to meet their 2031 housing goals.

Given work done to-date, water system capacity is not expected to be a limiting factor for development of 177 Cross Avenue. As planning proceeds, water distribution pressure and fire flow requirements for the site can be reviewed in more detail. Water hydraulic modelling will be undertaken at the next stage, when additional information is available regarding neighbouring developments and long-term plans for Midtown Oakville.

Urbantech® Consulting, A Division of Leighton-Zec Ltd. | 3760 14th Avenue, Suite 301 · Markham · ON · L3R 3T7 | 905.946.9461
urbantech.com

4 SANITARY SERVICING

4.1. Existing Conditions – Wastewater

4.1.1. Existing Wastewater Infrastructure

Midtown Oakville (including 177 Cross Avenue) is located within the Oakville Southwest Wastewater Treatment Plant (WWTP) catchment. There is an existing 600 mm / 750 mm sanitary trunk sewer located on Argus Road adjacent to the site which collects wastewater from Midtown Oakville (generally west of Trafalgar Road) as well as from approximately 260 ha north of the QEW. This sewer runs south along Argus Road, through the GO Station parking lot and along Trafalgar Road to Cornwall. The 177 Cross Avenue site currently drains to this sewer (through two direct connections, and one indirect connection via the existing 300 mm sanitary sewer on Cross Avenue).

Wastewater distribution infrastructure immediately adjacent to the 177 Cross Avenue property includes:

- 300 mm sanitary sewer on Cross Avenue
- 600 mm to 750 mm sanitary sewer on Argus Road.

See **Figure 4-1** below and refer to **Drawing 302** in **Appendix C** for additional information.

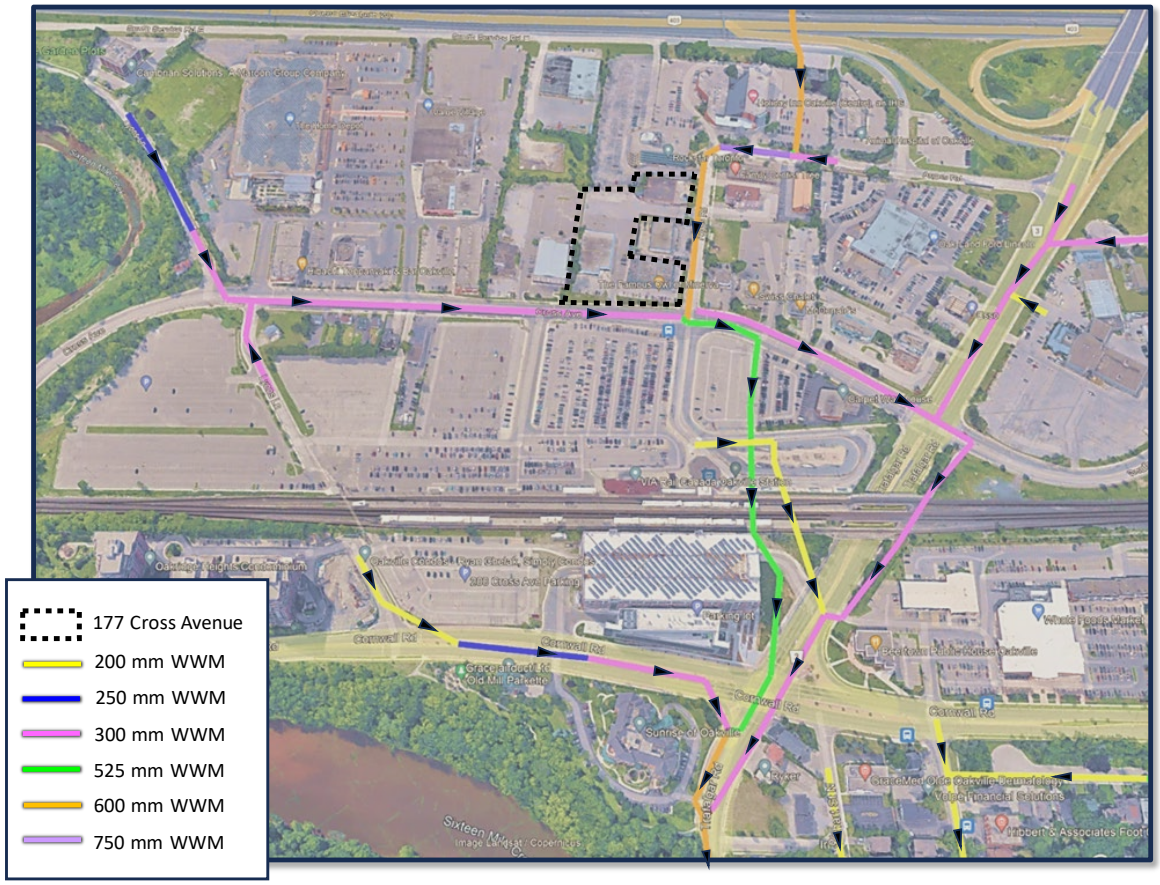


Figure 4-1: Midtown Oakville Existing Wastewater Distribution System

The Region of Halton has advised that there is an existing capacity constraint in the Midtown sewer network that needs to be addressed prior to proceeding with any re-development project. This constraint was originally identified and programmed through the 2011 Sustainable Halton Water and Wastewter Master Plan. Financing for detailed design of the sewer upgrade project was approved by Regional Council in March 2023, and financing for construction was approved by Council in February 2024. The Region has indicated that detailed design is on-going and that construction is anticipated to commence in the 2025 timeframe. The project scope is shown in **Figure 4-2**.

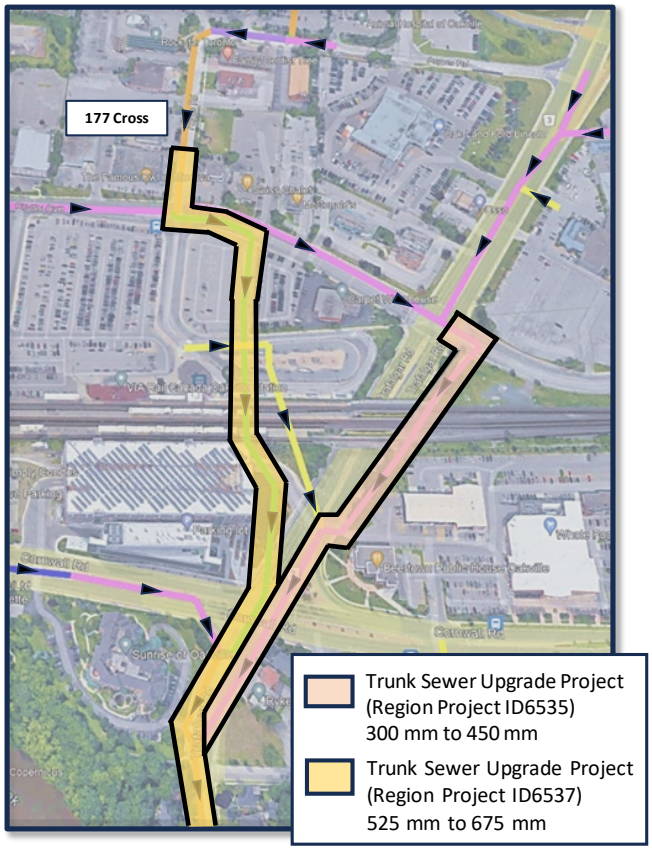


Figure 4-2: Region of Halton Sanitary Sewer Upgrade Project Scope (Midtown)

4.1.2. Existing Wastewater Demands

Existing uses on the 177 Cross Avenue site are connected to the Region's 600 mm sanitary sewer on Argus Road and to the existing 300 mm sanitary sewer on Cross Avenue. Per the Region of Halton's Water and Wastewater Linear Design Manual (2019, Section 3.2), the sanitary wastewater generation from the existing site is as follows (Light Commercial use):

Population:	92 people
Avg. Day Generation:	275 L/person/day
Avg. Dry Weather Flow:	0.29 L/s
Peak Wet Weather Flow:	1.29 L/s

See **Appendix B3** for supporting calculations.

4.2. Proposed Conditions – Wastewater (Sanitary)

4.2.1. Proposed Sanitary Servicing Strategy

The 177 Cross Avenue development is proposed to connect to the existing 300 mm wastewater main on Cross Avenue via a new service lateral connection. Wastewater generated from all four (4) buildings will drain to the southwest corner of the site (consistent with site grade) via the connected parking structure. Existing service connections to Cross Avenue and Argus Road will be decommissioned.

A service connection to the existing 600 mm trunk sewer on Argus Road was also reviewed as an alternative. However, this option was not carried forward because existing storm and water infrastructure within the Argus Road ROW impede the future sanitary connection at the depth required.

Per Region of Halton guidelines, a 250 mm sanitary service connection with property line inspection manhole is proposed, draining by gravity from the site to the existing 300 mm wastewater main on Cross Avenue. The ultimate elevation of the connection will be confirmed at detailed design with the mechanical engineer. The mechanical consultant will also be responsible for the design of all internal sanitary services.

Refer to **Drawing 302** in **Appendix C** for additional information.

4.2.2. Proposed Wastewater Generation

The future wastewater (sanitary) generation rate for the 177 Cross Avenue site has been calculated using the following information:

- Site Statistics (available in **Appendix A2**), including unit count / type and retail floor area.
- Region of Halton Water and Wastewater Linear Design Criteria (per capita generation rate, average day demand, peaking factor and inflow / infiltration rate).
- Region of Halton Built Boundary Housing Occupancy Rates (per the 2022 DC Background Study, Table A-4)
- Region of Halton Employment / Total Floor Area Forecast 2022-2031 (per the 2022 DC Background Study, Table A-8).

The domestic water usage projected for the site is as follows, with full supporting calculations available in **Appendix B3:**

- Population: 2,904 people, 23 jobs
- Avg. Day Usage: 275 L/person/day
- Avg. Dry Weather Flow: 9.3 L/s
- Peaking Factor (Modified Harmon): 3.45
- Inflow / Infiltration: 0.29 L/s
- Peak Wet Weather Flow: 32.5 L/s

4.2.3. Wastewater System Capacity – Regional Capacity

As noted in Section 4.1.1 the Region is moving forward with two (2) sanitary sewer upgrade projects to alleviate capacity constraints in the Midtown Oakville system. Once completed, these projects are intended to provide long-term capacity to accommodate growth in Midtown.

The Region has previously completed upgrades to the downstream trunk sewer system on Trafalgar Road, Rebecca Street and Lakeshore Road, to the Oakville Southwest WWTP.

Similar to the water system, the ability of the Regional wastewater system to support short-term growth (to 2031) and long-term growth (to build-out) in Midtown was evaluated through the 2021 GM BluePlan ASP. The ASP concludes that:

- There is sufficient capacity at the Oakville Southwest WWTP to support near-term growth in Midtown. A plant expansion may be required to accommodate growth post 2031. The need and timing for the future expansion is currently being evaluated as part of the on-going Integrated Master Plan. This should not impede moving forward with initial development in Midtown.

- There are no wastewater pump stations between Midtown Oakville and the Oakville Southwest WWTP. There are no wastewater pump station capacity considerations or concerns.

- The trunk sewer upgrade projects (ID6535 and ID6357, as shown in **Figure 4-2**) will provide long-term sanitary sewer capacity for growth in Midtown. Until these projects are completed, there is no capacity available in the existing trunk system for new growth.

Once the Region has completed the on-going trunk sewer upgrades (2026 timeframe), wastewater trunk sewer capacity is not expected to be a limiting factor for development of 177 Cross Avenue. As planning proceeds, wastewater hydraulic modelling can be undertaken, when additional information is available regarding neighbouring developments and long-term plans for Midtown Oakville.

4.2.4. Wastewater System Capacity – Local System Capacity

As outlined in Section 4.2.1, wastewater from the 177 Cross Avenue site is intended to connect to the existing 300 mm sanitary sewer on Cross Avenue, adjacent to the site (see **Drawing 302** in **Appendix C**). This sewer currently accepts wastewater from existing residential and commercial uses on the north and south side of Cross Avenue and on Lyons Lane to the west. To better understand the impact of proposed development in this area on the local sanitary sewer, three (3) sets of sanitary design sheets have been created (available in **Appendix B4)**, each of which evaluates a different servicing scenario:

Scenario 1: Existing Conditions
The existing conditions scenario calculates wastewater flow from existing uses. Results show significant capacity remaining in the 300 mm sanitary sewer on Cross Avenue, with a maximum percent full of only 35% at peak flow.

Scenario 2: Future Conditions (177 Cross Avenue)
This scenario evaluates the impact of adding the future 177 Cross Avenue development to the existing conditions model. At peak flow, the 300 mm sewer has existing capacity accommodate the 177 Cross Avenue development plus all current uses, with a maximum percent full of 71%. Also see **Drawing 303** in **Appendix C**.

Scenario 3: Future Conditions (All New Development)
This scenario evaluates the impact of adding the future 177 Cross Avenue Development plus all other known development applications in the area which plan to connect to the 300 mm sanitary sewer (i.e., 157-165 Cross Avenue, 166 South Service Road and 627 Lyons Lane). Under these conditions, a small portion of the 300 mm sanitary sewer (approximately 140 m, from Argus Road to

Urbantech® Consulting, A Division of Leighton-Zec Ltd. | 3760 14th Avenue, Suite 301 · Markham · ON · L3R 3T7 | 905.946.9461
urbantech.com

140 m west of Argus Road) would need to be upgraded from 300 mm to 450 mm. Also see **Drawing 304** in **Appendix C**.

Result of the local sanitary servicing analysis indicate that there is existing capacity in the local system for some near-term growth. As development proceeds, it is likely that a small portion of the existing sewer will need to be increased from 300 mm to 450 mm in diameter to accommodate proposed development.

5 STORM DRAINAGE & STORMWATER MANAGEMENT

5.1. Existing Storm Drainage

Under existing conditions, surface flows from the site head in a southerly direction towards Cross Avenue. Stormwater is collected in a series of catchbasins on the property that convey the collected runoff to a 1050 mm storm sewer on Cross Avenue. The Cross Avenue storm sewer ultimately discharges to the west at Sixteen Mile Creek. In between the northeast and southeast corner of the site is 570 Argus Road, which is not part of the 177 Cross Road proposed development. The stormwater runoff from the 570 Argus Road property is contained within its boundaries and flows east towards Argus Road. There are no other external drainage areas that convey stormwater runoff through the proposed site.

Existing storm servicing infrastructure in the vicinity of the site includes:

- 1050 mm storm sewer on Cross Avenue;
- 300 mm storm sewer on Cross Avenue;
- 300 mm storm sewer on Argus Road; and
- 750 mm storm sewer on Argus Road

5.2. Proposed Storm Drainage Plan

A 300 mm diameter storm connection is proposed at the southwest corner of the property that will discharge (by gravity) post-development site flows to the existing 1050 mm diameter municipal storm sewer on Cross Avenue. Refer to **Drawing 301** in **Appendix C** for additional information.

The proposed 1.02 ha site has been divided into five (5) drainage areas, as shown in **Drawing 301** provided in **Appendix C**. The post-development catchments are described as follows:

- Drainage Area ‘1’ is 0.73 ha and contains the four (4) proposed towers and associated ground-level access roads and pedestrian crossings. A conservative runoff coefficient of 0.85 assumed, based on the proposed land use for catchment ‘1’. Stormwater from this drainage area is captured and directed to the proposed stormwater management tank. The underground storage tank and its runoff release rate is discussed in more detail in **Section 5.3.1**.

- Drainage Area ‘EXT-1’ is an external drainage area of 0.20 ha. Per the Town’s 2014 Municipal Class Environmental Assessment for Midtown, the north portion of the 177 Cross Avenue site will form part of a future ROW. Drainage Area ‘EXT-1’ is the portion of the subject site assigned to the future ROW (as shown on the proposed site plan, provided in **Appendix A1**). Stormwater management for the future road proposed north of the property is assumed to be handled independently of the site drainage. In-line pipe storage, orifice plates and quality control technology (such as catchbasin shields, etc.) can be considered as the design proceeds for the future ROWs, in coordination with the Town and neighbouring developments. For the purposes of this FSR, a conservative runoff coefficient of 0.90 was assumed for catchment ‘EXT-1’, based on proposed land use. Topography and grading suggest that stormwater collected in this portion of road will drain east towards Argus Road.

- Drainage Area ‘EXT-2’ is an external drainage area of 0.06 ha. Similar to ‘EXT-1’, this area is associated with a future ROW on the west side of the 177 Cross Avenue property. This road alignment is shared with neighbouring properties to the north and west. Stormwater

management for the future road proposed west of the property is assumed to be handled independently of the site drainage and will be coordinated with neighbouring developments but is anticipated to include in-line pipe storage, orifice plates and in-situ quality control technology. A conservative runoff coefficient of 0.90 was assumed for catchment 'EXT-2', based on proposed land use.

- Drainage Area 'UC-1' is an uncontrolled drainage catchment that is a small 0.02 ha area along the southern and southeastern boundaries of the subject site. A conservative runoff coefficient of 0.90 was assumed for catchment 'UC-1', based on proposed land use. Due to grading and servicing constraints, this catchment is not captured and conveyed to the proposed stormwater tank but discharges directly to Cross Avenue. The release rate from the stormwater management tank will provide an over-controlled release rate to account for the uncontrolled runoff from this catchment 'UC-1', to ensure that runoff from the subject site towards Cross Avenue does not exceed pre-development target flows. The proposed over-control of the stormwater tank will be discussed in more detail in **Section 5.3.1**.

- Drainage Area 'UC-2' is an uncontrolled drainage catchment that is a small 0.01 ha area along the northeastern boundary of the subject site. A conservative runoff coefficient of 0.90 was assumed for catchment 'UC-2', based on proposed land use. This uncontrolled drainage area is conveyed east towards Argus Road. Therefore, the proposed SWM plan for catchment 'EXT-1' will over-control flows to Argus Road to accommodate the uncontrolled drainage from catchment 'UC-2'.

5.3. Stormwater Management

In accordance with Town of Oakville requirements for stormwater management as outlined in the Midtown Oakville EA Study (June 2014), the design criteria for the site are as follows:

Stormwater Quantity Control (Peak Flow Control)

Utilize the Midtown Oakville EA Study hydrology model to demonstrate that the target flows are met for each subwatershed. Per the Midtown EA, the proposed development is to drain to Sixteen Mile Creek. As there are no existing flood concerns for Sixteen Mile Creek in the study area, peak runoff rates from the development are to be controlled to the 5-year pre-development peak flow. In addition to meeting the flows, a minimum storage requirement is 68.2 m^3/ha.

Stormwater Runoff Volume Reduction (Water Balance)

Retain stormwater onsite to achieve an equivalent annual volume of infiltration to pre-development conditions, as per Section 3.2 of the MOE Stormwater Management Planning and Design Manual (March 2003).

Stormwater Quality Control

Achieve Enhanced Level 1 Protection, as per the Ministry of Environment's Stormwater Management Planning and Design Manual (March 2003).

5.3.1. Stormwater Quantity Control (Peak Flow Control)

A Visual OTTHYMO 6.2 model (VO6) was created to model the drainage from the subject site towards Cross Avenue and to size the proposed stormwater tank in catchment '1'. Based on the

Town's standards, a 24-hour Chicago storm distribution was used to simulate event-based rainfall on the site. Pre-development flow rates were calculated using the Town of Oakville IDF curves, where a conservative assumption of 50% imperviousness was applied to the development area of 0.75 ha, to be serviced by the proposed storage tank. As mentioned in **Section 5.2,** only two of the drainage areas, catchments '1' and 'UC-1', have post-development runoff that drains to Cross Avenue. The other 0.27 ha portion of the total 1.02 ha subject lands therefore was not accounted for in this hydrology model. Post-development flow rates were calculated using a conservative assumption of 90% imperviousness for the two drainage areas of 0.73 ha and 0.02 ha. The 0.73 ha drainage area, catchment '1', will drain to the underground stormwater management tank before being released via an orifice control to the 1050 mm existing storm sewer on Cross Avenue, and the 0.02 ha drainage area, catchment 'UC-1', will flow uncontrolled to Cross Avenue. The underground stormwater storage tank will be located within catchment '1', on Parking Level 1 (P1) and is sized to capture and control runoff from the 100-year storm event. Runoff from the site will be collected through proposed roof drains, trench drains, and surface area drains. Plumbing interior to the building and underground parking structure (designed by the mechanical engineer) will direct runoff to the stormwater tank. An emergency overland flow route from the tank to Cross Avenue is to be provided. This will either be in the form of an overflow pipe from the stormwater management tank or an overland flow route through the site with the discharge in the general vicinity of the tank. More details of the emergency flow route will be provided in the detailed design stage (with coordination from the mechanical engineer).

The table below summarizes the post-development flows from catchments '1' and 'UC-1', with the 100-year post-development flows being controlled to the 5-year pre-development target rate.

Table 5-1: Stormwater Flows

Storm Event	Total Pre-Development Flow	Post-Development Flows						
	Total	Flow From Area '1' To SWM Tank (L/s)	SWM Tank Release Rate (L/s)	Uncontrolled Flow: UC-1 (L/s)	SWM Tank + UC-1 (L/s)	Max. Allowable Release Rate from Site (L/s)	Site Release Rate (L/s)	Storage Volume Required (m^3)
2-year	94	154	50	4	51	135	55	243
5-year	135	219	70	6	72		77	
10-year	162	261	82	7	84		90	
25-year	218	316	99	9	102		109	
50-year	249	356	111	10	114		122	
100-year	280	394	123	11	126		135	

As per the VO model output provided in **Appendix B1**, 243 m^3 of storage is required for the proposed SWM tank to control the 100-year site flows under post-development conditions to the 5-year pre-development target rate. This complies with the SWM requirements from Table 2-17 of the Midtown Oakville EA, which specifies a unit storage requirement of 68.2 m^3/ha, resulting in a total required storage of 51.2 m^3, based on a development area of 0.75 ha. The runoff coefficient and associated tank sizing may be refined as detailed design progresses.

Urbantech® Consulting, A Division of Leighton-Zec Ltd. | 3760 14th Avenue, Suite 301 · Markham · ON · L3R 3T7 | 905.946.9461
urbantech.com

5.3.2. Stormwater Runoff Volume Reduction

According to the Midtown EA hydrology study any future development is to provide water balance controls by achieving the greater of either of the two following requirements:

1. Provide retention of 5 mm over the entire area of the proposed development, as per the City of Toronto's Wet Weather Flow Management Guidelines (November 2006); or

2. Retain stormwater on-site to achieve an equivalent annual volume of infiltration as pre-development conditions, as per Section 3.2 of the MOE Stormwater Management Planning and Design Manual (March 2003).

However, as per the Town's recommendations for other recent developments within the Midtown Oakville study area, a target retention of 25 mm is to be applied to the subject site. Based on the total site area of 1.02 ha, this results in a total retention of 255 m^3. With the site's relatively small size there will be limited opportunities for infiltration, so the re-use water will be used for onsite irrigation or other acceptable best efforts. The detailed design stage will provide additional information on the proposed stormwater management tank.

The underground stormwater management tank has been sized to include the minimum storage requirement of 243 m^3 required for peak flow control (as previously discussed in **Section 5.3.1**), plus an additional 255 m^3 for water balance retention. Therefore, the total SWM tank storage required to meet the applicable peak flow control and water balance requirements is 498 m^3.

5.3.3. Stormwater Quality Control

As required by the Town of Oakville, MECP Enhanced Level 1 protection through the removal of >80% of total suspended solids (TSS) will be provided for the site. This will be achieved through the use of a Jellyfish filtration unit (or approved equivalent), which is to be located downstream of the proposed stormwater management tank and upstream of the 300 mm diameter storm connection that will convey flows to the existing 1050 mm storm sewer on Cross Avenue. The Jellyfish unit will capture loaded areas from the vehicular and at-grade pedestrian areas but will be bypassed by the clean roof drainage areas. Adequate maintenance will need to be undertaken for the filtration system to provide a minimum 80% TSS removal. The detailed design phase will provide further details on maintenance requirements and sizing of the proposed Jellyfish filtration unit.

5.3.4. Spill Mitigation

We understand that Conservation Halton, in consultation with the Town of Oakville, is updating flood hazard modelling and mapping for the Midtown Oakville Growth Area. The study will ultimately define the flood hazard from the Morrison Wedgewood Diversion Channel and identify associated flood risk information. The Conservation Authority has indicated that the project will begin this summer with public consultation in fall 2024. A second public information centre is proposed for mid-2025, which would include draft flood hazard mapping.

The outcome of the study will potentially impact many of the development areas throughout the Midtown Oakville plan. We anticipate that any mitigation efforts and / or design elements that may be required to ultimately address flood risk will be determined collectively between the Town, the Conservation Authority and the development community. This can be discussed further as planning proceeds.

6 EROSION & SEDIMENT CONTROL

Erosion and sediment controls for the subject lands have been designed in conformance with the Town of Oakville and Conservation Halton guidelines. Erosion and sediment controls will be implemented during all site construction works including but not limited to topsoil stripping, bulk earthworks, foundation excavation, site servicing and stockpiling of materials and will conform to ESC guidelines (2006). The following erosion and sediment control measures are proposed to be implemented during construction:

- Installing heavy duty silt control fencing along the perimeter of the site at strategic locations.
- Installing a temporary mud mat at the construction site entrance.
- Wrapping the tops of all inlet structures with filter fabric and using install silt sacks.
- Tree preservation fencing in accordance with the tree preservation plan, if required.
- Gravel mud mat at the construction vehicle access point to minimize off-site tracking of sediments.
- Inspecting all sediment and erosion control controls to maintain them in good repair until such time as the Engineer or the Town approves their removal.

If required, site-specific measures will be determined during the detailed design / site alteration application stage. A detailed Erosion & Sediment Control Plan will be provided through the detailed design stage.

Drawing 1001 and **Drawing 1002** in **Appendix C** should be read in conjunction with this report.

7 CONCLUSIONS

This report has demonstrated that:

- Wastewater servicing for the site will be provided by a connection to the existing 300 mm sanitary sewer on Cross Avenue. The 300 mm sanitary sewer has sufficient existing capacity to accommodate full build-out of the 177 Cross Avenue property (as proposed). Future upsize to 450 mm may be required to accommodate additional proposed development along Cross Avenue and Lyons Lane.
- The Region of Halton is currently upgrading the trunk sewer downstream of the 177 Cross Avenue property (525 mm sewer through the GO Station parking lot). This project is in detailed design and is intended to be completed in the 2026 timeframe. Once complete, there are no other downstream capacity constraints anticipated in the trunk sewer system.
- Water servicing for the site will be provided by the existing 300 mm Zone O2 watermains on Cross Avenue and Argus Road.
- The 2021 ASP by GM BluePlan confirmed that there is sufficient pumping and reservoir capacity for near-term growth (to 2031) and that the existing linear infrastructure (i.e., 300 mm watermains) provides flow and pressure in accordance with Region of Halton level of service requirements.
- Stormwater quantity controls will be provided by controlling post-development peak flows from catchments '1' and 'UC-1' to 5-year pre-development levels. Storage will be provided in a stormwater tank located in the underground parking structure. Stormwater will be reduced to the 5-year pre-development level of 135 L/s and discharged to a proposed 300 mm diameter storm connection connecting into the existing municipal storm sewer in Cross Avenue. The required peak flow control storage volume is 243 m^3.
- The required water balance retention volume of 25 mm is equivalent to 255 m^3 of storage. This retention volume will also be stored in the underground stormwater tank and will be re-used for irrigation purposes and other best efforts, to be determined at the detailed design stage.
- Water quality criteria is met by means of a stormwater filtration system (Jellyfish unit or approved equivalent), placed upstream of the proposed stormwater tank.
- Erosion and sediment controls will be implemented during construction in accordance with Erosion and Sediment Control Guidelines.

Report Prepared by:

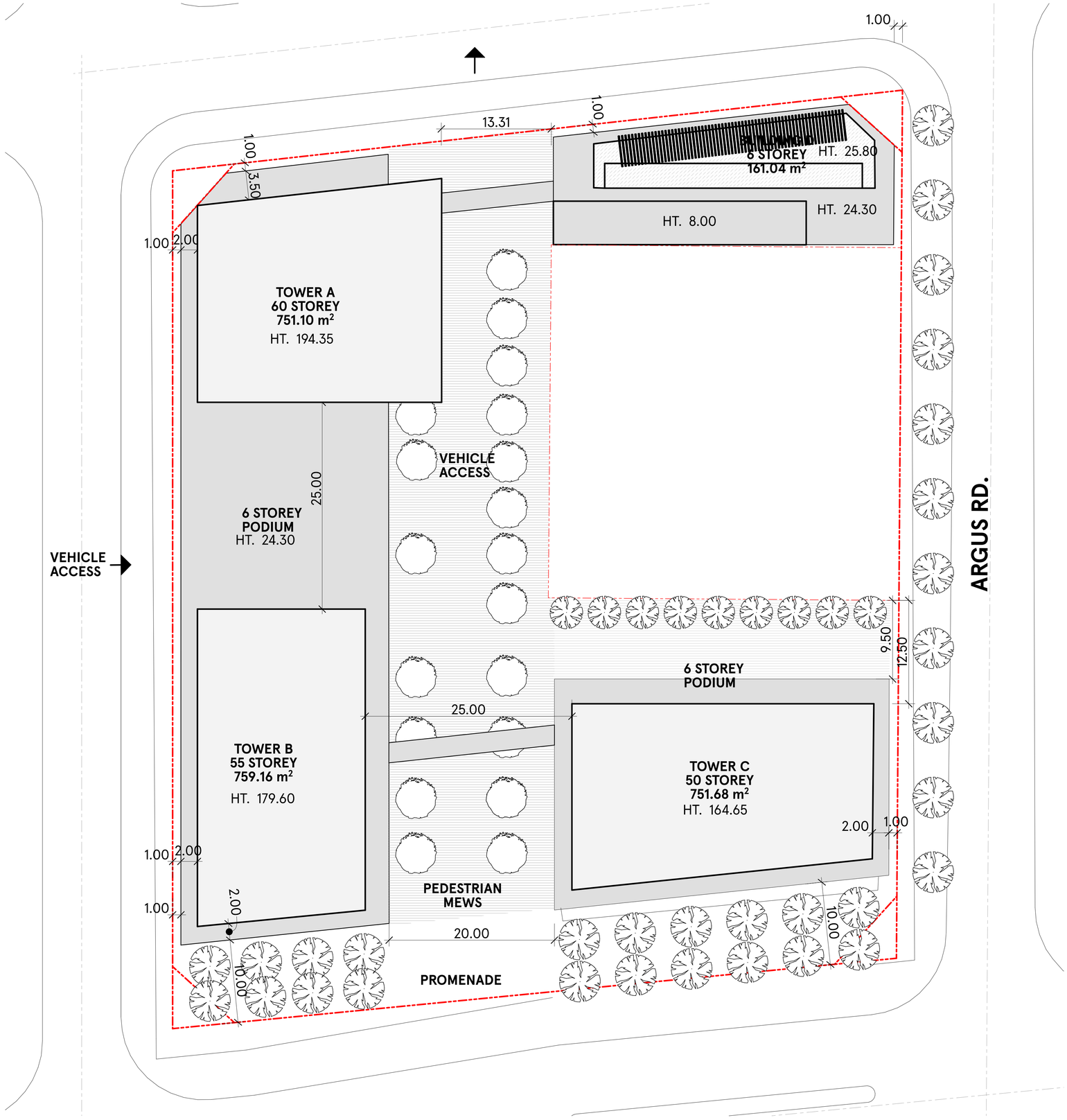


Kate Connell, P. Eng.
Senior Project Manager

Michael Baldaro, B. Eng
Water Resources Assistant

APPENDIX A:
Background Information and Site Statistics

A1: Site Plan
A2: Site Statistics
A3: Topographic Survey



1. Copyright of this drawing is reserved by the Architect. The drawing and all associated documents are an instrument of service by the Architect. The drawing and the information contained therein may not be reproduced in whole or in part without prior written permission of the Architect.
2. These Contract Documents are the property of the Architect. The Architect bears no responsibility for the interpretation of these documents by the Contractor. Upon written application, the Architect will provide written/ graphic clarification or supplementary information regarding the intent of the Contract Documents. The Architect will review Shop Drawings submitted by the Contractor for design conformance only.
3. Drawings are not to be scaled for construction. The Contractor is to verify all existing conditions and dimensions required to perform the work and report any discrepancies with the Contract Documents to the Architect before commencing any work.
4. Positions of exposed finished mechanical or electrical devices, fittings, and fixtures are indicated on architectural drawings. The locations shown on the architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the Architect.
5. These drawings are not to be used for construction unless noted below as "Issuance: For Construction"
6. All work is to be carried out in conformance with the Code and Bylaws of the authorities having jurisdiction.
7. The Architect of these plans and specifications gives no warranty or representation to any party about the constructability of the building(s) represented by them. All contractors or subcontractors must satisfy themselves when bidding and at all times ensure that they can properly construct the work represented by these plans.
8. Geodetic Elevations provided in these drawings are measured in accordance with the Canadian Geodetic Vertical Datum (CGVD2013).

© 2022 architects–Alliance

No	Issued For	Date
01	REZONING APPLICATION	27 June 2024

a—A
architects–Alliance
317 Adelaide Street West, 2nd Flr
Toronto ON . M5V 1P9 . Canada
www.architectsalliance.com
+1 . 416 . 593 . 6500

177 CROSS AVE.
177 CROSS ARGUS DEVELOPMENTS INC.

177 . Cross Ave.
Oakville . ON . L6J 2W7

SITE PLAN / ROOF PLAN

Scale: 1:250

Project No: 23008-1

27 June 2024

A0.6

Project Name *2024-06-27*

FLOOR AREA												PARKING						RESIDENTIAL UNITS													NET SALEBALE AREA (RETAIL & RESIDENTIAL)				
Level	Total Levels	Ht / Flr	Total Ht (M)	GCA / Level	Total GCA	Interior Amenity	Exterior Amenity	GFA Deductions	Residential	Retail GFA	Total GFA	Resident Vehicle Parking	Vistor Parking	Barrier-Free Parking	Car-Share Vehicular Parking	Visitor Bike Parking	Resident Bike Parking	S per level	S total	1b per level	1b total	2b per level	2b total	2b+D per level	2b+D total	3b per level	3b total	Total Units	RES SAL / Level	Total RES SAL	Retail / flr	Total Retail	Total SAL
P6	1	2.75	2.75	7,187	7,187			7,187			0	177	0	0	0	0	360																
P5	1	2.75	2.75	7,187	7,187			7,187			0	177	0	0	0	0	360																
P4	1	2.75	2.75	7,187	7,187			7,187			0	172	0	4	0	0	360																
P3	1	2.75	2.75	7,187	7,187			7,187			0	170	0	6	0	18	342																
P2	1	2.75	2.75	7,187	7,187			7,187			0	169	0	6	0	360	0																
P1	1	3.50	3.50	7,187	7,187			7,187			0	0	126	6	0	96	0																
Subtotal Below Grade					**43,120**			**43,120**			**0**	**865**	**126**	**22**	**0**	**474**	**1,422**																
BUILDING D																																	
Ground	1	8.00	8.00	602	602			0	505	97	602																		0	0	97	97	97
level 2-6	5	2.95	14.75	484	2,420			0	2,420		2,420							0	0	2	10	1	5	1	5	1	5	25					
Subtotal Above Grade	**1**		**22.75**		**602**	**0**	**0**	**0**	**505**	**97**	**3,022**								**0**		**10**		**5**		**5**		**5**	**25**		0		97	97
TOWER A & B																																	
Ground	1	8.00	8.00	1,810	1,810				1,461	349	1,810																			0	349	349	349
level 2-5	4	2.95	11.80	2,311	9,244				9,244		9,244							0	0	13	52	2	8	8	32	4	16	108	1,985	7,942		0	7,942
Levels 6	1	3.50	3.50	2,311	2,311				2,311		2,311							0	0	13	13	2	2	8	8	4	4	27	1,985	1,985		0	1,985
Levels 7	1	4.50	4.50	1,500	1,500	1,219	861		281		1,500																			0		0	0
TOWER A																																	
Levels 8-60	53	2.95	156.35	750	39,755				39,755	0	39,755							0	0	7	371	3	159	0	0	1	53	583	617.72	32,739	0	0	32,739
Mechanical	0	9.60	9.60	438	438			438	0	0	0																						
TOWER B																																	
Levels 8-55	48	2.95	141.60	750	36,002				36,002	0	36,002							0	0	8	384	3	144	1	48	0	0	576	624.66	29,984	0	0	29,984
Mechanical	0	9.60	9.60	432	432			432	0	0	0																						
Subtotal Above Grade	**108**		**193.75**		**91,493**	**1,219**	**861**	**870**	**89,054**	**349**	**90,623**								**0**		**820**		**313**		**88**		**73**	**1294**		72,650		349	72,999
TOWER C																																	
Ground	1	8.00	8.00	1,049	1,049			2	629	418	1,047																		0	0	418	418	418
level 2-5	4	2.95	11.80	1,049	4,196			8	4,188		4,188							0	0	3	12	3	12	2	8	4	16	48	896	3,585	0	0	3,585
Levels 6	1	3.50	3.50	1,049	1,049			2	1,047		1,047							0	0	3	3	3	3	2	2	4	4	12	896	896	0	0	896
Levels 7	1	2.95	2.95	751	751	586	220	2	162		749							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Levels 8-50	43	2.95	126.85	751	32,290				32,290		32,290							0	0	8	344	4	172	0	0	0	0	516	600.47	25,820	0	0	25,820
Mechanical	0	9.60	9.60	444	444			444	0		0																						
Subtotal Above Grade	**50**		**162.70**		**39,778**	**586**	**220**	**458**	**38,316**	**418**	**39,320**								**0**		**359**		**187**		**10**		**20**	**576**		**30,302**		**418**	**30,720**
Subtotal Above Grade			**216.50**		**131,873**	**1,806**	**1,080**	**1,328**	**127,875**	**864**	**132,965**	**0**	**0**		**0**	**0**	**0**		**0**		**1189**		**505**		**103**		**98**	**1895**		**102,952**		**864**	**103,816**
Subtotal			**216.50**		**174,993**	**1,806**	**1,080**	**44,448**	**127,875**	**864**	**132,965**	**865**	**126**		**0**	**474**	**1,422**		**0**		**1189**		**505**		**103**		**98**	**1895**		**0.8**		**0.01**	**0.78**
					1,882,923	**19,431**		**478,258**	**1,375,937**	**9,296**	**1,430,704**	***SF***											27%		5%								
																		Provided	**0%**		**63%**		**32%**		**5%**							
																		Requested			60%		35%		5%							

Floor Area Summary		
	Provided	Req|Per.
Site Area	10,078	
Total Residential Units	1,895	
Res GFA	127,875	
Commercial GFA	864	
Total GFA	132,965	
Interior Residential Amenity	1,806	3,790
Exterior Residential Amenity	1,080	3,790
Total Residential Amenity	2,886	7,580
FSI	13.19	

Vehicular Parking Summary			
Vehicular Parking	Provided	Provided Ratio	Req|Per.
Resident Vehicle Parking	881	0.46	
Visitor Vehicle Parking	132	0.07	
Auto Share	0		
Totals	**1,013**	0.53	

Bike Parking Summary		
Bike Parking	Provided	Req|Per.
Resident Bike Parking	1,422	1,421
Visitor Bike Parking	474	474
Totals	**1,896**	**1,895**

1. Copyright of this drawing is reserved by the Architect. The drawing and all associated documents are an instrument of service by the Architect. The drawing and the information contained therein may not be reproduced in whole or in part without prior written permission of the Architect.
2. These Contract Documents are the property of the Architect. The Architect bears no responsibility for the interpretation of these documents by the Contractor. Upon written application, the Architect will provide written/graphic clarification or supplementary information regarding the intent of the Contract Documents. The Architect will review Shop Drawings submitted by the Contractor for design conformance only.
3. Drawings are not to be scaled for construction. The Contractor is to verify all existing conditions and dimensions required to perform the work and report any discrepancies with the Contract Documents to the Architect before commencing any work.
4. Positions of exposed finished mechanical or electrical devices, fittings, and fixtures are indicated on architectural drawings. The locations shown on the architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the Architect.
5. These drawings are not to be used for construction unless noted below as "Issuance: For Construction"
6. All work is to be carried out in conformance with the Code and Bylaws of the authorities having jurisdiction.
7. The Architect of these plans and specifications gives no warranty or representation to any party about the constructability of the building(s) represented by them. All contractors or subcontractors must satisfy themselves when bidding and at all times ensure that they can properly construct the work represented by these plans.
8. Geodetic Elevations provided in these drawings are measured in accordance with the Canadian Geodetic Vertical Datum (CGVD2013).

© 2022 architects—Alliance

No	Issued For	Date
01	REZONING APPLICATION	27 June 2024

a—A
architects—Alliance
317 Adelaide Street West, 2nd Flr
Toronto ON . M5V 1P9 . Canada
www.architectsalliance.com
+1 . 416 . 593 . 6500

ONTARIO ASSOCIATION OF ARCHITECTS — LICENCE 3427

177 CROSS AVE.
177 CROSS ARGUS DEVELOPMENTS INC.

177 . Cross Ave.
Oakville . ON . L6J 2W7

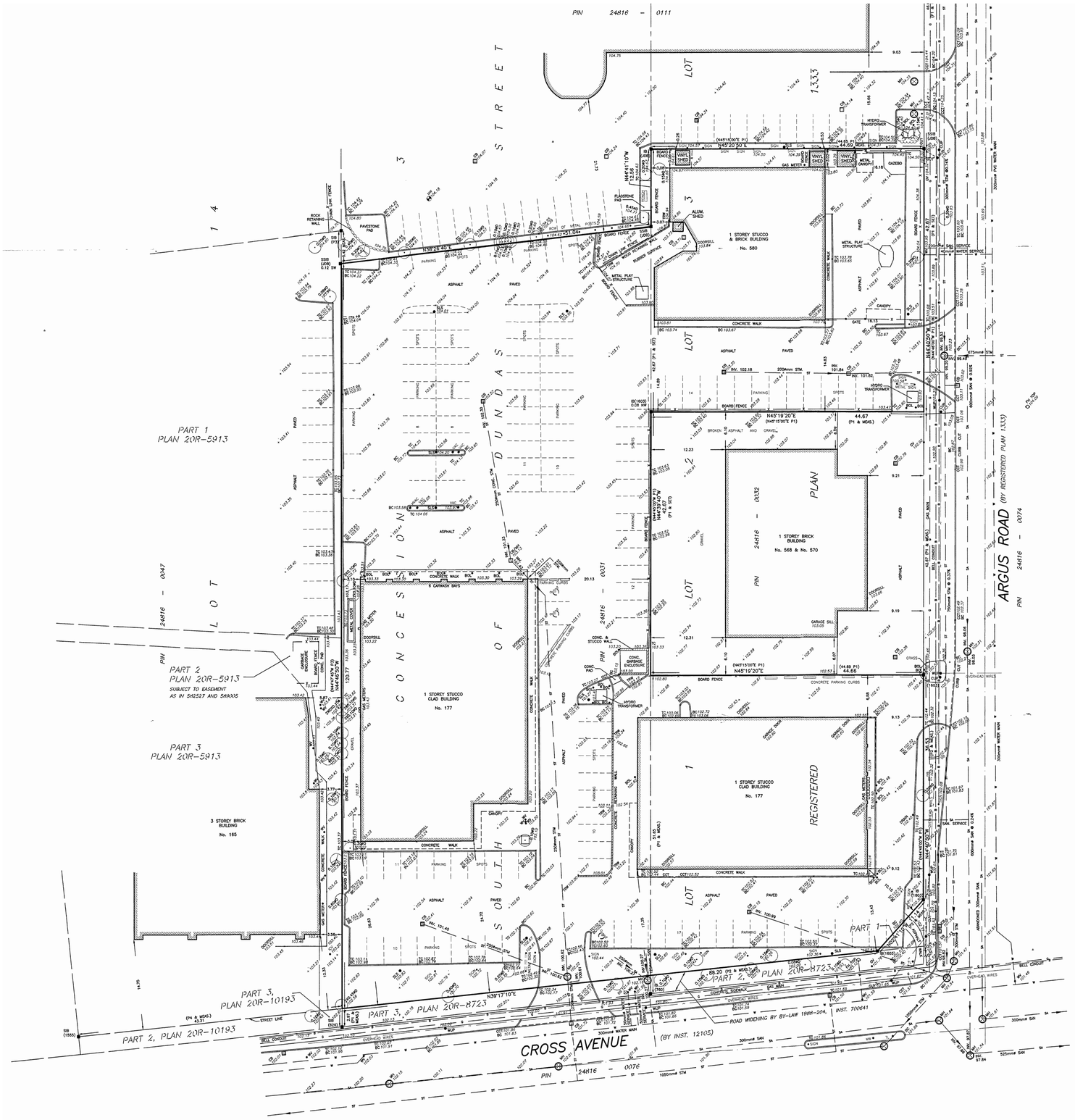
PROJECT SUMMARY + SITE STATISTICS

Scale:

Project No: 23008-1

27 June 2024

A0.4


PIN 24816 - 0111
LOT 1333
ARGUS ROAD (BY REGISTERED PLAN 1333)
PIN 24816 - 0074
LOT 14
CONCESSION 3 SOUTH OF DUNDAS STREET
LOT 13
LOT 12
LOT 1
REGISTERED PLAN
PLAN
PIN 24816 - 0032
PIN 24816 - 0047
PIN 24816 - 0076
PART 1 PLAN 20R-5913
PART 2 PLAN 20R-5913
SUBJECT TO EASEMENT AS IN 542527 AND 548005
PART 3 PLAN 20R-5913
PART 2, PLAN 20R-10193
PART 3, PLAN 20R-10193
PART 3, PLAN 20R-8723
PART 2, PLAN 20R-8723
PART 1
(BY INST. 12105)
INST. 700641
ROAD WIDENING BY BY-LAW 1986-204,
CROSS AVENUE
1 STOREY STUCCO & BRICK BUILDING No. 580
1 STOREY STUCCO CLAD BUILDING No. 177
1 STOREY BRICK BUILDING No. 568 & No. 570
3 STOREY BRICK BUILDING No. 165
N45°20'20"E 51.04
N44°41'10"W 44.65
N45°19'20"E 44.67
N45°19'20"E 44.66
N39°17'10"E 89.20
(N45°15'00"E P1)
(44.89 P1)
(P1 & MEAS.)
(P4 & MEAS.)
HYDRO TRANSFORMER
GAZEBO
METAL CANOPY
VINYL SHED
ALUM. SHED
METAL PLAY STRUCTURE
CANOPY
GATE
GARAGE SILL
CONCRETE PARKING CURBS
CONCRETE RETAINING WALL
ROCK RETAINING WALL
FLAGSTONE PAD
PAVESTONE PAD
BOARD FENCE
CHAIN LINK FENCE
WOOD RETAINING WALL
RUBBER SURFACE
ASPHALT
PAVED
CONCRETE WALK
BROKEN ASPHALT AND GRAVEL
GRAVEL
GRASS
6 CARWASH BAYS
PARKING
SPOTS
OVERHEAD WIRES
GAS METER
HYDRO METER
SAN SERVICE
WATER SERVICE
STORM SERVICE
300mmø PVC WATER MAIN
300mmø WATER MAIN
375mmø STM
200mmø STM
600mmø SAN & 525
1050mmø STM
525mmø SAN
STREET LINE
WELL CONDUIT
DRIVE OVER HOUSE CURB
DRIVE OVER CURB CUT
CONC. PARKING CURB
CONC. GARAGE ENCLOSURE
CONC. PAD
CONC. & STUCCO WALL
ACCESSIBLE PARKING SIGN
SIB (1555)
SIB (936)
SSIB (J08) 0.12 SW
SSIB (J08) 0.08 NW
SSIB (J08) 0.08 NE
IC (1603) 0.08 NW
IC (1603) 0.08 SW
IC (1603) 0.08 NE
IC (1603) 0.08 SE
IC (1603) 0.08 SW
IC (1603) 0.08 N

APPENDIX B:
Design Information and Calculations

B1: Stormwater Management Calculations
B2: Existing and Proposed Domestic Water Demand and Fire Flow Calculations
B3: Existing and Proposed Sanitary Flow Calculations
B4 Sanitary Sewer Design Sheets (Scenario 1, Scenario 2, Scenario 3)

Stormwater Management Calculations

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 3-Jun-24

Storage Calculations

Midtown Oakville EA

Total Drainage Area (Catchments 1 & UC-1)	0.75	ha
Unitary Storage Requirement	68.2	m^3/ha (Table 2-17 in Midtown Oakville EA)
Minimum Storage Required	51.2	m^3

Release Rates to Cross Avenue

Maximum Allowable Release Rate	0.135	m^3/s (5-yr Pre-Development Peak Flow Rate, VO Model)
Uncontrolled Release Rate (Catchment UC-1)	0.011	m^3/s (100-yr Post-Development Peak Flow Rate, VO Model)
Controlled Release Rate (Catchment 1 via SWM Tank)	0.124	m^3/s
Total Max. Release Rate (Catchments 1 and UC-1)	0.135	m^3/s (100-yr Post-Development Peak Flow Rate, VO Model)

Storage Calculations

Min. Storage Required	243	m^3 (100-yr Max. Storage Used, VO Model)
Min. Retention Required	25	mm
Retention Storage Required	255	m^3
Total Storage Needed	**498**	**m^3**

Urbantech Consulting, A Division of Leighton-Zec Ltd.
3760 14th, Suite 301 Markham, Ontario L3R 3T7
TEL: 905.946.9461 FAX: 905.946.9595
www.urbantech.com

WATER DEMAND CALCULATIONS - EXISTING CONDITIONS

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 11-Jul-24

Domestic Flow Calculations

Average Day Demand

Site Area =	1.02	ha
Population =	92	persons, Region Criteria (90 emp/ha for Light Commercial)
Average Consumption Rate =	275	L/person/day (Halton Linear Design Manual, Section 2.4)
Average Water Demand =	0.29	L/s

Max Day Demand

Max Day Factor =	2.25	all uses (Halton Linear Design Manual, Section 2.4.2)
Max Day Demand =	0.66	L/s

Max Hour Demand

Peak Hour Factor =	2.25	for Commercial Use (Table 2-2, Section 2.4)
Peak Hour Demand =	0.66	L/s

Notes:
1. Water usage per Region of Halton Water and Wastewater Linear Design Manual (2019), Light Commercial Use

Urbantech Consulting, A Division of Leighton-Zec Ltd.
3760 14th, Suite 301 Markham, Ontario L3R 3T7
TEL: 905.946.9461 FAX: 905.946.9595
www.urbantech.com

PROPOSED CONDITIONS - POPULATION ESTIMATE

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 11-Jul-24

Persons Per Unit (Note 2)

Apartments - Less Than 2-Bed	1.355	persons per unit
Apartments - Greater Than 2-Bed	1.831	persons per unit

Retail (Note 3)

Square Foot per Employee	403	sq. ft. / employee
	37	sq. m / employee

Site Population - Residential / Employment

	1-Bed Units	2-Bed Units	3-Bed Units	Retail Space (m^2)	Population	
					Residential	Employment
Tower A/B (Combined Floors)						
Ground	0	0	0	349	0	9
Levels 2 - 5	52	40	16	0	173	0
Level 6	13	10	4	0	43	0
Level 7	0	0	0	0	0	0
Tower A						
Levels 8 - 60	371	159	53	0	891	0
Tower B						
Levels 8 - 55	384	192	0	0	872	0
Tower C						
Ground	0	0	0	418	0	11
Levels 2 - 5	12	20	16	0	82	0
Level 6	3	5	4	0	21	0
Level 7	0	0	0	0	0	0
Levels 8 - 50	344	172	0	0	781	0
Building D						
Ground	0	0	0	97	0	3
Levels 2 - 6	10	10	5	0	41	0
TOTAL	**1,189**	**608**	**98**	**864**	**2,904**	**23**

Notes:
1. Proposed Unit Count per Site Statistics prepared by Architects-Alliance
2. Persons Per Unit from Halton Region 2022 DC Background Study Table A-4 (Housing Occupancy Rates) - Built Boundary
3. Retail population is from Halton Region 2022 DC Background Study Table A-8 (Sq. Ft per Employee Assumption 2022-2031), Commercial

WATER DEMAND CALCULATIONS - PROPOSED CONDITIONS

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 11-Jul-24

Domestic Flow Calculations

Average Day Demand

Population =	2904	persons, from Site Statistics
Per Capital Water Demand (Res) =	275	L/person/day (Halton Linear Design Manual, Section 2.4)
Average Water Demand =	9.24	L/s
Employment =	23	employees, from Site Statistics
Per Capital Water Demand (Emp) =	275	L/employee/day (Halton Linear Design Manual, Section 2.4)
Average Water Demand =	0.07	L/s
Total Average Day Water Demand =	9.32	L/s

Max Day Demand

Max Day Factor (Residential) =	2.25	all uses (Halton Linear Design Manual, Section 2.4.2)
Max Day Demand (Residential) =	20.80	L/s
Max Day Factor (Employment) =	2.25	all uses (Halton Linear Design Manual, Section 2.4.2)
Max Day Demand (Employment) =	0.17	L/s
Total Max Day Water Demand =	20.96	L/s

Max Hour Demand

Peak Hour Factor (Residential) =	4.0	for Residential (Table 2-2, Section 2.4)
Peak Hour Demand (Residential) =	36.97	L/s
Peak Hour Factor (Employment) =	2.25	for Employment (Table 2-2, Section 2.4)
Peak Hour Demand (Employment) =	0.17	L/s
Total Peak Hour Water Demand =	37.13	L/s

Notes:
1. Water usage per Region of Halton Water and Wastwater Linear Design Manual (2019)

Urbantech Consulting, A Division of Leighton-Zec Ltd.
3760 14th, Suite 301 Markham, Ontario L3R 3T7
TEL: 905.946.9461 FAX: 905.946.9595
www.urbantech.com

URBANTECH

WATER DEMAND CALCULATIONS - FIRE FLOW REQUIREMENTS (TOWER A/B)

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 12-Jul-24

Fire Flow Calculations - Tower A/B (Combined Podium Floors)

Based on the *Water Supply for Public Fire Protection, 2020* by Fire Underwriters Survey

1 Estimate of Fire Flow

F = 220 C (A)^1/2

F = Fire Flow (L/min)
C = Construction Type Coefficient
= 0.6 Fire Resistive
A = Total floor area (m^2)
= For fire-resistant buildings with protective openings, 'A' is taken as the largest floor area plus 25% of each of the two adjoining floors (excluding the basement). As such,

Floor	Area (m^2)	%
Level 3	2,311	25%
Level 4	2,311	100%
Level 5	2,311	25%

= 3467 m^2

F = 7772 L/min
= 8000 L/min, rounded to the nearest 1000 L/min

2 Occupancy Reduction

0% no adjustment (combustible contents)
F = 8000 L/min

3 Sprinkler Reduction

50% For NFPA Sprinkler System (full coverage), standard water supply and fully supervised system

F = 4000 L/min

Urbantech Consulting, A Division of Leighton-Zec Ltd.
3760 14th, Suite 301 Markham, Ontario L3R 3T7
TEL: 905.946.9461 FAX: 905.946.9595
www.urbantech.com

URBANTECH

WATER DEMAND CALCULATIONS - FIRE FLOW REQUIREMENTS (TOWER A/B)

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 12-Jul-24

4 Separation Charge (Tower A/B)

Direction	Separation	Charge	
North	>30	0%	Road + setbacks
West	>30	0%	Road + setbacks
South	25.0	10%	Tower Separation
East	25.0	10%	Tower Separation

Total Charge = 20%
F = 1600 L/min

Required Fire Flow

F = 5600 L/min
= 6000 L/min, rounded to the nearest 1000 L/min

Fire Flow Demand =	100.0	L/s
=	1,585	USGPM

Notes:

1. Proposed Building Statistics, Type, and Proximities per Architectural Drawings prepared by Architects-Alliance

Urbantech Consulting, A Division of Leighton-Zec Ltd.
3760 14th, Suite 301 Markham, Ontario L3R 3T7
TEL: 905.946.9461 FAX: 905.946.9595
www.urbantech.com

URBANTECH

WASTEWATER DEMAND CALCULATIONS - EXISTING CONDITIONS

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 11-Jul-24

Domestic Flow Calculations

Average Dry Weather Flow

Site Area =	1.02	ha
Population =	92	persons, Region Criteria (90 emp/ha for Light Commercial)
Average Generation Rate =	275	L/person/day (Halton Linear Design Manual, Section 3.2.2)
Average Dry Weather Flow =	0.29	L/s

Peaking Factor (Modified Harmon)

Kav =	0.80	(Halton Linear Design Manual, Section 3.2.3)
Peaking Factor =	3.40	(Halton Linear Design Manual, Section 3.2.3)

Inflow / Infiltration

Factor =	0.286	L/ha/s (Halton Linear Design Manual, Section 3.2.4)
I/I =	0.292	L/s

Peak Wet Weather Flow = 1.29 L/s

Notes:
1. Wastewater generation per Region of Halton Water and Wastewater Linear Design Manual (2019), Light Commercial Use

Urbantech Consulting, A Division of Leighton-Zec Ltd.
3760 14th, Suite 301 Markham, Ontario L3R 3T7
TEL: 905.946.9461 FAX: 905.946.9595
www.urbantech.com

PROPOSED CONDITIONS - POPULATION ESTIMATE

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 11-Jul-24

Persons Per Unit (Note 2)

Apartments - Less Than 2-Bed	1.355	persons per unit
Apartments - Greater Than 2-Bed	1.831	persons per unit

Retail (Note 3)

Square Foot per Employee	403	sq. ft. / employee
	37	sq. m / employee

Site Population - Residential / Employment

	1-Bed Units	2-Bed Units	3-Bed Units	Retail Space (m^2)	Population	
					Residential	Employment
Tower A/B (Combined Floors)						
Ground	0	0	0	349	0	9
Levels 2 - 5	52	40	16	0	173	0
Level 6	13	10	4	0	43	0
Level 7	0	0	0	0	0	0
Tower A						
Levels 8 - 60	371	159	53	0	891	0
Tower B						
Levels 8 - 55	384	192	0	0	872	0
Tower C						
Ground	0	0	0	418	0	11
Levels 2 - 5	12	20	16	0	82	0
Level 6	3	5	4	0	21	0
Level 7	0	0	0	0	0	0
Levels 8 - 50	344	172	0	0	781	0
Building D						
Ground	0	0	0	97	0	3
Levels 2 - 6	10	10	5	0	41	0
TOTAL	**1,189**	**608**	**98**	**864**	**2,904**	**23**

Notes:
1. Proposed Unit Count per Site Statistics prepared by Architects-Alliance
2. Persons Per Unit from Halton Region 2022 DC Background Study Table A-4 (Housing Occupancy Rates) - Built Boundary
3. Retail population is from Halton Region 2022 DC Background Study Table A-8 (Sq. Ft per Employee Assumption 2022-2031), Commercial

URBANTECH

WASTEWATER DEMAND CALCULATIONS - PROPOSED CONDITIONS

Project Name: 177 Cross Avenue
Municipality: Town of Oakville
Project No.: 23-308

Prepared by: KC
Checked by: MB
Date: 11-Jul-24

Domestic Flow Calculations

Average Dry Weather Flow

Population =	2904	persons, from Site Statistics
Per Capita WW Generation Rate (Res) =	275	L/person/day (Halton Linear Design Manual, Section 3.2.2)
Average Dry Weather Flow =	9.24	L/s
Employment =	23	employees, from Site Statistics
Per Capita WW Generation Rate (Emp) =	275	L/employee/day (Halton Linear Design Manual, Section 3.2.2)
Average Dry Weather Flow =	0.07	L/s
Total Average Dry Weather Flow =	9.32	L/s

Peaking Factor (Modified Harmon)

Kav =	1.0	(Halton Linear Design Manual, Section 3.2.3)
Peaking Factor =	3.45	(Halton Linear Design Manual, Section 3.2.3)

Inflow /Infiltration

Factor =	0.286	L/ha/s (Halton Linear Design Manual, Section 3.2.4)
I/I =	0.292	L/s
Design Flow =	**32.45**	**L/s**

Notes:
1. Wastewater generation per Region of Halton Water and Wastwater Linear Design Manual (2019)

Urbantech Consulting, A Division of Leighton-Zec Ltd.
3760 14th, Suite 301 Markham, Ontario L3R 3T7
TEL: 905.946.9461 FAX: 905.946.9595
www.urbantech.com

URBANTECH®

SAN. SEWER DESIGN SHEET - EXISTING CONDITIONS

SCENARIO 1: CROSS AVENUE SEWER TO ARGUS ROAD

177 CROSS AVENUE FSR

REGIONAL MUNICIPALITY OF HALTON

PROJECT DETAILS

Project No: 23-308
Date: 12-Jun-24
Designed by: K.C.
Checked by: B.M.

DESIGN CRITERIA

Min Diameter =	200	mm	Avg. Domestic Flow =	275.0	l/c/d
Mannings 'n'=	0.013		Infiltration =	0.286	l/s/ha
Min. Velocity =	0.60	m/s	Max. Peaking Factor =	4.00	
Max. Velocity =	3.00	m/s	Min. Peaking Factor=	2.00	

NOMINAL PIPE SIZE USED

STREET	FROM MH	TO MH	LENGTH (m)	RESIDENTIAL							COMMERCIAL/INDUSTRIAL/INSTITUTIONAL						FLOW CALCULATIONS							PIPE DATA					
				AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENSITY (P/ha)	DENSITY (P/Unit)	POP	ACCUM. RES. POP.	AREA (ha)	ACC. AREA (ha)	EQUIV. POP. (P/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)	PERCENT FULL (%)
Lyons Lane	MH1262	MH1263									1.74	1.74	90		157	157	0.5	157	4.00	2.0			2.5	0.85	250	54.8	1.12	0.55	5%
	MH1263	MH1265										1.74				157	0.5	157	4.00	2.0			2.5	0.26	250	30.3	0.62	0.36	8%
	MH1265	MH1264									0.50	2.24	90		45	202	0.6	202	4.00	2.6			3.2	1.00	250	59.5	1.21	0.63	5%
	MH1264	MH1266										2.24				202	0.6	202	4.00	2.6			3.2	0.56	300	72.4	1.02	0.50	4%
Cross Avenue	MH1266	MH1267										2.24				202	0.6	202	4.00	2.6			3.2	0.58	300	73.6	1.04	0.51	4%
	MH1269	MH1268									0.30	0.30	90		27	27	0.1	27	4.00	0.3			0.4	0.44	300	64.1	0.91	0.24	1%
	MH1268	MH1267										0.30				27	0.1	27	4.00	0.3			0.4	0.36	250	35.7	0.73	0.19	1%
	MH1267	MH1270									8.74	11.28	90		787	1016	3.2	1016	3.80	12.3			15.5	0.37	300	58.8	0.83	0.69	26%
	MH1270	MH1271									2.92	14.20	90		263	1279	4.1	1279	3.73	15.2			19.2	0.45	300	64.9	0.92	0.80	30%
	MH1271	MH1272									1.24	15.44	90		112	1391	4.4	1391	3.70	16.4			20.8	0.38	300	59.6	0.84	0.76	35%
	MH1272	MH1273										15.44				1391	4.4	1391	3.70	16.4			20.8	0.60	300	74.9	1.06	0.90	28%
	MH1273	MH1274										15.44				1391	4.4	1391	3.70	16.4			20.8	0.52	300	69.7	0.99	0.86	30%

URBANTECH®

SAN. SEWER DESIGN SHEET - PROPOSED (177 CROSS ONLY)

SCENARIO 2: CROSS AVENUE SEWER TO ARGUS ROAD

177 CROSS AVENUE FSR

REGIONAL MUNICIPALITY OF HALTON

PROJECT DETAILS

Project No: 23-308
Date: 12-Jun-24
Designed by: K.C.
Checked by: B.M.

DESIGN CRITERIA

Min Diameter =	200	mm	Avg. Domestic Flow =	275.0	l/c/d
Mannings 'n'=	0.013		Infiltration =	0.286	l/s/ha
Min. Velocity =	0.60	m/s	Max. Peaking Factor =	4.00	
Max. Velocity =	3.00	m/s	Min. Peaking Factor=	2.00	

NOMINAL PIPE SIZE USED

STREET	FROM MH	TO MH	LENGTH (m)	RESIDENTIAL							COMMERCIAL/INDUSTRIAL/INSTITUTIONAL						FLOW CALCULATIONS							PIPE DATA					
				AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENSITY (P/ha)	DENSITY (P/Unit)	POP	ACCUM. RES. POP.	AREA (ha)	ACC. AREA (ha)	EQUIV. POP. (P/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)	PERCENT FULL (%)
Lyons Lane	MH1262	MH1263									1.73	1.73	90		156	156	0.5	156	4.00	2.0			2.5	0.85	250	54.8	1.12	0.55	5%
	MH1263	MH1265										1.73				156	0.5	156	4.00	2.0			2.5	0.26	250	30.3	0.62	0.36	8%
	MH1265	MH1264									0.50	2.23	90		45	201	0.6	201	4.00	2.6			3.2	1.00	250	59.5	1.21	0.63	5%
	MH1264	MH1266										2.23				201	0.6	201	4.00	2.6			3.2	0.56	300	72.4	1.02	0.50	4%
Cross Avenue	MH1266	MH1267										2.23				201	0.6	201	4.00	2.6			3.2	0.58	300	73.6	1.04	0.51	4%
	MH1269	MH1268									0.30	0.30	90		27	27	0.1	27	4.00	0.3			0.4	0.44	300	64.1	0.91	0.24	1%
	MH1268	MH1267										0.30				27	0.1	27	4.00	0.3			0.4	0.36	250	35.7	0.73	0.19	1%
	MH1267	MH1270									8.74	11.27	90		787	1015	3.2	1015	3.80	12.3			15.5	0.37	300	58.8	0.83	0.69	26%
	MH1270	MH1271									0.82	12.09	90		74	1089	3.5	1089	3.78	13.1			16.5	0.45	300	64.9	0.92	0.76	26%
	MH1271	MH1272									2.78	14.87	90		251	1340	4.3	1340	3.71	15.8			20.1	0.38	300	59.6	0.84	0.73	34%
	MH1272	MH1273							2927	2927	0.95	15.82				1340	4.5	4267	3.31	44.9			49.5	0.60	300	74.9	1.06	1.11	66%
	MH1273	MH1274								2927		15.82				1340	4.5	4267	3.31	44.9			49.5	0.52	300	69.7	0.99	1.06	71%

URBANTECH®

SAN. SEWER DESIGN SHEET - PROPOSED (ALL NEW DEVELOPMENT)

SCENARIO 3: CROSS AVENUE SEWER TO ARGUS ROAD

177 CROSS AVENUE FSR

REGIONAL MUNICIPALITY OF HALTON

PROJECT DETAILS

Project No: 23-308
Date: 12-Jun-24
Designed by: K.C.
Checked by: B.M.

DESIGN CRITERIA

Min Diameter = 200 mm
Mannings 'n'= 0.013
Min. Velocity = 0.60 m/s
Max. Velocity = 3.00 m/s
Avg. Domestic Flow = 275.0 l/c/d
Infiltration = 0.286 l/s/ha
Max. Peaking Factor = 4.00
Min. Peaking Factor= 2.00

NOMINAL PIPE SIZE USED

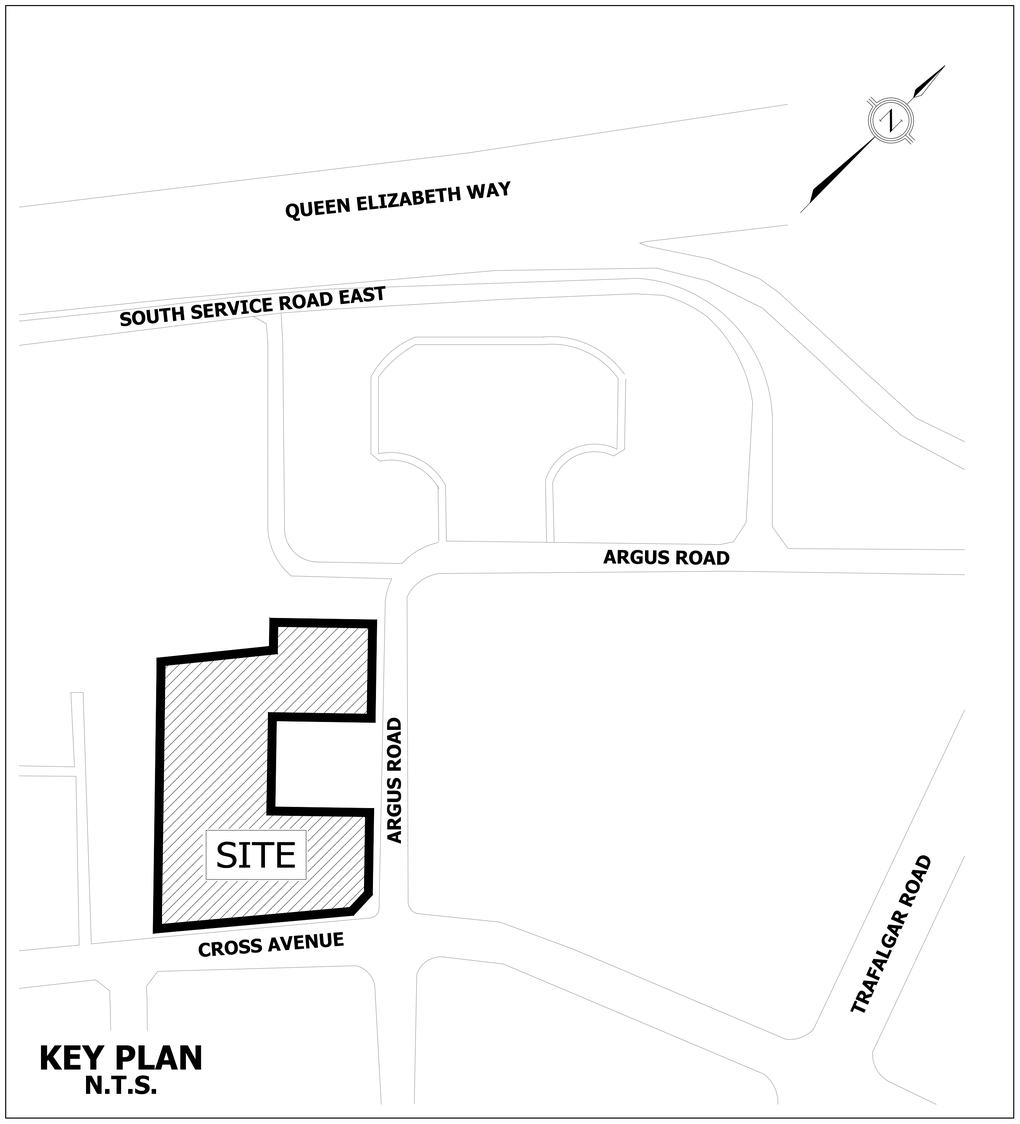
STREET	FROM MH	TO MH	LENGTH (m)	RESIDENTIAL							COMMERCIAL/INDUSTRIAL/INSTITUTIONAL						FLOW CALCULATIONS							PIPE DATA					
				AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENSITY (P/ha)	DENSITY (P/Unit)	POP	ACCUM. RES. POP.	AREA (ha)	ACC. AREA (ha)	EQUIV. POP. (P/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)	PERCENT FULL (%)
Lyons Lane	MH1262	MH1263							515	515	0.57	0.57					0.2	515	3.97	6.5			6.7	0.85	250	54.8	1.12	0.75	12%
	MH1263	MH1265								515	1.16	1.73	90		105	105	0.5	620	3.92	7.7			8.2	0.26	250	30.3	0.62	0.51	27%
	MH1265	MH1264								515	0.50	2.23	90		45	150	0.6	665	3.91	8.3			8.9	1.00	250	59.5	1.21	0.87	15%
	MH1264	MH1266								515		2.23				150	0.6	665	3.91	8.3			8.9	0.56	300	72.4	1.02	0.69	12%
Cross Avenue	MH1266	MH1267								515		2.23				150	0.6	665	3.91	8.3			8.9	0.58	300	73.6	1.04	0.70	12%
	MH1269	MH1268									0.30	0.30	90		27	27	0.1	27	4.00	0.3			0.4	0.44	300	64.1	0.91	0.24	1%
	MH1268	MH1267										0.30				27	0.1	27	4.00	0.3			0.4	0.36	250	35.7	0.73	0.19	1%
	MH1267	MH1270								515	8.74	11.27	90		787	964	3.2	1479	3.68	17.3			20.6	0.37	300	58.8	0.83	0.75	35%
	MH1270	MH1271								515	0.82	12.09	90		74	1038	3.5	1553	3.67	18.1			21.6	0.45	300	64.9	0.92	0.80	33%
	MH1271	MH1272							4777	5292	2.78	14.87				1038	4.3	6330	3.15	63.4			67.7	0.38	**450**	175.8	1.11	0.99	39%
	MH1272	MH1273							2927	8219	0.95	15.82				1038	4.5	9257	2.99	88.0			92.6	0.60	**450**	220.8	1.39	1.29	42%
	MH1273	MH1274								8219		15.82				1038	4.5	9257	2.99	88.0			92.6	0.52	**450**	205.6	1.29	1.24	45%

APPENDIX C:
Drawings and Figures

Drawing 100 General Notes
Drawing 101 Servicing Plan
Drawing 102 Removal Plan
Drawing 201 Grading Plan
Drawing 301 Storm Drainage Plan
Drawing 302 Sanitary Drainage Plan
Drawing 303 Overall Existing Sanitary Drainage Plan
Drawing 304 Overall Proposed Sanitary Drainage Plan
Drawing 701 Standard Details
Drawing 801 Composite Utility Plan
Drawing 1001 Erosion & Sediment Control Plan
Drawing 1002 Erosion & Sediment Control Details

TOWN OF OAKVILLE
177 CROSS AVENUE

FIRST SUBMISSION (JUL. 16, 2024)



KEY PLAN
N.T.S.

LIST OF DRAWINGS

GENERAL PLANS
100 - GENERAL NOTES
101 - SERVICING PLAN
102 - REMOVAL PLAN

GRADING PLANS
201 - GRADING PLAN

DRAINAGE PLANS
301 - STORM DRAINAGE PLAN
302 - SANITARY DRAINAGE PLAN
303 - OVERALL EXISTING SANITARY DRAINAGE PLAN
304 - OVERALL PROPOSED SANITARY DRAINAGE PLAN

STANDARD DETAILS
701 - STANDARD DETAILS

COMPOSITE UTILITY PLAN
801 - COMPOSITE UTILITY PLAN

EROSION AND SEDIMENT CONTROL PLANS
1001 - EROSION & SEDIMENT CONTROL PLAN
1002 - EROSION & SEDIMENT CONTROL DETAILS

LEGEND:

LIMIT OF SUBDIVISION

TOWN FILE No. :

URBANTECH®

Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

OAKVILLE

OWNER :
177 CROSS ARGUS DEVELOPMENTS INC. 3190 HARVERSTOR ROAD, SUITE 201A BURLINGTON, ON. L7N 3T1

GENERAL NOTES:

1. ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF TOWN OF OAKVILLE, REGION OF HALTON, OPSD, OPSS, AS AMENDED BY THE TOWN OF OAKVILLE AND THE REGION OF HALTON. STANDARD DRAWINGS AND SPECIFICATIONS OF THE TOWN OF OAKVILLE AND THE REGION OF HALTON SHOULD BE READ IN CONJUNCTION WITH THE INFORMATION HEREIN.
2. MATERIAL SUBSTITUTIONS MUST HAVE PRIOR APPROVAL OF THE ENGINEER, TOWN OF OAKVILLE & REGION OF HALTON AND ANY OTHER REGULATORY AGENCIES HAVING JURISDICTION.
3. EXISTING INFORMATION TAKEN FROM TOPOGRAPHIC SURVEY PROVIDED BY RADY-PENTEK & EDWARD ONTARIO LAND SURVEYORS.
4. NO BLASTING IS ALLOWED.
5. COMPACTION OF GRANULAR BACKFILL AROUND CATCHBASINS AND MANHOLES TO BE 95% S.P.M.D.D. AND SHALL BE COMPACTED MECHANICALLY.
6. ROOF LEADERS TO DISCHARGE TO SPLASH PADS AS PER TOWN OF OAKVILLE STANDARD 10-1.
7. STORM SEWER BEDDING TO BE HL6 OR HL8 (NOT CRUSHER RUN) AS PER TOWN OF OAKVILLE STANDARDS.
8. FILL AREAS GREATER THAN 0.3m WITHIN MUNICIPAL RIGHT-OF-WAY ARE SUBJECT TO COMPACTION TESTS TO ACHIEVE 100% S.P.M.D.D.
9. SET MANHOLE AND CATCHBASIN TOPS FLUSH WITH HL8 ASPHALT AND ARE TO BE ADJUSTED TO FINAL GRADE PRIOR TO PLACING FINAL LIFT OF ASPHALT.
10. TOWN OF OAKVILLE STANDARD 6-1 TO BE USED FOR CURB AND GUTTER UNLESS OTHERWISE NOTED.
11. TOWN OF OAKVILLE STANDARD 6-3 TO BE USED FOR ALL SIDEWALK. SIDEWALK DEPRESSIONS TO BE INSTALLED AT INTERSECTIONS. INTERSECTION RADII TO BE 7.50m UNLESS OTHERWISE NOTED.
12. PAVEMENT STRUCTURES WITHIN THE PLAN OF SUBDIVISION ARE AS GEOTECHNICAL REPORT BY SOIL ENGINEERS LTD.

ROAD BASE THICKNESS - LANEWAYS AND LOCAL ROADS (NOT SUPPORTING TRANSIT)

40mm - HL.3 ASPHALT SURFACE COURSE
80mm - HL.8 ASPHALT BINDER COURSE (50mm LANEWAY)
150mm - GRANULAR 'A' BASE
350mm - GRANULAR 'B' TYPE 1 - SUB-BASE

ROAD BASE THICKNESS - HARASYM TRAIL

40mm - HL.3 HS ASPHALT SURFACE COURSE
100mm - HDBC HL.8 ASPHALT BINDER COURSE
150mm - GRANULAR 'A' BASE
350mm - GRANULAR 'B' TYPE 1 - SUB-BASE

13. ANY ORGANIC MATERIAL OR TOPSOIL WITHIN FUTURE ROAD ALLOWANCES SHALL BE STRIPPED PRIOR TO CONSTRUCTION.
14. ALL TRENCHES WITHIN EXISTING R.O.W. TO BE BACKFILLED WITH GRANULAR MATERIAL AND COMPACTED TO 95% S.P.M.D.D.
15. ALL TRENCHES WITHIN A REGIONAL R.O.W. TO BE BACKFILLED WITH GRANULAR MATERIAL AND COMPACTED TO 98% S.P.M.D.D.
16. EROSION AND SEDIMENT CONTROL FACILITIES TO BE INSTALLED AS PER THE APPROVED SITE ALTERATION PERMIT PRIOR TO CONSTRUCTION.
17. SUBDRAINS TO BE INSTALLED AS PER TOWN OF OAKVILLE STD. 6-2 UNLESS OTHERWISE NOTED.
18. A POURED CONCRETE PAD IS REQUIRED AT ALL COMMUNITY MAILBOX LOCATIONS AS PER CANADA POST STANDARDS.
19. ALL MATERIALS SHALL MEET OR EXCEED ONTARIO PROVINCIAL STANDARD AND TOWN STANDARD SPECIFICATIONS.
20. WATERMAINS AND SANITARY SEWERS TO CONFORM TO LATEST REGIONAL MUNICIPALITY OF HALTON SPECIFICATIONS AND REQUIREMENTS.
21. ALL SEWERS ARE TO HAVE AN UNDISTURBED BASE.
22. BOREHOLE LOGS INFORMATION ARE FROM GEOTECHNICAL REPORT BY SOIL ENGINEERS LTD. DATED JUNE 2005.
23. REGION AND CITY ACCEPTANCE OF SEWERS ON GRAYDON LANDS IS REQUIRED BEFORE CONNECTIONS ARE MADE.

STREET SECTION DETAILS:

1. MAXIMUM ROADWAY PROFILE GRADIENT SHALL BE 6.0%, MINIMUM ROADWAY PROFILE GRADIENT SHALL BE 0.5%.
2. SUB-GRADE SHALL HAVE A CROSS-FALL OF -3.0% FROM CENTRELINE OF ROAD.
3. ALL GRANULAR AND ASPHALT LAYERS SHALL HAVE A CROSS-FALL OF:
   - 3.0% FROM CENTERLINE OF ROAD (FOR PAVEMENT WIDTHS OF 8.5M OR LESS)
   - 2.0% FROM CENTERLINE OF ROAD (FOR PAVEMENT WIDTHS GREATER THAN 8.5M)
4. TOP COURSE ASPHALTIC CONCRETE SHALL BE PLACED ONLY AFTER ADJACENT BUILDINGS (HOMES, INDUSTRIAL, COMMERCIAL ETC) HAVE BEEN CONSTRUCTED AND ONLY WITH THE CONSENT OF THE DIRECTOR OF ENGINEERING AND CONSTRUCTION.
5. FULL LENGTH SUB-DRAINS ARE TO BE INSTALLED ON BOTH SIDES OF THE ROAD.
6. CONCRETE CURBS SHALL BE OPSD 600.060 FOR STANDARD STREET SECTION STD 7-21A AND 7-22B (LANEWAYS).
7. CONCRETE CURBS SHALL BE OPSD 600.040 FOR ALL STANDARD STREET SECTIONS EXCEPT STD. 7-21A AND 7-21B. TOWN OF OAKVILLE STD 6-1 SHALL BE USED IN LIEU OF 600.040 IN NEW DEVELOPMENT AREAS WHERE TWO STAGE CURB AND GUTTER IS REQUIRED. TWO STAGE CURB NOT ACCEPTED ON REGIONAL ROADS.
8. ALL ROADWAY BOULEVARD AREAS SHALL BE OVERLAIN WITH 200MM TOPSOIL AND NO.1 NURSERY SOD.
9. SIDEWALKS SHALL CONFORM TO OPSD 310.010.
10. SIDEWALK RAMPS AT INTERSECTIONS AND MID-BLOCK CROSSINGS SHALL CONFORM TO OPSD 310.030 WITH THE REQUIREMENT THAT THE RAMP GRADIENT SHALL NOT EXCEED 5.0%. TACTILE PLATES TO BE INSTALLED AT ALL SIDEWALK AND MID-BLOCK CROSSINGS AND SHALL CONFORM TO CURRENT TOWN STANDARDS AND AODA (I.E. ASPHALT COATED CAST IRON PLATES).

STORM SEWERS:

1. MANHOLES AS PER O.P.S.D. 701.010 - 701.015 WITH COVER AND FRAME AS PER O.P.S.D. 401.010 TYPE 'A' UNLESS OTHERWIDE SPECIFIED ON PLANS. ALL STORM MANHOLE LIDS TO BE STAMPED WITH "STORM".
2. CONCRETE PIPE TO BE CLASS 65-D AS PER CSA A257.2, PVC SDR 35 OR RIBBED PVC CONFORMING TO CSA B.182.2 (MAX PVC = 600MM DIA). HIGHER STRENGTH PIPE CLASSES SHALL BE SELECTED FOR DEEPER SEWERS.
3. SERVICE CONNECTIONS TO BE 150MM DIA. WHITE PVC SDR-28 PIPE. MINIMUM COVER TO BE 2.0M AND MAXIMUM COVER TO BE 3.0M AT STREETLINE WHERE APPLICABLE.
4. CATCHBASINS TO BE AS PER O.P.S.D. 705.02 FOR SINGLES AND 705.01 FOR DOUBLES. GRATES TO BE AS PER O.P.S.D. 400.11. CATCHBASINS LEADS TO BE 250MM DIA. FOR SINGLES AND 300MM DIA FOR DOUBLES AS PER CSA B182.2 SDR.-35. REFER TO TOWN STD.3-4 FOR CATCHBASIN CONNECTION DETAILS. RLCB GRATE WITH BEHIVE GRATES AS PER STD.5-2. RLCBS INDICATED ON PLAN AND PROFILES TO HAVE HIGH CAPACITY GRATES AS PER STEPCON INDUSTRIES MODEL NO. 5103 ON DWG 505.
5. NO SUMP REQUIRED ON REAR LOT CATCHBASINS AS PER TOWN OF OAKVILLE STD. 3-1 WITH BEEHIVE GRATE AS PER STD. 5-2 INCLUDING A 100MM CONCRETE CAP FROM CATCHBASIN TO STREETLINE.
6. SILT TRAPS WITH FILTER FABRIC TO BE INSTALLED ON ALL CATCHBASINS AS PER THE REQUIREMENTS OF THE SITE ALTERATION PERMIT. TRAPS TO BE CLEANED REGULARLY BY THE CONTRACTOR. TRAPS ARE NOT TO BE REMOVED UNTIL CURBS ARE CONSTRUCTED AND BOULEVARDS ARE SODDED AND BACKYARDS ARE GRADED AND SODDED.
7. RUBBER GASKETED JOINTS ARE TO BE USED ON ALL STORM SEWERS.
8. STORM PIPES ARE TO BE CONNECTED OBVERT TO OBVERT WHEN DOWNSTREAM PIPE IS GREATER THAN THE UPSTREAM PIPE OR OF EQUAL SIZE A MINIMUM OF 75MM DROP IS TO BE MAINTAINED.
9. ALL LOTS REQUIRE SUMP PUMPS AS INDICATED ON THE GRADING PLANS. SUMP PUMP DETAIL PROVIDED ON DWG. 505.
10. BEDDING FOR STORM SEWERS TO BE HL6 OR HL8 AND NOT CRUSHER RUN STONE.
11. ALL SEWERS ARE TO HAVE UNDISTURBED BASE.

SANITARY SEWER NOTES:

1. MANHOLES AS PER O.P.S.D. 701.010 WITH FRAME AND COVER AS PER O.P.S.D. 401.010 TYPE 'A'.
2. SEWER PIPE TO BE PVC SDR 35 (GREEN IN COLOR), OR RIBBED CONFORMING TO CSA B-182.4, OPSS 1841, OPSD 806.040 AND 806.060 AS PER RH WWLDM 3.7.1.b.
3. ALL SERVICE CONNECTIONS TO BE 125mm DIA DR 28 (GREEN IN COLOR) FOR SINGLE LOT CONNECTIONS. DUAL CONNECTIONS ARE NOT PERMITTED. MINIMUM COVER AT STREETLINE OF SHALL BE 2.15m AND 2.75m WITH 2.0% MIN. GRADE IS REQUIRED. LOCATIONS AS PER PLAN AND PROFILE DRAWINGS.
4. SERVICE CONNECTIONS EXCEEDING 4.50m REQUIRE RISERS AS PER OPSD 1006.010.
5. SAFETY GRATES ARE NOT ALLOWED IN HALTON REGION.
6. COVER SHALL BE MINIMUM 2.75m BELOW THE CENTERLINE OF THE ROAD ALLOWANCE AND NOT LESS THAN 1.4m FROM THE GROUND SURFACE.
7. UNLESS OTHERWISE INDICATED BY GEOTECHNICAL REPORT, GRANULAR 'A' SHALL BE USED FOR BEDDING AND COVER AND GRANULAR 'B' TYPE I SHALL BE USED FOR TRENCH BACKFILL. MATERIAL SHALL ALSO CONFORM TO OPSD 802.030, 802.031 & 802.033 (RH AMD. APR. 2019).
8. COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL LATERALS SHALL BE A MINIMUM OF 150mm IN DIAMETER.
9. BENCHING TO OBVERT IS REQUIRED TO PROVIDE A SMOOTH TRANSITION THROUGH THE MANHOLE.
10. ALL SANITARY SEWER MANHOLE LIDS ARE TO BE CAST WITH THE WORDS 'DANGER' AND 'SANITARY'.
11. LATERAL CONNECTIONS FROM THE PROPERTY LINE TO THE MAIN SHALL BE GRAVITY FED. A 2% MINIMUM GRADE FOR LATERAL CONNECTIONS SHALL BE MAINTAINED.
12. ALL MANHOLES ARE TO BE WATERPROOFED AND TESTED TO CONFIRM THAT THEY ARE WATER TIGHT. WATERPROOFING SHALL BE INSTALLED ON THE EXTERIOR OF ALL MANHOLES. WATERPROOFING SHALL BE A NON-TOXIC, NON-FLAMMABLE, FAST CURING MATERIAL TO ANSI/NSF STANDARD 61, BARRIER MATERIALS.
13. INLET AND OUTLET PIPES JOINING THE SANITARY MANHOLES, WHETHER EXISTING MANHOLES OR NEW, SHALL HAVE GASKETTED FLEXIBLE WATERTIGHT CONNECTIONS, AS PER MOE 5.9.6.
14. ALL NEW WASTEWATER MAINS CONNECTING TO THE EXISTING SYSTEM SHALL BE PLUGGED AT THE CONNECTION POINT TO THE ACTIVE SYSTEM UNTIL WRITTEN APPROVAL FROM HALTON REGION HAS BEEN RECEIVED TO ACCEPT FLOWS.
15. THE ENGINEERING CONSULTANT WILL UNDERTAKE THE CLOSED CIRCUIT TELEVISION INSPECTION (CCTV) OF THE WASTEWATER MAINS (SANITARY SEWERS) RELATED TO THE SUBDIVISION BOTH POST-CONSTRUCTION AND ALSO PRIOR TO ASSUMPTION AFTER THE MAINTENANCE PERIOD, AND IN BOTH CASES CERTIFY THE DEFICIENT FREE CONDITION OF THE WASTEWATER MAINS IN REPORTS TO THE SATISFACTION OF THE REGION.
16. AIR AND MANDREL TESTING OF THE SANITARY SEWERS IS TO BE CONDUCTED POST CONSTRUCTION, UTILIZING AN APPROVED CONTRACTOR.
17. SANITARY SEWERS ARE NOT PERMITTED TO ACCEPT ANY STORM DRAINAGE INCLUDING FOUNDATION, ROOF DRAINAGE AND WEEPING TILE CONNECTIONS.
18. SERVICE CONNECTIONS TO SEWER MAIN SHALL BE PERPENDICULAR AND IN LIMITED CASES AT A MAXIMUM OF 45 DEGREES FROM THE HORIZONTAL. INSTALLATION SHALL BE AS PER OPSD 1006.010 & 4006.020 AS AMENDED AND AS PER HALTON REGION STANDARDS RH 302.01 AND 302.02.

WATERMAIN NOTES:

1. ALL CONSTRUCTION TO CONFORM WITH REGION OF HALTON'S NEW DESIGN CRITERIA, CONTRACT SPECIFICATIONS AND STANDARD DRAWINGS MANUAL, APRIL 2019.
2. WATERMAINS 150mm TO 300mm TO BE P.V.C. CL.235 (DR-18) WITH GASKETED JOINTS AS PER AWWA C-900, C-905 & C-907.
3. MAXIMUM ALLOWABLE PIPE JOINT DEFLECTION SHALL BE 50% OF THE MANUFACTURER'S SPECIFICATIONS. JOINT DEFLECTION TO BE AVOIDED, BENDS TO BE USED WHERE POSSIBLE. BARREL DEFLECTION IS NOT PERMITTED.
4. ALL WATER AND SERVICE CONNECTIONS UP TO 50mm DIAMETER TYPE 'K' SOFT COPPER TUBING MEETING AWWA C800 (LATEST VERSION) AND AS PER OPSD 1104.010 AND 1104.020.
5. A MIN. HORIZONTAL SEPARATION OF 2.5m BETWEEN WATERMAINS AND SEWERS, INCLUDING SERVICE LATERALS MUST BE MAINTAINED. A MINIMUM VERTICAL SEPARATION OF 0.15m MUST BE MAINTAINED IF WATERMAIN CROSSES ABOVE SEWERS. IF WATERMAIN CROSSES BELOW, A MINIMUM OF 0.50m MUST BE MAINTAINED. THE DISTANCE SHALL BE MEASURED FROM THE NEAREST EDGES OR OUTSIDE SURFACES.
6. WATERMAIN BEDDING REQUIREMENTS SHALL BE DETERMINED BY THE DEPTH OF BURY OF THE PIPE, SOIL TYPE AND TRENCH CONDITIONS. AS A MINIMUM, WATERMAIN SHALL BE LAID ON 150mm OF GRANULAR 'A' BEDDING AND CONFORM TO OPSD 801.010 AND OPSS 401 (FLEXIBLE PIPES). REGIONAL MUNICIPALITY OF HALTON APPROVED MECHANICAL RESTRAINTS SHALL BE USED ON ALL STANDARD BENDS.
7. ALL HYDRANTS AS PER OPSD 1105.010 (AS AMENDED BY REGION OF HALTON) AND SHALL MEET THE REQUIREMENTS OF A.W.W.A. C-502 SPECIFICATIONS.

   - ALL NEW HYDRANTS THAT ARE TO BE INSTALLED UNDER THE NEW DEVELOPMENT AND CAPITAL PROJECTS THAT HAVE BEEN TENDERED IN THE REGION OF HALTON WILL HAVE TO MEET NEW STANDARD SPECIFICATIONS. HYDRANTS THAT ARE NOT IN COMPLIANCE WITH THE NEW STANDARD SPECIFICATIONS WILL NOT BE ACCEPTED FOR USE IN THE REGION OF HALTON.

   - TWO (2) 63.5mm (2 1/2") WITH CSA STANDARD THREAD, 63.6 I.D., 79.5mm O.D., 5 THREADS PER 25mm, 31.75mm SQUARE OPERATING NUT; AND

   - ONE (1) 100mm (4") STORZ PUMPER CONNECTION AS PER CAN/ULC #S-520, 31.75mm SQUARE OPERATING NUT, STORZ CAP PAINTED GLOSS BLACK.

   - ALL HYDRANT LATERALS SHALL HAVE A 150mm SECONDARY VALVE & BOX AND ANCHOR TEE RIGHT AT THE MAIN.

   - IF HYDRANT BARREL DEPTH EXCEEDS 1.7m, A HYDRANT THAT CAN BE RAISED FROM THE BOTTOM WITHOUT INCREASING THE ROD LENGTH IS TO BE USED.

   - HYDRANT BREAKOFF FLANGE SHALL BE LOCATED BETWEEN 0mm AND 50mm ABOVE FINISHED GRADE AS PER HALTON REGION STANDARDS.

8. ALL SACRIFICIAL ANODES SHALL CONFORM TO A.S.T.M. B-418 TYPE II AND SHALL BE MADE OF HIGH GRADE ELECTROLYTIC ZINC, 99.99% PURE. MINIMUM WEIGHT OF ANODE TO BE 14.5kg.
9. ALL METALLIC WATERMAINS, FITTINGS, HYDRANTS AND RESTRAINERS TO HAVE ONE ZINC ANODE PER LENGTH OF PIPE IN SIZES ACCORDING TO THE FOLLOWING TABLE AND INSTALLED IN ACCORDANCE WITH OPSS 442 AND OPSD 1109.010 & 1109.011.

PIPE / FITTING SIZE (mm)	ZINC ANODE SIZE (KG)
150	11
200	11
300	11
400	11
450	11
HYDRANT	11

COPPER SERVICE (mm)	ZINC ANODE SIZE (KG)
20, 25, 40 AND 50	5.5 (<= 26m IN LENGTH)
20, 25, 40 AND 50	11 (> 26m IN LENGTH)

10. ANODE INSTALLATION IS NOT REQUIRED WITHIN VALVE-CHAMBERS, DRAIN CHAMBERS OR AIR RELEASE CHAMBER.
11. ALL WELD CONNECTIONS TO BE COATED WITH "TC MASTIC" OR APPROVED EQUIVALENT.
12. FOR ALL ANODES CONNECTED TO NEW PIPE, FITTINGS OR TO EXISTING METALLIC WATERMAINS, A CADWELDER AND CA-15 OR EQUIVALENT CARTRIDGE SHALL BE USED, ANODE INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
13. WHERE NEW PIPE IS TO BE CONNECTED TO EXISTING DUCTILE IRON OR CAST IRON PIPE A 14.5 KG MAGNESIUM ANODE IS TO BE CONNECTED TO THE FIRST LENGTH OF EXISTING PIPE AS PER OPSS 442 AND OPSD 1109.010 & 1109.011.
14. ALL VALVES TO OPEN LEFT (COUNTER-CLOCKWISE) AND SHALL HAVE 50mm SQUARE STANDARD AWWA OPERATING NUT.
15. ALL PLUGS, CAPS, TEES, BENDS AND FITTINGS SHALL BE MECHANICALLY RESTRAINED WITHIN THE WATER DISTRIBUTION SYSTEM OF HALTON REGION.
16. BACKFILL SHALL BE 100% SPMDD BENEATH ROADS, SIDEWALKS, CURBS AND 95% SPMDD ELSEWHERE AND CONFORM TO OPSS MUNI. 401 GRANULAR 'B' TYPE I OR II OR APPROVED SELECT NATIVE MATERIAL. LOOSE MATERIAL SHALL BE COMPACTED TO 95% SPMDD BEFORE SUBSEQUENT LAYERS ARE PLACED.
17. THE TOP OF THE WATERMAIN SHALL HAVE A MINIMUM OF 1.7m COVER, MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED GRADE, EXCEPT WHERE NOTED ON THE DRAWINGS.
18. ALL VALVE CHAMBERS SHALL BE PRECAST CONCRETE IN ACCORDANCE WITH REGIONAL MUNICIPALITY OF HALTON STANDARDS RH 402.020 AND RH 402.080.
19. GATE VALVES CONFORMING TO A.W.W.A. C509 OR C515 STANDARDS ARE REQUIRED ON WATERMAINS 300mm AND UNDER. LINE GATE VALVES SHALL HAVE SCREW TYPE VALVE BOXES.
20. ANY SERVICE CONNECTION (BOTH WATER AND WASTEWATER) THAT WILL NOT BE UTILIZED WILL BE REQUIRED TO BE DISCONNECTED AT THEIR RESPECTIVE MAINS, PRIOR TO ASSUMPTION OF THE WATER AND WASTEWATER SYSTEM BY THE REGION.
21. ALL WATERMAIN FITTINGS SHALL HAVE MECHANICAL JOINTS AND VALVES IN CHAMBERS BE FLANGED.

WATERMAIN NOTES:

22. TRACER WIRE SHALL BE INSTALLED ON ALL NEW INSTALLATIONS OF POLYVINYL CHLORIDE (PVC) WATERMAIN PIPE FOR LOCATING PURPOSES. A SOLID 10 GAUGE TWU COPPER WIRE SHALL BE INSTALLED ALONG THE TOP OF THE PIPE, STRAPPED TO THE PIPE AT 6m INTERVALS.
23. THE TRACER WIRE SHALL BE INSTALLED BETWEEN EACH VALVE AND/OR THE END OF THE NEW WATERMAIN TO ENSURE A CONTINUOUS SIGNAL FOR LOCATING THE MAIN. JOINTS IN THE TRACER WIRE BETWEEN VALVES ARE DISCOURAGED, BUT WHEN NECESSARY, MUST BE WATERPROOFED (REFER TO OPSD 1109.025) AND DONE IN SUCH A WAY TO ENSURE ELECTRICAL CONDUCTIVITY. AT EACH VALVE, A LOOP OF WIRE IS TO BE BROUGHT UP OUTSIDE THE VALVE BOX TO THE TOP OF THE BOX AS PER HALTON STANDARD DRAWING RH 406.010.
24. TRACER WIRE FOR HORIZONTAL DIRECTIONAL DRILLING AND PIPE BURSTING INSTALLATION SHALL BE IN ACCORDANCE WITH HALTON REGION'S AMENDMENTS TO OPSS.
25. ALL DOMESTIC CONNECTIONS SHALL BE 25mm DIAMETER. CURB STOP AND SERVICE BOX SHALL REQUIRE THE INSTALLATION OF STAINLESS-STEEL RODS AND BRASS COTTER PINS.
26. THE OPERATION OF THE EXISTING WATERMAIN SHALL BE BY REGION OF HALTON STAFF ONLY.
27. ALL VALVE CHAMBER COVERS ARE TO BE STAMPED 'DANGER' AND 'WATER'.
28. IN ADDITION TO STANDARD WATERMAIN CHLORINATION, PRESSURE TESTING AND WATER SAMPLING, ALL WATERMAINS WILL BE SWABBED THROUGH THE FIRE HYDRANTS OR AS DIRECTED BY THE REGION.
29. THE WATERMAINS MUST BE CONSTRUCTED ENTIRELY SEPARATE FROM THE EXISTING SYSTEM. CONNECTION TO THE EXISTING SYSTEM WILL ONLY BE ALLOWED ONCE THE NEW SYSTEM HAS HAD ALL OF ITS SWABBING PERFORMED, PRESSURE TESTING PASSED, CHLORINATION, FLUSHING AND BACTERIOLOGICAL TESTING RESULTS APPROVED.
30. COMPACTION OF BACKFILL FOR WATERMAIN SHALL HAVE LIFT THICKNESS NOT EXCEEDING 200mm AS SPECIFIED IN THE GEOTECHNICAL INVESTIGATION PREPARED BY AME - MATERIALS ENGINEERING DATED AUGUST 2004, APPROVED BY SOIL ENGINEERS LTD.
31. MINIMUM SEPARATION FROM THE EDGE OF DRIVEWAY TO FACE OF HYDRANTS SHALL BE 1.2m.

RECOMMENDED RESTRAINED LENGTHS OF PVC PIPE

Nom. Pipe Size (mm)	Hor. 45° Bend	Hor. 22.5° Bend	Hor. 11.25° Bend	Size of Size Tee	Valve/ Dead-End
150	1.34 m.	0.64 m.	0.34 m.	Br. Only	8.87 m.
200	1.77 m.	0.85 m.	0.43 m.	Br. Only	11.55 m.
300	2.50 m.	1.19 m.	0.61 m.	0.61 m.	16.58 m.

REDUCING TEES*

Nom. Size (mm)	Restrained Length	Nom. Size (mm)	Restrained Length
200 x 150	Br. Only	300 x 150	Br. Only
		300 x 200	Br. Only

* RECOMMENDED RESTRAINED LENGTHS FOR TEES ARE FOR THE BRANCH OUTLET AND ASSUME A MINIMUM 3 METER SECTION OF PIPE ATTACHED TO EACH SIDE OF THE RUN. RESTRAINT DEVICES SHOULD ALSO BE INSTALLED ON BOTH RUN JOINTS OF THE TEE ITSELF.

VERTICAL OFFSETS**

Nom. Size (mm)	45° Vertical Offset	22.5° Vertical Offset	11.25° Vertical Offset
150	3.69 m x 4.79 m	1.77 m x .79 m	0.18 m / 0.82 m
200	4.78 m x 2.16 m	2.29 m x 1.04 m	0.24 m / 1.07 m
300	6.86 m x 3.08 m	3.29 m x 1.46 m	0.34 m / 1.52 m

**FIRST NUMBER IS THE RECOMMENDED RESTRAINED LENGTH ON EACH SIDE OF THE DOWN BEND(S), THE SECOND NUMBER IS THE LENGTH FOR EACH SIDE OF THE UP BEND(S). IN THE EVENT THAT THE LENGTHS OVERLAP, ALL JOINTS OF THE OFFSET SHOULD BE RESTRAINED (LOW SIDE DEPTH = 3.048 m)

NOTE: ANY JOINTS THAT FALL WITHIN THESE RECOMMENDED LENGTHS SHOULD BE RESTRAINED. (ON EACH SIDE OF BENDS, ON THE BRANCH OUTLET OF TEES, AND BEFORE DEAD-ENDS.

Pipe	PVC, AWWA C-900
Soil	Soft to stiff, moist, mottled brown to reddish brown, silty clay, trace to some sand and gravel (Till)
Average Depth of Bury	1.7 m
Trench Type	2
Test Pressure	150 psi
Safety Factor	1.5 : 1 (based on test pressure)

32. ALL WATERMAIN AND WATER SERVICE CROSSINGS OF THE BYPASS STORM SEWER SHALL UTILIZE URECON PRE-INSULATED PIPE OR HALTON REGION APPROVED EQUAL. THE WATERMAIN AND WATER SERVICES SHALL BE ORDERED AHEAD OF TIME FROM MANUFACTURER IN ORDER TO BE AVAILABLE FOR THE TIME OF CONSTRUCTION.
33. ALL RESIDENTIAL WATER METERS ARE TO BE INSTALLED AS PER HALTON REGION STD. RH 500.010.
34. STAINLESS STEEL SERVICE SADDLES SHALL BE USED WHEN TAPPING WATER SERVICES.
35. AN ANCHOR TEE AND VALVE ASSEMBLY, RIGHT AT THE WATERMAIN, SHALL FEED ALL THE FIRE HYDRANTS.
36. OPSD 1105.010 TO BE AMENDED AS PER HALTON REGION' STANDARDS SO THAT DISTANCE BETWEEN THE BOTTOM OF THE BREAK OFF FLANGE AND FINISHED GRADE IS 0.0mm TO 50mm.
37. CONNECTION TO HALTON REGION'S LIVE WATER DISTRIBUTION SYSTEM WILL REQUIRE THE CONTRACTOR TO FOLLOW STANDARD OPERATING PROCEDURES AND UNDERTAKING MEASURES FOR THE WATERMAIN PIPE ISOLATION AND PRESSURE DOWN. THE ENGINEERING CONSULTANT TO WORK WITH THE REGION TO DETERMINE HOW MANY EXISTING PROPERTY OWNERS WILL BE AFFECTED BY THE WATERMAIN SHUT-DOWN AND PROVIDE A LETTER TO THE NEIGHBOURS ADVISING OF THE NOTICE OF INTERRUPTION OF THEIR WATER SERVICES.

DRIVEWAYS:

1. RESIDENTIAL DRIVEWAY APRONS BETWEEN THE SIDEWALK AND THE ROAD CURB SHALL BE CONSTRUCTED WITH 180MM CONCRETE AND 75MM OF 19MM CRUSHER RUN LIMESTONE.
2. ALL DRIVEWAYS BETWEEN CURB AND SIDEWALK TO BE PLAIN CONCRETE.

RESTORATION OF PUBLIC RIGHT OF WAY NOTES:

1. ALL AREAS DISTURBED BY THE CONTRACTOR DURING THE CONSTRUCTION OF THE WORKS ARE TO BE RESTORED TO ORIGINAL CONDITION OR BETTER AS DETERMINED BY THE ENGINEER AND CITY STAFF. ALL GRASS AND VEGETATION COVERED AREAS TO BE RESTORED BY PLACING 150mm OF TOPSOIL AND No. 1 GRADE NURSERY SOD TO THE SATISFACTION OF THE CITY OF BURLINGTON AND THE REGION OF HALTON, UNLESS OTHERWISE NOTED.
2. ROCK CHECK DAMS AND STRAW BALES ARE TO BE LOCATED IN ALL EXISTING DITCHES AS DIRECTED BY THE ENGINEER, THE CITY OF BURLINGTON AND/OR REGION OF HALTON.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING GRADE, DRAINAGE AND SILTATION CONTROL DEVICES IN GOOD WORKING ORDER DURING AND AFTER CONSTRUCTION FOR ALL WORKS WITHIN THE RIGHT OF WAY.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN | CHECKED | DATE:
DRAWN | CHECKED | SCALE | REFERENCES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT
DATE _____

FIELD NOTES:

BELL	☐	HYDRO	☐
GAS	☐	CABLE	☐
TRAF.	☐	WATER	☐

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH
Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

OAKVILLE

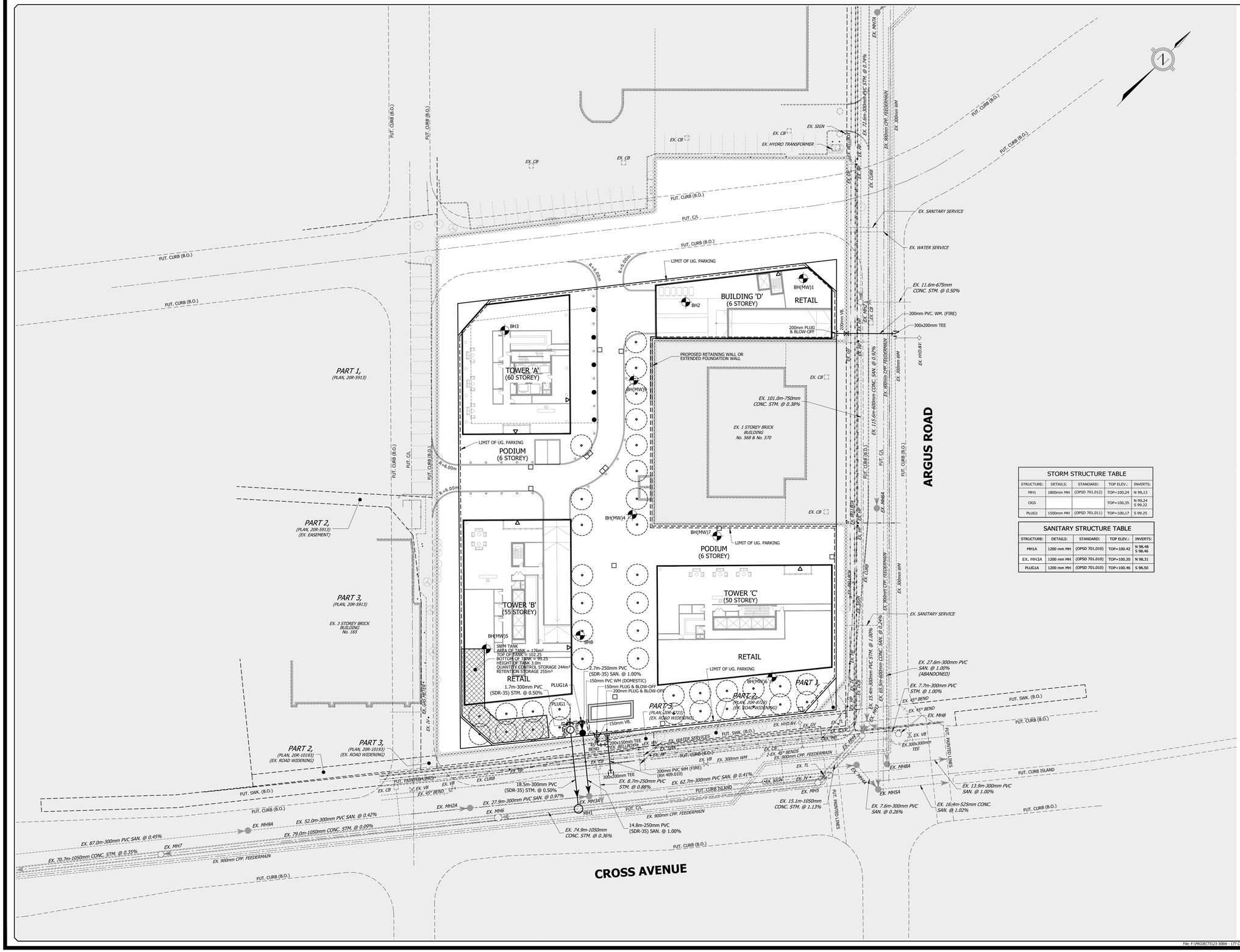
177 CROSS ARGUS DEVELOPMENTS INC.

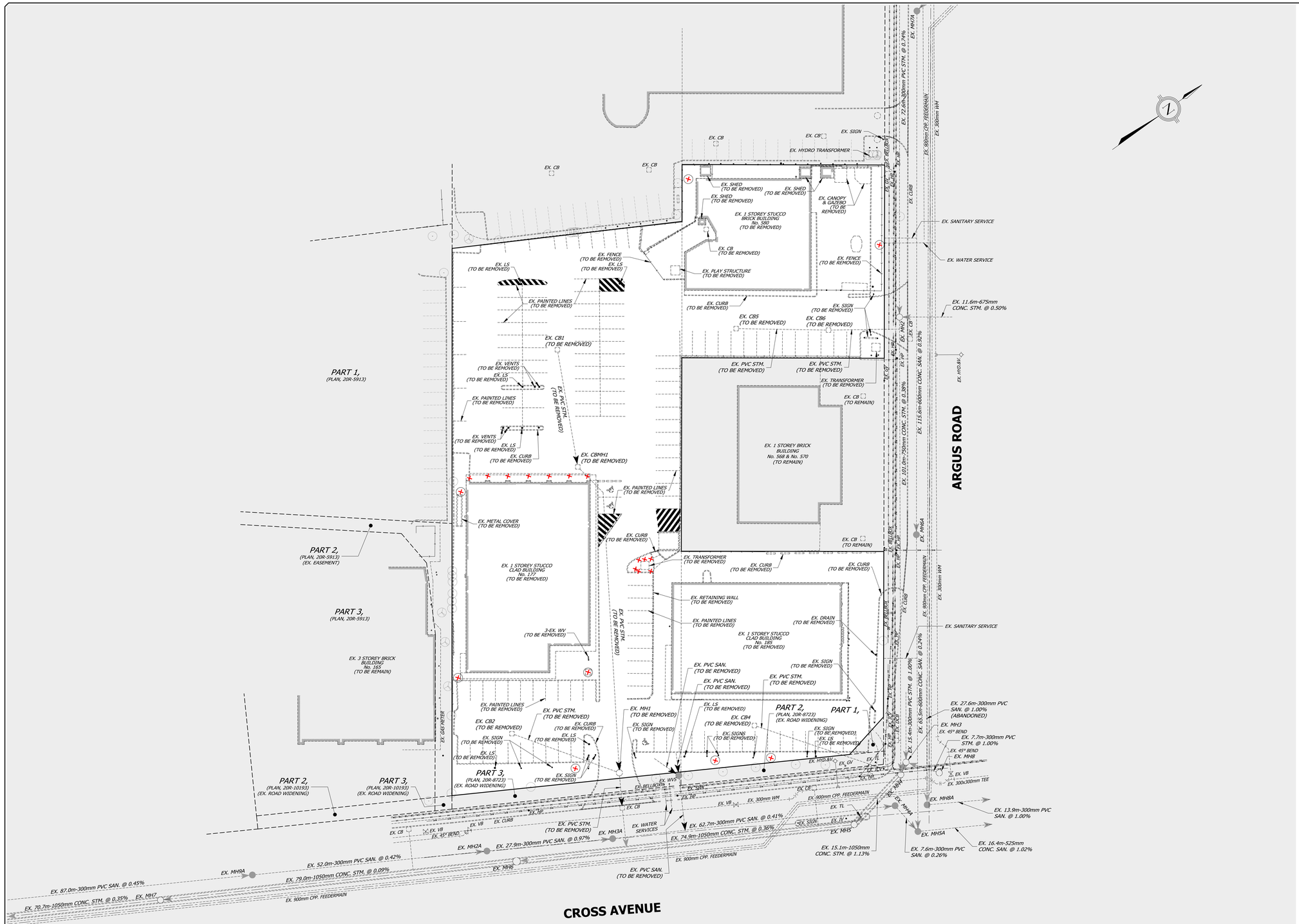
177 CROSS AVENUE
OAKVILLE, ON.

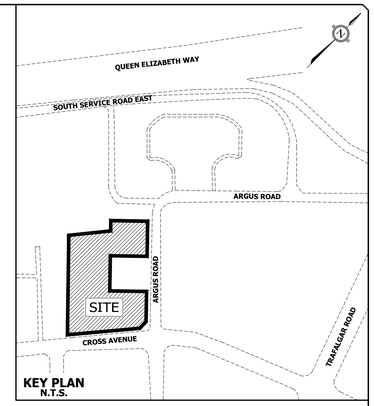
GENERAL NOTES

MUNICIPAL FILE NO. | REGION FILE NO.

CONTRACT NO. 23-308 | DRAWING No. **100**


ARGUS ROAD
CROSS AVENUE
PART 1, (PLAN, 20R-5913)
PART 2, (PLAN, 20R-5913) (EX. EASEMENT)
PART 3, (PLAN, 20R-5913)
PART 2, (PLAN, 20R-10193) (EX. ROAD WIDENING)
PART 3, (PLAN, 20R-10193) (EX. ROAD WIDENING)
PART 2, (PLAN, 20R-8723) (EX. ROAD WIDENING)
PART 3, (PLAN, 20R-8723) (EX. ROAD WIDENING)
TOWER 'A' (60 STOREY)
BUILDING 'D' (6 STOREY)
RETAIL
PODIUM (6 STOREY)
TOWER 'B' (55 STOREY)
TOWER 'C' (50 STOREY)
RETAIL
PODIUM (6 STOREY)
RETAIL
LIMIT OF UG. PARKING
PROPOSED RETAINING WALL OR EXTENDED FOUNDATION WALL
EX. 1 STOREY BRICK BUILDING No. 568 & No. 570
EX. 3 STOREY BRICK BUILDING No. 165
SWM TANK
AREA OF TANK = 176m²
TOP OF TANK = 102.25
BOTTOM OF TANK = 99.25
HEIGHT OF TANK 3.0m
QUANTITY CONTROL STORAGE 244m³
RETENTION STORAGE 255m³
1.7m-300mm PVC (SDR-35) STM. @ 0.50%
2.7m-250mm PVC (SDR-35) SAN. @ 1.00%
18.5m-300mm PVC (SDR-35) STM. @ 0.50%
14.8m-250mm PVC (SDR-35) SAN. @ 1.00%
EX. 11.6m-675mm CONC. STM. @ 0.50%
EX. 101.0m-750mm CONC. STM. @ 0.38%
EX. 115.6m-600mm CONC. SAN. @ 0.92%
EX. 72.6m-300mm CPP. FEEDERMAIN
EX. 900mm CPP. FEEDERMAIN
EX. 300mm WM
EX. SANITARY SERVICE
EX. WATER SERVICE
200mm PVC. WM. (FIRE)
300x200mm TEE
200mm PLUG & BLOW-OFF
150mm PLUG & BLOW-OFF
150mm PVC WM (DOMESTIC)
200mm PLUG & BLOW-OFF
150mm VB.
200x150mm TEE
300x200mm TEE
200mm PVC WM (FIRE) (RR 409.010)
EX. 8.7m-250mm PVC STM. @ 0.88%
EX. 62.7m-300mm PVC SAN. @ 0.41%
EX. 27.9m-300mm PVC SAN. @ 0.97%
EX. 52.0m-300mm PVC SAN. @ 0.42%
EX. 79.0m-1050mm CONC. STM. @ 0.09%
EX. 87.0m-300mm PVC SAN. @ 0.45%
EX. 70.7m-1050mm CONC. STM. @ 0.35%
EX. 74.9m-1050mm CONC. STM. @ 0.36%
EX. 15.1m-1050mm CONC. STM. @ 1.13%
EX. 7.6m-300mm PVC SAN. @ 0.26%
EX. 16.4m-525mm CONC. SAN. @ 1.02%
EX. 13.9m-300mm PVC SAN. @ 1.00%
EX. 27.6m-300mm PVC SAN. @ 1.00% (ABANDONED)
EX. 7.7m-300mm PVC STM. @ 1.00%
EX. 65.5m-600mm CONC. SAN. @ 0.2%
EX. 16.4m-300mm PVC STM. @ 1.00%
EX. 45° BEND
EX. MH8
EX. MH8A
EX. MH5
EX. MH5A
EX. MH4
EX. MH3A
EX. MH2A
EX. MH6
EX. MH7
EX. MH9A
EX. MH34
EX. MH1
EX. MH2
EX. MH7A
EX. MH4A
EX. 45° BENDS
EX. 900mm CPP. FEEDERMAIN
EX. 45° BEND
EX. 300x300mm TEE
EX. VB
EX. CB
EX. CBMH
EX. SIGN
EX. HYDRANT
EX. HYD.&V.
EX. GV
EX. TEL
EX. HYD.&V.
EX. HYD.&V.
EX. SWK.
EX. CURB
EX. TEL
EX. TEL
EX. SIGN
EX. HYD.
EX. HYD.&V.
EX. HYD.&V.
EX. GV
EX. TEL
EX. GV
EX. TEL
EX. CB
EX. CB
EX. CB





LEGEND

- FUTURE / EXISTING DEVELOPMENT LANDS
- EXISTING WATERMAIN
- EXISTING SINGLE CATCHBASIN
- EXISTING DOUBLE CATCHBASIN
- EXISTING HYDRANT & VALVE
- EXISTING VALVE AND BOX
- EXISTING VALVE CHAMBER
- EXISTING TREES
- EXISTING TREES TO BE REMOVED
- EXISTING BOLLARDS TO BE REMOVED
- EXISTING WATERCOURSE
- LIMIT OF SUBDIVISION
- EXISTING OVERHEAD WIRE

BENCHMARK

ELEVATIONS ARE REFERRED TO CANADIAN GEODETIC VERTICAL DATUM - 1928, AND WERE DERIVED FROM TOWN OF OAKVILLE BENCHMARK No. 110, HAVING A PUBLISHED ELEVATION OF 107.172 METRES.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN		CHECKED	
DRAWN		CHECKED	

DATE:

SCALE 1:400 (4m 0m 4m 8m 16m)

REFERENCES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT

DATE _____

FIELD NOTES:

BELL	☐	HYDRO	☐
GAS	☐	CABLE	☐
TRAF.	☐	WATER	☐

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH®
Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

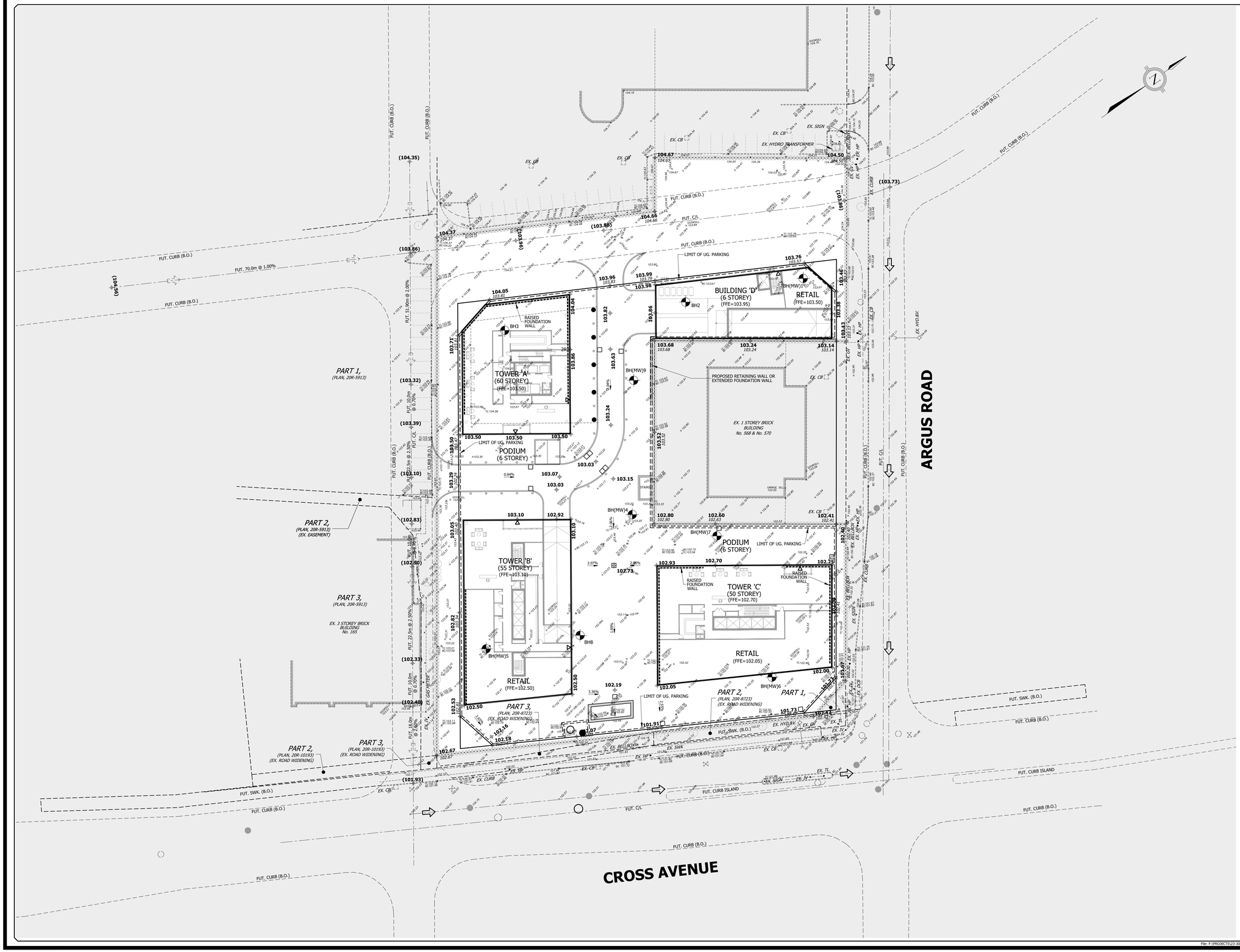
OAKVILLE

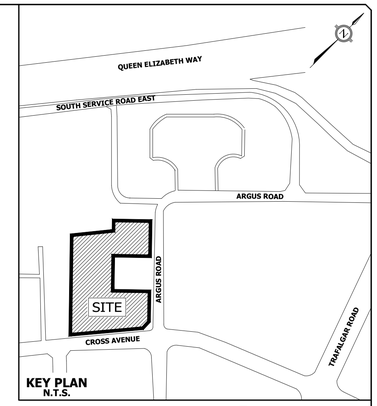
177 CROSS ARGUS DEVELOPMENTS INC.

177 CROSS AVENUE
OAKVILLE, ON.

REMOVAL PLAN

MUNICIPAL FILE NO.	REGION FILE NO.
CONTRACT NO.	DRAWING No.
23-308	102





LEGEND

- EXISTING CONTOUR AND ELEVATION
- PROPOSED ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- PROPOSED BOTTOM OF WALL ELEVATION
- PROPOSED SWALE ELEVATION
- FUTURE ELEVATION
- EXISTING ELEVATION
- PROPOSED SWALE
- PROPOSED OVERLAND FLOW ROUTE
- FUTURE OVERLAND FLOW ROUTE
- EXISTING OVERLAND FLOW ROUTE
- STORM MANHOLE
- SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- MAN DOOR
- LIMIT OF SUBDIVISION
- SINGLE CATCHBASIN/AREA DRAIN
- DOUBLE CATCHBASIN
- HYDRANT & VALVE
- VALVE AND BOX
- EXISTING SINGLE
- EXISTING DOUBLE CATCHBASIN
- EXISTING HYDRANT & VALVE
- EXISTING VALVE AND BOX
- EXISTING VALVE CHAMBER
- PROPOSED TRANSFORMER
- PROPOSED STREET LIGHT
- BOREHOLE LOCATION
- MAXIMUM 3:1 SLOPE (UNLESS OTHERWISE NOTED)
- FUTURE / EXISTING DEVELOPMENT LANDS

BENCHMARK

ELEVATIONS ARE REFERRED TO CANADIAN GEODETIC VERTICAL DATUM - 1928, AND WERE DERIVED FROM TOWN OF OAKVILLE BENCHMARK No. 110, HAVING A PUBLISHED ELEVATION OF 107.172 METRES.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN		CHECKED	
DRAWN		CHECKED	

DATE:

SCALE 1:400 (4m 0m 4m 8m 16m)

REFERENCES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT

DATE

FIELD NOTES:

BELL		HYDRO	
GAS		CABLE	
TRAF.		WATER	

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH
Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

OAKVILLE

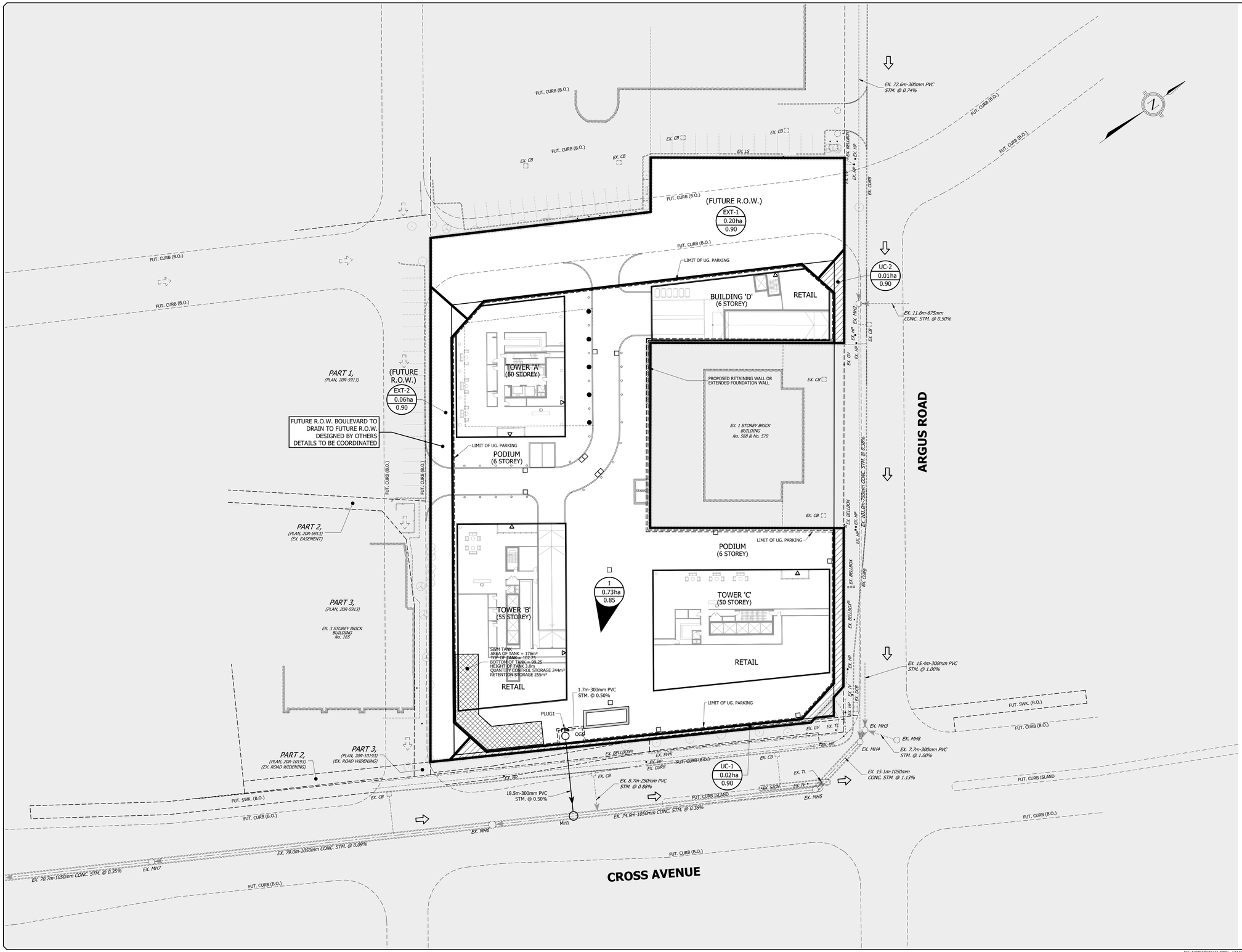
177 CROSS ARGUS DEVELOPMENTS INC.

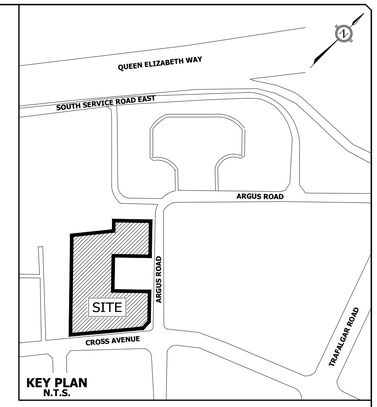
177 CROSS AVENUE
OAKVILLE, ON.

GRADING PLAN

MUNICIPAL FILE NO.	REGION FILE NO.
CONTRACT NO.	DRAWING No.
23-308	**201**

File: F:\PROJECTS\23-308W - 177 CROSS AVE, OAKVILLE\DRAWINGS\200 - GRADING\201_GRADING PLAN.DWG - REVISED BY:<xrio:on> - 16, July 16, 2024 1:38 PM





LEGEND

- STORM SEWER AND MANHOLE
- EXISTING STORM SEWER AND MANHOLE
- SINGLE CATCHBASIN/AREA DRAIN
- DOUBLE CATCHBASIN
- EXISTING SINGLE CATCHBASIN
- EXISTING DOUBLE CATCHBASIN
- EXISTING CONTOUR AND ELEVATION
- STORM AREA I.D.
- STORM DRAINAGE AREA (ha) FOR MINOR SYSTEM (5 YEAR) FLOW
- RUNOFF COEFFICIENT
- STORM DRAINAGE AREA BOUNDARY
- UNCONTROLLED DRAINAGE AREA
- MAXIMUM 3:1 SLOPE (UNLESS OTHERWISE NOTED)
- FUTURE / EXISTING DEVELOPMENT LANDS
- LIMIT OF SUBDIVISION
- PROPOSED OVERLAND FLOW ROUTE
- FUTURE OVERLAND FLOW ROUTE
- EXISTING OVERLAND FLOW ROUTE

BENCHMARK

ELEVATIONS ARE REFERRED TO CANADIAN GEODETIC VERTICAL DATUM - 1928, AND WERE DERIVED FROM TOWN OF OAKVILLE BENCHMARK No. 110, HAVING A PUBLISHED ELEVATION OF 107.172 METRES.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN | CHECKED | DATE:
DRAWN | CHECKED

SCALE 1:400 (4m 0m 4m 8m 16m)

REFERENCES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT
DATE

FIELD NOTES:

BELL	☐	HYDRO	☐
GAS	☐	CABLE	☐
TRAF.	☐	WATER	☐

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH®
Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

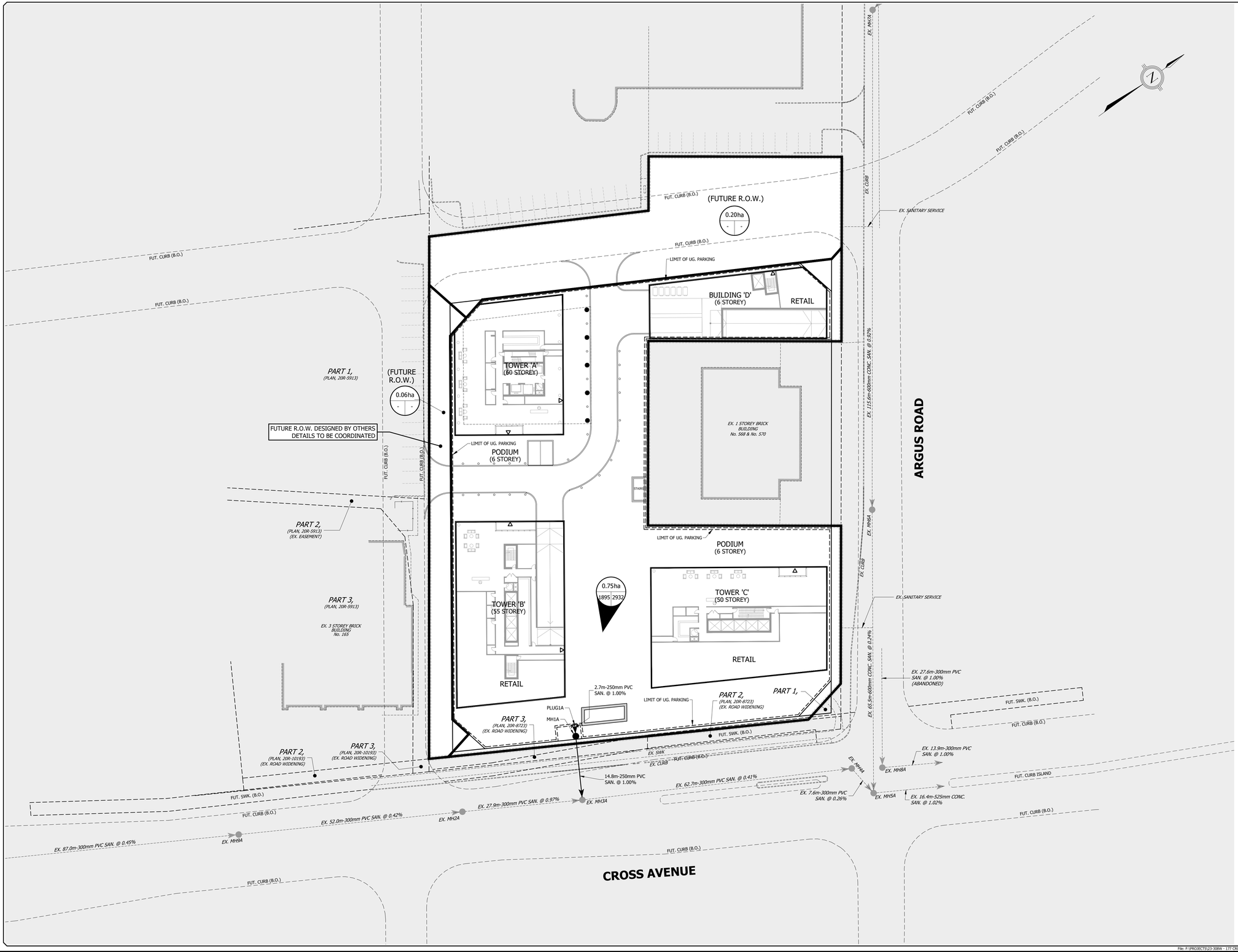
OAKVILLE

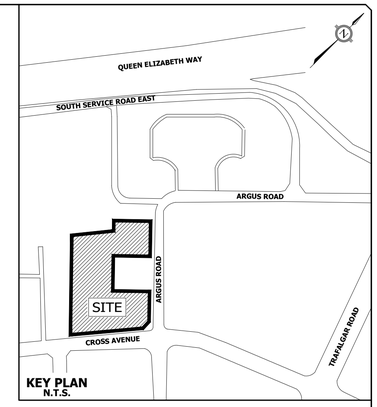
177 CROSS ARGUS DEVELOPMENTS INC.

177 CROSS AVENUE
OAKVILLE, ON.

STORM DRAINAGE PLAN

MUNICIPAL FILE NO.	REGION FILE NO.
CONTRACT NO. 23-308	DRAWING No. 301





LEGEND

- SANITARY SEWER AND MANHOLE
- EXISTING SANITARY SEWER AND MANHOLE
- 0.73ha — SANITARY DRAINAGE AREA (Ha.)
- 1895 | 2932 — POPULATION
- # OF UNITS / OR POPULATION PER HECTARE (p/Ha.)
- SANITARY DRAINAGE AREA BOUNDARY
- LIMIT OF SUBDIVISION
- FUTURE / EXISTING DEVELOPMENT LANDS

BENCHMARK

ELEVATIONS ARE REFERRED TO CANADIAN GEODETIC VERTICAL DATUM - 1928, AND WERE DERIVED FROM TOWN OF OAKVILLE BENCHMARK No. 110, HAVING A PUBLISHED ELEVATION OF 107.172 METRES.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN		CHECKED	
DRAWN		CHECKED	

DATE:

SCALE 1:400 (4m 0m 4m 8m 16m)

REFERENCES:

FIELD NOTES:

BELL	☐	HYDRO	☐
GAS	☐	CABLE	☐
TRAF.	☐	WATER	☐

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT

DATE

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH®
Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

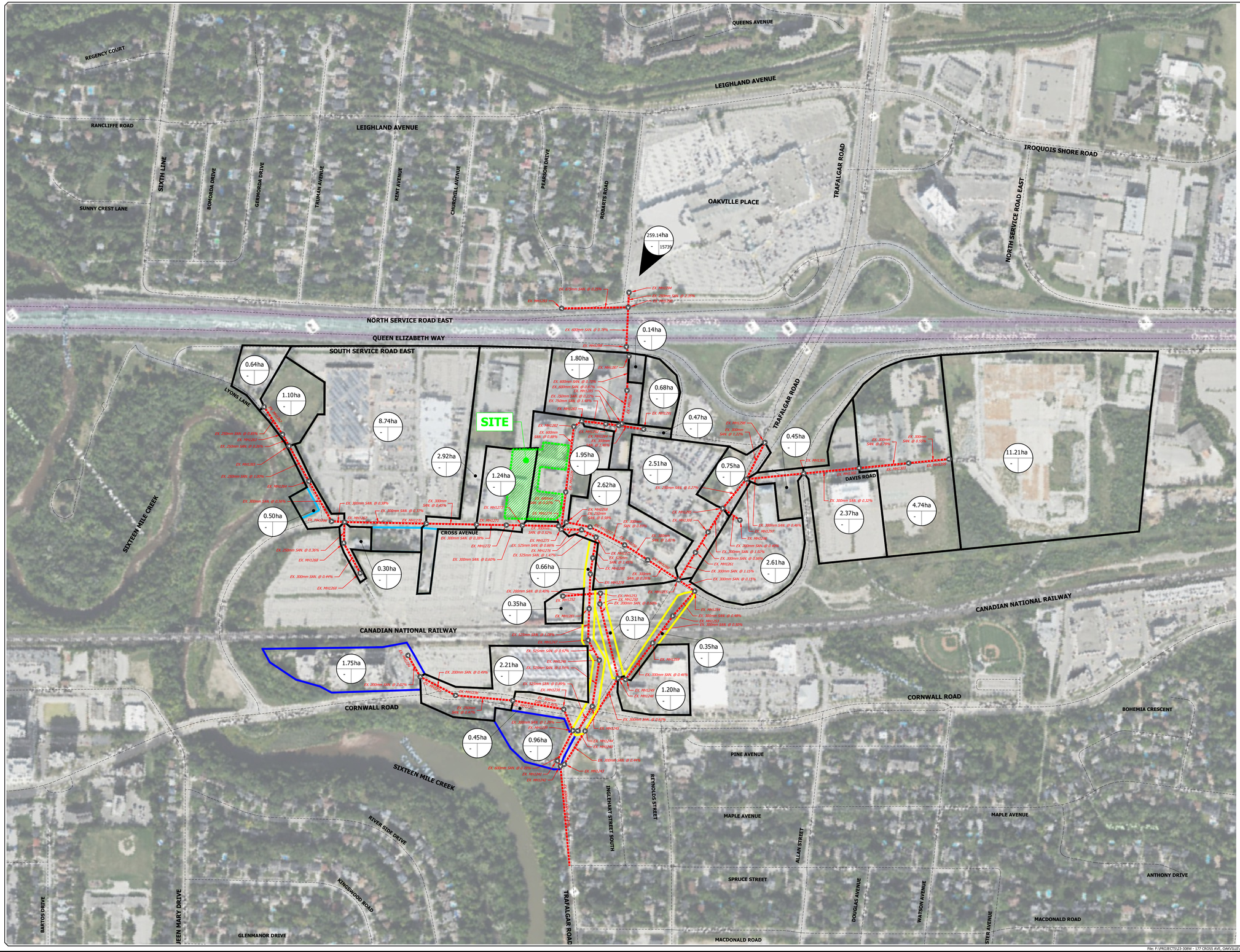
OAKVILLE

177 CROSS ARGUS DEVELOPMENTS INC.

177 CROSS AVENUE
OAKVILLE, ON.

SANITARY DRAINAGE PLAN

MUNICIPAL FILE NO.	REGION FILE NO.
CONTRACT NO. 23-308	DRAWING No. **302**



LEGEND

- 0.45ha / - / - — EXISTING SANITARY DRAINAGE AREA (Ha.), EXISTING POPULATION, EXISTING DENSITY (P/ha)
- SANITARY DRAINAGE AREA BOUNDARY
- LIMIT OF SUBDIVISION

BENCHMARK

ELEVATIONS ARE REFERRED TO CANADIAN GEODETIC VERTICAL DATUM - 1928, AND WERE DERIVED FROM TOWN OF OAKVILLE BENCHMARK No. 110, HAVING A PUBLISHED ELEVATION OF 107.172 METRES.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN | CHECKED | DATE:
DRAWN | CHECKED

SCALE 1:3000 (30m 0m 30m 60m 120m)

REFERENCES:

FIELD NOTES:

BELL | HYDRO
GAS | CABLE
TRAF. | WATER

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: ___ DATE: ___
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT

DATE

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH®
Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

OAKVILLE

177 CROSS ARGUS DEVELOPMENTS INC.

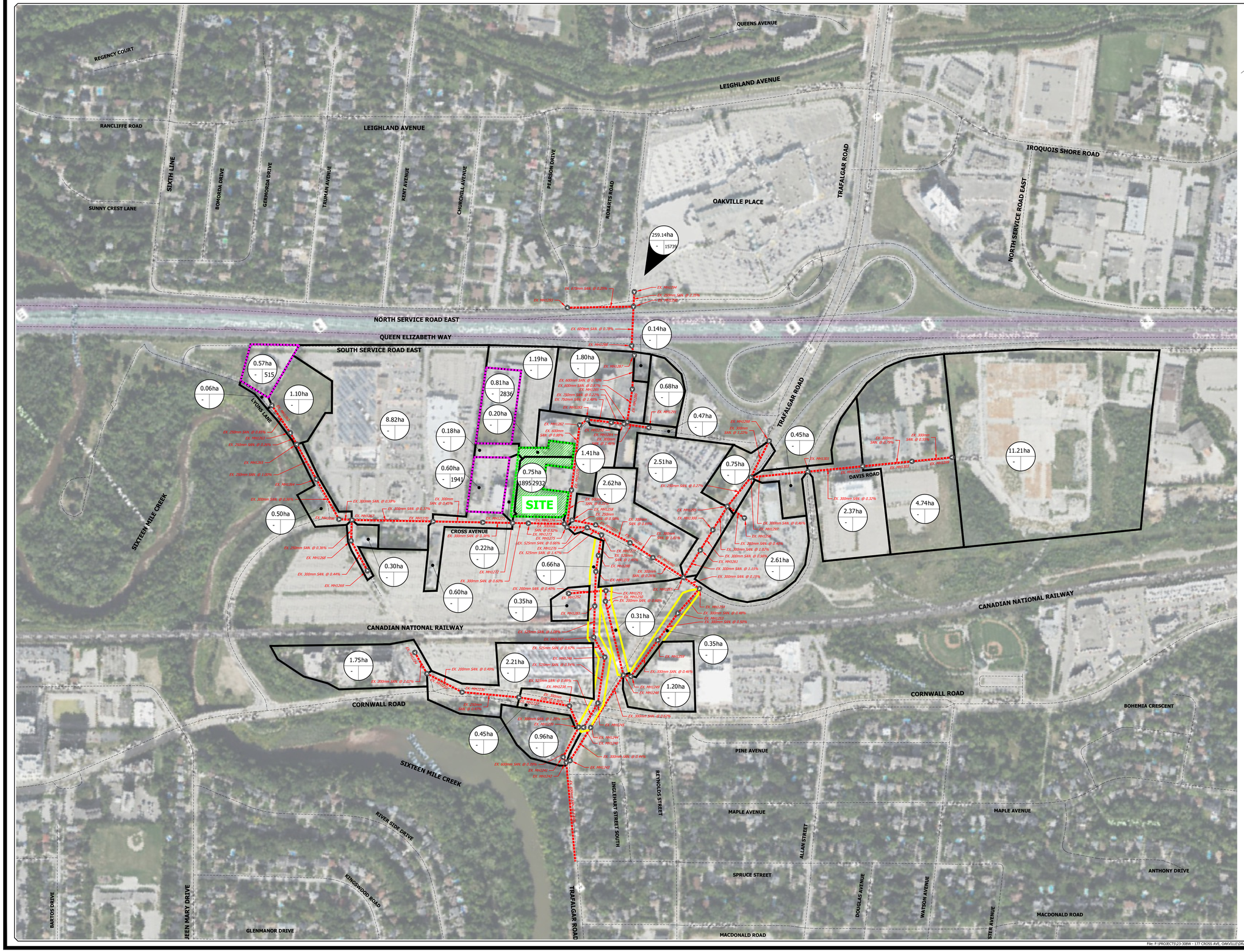
177 CROSS AVENUE
OAKVILLE, ON.

OVERALL EXISTING SANITARY DRAINAGE PLAN

MUNICIPAL FILE NO. | REGION FILE NO.

CONTRACT NO. 23-308 | DRAWING No. 303

File: F:\PROJECTS\23-308W - 177 CROSS AVE, OAKVILLE\DRAWINGS\300 - DRAINAGE\303_OVERALL EXISTING SANITARY DRAINAGE PLAN.DWG - REVISED BY:<nscox> - 16, July 16, 2024 1:39 PM



LEGEND

- 0.45ha / - / - — EXISTING SANITARY DRAINAGE AREA (Ha.), EXISTING POPULATION, EXISTING DENSITY (P/ha)
- SANITARY DRAINAGE AREA BOUNDARY
- LIMIT OF SUBDIVISION
- LIMIT OF FUTURE DEVELOPMENTS

BENCHMARK

ELEVATIONS ARE REFERRED TO CANADIAN GEODETIC VERTICAL DATUM - 1928, AND WERE DERIVED FROM TOWN OF OAKVILLE BENCHMARK No. 110, HAVING A PUBLISHED ELEVATION OF 107.172 METRES.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN | CHECKED | DATE:
DRAWN | CHECKED

SCALE 1:3000 (30m 0m 30m 60m 120m)

REFERENCES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT
DATE

FIELD NOTES:

BELL ☐ HYDRO ☐
GAS ☐ CABLE ☐
TRAF. ☐ WATER ☐

REGISTERED PROFESSIONAL ENGINEER — R.B.T. MERWIN — 100009772 — JUL. 16, 2024 — PROVINCE OF ONTARIO

URBANTECH
Urbantech® Consulting
A Division of Leighton-Zac West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

OAKVILLE

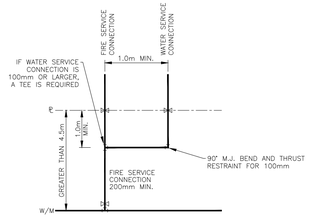
177 CROSS ARGUS DEVELOPMENTS INC.

177 CROSS AVENUE
OAKVILLE, ON.

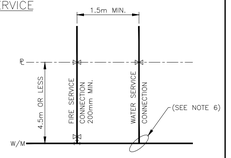
OVERALL PROPOSED SANITARY DRAINAGE PLAN

MUNICIPAL FILE NO. | REGION FILE NO.

CONTRACT NO. 23-308 | DRAWING No. 304



GREATER THAN 4.5m SERVICE



LESS THAN 4.5m SERVICE

NOTES
1. COMPRESSION TYPE FITTINGS ONLY. NO SOLDERED JOINTS ARE PERMITTED BEFORE THE WATER METER.
2. WATER SERVICE CONNECTION 25, 38, 50 TO BE TYPE "K" SOFT COPPER, 100 AND LARGER TO BE PVC OR DI.
3. FIRE SERVICE CONNECTION TO BE MIN. 200mm.
4. IF THE WATERMAIN IS 4.5m OR LESS FROM THE PROPERTY LINE, THEN 2 SEPARATE CONNECTIONS ARE REQUIRED.
5. TAPPING SLEEVE TO BE PRESSURE TESTED BY CONTRACTOR BEFORE MAIN IS TAPPED.
6. ALL SERVICE CONNECTIONS TO PVC PIPE REQUIRE SADDLES. ALL SERVICE CONNECTIONS 50mm OR LESS TO HAVE A MAIN STOP, CURB STOP AND BOX. ALL SERVICES GREATER THAN 50mm REQUIRE A TAPPING SLEEVE AND VALVE OR AN ANCHOR TEE WITH A GATE VALVE AND BOX AT THE MAIN IN ADDITION TO A PROPERTY LINE GATE VALVE AND BOX.
7. ALL GATE VALVES TO HAVE VALVE BOXES.
8. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED.

THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT	Date: August 2018	Rev. 2	NTS
WATER SERVICE AND FIRE SERVICE CONNECTION INSTALLATIONS	REGION STANDARD RH 409.010		

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN		CHECKED		DATE:
DRAWN		CHECKED		

SCALE: N.T.S

REFERENCES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT

DATE

FIELD NOTES:

BELL	☐	HYDRO	☐
GAS	☐	CABLE	☐
TRAF.	☐	WATER	☐

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH®
Urbantech® Consulting
A Division of Leighton-Zac West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

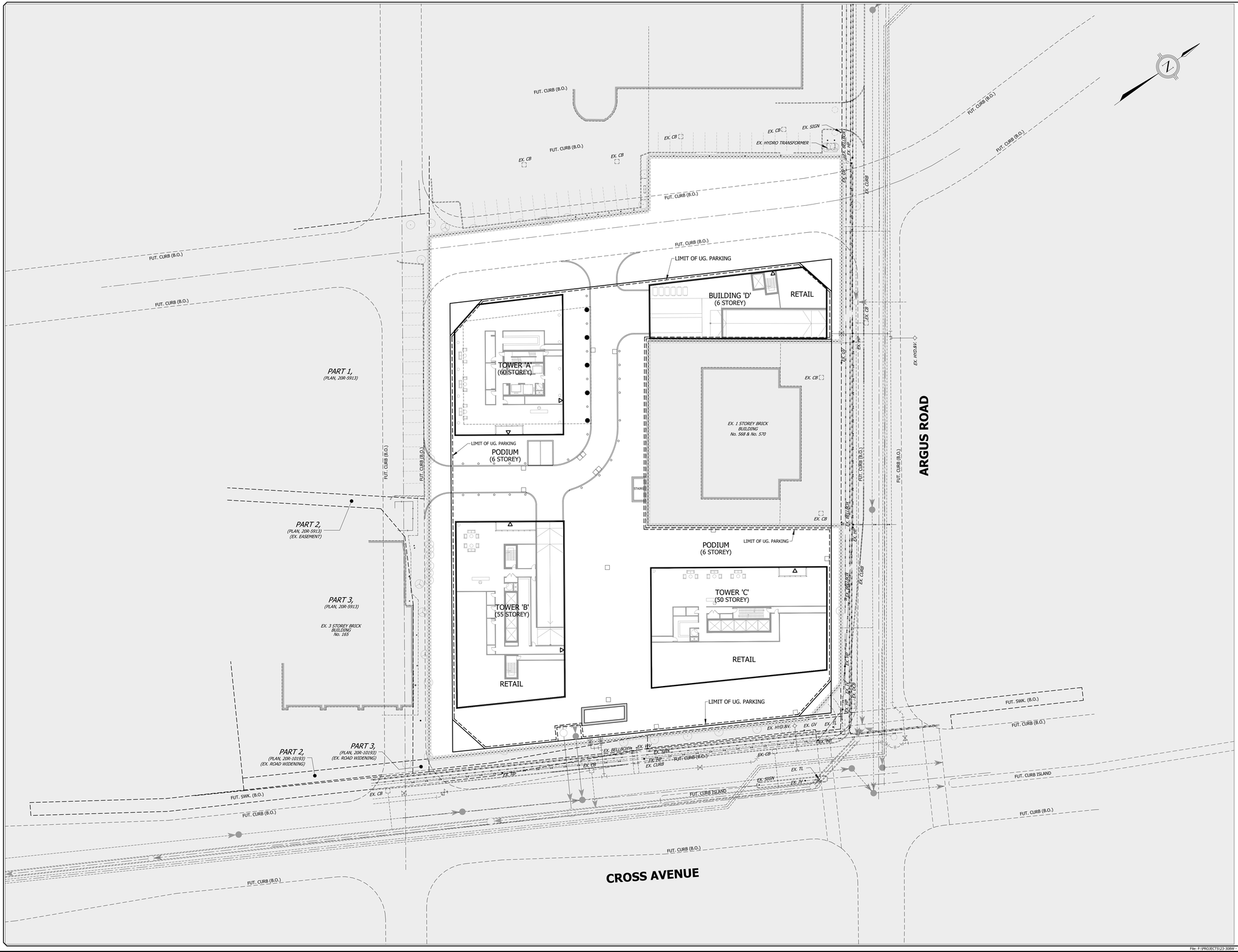
OAKVILLE

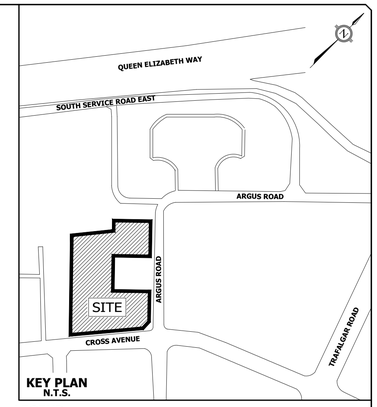
177 CROSS ARGUS DEVELOPMENTS INC.

177 CROSS AVENUE
OAKVILLE, ON.

STANDARD DETAILS

MUNICIPAL FILE NO.	REGION FILE NO.
CONTRACT NO. 23-308	DRAWING No. **701**





LEGEND

- STORM SEWER AND MANHOLE
- SANITARY SEWER AND MANHOLE
- EXISTING STORM SEWER AND MANHOLE
- EXISTING SANITARY SEWER AND MANHOLE
- WATERMAIN
- EXISTING WATERMAIN
- PROPOSED TRANSFORMER
- PROPOSED STREET LIGHT
- EXISTING OVERHEAD WIRE
- EXISTING BELL CABLE
- EXISTING GAS LINE
- LIMIT OF SUBDIVISION
- SINGLE CATCHBASIN/AREA DRAIN
- DOUBLE CATCHBASIN
- HYDRANT & VALVE
- VALVE AND BOX
- EXISTING SINGLE
- EXISTING DOUBLE CATCHBASIN
- EXISTING HYDRANT & VALVE
- EXISTING VALVE AND BOX
- EXISTING VALVE CHAMBER
- EXISTING TREES
- MAN DOOR

BENCHMARK

ELEVATIONS ARE REFERRED TO CANADIAN GEODETIC VERTICAL DATUM - 1928, AND WERE DERIVED FROM TOWN OF OAKVILLE BENCHMARK No. 110, HAVING A PUBLISHED ELEVATION OF 107.172 METRES.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN		CHECKED	
DRAWN		CHECKED	

DATE:

SCALE 1:400 (4m 0m 4m 8m 16m)

REFERENCES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT

DATE _____

FIELD NOTES:

BELL	☐	HYDRO	☐
GAS	☐	CABLE	☐
TRAF.	☐	WATER	☐

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH®
Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

OAKVILLE

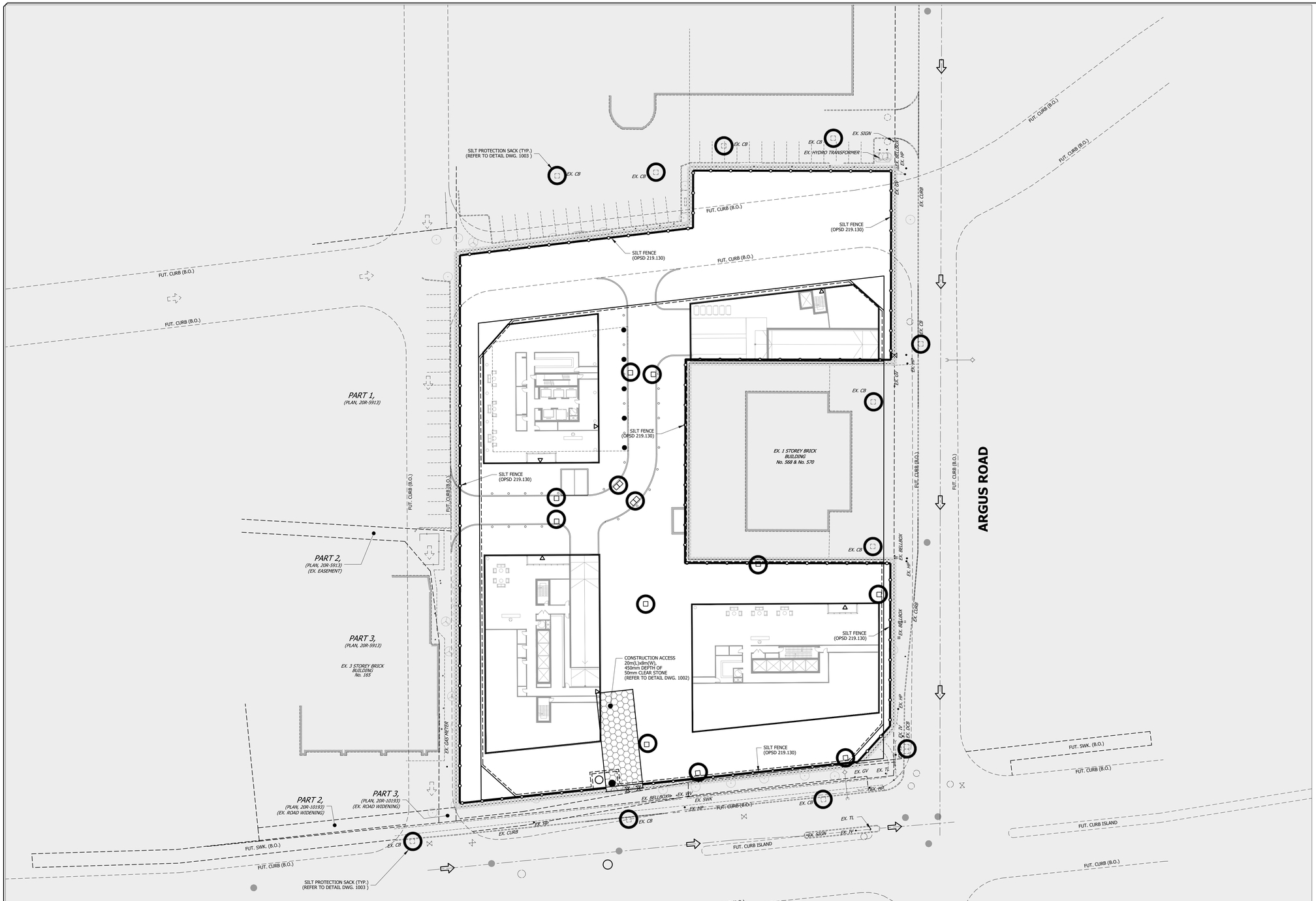
177 CROSS ARGUS DEVELOPMENTS INC.

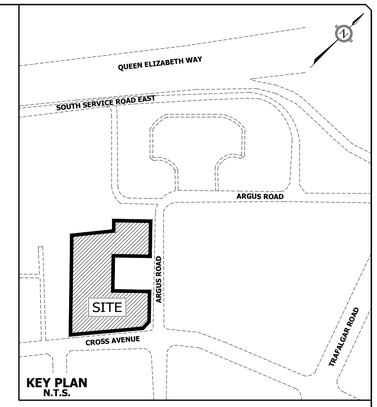
177 CROSS AVENUE
OAKVILLE, ON.

COMPOSITE UTILITY PLAN

MUNICIPAL FILE NO.	REGION FILE NO.
CONTRACT NO.	DRAWING No.
23-308	**801**

File: F:\PROJECTS\23-308\W - 177 CROSS AVE, OAKVILLE\DRAWINGS\800 - COMPOSITE UTILITY\801-CUP PLAN.DWG - REVISED BY:<srlcdo> - 16, July 16, 2024 1:39 PM





KEY PLAN
N.T.S.

LEGEND

- STORM SEWER AND MANHOLE
- SANITARY SEWER AND MANHOLE
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING SINGLE CATCHBASIN
- EXISTING DOUBLE CATCHBASIN
- EXISTING HYDRANT & VALVE
- EXISTING VALVE AND BOX
- EXISTING VALVE CHAMBER
- CATCHBASIN/AREA DRAIN SILT PROTECTION (REFER TO DETAIL DWG. 1002)
- PROPOSED OVERLAND FLOW ROUTE
- FUTURE OVERLAND FLOW ROUTE
- EXISTING OVERLAND FLOW ROUTE
- PROPOSED CONSTRUCTION ACCESS STONE PAD (REFER TO DETAIL ON DWG. 1002)
- SILT FENCE (AS PER OPSD 219.130)
- 104.00 EXISTING CONTOUR AND ELEVATION
- FUTURE / EXISTING DEVELOPMENT LANDS
- LIMIT OF SUBDIVISION
- MAXIMUM 3:1 SLOPE (UNLESS OTHERWISE NOTED)

BENCHMARK

ELEVATIONS ARE REFERRED TO CANADIAN GEODETIC VERTICAL DATUM - 1928, AND WERE DERIVED FROM TOWN OF OAKVILLE BENCHMARK No. 110, HAVING A PUBLISHED ELEVATION OF 107.172 METRES.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN		CHECKED	
DRAWN		CHECKED	

DATE:

SCALE
1:400
4m 0m 4m 8m 16m

REFERENCES:

FIELD NOTES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT

DATE

BELL	☐	HYDRO	☐
GAS	☐	CABLE	☐
TRAF.	☐	WATER	☐

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH®
Urbantech® Consulting
A Division of Leighton-Zac West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

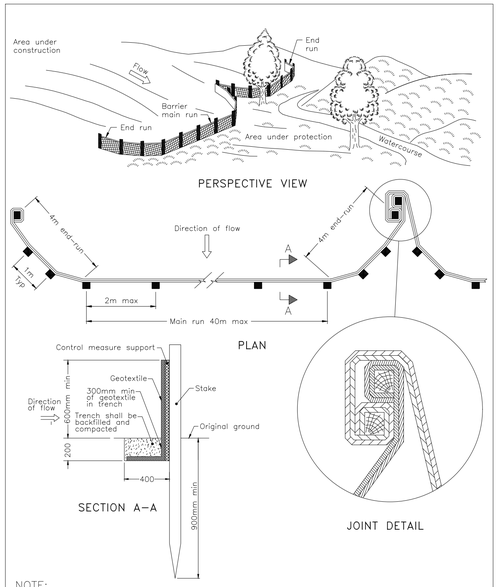
OAKVILLE

177 CROSS ARGUS DEVELOPMENTS INC.

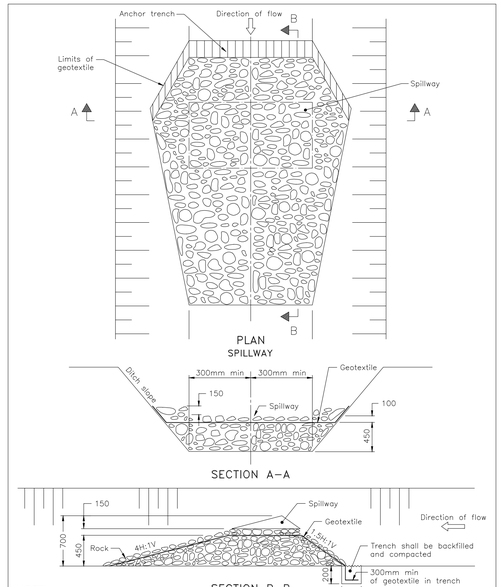
177 CROSS AVENUE
OAKVILLE, ON.

EROSION & SEDIMENT CONTROL PLAN

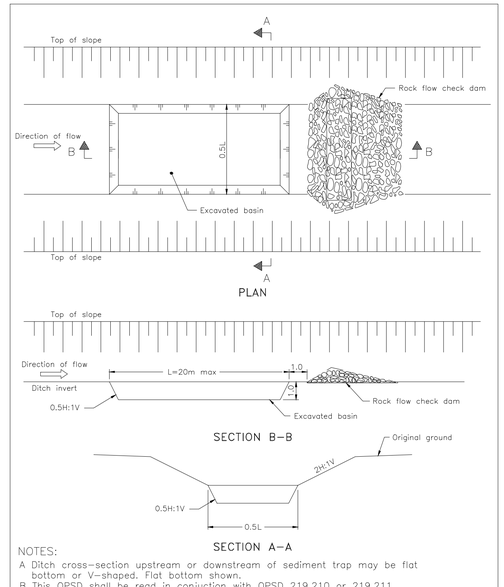
MUNICIPAL FILE NO.	REGION FILE NO.
CONTRACT NO. 23-308	DRAWING No. **1001**



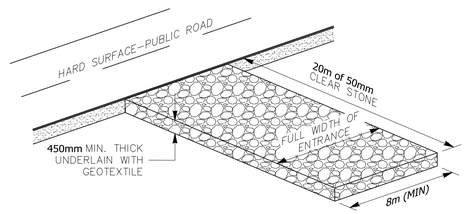
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2021	Rev 3
HEAVY–DUTY SILT FENCE BARRIER		OPSD 219.130



ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2021	Rev 3
TEMPORARY ROCK FLOW CHECK DAM FLAT BOTTOM DITCH		OPSD 219.211

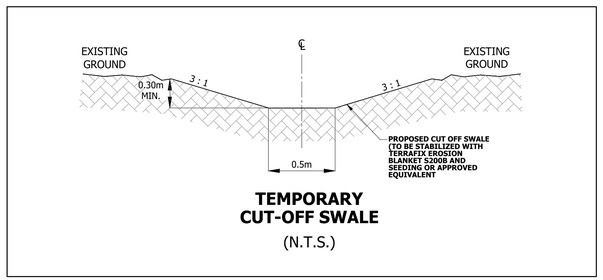


ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev 2
SEDIMENT TRAP IN DITCH		OPSD 219.220



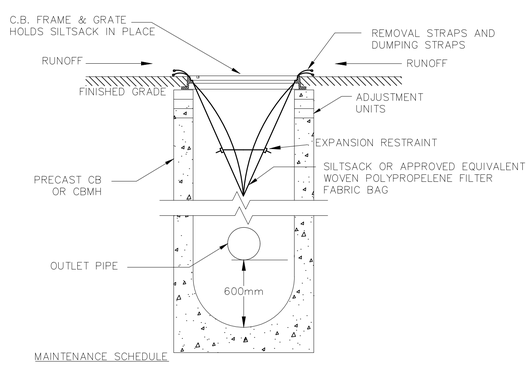
CONSTRUCTION ACCESS DETAIL

N.T.S.



TEMPORARY CUT-OFF SWALE

(N.T.S.)



MAINTENANCE SCHEDULE

–INSPECT AFTER EVERY MAJOR RAIN EVENT.
–INSPECT EVERY 3 WEEKS MINIMUM.
–SILTSACK SHOULD NEVER BE OVER HALF FULL.
–FULL BAG CAN BE REMOVED, DUMPED, CLEANED AND REUSED
(TO REMOVE INSERT 25mm REBAR INTO REMOVAL FLAP POCKETS)
(TO DUMP INSERT 25mm REBAR INTO BOTH DUMPING STRAPS)

TEMPORARY SILTSACK SILTATION CONTROL IN CB

N.T.S.

No.	DATE	BY	REVISIONS
1	JUL. 16, 2024	R.B.T.M.	FIRST SUBMISSION

DESIGN | CHECKED | DATE:

DRAWN | CHECKED

SCALE | REFERENCES:

APPROVALS

MUNICIPAL
APPROVED IN PRINCIPLE SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN OF OAKVILLE STANDARDS AND SPECIFICATIONS.

SIGNED: _____ DATE: _____
Manager of Development Engineering - TOWN OF OAKVILLE

REGIONAL
DESIGN OF SANITARY SERVICES,WATER SERVICES AND ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCATIONAL APPROVAL FROM THE AREA MUNICIPALITY.

LEGISLATIVE AND PLANNING SERVICES DEPARTMENT

DATE

FIELD NOTES:

BELL	☐	HYDRO	☐
GAS	☐	CABLE	☐
TRAF.	☐	WATER	☐

REGISTERED PROFESSIONAL ENGINEER
R.B.T. MERWIN
100009772
JUL. 16, 2024
PROVINCE OF ONTARIO

URBANTECH
Urbantech® Consulting
A Division of Leighton-Zec West Ltd.
2030 Bristol Circle, Suite 105
Oakville, ON. L6H 0H2
TEL 905.829.8818 • urbantech.com

OAKVILLE

177 CROSS ARGUS DEVELOPMENTS INC.

177 CROSS AVENUE
OAKVILLE, ON.

EROSION & SEDIMENT CONTROL DETAILS

MUNICIPAL FILE NO.	REGION FILE NO.
CONTRACT NO.	DRAWING No.
23-308	**1002**

This is Exhibit “K” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Azure Group

A SOIL INVESTIGATION FOR PROPOSED HIGH RISE BUILDINGS 177 CROSS AVENUE, OAKVILLE, ONTARIO

DRAFT

PREPARED FOR: ALLIANCE UNITED CORPORATION
3190 HARVESTER ROAD, SUITE 201A
BURLINGTON, ONTARIO
L7N 3T1

PROJECT NO. 2303-003

DATE: AUGUST 28, 2023

Azure Group Inc.
6751 Professional Drive, Suites 201 & 202, Mississauga, ON, L4V 1Y3, Canada
T: 905 673 2694 C:416 779 2694 F: 416 907 2694 E: info@azuregroup.ca www.azuregroup.ca

TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 SITE AND PROJECT DESCRIPTION 1
3.0 SCOPE OF WORK 2
4.0 METHOD OF INVESTIGATION 2
5.0 SUBSURFACE CONDITIONS 4
6.0 GEOTECHNICAL DISCUSSIONS AND RECOMMENDATIONS 9
6.1 Introduction 9
6.2 Foundation 10
6.2.1 Conventional Spread And Strip Footings Constructed On The Bedrock 10
i. Foundation notes 10
6.2.2 Raft Foundation 11
6.3 Earthquake Consideration 12
6.4 Excavation 12
6.5 Vibration Monitoring 13
6.6 Lateral Earth Pressure 13
6.7 Shoring The Excavated Wall 14
6.7.1 Caisson Wall 15
6.7.2 Soldier Piles and Wooden Lagging 16
6.7.3 Tiebacks or Anchor 16
6.7.4 Lateral Earth Pressure on Shoring System 17
6.7.5 Shoring System Movement (Vertical and Horizontal) 17
6.8 ELEVATOR PIT 18
6.9 CONTROL OF THE GROUNDWATER TABLE 18
6.10 SLAB ON GRADE (If Spread footings are considered) 18
6.11 PERMANENT DRAIN FOR EXTERIOR WALLS AND SLAB ON GRADE (If Spread Footings are Considered) 19
6.12 RECOMMENDATIONS FOR SEWER BEDDING AND TRENCH BACKFILLING 20
6.13 PAVEMENT DESIGN FOR ASPHALT CONCRETE 21
7.0 GENERAL CONSIDERATIONS 22
8.0 CLOSING 23

DRAFT

APPENDIX

Drawing 1 – Borehole Locations
Drawing 2 to 10 – Borehole Logs

DRAFT

1.0 INTRODUCTION

Azure Group was retained by Allaince United Corporation to carry out a geotechnical investigation for the proposed development located at 177 Cross Avenue in Oakville, Ontario (hereinafter referred to as the "Site").

The geotechnical investigation was completed concurrently with environmental and hydro geological investigation. The results of the environmental and hydrological investigation are provided in separate reports.

The development will consider the construction of three (3) high rise buildings 50, 55, and 60 levels with six (6) underground parking levels.

The purpose of the geotechnical investigation was to determine the subsurface conditions at the site by means of nine (9) boreholes to provide geotechnical parameters and recommendations for the design of the proposed building. The geotechnical boreholes were drilled to the surface of the sound bedrock. The bedrock was then cored at three borehole locations to determine the quality of the bedrock. Six (6) monitoring wells were installed at various locations and various depths to determine the groundwater table at the proposed location of the boreholes. The investigation was carried out on May 3, 4 and 5, 2023.

This report presents the results of the tests performed in accordance with the general terms of reference outlined above.

This report has been prepared for the Alliance United Corporation (the Client) specifically and solely for the proposed development of the Site based on the intended layout and the proposed facilities provided at the time of preparing this report. Third party use of this report is prohibited without consent of the Azure Group Inc.

2.0 SITE AND PROJECT DESCRIPTION

The subject property is located at 177 Cross Avenue in the city of Oakville. The Site is located at the northwest corner of Cross Avenue and Argus Road, approximately 170 m west of Trafalgar Road. Currently, the site is occupied by several one to two-level commercial buildings.

The Site is bounded by Cross Avenue to the south, Argus Road to the east in Town of Oakville.

The development will consider the construction of three (3) high rise buildings 50, 55, and 60 levels with six (6) underground parking levels.

The finished floor elevation of the building, structural load, underground utilities, invert depth, etc., are not available at the time of preparing the geotechnical report. However, we anticipate that the finished floor elevation of the buildings is approximately 300 mm above the existing ground surface, and the depth of six (6) underground levels is approximately 18 m plus the thickness of the footings, which is approximately ±2 m. Based on the above assumption, the approximate depth of the excavation (underside of the footings) of the six underground levels will be ±20 m below the existing ground surface.

DRAFT

3.0 SCOPE OF WORK

The geotechnical scope of work included the following:

1. Investigation of the subsurface conditions by advancing nine (9) boreholes "BH1 to BH9" at the location shown on Drawing No.1 attached to this report.

2. The boreholes were drilled to the surface of the bedrock,

3. The bedrock was cored at the location of BH1, BH6 and BH9,
4. Monitoring wells were installed at the location of BH(MW)1, BH(MW)4, BH(MW)5, BH(MW)6 BH(MW)7 and BH(MW)9.
5. Conduct field tests during drilling (Standard Penetration Tests, SPT) to obtain the number of blow "N" per 300 mm and pocket penetrometer tests on the extracted soil samples to obtain the undrained shear strength of the soil Cu.

6. Conduct a limited laboratory testing program on selected soil samples obtained from the boreholes for soil classification and moisture content determination.

7. Conduct compressive strength tests on the representative cored bedrocks,

8. Prepared a geotechnical report with comments and recommendations regarding:

    - Site preparation and Site Grading,
    - Existing subsurface soil/bedrock condition
    - Appropriate foundation depth, type, bearing capacity, settlement, and seismic classification,
    - Effect of construction on adjacent buildings
    - Lateral earth pressure
    - Shoring recommendations
    - Excavation and backfilling recommendations
    - Elevator pits design recommendations
    - Floor slab design and construction
    - Parking area and driveway pavement structure
    - Record the groundwater conditions,
    - Suitability of the existing materials for backfilling, and
    - Sewer bedding and cover.

4.0 METHOD OF INVESTIGATION

Prior to the commencement of the field investigation, the borehole locations were established in the field by Azure personnel. The underground utilities were identified by a private and public utility locates company in the presence of a representative from Azure.

The field work for geotechnical investigation was carried out May 3 to May 5, 2023. A total of nine (9) boreholes, BH1 to BH9, were drilled to a refusal depth varying between 4 m and 7.9 m (at the surface of the inferred bedrock). The location of the boreholes is shown on Drawing No.1.

DRAFT

Monitoring wells were installed at the location of BH(MW)1, BH(MW)4, BH(MW)5, BH(MW)6, BH(MW)7 and BH(MW)9 to depths ranging between 3.65 m and 17.74 m below the existing grade.

The bedrock was cored at the location of BH(MW)1, BH(MW)6, and BH(MW)9 to a depth of 5.5 m, 2.4 m, and 10 m below the surface of encountered bedrock respectively.

The boring logs are provided in Drawings No. 2 to 10 attached in this report.

All boreholes were advanced using a track-mounted CME-55 drilling rig with 100 mm diameter continuous flight open/solid auger under the full-time supervision of a geotechnical engineer from Azure Group.

The boreholes were drilled using hollow-stem (where required) and solid-stem augers. The coring of the bedrock was carried out using NQ tribal tube wireline equipment providing a 63.5 mm diameter core.

The subsurface strata were sampled at regular intervals of 0.75 m depth for the first 3 m and 1.5 m interval for remaining depth using a split-spoon sampler following the procedure as detailed in the ASTM Standard specification D1586 for the Standard Penetration Test. Field tests to determine the engineering parameters of the soil were carried out during drilling, which included Standard Penetration Tests (SPT) and a pocket penetrometer test. Water level observations were made in each borehole upon its completion.

Coring the bedrock commenced at the surface of the inferred bedrock. The bedrock was cored at 1.5 m (5 feet) intervals except the first run which was cored for 0.9 m (3 feet). The Core Recovery "CR", and Rock Quality Designation "RQD" and hardness were determined on the extracted cores. All soil and rock samples were taken to an accredited laboratory for final visual assessment, classification, and testing. All soil samples were tested and classified in general accordance with the Unified Soil Classification System, ASTM 2487, and Standard Practice for Classification of Soil for Engineering Purposes.

Compressive strength tests were carried out on the cores retrieved from the bedrock. The boring logs of the investigations describe the soil and core sample retrieved from the boreholes and are shown in Drawings No. 2 to No.10 attached in this report.

The ground surface elevation at the surface of the boreholes was determined relative to the existing **manholes** (two manholes). The first manhole is located south of 580 Argus Road and the second manhole is located at the southeast of Cross Avenue. The geodetic elevations at the surface of the manholes are 103.35 m for manhole No.1 and 102.22 m for manhole No. 2. Summary of geodetic elevations at the surface of the boreholes is provided in Table 1.

The ground surface elevation and depths of the boreholes are summarized in Table 1.

DRAFT

Table 1: Summary of Ground Surface Elevation and Depths of Boreholes and Monitoring Wells

BH No.	G. S. Elev.	Refusal Depth/Elev. of BH	Depth/Elev. Of BH	MW Dep.(m)/ Elev.(masl)
BH(MW)1	103.44 m	4.6 m/93.44 m	10.0/93.44 (BR Cored from 4.6 to 10)	5.34 /98.10
BH2	103.51 m	5.8 m/97.72 m	5.8 m/97.71 m	-
BH3	103.63 m	5.8 m/97.84 m	5.8 m/97.83 m	-
BH(MW) 4	103.16 m	6.9 m/96.26 m	6.9 m/96.26 m	5.72 /97.44
BH(MW)5	102.74 m	6.9 m/95.84 m	6.9 m/95.84 m	4.01 /98.73
BH(MW)6	102.25 m	4.6 m/97.65 m	7.0/95.25 (BR Cored from 4.6 to 7 m)	5.11 /97.14
BH(MW)7	102.44 m	4.0 m/98.44 m	4.0 m/98.44 m	3.65/98.79
BH8	102.84 m	6.1 m/96.74 m	6.1 m/96.74 m	-
BH(MW)9	103.44 m	7.9 m/95.54 m	7.9 m/95.54 (BR Cored from 7.9 to 18)	17.74/85.70

5.0 SUBSURFACE CONDITIONS

The subsurface conditions encountered in the boreholes are shown on the borehole records provided in Drawings numbered 2 to 10.

The boreholes records include soil stratification at the borehole locations along with detailed soil descriptions and selected physical properties for each stratum encountered. Variations in the soil stratification may occur and should be expected between borehole locations and elsewhere on the site.

Since the Site was backfilled to its present elevation, and most likely cut and fill earthwork using the local site materials were used for backfilling operation, it was difficult to identify the precise boundary between the native soil and the backfill soils due to similarities in colour, texture, and consistency of the soil. Furthermore, the internal diameter of the spoon used in the Standard Penetration Test (SPT) is 38 mm which is less than the maximum size of the gravel (75 mm), the grain size test results and soil classification may not reflect the entire gravel size fraction.

In general, the materials encountered below the surface of the boreholes consisted of asphalt pavement structure, fill, native soils, and bedrock. The following is the description of the materials encountered at the location of the boreholes.

Pavement Structure

Asphalt pavement structure was encountered below the ground surface at the location of all boreholes. The average thickness of the asphalt pavement was 80 mm, and the granular materials were 150 mm.

DRAFT

Fill Soils

Fill soil was encountered below the asphalt pavement at the location of all boreholes. The fill consisted of loose to compact silty sand, sandy silt, clayey silt, or a mixture of these materials traced to some gravel. The fill extended to depth ranging between 0.8 m to 1.8 m below the existing ground surface.

Records of backfilling operations were not available at the time of our investigation. However, we are of the opinion that the existing fill was not engineered and is not suitable for engineering purposes.

Native Soils

Native sandy silt, silty sand with gravel and silty clayey gravel trace shale fragments were encountered below the fill at the location of all boreholes. The consistency of the clayey soil was very stiff to hard, and the relative density of the sandy soil was compact to dense. The native soil terminated at the refusal depth of the drilling operation (inferred shale bedrock) at depths ranging between 4.6 m to 7.9 m below the existing ground surface.

Grain size and moisture content tests were carried out on representative soil samples.

The average moisture content of the soil was 6.4 % (ranged between 3.9 and 10.5%)

The following percentages of the soils were obtained from the grain size analyses:

Gravel	Average 26.2 % (range between 6.6 and 39.7 %)
Sand	Average 35.2 % (range between 24.9 and 51.0 %)
Silt & Clay	Average 38.6 % (range between 21.4 and 44.9 %)

Groundwater

Six (6) monitoring wells were installed at the location of BH(MW)1, BH(MW)4, BH(MW)5, BH(MW)6, BH(MW)7, and BH(MW)9 to depths of 5.34 m, 5.72 m, 4.01 m, 5.11 m, 3.65 m, and 17.74 m respectively below the existing ground surface.

Groundwater was encountered during drilling operation and/or after monitoring well installation at the location of all boreholes except at the location of borehole BH8. Since water was used in coring the bedrock at the location of BH9, the groundwater was not measured upon completion of the coring operation.

Groundwater table in the monitoring wells was also measured on May 31, 2023. Summary of the measured groundwater table is represented in Table 2.

It should be noted that the elevation of the natural groundwater table is likely to vary throughout the year depending on the amount of precipitation, runoff, evaporation, and percolation in the area. A summary of the materials encountered in boreholes is provided in Table 2.

DRAFT

Table 2: Summary of Depths and Elevation of Subsurface Conditions

BH	G.S. Elev.	Depth of Fill	Depth/Elev. Of Bedrock, (m)	G. W. T. (m)/2023	
				End of Drilling	May 31
BH(MW)1	103.44 m	1.5 m	4.6 /93.44	4.3	3.39
BH2	103.51 m	1.2 m	5.8 /97.72	4.5 (approx.)	N/A
BH3	103.63 m	1.8 m	5.8 /97.84	4.5 (approx.)	N/A
BH(MW) 4	103.16 m	1.6 m	6.9 /96.26	2.8	2.71
BH(MW)5	102.74 m	1.8 m	6.9 /95.84	1.5	1.95
BH(MW)6	102.25 m	1.6 m	4.6 /97.65	3.22	3.50
BH(MW)7	102.44 m	0.8 m	4.0 /98.00	3.3	0.65
BH8	102.84 m	1.6 m	6.1/96.74	N/A	N/A
BH(MW)9	103.44 m	1.5 m	7.9 /95.51	N/A	6.94

Inferred Bedrock

All boreholes were drilled to the depth of the auger refusal at the surface of inferred bedrock. The inferred surface of the bedrock was identified at depths ranging between 4.6 and 7.9 m. The bedrock at the location of BH(MW)1, BH(MW)6 and BH(MW)9 was cored to a depth of 5.5 m, 2.4 m, and 10 m below the surface of the bedrock (10 m, 7 m & 18 m below the existing ground surface respectively).

Visual observation on the extracted bedrock cores and from our experience in the area, revealed that Georgian Bay Shale bedrock Formation underlined the soil overburden. A thin layer of weathered shale may exist between the soil overburden and the sound bedrock.

Since augers and/or casings were used for drilling, the exact interface depth between the soil overburden, weathered and sound shale were not precisely determined. Furthermore, the native soil overlying the weathered or sound shale bedrock may contain boulders which may give a false indication of the shale elevation. Therefore, the exact depth of the bedrock below the existing ground surface can be different from that recorded in the borehole logs due to possible existence of large pieces of weathered shale.

To classify and assess the quality of the extracted bedrock cores, the Core Recovery "RC" and Rock Quality Designation "RQD" were determined. Other tests such the hardness and compressive strength were also carried out on the bedrock cores. The RC and the RQD are described in the following sections:

Core Recovery

The Core Recovery (CR) refers to the length of rock core covered from a core run. The recovery ratio is the ratio of the length of core recovered to the total length of the core drilled on a given run,

DRAFT

expressed as a ratio or a percentage. The core recovery (RC) of 100% was obtained for all bedrock cores (except for Run 1 at the location of BH9 which was 66%).

Rock Quality Designation

The Rock Quality Designation (RQD) refers to the sum of the lengths of all pieces of sound core over 100 mm (4") long divided by the length of the core run. The low RQD indicates a broken/fragmented zone of the bedrock. The higher values indicate fair quality of bedrock. The RQD at the location of BH1 varies from 29.1% to 63.3%, at the location of BH6 varies from 15% to 23.6% and at the location of BH9 varies from 27.8% to 93.3% (considered to be typical of the Georgian Bay Formation).
Summary of CR and RQD is provided in Table 3.

Table 3: Summary of CR and RQD of Cored Bedrock

BH No.	Start Depth (Below GS)	End Depth (Below GS)	RC%	RQD%
BH1				
R1	4.6	5.5	100	29.1
R2	5.5	7.0	100	48.3
R3	7.0	8.5	100	63.3
R4	8.5	10	100	47.5
Average			100	47.1
BH6				
R1	4.6	5.5	100	23.6
R2	5.5	7.0	100	15.0
Average			100	19.3
BH9				
R1	7.9	8.8	66	27.8
R2	8.8	10.3	100	55.8
R3	10.3	11.8	100	70.0
R4	11.8	13.3	100	93.3
R5	13.3	14.8	100	90.8
R6	14.8	16.3	100	83.3
R7	16.3	17.8	100	84.2
Average			95.1	79.6

Other tests were carried out on the bedrock cores to assess the hardness and compressive strength.

Compressive Strength of the Bedrock Cores

Compressive strength tests were carried out on representative core samples. Test results indicate that the bedrock shale has a compressive strength ranging between 56.6 MPa and 73.2 MPa with an average of 66.5 MPa.

The table below (Table 4) is the rating system of shale for construction as outlined in the Ontario Ministry of Transportation and Communication RR229 – Evaluation of Shale for Construction Projects – an Ontario Shale Rating System, March 1983.

Table 4: Rating System for Shale in Construction

DRAFT

	Compressive Strength, MPa	Young's Modulus GPa	Dynamic Modulus GPa	Poisson's Ratio
Average	28	4	19	0.19
Range	8 - 41	0.5 - 12	6 - 28	0.1 – 0.25

Based on visual examination, hardness, compressive strength, rock recovery and rock quality designation on the bedrock, the bedrock encountered was moderately hard to hard greyish shale, visually identified as the Georgian Bay Formation. This formation comprises a thick sequence of thinly bedded or laminated shales, siliceous shales, calcareous shales, calcareous mudstone and very occasionally, sandstones.

Table 5 summarizes the properties of the bedrock at the location of BH9. The coring logs are provided in this report.

Table 5: Summary of the core bedrock

BOREHOLE **BH9**	**STARTED DATE: MAY 3, 2023**	**GROUND SURFACE ELEVATION: 103.44M**	**DEP./ELEV. OF BEDROCK: 7.9/95.5 M**

Run No.	Depth (m)	Elev. (m)	CR (%)	RQD (%)	Bedrock Description
R1	7.9 8.8	95.5 94.6	66	27.8	Georgian Bay Formation Shale 7.2 m (Elev. 96.2 m) to 8.8 m (94.6 m) Moderately fractured, slightly weathered to weathered, grey, very fine-grained **SHALE**
R2	8.8 10.4	94.6 93.0	100.00	55.8	8.8 m (94.6 m) to 18.0 m (85.4 m) Slightly fractured to sound, moderately hard to hard, Fresh, Grey, very fine-grained **SHALE**
R3	10.4 11.9	93.0 91.5	100.00	70.0	
R4	11.9 13.4	91.5 90.0	100.00	93.3	
R5	13.4 14.9	90.0 88.5	100.0	90.83	
R6	14.9 16.5	88.5 86.9	100.00	83.3	

DRAFT

R7	16.5 18.0	86.9 85.4	100.00	84.2	

6.0 GEOTECHNICAL DISCUSSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

Based on the information obtained from the investigation, the following comments and constraints are provided with respect to the proposed scope of development:

1. The proposed development will comprise the construction of three (3) high rise buildings (50, 55, and 60 levels) with six (6) underground levels,
2. The approximate depth of the underground levels (P6) is ±18.0 m. Taking into consideration that the footing thickness is ±2 m, the estimated depth of the underground excavation is ±20 m below the existing grade,
3. Nine (9) boreholes were drilled to refusal depths ranging between 4.6 m and 7.9 m below the existing ground surface,
4. Fill and native soil overlying bedrock were encountered at the location of all boreholes,
5. Boreholes BH(MW)1, BH(MW)6 and BH(MW)9 were cored to depths of 5.5 m, 2.4 m, and 10.1 m below the surface of the encountered sound bedrock (10 m, 7 m and 18 m below the existing ground surface),
6. Groundwater encountered during the drilling operation and after monitoring well installation. As of May 31, 2023, the groundwater table in the monitoring wells was measured at depths ranging between 0.65 m (at the location of BH7) and 6.94 m (at the location of BH9) below the existing grade (corresponding to elevation 101.79 m and 96.50 m respectively),
7. Groundwater control (dewatering) will be required during and after construction,
8. Since bedrock exists below an approximate depths ranging between ±4.6 m and ±7.9 m, the foundations will be constructed on the bedrock,
9. Spread and/or raft foundation are options for supporting the building loads.
10. Underground excavation should be carried out according to the latest edition of the Occupational Health and Safety Act (OHSA),
11. Shoring of the excavation walls should be considered in case that the underground parking extends to the property boundaries,
12. The temporary shoring and groundwater seepage control are discussed in this report, and

DRAFT

13. Conventional slab-on-grade is considered suitable for use on this site.

Details of the footing's construction are provided in the following sections.

6.2 FOUNDATION

It is anticipated that the buildings with six (6) underground levels will be constructed at an approximate depth of ±20 m.

Since sound shale bedrock exists at the proposed foundation level, conventional spread and strip footings are considered for supporting the building loads. Raft foundation is another option for supporting the building loads.

However, city of Oakville regulations should be considered for the type of foundation to be used for the buildings.

The following sections are our recommendations for the two options of footings constructed on the bedrock.

6.2.1 Conventional Spread and Strip Footings Constructed on the Bedrock

For footings constructed on the sound bedrock the factored Ultimate Limit State (ULS) should not exceed 5000 kPa.

The ULS will govern the design as the bearing stratum must fail for appreciable settlement to occur.

i. Foundation Notes

The following notes should be considered in the design and construction of the foundation:

1) The above recommendations apply to the actual borehole locations. Variations in bedrock profile and properties may be present between the borehole locations. Should significant variations evident during construction, it may be necessary to re-evaluate the recommendations of this report,

2) The soundness of bedrock at the foundation level should be confirmed and approved through close supervision during excavation process,

3) The above-mentioned bearing capacity must be reviewed by our office once the finished floor elevation of the building has been established,

4) The footing subgrade must be cleaned of all soften or disturbed materials,

5) Temporary frost protection is required for the footings bases and the poured concrete during freezing weather conditions,

6) We recommend constructing the footings immediately after completion of the excavation, otherwise, we recommend pouring a layer of lean concrete (±80 mm thick) on the surface of the bedrock after completion of the excavation to keep the bedrock intact since shale bedrock weathers rapidly during wetting and drying cycles,

DRAFT

7) For footings constructed into sound bedrock, the total and differential settlement is insignificant provided that the applied load does not exceeding the recommended bearing capacity,

8) The minimum footing size, footing thickness, excavation size and other footing requirements should be designed in accordance with the requirements detailed in the latest edition of the Ontario Building Code (OBC),

9) Footings constructed at different levels should be constructed so that the higher foundations are set behind a line sloping at angle of 7V: 10H and drawn from the near edge of the lower footing,

10) The above recommendations apply to the actual borehole locations. Variation in soil and bedrock profile and properties may be present between the borehole locations. Should significant variations become evident during construction, it may be necessary to re-evaluate the recommendations of this report,

11) For overturning considerations of spread or continuous foundations, the maximum bedrock pressure at the toe of the foundations should not exceed the maximum net allowable bedrock pressures, and

12) Surface, rainwater and groundwater should not be allowed in the excavated area.

6.2.2 RAFT FOUNDATION

Raft foundation is another option to support the proposed building loads. Raft foundations can be designed and constructed to provide suitable support for the underground level, which spreads the foundation loads over the entire structure's footing footprint.

For a raft constructed on sound bedrock, we recommend a factored Ultimate Limit State "ULS" of 2,500 kPa. The ULS will govern the design as the bearing stratum must fail for appreciable settlement to occur.

For bearing resistance of 2500 kPa, we anticipate that the settlement is insignificant. The computations should include the structural rigidity of the concrete raft.

A modulus of subgrade reaction of 60 MPa/m is recommended for the design of raft foundations constructed on sound bedrock.

In the design of the raft slab and underground walls, the following should be considered:

1. Hydrostatic pressure acting on the underground walls, and
2. Hydrostatic uplift pressure acting on the raft foundation.

To eliminate the construction of drainage systems below the underground finished floor slab and discharge the groundwater into the city sewer system, the raft and the underground walls should be designed and constructed as a watertight structure (Tanked Raft Foundation.

For watertight raft, the following are recommended:

1. 250 mm mud slab (concrete strength and reinforcement should be decided by the structural engineer)

DRAFT

2. The structural design of the raft (thickness and rebars) should be determined by the structural engineer,
3. The raft foundation and the underground concrete walls should be constructed monolithically to prevent groundwater leak at the intersection of the raft and the walls,
4. A gap between the top of the raft and the underside of the lowest underground floor slab should be considered (for the installation of the utilities). The thickness of the gap should be decided by others. Furthermore, we recommend filling the gap with clear stone,
5. Details of waterproofing the raft and walls should be provided by a specialized consultant, and
6. The raft should be designed sufficiently rigid to uniformly distribute the applied building loads over the entire building footprint.
7. If watertight raft foundation is not required, the following should be considered:
   - 250 mm of clear stone is recommended below the concrete raft,
   - Underdrainage pipes should be placed within the granular material, and
   - Drainage details are discussed in this report.

6.3 EARTHQUAKE CONSIDERATION

The 2012 Ontario Building Code (OBC) Subsection 4.1.8 stipulates that a structure should be designed to meet the requirements of the Earthquake Load and Effects. The Site Classification for Seismic Site Response are given in Table 4.1.8.4.A of the 2012 OBC. The site classification is based on the determination of the average shear wave velocity in the top 30 m of the site stratigraphy which could be estimated from the average Standard Penetration Resistance (N_{60}) and the soil undrained shear strength (S_u). For footing constructed on the sound bedrock, the Site may be classified as "Class B". for the possibility of obtaining higher Site Class, e.g., Class A, shear wave tests should be considered.

6.4 EXCAVATION

1. It is anticipated that footings will be constructed at a depth of ±20 m below the existing ground surface. Therefore, excavation will be carried out on the soil overburden, weathered and sound shale bedrock.
2. Groundwater was encountered at depths ranging between 0.65 m and 6.94 m (corresponding to elevations 101.79 m and 96.5 m) below the existing ground surface. Therefore, the building foundations will be constructed below the groundwater table. Dewatering is required during construction. Dewatering the groundwater is discussed in Section 6.9.
3. All excavations must be carried out in accordance with the Occupational Health and Safety Act and Regulations (OSHA) for Construction Projects, November 1993 (Part III-Excavations, Section 222 through 242).
4. According to OSHA, if excavation is deeper than 1.2 m, the excavated sides should be sloped. The regulations designate four (4) broad classification of soils to stipulate appropriate measures for exaction safety. The regulations stipulate safe excavation slopes by soil type as follows:

Table 6: Soil Type and Slope Ratio

Soil Type	Base of Slope	Maximum Slope Inclination
1	Within 1.2 meters of bottom of excavation	1H:1V

DRAFT

2	Within 1.2 meters of bottom of excavation	1H:1V
3	From bottom of excavation	1H:1V
4	From bottom of excavation	3H:1V

5. According to OSHA, fill soil may be classified as Type 4 soil and therefore the minimum excavation side slope is 3H: 1V from the bottom of the excavation. The native layers which were encountered below the fill soils may be classified as Type 3 soil.
6. Vertical cuts may be carried out in the bedrock provided the bedrock bedding is horizontally oriented.
7. Excavation of side slopes should be protected from exposure to precipitation and associated ground surface run-off and should be inspected regularly for signs of instability. If localized instability is noted during excavation or wet conditions are encountered, the side slopes should be flattened as required to maintain safe working conditions,
8. Exposed shale deteriorates flakes and recedes and loses strength with time. Falling of small fragments from the vertical face of the excavation occurs on a continuous basis. The use of draped steel mesh or spray foam over the excavation faces of the shale are recommended.
9. The excavation of the soil overburden (fill/native soils) and weathered shale down to the level of the sound bedrock should be relatively straightforward. The overburden soils may contain larger particles such as cobbles and boulders that were not encountered during the drilling process.
10. Shale bedrock can be excavated to the required depth with conventional excavation equipment once it has been displaced by ripper tooth equipment.
11. It should be noted that the above recommendations are based on the actual borehole locations. Should any contaminated materials be encountered beyond the location of the boreholes, it may be necessary to revise the above recommendations.

6.5 VIBRATION MONITORING

Vibration will most likely be generated during demolishing of the existing building, installation of shoring walls, bedrock excavation and other construction activities.

Vibration may cause an adverse impact and structural damage to the adjacent buildings. Therefore, the vibrations should be monitored to ensure that they do not exceed the safe limits and comply with the municipal by-law.

Furthermore, we recommend carrying out condition surveys on the adjacent structures prior to any construction activities.

6.6 LATERAL EARTH PRESSURE

Walls (e.g., underground walls) supporting soil, and water should be designed and constructed to resist lateral earth pressure imposed by the soil, and water. For walls that are designed to allow rotation, active earth pressures may be used for design. For rigidly tied walls, the "at rest" earth

DRAFT

pressure should be used for design. The lateral earth pressure may be calculated using the following expression:

$P = KA\ [\gamma(h1-hw) + \gamma'hw + q] + \gamma whw$

The above equation considers the hydrostatic pressure in determining the lateral pressure on the wall if continuous wall drains are not provided.

A perimeter drainage system may be constructed to prevent the build-up of any hydrostatic pressure behind the wall. In this case, the following equation is recommended:

$P = K\ (\gamma h + q)$

Summary of the recommended soil parameters is provided in Table 7 & 8:

Table 7: Approximate Values of Soil Parameters

Soil Parameters	$Ø^0/C$ (kPa)	γ (kN/m^3)	K_A	K_0	K_P
Compact sand/silty sand	30/0	19	0.33	0.5	3
Dense sand/silty sand	33/0	21	0.30	0.46	3.33
Very stiff clayey silt/silty clay	0/100	22	0.30	0.46	3.33

Table 8: Description of Soil Parameters

Soil Parameter	**Description**
P	Lateral earth pressure in kPa acting at depth h (m)
Ø	Internal angle of friction
γ_{soil}	Unit weight of overburden soil above the groundwater table
γ'	Submerged unit weight of soil, a value of 10 kN/m^3 may be assumed
γ_w	Unit weight of water, a value of 10 kN/m^3 may be assumed
h	Depth below ground surface (m)
h_1	Depth in overburden soil, below the ground surface
h_w	The depth below the groundwater table (m)
q	Equivalent value to surcharge on the ground surface in kPa.
K	Lateral earth pressure coefficient (horizontal ground surface and vertical wall
K_A	Active earth pressure coefficient
K_0	At rest earth pressure coefficient

6.7 SHORING THE EXCAVATED WALL

Any excavation should not extend below the foundation of adjacent buildings without lateral support of the excavated walls.

Where space permits, temporary open cut excavation may be used for underground excavation. The side slopes of the excavation are provided in section 6.4.

DRAFT

If the underground excavation extends to the Site's boundaries, shoring the excavated walls will be required.

The following provides our recommendations for the design and construction of the temporary shoring system:

1. The shoring system should be designed in accordance with the latest edition of the Canadian Foundation Engineering Manual (CFEM),
2. The design of the temporary shoring system must consider the presence of underground utilities and services below the adjacent streets as well as the proximity of adjacent structures. If services and/or foundations of adjacent structures are present within the active zone behind the shoring system, appropriate parameters must be considered to avoid any harmful movements,
3. The temporary shoring may consist of caisson walls and/or soldier piles with a wooden lagging system. Caissons are recommended for shoring where lateral movement of the shoring is not permitted. Soldier piles and timber laggings may be considered where slight movement can be tolerated,
4. The walls of the excavation should be supported by either post-tensioned anchors or tiebacks drilled and grouted into the soil or bedrock around the excavation. Tiebacks and/or anchors are discussed in section 6.7.3 of this report,
5. If permission to extend anchors into the adjacent properties is not granted, internal bracing such as using struts is another option for supporting the shoring,
6. The shoring system should be designed by a local design professional experienced in the type of system being proposed,
7. Similar lateral earth pressure and soil parameters recommended in Section 6.6 may be considered for the design of the shoring system,
8. Groundwater and boulders may be encountered during caisson and/or soldier pile installation. Dewatering may also be required during shoring of the excavated wall, therefore the effect of lowering the groundwater table on the adjacent structure should be considered,
9. Monitoring of horizontal movement at the top of the shoring is recommended. Monitoring recommendation is discussed in Section 6.7.5,
10. The bedrock is nominally self-supporting in a vertical face, provided the rock bedding is horizontally oriented,
11. The backfilled materials between the shoring system and the excavated sides should be free draining material, to minimize the effect of hydrostatic pressure on the shoring system. Otherwise, the hydrostatic pressure should be added to the lateral earth pressure acting on the system.

The following sections discuss the type of applicable shoring systems:

6.7.1 Caisson Wall

1. Caisson walls are recommended for shoring where lateral movement of the shoring is not permitted,
2. Caisson wall may be constructed to minimize the underground water seeping into the excavated area,

DRAFT

3. Caissons may be constructed by drilling through the overburden soil individual caisson along all the excavated sides. The caisson should be terminated at the surface of the bedrock,
4. We recommend that liners be used in the sandy soil below the groundwater table and the caissons be advanced without the removal of the soil for several meters below the groundwater table,
5. Soldier piles may be installed in some of the drilled holes as recommended by the shoring engineer.
6. The holes should be filled with low strength concrete using Tremie pipe or an equivalent method. The concrete strength must be specified by the shoring designer, and
7. The wall should not be considered as a permanent underground wall unless special consideration was considered prior to its construction.

6.7.2 Soldier Piles and Wooden Lagging

1. Temporary shoring which may consist of soldier piles and wooden lagging is another option for supporting the excavated walls.
2. It is recommended that the soldier piles be installed in pre-augered holes extended to the surface of the bedrock. The lagging may only extend to the level of the intact and self-supporting bedrock,
3. The shoring system should be supported by anchors or tie back as discussed in Section 6.7.3,
4. The soil parameters recommended in Section 6.6 may be considered in the design of soldier piles and wooden lagging system,
5. We recommend the use of geotextile filter cloth on the exposed surface of the lagging boards to prevent/minimize the loss of soil through the spaces between the boards.

6.7.3 Tiebacks or Anchor

1. The shoring wall should be supported by either post-tensioned anchors or tiebacks drilled and grouted into the soil/or bedrock around the excavation,
2. Liners should be used in constructing the anchors or tie backs below the groundwater table and/or in sand/sandy silt soils,
3. If anchors/tiebacks are used, they will extend onto the adjacent properties and road subsoil,
4. Permission will be required from the owners of the adjacent properties to install the tie back anchors,
5. The extent of the tiebacks should consider the existence of the underground utilities along Cross Street and Argus Road.
6. The anchors must extend to a length in the soil/bedrock recommended by the Canadian Foundation Manual. A minimum length of 2.5 m beyond the line of 45 – Ø/2 drawn from the base of the excavation is recommended.
7. The recommended distance of the top anchor below the ground surface is 1.5 m, however, the top anchor must not be placed lower than 3 m below the existing ground surface.
8. The anchor/tiebacks bond depends on the soil/bedrock properties, installation method and grouting properties. For gravity poured concrete, an allowable bond pressure of 40 kPa is suggested for the existing native soil. A higher bond pressure may be obtained if a pressurized method of grout installation is used. An allowable pressure of 200 kPa is suggested for tiebacks extending into the sound bedrock.

DRAFT

9. All anchors should be tested as indicated in the Canadian Foundation Engineering Manual (CFEM). At least two (2) anchors in each level should be tested to 200 % of the design load in accordance with the current edition of the CFEM to verify the capacity of the anchors. The design of the working anchors should then be modified based on the test results, where necessary. All remaining anchors should be installed following similar procedures and proof tested to 1.33 times the design load.

6.7.4 Lateral Earth Pressure on Shoring System

1. The recommendations and soil parameters provided in Section 6.6 in this report may be adopted in estimating the lateral earth pressure "P" acting on a unit element of the shoring system at any depth below the surface of the retained.
2. If single level of earth anchor or bracing is used for the support of the shoring, a triangular pressure distribution may be assumed for determining the lateral earth pressure acting on the shoring system,
3. Where several levels of earth anchor or bracing are used, trapezoidal pressure distribution may be considered for determining the lateral earth pressure acting on the shoring system.
4. Groundwater pressure may also be considered for determining the lateral pressure acting on the shoring system. However, the groundwater pressure on the shoring system depends on the permeability of the retained soil and on the type of shoring system. For soldier pile and wood lagging, the water may seep through the system, consequently no water pressure will be induced on the shoring system. If continuous caissons are used, water pressure on the shoring wall should be considered, and

6.7.5 Shoring System Movement (Vertical and Horizontal)

Vertical and horizontal movement of the shoring system is inevitable. The vertical movement will result from the vertical component of the inclined anchor or tie back and surface settlement, and the horizontal inward movement results from the lateral earth pressure and water pressure. The magnitude of these movements may be minimized/eliminated by proper construction practices. The vertical and horizontal movement will be in the range of 0.1H% to 0.25H% (H = height of the excavated wall). However, the actual shoring movement should be determined by the shoring consultant.

Monitoring the vertical and horizontal movement of the shoring system using an inclinometer incorporated in the soldier piles and/or vertical and horizontal settlement using total station with targets attached on the soldier piles is recommended "during the underground construction" to ensure that the movements are within the acceptable range.

Initial readings of these devices should be conducted prior to any excavation activities.

Based on our experience of monitoring the movement using either inclinometer and/or the total station with targets, we recommend the measurements be carried out on a weekly basis in the early stage of underground construction and then every other week until the completion of the underground levels.

Monitoring records should be provided continuously to Azure and the shoring the consultant.

DRAFT

We should also be informed immediately for any excessive movement that exceeds the recommended limit.

6.8 ELEVATOR PIT

The required depth of the elevator pit/pits are not available at the time of preparing the geotechnical report. However, it is anticipated that the elevator pit/pits will be constructed at an approximate depth of ±1.5 m below the finished lower level (P6) of the underground parking. However, the depths should be decided by the structure and elevator consultants.

If spread footings are considered for supporting the building loads, we recommend that the pit be designed and constructed as a water-tight structure. The design should consider the hydrostatic pressure on the pit walls and the uplift pressure acting at the bottom of the pit.

If the raft foundation is considered for supporting the building load, the elevator pit will be considered as part of the raft footing.

6.9 CONTROL OF THE GROUNDWATER TABLE

- The overburden soil above the surface of the bedrock contains water.
- As of May 31, 2023, the groundwater tables in the monitoring wells were measured at depths ranging between 0.65 m and 6.94 m below the existing ground surface (corresponding to elevations 101.79 m and 96.50 m). Since the six underground levels of the proposed building will extend to a depth of ±20 m, the footings will be constructed below the groundwater table,
- The groundwater within the soil will seep into the excavation during and after completion of the underground excavation,
- Since bedrock exists at the bottom of the excavation, dewatering may be accomplished by excavating trenches and collecting the water in wells or pits. A sump pump may be used to pump the collected groundwater in the wells or pits,
- The volume of water to be pumped out should be determined by specialized consultants.
- Dewatering after construction will be discussed in Section 6.11, and
- City of Oakville regulations for pumping groundwater into the city sewer system should be considered.

6.10 SLAB ON GRADE (If Spread footings are considered)

- If spread footing are considered, the lowest underground slab of the building will be constructed as a conventional slab-on-grade on the existing sound shale bedrock,
- A moisture barrier and drainage layer should be provided between the underside of the floor slab and the exposed bedrock. It is recommended that the moisture barrier consist of a minimum of 250 mm thick layer of 19 mm clear crushed stone (OPSS 1004) compacted by vibration to a dense state. Further details of the drainage layer are provided in section 9 of this report,
- The floor slab should be constructed independently of any structural members; for example, load bearing walls and/or columns, by means of fiber board or an equivalent isolation compound,
- Saw cuts should be provided along column lines and at closer centres as required. Diamond saw cut is required near columns, and

DRAFT

- For slab supported on a layer of granular materials overlying sound bedrock, a Modulus of Subgrade Reaction (k_s) of 30 MPa/m (110 pci) is recommended.
- Further details of the drainage layer are provided in section 6.11 of this report.

6.11 PERMANENT DRAIN FOR EXTERIOR WALLS AND SLAB ON GRADE (If Spread Footings are Considered)

If spread footings are considered for supporting the building loads, drainage system for the exterior walls and slab on grade should be considered.

For six (6) underground levels, the lower walls and floor slabs will lie below the permanent ground water table. Groundwater seepage through the shoring walls should also be expected. Therefore, to avoid the build-up of hydrostatic pressure on the walls and keep the floor slab dry, the following is recommended:

1. The exterior underground walls should be positively water-proofed with a perimeter and vertical drainage system,
2. The underground wall drain may be accomplished with the installation of dimpled core drainage membrane sheets between the shoring system and the underground wall. The drainage membrane sheets are installed vertically and nailed to the shoring walls (caissons or the wood lagging walls). Since the groundwater table fluctuates, it is recommended that the drainage membranes be installed continuously over the shoring walls extending down from the ground surface,
3. An additional waterproofing layer between the core drainage membrane and the underground wall is recommended as an extra protection,
4. Drainage ports or PVC pipes through the walls should be installed at the base of the drainage strip, to allow drainage to under floor weeping tile located on the interior side of the wall. The recommended spacing of the drainage ports/PVC pipes is 2.4 m,
5. The ends of the PVC pipes should be covered by textile or polyethylene sheeting to prevent ingress of concrete during placing the concrete.
6. Recommendation for slab on grade construction is discussed in Section 6.10 of this report,
7. A moisture barrier and drainage layer should be provided between the underside of the floor slab and the exposed bedrock. It is recommended that the moisture barrier consist of a minimum of 250 mm thick layer of Ontario Standard Specification (OPSS) Granular "A" or 19 mm clear crushed stone (OPSS 1004) compacted by vibration to a dense state,
8. Subfloor drainage system should be used to convey accumulated water to the building/buildings sump,
9. An underfloor and perimeter drainage system should be installed below the slab on-grade to convey the accumulated water to sump/sumps,
10. The underfloor and perimeter drainage drains should consist of 100 mm diameter perforated PVC pipes or weeping tiles surrounded by 150 mm of 19 mm clear crushed stones, having less than 8 percent passing the 75-micron (No. 200) sieve size. The pipes and the crushed stone should be wrapped with geotextile filter fabric sheets having a filtering opening size (FOS) of 60 microns,
11. The underfloor and perimeter drainage pipes should be placed parallel to each other with spacing in the range of 2.5 m sloped in toward frost-free sumps. We recommend constructing several sumps distributed along the edges of the underground level,

DRAFT

12. The spacing of the drainage pipes, the quantity of the accumulate water and the number/location of the sumps should be determined by a dewatering consultant,
13. We recommend installing one perimeter pipe within 1 m of the exterior wall to collect the wall drains,
14. The underfloor and perimeter drainage should be sloped in one direction toward a frost-free sump,
15. The accumulated water should be pumped frequently using a sump pump. The pumps must be on emergency power,
16. The perimeter drainage system should be independent of any storm water piping,
17. Pressure relief ports (valves) are recommended in the slab on grade of the lower underground level of the parking area. The recommended spacing of the ports is ±9 m to dissipate the upward hydrostatic pressure at the base of the slab,
18. The floor slab should be constructed independently of any structural members; for example, load bearing walls and/or columns, by means of fiber board or an equivalent isolation compound,
19. To protect unheated areas and the entrance of the underground parking against frost heave, we recommend the installation of 50 mm thick Styrofoam or equivalent below the slab on grade, and
20. City of Oakville regulations for pumping the water should be followed.

6.12 RECOMMENDATIONS FOR SEWER BEDDING AND TRENCH BACKFILLING

- Pipe bedding and backfill material specifications and compaction criteria for water and sewer services should be in accordance with the pipe designer's recommendations and/or local municipal requirements,
- The subgrade of the sewer should consist of sound native soil/or bedrock, or properly compacted fill materials free of organic and/or deleterious materials. If the bottom of the trench at the required pipe grade is found to be unstable or include organics materials, the unsuitable materials should be removed and replaced with approved materials prior to any pipe installation,
- The exposed trench bottom shall be compacted to a minimum of 95% of the materials Standard Proctor Maximum Dry Density (SPMDD). OPSS Granular B is recommended for backfilling the excavated trench. The backfilling operation should be carried out in lifts not exceeding 150 mm in the loose state compacted to 98% of the materials SPMDD,
- A Sand layer of minimum thickness of 50 mm should be placed below the sewers as a leveling pad. The leveling pad will make the pipe foundation more rigid, reduce the detrimental effect of differential settlement and provide a working platform to facilitate the construction of the sewers. The leveling pad should spread the full width of the trench bottom,
- After preparation of the trench base, a pipe bedding of a minimum thickness of 150 mm shall be placed using crushed stone or crushed gravel, meeting OPSS Granular "A" material compacted to 98% of the materials SPMDD,
- All trench excavations shall be backfilled immediately after the sewers are laid. The backfilling operation should be carried out on both sides of the sewer and shall be manually compacted simultaneously. At no time shall the levels of each side differ by more than 100 mm un-compacted. Approved granular materials should be used for backfilling. The granular materials should extend to a minimum of 300 mm above the top of the pipe. Backfill materials shall be

DRAFT

placed in uniform layers not exceeding 150 mm in thickness for the full width of the trench and compacted manually,

- Backfilling above the 300 mm should be placed in uniform thickness of 150 mm compacted to 98% of the materials SPMDD to eliminate the possibility of settlement, pipe misalignment, or damage to the joints,
- Granular materials may be used as backfill materials,
- Backfill materials shall be placed to a minimum of 900 mm above the crown of the sewer before any power operated tractor or rolling equipment are used for compaction,
- Water lines installed outside of heated areas should be provided with a minimum of 1.2-meter soil cover or equivalent for frost protection,
- In normal sewer construction, the problem of road settlement largely occurs adjacent to manholes or catch basins. In areas which are inaccessible to heavy compaction equipment, additional compactive effort with smaller equipment is warranted,
- Fill materials imported to the site must meet all applicable municipal, provincial, and federal guidelines and regulations associated with environmental characterization of the material. The materials preparation and compaction of bedding layer, the pipe installation should be in accordance with the current revision of OPSS 1010, OPSS 401, OPSS 501, OPSS410, OPSD 902.032, OPSD 803.030 and OPSD 803.031.

6.13 PAVEMENT DESIGN FOR ASPHALT CONCRETE

Flexible asphalt pavement is recommended for the parking areas and site access roads. Flexible pavement consists of a prepared roadbed (subgrade) underlying layer of subbase, base, and surface courses (pavement structure).

Prior to pavement structure construction, we recommend the pavement subgrade should be prepared as noted below:

Pavement Subgrade:

Pavement subgrade can consist of native soil and/or engineered fill. Any soft, lose or unstable materials should also be removed. The exposed surface should be compacted to at least 98% of the SPMDD and proof-rolled with a loaded tandem truck.

Sub-grade up-fill should be compacted to at least 98% of the SPMDD, at or below the optimum moisture content (OMC) in lifts not exceeding 150 mm in thickness. Any materials that have moisture content higher than 3% of its OMC should be dried out.

Granular sub-base:

The granular sub-base is the portion of the flexible pavement structure between the roadbed (subgrade) and the base course, and is used to increase the structural capacity, raise pavement layers above the frost line, or provide a levelling course for the placement of base layers. Granular "B" may be used for sub-base construction. The sub-base layer should be placed on the prepared subgrade. The granular sub-base layer should be compacted to at least 100% of the SPMDD.

Granular Base:

The granular base is the portion of the pavement structure immediately beneath the surface course. It is constructed with high quality aggregates. The base materials consist of 100% aggregate materials. These

DRAFT

materials consist of durable particles of gravel and sand or crushed rock, crushed gravel, and sand. Recycled aggregates may also be used for base construction. Geotechnical engineer should be consulted prior to the use of the recycled materials.

Pavement Surface:

The surface course of a flexible pavement structure consists of a mixture of mineral aggregates and bituminous materials placed as the upper course and usually constructed on a base course. The pavement surface must be constructed to a higher standard than other layers in the pavement structure. The materials most used for pavement surfacing are the asphalt/bituminous mixtures.

The recommended pavement structures are provided in Table 9.

Table 9: Pavement Structure for the Driveways and Parking Areas

Description	Heavy duty	Light Duty	Concrete	Materials
Asphalt Surface Course (HL3)	40 mm	35 mm		Hot Mix Asphalt
Asphalt Base Course (HL8)	60 mm	50 mm		Hot Mix Asphalt
Concrete			200 mm	Portland Cement Concrete
Granular Base	150 mm	150 mm	150 mm	19 mm CRL or Granular A
Granular Sub-Base Course	300 mm	300 mm	300 mm	50 mm Crushed Limestone or Granular B

CRL = Crusher Run Limestone
Light Duty or Standard Duty Driveway

The recommended compaction level for each layer is provided in Table 10.

Table 10: Compaction Recommendation for Pavement Layers

Pavement Layer	Compaction Level
Asphalt Surface Course (HL3)	92.0 -96.5% MRD
Asphalt Base Course (HL8)	92.0 – 96.5% MRD
OPSS Granular "A" or 20 mm CRL (Granular Base)	100% SPMDD
OPSS Granular "B" Type II or 50 mm CRL (Granular Sub-base)	100% SPMDD

MRD = Marshall Relative Density
SPMDD = Standard Proctor Maximum Dry Density

Notes:

- The pavement surface and subgrade should be graded to direct run-off water away from the roadway, parking areas and associated infrastructure.
- Construction trucks and equipment should be kept off the newly constructed parking area and driveways before the placement of asphalt layer.
- Furthermore, we recommend the installation of sub-drains along the perimeter of the pavement and throughout low areas to prevent infiltration and accumulation of surface run-off water in the pavement structure.

7.0 GENERAL CONSIDERATIONS

This report is limited in scope to those items specifically referenced in the text. No other testing and design calculations have been performed except as specifically reported.

DRAFT

The discussions and recommendations presented in this report are intended for the sole guidance of the client named and the design consultants. It should not be relied upon for any other purpose.

The information on which these recommendations are based is subject to confirmation by engineering personnel at the time of construction.

The data we have collated and the opinions we have formed after reviewing this information should not be construed as a guarantee but only a guide to probable expectations. Conditions that exist but are not recorded herein were not apparent given the level of study authorised.

The fact that localised variations in the subsurface conditions may be present between and beyond the boreholes and that those conditions may be significantly different from the general description provided for design purposes should be understood.

It is strongly urged that Azure Group be contacted to provide assistance in the interpretation of the borehole records by anyone undertaking work on or below the ground surface at this site prior to this work being carried out.

The client expressly agrees that it has entered into this agreement with Azure Group, both on its own behalf and as agent on behalf of its employees and principals.

The client expressly agrees that Azure Group 's employees and principals shall have no personal liability to the client in respect of a claim, whether in contract, tort and/or any other cause of action in law. Accordingly, the client expressly agrees that it will bring no proceedings and take no action in any court of law against any of Azure Group 's employees or principals in their personal capacity.

8.0 CLOSING

We trust that the foregoing information is sufficient for your present needs and will be pleased to review the contents of this report in greater detail. Should you require our services further in this regard, please do not hesitate to contact our office.

Yours truly,

Azure Group

DRAFT

AZURE GROUP — *DRAWING NO. 2*

JOB NUMBER 2303-002 — *BH1(MW)1*

Project Location: 177 Cross Avenue, Oakville, Ontario — **Sheet 1 of 1**

Client: Allaince United Corporation

Date Started: May 5, 2023 ***Date Finished: May 5, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Type: 125 mm Open**

G. S. Elev.: 103.44 m **G.W. Depth: 3.39** **G.W. Elevation: 100.05m** **Time: May 31, 2023**

Depth/Elev. (m)		Description	Type/No		N	C_u (kPa)	G. W. E	Remark
0	103.44	80 mm Asphalt	SS	1	9			
		Fill: Compact silty sand trace gravel						
0.75	102.69		SS	2	19			
		Compact silty sand/sand, moist						
1.5	101.94		SS	3	10			
		Compact SAND below 1.2 m, moist						
2.25	101.19		SS	4	46			
		Dense SAND/SILTY SAND, moist to wet below 2.2 m						
3.0	100.44		SS	5	50			
		Dense SILTY SAND, wet					3.39m*	
4.5	98.94		SS	6	33			
		Hard CLAYEY SILT below 4 m, wet						
6.0	97.44		SS	7	10			5.34 m
		Stiff CLAYEY SILT below 6m,						
		Hard CLAYEY SILT with Shale Fragments below 7 m						
7.5	95.94		SS	8	78			
8.1	95.34	Refusal at 8.1 m (Inferred shale Bedrock)						

DRAFT

AZURE GROUP — DRAWING NO. 3

JOB NUMBER 2303-002 — BH2

Project Location: 177 Cross Avenue, Oakville, Ontario — **Sheet 1 of 1**

Client: Allaince United Corporation

Date Started: May 5, 2023 ***Date Finished: May 5, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Type : 125 mm Open**

G. S. Elev.: 103.51 m **G.W. Depth: N/A** **G.W. Elevation: N/A** **Time: *May 5*, 2023**

Depth/Elev. (m)		Description	Type/No		N	C_u (kPa)	G. W. E	MW
0	103.51	277 mm Concrete Pavement	SS	1				
		Fill: Sand/Silty sand, moist						
0.75	102.76		SS	2				
		SILTY SAND below 1.0 m, moist						
1.5	102.01	SILTY SAND, moist	SS	3				
2.25	101.26	SILTY SAND, moist wet below 2.1	SS	4				
3.0	100.51	SILTY SAND, wet	SS	5				
		Very dense CLAYEY SILT trace to some clay below 4						
4.6	98.91	SILTY SAND, wet	SS	6				
		E.O.B						

DRAFT

AZURE GROUP — DRAWING NO. 4

JOB NUMBER 2303-002 — BH3

Client: Allaince United Corporation

Date Started: May 4, 2023 ***Date Finished: May 4, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Type: 125 m m Open**

G. S. Elev.: 103.63 m **G.W. Depth: N/A** **G.W. Elevation: N/A** **Time: May 4, 2023**

Depth/Elev. (m)		Description	Type/No		N	C_u (kPa)	G. W. E	MW
0	103.63	277 mm Concrete Pavement	SS	1				
		Fill: Sand/Silty sand, moist						
		Silty sand, moist						
0.75	102.88		SS	2				
		SILTY SAND below 1.2 m, moist						
		SILTY SAND, moist						
1.5	102.13		SS	3				
2.25	101.38	SILTY SAND, moist	SS	4				
3.0	100.63		SS	5				
		SILTY SAND, Wet below 3.0						
		Compact SANDY SILT trace clay below 4 m, wet						
4.6	99.03		SS	6				
		SILTY SAND, wet						
		Refusal at 5.7m (inferred shale bedrock)						

DRAFT

AZURE GROUP — *DRAWING NO. 5*

JOB NUMBER 2303-002 — *BH(MW)4*

Client: Allaince United Corporation

Date Started: May 5, 2023 ***Date Finished: May 5, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Ty pe: 125 mm Open**

G. S. Elev.: 103.16 m **G.W. Depth: 2.71m** **G.W. Elevation: 100.45m** **Time: May 31, 2023**

Depth/Elev. (m)		Description	Type/No		N	C_u (kPa)	G. W. E	MW
0	103.16	150 mm Topsoil	SS	1				
		Fill: Silty sand, moist						
0.75	102.41	SILTY SAND below 0.8 m, moist	SS	2				
		SILTY SAND, moist						
1.5	101.66		SS	3				
		SILTY SAND, wet below 2.3 m						
2.25	100.91		SS	4				
							2.71 m	
		SILTY SAND,						
3.0	100.16		SS	5				
		SILTY SAND						
4.5	98.66		SS	6				
								5.72 m
6.0	97.16	Hard CLAYEY SILT with Shale Fragments below 6m	SS	7				
6.7	96.46	Refusal at 6.7 m (Inferred shale Bedrock)	SS	8				

DRAFT

AZURE GROUP

DRAWING NO. 6

JOB NUMBER 2303-002

BH(MW)5

Client: Allaince United Corporation

Date Started: May 4, 2023 ***Date Finished: May 4, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Ty pe: 125 mm Open**

G. S. Elev.: 102.74 m **G.W. Depth: 1.95 m** **G.W. Elevation: 100.79m** **Time: May 31, 2023**

Depth/Elev. (m)		Description	Type/No		N	C_u (kPa)	G. W. E	MW
0	102.74	Fill: Compact sand/silty sand trace gravel, moist	SS	1	15			
0.75	101.99	Loose sand/silty sand below 0.8 m, moist	SS	2	9			
		Loose SILTY SAND, moist					1.32m	
1.5	101.24	wet below 1.8 m	SS	3	7			
2.25	100.49	Compact SILTY SAND below 2.2 m, wet	SS	4	23			
3.0	99.74		SS	5	22			
		Compact SANDY SILT below 4 m, wet						4.01 m
4.5	98.24		SS	6	25			
		Hard CLAYEY SILT with Shale Fragments below 6 m						
6.0	96.74		SS	7	29			
		Refusal at 6.2 m						
6.7	96.04							

DRAFT

AZURE GROUP — DRAWING NO. 7

JOB NUMBER 2303-002 — BH(MW)6

Client: Allaince United Corporation

Date Started: May 4, 2023 ***Date Finished: May 4, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Ty pe: 125 mm Open**

G. S. Elev.: 102.25 m **G.W. Depth: 3.5 m** **G.W. Elevation: 98.75 m** **Time: May 31, 2023**

Depth (m)	Elev. (m)	Description	Type	No	N	C_u (kPa)	G. W. E	MW
0	102.25	80 mm Asphalt	SS	1	17			
		Fill: Compact sand/silty sand trace gravel, moist						
0.75	101.50	Compact sand/silty sand trace gravel, moist	SS	2	11			
1.5	100.75	Compact SILTY SAND below 1.7 m	SS	3	17			
2.25	100	Compact SILTY SAND, wet	SS	4	20			
3.0	99.25	Compact SILTY SAND, wet	SS	5	24		3.5m	
4.5	97.75	Hard CLAYEY SILT with shale Fragments Refusal at 4.5m	SS	6	50			5.11 m

DRAFT

AZURE GROUP — DRAWING NO. 8

JOB NUMBER 2303-002 — BH(MW)7

Client: Allaince United Corporation

Date Started: May 9, 2023 ***Date Finished: May 9, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Ty pe: 125 mm Open**

G. S. Elev.: 102.44 m **G.W. Depth: 0.65** **G.W. Elevation: 101.79 m** **Time: May 31, 2023**

Depth/Elev. (m)		Description	Type/No		N	C_u (kPa)	G. W. E	MW
0	102.44	80 mm Asphalt			5			
		Fill:Loose to very loose sand and gravel, moist						
							0.65 m	
0.75	101.69		SS	2	15			
		Compact sand and gravel, moist						
		Dense SILTY SAND below 1.8 m, moist						
1.5	100.94		SS	3	38			
2.25	100.19	Compact SILTY SAND below 2.2 m, wet	SS	4	21			
3.0	99.44		SS	5	28			
		Compact SANDY SILT, wet						
		Stiff SILTY CLAY/CLAYEY SILT below 3.7 m						3.65m
4.5	97.94		SS	6	50			
		Refusal at 4.5 m						

DRAFT

AZURE GROUP — DRAWING NO. 9

JOB NUMBER 2303-002 — BH8

Client: Allaince United Corporation

Date Started: May 11, 2023 ***Date Finished : May 11, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Ty pe: 125 mm Open**

G. S. Elev.: 102.835 m **G.W. Depth: NE** **G.W. Elevation:** **Time :**

Depth/Elev. (m)		Description	Type/No		N	C_u (kPa)	G. W. E	MW
0	102.835	80 mm Asphalt	SS	1	8			
		Fill: compact sand and gravel						
0.75	102.085	Compact sand trace gravel	SS	2	12			
1.5	101.335	Compact sand trace gravel	SS	3	19			
		Compact SILTY SAND below 1.8 m						
2.25	100.585	Compact SILTY SAND, moist	SS	4	28			
3.0	99.835	Dense SILTY SAND	SS	5	32			
4.5	98.335	Compact below 4.6 m	SS	6	50			
6.0	96.135	Very stiff SILTY CLAY/CLAYEY SILT, wet Hard CLAYEY SILT WITH shale fragments Refusal at 6.1 m	SS	7	50			

DRAFT

AZURE GROUP — DRAWING NO. 10

JOB NUMBER 2303-002 — BH(MW)9

Client: Allaince United Corporation

Date Started: May 3, 2023 ***Date Finished May 3, 2023*** ***Temperature: 10°C***

Azure Group: **Auger Ty pe: 125 mm Open**

G. S. Elev.: 103.44 m **G.W. Depth: 6.94m** **G.W. Elevation: 96.5m** **Time: May 31, 2023**

Depth/Elev. (m)		Description	Type/No		N	C_u (kPa)	G. W. E	MW
0	103.44	200 mm Topsoil			25			
		Fill: Compact sand trace gravel, moist						
		Compact SIlty Sand trace gravel, moist						
0.75	102.69		SS	2	15			
		Dense SILTY SAND, moist						
1.5	101.35		SS	3	37			
2.25	100.585	Dense SILTY SAND,wet	SS	4	26			
3.0	99.835	Stiff to very stiff SILTY CLAY/CLAYEY SILT trace gravel, wet	SS	5	33			
4.5	98.335	very Stiff SILTY CLAY/CLAYEY SILT trace gravel, and shale fragments, wet	SS	6	19			
6.0	96.935	Hard CLAYEY SILT with Shale Fragments,	SS	7	24		6.94m	
8.0	80.4	Refusal at 8.0m (Inferred shale Bedrock) Bedrock cored to 17.98m	SS	8	53			17.74m

DRAFT

This is Exhibit “L” referred to in
the Affidavit of Sarmad (Sam) Gannisworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Azure Group

May 14, 2024

Project No. 2303-003

Alliance United Corporation
3190 Harvester Road, Suite 201A,
Burlington, Ontario
L7N 3T1

Attention: Mr. Sam Ganni

Re: Preliminary Hydrogeological Assessment
177 Cross Avenue,
Oakville, Ontario

Dear Sir:

Azure Group Inc. (Azure) was retained by Alliance United Corporation (The Client) to conduct a Hydrogeological Assessment at the property comprised of 177 Cross Avenue, Oakville, ON (the "Site"). Azure thereby retained in partnership Azimuth Environmental Consulting, Inc. (Azimuth) to complete the Hydrogeological Assessment. This evaluation focused on the existing soil and ground water regime underlying the Site and the potential for the proposed mixed commercial / residential development to impact the existing conditions.

The Site is a "C" shaped parcel and is approximately 10,078 m^3 in size and is bound by Cross Avenue to the south east, Argus Road to the east, and additional commercial and retail use to the north, west, and east. The Site is currently developed for commercial use and contains three structures: one single storey daycare and two single storey structures used for commercial and retail purposes. The remaining land is composed primarily of asphalt pavement used as a driveway and for parking.

CLOSURE

This report has been prepared for the benefit of Alliance United Corporation (The Client), and their clients.

Any other person or entity without the express written consent of Azure Group Inc. (Azure) and the client may not rely upon the report. Any use that a party makes of this report, or any reliance on decisions made based on it, are the responsibility of such parties. Azure accepts no liability and no responsibility whatsoever for damages, if any, suffered by any party as a result of decisions made or actions based on this report.

An environmental site characterization is a limited sampling of a site. The conclusions given herein are based on information gathered at the specific locations and can only be extrapolated to an undefined limited area around these locations. The extent of the limited area depends on the soil and groundwater conditions, as well as the history of the subject property reflecting natural, construction, and other activities. In addition, analyses have been carried out for a limited number of chemical parameters, and it should not be inferred that other chemical species are not present.

Due to the nature of the investigation and the limited data available, Azure cannot warrant against undiscovered environmental liabilities. No other warranty or representation, either expressed or implied, is included or intended in this report. Should any conditions at the site be encountered, which differ from those at the sampling locations and/or additional site information become available, Azure requests that this information be brought to our attention so that we may re-assess the conclusions presented herein. It should also be noted that current environmental Regulations, Guidelines, Policies, Standards, Protocols and Objectives are subject to change, and such changes, when put into effect, could alter the conclusions and recommendations noted throughout this report.

We trust this is satisfactory. Should any queries arise, please feel free to contact this office.

Yours truly,

AZURE GROUP INC.

Preliminary Hydrogeological Assessment

177 Cross Avenue
Oakville, Ontario

Prepared for:
Azure Group

Prepared by:
Azimuth Environmental
Consulting, Inc.

May 2024

AEC 23-167

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Environmental Assessments & Approvals

May 14th 2024

AEC 23-167

Azure Group
6751 Professional Court, Suite 201
Mississauga, Ontario
L4V 1Y3

Attention: Ahmed Al-Temimi
President

Re: **Preliminary Hydrogeological Assessment: 177 Cross Avenue, Oakville, ON**

Dear Ahmed,

Azimuth Environmental Consulting, Inc. (Azimuth) is pleased to provide our Preliminary Hydrogeological Assessment for the property located at 177 Cross Avenue in the Town of Oakville, ON (the "Site"). This evaluation focused on the existing soil and ground water regime underlying the Site and the potential for the proposed mixed commercial / residential development to impact the existing conditions.

Should you have any questions or wish to discuss the report in greater detail, please do not hesitate to contact the undersigned.

Yours truly,

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

PROFESSIONAL GEOSCIENTIST
JMillington
JENNIFER MILLINGTON
PRACTISING MEMBER
2643
2024/05/14
ONTARIO

Jenn Millington, M.A.Sc, P.Geo.
Hydrogeologist

642 Welham Road, Barrie, Ontario L4N 9A1
telephone: (705) 721-8451 • fax: (705) 721-8926 • info@azimuthenvironmental.com • www.azimuthenvironmental.com

Table of Contents

page

1.0 INTRODUCTION 1
1.1 Background 1
2.0 ENVIRONMENTAL SETTING 1
2.1 Physiography 1
2.2 Topography and Drainage 2
2.3 Bedrock Geology 2
2.4 Quaternary Geology 2
2.5 Hydrogeology 2
3.0 SOURCE WATER PROTECTION 3
4.0 MONITORING 3
4.1 Geotechnical 3
4.2 Ground Water Monitoring 3
4.3 Water Quality Sampling 4
4.4 Hydraulic Conductivity Testing 5
5.0 WATER BALANCE 6
6.0 DEWATERING ASSESSMENT 6
6.1 Drawdown Conditions 6
6.2 Estimated Zone of Influence 7
6.3 Approximate Dewatering Volumes 7
6.4 Impact Assessment 9
7.0 SUMMARY AND CONCLUSIONS 9
8.0 REFERENCES 11

List of In-Text Tables

		page
Table 1:	Summary of Proposed Structures	1
Table 2:	Summary of Ground Water Measurements (May 31st , 2023)	3
Table 3:	Hydraulic Testing Results	5
Table 4:	Summary of Dewatering Conditions	8

List of Figures

Figure 1 Property Location
Figure 2 Site Layout
Figure 3 Surrounding Well Records
Figure 4 Ground Water Flow Direction

List of Appendices

Appendix A: Figures
Appendix B: Proposed Development Plan
Appendix C: MECP Well Records
Appendix D: Source Water Protection Map
Appendix E: Hydraulic Conductivity Testing
Appendix F: Dewatering Calculations

1.0 INTRODUCTION

Azimuth Environmental Consulting Inc. (Azimuth) has been retained by the Azure Group to conduct a Preliminary Hydrogeological Assessment for the property located at 177 Cross Avenue in the Town of Oakville, ON (the "Site") (Figure 1). The purpose of this assessment is to characterize the existing hydrogeological conditions at the Site, and determine any constraints to the proposed development plan.

1.1 Background

The Site is a "C" shaped parcel and is approximately 10,078 m^3 in size and is bound by Cross Avenue to the south east, Argus Road to the east, and additional commercial and retail use to the north, west, and east. The Site is currently developed for commercial use and contains three structures: one single storey daycare and two single storey structures used for commercial and retail purposes. The remaining land is composed primarily of asphalt pavement used as a driveway and for parking.

The proposed Site Plan is included in Appendix B and includes four structures (A-D) that will be used for mixed use residential / commercial:

Table 1: Summary of Proposed Structures

Structure ID	Size (m^2)
Tower A	748
Tower B	750
Tower C	552
Building D	578

As per the proposed development plan (Appendix B), the development will have pedestrian access to all four sides of the property, connecting the Site with Cross Avenue, Argus Road, and the adjacent parcels to the north and west. All parking will be within a single below grade parking lot that will span 6 levels and cover the entire Site footprint. The parking garage will be accessible from the north side of Tower B.

2.0 ENVIRONMENTAL SETTING

2.1 Physiography

The Ontario Geologic Survey (Chapman and Putnam, 1984) describes the area as being located within the South Slope physiographic region. The South Slope represents the southern slope of the Oak Ridges Moraine and also includes a small strip south of the Peel Plain. This area extends from the Niagara Escarpment to the Trent River and covers approximately 2,450 square kilometers. In general, this area is underlain by fine-grained sediment; however it contains a variety of soils which are developed upon tills. The tills

are more sandy in the east and clayey in the west. Most of this area is drumlinized, and displays a gradual slope to the south toward Lake Ontario.

2.2 Topography and Drainage

The Site is found at an elevation between 102 – 104 masl and contains numerous catch basins within the asphalt parking lot to capture surface water runoff. Due to the developed nature of the Site and surrounding area, the catch basins are expected to discharge into the Town of Oakville's municipal sewer/stormwater network. Diversion of runoff into the municipal network is anticipated to continue after the proposed development.

Sixteen Mile Creek is located approximately 500 m south of the Site, emptying into Lake Ontario approximately 2.2 km to the south east. There are no additional environmental features (wetlands, woodlands, ponds, creeks, etc.) within 500m of the Site.

2.3 Bedrock Geology

The Ontario Geologic Survey Earth Database shows that the uppermost bedrock unit at the Site consists of shale of the Queenston Formation (OGS, 2023). The Queenston Formation is Upper Ordovican in age and is characterized by a red coloured shale material. This formation outcrops below the Niagara Escarpment from Niagara Falls to Cabot Head on the Bruce Peninsula. Shale bedrock was encountered at a depth of between 2.4 and 5.0 mbgs at the Site (Section 4.1).

2.4 Quaternary Geology

The Ontario Geologic Survey characterizes the Site as being in an area of thin, discontinuous drift material overlying Paleozoic bedrock. The Site specific material overlying the bedrock can be found in Section 4.1 below.

2.5 Hydrogeology

The Ontario Ministry of Environment, Conservation, and Parks (MECP) Water Well Records were referenced for any recorded well information within the vicinity of the Site (250 m) (MECP, 2023). The Site is currently serviced with municipal water and sewer utilities; however well records can be used to gain subsurface information which can provide insight into shallow geological formation within the area. Thirty (30) individual well records were identified for the Site and surrounding area. All of these records were either listed as monitoring wells or did not include a specified use. The well records found in the vicinity of the Site are included in Appendix C and are shown on Figure 3.

Based on the well record review, there are no potable water wells within 250m of the Site. This is somewhat expected given the historic nature of the neighborhood and presence of municipal water connections. The soils identified in these records were primarily fill and/or silt and sand overlying shallow shale bedrock, which is consistent with the geological literature outlined above, as well as the Site specific soils identified at the Site through the geotechnical drilling program summarized in Section 4.0.

3.0 SOURCE WATER PROTECTION

A review of the Source Water Protection Areas as identified on the MECP Source Protection Information Atlas website indicates the Site is located within a Intake Protection Zone (IPZ) 2 and a Highly Vulnerable Aquifer Area (HVA), but is not located within a Significant Ground Water Recharge Area (SGRA), Wellhead Protection Area (WHPA) A, B, C, or D, WHPA-Q1/2, or Issues Contributing Area (ICA). Source Water Protection mapping is included in Appendix D.

4.0 MONITORING

4.1 Geotechnical

Azure Group Inc. completed a geotechnical drilling program at the Site in May of 2023, which included advancing nine boreholes to depths ranging between 5.7 and 18.0 metres below ground surface (mbgs). Six of the holes (BH-1, BH-4, BH-5, BH-6, BH-7, & BH-9) were completed as monitoring wells.

The subsurface material encountered includes asphalt over a combination of silt, silty sand, or silty clay overlying grey or red shale. The upper portion of the shale was weathered and mixed with trace silt or sand. The top of the weathered shale unit was encountered between 2.4 and 5.0 mbgs. The complete borehole logs can be found in Azure (2023). Borehole and monitoring well locations are illustrated on Figure 4.

4.2 Ground Water Monitoring

A Site visit was completed on May 31st 2023 to collect water level data from the existing monitoring well network. The measured ground water levels are provided in the below Table 2:

Table 2: Summary of Ground Water Measurements (May 31st , 2023)

Location ID	Ground Elevation*	Monitoring Well Depth (m)	Water Level (mbgs)	Water Level (masl)
MW-1	103.44	5.34	3.39	100.05
MW-4	103.16	5.72	2.71	100.45
MW-5	102.74	4.01	1.95	100.79
MW-6	102.25	5.11	3.50	98.75

Table 2: Summary of Ground Water Measurements (May 31st , 2023)

Location ID	Ground Elevation*	Monitoring Well Depth (m)	Water Level (mbgs)	Water Level (masl)
MW-7	102.44	3.65	0.65	101.79
MW-9	103.44	17.74	6.94	96.50

* Ground elevation data provided by Azure Group.

Five wells (MW-1, MW-4, MW-5, MW-6, and MW-7) were installed within the surficial aquifer to depths between 3.6 m and 5.7 m. The remaining well (MW-9) was installed to a depth of 17.7 m which aligns with the deep underground parking foundation. MW-9 is screened within the underlying competent shale bedrock and therefore the water level measured likely represents a deeper confined bedrock unit, isolated from the upper water table aquifer.

Ground water within the surface water table aquifer was measured between 98.75 masl and 101.79 masl (Figure 4). The ground water level within the underlying shale bedrock aquifer at MW-9 was 96.5 masl, which indicates a downward hydraulic gradient between the overburden sediment and the underlying shale bedrock. Based on the preliminary water level data collected in May of 2023, the high water level for use in construction dewatering is 101.8 masl.

The water levels are expected to fluctuate seasonally, with the highest readings expected between March and June. A pressure transducer was installed within both MW-4 and MW-9 for long term hourly measurements. Additional measurements at all well locations will commence in March of 2024 to confirm the high ground water measurement until June 2024.

4.3 Water Quality Sampling

Water quality samples were collected by submitted as part of the Phase II Environmental Site Assessment (ESA) completed by Azure Group (Azure, 2023). The analysis completed at each monitoring well was based on the requirements of the Phase II ESA but included metals, petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs). The below water quality parameters were analyzed from each well:

MW-1: PHCs (F_1-F_4) and VOCs
MW-4: Metals, PHCs (F_1-F_4), VOCs, and PAHs
MW-5: PHCs (F_1-F_4), VOCs, and PAHs
MW-6: PHCs (F_1-F_4) and VOCs
MW-7: Metals, PHCs (F_1-F_4), VOCs, and PAHs

Notable results include elevated concentrations of PCH F_1(C_6-C_{10}), toluene, acetone, methylene chloride, benzene, ethylbenzene, and xylenes.

Any water discharged to the municipal storm sewer must meet the requirements outlined in the Town of Oakville's By-law No. 2009-031. Based on the above results, the onsite ground water quality does not meet the acceptable storm sewer limit under By-law 2009-031. Discharge to the sanitary sewer is not permitted within the Town of Oakville.

Due to the elevated concentrations noted above, some consultation with a dewatering contractor will need to be completed prior to construction. If discharge water with elevated concentrations of PHCs or VOCs is expected, then this water may need to be treated onsite prior to disposal, or collected and disposed of off Site as it should not be discharged into the natural environment or within the existing Town of Oakville storm/sanitary network. Additional details related to the dewatering strategy and discharge locations will be determined once a contractor has been retained closer to the start of construction.

4.4 Hydraulic Conductivity Testing

In order to understand the hydraulic characteristics of the underlying overburden, transient hydraulic tests were performed on the Site monitoring wells following the 2023 drilling program. The transient test involves the instantaneous injection or withdrawal of a volume or slug of water or solid cylinder of known volume. This is accomplished by adding or displacing a known volume to/from a well and measuring water level response time to return to equilibrium. Water level measurements were recorded both manually and through the use of a pressure transducer set to record every second. Data was analyzed using the Hvorslev Method (1951) for a confined or unconfined aquifer, which assumes a homogeneous, isotropic medium in which soil and water are incompressible. Hydraulic testing results are summarized in Table 3 (below). Slug Testing was completed within MW-4 and MW-9, which represent both the shallow and deep aquifer units at the Site. The results are summarized in the following table.

Table 3: Hydraulic Testing Results

Monitoring Well	Hydraulic Conductivity (m/s)	Screen Depth (mbgs)	Soil Description
MW-4	1.85×10^{-8}	2.6 – 5.7	Silty Sand / Weathered Shale / Shale
MW-9	1.02×10^{-9}	14.6 – 17.6	Shale

The measured hydraulic conductivity is within the published range for a silty material (Freeze & Cherry, 1979).

5.0 WATER BALANCE

Typically a water balance assessment is completed as part of a hydrogeological assessment to quantify the changes in ground water infiltration and surface runoff resulting from the proposed development. However, given the current property configuration is covered by almost completely (>99%) in impervious area, and will be maintained as such with the proposed development, there is no quantifiable change to either surface runoff or ground water infiltration at the Site. In addition, runoff from both the pre- and post-development scenario is discharged to the municipal network. The proposed underground parking levels will also limit the potential use of ground water infiltration LID measures such that quantification of infiltration measures will not be able to be completed. Based on the above information, the proposed development is not expected to significantly change the amount of infiltration occurring at the Site.

6.0 DEWATERING ASSESSMENT

The underground parking will encroach into the water table by up to approximately 18.8 m, such that significant construction dewatering will be required for installation of the foundation and potentially servicing connections. Depending on the approach to addressing the foundation below water table, permanent dewatering may need to be considered if the parking levels are not waterproofed.

Given the required drawdown is greater than 1.5 m, the use of shallow well points or eductor systems will likely be required. The exact dewatering methodology will depend on site-specific conditions and construction methods such that it will be determined by the dewatering contractor.

Given the urban setting, dewatering discharge will be required to be discharged to the local storm sewer along the adjacent streets.

6.1 Drawdown Conditions

The details utilized for this assessment are derived from the current Site Plan (Appendix B), which shows six levels of underground parking across the entire Site footprint. If we assume up to 3m of depth per level plus 1m for additional foundation support, the structure would extend to a depth of 19 mbgs.

Based on the ground water table illustrated in Table 2 and the foundation depth, up to 19.3 m of ground water lowering during construction will be required. This is based on the following assumptions:

- Construction ground water lowering will target a depth of 0.5 m below the base of the underground parking elevation liner to ensure dry working conditions;
- The structure will contain 6 levels of underground parking, and each level will represent approximately 3m plus 1m four foundation supports. The foundation will therefore be 19m deep;
- The ground elevation at the Site is 102-104 masl. To be conservative, 102 masl is used as the top of the structure foundation. The foundation will therefore extend to 83.0 masl. Ground water lowering will therefore target 82.5 masl;
- The highest ground water level measured at the Site to date is 101.79 masl. This is therefore the ground water level used in the current dewatering assessment. A drawdown of 19.3 m is required to maintain dry working conditions at 82.5 masl. Given the deeper confined aquifer unit with deeper water levels, the water levels in this assessment are considered conservative when encompassing the entire construction profile;
- The hydraulic conductivity value referenced (1.85×10^{-8} m/s) in this assessment is based on estimate of the overburden aquifer measured at MW-4. This value is considered conservative given the majority of the foundation will be built in the underlying shale, which had a measured hydraulic conductivity of 1.02×10^{-9} m/s;
- The dewatering footprint is assumed to have a length of 120 m and a width of 95 m. The "C" shaped parcel is assumed to be rectangle for the purpose of this assessment;
- The entire foundation is assumed to be constructed as a single dewatering undertaking installed at one time. If the dewatering will be done in sections, or if the flow within the excavation is reduced through the use of watertight shoring walls, then the volumes and Zone of Influence would be reduced;

The actual drawdown will depend on construction timing, such that volumes could be reduced if the construction activities are undertaken during the summer period when ground water elevations would be lower.

6.2 Estimated Zone of Influence

The Zone of Influence (ZOI) or Radius of Influence (R_o) was estimated using Sichardts Formula as described in the below Table 4. The calculated ZOI for the Site is 67m.

6.3 Approximate Dewatering Volumes

Calculation of the dewatering rate / volume was completed using the steady state method from Powers, *et al.* (2007) for estimating radial flow to a rectangular excavation in an unconfined aquifer.

The following equation was used:

$$Q = \{[(\pi * K) * (H^2 - h^2)] / [\ln(R_o/r)]$$

(Ref: Powers *et al.* (2007)

The full dewatering assessment is appended, while the details are also summarized in Table 4 below.

Based on the information provided in Table 3 below, the dewatering required for the construction of the building foundation is 16,000 L/day. A 3x safety factor can then be applied to the above volume for a conservative estimate (48,000 L/day). Actual dewatering values may fluctuate based on seasonal water table depth, but given the low hydraulic conductivity of the soils, it may not have a significant difference on overall water taking volumes.

Any construction dewatering between 50,000 L/day and 400,000 L/day can be completed after registration under the Environmental Activity and Sector Registry (EASR). Any active construction dewatering above 400,000 L/day requires a Permit To Take Water (PTTW). Based on the calculations listed above and in Table 3, the conservative estimate (48,000 L/day) is very close to the lower limit which would require EASR (50,000 L/day). However, if more granular seams are encountered during the excavation work, rates could exceed the calculated values such that an EASR may be required. Alternatively, more limited dewatering may be required if construction is undertaken during the dryer summer months or utilizes watertight shoring for foundation construction.

Table 4: Summary of Dewatering Conditions

Variable	Structure Foundation Dewatering
Estimate of Equivalent Radius **[r_e]** (m)	60
Hydraulic Conductivity **[K]** (m/s)	1.85×10^{-8}
Saturated Thickness Before Pumping **[H]** (m)	19.8
Depth of Water During Pumping **[h]** (m)	0.5
Maximum Required Drawdown **[H-h]** (m)	19.3
length of excavation **[a]** (m)	120
width of excavation **[b]** (m)	95
Radius of Influence **[R_o]** (m) [1]	68
Discharge **[Q]** (L/day)	16,000
Discharge [Q] (L/day) 3 X Safety Factor Applied	**48,000**

6.4 Impact Assessment

Based on the information provided in Table 4, the largest zone of influence is 68 m from the centre of the dewatering zone; however this is the maximum distance where any measurable water table decline is observed. Due to the size of the excavation, significant decline in ground water levels (>1 m) will likely be contained within an 8 m distance from the property boundary. As the area is municipally serviced, there are no private wells located within the radius of influence, while the municipal water for the area is surface water such that there are no municipal wells in the area. Finally, there are no local natural features such as wetlands or watercourses in proximity to the Site.

Given the presence of residual contamination at the Site, consideration needs to be given to the quality of the dewatering discharge, which may require treatment prior to discharge into the Town's sanitary/storm sewer network. It is assumed that this will require obtaining a discharge permit from the Town of Oakville prior to initiation of any dewatering activities at the Site.

7.0 SUMMARY AND CONCLUSIONS

Azimuth Environmental Consulting Inc. (Azimuth) has been retained by the Azure Group to conduct a Preliminary Hydrogeological Assessment for the property located at 177 Cross Avenue in the Town of Oakville, ON. The purpose of this assessment is to characterize the existing hydrogeological conditions at the Site and the potential for the proposed development to impact the existing environmental conditions.

The Site is a "C" shaped parcel and is approximately 10,078 m^3 in size and is bound by Cross Avenue to the south east, Argus Road to the east, and additional commercial and retail use to the north, west, and east. The Site is currently developed for commercial use and contains three structures: one single storey daycare and two single storey structures used for commercial and retail purposes. The remaining land is composed primarily of asphalt pavement used as a driveway and parking.

The proposed development includes the construction of four structures (Tower A, Tower B, Tower C, and Building D). All parking will be within a single below grade parking lot that will span 6 levels and cover the entire Site footprint.

The Site is found at an elevation between 102 – 104 masl and contains numerous catch basins within the asphalt parking lot to capture surface water runoff. Due to the developed nature of the Site and surrounding area, the catch basins are expected to discharge into the Town of Oakville's municipal sewer/stormwater network. Diversion of runoff into the municipal network is anticipated to continue after the proposed development.

The subsurface material at the Site includes asphalt over a combination of silt, silty sand, or silty clay overlying grey or red shale. The upper ~1m of the shale was weathered and mixed with trace silt or sand. The top of the shale unit was encountered between 2.4 and 4.5 mbgs.

Five wells (MW-1, MW-4, MW-5, MW-6, and MW-7) were installed within the surficial aquifer to depths between 3.6 m and 5.7 m. An additional well (MW-9) was installed to a depth of 17.7 m which represents the base of the deep underground parking foundation. MW-9 is screened within the underlying confined shale bedrock aquifer and therefore the water level measured does not represent the surficial aquifer conditions. Ground water within the surface water table aquifer was measured between 98.75 masl and 101.79 masl (Figure 4). The ground water level within the underlying shale bedrock at MW-9 was 96.5 masl, which indicates a downward hydraulic gradient between the overburden sediment and the underlying shale bedrock.

The water levels are expected to fluctuate seasonally, with the highest readings expected between March and June. Additional monthly manual measurements at all well locations will commence in March of 2024 to confirm the high ground water measurement.

Given the current property configuration and proposed development plan include complete impervious surface coverage, there is no quantifiable change to either surface runoff or ground water infiltration at the Site. Similarly, the proposed underground parking levels will limit the potential use of ground water infiltration LID measures such that quantification of infiltration measures will not be able to be completed

The proposed development will include the construction underground car parking with associated underground servicing connections (water, sewer, stormwater). At present, elevations for the underground parking would indicate encroachment into the water table approximately 18.8 m. As such, there will be a need for construction dewatering with the estimated daily volume of 48,000 L/day. The estimated volume (48,000 L/day) is very close to the lower limit which would require EASR (50,000 L/day). However, if more granular seams are encountered during the excavation work, rates could exceed the calculated values such that an EASR may be required. Alternatively, more limited dewatering may be required if construction is undertaken during the dryer summer months or utilizes watertight shoring for foundation construction.

The construction dewatering activities are not anticipated to result in any negative impact to local wells or natural features given the urban setting. No private or public supply wells are present in the area. Similarly, no natural features such as wetlands or

watercourses are location in proximity (<300m) to the Site. The building details related to the below grade foundation are not known, but given the encroachment into the water table, either water proofing or a permanent dewatering system would be required prevent ground water intrusion in the underground parking levels.

8.0 REFERENCES

Barnett, P.J., Cowan, W.R. and Henry, A.P. 1991.
Quaternary Geology of Ontario

Chapman, L.J. and D.F. Putnam, 1984
The Physiography of Southern Ontario
3rd Edition, OGS Special Volume 2, MNR.

Ontario Geological Survey (OGS), 2022.
OGS Earth Mapping. Obtained from: https://www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearth

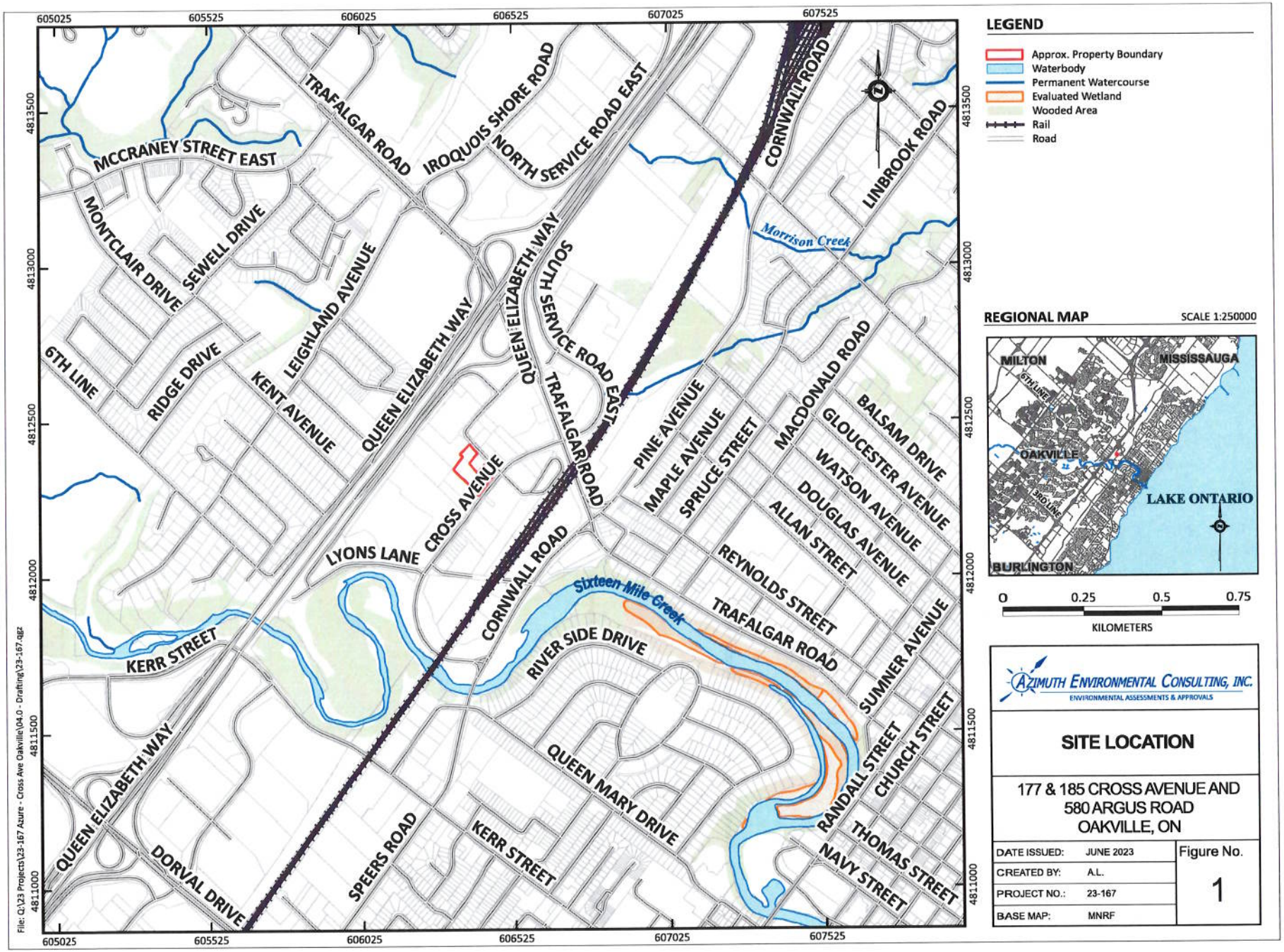
Ontario Ministry of the Environment and Climate Change (MOECC), 1995.
MOEE Hydrogeological Technical Information Requirements for Land Development Applications.

APPENDICES

Appendix A: **Figures**
Appendix B: **Proposed Development Plan**
Appendix C: **MECP Well Records**
Appendix D: **Source Water Protection Map**
Appendix E: **Hydraulic Conductivity Testing**
Appendix F: **Dewatering Calculations**

APPENDIX A

Figures



LEGEND

- Approx. Property Boundary
- Waterbody
- Permanent Watercourse
- Evaluated Wetland
- Wooded Area
- Rail
- Road

REGIONAL MAP SCALE 1:250000

0 0.25 0.5 0.75

KILOMETERS

AZIMUTH ENVIRONMENTAL CONSULTING, INC.
ENVIRONMENTAL ASSESSMENTS & APPROVALS

SITE LOCATION

177 & 185 CROSS AVENUE AND
580 ARGUS ROAD
OAKVILLE, ON

DATE ISSUED:	JUNE 2023	Figure No.
CREATED BY:	A.L.	1
PROJECT NO.:	23-167	
BASE MAP:	MNRF	

File: Q:\23 Projects\23-167 Azure - Cross Ave Oakville\04.0 - Drafting\23-167.qgz



LEGEND:

- APPROX. PROPERTY BOUNDARY
- 100.00 — 0.5m CONTOURS (CITY OF TORONTO, 2002)
- MONITORING WELL LOCATION (AZURE, MAY 2023)
- BOREHOLE LOCATION (AZURE, MAY 2023)

LOCATION PLAN



0 12.50 25.0

HORIZONTAL SCALE 1:500

AZIMUTH ENVIRONMENTAL CONSULTING, INC.
ENVIRONMENTAL ASSESSMENTS & APPROVALS

SITE LAYOUT & EXISTING CONDITIONS

177 & 185 CROSS AVENUE AND
580 ARGUS ROAD
OAKVILLE, ON

DATE ISSUED:	JUNE 2023	Figure No.
CREATED BY:	A.L.	2
PROJECT NO.:	23-167	
REFERENCE:	TOWN OF OAKVILLE	



LEGEND

- Approx. Property Boundary
- Study Area
- 1m Contours (GTA 2002 DEM)
- MECP Water Well Location

LOCATION MAP SCALE 1:7000

AZIMUTH ENVIRONMENTAL CONSULTING, INC.
ENVIRONMENTAL ASSESSMENTS & APPROVALS

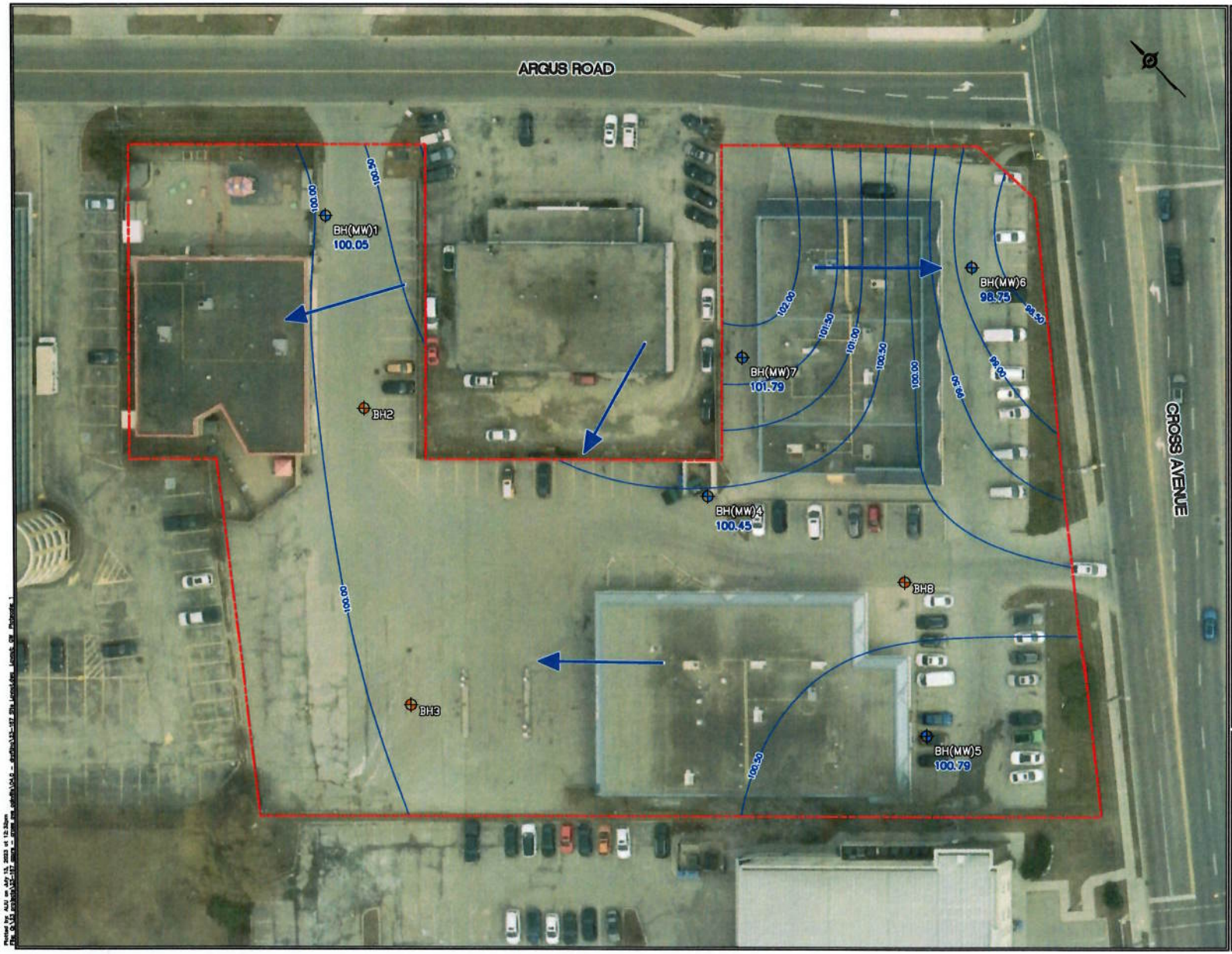
SURROUNDING WELL RECORDS

177 & 185 CROSS AVENUE AND
580 ARGUS ROAD
OAKVILLE, ON

DATE ISSUED:	JUNE 2023
CREATED BY:	A.L.
PROJECT NO.:	23-167
BASE MAP:	---

Figure No. 3

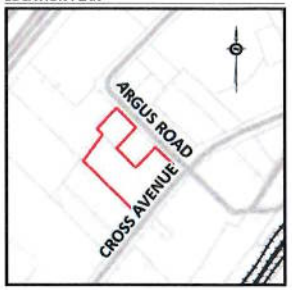
File: Q:\23 Projects\23-167 Azure - Cross Ave Oakville\GIS - Drafting\23-167.mxd



LEGEND:

- APPROX. PROPERTY BOUNDARY
- MONITORING WELL LOCATION (AZURE, MAY 2023)
- BOREHOLE LOCATION (AZURE, MAY 2023)
- 100.00 — 0.5m GROUND WATER CONTOURS
- INFERRED DIRECTION OF GROUND WATER FLOW

LOCATION PLAN



0 12.50 25.0

HORIZONTAL SCALE 1:500

AZIMUTH ENVIRONMENTAL CONSULTING, INC.
ENVIRONMENTAL ASSESSMENTS & APPROVALS

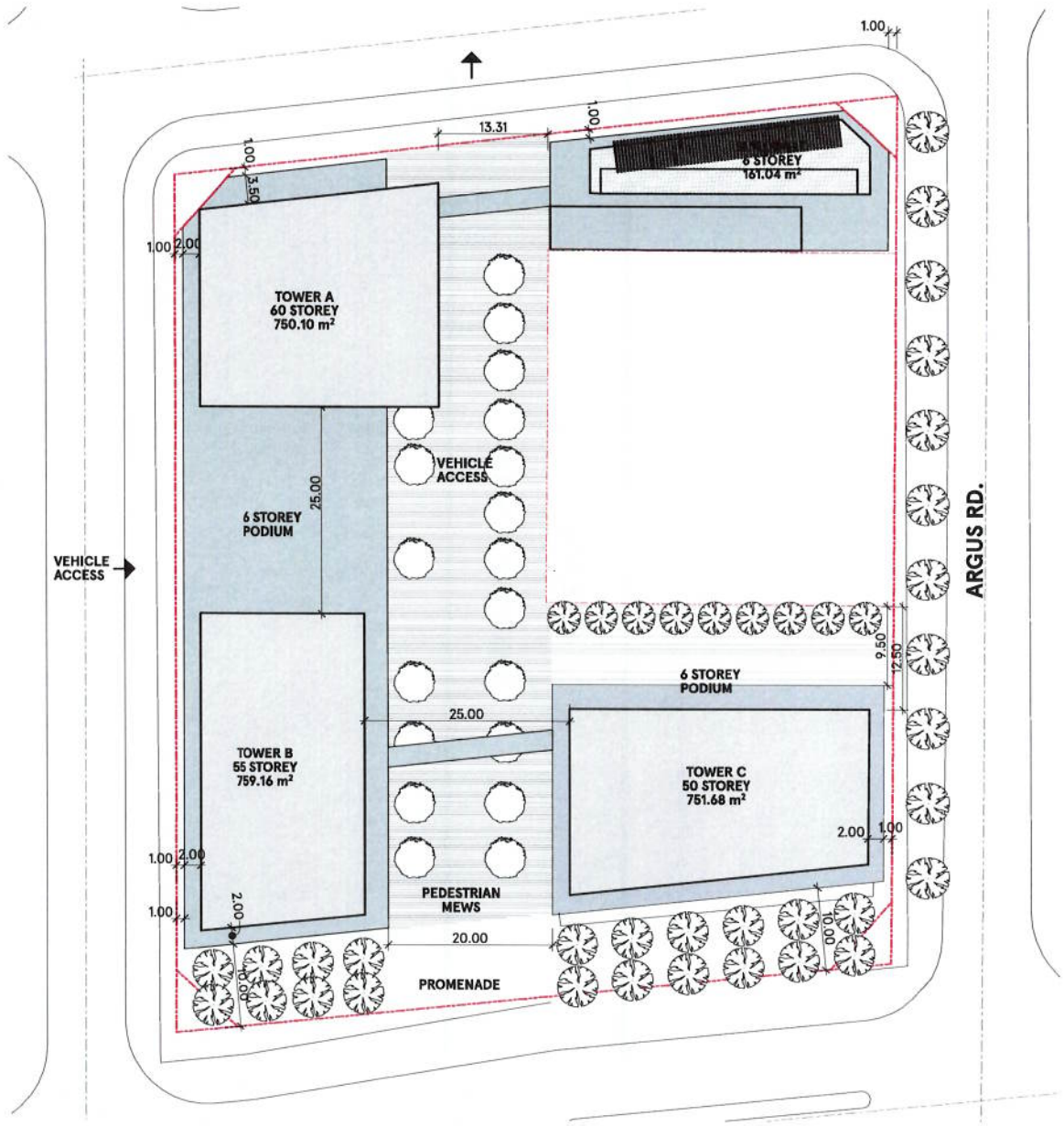
GROUND WATER LEVELS AND CONTOURS

177 & 185 CROSS AVENUE AND
580 ARGUS ROAD
OAKVILLE, ON

DATE ISSUED:	JUNE 2023	Figure No.
CREATED BY:	A.L.	4
PROJECT NO.:	23-167	
REFERENCE:	TOWN OF OAKVILLE	

APPENDIX B

Proposed Development Plan



1. Copyright of this drawing is reserved by the Architect. The drawing and all associated documents are an instrument of service by the Architect. The drawing and the information contained thereon may not be reproduced in whole or in part without prior written permission of the Architect.

2. These Contract Documents are the property of the Architect. The Architect bears no responsibility for the interpretation of these documents by the Contractor. Upon written application, the Architect will provide written/graphic clarification or supplementary information regarding the intent of the Contract Documents. The Architect will review Shop Drawings submitted by the Contractor for design conformance only.

3. Drawings are not to be scaled for construction. The Contractor is to verify all existing conditions and dimensions required to perform the work and report any discrepancies with the Contract Documents to the Architect before commencing any work.

4. Positions of exposed finished mechanical or electrical devices, fittings, and fixtures are indicated on architectural drawings. The locations shown on the architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the Architect.

5. These drawings are not to be used for construction unless noted below as "Issuance For Construction"

6. All work is to be carried out in conformance with the Code and Bylaws of the authorities having jurisdiction.

7. The Architect of these plans and specifications gives no warranty or representation to any party about the constructability of the building(s) represented by them. All contractors or subcontractors must satisfy themselves when bidding and at all times ensure that they can properly construct the work represented by these plans.

8. Geodetic Elevations provided in these drawings are measured in accordance with the Canadian Geodetic Vertical Datum (CGVD2013).

© 2022 architects-Alliance

No	Issued For	Date
01	REZONING APPLICATION	02 Feb 2022

a—A architects—Alliance
317 Adelaide Street West, 3rd Flr
Toronto ON . M5V 1P9 . Canada
www.architectsalliance.com
+1 . 416 . 593 . 4500

177 CROSS AVE.
CLIENT COMPANY

177 . Cross Ave.
Oakville . ON . L6J 2W7

SITE PLAN / ROOF PLAN

Scale: 1:250
Project No: 23008-1
23 February 2024

A0.6

APPENDIX C

MECP Well Records

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below): A014511

Well Record
Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

- For use in the **Province of Ontario** only. This document is a permanent legal document. Please retain for future reference.
- All Sections must be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- **All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Ministry Use Only

MUN 23605 CON DS 5 03 LOT

Well Owner's Information and Location of Well Information

[redacted]

Oakville

RR#/Street Number/Name: 217 CROSS AVENUE

City/Town/Village: OAKVILLE

Site/Compartment/Block/Tract etc.:

GPS Reading: NAD 83 Zone 17 Easting 610525 Northing 4812383

Unit Make/Model: MAGELLAN

Mode of Operation: ☐ Undifferentiated ☒ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see Instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To
BROWN	SAND	SILT &	FILL	0	2.2
BROWN	SAND			2.2	2.4
GREY	SHALE			2.4	5.1

Hole Diameter

Depth From	Depth To (Metres)	Diameter (Centimetres)
0	5.1	21

Water Record

Water found at Metres / Kind of Water

- ___ m ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals ☐ Gas ☐ Other:
- ___ m ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals ☐ Gas ☐ Other:
- ___ m ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals ☐ Gas ☐ Other:

After test of well yield, water was ☐ Clear and sediment free ☐ Other, specify

Chlorinated ☐ Yes ☐ No

Construction Record

Inside diam (centimetres)	Material	Wall thickness (centimetres)	Depth From	Depth To (Metres)
Casing				
2.5	☐ Steel ☐ Fibreglass ☒ Plastic ☐ Concrete ☐ Galvanized	.105	0	3.6
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam 3.35	☐ Steel ☐ Fibreglass ☒ Plastic ☐ Concrete ☐ Galvanized	Slot No. 10	3.6	5.1
No Casing or Screen				
	☐ Open hole			

Test of Well Yield

Pumping test method	Draw Down: Time min	Draw Down: Water Level Metres	Recovery: Time min	Recovery: Water Level Metres
Pump intake set at - (metres)	Static Level			
Pumping rate - (litres/min)	1		1	
Duration of pumping ___ hrs + ___ min	2		2	
Final water level end of pumping ___ metres	3		3	
Recommended pump type. ☐ Shallow ☐ Deep	4		4	
Recommended pump depth. ___ metres	5		5	
Recommended pump rate. (litres/min)	10		10	
If flowing give rate - (litres/min)	15		15	
If pumping discontinued, give reason:	20		20	
	25		25	
	30		30	
	40		40	
	50		50	
	60		60	

Plugging and Sealing Record ☒ Annular space ☐ Abandonment

Depth set at - From	Depth set at - To (Metres)	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
0	3.1	BENTONITE	
3.1	5.1	SILICA SAND	

Method of Construction

☐ Cable Tool ☐ Rotary (air) ☐ Diamond ☐ Digging
☐ Rotary (conventional) ☐ Air percussion ☐ Jetting ☐ Other
☐ Rotary (reverse) ☒ Boring ☐ Driving

Water Use

☐ Domestic ☐ Industrial ☐ Public Supply ☐ Other
☐ Stock ☐ Commercial ☒ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

☐ Water Supply ☐ Recharge well ☐ Unfinished ☐ Abandoned, (Other)
☒ Observation well ☐ Abandoned, insufficient supply ☐ Dewatering
☐ Test Hole ☐ Abandoned, poor quality ☐ Replacement well

Well Contractor/Technician Information

Name of Well Contractor: GEOENVIRONMENTAL DRILLING INC | Well Contractor's Licence No.: 6607

Business Address (street name, number, city etc.): 340 MARKET DRIVE MILTON ON

Name of Well Technician (last name, first name): GALLEY BRIAN | Well Technician's Licence No.: 0004-1055

Signature of Technician/Contractor: X [signature] | Date Submitted: 2004/09/08

Location of Well

In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.

SEE ATTACHED DIAGRAM

Audit No. Z 17060 | Date Well Completed: 2004/09/06

Was the well owner's information package delivered? ☐ Yes ☒ No | Date Delivered

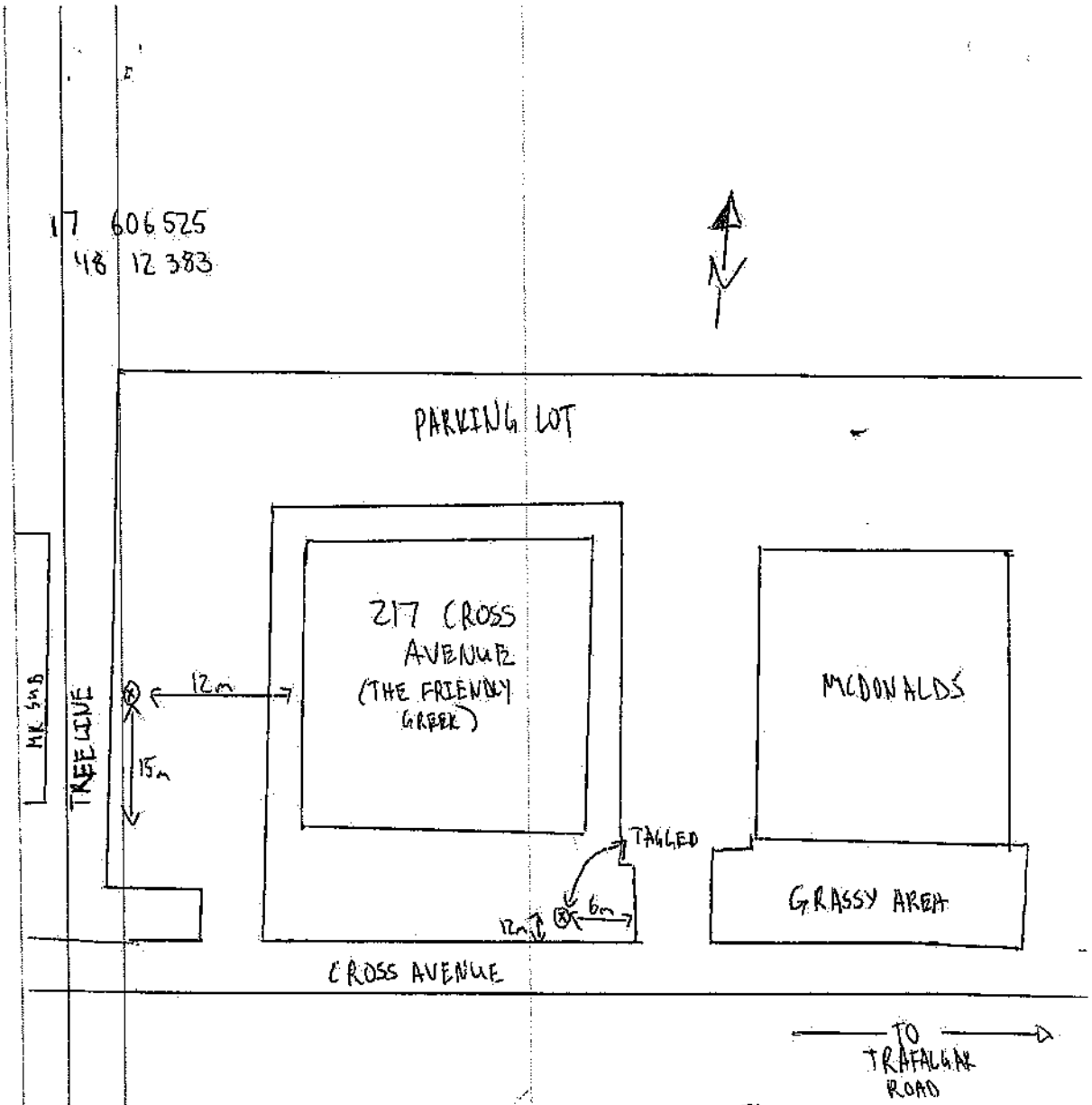
Ministry Use Only

Data Source | Contractor: 6607

Date Received: AUG 25 2004 | Date of Inspection

Remarks | Well Record Number: 2810039

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☐ Well Owner's Copy ☐ *Cette formule est disponible en français*



AUG 25 2004 217060 6607

Ontario — Ministry of the Environment

Well Tag No. A 090329
A090329

Well Record
Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☐ Imperial

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
GO TRANSIT			

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
214 CROSS AVE	OAKVILLE	ONTARIO	L6J2W6	4168693200

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
214 CROSS ST. AVE			

County/District/Municipality	City/Town/Village	Province	Postal Code
	OAKVILLE	Ontario	L6J2W6

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	794059	4327152		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
BROWN	GRANULAR FILL	SMALL COBBLE		0'	1'
BROWN	TILL	SHALE	MOIST	1'	11'
RED	SHALE	LIMESTONE LAYERS	HARD	11'	20'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0'	9'	BENTONITE CHIPS	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☒ Boring ☐ Digging
☐ Air percussion
☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☑ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
1.8"	PLASTIC	0.2"		

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
2.0"	PLASTIC	10	10'	20'

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☒ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
DETERMINATION DRILLING	7295

Business Address (Street Number/Name)	Municipality
321 GUYATT RD EAST	HAMILTON

Province	Postal Code	Business E-mail Address
ONTARIO	L0R1C0	DAN@DETERMINATIONDRILLING.COM

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
9056922481	SILEWZI, BRANDON

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
1978		2009 09 18

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping hrs + min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

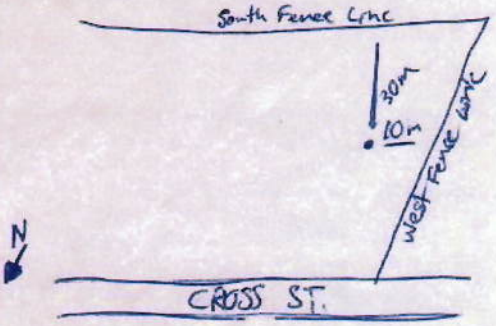
Well production (l/min) / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☐ No	Date Work Completed: 2009 09 16	Audit No. Z097369 NOV 16 2009 Received

0506E (12/2007) — Ministry's Copy

© Queen's Printer for Ontario, 2007

Ontario Ministry of the Environment

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Print Below) A115646 **A115646**

Well Record

...tion 903 Ontario Water Resources Act

B399 Page 1 of 3

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	Dundee Realty Management Corp		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
30 Adelaide St East Suite 1600	Toronto	ON	M5C3H1	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
586 Argus Rd.			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	606330	4812360		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Black	Pavement		Pavement	0	0.5
Brown	Sand	Gravel	Loose	0.1	1
Brown	Silt	Sand	Dense	1	11

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	0.5	Concrete	0.0050
0.5	3	Bentonite	0.0015
3	11	Sand	0.0035

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☑ Other, specify Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☑ Test Hole ☑ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Weld Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2.00	Plastic	0.14	0	4

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.29	Plastic	10	4	11

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	11	4.5

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping hrs + min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7241

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
#2-147 West Beaver Creek Rd	Richmond Hill	ON	L4B1C6	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
(905) 764-9304	Andrew Vanderboor

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
3614	Andrew Vanderboor	2011/04/08

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No		2011/03/29

Ministry Use Only

Audit No. Z130927

APR 05 2011 Received

0506E (2007/12) © Queen's Printer for Ontario, 2007

Ministry's Copy

Ontario Ministry of the Environment

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Print Below) A115645 A115645

Well Record

Regulation 903 Ontario Water Resources Act

8399 Page 2 of 3

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	Dundee Realty Management Corp		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
30 Adelaide St. East Suite 1600	Toronto	ON	M5C 3H1	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
586 Argus Rd			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates NAD 83	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
	17	0633648	4812373		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Black	Pavement		Pavement	0	0.5
Brown	Sand	Gravel	Loose	0.5	1
Brown	Silt	Sand	Dense	1	11

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	0.5	Concrete	0.0050
0.5	3	Bentonite	0.0020
3	11	Sand	0.0040

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☑ Other, specify: Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☑ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2.00	Plastic	0.14	0	4

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.28	Plastic	10	4	11

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	11	4.5

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping hrs + min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
50		50	
60		60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7241

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
#2-147 West Beaver Creek Rd.	Richmond Hill	ON	L4B1C6	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
(905)764-9304	Andrew Vanderwoor

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
3614	Andrew Vanderwoor	2011 04 08

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No		2011 03 29

Ministry Use Only

Audit No. z130926

APR 05 2011

0506E (2007/12) © Queen's Printer for Ontario, 2007

Ministry's Copy

Ontario Ministry of the Environment

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Print Below) A115644 **A115644**

Well Record

Regulation 903 Ontario Water Resources Act

8399 Page 3 of 3

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	Dundee Realty Management Corp		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
30 Adelaide St East Suite 1000	Toronto	ON	M5C3H1	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
586 Argus Rd			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates NAD 8 3	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
	17	0635748	12434		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Black	Topsoil		Loose	0	0.5
Brown	Silt	Sand	Dense	0.5	11

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	0.5	Concrete	0.0050
0.5	3	Bentonite	0.0015
3	11	Sand	0.0040

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☑ Other, specify: Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☑ Test Hole ☑ Monitoring ☐ Livestock ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2.09	Plastic	0.14	0	4

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.28	Plastic	10	4	11

Status of Well

☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	11	4.5

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping hrs + min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

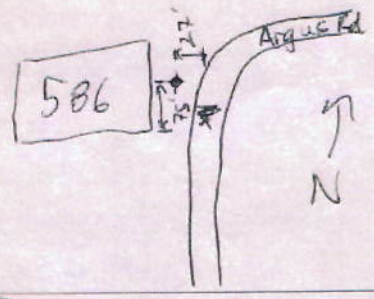
Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7241

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
#2-147 West Beaver Creek Rd.	Richmond Hill	ON	L4B1C6	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
(905)764-9304	Andrew Vandeboer	3614	Andrew Vandeboer	2011 04 08

Well owner's information package delivered: ☐ Yes ☐ No

Date Package Delivered

Date Work Completed 2011 03 29

Ministry Use Only

Audit No. Z130919

Received APR 05 2011

Ministry's Copy

0506E (2007/12) © Queen's Printer for Ontario, 2007

Ontario Ministry of the Environment

Well Record for Well Cluster - Part 1 of 3

(Only for Multiple Test Holes or Dewatering Wells)

Regulation 903 Ontario Water Resources Act

Page 1 of 1

All measurements recorded in: [X] Metric [ ] Imperial

Follow instructions on the front and back of this form. Print or Type.

Well Tag No. of Deepest Well: *(Print Well Tag No.)* A128931

Well # on Drawing of Deepest Well: 60

Well Cluster Location Information

Address of Well Location (Street Number(s)/Name(s), RR, if available)	Lot(s)	Concession(s)	Geographic Township	County/District/Upper Tier Municipality
177 + 185 Cross Rd, 580 Argus Rd				

City, Town, Village or Hamlet	Province	GPS Unit Make	Model	Unit Mode of Operation
Oakville	Ontario	Garmin	etrex	[ ] Undifferentiated [X] Averaged [ ] Differentiated, specify:

Mandatory Attachments/Additional Information

[X] Land Owner Consent Form must be attached.

[X] Detailed Drawing of All Well Locations must be attached.

I, the person constructing the well, will promptly submit to the Director, on request, any additional information in my custody or control related to any well in the well cluster that I have constructed.

Signature of Technician/Contractor: William Wilson — Date (yyyy/mm/dd): 2012/11/23

Well Details

Well # on Drawing	UTM Coordinates Zone	Easting	Northing	Hole Depth (m/ft)	Hole Diameter (cm/in)	Method of Construction	Casing Material; Diameter (cm/in)	Casing From (m/ft)	Casing To (m/ft)	Screen Interval From (m/ft)	Screen Interval To (m/ft)	Annular Space Material From (m/ft)	Annular Space Material To (m/ft)	Annular Space Material: Material	Overburden/Bedrock or Abandonment Filing Material Intervals (m/ft)	Static Water Level (m/ft)	Date of Completion (yyyy/mm/dd)
10	17	606392	4812383	11.6	20 7.6	Boring Diamond	Plastic 3.8	0.0	8.6	8.6	11.6	0.0	8.0	Bentonite	0.0-1.0 Fill 1.0-3.1 clay 3.1-11.6 Shale	4.6	2012/05/10
15	17	606390	4812386	4.5	20	Boring	Plastic 6.0	0.0	3.0	3.0	4.5	0.0	2.3	Bentonite	0.0-1.0 Fill 1.0-3.1 clay 3.1-4.5 Shale	3.5	2012/05/12
60	17	606382	4812349	11.6	20 7.6	Boring Diamond	Plastic 3.8	0.0	8.6	8.6	11.6	0.0	8.0	Bentonite	0.0-1.0 Fill 1.0-3.6 clay 3.6-11.6 Shale	5.1	2012/05/16
65	17	606332	4812349	4.5	20	Boring	Plastic 6.0	0.0	3.0	3.0	4.5	0.0	2.5	Bentonite	0.0-1.0 Fill 1.0-3.6 clay 3.6-4.5 Shale	2.6	2012/05/16
110	17	606400	4812334	11.6	20 7.6	Boring Diamond	Plastic 3.8	0.0	8.6	8.6	11.6	0.0	8.0	Bentonite	0.0-1.4 Fill 1.4-4.0 clay 4.0-11.6 Shale	4.5	2012/05/12
115	17	606401	4812334	4.5	20	Boring	Plastic 6.0	0.0	3.0	3.0	4.5	0.0	2.5	Bentonite	0.0-1.4 Fill 1.4-4.0 clay 4.0-4.5 Shale	2.0	2012/05/12
13	17	606409	4812286	10.7	20 7.6	Boring Diamond	Plastic 3.8	0.0	7.7	7.7	10.7	0.0	7.0	Bentonite	0.0-1.4 Fill 1.4-3.0 clay 3.0-10.7 Shale	4.0	2012/05/18
14	17	606444	4812326	11.6	20 7.6	Boring Diamond	Plastic 3.8	0.0	8.6	8.6	11.6	0.0	8.0	Bentonite	0.0-1.6 Fill 1.6-4.4 Silt 4.4-11.6 Shale	3.5	2012/05/11
15	17	606423	4812353	3.5	20	Boring	Plastic 6.0	0.0	2.0	2.0	3.5	0.0	1.4	Bentonite	0.0-0.9 Fill 0.9-2.7 clay 2.7-3.5 Shale	3.5	2012/05/18

Well Contractor and Well Technician Information

Business Name of Well Contractor	Business Address (Street Number/Name, RR)	Municipality	Province
DBW Drilling Ltd	148 Wright Crescent	Bolton	Ont

Postal Code	Bus. Telephone No.	Well Contractor's Licence No.	Business E-mail Address
L7E 5X6	416 738-0337	7230	-

Name of Well Technician (First Name, Last Name)	Well Technician's Licence No.	Signature of Well Technician	Date Submitted (yyyy/mm/dd)
William Wilson	3429	William Wilson	2012/11/23

Date First Well in Cluster Constructed or Abandoned (yyyy/mm/dd): 2012/05/11

Date Last Well in Cluster Completed (yyyy/mm/dd): 2012/05/18

Well Abandonment

Person Abandoning the Wells:

Name (Print or Type) - See instruction 11 on the back of this form

Ministry Use Only

Date Received (yyyy/mm/dd): NOV 28 2012

Audit No.: C 19728

Comments:

1991E (2011/04) © Queen's Printer for Ontario, 2011

Ministry's Copy

Ontario Ministry of the Environment

Well Record for Well Cluster - Part 3 of 3
Detailed Drawing of All Well Locations

Note: This **Well Record for Well Cluster Part 3 - Detailed Drawing of all Well Locations,** must be attached to Parts 1 and 2. The drawing must include all property boundaries, an arrow indicating the North direction, all named roads and sufficient measurements to locate all wells in the cluster in relation to fixed points. The drawing must show the location of each well and each well must be numbered on the drawing to match number used for that well on the **Well Record for Well Cluster Parts 1 and 2.** The well with the well tag must be clearly identified on the Drawing.
UTM coordinates should appear beside each well, if space permits. Additional comments on wells can be included on the drawing.

Well Tag Number: # A128391

"Well Record for Well Cluster" Form Audit Number: # C 19728

See attached Plan

NOV 2 2 2012

C-7230
C19728

Ontario Ministry of the Environment

Well Record for Well Cluster - Part 2 of 3
Land Owner Consent

This form is to be completed by the person who constructs or abandons test holes or dewatering wells that form all or part of a well cluster. If this form is being used to report any well abandonment, these wells must have been previously reported as part of a single well cluster.

Note: For well cluster records, only the owners of the land on which the wells are situated are to give written consent. If the well purchaser (e.g. a consultant who hires the driller) is not the owner of the land, then the well purchaser cannot sign the consent form.

By signing this form, land owners are providing consent to use one well record to report a well cluster of test holes or dewatering wells in accordance with section 16.4 of Regulation 903 made under the *Ontario Water Resources Act*.

This completed **Well Record for Well Cluster Part 2 - Land Owner Consent** must be attached to Parts 1 and 3.

* Please PRINT if completing by hand.

Well Tag Number: # A128391

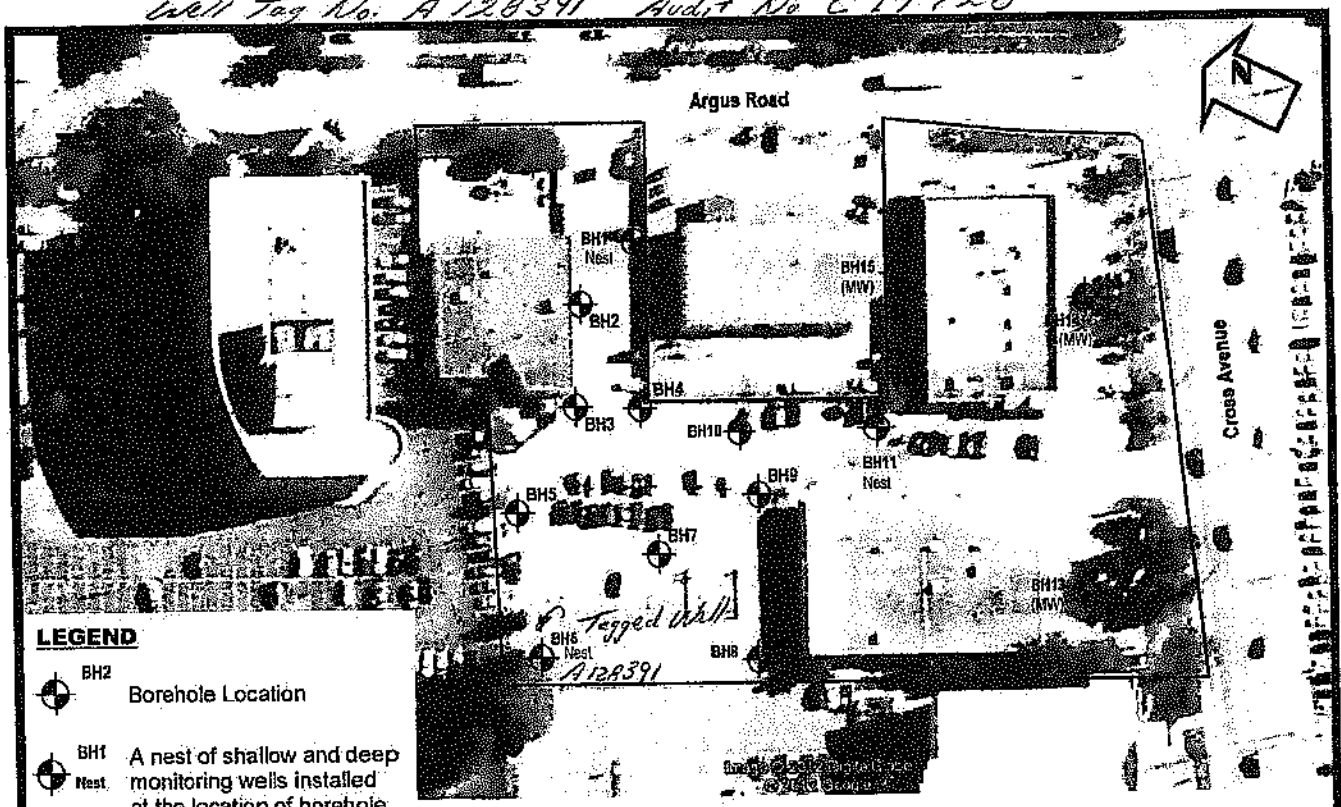
"Well Record for Well Cluster" Audit Number: # C 19728

Well # on Detailed Drawing	Property Location Description	Land Owner's Name	Signature of Land Owner	Date Signed *(yyyy/mm/dd)*
All	177+185 Cross Ave 580 Argus Road Oakville, Ont	915643 Ontario Inc.	—	—
	Nov 22 2012	C-7230 C19728		

Ministry's Copy

 © Queen's Printer for Ontario, 2011 Disponible en français

Well Tag No. A128391 Audit No C19728



LEGEND

- BH2 — Borehole Location
- BH1 Nest — A nest of shallow and deep monitoring wells installed at the location of borehole
- (MW) — Monitoring Well
- Top of Existing Fire Hydrant: Assume elevation = 100.00 m

AME Materials Engineering AME – MATERIALS ENGINEERING 117 Ringwood Drive, Unit # 6 Stouffville, Ontario, L4A 8C1 Tel: (905) 640 7772 Fax: (905) 640 8512	BOREHOLE LOCATION PLAN 177 & 185 Cross Avenue and 580 Argus Road SALMONA TREGUNNO INC. Oakville Ontario	Project No.:	40369.202
		Scale:	N.T.S.
		Date:	May 2012
		Drawing No.:	1-2

Nov 27 2012 C-7328 pg 1 of 1

Ontario — Ministry of the Environment and Climate Change

Well Tag No. (Place Sticker and/or Print Below): A183242 — 5-17863

Well Record

Regulation 903 Ontario Water Resources Act

Tag#: A183242

Measurements recorded in: ☑ Metric ☐ Imperial

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	136 Cross Ave Holdings LTD		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
253 Cross Ave Oakville		ON	L6J 2W6	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
136 Cross Ave			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates: Zone | Easting | Northing | Municipal Plan and Sublot Number | Other: WKQ-008480 A0 - A02

NAD 8 3 | 1 7 | 6 0 6 3 5 3 | 4 8 1 2 1 2 0

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Black	Asphalt			0	3"
Brown	Sand	Silt		3	4'
Brown	Silt		dense	4'	13'
Grey	Shale		weathered	13'	20'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	6"	Concrete	
6"	9'	Bentonite	
9'	20'	Sand	

Method of Construction

☐ Cable Tool ☐ Diamond
☑ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☒ Other, specify: Direct Push

Well Use

☐ Public ☐ Commercial ☑ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☒ Test Hole ☒ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify:

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2"	PVC	.125	0	10'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
225	PVC	10	10'	20'

Status of Well

☐ Water Supply
☐ Replacement Well
☒ Test Hole
☐ Recharge Well
☐ Dewatering Well
☒ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	20'	4.25"

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping: ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map.

A

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7241

Business Address (Street Number/Name)	Municipality
165 Shields Court	Markham

Province	Postal Code	Business E-mail Address
Ontario	L3R 8V2	wrecords@stratasoil.com

Business Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
905-764-9304	Vanderbeer, Andrew

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
3616	Andrew Vanderbeer	2015/12/11

Comments: General contractor: Pinchin Environmental

Well owner's information package delivered: ☐ Yes ☒ No

Date Package Delivered:

Date Work Completed: 2015/11/20

Ministry Use Only

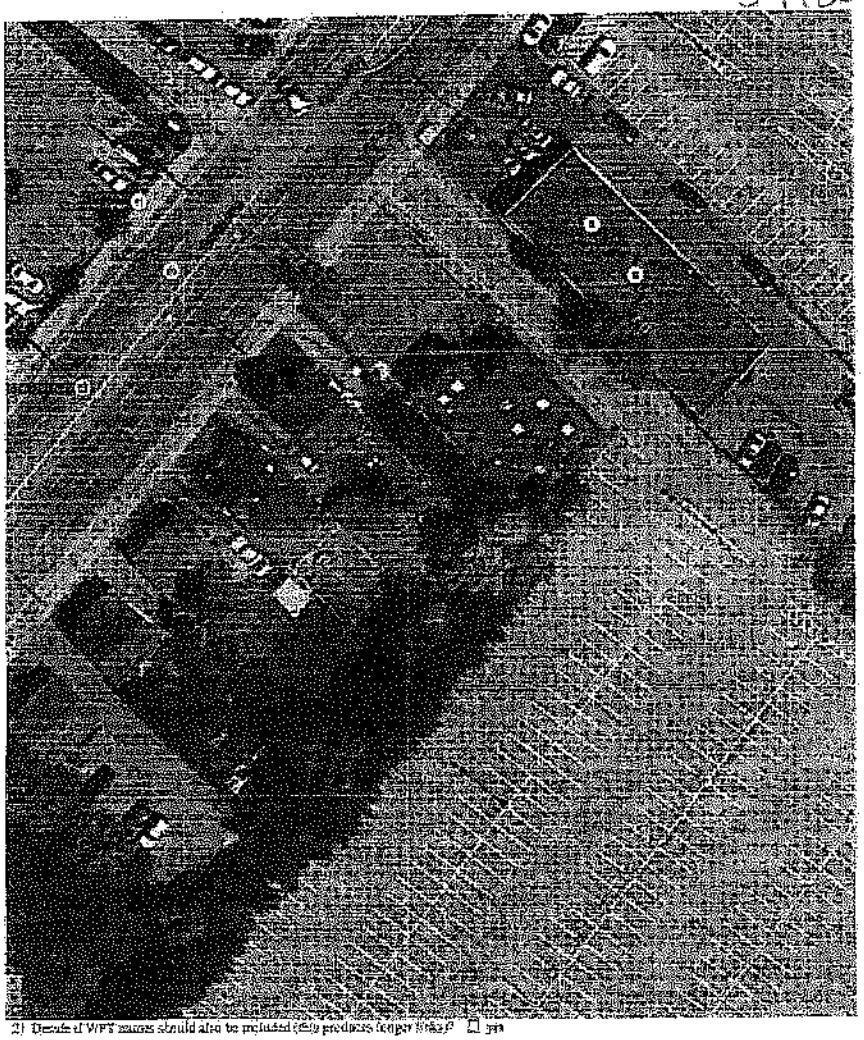
Audit No. Z224734

DEC 10 2015

Received

© Queen's Printer for Ontario, 2014

S-178863



2) Decide if WPT names should also be included (only produces longer links)? ☐ yes

3) Click here -> create link

4) Copy the link with "Ctrl+C" and paste it with "Ctrl+V" to the destination

Info / Help

GPS **Geoplaner** (GeoConverter + Routeplan[n]er) provides several GIS and GPS utilities in a single web-based application

- Coordinate Finder - find locations worldwide with Google Maps and OSM
- Altitude / Elevations - retrieve altitude or sea depth of any location
- UTM to Latitude / Longitude Converter - and vice versa
- Latitude / Longitude Converter - convert between three notations
- Geocoding - address to Latitude / Longitude converter
- Reverse Geocoding - Latitude / Longitude to address converter

Map data ©2015 Google Imagery ©2015, Fly Base Solutions

DEC 1 0 2015

C-7241 7224234 12/1/2015

Ontario — Ministry of the Environment and Climate Change

Well Tag No. (Place Sticker and/or Print Below) A183243

S-17863

Well Record

Regulation 903 Ontario Water Resources Act

Tag#: A183243

Measurements recorded in: ☒ Metric ☐ Imperial

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	136 Cross Ave Holdings LTD		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
238 Cross Ave Oakville			L6J2W6	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
136 Cross Ave			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	17	6 0 6 3 9 7	4 8 1 2 1 1 1		NKQ-008480 A 0 - A 02

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Brown	silt	clay	soil	0	8'
Brown	silt	clay	Dense	8'	11'
Grey	Slate		weathered	11'	20'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	6"	Concrete	
6"	9'	Bentonite	
9'	20'	Sand	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☒ Other, specify: Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☒ Test Hole ☒ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2"	PVC	.25	0	10'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
225	PVC	10	10'	20'

Status of Well

☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water	Gas	Other, specify
	☐ Fresh ☐ Untested	☐	
	☐ Fresh ☐ Untested	☐	
	☐ Fresh ☐ Untested	☐	

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping: hrs + min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map

5

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7241

Business Address (Street Number/Name)	Municipality
165 Shields Court	Markham

Province	Postal Code	Business E-mail Address
Ontario	L3R 8V2	wrecords@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
905-764-9304	Vandervoort, Andrew

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
3614	Andrew Vandervoort	2015 12 11

Comments: General contractor: Pinchin Environmental

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☒ No		2015 11 20

Ministry Use Only

Audit No. Z224735

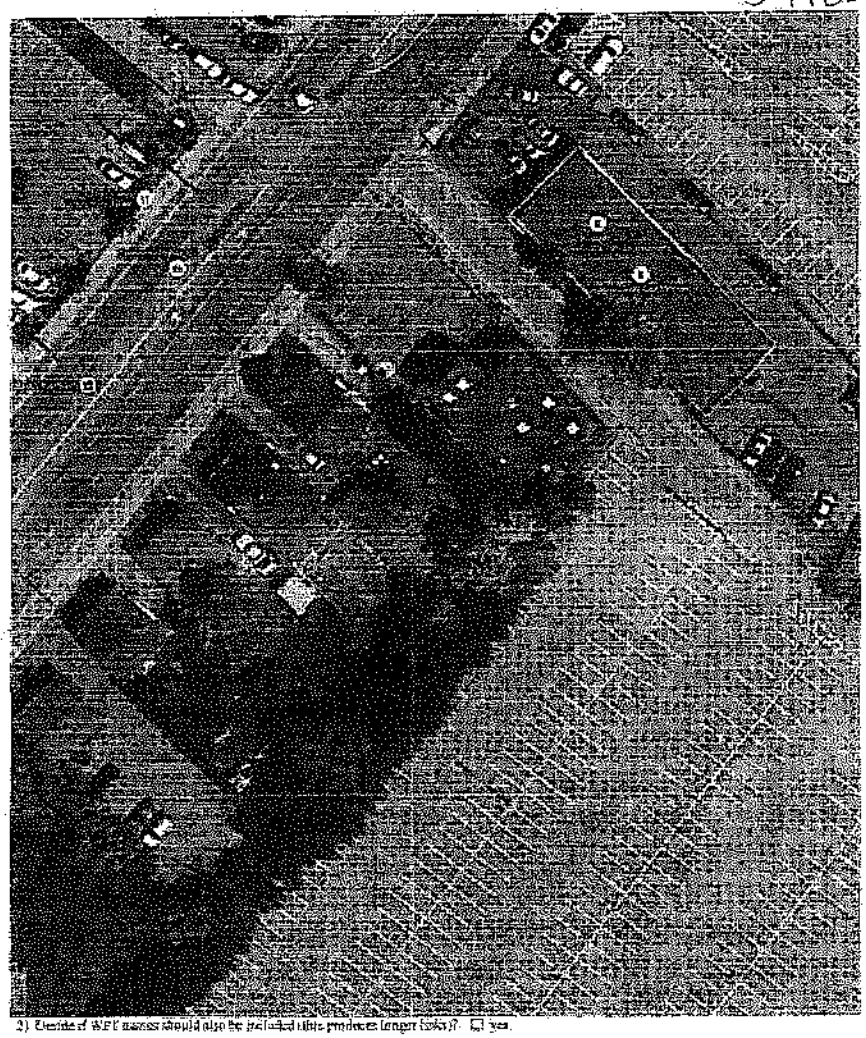
DEC 10 2015

506E (2014/11)

Ministry's Copy

© Queen's Printer for Ontario, 2014

S-178863



2) Centre of WPT names should also be included (this produces longer links)? ☐ yes.

3) Click here -> create link

4) Copy the link with "Ctrl+C" and paste it with "Ctrl+V" to the destination.

Info / Help

GPS Geoplaner (GeoConverter + Routeplan[n]er) provides several GIS and GPS utilities in a single web-based application:

- Coordinate Finder - find locations worldwide with Google Maps and OSM
- Altitude / Elevations - retrieve altitude or sea depth of any location
- UTM to Latitude / Longitude Converter - and vice versa
- Latitude / Longitude Converter - convert between three notations
- Geocoding - address to Latitude / Longitude converter
- Reverse Geocoding - Latitude / Longitude to address converter

Map data ©2015 Google Imagery ©2015 TerraMetrics

DEC 10 2015

C-724 / 722735

A197865 S-18491

Ontario — Ministry of the Environment and Climate Change

Well Tag No. (Place Sticker and/or Print Below) A197865
Tag#: A197865

Well Record
Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☐ Imperial

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	Mac's Convenience Stores Inc		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (incl. area code)
305 Milner Avenue, Suite 400, 4th Floor	Toronto	ON	M1B3V4	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
562 Tafalgar Rd			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	601662	4811254 2		WKQ-008914 A 0 - A 03

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Grey	limestone fill			0	8'
Grey	shale			8'	20'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	6"	Concrete	
6"	9'	Bentonite	
9'	20'	Sand	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☒ Air percussion
☐ Other, specify: Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☒ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2	PVC	.125	0	10'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.25	PVC	10	10'	20'

Status of Well

☐ Water Supply
☐ Replacement Well
☒ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water	Hole Diameter Depth From	Depth To	Diameter (cm/in)
☐ Gas ☐ Other, specify	☐ Fresh ☐ Untested	0	20'	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested			
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested			

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map

4"

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7241

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
165 Shields Court	Markham	Ontario	L3R 8V2	wrecords@stratasoil.com

Bus. Telephone No. (incl. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
905-764-9304	Vanderboer, Andrew	3616	Andrew Vanderboer	2016/05/30

Comments: General contractor: SPL Consultants Limited

Well owner's information package delivered ☐ Yes ☐ No

Date Package Delivered: YYYY/MM/DD

Date Work Completed: 2016/04/23

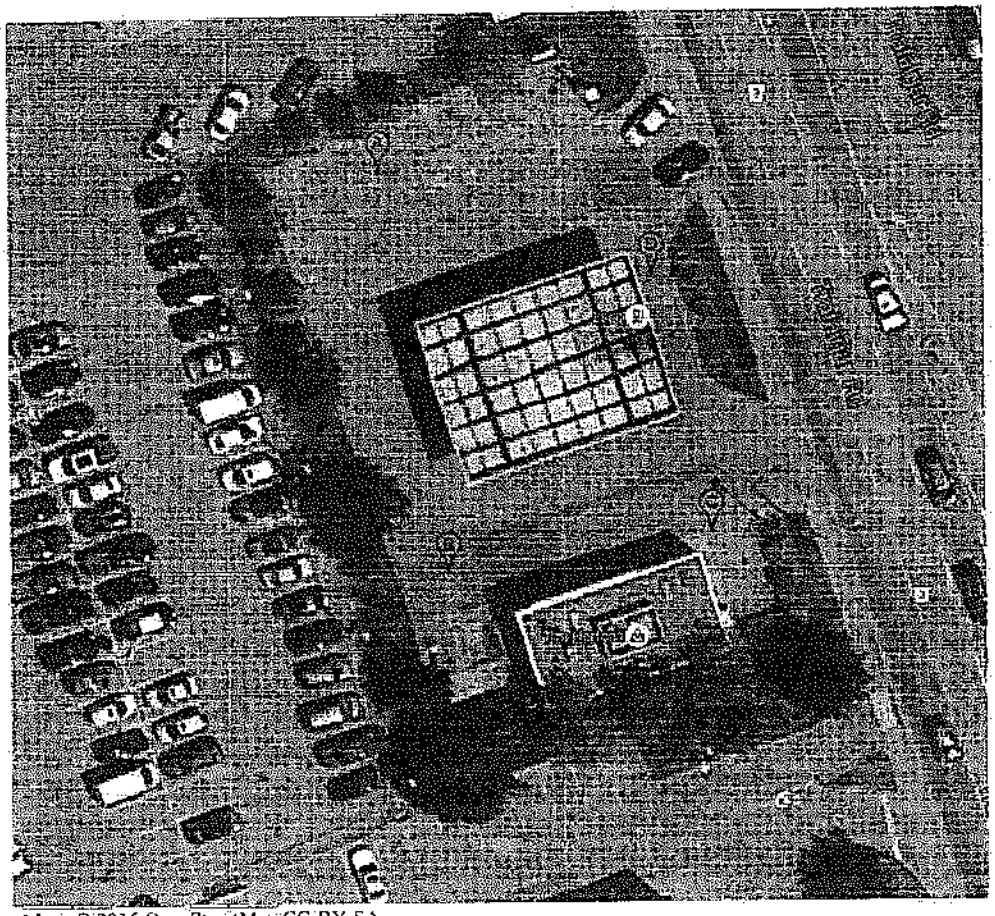
Ministry Use Only
Audit No. Z231457
MAY 27 2016
Received

0506E (2014/11)

Ministry's Copy

© Queen's Printer for Ontario, 2014

S-18491



Maps © 2016 OpenStreetMap CC-BY-SA -

POI / WPT / Waypoints

*04-D "WP04-D"
added
17 T 606625 4812534
43.45812°N -79.68203°E
Elevation= 94.0m

*03-C "WP03-C"
added
17 T 606630 4812513
43.45793°N -79.68197°E
Elevation= 93.7m

*02-B "WP02-B"
added
17 T 606608 4812509

Map data ©2016 Google Imagery ©2016, First Base Solutions

MAY 27 2016

C-724/
2231457.

A197866

Ontario — Ministry of the Environment and Climate Change

Well Tag No. (Place Sticker and/or Print Below) A197866

Tag#: A197866

S-18491

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☐ Imperial

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	Mac's Convenience Stores Inc.		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
305 Milner Avenue, Suite 400, 4th Floor	Toronto	ON	M1B 3V4	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
562 Tafalgar Rd			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	606628	4811259		WKQ-008914 A0 - A03

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Grey	Fill			0	4'
Grey	Shale			4'	20'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	6"	Concrete	
6"	9'	Bentonite	
9'	20'	Sand	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☑ Air percussion ☐ Other, specify: Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☒ Test Hole ☐ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify:

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2"	PVC	125	0	10'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.25"	PVC	10	10'	20'

Status of Well

☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water	Gas	Other, specify
	☐ Fresh ☐ Untested	☐	☐
	☐ Fresh ☐ Untested	☐	☐
	☐ Fresh ☐ Untested	☐	☐

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	20'	

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map B-

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7241

Business Address (Street Number/Name)	Municipality
165 Shields Court	Markham

Province	Postal Code	Business E-mail Address
Ontario	L3R 8V2	wrecords@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
905-764-9304	Vanderdoor, Andrew

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
3164	Andrew Vanderdoor	2016/05/20

Comments: General contractor: SPL Consultants Limited

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☐ No		Audit No. Z231456

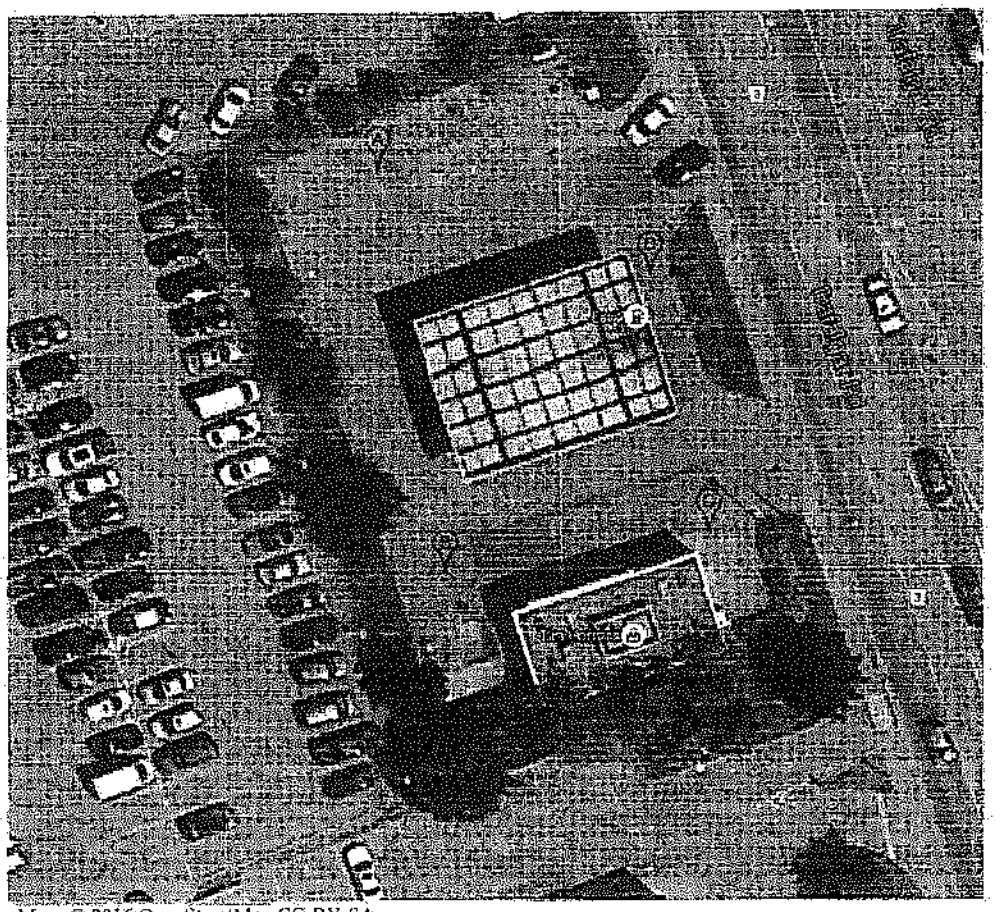
Date Work Completed: 2016/04/25

MAY 27 2016

Received

0506E (2014/11) Ministry's Copy

© Queen's Printer for Ontario, 2014



Maps © 2016 OpenStreetMap CC-BY-SA -

POI / WPT / Waypoints

*04-D "WP04-D"
added
17 T 606625 4812534
43.45812°N -79.68203°E
Elevation= 94.0m

*03-C "WP03-C"
added
17 T 606630 4812513
43.45793°N -79.68197°E
Elevation= 93.7m

*02-B "WP02-B"
added
17 T 606608 4812509

Map data ©2016 Google Imagery ©2016 , First Base Solutions

MAY 27 2016 C-7241 7231456

Ontario — Ministry of the Environment and Climate Change

Measurements recorded in: ☐ Metric ☒ Imperial

Well Tag No. (Place Sticker and/or Print Below): A197867

Tag#: A197867

5-18491 **Well Record**

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	Macs Convenience Stores Inc		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
305 Milner Avenue, Suite 400, 4th Floor	Toronto	ON	M1B3V4	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
562 Tafalgar Rd			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	17	6066304	8112513		WKO-008914 A 0 - A 03

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Grey	Fill			0	6'
Grey	Shale			6'	20'

Annular Space

Depth Set at (m/ft) From	Depth Set at (m/ft) To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	6"	Concrete	
6"	10'	Bentonite	
10'	20'	Sand	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☑ Air percussion ☐ Other, specify: Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☒ Test Hole ☒ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2"	PVC	125	0	10'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.25	PVC	10	10'	20'

Status of Well

☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water	Gas	Other, specify
	☐ Fresh ☐ Untested	☐	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	☐ Gas	☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	☐ Gas	☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	20'	

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping: ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map "C"

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7214

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
165 Shields Court	Markham	Ontario	L3R 8V2	wrecords@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
905-764-9304	Vandebosch, Andrew	3614	Andrew Vandebosch	2016 05 20

Comments: General contractor: SPL Consultants Limited

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No		2016 04 23

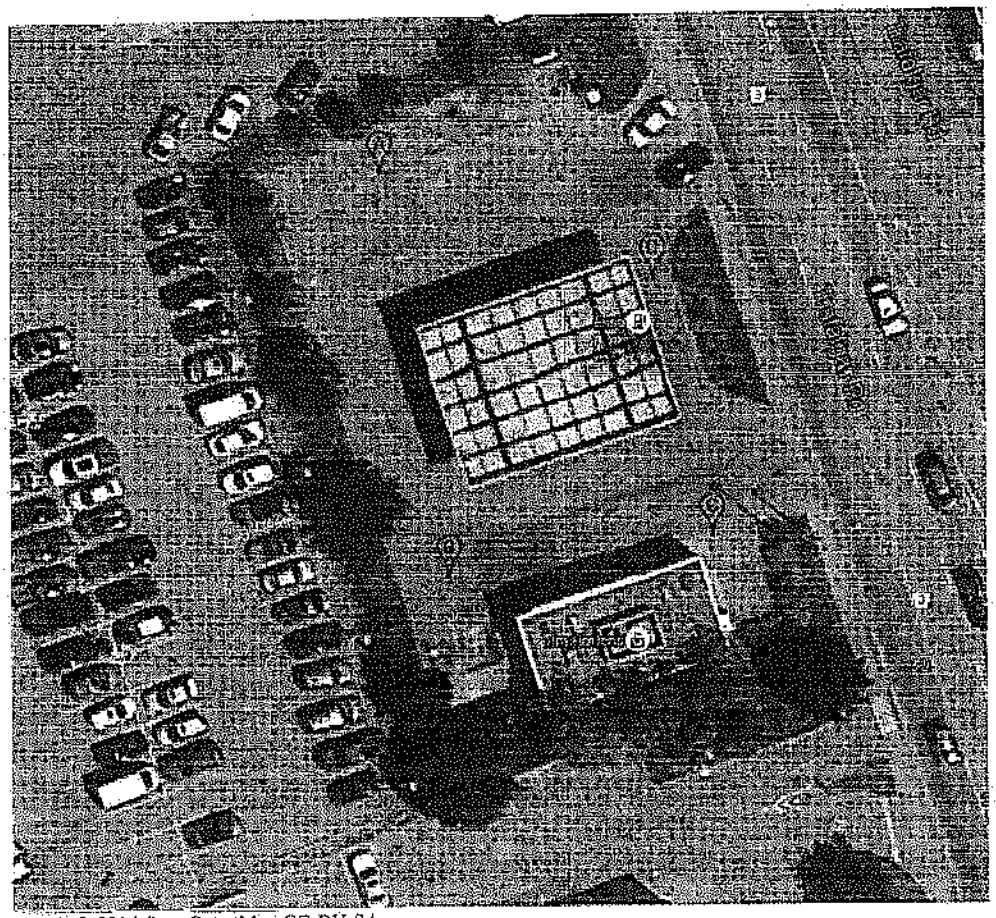
Ministry Use Only

Audit No: Z231455

Received: MAY 27 2016

5506E (2014/11) **Ministry's Copy**

© Queen's Printer for Ontario, 2014



Maps © 2016 OpenStreetMap CC-BY-SA -

POI / WPT / Waypoints

*04-D "WP04-D"
added
17 T 606625 4812534
43.45812°N -79.68203°E
Elevation= 94.0m

*03-C "WP03-C"
added
17 T 606630 4812513
43.45793°N -79.68197°E
Elevation= 93.7m

*02-B "WP02-B"
added
17 T 606608 4812509

C-7241 Z011455

Map data ©2016 Google, Imagery ©2016 , First Base Solutions

MAY 27 2016

Ontario — Ministry of the Environment and Climate Change

Measurements recorded in: ☐ Metric ☒ Imperial

Well Tag No. (Place Sticker and/or Print Below): A197868

S-18491

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	Mac's Convenience Stores Inc.		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
305 Milner Avenue, Suite 400, 4th Flor.	Toronto	ON	M1B3V4	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
562 Tafalgar Rd			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	606625	4812534		WKQ-008914 A0 - A03

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Grey	Clay			0	4'
Grey	Shale			4'	20'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	6"	Concrete	
6"	9'	Bentonite	
9'	20'	Sand	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☒ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☐ Other, specify: Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☐ Test Hole ☒ Monitoring ☐ Irrigation ☒ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2"	PVC	125	0	10'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.25"	PVC	10	10'	20'

Status of Well

☐ Water Supply ☐ Replacement Well ☒ Test Hole ☒ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	20'	

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping: ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
50		50	
60		60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map

"D"

Comments: General contractor: SPL Consultants Limited

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling Inc.	7214

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
165 Shields Court	Markham	Ontario	L3R 8V2	wrecords@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
905-764-9304	Vanderkooy, Andrew	3161	Andrew Vanderkooy	2016 05 19

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No		2016 04 28

Ministry Use Only

Audit No. Z231454

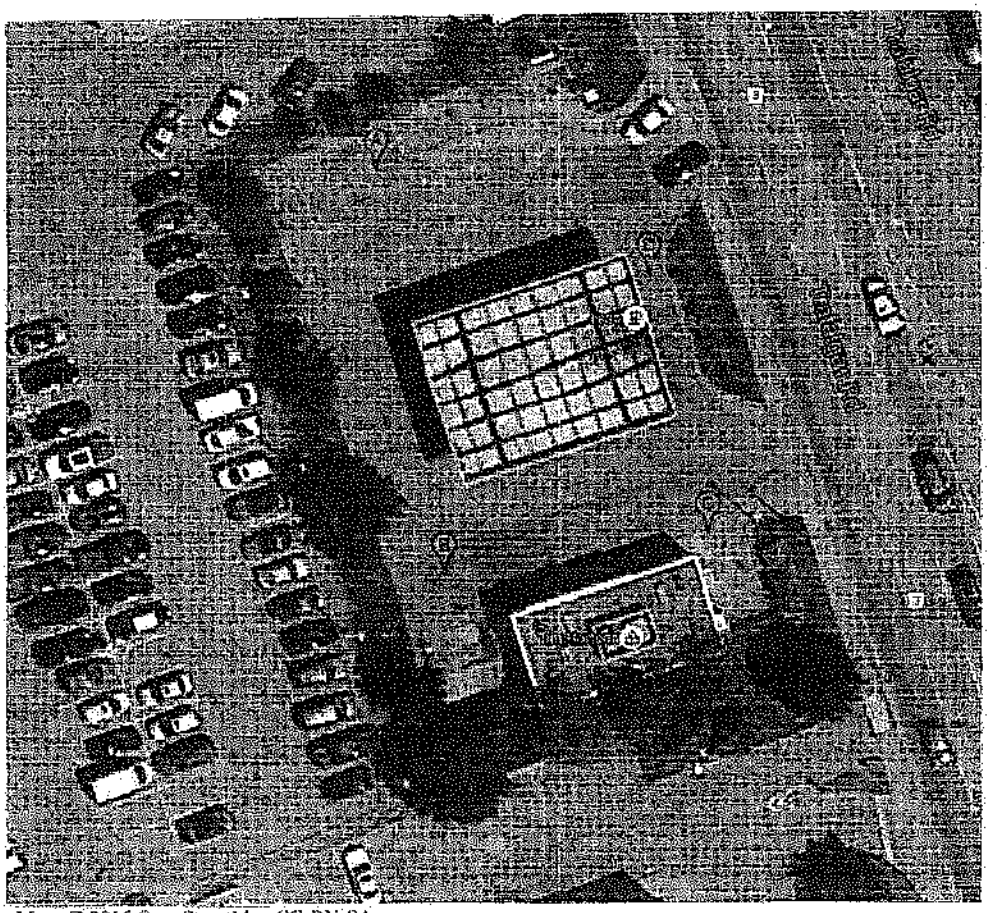
MAY 27 2016

0506E (2014/11)

Ministry's Copy

© Queen's Printer for Ontario, 2014

S-18491



Maps © 2016 OpenStreetMap CC-BY-SA -

POI / WPT / Waypoints

*04-D "WP04-D"
added
17 T 606625 4812534
43.45812°N -79.68203°E
Elevation= 94.0m

*03-C "WP03-C"
added
17 T 606630 4812513
43.45793°N -79.68197°E
Elevation= 93.7m

*02-B "WP02-B"
added
17 T 606608 4812509

A-721/2031454

MAY 27 2016

Map data ©2016 Google Imagery ©2016 , FirstBase Solutions

7322522

Ontario — Ministry of the Environment and Climate Change

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag#: A220541 (ow) L-220541

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

CLV GROUP INC

Address of Well Location (Street Number/Name)	Township	Lot	Concession
165 Cross Ave			
County/District/Municipality	**City/Town/Village**	**Province**	**Postal Code**
	Oakville	Ontario	
UTM Coordinates Zone / Easting / Northing	**Municipal Plan and Sublot Number**	**Other**	
NAD 83 / 17 / 606395 / 4812448			

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BLK	Asphalt			0	4"
BRN	Sand	Silt		4"	8'
GRY	Shale		Weathered	8'	20'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
20'	9'	Sand	
9'	0	Bentonite	
		Flushmount	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☐ Other, specify Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☑ Test Hole ☑ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
2"	PVC	.25	0	10'

Status of Well

☐ Water Supply ☐ Replacement Well ☑ Test Hole ☐ Recharge Well ☐ Dewatering Well ☑ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
2.25	PVC	10	10'	20'

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	20'	5"

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping: ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7219
Business Address (Street Number/Name)	**Municipality**
165 Shields Court	Markham
Province	**Postal Code**	**Business E-mail Address**
ON	L3R 8V2	
Bus. Telephone No. (inc. area code)	**Name of Well Technician (Last Name, First Name)**
905 477 9119	Kyle Fidler
Well Technician's Licence No.	**Signature of Technician and/or Contractor**	**Date Submitted**
31939		2017/05/25

Well owner's information package delivered ☐ Yes ☐ No

Date Package Delivered: ____

Date Work Completed: 2017/05/25

Ministry Use Only

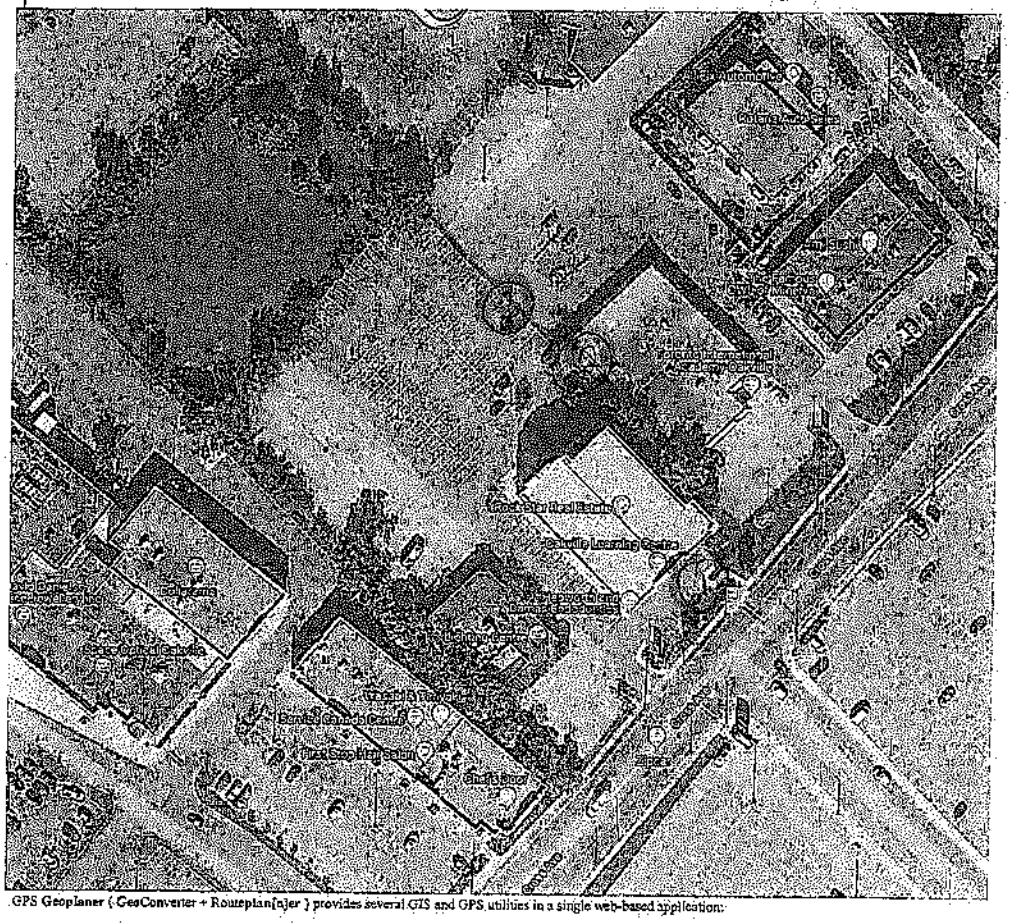
Audit No. Z286921

Received NOV 01 2018

0506E (2014/11) Ministry's Copy

© Queen's Printer for Ontario, 2014

S-7161



GPS Geoplaner (GeoConverter + Routeplan[n]er) provides several GIS and GPS utilities in a single web-based application:

- Coordinate Finder - find locations worldwide with Google Maps and OSM
- Altitude / Elevations - retrieve altitude or sea depth of any location
- UTM to Latitude / Longitude Converter - and vice versa
- Latitude / Longitude Converter - convert between three notations
- Geocoding - address to Latitude / Longitude converter
- Reverse Geocoding - Latitude / Longitude to address converter
- GPS Waypoint & Route Planner - create GPS waypoints and routes
- Import / Export GPS - Data - upload and download *.gpx-Files

Coordinate Finder with Google Maps & Open Street Map | Elevations

Operating GoogleMaps, Open Street Map by mouse click: Change the map type between *"Map"*, *"Satellite"*, *"Hybrid"*, *"Terrain"* (GoogleMaps) and *"OSM"* (Open Street Map); move the visible map section and zoom in and out the map.
Furthermore there are buttons for browsing through the waypoint list, removing single or all waypoints and editing GPS waypoint titles/names.

Coordinates or GPS waypoints can be created by:

Map data ©2018 Google Imagery ©2018, DigitalGlobe, First Base Solutions

C-7241

7322523

Ontario — Ministry of the Environment and Climate Change

Measurements recorded in: ☐ Metric ☑ Imperial

Tag#: A243697 (Below) A243697

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

CLV GROUP INC.

Address of Well Location (Street Number/Name)	Township	Lot	Concession
165 Cross Ave			
County/District/Municipality	**City/Town/Village**	**Province**	**Postal Code**
	Oakville	Ontario	
UTM Coordinates NAD 8 3	**Zone** 17	**Easting** 6616364	**Northing** 4831210
Municipal Plan and Sublot Number		**Other**	

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BLK	Asphalt			0	4"
BRN	Sand	Silt		4"	8'
GRY	Shale		Weathered	8'	16½

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
16½	5½	Sand	
5½	0	Holeplug flushmount	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Public ☐ Commercial ☐ Not used
☐ Rotary (Conventional) ☐ Jetting ☐ Domestic ☐ Municipal ☐ Dewatering
☐ Rotary (Reverse) ☐ Driving ☐ Livestock ☑ Test Hole ☑ Monitoring
☐ Boring ☐ Digging ☐ Irrigation ☐ Cooling & Air Conditioning
☐ Air percussion ☐ Industrial
☐ Other, specify Direct Push ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2"	PVC	.25	0	5½

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.25	PVC	10	5½	16½

Status of Well

☐ Water Supply
☐ Replacement Well
☑ Test Hole
☐ Recharge Well
☐ Dewatering Well
☑ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water	Gas	Other, specify
	☐ Fresh ☐ Untested	☐	
	☐ Fresh ☐ Untested	☐	
	☐ Fresh ☐ Untested	☐	

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	16½	6"

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7214
Business Address (Street Number/Name)	**Municipality**
165 Shields Court	Markham
Province	**Postal Code**
ON	L3R8V2
Business E-mail Address	
records@stratasoil.com	
Bus. Telephone No. (inc. area code)	**Name of Well Technician (Last Name, First Name)**
9055940791	Kyle Fisher
Well Technician's Licence No.	**Signature of Technician and/or Contractor**
3457	
Date Submitted	
2017/08/17	

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

MW 2

Comments:

Well owner's information package delivered ☐ Yes ☐ No

Date Package Delivered

Date Work Completed 2017/08/17

Ministry Use Only

Audit No. Z286920

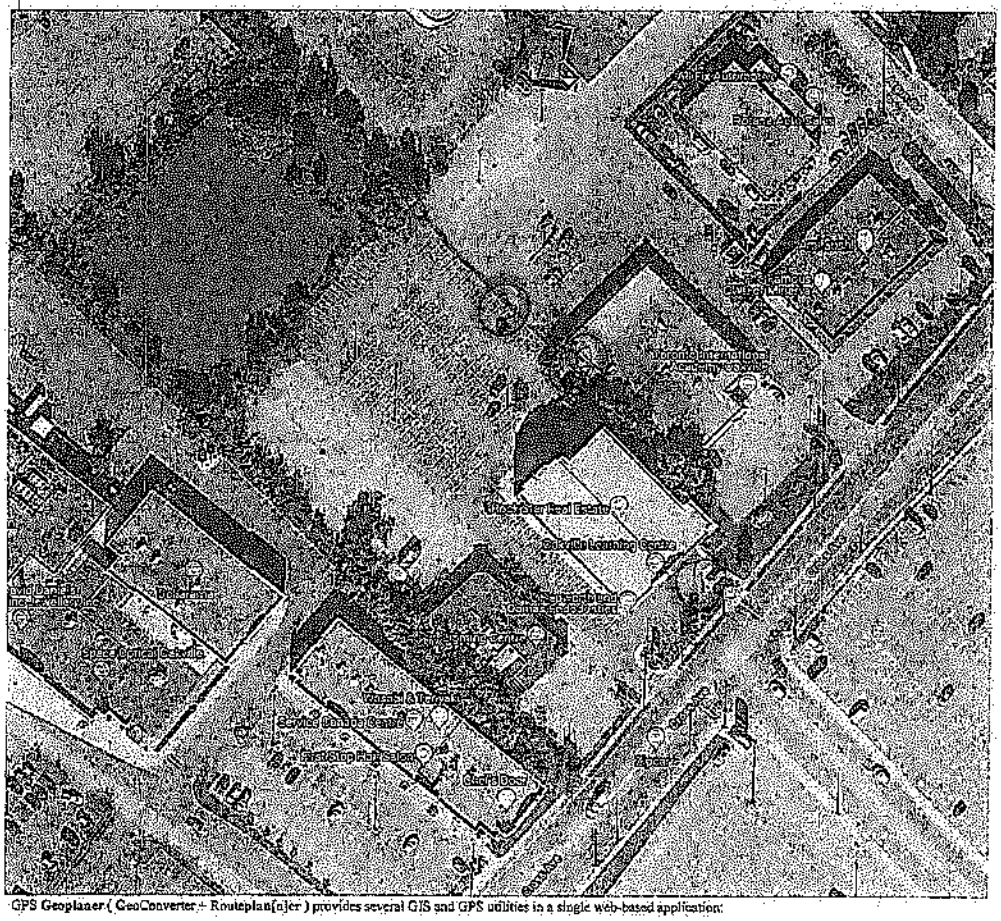
Received NOV 01 2017

0506E (2014/11)

Ministry's Copy

© Queen's Printer for Ontario, 2014

S-2184



GPS Geoplaner (GeoConverter + Routeplan[n]er) provides several GIS and GPS utilities in a single web-based application:

- Coordinate Finder - find locations worldwide with Google Maps and OSM
- Altitude / Elevations - retrieve altitude or sea depth of any location
- UTM to Latitude / Longitude Converter - and vice versa
- Latitude / Longitude Converter - convert between three notations
- Geocoding - address to Latitude / Longitude converter
- Reverse Geocoding - Latitude / Longitude to address converter
- GPS Waypoint & Route Planner - create GPS waypoints and routes
- Import / Export GPS - Data - upload and download *.gpx-Files

Coordinate Finder with Google Maps & Open Street Map | Elevations

Operating GoogleMaps, Open Street Map by mouse click: Change the map type between *"Map"*, *"Satellite"*, *"Hybrid"*, *"Terrain"* (GoogleMaps) and *"OSM"* (Open Street Map); move the visible map section and zoom in and out the map.
Furthermore there are buttons for browsing through the waypoint list, removing single or all waypoints and editing GPS waypoint titles/names.

Coordinates or GPS waypoints can be created by:

Map data ©2018 Google Imagery ©2018 , DigitalGlobe, First Base Solutions

NOV 01 2019 C-7241

Z2186920

7322524

Ontario — Ministry of the Environment and Climate Change

Well Tag#: A243641 (A24364)

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☑ Imperial

Page ____ of ____

CLV GROUP INC

Address of Well Location (Street Number/Name)	Township	Lot	Concession
165 Cross Ave			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Oakville	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	17	606344	4811273		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BLK	Asphalt			0	4"
BRN	Sand	Silt		4"	8"
GRY	Shale			8'	21'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
~~8~~ 21	10'	Sand	
10'	0	Hydrolug	
		Flushmount	

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☐ Other, specify Direct Push

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☐ Test Hole ☑ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
2"	PVC	.25	0	11'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.25	PVC	10	11'	21'

Status of Well

☐ Water Supply ☐ Replacement Well ☑ Test Hole ☐ Recharge Well ☐ Dewatering Well ☑ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	21'	6"

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

MW3

Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7219

Business Address (Street Number/Name)	Municipality
165 Shields Court	Markham

Province	Postal Code	Business E-mail Address
ON	L3R8M2	records@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
9059970119	Kyle Pitt

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
7319		2018/05/27

Well owner's information package delivered: ☐ Yes ☐ No

Date Package Delivered: ____

Date Work Completed: 2018/05/25

Ministry Use Only

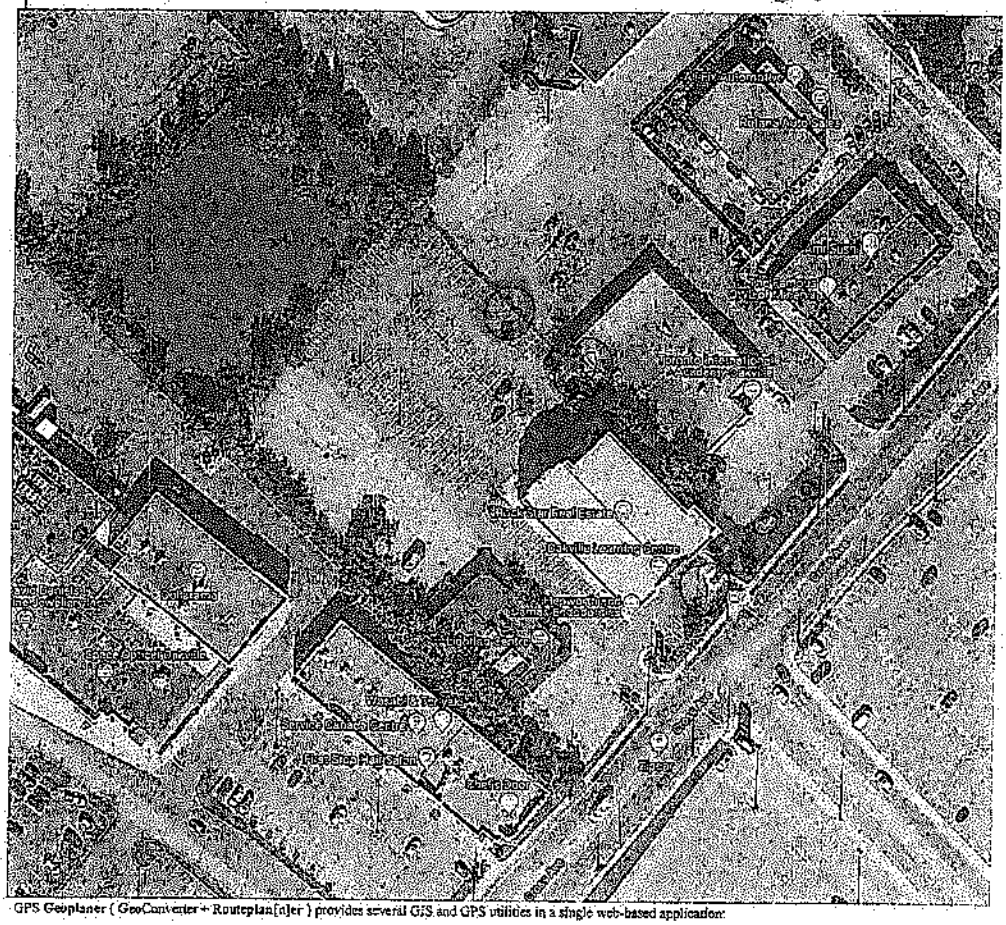
Audit No: Z286917

Received: NOV 01 2018

0506E (2014/11) Ministry's Copy

© Queen's Printer for Ontario, 2014

S-2184



GPS Geoplaner (GeoConverter + Routeplan[n]er) provides several GIS and GPS utilities in a single web-based application:

- Coordinate Finder - find locations worldwide with Google Maps and OSM
- Altitude / Elevations - retrieve altitude or sea depth of any location
- UTM to Latitude / Longitude Converter - and vice versa
- Latitude / Longitude Converter - convert between three notations
- Geocoding - address to Latitude / Longitude converter
- Reverse Geocoding - Latitude / Longitude to address converter
- GPS Waypoint & Route Planner - create GPS waypoints and routes
- Import / Export GPS - Data - upload and download *.gpx-Files

Coordinate Finder with Google Maps & Open Street Map | Elevations

Operating GoogleMaps, Open Street Map by mouse click: Change the map type between *"Map"*, *"Satellite"*, *"Hybrid"*, *"Terrain"* (GoogleMaps) and *"OSM"* (Open Street Map); move the visible map section and zoom in and out the map.
Furthermore there are buttons for browsing through the waypoint list, removing single or all waypoints and editing GPS waypoint titles/names.

Coordinates or GPS waypoints can be created by:

Map data ©2018 Google Imagery ©2018 , DigitalGlobe, First Base Solutions

C-7241

Z 28697

Ontario

Ministry of the Environment, Conservation and Parks

Well Record - Regulation 903

Ontario Water Resources Act

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *
A 105921

Type *

☐ Construction ☑ Abandonment

Measurement recorded in: *

☑ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name	First Name
[redacted]	

Organization	Email Address
Town of Oakville	[redacted]

Current Address

Unit Number	Street Number *	Street Name *	City/Town/Village
		[redacted]	

Country	Province	Postal Code	Telephone Number
Canada	Ontario	[redacted]	

2. Well Location

Address of Well Location

Unit Number	Street Number *	Street Name *	Township
	233	Cross Avenue	Trafalgar

Lot	Concession	County/District/Municipality
13	3	Halton

City/Town	Province	Postal Code
Oakville	Ontario	L6J 2W9

UTM Coordinates	Zone *	Easting *	Northing *		Municipal Plan and Sublot Number
NAD 83	17	606614	4812490	Test UTM in Map	

Other

3. Abandonment and Sealing

Well Depth 3.1 (m)

Provide information of well (e.g. construction date, original contractor). **Do not** enter private information

Original Owner

General Description	Depth From (m)	Depth To (m)

4. Annular Space

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	3.1	Bentonite	0.01

5. Method of Construction

☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify)

6. Well Use

☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☐ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify)

7. Status of Well

☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☑ Abandoned, other (specify) Customers Request
☐ Other (specify)

8. Construction Record - Casing (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole **or** Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5	Plastic		0	1.5

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.3	Plastic		1.5	3.1

10. Water Details

Water found at Depth (m)	☐ Gas	Kind of water ☐ Fresh	☐ Untested	☐ Other

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0		

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain

If flowing give rate

☐ Flowing _____ (L/min)

Draw down

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

After test of well yield, water was

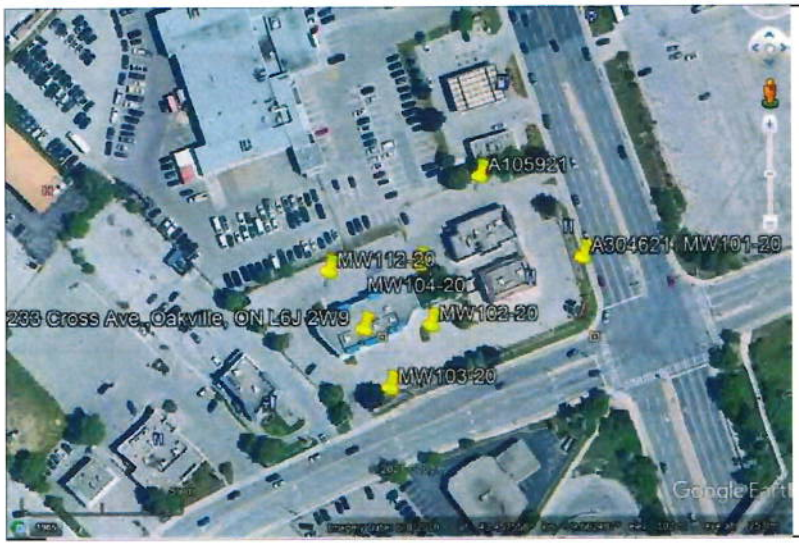
☐ Clear and sand free ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? ☐ Yes ☑ No

Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
☐ Yes ☑ No		2021/07/09

Comments
No water recorded

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
SL Sonic Soil Limited	7732

Business Address

Unit Number	Street Number	Street Name *
	441	Carlingview Drive

City/Town/Village *	Province	Postal Code *
Etobicoke	Ontario	M9W 5G8

Business Telephone Number	Business Email Address
905-660-0501	sonic@sonicsoil.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
Anderson	Greg	3398

16. Declaration *

☑ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
Archibald	Alan	sonic@sonicsoil.com

Signature
Alan Archibald
Digitally signed by Alan Archibald
DN: C=CA, O=SL Sonic Soil Limited, CN=Alan Archibald, E=sonic@sonicsoil.com
Reason: I am the author of this document
Location:
Date: 2021-07-16 12:27:07
Foxit PhantomPDF Version: 9.4.1

Date Submitted (yyyy/mm/dd)
2021/07/16

17. Ministry Use Only

Audit Number
RS9Q R8P3

Ontario

Ministry of the Environment, Conservation and Parks

Well Record - Regulation 903

Ontario Water Resources Act

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *
A304621

Type *

☐ Construction ☑ Abandonment

Measurement recorded in: *

☑ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name	First Name
[redacted]	

Organization	Email Address
Town of Oakville	[redacted]

Current Address

Unit Number	Street Number *	Street Name *	City/Town/Village
			[redacted]

Country	Province	Postal Code	Telephone Number
Canada	Ontario	[redacted]	

2. Well Location

Address of Well Location

Unit Number	Street Number *	Street Name *	Township
	233	Cross Avenue	Trafalgar

Lot	Concession	County/District/Municipality
13	3	Halton

City/Town	Province	Postal Code
Oakville	Ontario	L6J 2W9

UTM Coordinates	Zone *	Easting *	Northing *		Municipal Plan and Sublot Number
NAD 83	17	606652	4812460	Test UTM in Map	

Other

3. Abandonment and Sealing

Well Depth 4 (m)

Provide information of well (e.g. construction date, original contractor). **Do not** enter private information

Original Owner

General Description	Depth From (m)	Depth To (m)

4. Annular Space

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	4	Bentonite	0.01

5. Method of Construction

☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify)

6. Well Use

☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☐ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify)

7. Status of Well

☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☑ Abandoned, other (specify) Customers Request
☐ Other (specify)

8. Construction Record - Casing (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole **or** Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5	Plastic		0	2.5

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.3	Plastic		2.5	4

10. Water Details

Water found at Depth (m)	☐ Gas	Kind of water ☐ Fresh	☐ Untested	☐ Other

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0		

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain _____

If flowing give rate

☐ Flowing _____ (L/min)

Draw down

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

After test of well yield, water was

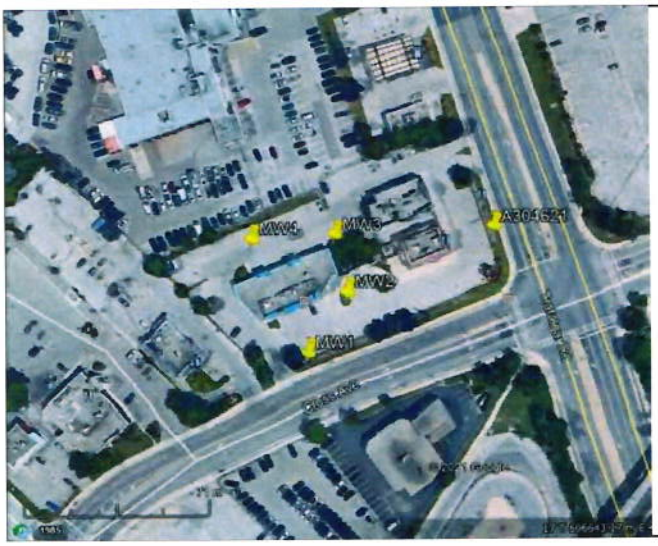
☐ Clear and sand free ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? ☐ Yes ☑ No

Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
☐ Yes ☑ No		2021/06/25

Comments
No water recorded
MW101-20

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
SL Sonic Soil Limited	7732

Business Address

Unit Number	Street Number	Street Name *
	441	Carlingview Drive

City/Town/Village *	Province	Postal Code *
Etobicoke	Ontario	M9W 5G8

Business Telephone Number	Business Email Address
905-660-0501	sonic@sonicsoil.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
Pratt	Ryan	4072

16. Declaration *

☑ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
Archibald	Alan	sonic@sonicsoil.com

Signature	Date Submitted (yyyy/mm/dd)
Alan Archibald Digitally signed by Alan Archibald DN: C=CA, O=SL Sonic Soil Limited, CN=Alan Archibald, E=sonic@sonicsoil.com Reason: I am the author of this document Location: Date: 2021-07-16 12:24:46 Foxit PhantomPDF Version: 9.4.1	2021/07/16

17. Ministry Use Only

Audit Number
O8IU KZP3

Ontario

Ministry of the Environment, Conservation and Parks

Well Record - Regulation 903

Ontario Water Resources Act

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *
No Tag on Well

Type *

☐ Construction ☑ Abandonment

Measurement recorded in: *

☑ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name	First Name
[redacted]	
Organization: Town of Oakville	Email Address: [redacted]

Current Address

Unit Number	Street Number *	Street Name *	City/Town/Village
		[redacted]	

Country	Province	Postal Code	Telephone Number
Canada	Ontario	[redacted]	

2. Well Location

Address of Well Location

Unit Number	Street Number *	Street Name *	Township
	233	Cross Avenue	Trafalgar

Lot	Concession	County/District/Municipality
13	3	Halton

City/Town	Province	Postal Code
Oakville	Ontario	L6J 2W9

UTM Coordinates	Zone *	Easting *	Northing *		Municipal Plan and Sublot Number
NAD 83	17	606581	4812411	Test UTM in Map	

Other

3. Abandonment and Sealing

Well Depth 4 (m)

Provide information of well (e.g. construction date, original contractor). **Do not** enter private information

Original Owner

General Description	Depth From (m)	Depth To (m)

4. Annular Space

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	4	Bentonite	0.01

5. Method of Construction

☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify)

6. Well Use

☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☐ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify)

7. Status of Well

☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☑ Abandoned, other (specify) Customers Request
☐ Other (specify)

8. Construction Record - Casing (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole **or** Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5	Plastic		0	2.5

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.3	Plastic		2.5	4

10. Water Details

Water found at Depth 2.1 (m) ☐ Gas Kind of water ☐ Fresh ☑ Untested ☐ Other

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0		

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain

If flowing give rate

☐ Flowing (L/min)

Draw down

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

After test of well yield, water was

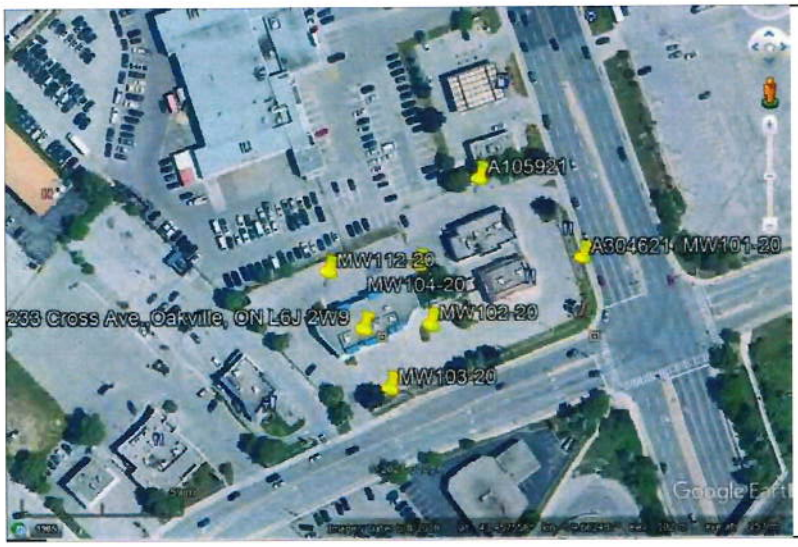
☐ Clear and sand free ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? ☐ Yes ☑ No

Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
☐ Yes ☑ No		2021/06/25

Comments
MW103-20

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
SL Sonic Soil Limited	7732

Business Address

Unit Number	Street Number	Street Name *
	441	Carlingview Drive

City/Town/Village *	Province	Postal Code *
Etobicoke	Ontario	M9W 5G8

Business Telephone Number	Business Email Address
905-660-0501	sonic@sonicsoil.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
Pratt	Ryan	4072

16. Declaration *

☑ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
Archibald	Alan	sonic@sonicsoil.com

Signature
Alan Archibald
Digitally signed by Alan Archibald
DN: C=CA, O=SL Sonic Soil Limited, CN=Alan Archibald, E=sonic@sonicsoil.com
Reason: I am the author of this document
Location:
Date: 2021-07-16 12:23:23
Foxit PhantomPDF Version: 9.4.1

Date Submitted (yyyy/mm/dd)
2021/07/16

17. Ministry Use Only

Audit Number
YJWC 8PK3

Ontario

Ministry of the Environment, Conservation and Parks

Well Record - Regulation 903

Ontario Water Resources Act

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *
No Tag on Well

Type *

☐ Construction ☑ Abandonment

Measurement recorded in: *

☑ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name	First Name
[redacted]	

Organization	Email Address
Town of Oakville	[redacted]

Current Address

Unit Number	Street Number *	Street Name *	City/Town/Village
		[redacted]	

Country	Province	Postal Code	Telephone Number
Canada	Ontario	[redacted]	

2. Well Location

Address of Well Location

Unit Number	Street Number *	Street Name *	Township
	233	Cross Avenue	Trafalgar

Lot	Concession	County/District/Municipality
13	3	Halton

City/Town	Province	Postal Code
Oakville	Ontario	L6J 2W9

UTM Coordinates	Zone *	Easting *	Northing *		Municipal Plan and Sublot Number
NAD 83	17	606596	4812434	Test UTM in Map	

Other

3. Abandonment and Sealing

Well Depth 4 (m)

Provide information of well (e.g. construction date, original contractor). **Do not** enter private information

Original Owner

General Description	Depth From (m)	Depth To (m)

4. Annular Space

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	4	Bentonite	0.01

5. Method of Construction

☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify)

6. Well Use

☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☐ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify)

7. Status of Well

☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☑ Abandoned, other (specify) Customers Request
☐ Other (specify)

8. Construction Record - Casing (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole **or** Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5	Plastic		0	2.5

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.3	Plastic		2.5	4

10. Water Details

Water found at Depth 2.9 (m) ☐ Gas Kind of water ☐ Fresh ☑ Untested ☐ Other

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0		

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain

If flowing give rate

☐ Flowing (L/min)

Draw down

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

After test of well yield, water was

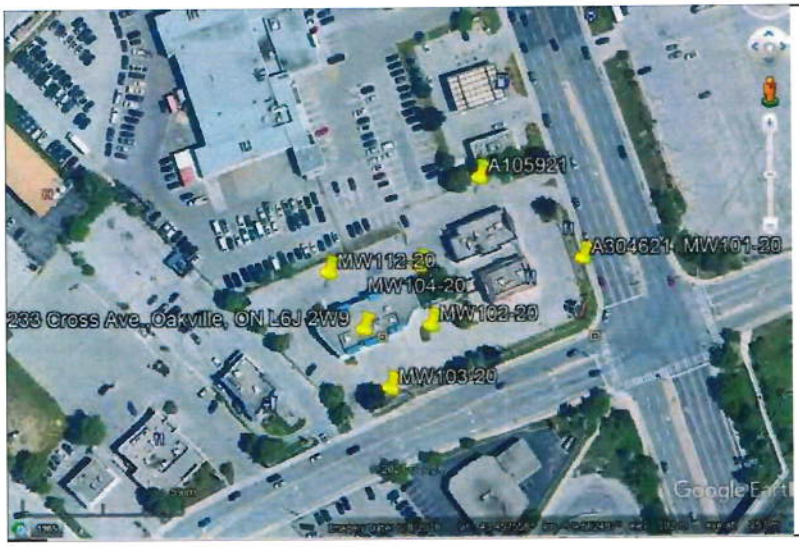
☐ Clear and sand free ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? ☐ Yes ☑ No

Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
☐ Yes ☑ No		2021/06/25

Comments
MW102-20

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
SL Sonic Soil Limited	7732

Business Address

Unit Number	Street Number	Street Name *
	441	Carlingview Drive

City/Town/Village *	Province	Postal Code *
Etobicoke	Ontario	M9W 5G8

Business Telephone Number	Business Email Address
905-660-0501	sonic@sonicsoil.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
Pratt	Ryan	4072

16. Declaration *

☑ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
Archibald	Alan	sonic@sonicsoil.com

Signature
Alan Archibald
Digitally signed by Alan Archibald
DN: C=CA, O=SL Sonic Soil Limited, CN=Alan Archibald, E=sonic@sonicsoil.com
Reason: I am the author of this document
Location:
Date: 2021-07-16 12:00:43
Foxit PhantomPDF Version: 9.4.1

Date Submitted (yyyy/mm/dd)
2021/07/16

17. Ministry Use Only

Audit Number
F54S DJLI

Ontario

Ministry of the Environment, Conservation and Parks

Well Record - Regulation 903

Ontario Water Resources Act

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *
No Tag on Well

Type *

☐ Construction ☑ Abandonment

Measurement recorded in: *

☑ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name	First Name
[redacted]	

Organization	Email Address
Town of Oakville	[redacted]

Current Address

Unit Number	Street Number *	Street Name *	City/Town/Village
		[redacted]	

Country	Province	Postal Code	Telephone Number
Canada	Ontario	[redacted]	

2. Well Location

Address of Well Location

Unit Number	Street Number *	Street Name *	Township
	233	Cross Avenue	Trafalgar

Lot	Concession	County/District/Municipality
13	3	Halton

City/Town	Province	Postal Code
Oakville	Ontario	

UTM Coordinates	Zone *	Easting *	Northing *		Municipal Plan and Sublot Number
NAD 83	17	606591	4812456	Test UTM in Map	

Other

3. Abandonment and Sealing

Well Depth 4 (m)

Provide information of well (e.g. construction date, original contractor). **Do not** enter private information

Original Owner

General Description	Depth From (m)	Depth To (m)

4. Annular Space

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	4	Bentonite	0.01

5. Method of Construction

☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify)

6. Well Use

☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☐ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify)

7. Status of Well

☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☑ Abandoned, other (specify) Customers Request
☐ Other (specify)

8. Construction Record - Casing (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole **or** Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5	Plastic		0	2.5

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.3	Plastic		2.5	4

10. Water Details

Water found at Depth 1.8 (m) ☐ Gas Kind of water ☐ Fresh ☑ Untested ☐ Other

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0		

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain

If flowing give rate

☐ Flowing (L/min)

Draw down

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

After test of well yield, water was

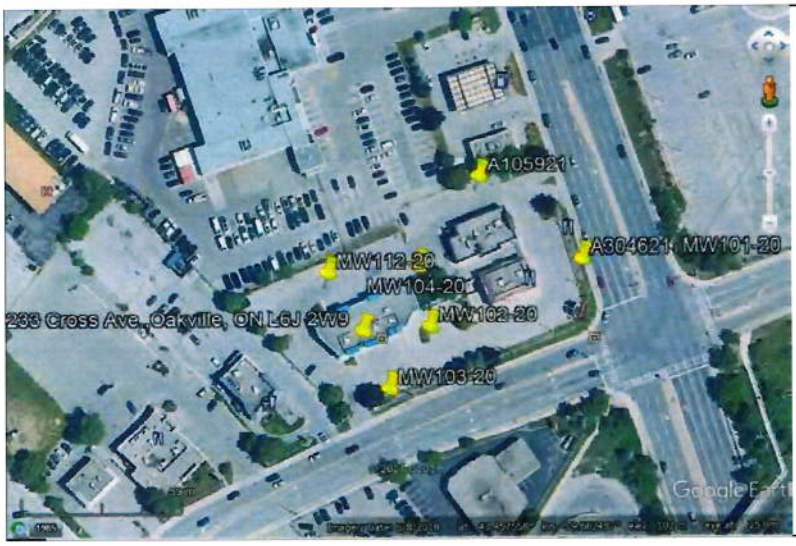
☐ Clear and sand free ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? ☐ Yes ☑ No

Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
☐ Yes ☑ No		2021/06/25

Comments
MW104-20

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
SL Sonic Soil Limited	7732

Business Address

Unit Number	Street Number	Street Name *
	441	Carlingview Drive

City/Town/Village *	Province	Postal Code *
Etobicoke	Ontario	M9W 5G8

Business Telephone Number	Business Email Address
905-660-0501	sonic@sonicsoil.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
Pratt	Ryan	4072

16. Declaration *

☑ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
Archibald	Alan	sonic@sonicsoil.com

Signature
Alan Archibald
Digitally signed by Alan Archibald
DN: C=CA, O=SL Sonic Soil Limited, CN=Alan Archibald, E=sonic@sonicsoil.com
Reason: I am the author of this document
Location:
Date: 2021-07-16 11:47:05
Foxit PhantomPDF Version: 9.4.1

Date Submitted (yyyy/mm/dd)
2021/07/16

17. Ministry Use Only

Audit Number
VG4R ZGHG

Ontario

Ministry of the Environment, Conservation and Parks

Well Record - Regulation 903

Ontario Water Resources Act

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *
No Tag on Well

Type *

☐ Construction ☑ Abandonment

Measurement recorded in: *

☑ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name	First Name
[redacted]	

Organization	Email Address
Town of Oakville	[redacted]

Current Address

Unit Number	Street Number *	Street Name *	City/Town/Village
			[redacted]

Country	Province	Postal Code	Telephone Number
Canada	Ontario	[redacted]	

2. Well Location

Address of Well Location

Unit Number	Street Number *	Street Name *	Township
	233	Cross Street	Trafalgar

Lot	Concession	County/District/Municipality
13	3	Halton

City/Town	Province	Postal Code
Oakville	Ontario	L6J 2W9

UTM Coordinates	Zone *	Easting *	Northing *		Municipal Plan and Sublot Number
NAD 83	17	606559	4812454	Test UTM in Map	

Other

3. Abandonment and Sealing

Well Depth 3.0 (m)

Provide information of well (e.g. construction date, original contractor). **Do not** enter private information

Original Owner

General Description	Depth From (m)	Depth To (m)

4. Annular Space

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	3	Bentonite	0.01

5. Method of Construction

☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify)

6. Well Use

☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☐ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify)

7. Status of Well

☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☑ Abandoned, other (specify) Customers Request
☐ Other (specify)

8. Construction Record - Casing (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole **or** Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5	Plastic		0	1.4

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.3	Plastic		1.4	3

10. Water Details

Water found at Depth 1.7 (m) ☐ Gas Kind of water ☐ Fresh ☐ Untested ☐ Other

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0		

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain

If flowing give rate

☐ Flowing (L/min)

Draw down

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

After test of well yield, water was

☐ Clear and sand free ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected?
				☐ Yes ☑ No

Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
☐ Yes ☑ No		2021/06/25

Comments
MW112-20

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
SL Sonic Soil Limited	7732

Business Address

Unit Number	Street Number	Street Name *
	441	Carlingview Drive

City/Town/Village *	Province	Postal Code *
Etobicoke	Ontario	M9W 5G8

Business Telephone Number	Business Email Address
905-660-0501	sonic@sonicsoil.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
Pratt	Ryan	4072

16. Declaration *

☑ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
Archibald	Alan	sonic@sonicsoil.com

Signature	Date Submitted (yyyy/mm/dd)
Alan Archibald Digitally signed by Alan Archibald DN: C=CA, O=SL Sonic Soil Limited, CN=Alan Archibald, E=sonic@sonicsoil.com Reason: I am the author of this document Location: Date: 2021-07-16 11:44:59 Foxit PhantomPDF Version: 9.4.1	2021/07/16

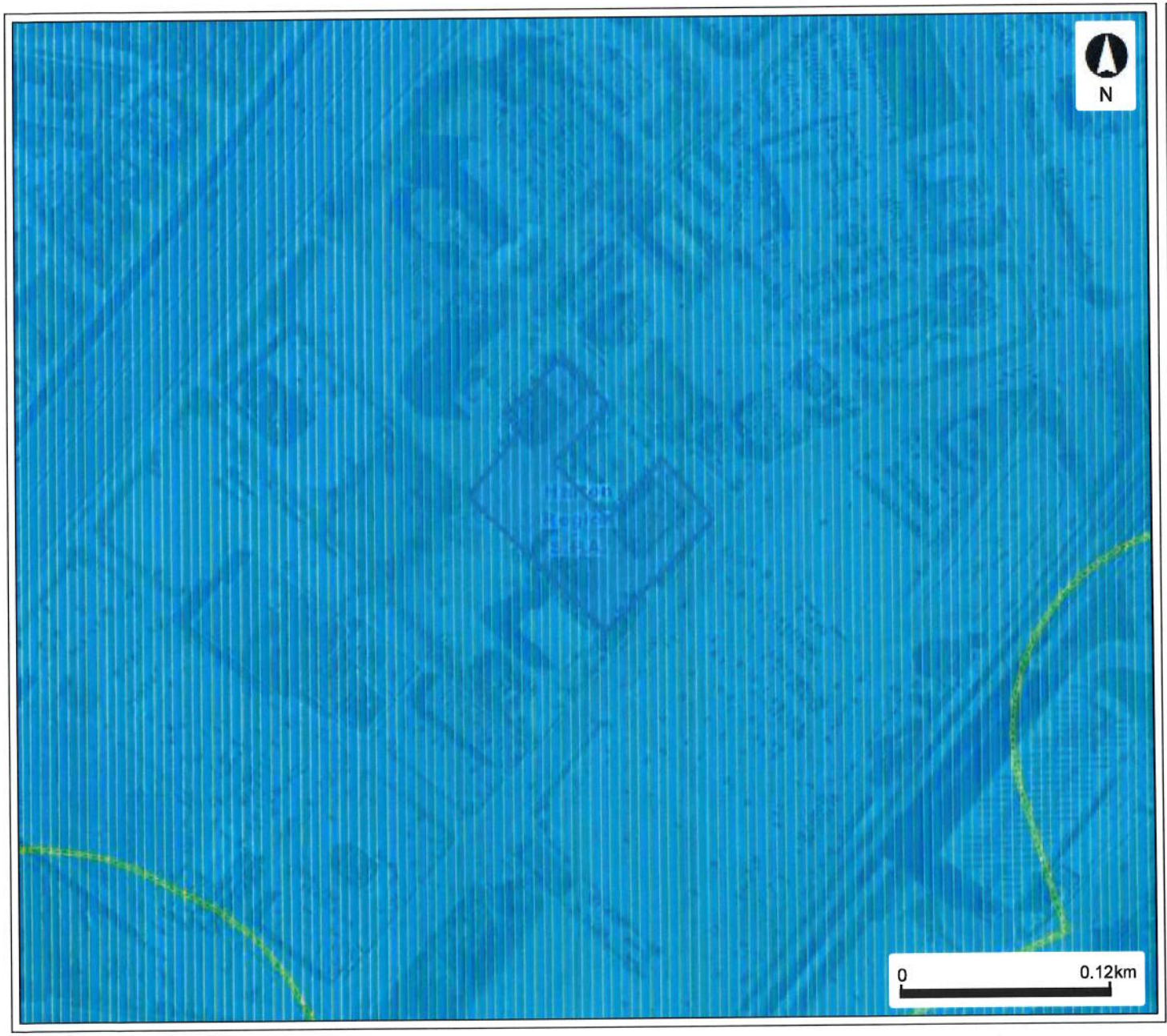
17. Ministry Use Only

Audit Number
IL9M BU8I

APPENDIX D

Source Water Protection Map

177 Cross Avenue, Oakville



Legend

- Permits To Take Water: Active
- Wellhead Protection Area Q1
- Wellhead Protection Area Q2
- Significant Groundwater Recharge Area
  - N/A
  - 0
  - 2
  - 4
  - 6
- Issue Contributing Areas
- Highly Vulnerable Aquifers
- WHPA-E
- Wellhead Protection Area
  - A
  - B
  - C
  - C1
  - D
  - F
- Intake Protection Zone 1
- Event Based Areas
- Intake Protection Zone 2
- Source Protection Areas

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Environment, Conservation and Parks (MECP) shall not be liable in any way for the use or any information on this map. of, or reliance upon, this map.

Ontario

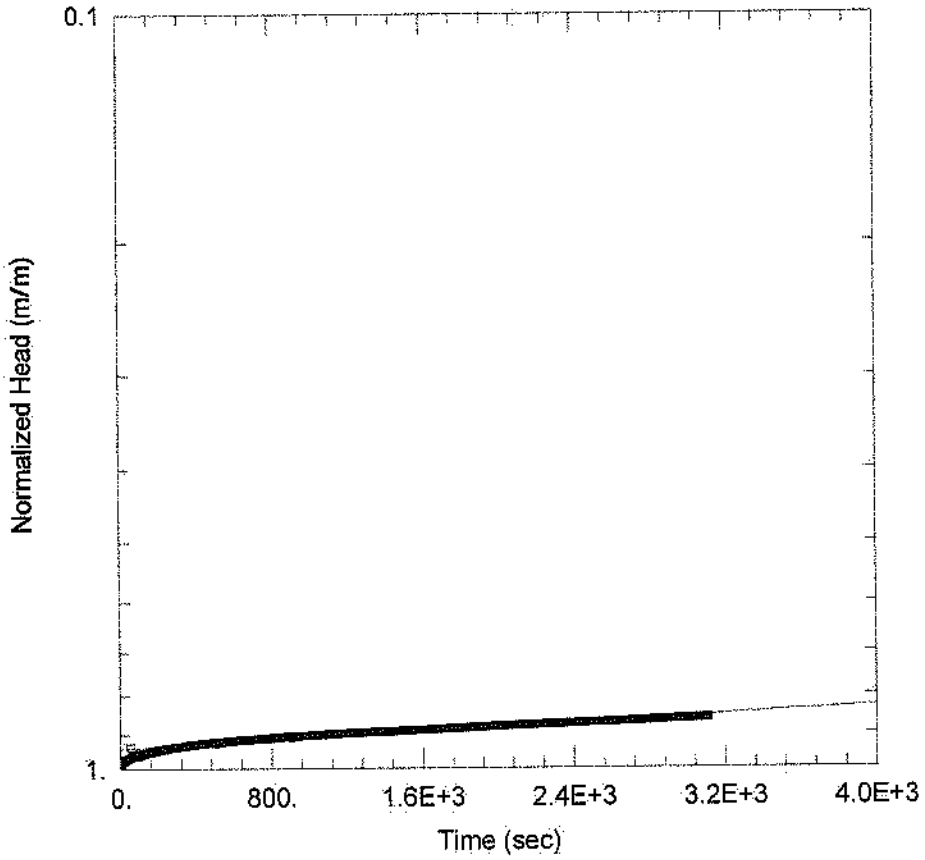
© King's Printer for Ontario and its licensors, 2023

May Not be Reproduced without Permission.
THIS IS NOT A PLAN OF SURVEY.

Map Created: 6/15/2023
Map Center: 43.45635 N, -79.68498 W

APPENDIX E

Hydraulic Conductivity Testing



WELL TEST ANALYSIS

Data Set: M:\Projects3\23 Projects\23-167 Azure - Cross Ave Oakville\03.0 - Data\slug tests\mw-4.aqt
Date: 06/16/23 Time: 11:25:30

PROJECT INFORMATION

Company: Azimuth Environmental
Client: Azure
Project: 23-167
Location: 177 Cross Ave
Test Well: MW-4
Test Date: May 31 2023

AQUIFER DATA

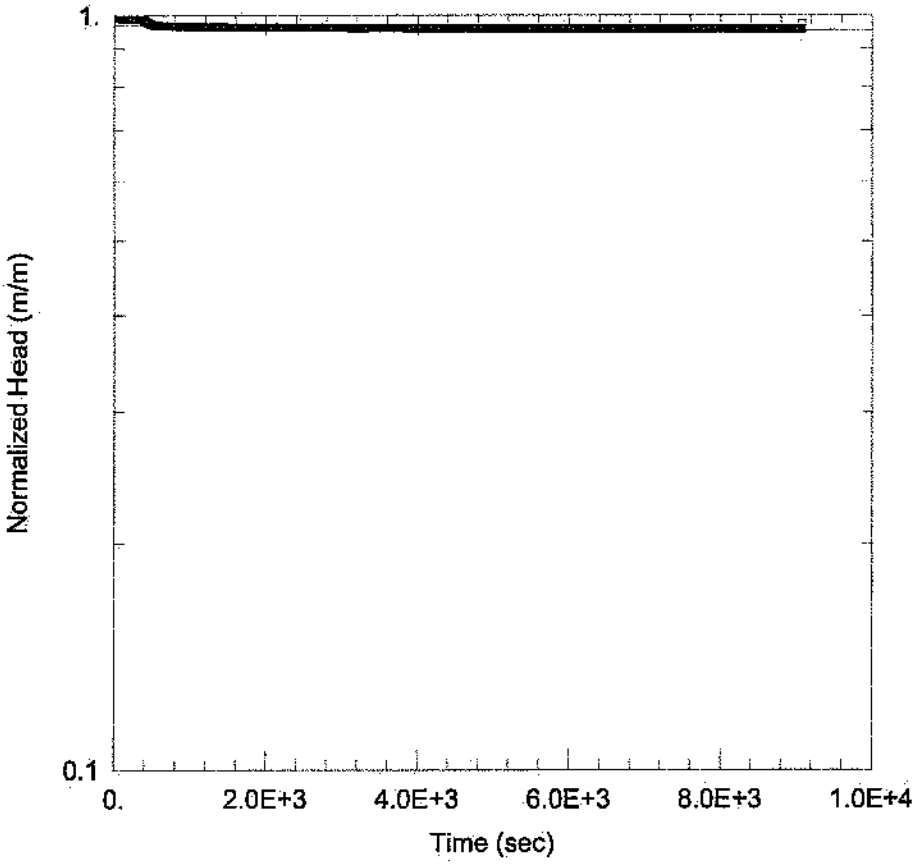
Saturated Thickness: 3.01 m
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-4)

Initial Displacement: -1.407 m
Total Well Penetration Depth: 3.01 m
Casing Radius: 0.0254 m
Static Water Column Height: 3.01 m
Screen Length: 3.05 m
Wellbore Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.848E-8 m/sec
y0 = -1.323 m



WELL TEST ANALYSIS

Data Set:
Date: 07/14/23 Time: 09:53:23

PROJECT INFORMATION

Project: 23-167
Test Well: MW-9

AQUIFER DATA

Saturated Thickness: 10.7 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9)

Initial Displacement: -5.243 m
Total Well Penetration Depth: 10.7 m
Casing Radius: 0.0254 m
Static Water Column Height: 10.7 m
Screen Length: 3.05 m
Wellbore Radius: 0.0254 m

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 1.015E-9 m/sec
y0 = -5.083 m

APPENDIX F

Dewatering Calculations

Type	ID	Length (m)	Width (m)	Effective Radius[1] (m)	Hydraulic Conductivity (m/s)	Hydraulic Conductivity (m/day)	Initial Depth of Water (static head) prior to dewatering (m)	H^2	Depth of Water in the well while pumping (m)	h^2	H-h (m)	H^2-h^2	Radius of Influence[2] (m)	Discharge into Ends[3] (m^3/day)	Plane Discharge[4] (m^3/day)	Total Discharge (m^3/day)	Total Discharge (L/day)	Total Discharge x 3 Safety Factor (L/day)
		a	b	re	k	k	H		h				Ro	Q	Q	Q	Q	Q
Structure	NA	120	95	60	1.85E-08	1.60E-03	19.79	392	0.5	0.3	19.3	391	68	16	0.0	16.0	16,000	48,000
Total Dewatering																	16,000	48,000

Notes

[1] $r_e = (a+b)/\pi$ - assuming a/b >1.5, or $re = \sqrt{ab}/\pi$ (Powers et. al., 2007)

[2] $Ro = r_e + 3000 * (H-h) * \sqrt{k}$ - Sichardts Formula, (Cashman and Preene, 2001)

[3] $Q = [(\pi * K) * (H^2 - h^2)] / [\ln(R_o/r)]$ (Powers et al., 2007)

[4] $Q = 2 * [a * K * (H^2 - h^2)] / (2R_o)]$ (Powers et al., 2007)

* H & h are relative to base of active ground water levels

This is Exhibit “M” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Azure Group

PHASE ONE
ENVIRONMENTAL SITE ASSESSMENT

177, 185 & 187 CROSS AVENUE AND 580 ARGUS ROAD, OAKVILLE, ONTARIO

PREPARED FOR: 177 CROSS ARGUS DEVELOPMENT INC.

3190 HARVESTOR ROAD, SUITE 201A, BURLINGTON, ONTARIO, L7N 3T1

PROJECT NO. 2303-003
DATE MAY 05, 2023
(REVISED MAY 21, 2024)

Azure Group Inc.
6751 Professional Drive, Suites 201 & 202, Mississauga, ON, L4V 1Y3, Canada
T: (905) 673-294 **C:** (416) 779-2694 **F:** (416) 907-2694 **E:** info@azuregroup.ca www.azuregroup.ca

LEGAL STATEMENT

The report is prepared by Azure Group (Azure) for 177 Cross Argus Development Inc. (the client).

The report may not be relied upon by any other person or entity unless a written reliance letter has been provided by Azure Group (Azure) to such third parties. Any use that a party makes of this report, or any reliance on decisions made based on it, is the responsibility of such parties. Azure accepts no responsibility for damages, if any, suffered by any party as a result of decisions made or actions based on this report.

© Azure Group Inc. • 2023

EXECUTIVE SUMMARY

Azure Group Inc. (Azure) was retained by 177 Cross Argus Development Inc. (The Client) to conduct a Phase One Environmental Site Assessment (ESA) on an irregularly shaped parcel of land located at 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville, Ontario (hereinafter referred to as the 'Phase One Property'). The Phase One Property is approximately 1.01 hectares (2.50 acres). The legal description of the Phase One Property is "LT 3, PL 1333; PT LT 1, PL 1333, AS IN 755007; PT LT 14, CON 3 TRAF SDS, AS IN 755007; TOWN OF OAKVILLE".

Based on the records review, the Phase One Property is located within a developed area within the Town of Oakville. Azure will follow an engineering north considering Cross Avenue oriented in an east-west direction, for the purpose of this Phase One Environmental Site Assessment (ESA). The Phase One Property is an irregularly shaped parcel of land with three (3) one-storey structures present on it. It is currently used for mixed commercial and institutional purposes including three structures and associated parking areas. The Phase One property has an approximately 88 m frontage along Cross Avenue and a depth of approximately 120 m along Argus Road.

This Phase One ESA report has been conducted for the Client as a requirement for the Region of Halton and that a Record of Site Condition (RSC) for the Phase One Property pursuant to Ontario Regulation 153/04 – Records of Site Condition – Part XV.1 of The Environmental Protection Act, as amended (O. Reg. 153/04, as amended), shall be filed with the Ontario Ministry of Environment, Conservation and Parks (MECP).

Based on information gathered and observations made, the Phase One ESA has revealed the following Potentially Contaminating Activities at the Phase One Property and within the surrounding area:

Potentially Contaminating Activities (PCAs) on the Phase One Property and within the Phase One Study Area

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
1-9	Phase One Property	1. Potential fill materials of unknown quality may be present at the Phase One Property which were likely imported during the property's development since the late 1940s (approximately).	30. Importation of Fill Material of Unknown Quality	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, pH

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
		2. Historical auto service garage at the former structure in the northeastern portion of the Phase One Property, close to the present 580 Argus structure.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs
		3. Historical carwash in the northeast portion of the Phase One Property (1967 FIPs), at the former structure in the northeastern portion of the Phase One Property, close to the present 580 Argus structure	Other- Former Carwash	Soil: PHCs, BTEX, VOCs
		4. Historical use as Tannery, from the early 1950s to mid-1980s, at the former structure in the southwestern portion of the Phase One Property close to the present 177 Cross structure.	53. Tannery	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs
		5. Historical warehouse and trailer repair operation from the early 1950s to the mid-1980s, at the former structure in the southwestern portion of the Phase One Property close to the present 177 Cross Avenue structure.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems.	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs
		6. Historical Dry Cleaning depot from 1991 to 2001 at the southeastern portion of the Phase One Property. At present 187 Cross Avenue.	37. Operation of Dry Cleaning Equipment where Chemicals are Used	PHCs, BTEX, VOCs
		7. Current presence of Transformer at the northeastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	Soil: PHCs, PCBs
		8. Current presence of Transformer at the eastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	Soil: PHCs, PCBs

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
		9. Public Parking of Civilian Vehicles at the portion of the Phase One Property utilized for vehicle parking	N/A. Road Salt/De-Icing on Paved Surfaces	Soil: EC and SAR, However, these are determined not to be associated contaminants of potential concern due to the fact that such PCAs are exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons.
10-11	570 Argus Road (immediately adjacent east)	10. Existing auto garage from approximately 1996 indicated in the city directories.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs
		11. Historical printing, lithographing & metal fabrication operations were listed in the FIPs from 1967.	Other - Printing	PHCs, BTEX, VOCs
12	586 Argus Road (immediately adjacent to the north and up-gradient)	Historical professional equipment and supplies manufacturing (Dionex Canada Ltd.) from 1996 to 2001, listed in City directories.	19. Electronic and Computer equipment manufacturing	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs
13	165 Cross Avenue (immediate west and trans-gradient)	Instant Imprints Canada Inc. was listed under Scott's manufacturing directory and city directories for commercial screen printing and sign manufacturing from 2017 to 2021	Other - Printing	PHCs, BTEX, VOCs
14	587-589 Argus Road (approximately 20 m northeast and upgradient)	Former printing operations under different business names at this property indicated in the city directory and FIPs from 1966 to 1985.	Other - Printing	PHCs, BTEX, VOCs
15	214 Cross Avenue (approximately 120 m south and downgradient)	Historical Canadian National Railway and presently Metrolinx GO station are operational since 1965	46. Rail Yards, Tracks and Spurs Other – Go Station	No COCs found due to significant distance between the Phase One Property and the PCA location and being

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
				downgradient of the Phase One Property

"TABLE OF AREAS OF POTENTIAL ENVIRONMENTAL CONCERN"
Refer to clause 16(2) (a), Schedule D, O. Reg. 153/04

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1 (Due to potential fill materials of unknown quality at the Phase One Property)	The Phase One Property	30. Importation of Fill Material of Unknown Quality	On-site	Metals, As, Sb, Se, Cr(VI), CN, Hg, B-HWS, PAHs, pH	Soil
APEC 2 (historical auto service garage in the northeast portion of the Phase One Property)	Northeastern portion of Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater
APEC 3 (Historical carwash, in the northeast portion of the Phase One Property)	Northeastern portion of Phase One Property	Other- Former Carwash	On-site	Soil: PHCs, BTEX, VOCs	Soil
APEC 4 (Due to historical property use as	Southwestern portion of the Phase One Property	53. Tannery	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
a Tannery former Structure, at the southwestern portion of the Phase One Property)				Groundwater: PHCs, BTEX, VOCs, PAHs	
APEC 5 (Due to historical property use as warehouse and trailer repair operation at the southwestern portion of the Phase One Property)	Southwestern portion of the Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs	Soil and Groundwater
APEC 6 (Due to former Dry Cleaning depot at southeast portion of the Phase One Property)	Southeastern portion of the Phase One Property	37. Operation of Dry Cleaning Equipment where Chemicals are Used	On-Site	PHCs, BTEX,VOCs	Soil and Groundwater
APEC 7 (Due to the current presence of the Transformer at the northeastern portion of the Phase One Property)	northeastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	On-Site	PHCs, PCBs	Soil
APEC 8 (Due to the current presence of the Transformer at the eastern portion of the Phase One Property)	Eastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	On-Site	PHCs, PCBs	Soil
APEC 9 (Due to				EC and SAR, However, these are determined not to	

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
potential use of salt road at the paved areas of the Phase One Property in winter seasons)	Paved areas of the Phase One Property	N/A. Road Salt/de-Icing on Paved Surfaces	On-site	be associated contaminants of potential concern due to the fact that such PCAs are exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons	Soil
APEC 10 (Due to an auto garage and historical printing, lithographing & metal fabrication operations at 570 Argus Rd immediate east of the Phase One Property)	Eastern portion of the Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems Other - Printing	Off-Site	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs	Soil and Groundwater
APEC 11 (Due to Historical equipment and supplies manufacturing immediate north of Phase One Property)	Northern portion of the Phase One Property	19. Electronic and Computer equipment manufacturing	Off-site	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater
APEC 12 (Due to commercial screen printing and sign manufacturing immediate west of Phase One Property)	Southwestern portion of the Phase One Property	Other - Printing	Off-Site	PHCs, BTEX, VOCs	Soil and Groundwater
APEC 13 (Former printing operations at 587-589 Argus Road approximately 20 m northeast	Northeastern portion of the Phase One Property	Other - Printing	Off-site	PHCs, BTEX, VOCs	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
of Phase One Property)					

The Phase One ESA reviewed available historical information, environmental databases, interviews of available site knowledgeable people and our site reconnaissance. Based on the above noted environmental concerns, a Phase Two Environmental Site Assessment (hereinafter referred to as a 'Phase Two ESA') is recommended to assess the Phase One Property.

The executive summary is a brief caption of the report and should not be read in lieu of reading the report in its entirety. Limitations are listed in Section 10.0 and are to be read in conjunction with the remainder of this report.

TABLE OF CONTENTS

Page No.

1.0 INTRODUCTION 1
1.1 PHASE ONE PROPERTY INFORMATION 1
1.1.1 Phase One Property and the Investigated Area 2
2.0 SCOPE OF INVESTIGATION 2
3.0 RECORDS REVIEW 3
3.1 GENERAL 3
3.1.1 Phase One Study Area 3
3.1.2 First Developed Use 3
3.1.3 Fire Insurance Plans 4
3.1.4 Chain of Title 4
3.1.5 Aerial Photographs 5
3.1.6 City Directories 7
3.1.7 Environmental Reports 8
3.1.8 Regulatory Requests – Technical Standards and Safety Authority (TSSA) 8
3.1.9 Regulatory Requests – MECP 8
3.2 ENVIRONMENTAL SOURCE INFORMATION 9
3.2.1 Environmental Risk Information Service (ERIS) Report 9
3.3 PHYSICAL SETTING SOURCES 10
3.3.1 Topography, Hydrology, and Geology 10
3.3.3 Well Records 10
4.0 INTERVIEWS 11
5.0 SITE RECONNAISSANCE 11
5.1 THE PHASE ONE PROPERTY 11
5.1.1 Phase One Property Description 11
5.1.2 Phase One Property Structure 12
5.1.3 Underground Storage Tank 12
5.1.4 Above-ground Storage Tank 12

5.1.5 Fill Material ***12***
5.1.6 Stressed Vegetation ***12***
5.1.7 Water Bodies and Water Wells ***12***
5.1.8 Air Discharges ***12***
5.1.9 Polychlorinated Biphenyls (PCBs) ***13***
5.1.10 Asbestos-Containing Materials (ACMs) ***13***
5.1.11 Urea Formaldehyde Foam Insulation (UFFI) ***13***
5.1.12 Lead ***13***
5.1.13 Ozone Depleting Substances (ODSs) ***13***
5.1.14 Radon Gas ***14***
5.1.15 Mould ***14***
5.1.16 Waste Materials ***14***
5.1.17 Spill and Stain Areas ***14***
5.1.18 Wastewater Discharges ***14***
5.1.19 Air Discharges ***14***
5.2 NEIGHBOURING PROPERTIES **14**
6.0 SUMMARY OF FINDINGS **15**
7.0 CONCLUSIONS **20**
7.1 PHASE TWO ENVIRONMENTAL SITE ASSESSMENT RECOMMENDATION **20**
7.2 RECORD OF SITE CONDITION REQUIREMENTS **26**
8.0 QUALIFICATIONS OF ASSESSOR **26**
9.0 REFERENCES **28**
10.0 LIMITATIONS **29**

LIST OF APPENDICES

FIGURES

Figure No. 1 – Site Location Plan
Figure No. 2 – Phase One Property Location Plan
Figure No. 3 – Zoning Map
Figure No. 4 – Historical Map
Figure No. 5 – Topographic Map
Figure No. 6 – Natural Heritage Map
Figure No. 7 – Phase One Conceptual Site Model
Figure No. 8 – Location of APECs

APPENDICES

Appendix A – Figures
Appendix B – Plan of Survey
Appendix C – Current and Past Use Table
Appendix D – MPAC Report
Appendix E – Aerial Photographs
Appendix F – City Directories
Appendix G – Regulatory Documents
Appendix H – ERIS Report
Appendix I – Interview Questionnaire
Appendix J – Site Photographs

© Azure Group Inc. • 2023

1.0 INTRODUCTION

Azure Group Inc. (Azure) was retained by 177 Cross Argus Development Inc. (The Client) to conduct a Phase One Environmental Site Assessment (ESA) on an irregularly shaped parcel of land located at 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville, Ontario (hereinafter referred to as the 'Phase One Property'). The Phase One Property is approximately 1.01 hectares (2.50 acres). The municipal address of the Phase One Property is "LT 3, PL 1333; PT LT 1, PL 1333, AS IN 755007; PT LT 14, CON 3 TRAF SDS, AS IN 755007; TOWN OF OAKVILLE".

Based on the records review, the Phase One Property is located within a developed area within the Town of Oakville. Azure will follow an engineering north considering Cross Avenue oriented in an east-west direction, for the purpose of this Phase One Environmental Site Assessment (ESA). The Phase One Property is an irregularly shaped parcel of land with three (3) one-storey structures present on it. It is currently used for mixed commercial and institutional purposes including three structures and associated parking areas. The Phase One property has an approximately 88 m frontage along Cross Avenue and a depth of approximately 120 m along Argus Road.

This Phase One ESA report has been conducted for the Client as a requirement for the Region of Halton and that a Record of Site Condition (RSC) for the Phase One Property pursuant to Ontario Regulation 153/04 – Records of Site Condition – Part XV.1 of The Environmental Protection Act, as amended (O. Reg. 153/04, as amended), will be filed with the Ontario Ministry of Environment, Conservation and Parks (MECP).

The objective of this Phase One ESA is to identify any potentially contaminating activities (PCA) that are occurring, or have occurred, at the Phase One Property and at properties within 250 m from the boundary of the Phase One Property. The Phase One ESA also evaluates each individual Potentially Contaminating Activity (PCA) and determine whether it would contribute as an Area of Potential Environmental Concern (APEC) at the Phase One Property.

1.1 Phase One Property Information

The Phase One Property is located at 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville, Ontario. The Phase One Property is legally described as LT 3, PL 1333; PT LT 1, PL 1333, AS IN 755007; PT LT 14, CON 3 TRAF SDS, AS IN 755007; TOWN OF OAKVILLE, in the Regional County of Halton. The Property Identification Number (PIN) is 24816-0031 (LT). The Phase One Property has a total approximate area of 1.01 hectares (2.50 acres). A Site location plan is shown as Figure No. 1 and the Phase One Property Location Plan is shown as Figure No. 2 in Appendix A. The Plan of Survey is included in Appendix B.

The Town of Oakville Zoning By-laws 2014-014, 2009-189 and 1984-63 were reviewed, the maps indicate that Phase One Property is designed as part of one zone: MTC - Midtown Transitional Commercial zone. The neighbouring properties surrounding the Phase One

© Azure Group Inc. • 2024

Property are also represented as MTC - Midtown Transitional Commercial zone as well as RH, RL5-0 and RM4 - Residential High, Residential Low and Residential Medium zone.

The map showing the Zoning and is included in Figure No. 3 in Appendix A.

At the time of the Phase One ESA, the Phase One Property was owned and managed by 177 Cross Argus Development Inc. The contact information of the Phase One Property owner is as follows:

Table 1 - Site Ownership Information

Company Name	177 Cross Argus Development Inc.
Company Address	3190 HARVESTOR ROAD, SUITE 201A, BURLINGTON, ONTARIO, L7N 3T
Owner	177 Cross Argus Development Inc.

1.1.1 Phase One Property and the Investigated Area

The Phase One Property is located at the intersection of Cross Avenue and Argus Road, in the Town of Oakville, in the Regional County of Halton. The Phase One Study Area consists of neighbouring properties located wholly or partially within 250 m from the Phase One Property boundary. For this assessment, all properties within 250 m of the Phase One Property Boundary are included in the study, to determine whether PCA is occurring, or has occurred, which may contribute as an APEC. Properties more than 250 m from the Phase One Property boundary are considered to be too far to pose as an environmental concern to the Phase One Property, given the permeability of the subsoil at the Phase One Property. The Phase One Property and 250 m Study Area is enclosed in Figure No. 7 in Appendix A.

2.0 SCOPE OF INVESTIGATION

The Scope of the Phase One ESA consisted of the following:

- Review available city directories and Fire Insurance Plans (FIPs), topographic and geological maps, aerial photographs, and previous environmental reports;
- Contact provincial and/or municipal bureaus to obtain any related records pertaining to non-compliance environmental items, and review such records where made available;
- An environmental database review completed by Environmental Risk Information Services Ltd. (ERIS) covering the Phase One Property and the Phase One Study Area;
- Conduct a land title search with records pertaining to the Phase One Property, dating back to the Crown;
- Review Natural Heritage Areas and other environmental maps provided by the Ontario Ministry of Natural Resources and Forestry (MNRF) and local municipality;
- Contact selected regulatory agencies, including MECP Freedom of Information (FOI) office and Technical Standards & Safety Authority (TSSA), pertaining to

environmental records associated with the Phase One Property;
- Conduct interview(s) with person(s) knowledgeable about the current and past activities at the Phase One Property;
- Conduct Site Reconnaissance;
- Review the current and historical land uses associated with the Phase One Property and properties within the Phase One Study Area; and,
- Prepare a report documenting the findings.

It should be noted that the Phase One ESA scope of work does not include any subsurface investigation, such as sampling or monitoring tasks. The Phase One ESA also considers the general housekeeping and environmental management practices associated with the Phase One Property, but this assessment does not include any environmental compliance reviews.

The qualification of the assessor is provided in Section 8.0 of this report.

3.0 RECORDS REVIEW

3.1 General

3.1.1 Phase One Study Area

The Phase One Study Area consists of the neighbouring properties located wholly or partially within 250 m from the Phase One Property boundary. As indicated, the Phase One Property consisted of three (3) one-storey structures present on it. It is currently used for mixed commercial and institutional purposes and include associated parking areas.

The 250 m Study Area consists of commercial and/or industrial property uses in all directions as shown in the Figure drawings No. 7 in Appendix A.

3.1.2 First Developed Use

Based on a review of an 1858 historical atlas of the Ontario County historical map, the Phase One Property appeared to be part of an undeveloped/agricultural parcel of land owned by Mr. Robert K Chisholm in the Town of Oakville (current day Town of Oakville).

Since there is no information available prior to 1858 and based on the aerial photographs, Chain of Title, it can be concluded that the Subject Property was likely first developed circa late 1940s.

A copy of the MPAC report is shown in appendix D and 1856 Historical Map of Ontario is shown in Drawing No. 4 of Appendix A.

3.1.3 Fire Insurance Plans

A request was submitted to ERIS for Fire Insurance Plans (FIPs) for the Phase One Property and Study Area within a 250 m radius found online. And the response came back with FIP coverage for the area of the Phase One Property for the year 1967 was reviewed. The following are the environmental concerns identified.

Address (Approximate Distance & Direction from Subject Property)	Description	Potential Environmental Concerns? (Yes/No)
Phase One Property		
(Phase One Property)	According to the 1967 FIPs, this property was likely used for tanning and as a car wash.	Possibly, as the activities appear to be operational on-site at the Phase One Property
Surrounding Properties		
570 Argus Road (Immediately adjacent east)	Historical printing, lithographing & metal fabrication operations were listed in the FIPs from 1967	Possibly, as this property is located in close distance away to the Phase One Property.
587-589 Argus Road (Approximately 20 m northeast and upgradient)	Historical printing operation was listed in the FIPs from 1967	Possibly, as this property is located in upgradient to the Phase One Property.

3.1.4 Chain of Title

A land title search was conducted at the Land Registry Office #20 in the Town of Oakville, Ontario. According to the land title records obtained the current owner of the Phase One Property located at 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville, Ontario is 177 Cross Argus Development Inc. The Property Identification Number (PIN) for the Phase One Property is 24816-0031 (LT). The Chain of Title is included in Appendix C.

The chain of title search is conducted to determine the history of ownership and occupants of the Phase One Property, dating back to crown ownership. The table below (Table 2) presents the Current and Past Uses of the Phase One Property, providing a detailed list of all the landowners of the Phase One Property, and their associated dates of ownership, from crown ownership to present.

Chain of Title of the Phase One Property

Year	Name of owner
The Phase One Property is part of Lot 14, Concession 3, South of Dundas Street granted to William Chisholm in 1831.	
Prior to 1831	Crown
1831 – 1866	William Chisholm
1866 – 1871	John Cross
1871 – 1883	William Wardall
1883 – 1907	John Cross
1907 – 1921	Charles Cross
1921 – 1921	Walter Ward Price
1921 – 1946	Edith Mary Paqt, Spinister Marion, Elizabeth Paqt, Spinister Robert, Harold Paqt, Rosa Paqt, William Paqt
1946 – 1948	James Locke
1948 – 1950	James Kendall
1950 – 1965	James Kendall Leather Company Limited
1965 – 1969	James Kendall Leather Company Limited
1969 – 1973	Eric Thorne, Jordon Brown
1973 – 1985	John Duncan, James Duncan
1985 – 1986	572578 Ontario Limited
1986 – 1988	Gobram Developments Ltd.
1965 – 1977	Eric Thorne, Jordon Brown
1977 – 1987	The Howard Conquergood Memorial Building Association
1987 – 1988	Dollarbram Developments Inc.
1965 – 1968	Snow Properties Limited
1968 – 1977	Dede Limited
1977 – 1979	Bootsma Holdings Limited
1979 – 1979	Komaster Corporation Limited
1979 – 1983	John Duncan
1983 – 1986	572578 Ontario Limited
1986 – 1988	Gobram Developments Ltd.
1988 – 1990	Gobram Developments Ltd.
1990 – 2023	915643 Ontario Inc.
2023 – Current	177 Cross Argus Development Inc.

3.1.5 Aerial Photographs

Selected aerial photographs were obtained from the University of Toronto Map and Library database, ERIS database, and Google Earth Pro database. Aerial photographs dated 1934, 1954, 1967, 1974, 1985, 1999, 2008, 2017 and 2021 were reviewed. A copy of the aerial photography is included in Appendix E. A brief description of the history of the Phase One Property and neighbouring properties is tabulated in the following:

History of Phase One Property and Neighbouring Properties

Year	Details
1934 Aerial Photograph	• The Phase One Property appears to be vacant/undeveloped and/or agricultural land. **North**: The property north to Phase One Property appears to likely represent vacant/undeveloped and/or agricultural land. **East**: Properties lying east to the Phase One Property appear to likely represent residential/commercial use structures at this time. **South**: Properties lying south to the Phase One Property appear to likely represent vacant/undeveloped and/or agricultural land. **West**: Properties lying west to the Phase One Property appear to likely represent vacant/undeveloped and/or agricultural land.
1954 Aerial Photograph	• Low resolution of aerial in Phase One property. • It appears a road similar in orientation to the present day Queen Elizabeth Way north of the Phase One Property. • It appears that a road similar in orientation to the present day Cross Avenue was observed to the south of the Phase One Property. • The Surrounding Properties located north, south, east and west appear to be unchanged since 1934 only some road developments. • It should be noted that the available aerial is of low resolution.
1967 Aerial Photograph	• The Phase One Property appears to be developed with three structures. **South:** Likely residential and/or commercial development **West:** Likely industrial and/or commercial development **East:** Likely industrial and/or commercial development **North**: Likely residential development beyond Queen Elizabeth Way
1974 Aerial Photograph	• The Phase One Property appears to be unchanged since 1967. **North:** Some new industrial and/or commercial structures have appeared just north of the Phase One Property at that time. **East:** Some new industrial and/or commercial structures have appeared just east of the Phase One Property at that time • The Surrounding Properties located south and west appear to be unchanged since 1967
1985 Aerial Photograph	• The Phase One Property appears to be unchanged since 1974. • It should be noted that available aerial is of low resolution. **North,South,West,East:** Likely industrial and/or commercial redevelopment
1999 Aerial Photograph	• The Phase One Property appears to be redeveloped including three commercial structures and associated parking areas at this time. • **North,South,West,East:** Likely industrial and/or commercial development/redevelopment
2008 Aerial Photograph	• The Phase One Property appears to be unchanged since 1999. • The Surrounding Properties appear to have no significant changes since 1999.
2017 Aerial Photograph	• The Phase One Property appears to be unchanged since 1999. • The Surrounding Properties appear to have no significant changes since 1999.
2021 Satellite Imagery	• The Phase One Property appears to be unchanged since 1999. • The Surrounding Properties appear to have no significant changes since 1999.

3.1.6 City Directories

A request was made for a city directory search for the Phase One Property and Phase One Study area. Azure was able to obtain and review a city directory archive for the Phase One Property and the Phase One Study Area within 5-year intervals from 1960-2021. The results returned contained city directories from the POLKS, MIGHTS and DIGITAL BUSINESS DIRECTORY.

The neighbouring properties are listed as primarily commercial and industrial property uses. Noteworthy businesses in the neighbouring properties within the Phase One Study Area are listed below.

Noteworthy Findings from City Directory Search (Surrounding Properties)

Address (Approximate Distance & Direction from Phase One Property)	Occupant and Year of Occupation	Potential Environmental Impact
	Occupant	
580 Argus Road (Phase One Property)	Auto Service Centre (1991) Jet Auto CTR (1996) Power Spray (1975)	Possibly, as auto service operations historically existed on-site at the Phase One Property.
185&187 Cross Avenue (Phase One Property)	Dry Cleaners (1991-2001) Car Wash (1991-2001, 2012) Tannery- Kendall Jas R Leather Co Ltd (1965)	Possibly, as dry-cleaning and Tannery operations historically existed on-site at the Phase One Property.
570 Argus Road (Immediately adjacent east)	All Fix Automotive (2012,2017, 2021) Ace Automotive (2001) Argus Automotive (1996)	Possibly, as this property historically and currently is used as automotive garage and located immediately adjacent to the east of Phase One Property
586 Argus Road (Immediately adjacent to the north and up-gradient)	Dionex/Dionez Canada Ltd(1996,20001)	Possibly, as this property historically used as equipment and supplies manufacturing and located at immediately adjacent to the north and up-gradient of Phase One Property
165 Cross Avenue (Immediate west and downgradient)	Instant Imprints Canada Inc (2017,2021)	Unlikely, as this property is located downgradient of the Phase One Property.
587Argus Road (Approximately 20 m northeast and upgradient)	Associated Printing Services (1971-1981) Printing Shop (1985)	Possibly, as this property historically and currently used as printing services and located at up-gradient of Phase One Property
214 Cross Avenue (approximately 120 m south and downgradient)	Gateway Oakville GO (2012-2021) Canadian National Railway (1965)	Unlikely, as this property is located downgradient and a significant distance away from the Phase One Property.

The City Directory search reviewed is presented in Appendix F.

3.1.7 Environmental Reports

No previous environmental reports were provided to Azure for review at the time of writing this Phase One ESA report.

3.1.8 Regulatory Requests – Technical Standards and Safety Authority (TSSA)

The TSSA is the provincial bureau that is responsible for the safety inspection of fuels, pressure vessels and boilers, upholstered and stuffed articles and elevating and amusement devices in Ontario since approximately 1987.

The representative of TSSA was contacted pertaining to any records of fuel storage at the Phase One Property or within the adjacent/immediate neighbouring properties. Below are the addresses we have requested searching for fuel storage tanks:

List of Phase One Property and Surrounding Property Addresses Requested for Tank Record Search

Address	City	Tank Record(s) Found (Yes or No)
177 Cross Avenue, Oakville, ON L6J2W7	Oakville	No
185 Cross Avenue, Oakville, ON L6J2W7	Oakville	No
187 Cross Avenue, Oakville, ON L6J2W7	Oakville	No
165 Cross Avenue, Oakville, ON L6J2W7	Oakville	No
580 Argus Road, Oakville, ON L6J3J3	Oakville	No
586 Argus Road, Oakville, ON L6J3J3	Oakville	No
590 Argus Road, Oakville, ON L6J3J3	Oakville	No
589 Argus Road, Oakville, ON L6J3J3	Oakville	No
581 Argus Road, Oakville, ON L6J3J3	Oakville	No
568 Argus Road, Oakville, ON L6J3J3	Oakville	No

Based on the TSSA response email on June 7, 2023, no records regarding fuel storage tanks and related facilities were found in relation to the property located at 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville, Ontario. The TSSA response in included in Appendix G.

3.1.9 Regulatory Requests – MECP

A request was submitted to the MECP Freedom of Information office for information they held associated with environmental orders and spills pertaining to the Phase One Property.

MECP Freedom of Information office sent a Record Release Letter, dated October 4, 2023, includes a copy of the records related to the FOI request concerning Phase One Property. The records did not indicate any significant concerns related to the findings at the Phase One Property

A copy of the FOI request is included as a Regulatory Document in Appendix G.

3.2 Environmental Source Information

3.2.1 Environmental Risk Information Service (ERIS) Report

ERIS is a private organization that maintains various risk and historical databases pertaining to properties throughout Canada. An ERIS report dated April 27, 2023, was reviewed and a copy of the report has been provided in the ERIS Report in Appendix H.

Noteworthy environmental items pertaining to the Phase One Property and the Phase One Study Area are presented below:

Summary of the ERIS Report findings

Location and Proximity relative to the Phase One Property	Summary	Database(s)	Potential Environmental Impact
Phase One Property			
(Phase One Property)	N/A	N/A	N/A
Surrounding Properties			
586 Argus Rd (Approximately 30 m west of the Phase One Property)	• DR. GREGORY A. SHAW was listed under Photo processing wastes generator number ON1806700 for 1993 to 2004.	GEN	Unlikely, as the property is of trans-gradient proximity to the Phase One Property and is also separated by road which acts as a hydraulic barrier.
165 Cross Ave (Approximately 25 m southwest of the Phase One Property)	• Dr. B. Kostovic Medical Professional Corporation was listed under specified inorganic waste generator number ON6125184 for 2022.	GEN	Unlikely, as the property is in down-gradient proximity to the Phase One Property.
581 Argus Rd (Approximately 50 m east of the Phase One Property)	• Adamson Properties Inc. was listed under Oil skimming and sludges waste generator number ON7415460 from 2014 • Argus Medical Centre was listed under Pathological/Pharmaceutical wastes generator number ON7527744 for 2013-2022.	GEN	Unlikely, as the property is distant, in trans-gradient proximity to the Phase One Property and separated by a road which acts as a hydraulic barrier.

Other ERIS databases were listed pertaining to the Phase One Property and neighbouring properties; however, they were located outside of the 250 m radius from the boundaries of the Phase One Property and/or did not pose an environmental concern. Due to the relative

distances or down-gradient locations of these properties from the Phase One Property, they are considered to be of low potential risk for environmental contamination to the Phase One Property.

A copy of the ERIS report for the Phase One Property is provided in Appendix H.

3.3 Physical Setting Sources

3.3.1 Topography, Hydrology, and Geology

The Natural Resource Canada Topographic Map was reviewed. The map indicates that the Phase One Property is decreasing in elevation, with the grade descending gradually in the south/southwest direction towards Ontario Lake. The inferred groundwater flow is estimated to be south towards Ontario Lake (Approximately 2.7 km south). A copy of the topographic map is included as Figure No. 5 in Appendix A.

Bedrock Geology: According to The Ontario Geologic Survey Earth Database shows that the uppermost bedrock unit at the Site consists of shale of the Queenston Formation (OGS, 2023). The Queenston Formation is Upper Ordovician in age and is characterized by a red-coloured shale material. This formation outcrops below the Niagara Escarpment from Niagara Falls to Cabot Head on the Bruce Peninsula.

A review of the surface geology map of the general area of the Phase One Property reveals that the Phase One Property consists of clay to silt-textured till (derived from glaciolacustrine deposits or shale).

3.3.2 Water Bodies and Areas of Natural Significance

The Schedule H – Source Protection Information Atlas by the MECP (accessed online) was reviewed. The map indicates that the Phase One Property and the Phase One Study Area are not within any well-head protection area. However, the Phase One property was identified to be in a Highly Vulnerable Aquifer (HVA), as confirmed by the Halton Region.

The Ministry of Natural Resource and Forestry website was accessed online. The Natural Heritage Areas map reveals that no Provincially Significant Wetland (PSW) is located at the Phase One Property or within the Phase One Study Area. The map showing the Natural Heritage Area and is included in Figure No. 6 in Appendix A.

Therefore, based on the observation mentioned above, the Phase One Property is not considered to be environmentally sensitive.

3.3.3 Well Records

Based on the review of the ERIS report and the Ontario Map of Well Records, four (4) water wells were identified at the Phase One Property.

4.0 INTERVIEWS

An interview questionnaire was completed by Mr. Calvin McCourt. He has reportedly been involved with the Phase One Property for 2 years. He indicated that the main use of the Phase One Property is for commercial purposes. Mr. McCourt was not aware of the presence of any underground/aboveground storage tanks, spills, leaks, or hazardous materials activities, specific chemicals stored on-site, previous environmental assessments completed, dumping of hazardous substances such as petroleum products, automotive parts, identified waste materials, chemical substances, etc. or other environmental issues at the Phase One Property.

A copy of the interview questionnaire is presented in Appendix I.

5.0 SITE RECONNAISSANCE

The Phase One ESA site reconnaissance was conducted on April 10, 2023, by Mr. Amit Pal. The weather was overcast, and the ambient temperature was approximately 17°C. The length of time spent conducting the Site reconnaissance was approximately 2 hours.

Azure was permitted to access and assess the entire area of the Phase One Property, as well as all exterior areas of the associated immediately adjacent properties to the Phase One Property during the site reconnaissance.

The Phase One Property and readily visible and publicly accessible portions of the adjacent properties were examined for the presence and identification of PCAs and/or APECs associated with the Phase One Property during the site reconnaissance.

Selected photographs of the Phase One Property are included in Appendix J.

5.1 The Phase One Property

5.1.1 Phase One Property Description

The Phase One Property is located in a primarily commercial area within the Town of Oakville. The Town of Oakville Zoning By-law 2014-014 was reviewed, the maps indicate that Phase One Property is designed as part of one zone: MTC - Midtown Transitional Commercial zone. The neighbouring properties surrounding the Phase One Property are also represented as MTC - Midtown Transitional Commercial zone as well as RH, RL5-0 and RM4 - Residential High, Residential Low and Residential Medium zone.

The map showing the Zoning and is included in Figure No. 3 in Appendix A.

5.1.2 Phase One Property Structure

A site location map, neighbouring land uses, a site plan and associated Phase One Conceptual Site Model (CSM) are included in Appendix A of this report as Drawing Nos. 1, 2, and 7 respectively. The aerial photographs are included in Appendix E. A Plan of Survey is included in Appendix B.

5.1.3 Underground Storage Tank

No underground storage tank or evidence suggesting any underground storage tank was observed or reported on-site.

5.1.4 Above-ground Storage Tank

No aboveground storage tank or evidence suggesting any underground storage tank was observed or reported on-site.

5.1.5 Fill Material

During the site reconnaissance, fill material was not observed of the Phase One Property.

5.1.6 Stressed Vegetation

No stressed vegetation was observed or reported at the Phase One Property during the site visit.

5.1.7 Water Bodies and Water Wells

No monitoring wells were observed on the Phase One Property (where visible), during the site reconnaissance. However, four (4) water wells were addressed in the ERIS report in the Phase One Property.

The nearest water body is the Ontario Lake, located approximately 2.7 km south of the Phase One Property.

5.1.8 Air Discharges

No air discharges were observed or reported on the Phase One Property or within the Phase One Study Area.

5.1.9 Polychlorinated Biphenyls (PCBs)

PCBs were commonly used historically in electrical equipment such as transformers, fluorescent lamp ballasts, and capacitors. The regulations in 1977 and 1980 prohibited new equipment and transformer were established.

No suspect PCB containing materials were observed at the Phase One Property.

5.1.10 Asbestos-Containing Materials (ACMs)

ACMs are friable and non-friable silicates that were commonly used in building materials. Friable asbestos generally present in pipe and boiler insulation, while non-friable asbestos generally present in roofing material, floor and ceiling tiles, and cement as insulator. ACMs were used in building materials until early 1980s.

ACMs are defined as a designated substance under the Ontario Occupational Health and Safety Act (OHSA), and any worker must be notified of the present of ACMs if such material is present in their workplace.

No suspect friable and non-friable ACMs were observed at the Phase One Property.

5.1.11 Urea Formaldehyde Foam Insulation (UFFI)

UFFI was used as thermal insulation between 1970 and 1980. The use of UFFI ceased in 1980 when the use of it was banned under the federal Hazardous Products Act. UFFI is considered to be a special attention substance due to their ability of releasing formaldehyde gas when it is exposed to water or moisture.

No suspect UFFI were observed at the Phase One Property.

5.1.12 Lead

Lead was commonly used to build plumbing solder and pipes and a common particle found in paint. Paint that was produced prior to 1950 might contain a higher level of lead. Once it deteriorated, it could become airborne and enter a human body via ingestion or inhalation.

No suspect lead containing materials were observed at the Phase One Property. The assessment of lead is beyond the scope of this Phase One ESA.

5.1.13 Ozone Depleting Substances (ODSs)

ODSs were commonly used as coolant prior to 1997 due to an effort to eliminate greenhouse gas emission. The use of certain existing machinery or device containing ODSs could still be used but must be serviced by a contractor licensed to handle ODSs in order to prevent release to the atmosphere.

No equipment or devices potentially containing ODSs were observed at the Phase One Property.

5.1.14 Radon Gas

Radon gas is a decay by-product from uranium and thorium. It is a radioactive, colourless, odourless, and tasteless noble gas. Radon gas can migrate into buildings through soil vapour and accumulate in poorly ventilated area.

Radon gas was not assessed as part of this assessment and is beyond the scope of this investigation.

5.1.15 Mould

Mould is a fungus that grows naturally in the atmosphere. However, when it is accumulated in high concentration, it could become toxic to human.

No mould growth was observed or reported at the Phase One Property at the time of the Site Reconnaissance.

5.1.16 Waste Materials

There was no evidence of waste materials/associated disposal present at the Phase One Property.

5.1.17 Spill and Stain Areas

At the time of the site reconnaissance, no obvious visual evidence of staining or spills was observed (where visible) on the Phase One Property.

5.1.18 Wastewater Discharges

No wastewater discharges were observed or reported on the Phase One Property.

5.1.19 Air Discharges

No air discharges were observed or reported on the Phase One Property.

5.2 Neighbouring Properties

At the time of the Site Reconnaissance, commercial use properties were present along Argus Road and Cross Avenue.

6.0 SUMMARY OF FINDINGS

The Phase One ESA reviews a number of environmental databases, historical records, and information gathered from interviews and site reconnaissance. Based on information gathered and observations made, the Phase One ESA has revealed the following Potentially Contaminating Activities at the Phase One Property and within the surrounding area:

Potentially Contaminating Activities (PCAs) on the Phase One Property and within the Phase One Study Area

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
1-9	Phase One Property	1. Potential fill materials of unknown quality may be present at the Phase One Property which were likely imported during the property's development since the late 1940s (approximately).	30. Importation of Fill Material of Unknown Quality	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, pH
		2. Historical auto service garage at the former structure in the northeastern portion of the Phase One Property, close to the present 580 Argus structure.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs
		3. Historical carwash in the northeast portion of the Phase One Property (1967 FIPs), at the former structure in the northeastern portion of the Phase One Property, close to the present 580 Argus structure	Other- Former Carwash	Soil: PHCs, BTEX, VOCs
		4. Historical use as Tannery, from the early 1950s to mid-1980s, at the former structure in the southwestern portion of the Phase One Property close to the present 177 Cross structure.	53. Tannery	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs
		5. Historical warehouse and trailer repair operation from the early 1950s to the mid-1980s, at the former structure in the southwestern portion of the Phase One Property close to the present 177 Cross Avenue	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
		structure.	transportation systems.	
		6. Historical Dry Cleaning depot from 1991 to 2001 at the southeastern portion of the Phase One Property. At present 187 Cross Avenue.	37. Operation of Dry Cleaning Equipment where Chemicals are Used	PHCs, BTEX, VOCs
		7. Current presence of Transformer at the northeastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	Soil: PHCs, PCBs
		8. Current presence of Transformer at the eastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	Soil: PHCs, PCBs
		9. Public Parking of Civilian Vehicles at the portion of the Phase One Property utilized for vehicle parking	N/A. Road Salt/De-Icing on Paved Surfaces	Soil: EC and SAR. However, these are determined not to be associated contaminants of potential concern due to the fact that such PCAs are exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons.
10-11	570 Argus Road (immediately adjacent east)	10. Existing auto garage from approximately 1996 indicated in the city directories.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs
		11. Historical printing, lithographing & metal fabrication operations were listed in the FIPs from 1967.	Other - Printing	PHCs, BTEX, VOCs
12	586 Argus Road (immediately adjacent to the north and up-gradient)	Historical professional equipment and supplies manufacturing (Dionex Canada Ltd.) from 1996 to 2001, listed in City directories.	19. Electronic and Computer equipment manufacturing	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
13	165 Cross Avenue (immediate west and trans-gradient)	Instant Imprints Canada Inc. was listed under Scott's manufacturing directory and city directories for commercial screen printing and sign manufacturing from 2017 to 2021	Other - Printing	PHCs, BTEX, VOCs
14	587-589 Argus Road (approximately 20 m northeast and upgradient)	Former printing operations under different business names at this property indicated in the city directory and FIPs from 1966 to 1985.	Other - Printing	PHCs, BTEX, VOCs
15	214 Cross Avenue (approximately 120 m south and downgradient)	Historical Canadian National Railway and presently Metrolinx GO station are operational since 1965	46. Rail Yards, Tracks and Spurs Other – Go Station	No COCs found due to significant distance between the Phase One Property and the PCA location and being downgradient of the Phase One Property

"TABLE OF AREAS OF POTENTIAL ENVIRONMENTAL CONCERN"

Refer to clause 16(2) (a), Schedule D, O. Reg. 153/04

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1 (Due to potential fill materials of unknown quality at the Phase One Property)	The Phase One Property	30. Importation of Fill Material of Unknown Quality	On-site	Metals, As, Sb, Se, Cr(VI), CN, Hg, B-HWS, PAHs, pH	Soil
APEC 2 (historical auto service garage in the northeast portion of the Phase One Property)	Northeastern portion of Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 3 (Historical carwash, in the northeast portion of the Phase One Property)	Northeastern portion of Phase One Property	Other- Former Carwash	On-site	Soil: PHCs, BTEX, VOCs	Soil
APEC 4 (Due to historical property use as a Tannery former Structure, at the southwestern portion of the Phase One Property)	Southwestern portion of the Phase One Property	53. Tannery	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs	Soil and Groundwater
APEC 5 (Due to historical property use as, warehouse and trailer repair operation at the southwestern portion of the Phase One Property)	Southwestern portion of the Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs	Soil and Groundwater
APEC 6 (Due to former Dry Cleaning depot at southeast portion of the Phase One Property)	Southeastern portion of the Phase One Property	37. Operation of Dry Cleaning Equipment where Chemicals are Used	On-Site	PHCs, BTEX,VOCs	Soil and Groundwater
APEC 7 (Due to the current presence of the Transformer at the northeastern portion of the Phase One Property)	northeastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	On-Site	PHCs, PCBs	Soil
APEC 8	Eastern	18. Electricity	On-Site	PHCs, PCBs	Soil

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
(Due to the current presence of the Transformer at the eastern portion of the Phase One Property)	portion of the Phase One Property	Generation, Transformation and Power Stations			
APEC 9 (Due to potential use of salt road at the paved areas of the Phase One Property in winter seasons)	Paved areas of the Phase One Property	N/A. Road Salt/de-Icing on Paved Surfaces	On-site	EC and SAR. However, these are determined not to be associated contaminants of potential concern due to the fact that such PCAs are exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons	Soil
APEC 10 (Due to an auto garage and historical printing, lithographing & metal fabrication operations, at 570 Argus Rd immediate east of the Phase One Property)	Eastern portion of the Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems Other - Printing	Off-Site	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs	Soil and Groundwater
APEC 11 (Due to Historical equipment and supplies manufacturing immediate north of Phase One Property)	Northern portion of the Phase One Property	19. Electronic and Computer equipment manufacturing	Off-site	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 12 (Due to commercial screen printing and sign manufacturing immediate west of Phase One Property)	Southwestern portion of the Phase One Property	Other - Printing	Off-Site	PHCs, BTEX, VOCs	Soil and Groundwater
APEC 13 (Former printing operations at 587-589 Argus Road approximately 20 m northeast of Phase One Property)	Northeastern portion of the Phase One Property	Other - Printing	Off-site	PHCs, BTEX, VOCs	Soil and Groundwater

The Phase One ESA reviewed available historical information, environmental databases, interviews of available site knowledgeable people and our site reconnaissance. Based on our review of the available historical and current information, the Phase One ESA has revealed that there is potential for adverse environmental impact to the Phase One Property.

7.0 CONCLUSIONS

7.1 Phase Two Environmental Site Assessment Recommendation

The following environmental records for the Phase One Property and Phase One Study Area were evaluated for environmental concerns outlined pertaining to the Phase One Property: Based on the Phase One ESA research, the following environmental concerns were evaluated and considered to be Contributing Potentially Contaminating Activities (PCAs) for the Phase One Property:

Potentially Contaminating Activities (PCAs) on the Phase One Property and within the Phase One Study Area

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
1-9	Phase One Property	1. Potential fill materials of unknown quality may be present at the Phase One	30. Importation of Fill Material of Unknown Quality	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, pH

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
		Property which were likely imported during the property's development since the late 1940s (approximately).		
		2. Historical auto service garage at the former structure in the northeastern portion of the Phase One Property, close to the present 580 Argus structure.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs
		3. Historical carwash in the northeast portion of the Phase One Property (1967 FIPs), at the former structure in the northeastern portion of the Phase One Property, close to the present 580 Argus structure.	Other- Former Carwash	Soil: PHCs, BTEX, VOCs
		4. Historical use as Tannery, from the early 1950s to mid-1980s, at the former structure in the southwestern portion of the Phase One Property close to the present 177 Cross structure.	53. Tannery	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs
		5. Historical warehouse and trailer repair operation from the early 1950s to the mid-1980s, at the former structure in the southwestern portion of the Phase One Property close to the present 177 Cross Avenue structure.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems.	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs
		6. Historical Dry Cleaning depot from 1991 to 2001 at the southeastern portion of the Phase One Property. At present 187 Cross Avenue.	37. Operation of Dry Cleaning Equipment where Chemicals are Used	PHCs, BTEX, VOCs
		7. Current presence of Transformer at the northeastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	Soil: PHCs, PCBs
		8. Current presence of Transformer at the eastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	Soil: PHCs, PCBs

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
		9. Public Parking of Civilian Vehicles at the portion of the Phase One Property utilized for vehicle parking	N/A. Road Salt/De-Icing on Paved Surfaces	Soil: EC and SAR. However, these are determined not to be associated contaminants of potential concern due to the fact that such PCAs are exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons.
10-11	570 Argus Road (immediately adjacent east)	10. Existing auto garage from approximately 1996 indicated in the city directories.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs
		11. Historical printing, lithographing & metal fabrication operations were listed in the FIPs from 1967.	Other - Printing	PHCs, BTEX, VOCs
12	586 Argus Road (immediately adjacent to the north and up-gradient)	Historical professional equipment and supplies manufacturing (Dionex Canada Ltd.) from 1996 to 2001, listed in City directories.	19. Electronic and Computer equipment manufacturing	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs
13	165 Cross Avenue (immediate west and trans-gradient)	Instant Imprints Canada Inc. was listed under Scott's manufacturing directory and city directories for commercial screen printing and sign manufacturing from 2017 to 2021	Other - Printing	PHCs, BTEX, VOCs
14	587-589 Argus Road (approximately 20 m northeast and upgradient)	Former printing operations under different business names at this property indicated in the city directory and FIPs from 1966 to 1985.	Other - Printing	PHCs, BTEX, VOCs
15	214 Cross Avenue (approximately 120 m south and downgradient)	Historical Canadian National Railway and presently Metrolinx GO station are operational since 1965	46. Rail Yards, Tracks and Spurs Other – Go Station	No COCs found due to significant distance between the Phase One Property and the PCA location and being downgradient of the Phase

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
				One Property

"TABLE OF AREAS OF POTENTIAL ENVIRONMENTAL CONCERN"
Refer to clause 16(2) (a), Schedule D, O. Reg. 153/04

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1 (Due to potential fill materials of unknown quality at the Phase One Property)	The Phase One Property	30. Importation of Fill Material of Unknown Quality	On-site	Metals, As, Sb, Se, Cr(VI), CN, Hg, B-HWS, PAHs, pH	Soil
APEC 2 (historical auto service garage in the northeast portion of the Phase One Property)	Northeastern portion of Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater
APEC 3 (Historical carwash, in the northeast portion of the Phase One Property)	Northeastern portion of Phase One Property	Other- Former Carwash	On-site	Soil: PHCs, BTEX, VOCs	Soil
APEC 4 (Due to historical property use as a Tannery	Southwestern portion of the Phase One Property	53. Tannery	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX,	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
former Structure, at the southwestern portion of the Phase One Property)				VOCs, PAHs	
APEC 5 (Due to historical property use as, warehouse and trailer repair operation at the southwestern portion of the Phase One Property)	Southwestern portion of the Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs	Soil and Groundwater
APEC 6 (Due to former Dry Cleaning depot at southeast portion of the Phase One Property)	Southeastern portion of the Phase One Property	37. Operation of Dry Cleaning Equipment where Chemicals are Used	On-Site	PHCs, BTEX, VOCs	Soil and Groundwater
APEC 7 (Due to the current presence of the Transformer at the northeastern portion of the Phase One Property)	northeastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	On-Site	PHCs, PCBs	Soil
APEC 8 (Due to the current presence of the Transformer at the eastern portion of the Phase One Property)	Eastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	On-Site	PHCs, PCBs	Soil
APEC 9 (Due to potential use of salt road at the paved		N/A. Road Salt/de-Icing		EC and SAR, However, these are determined not to be associated contaminants of potential concern due to the fact that such PCAs are	

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
areas of the Phase One Property in winter seasons)	Paved areas of the Phase One Property	on Paved Surfaces	On-site	exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons	Soil
APEC 10 (Due to an auto garage and historical printing, lithographing & metal fabrication operations, at 570 Argus Rd immediate east of the Phase One Property)	Eastern portion of the Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems Other - Printing	Off-Site	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs	Soil and Groundwater
APEC 11 (Due to Historical equipment and supplies manufacturing immediate north of Phase One Property)	Northern portion of the Phase One Property	19. Electronic and Computer equipment manufacturing	Off-site	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater
APEC 12 (Due to commercial screen printing and sign manufacturing immediate west of Phase One Property)	Southwestern portion of the Phase One Property	Other - Printing	Off-Site	PHCs, BTEX, VOCs	Soil and Groundwater
APEC 13 (Former printing operations at 587-589 Argus Road approximately 20 m northeast of Phase One Property)	Northeastern portion of the Phase One Property	Other - Printing	Off-site	PHCs, BTEX, VOCs	Soil and Groundwater

Based on the above noted environmental concerns, a Phase Two Environmental Site Assessment is recommended to assess the Phase One Property.

7.2 Record of Site Condition Requirements

Based on the nature of the current land use and proposed future development (i.e. residential) a Record of Site Condition (RSC) is required to be filed.

8.0 QUALIFICATIONS OF ASSESSOR

The Phase One ESA was reviewed by Mr. Ahmed Al-Temimi, M.Sc., P.Eng. Mr. Al-Temimi is a professional engineer licensed to practice in Ontario. Mr. Al-Temimi also registered as a qualified person (QP) under the Ministry of Environment and Climate Change (MOECC). Mr. Al-Temimi has conducted thousands of site assessments including Phase One and Two ESAs, soil and groundwater remediation projects in consulting and contracting environment at commercial, industrial, and residential sites for various governmental, financial, industrial, commercial, real estate, and legal clients (i.e., City of Mississauga, City of Brampton, Regional Municipality of York, Real Estate Limited, Loblaws, CIBC, 20VIC Management Inc., and Morguard Investments Limited).

Below is a short list of Mr. Al-Temimi completed projects:

- Conducted hundreds of Phase One ESAs for a variety of residential, commercial, industrial, farmlands properties and Government facilities (i.e. Municipal, Provincial and Federal facilities).
- Managed the day-to-day operations for numerous Phase Two ESAs including a two-year contract with the Regional Municipality of York which include drilling hundreds of boreholes and monitoring wells that included managing concurrent field teams, driller coordination, and management of laboratory submissions. The work plan included drilling on the right-of-way and coordinating the use of traffic control and police services. The field program involved collecting soil and groundwater samples for PHCs, BTEX or VOCs, PAHs and metals and/or inorganic parameters;
- Lead Manager on a large industrial development project in Caledon, involving more than 50 boreholes drilled and 30 monitoring wells installed for groundwater study and contamination abatement. Additionally, 12 domestic water wells were installed to supply water at this development. The project was successfully completed in less than 2 months and was under the original budget by nearly 20%;
- Group Manager, Phase III Environmental Site Remediation (soil and groundwater) at more than 50 petroleum and tetrachloroethylene contaminated sites including excavation and disposal, bio-venting, vapour extraction, bio-slurping, bioremediation (in-situ/ex-situ), and soil management, for private, governmental and industrial/financial institutions;
- Manager and lead field assessor on more than 30 underground storage tank removal activities from many sites in the Greater Toronto Area, including Volkswagen at Dixie and 401 in Mississauga, a commercial building in Toronto and a proposed

residential development in Georgetown;

- Conducted Hydrogeological Assessment and Groundwater Studies during the installation of underground services to ensure that the excavation would not affect the potable groundwater table for the surrounding properties. In addition, performed Single Well Response Tests (Slug tests) at monitoring wells in order to estimate the hydraulic conductivity (K) of the aquifer (water bearing strata);
- Managed numerous Indoor Air Quality Assessments (IAQ) for retail and commercial office buildings. The IAQ assessments were predominately conducted for due diligence purposes and also to determine the source of building occupants complaints;
- Supervised Asbestos Containing Material (ACM) assessments and abatement for most of the under developments residential, commercial and industrial projects located in Ontario, in which we were requested to assess and abate on-site ACM, where we utilized other consulting firm's database/information to update all required information and applied improvements for easement of understanding/responsive procedures etc;
- Project Manager/Site Supervisor for many projects to conduct the destructive and non-destructive mould assessments;
- Conducted detailed designated substance survey's (DSS) for land developers in order to facilitate the renovation / demolition and rebuild commercial buildings and plazas activities;

The conclusions as presented represent the best judgment of the inspector based on the visual observations of the accessible property elements of the Site and adjacent properties observed during the Phase One ESA investigation program. Should additional information become available, Azure Group Inc. requests that this information be brought to our attention so that we may reassess the conclusions presented herein.

Respectfully Submitted,

AZURE GROUP

Ehsan Momeni, M.Eng.
Project Scientist
Ehsan@azuregroup.ca

Ahmed Al-Temimi, M.Sc., P.Eng., QP(ESA)
Ontario Designated Consulting Engineer
aaltemimi@azuregroup.ca

9.0 REFERENCES

1. Environmental Protection Act (EPA). Part VII of Ontario Regulation 511/09. The Ontario Ministry of the Environment and Climate Change (MOECC) (2009).
2. Bedrock Geology of Ontario, Ontario Geological Survey, published in 2011.
3. Surficial Geology of Southern Ontario, Ontario Geological Survey, published in 2010.
4. ERIS Environmental Risk Information Services.
5. LGI Copy Service City Directories.
6. 1880 Map of Ontario Counties, Halton County. The Canadian County Atlas Digital Project.
7. Toporama Map, Ministry of Natural Resource and Forestry.
8. Town of Oakville Interactive Mapping – Aerial Photographs (accessed online).
9. Toronto Public Library Archives Database (accessed online).
10. OPTA Information Intelligence, 2021 (accessed online).
11. Google Earth Pro 2024.
12. Town of Oakville Zoning By-law 016-2014, 2009-189 and 1984-63
13. Source Protection information Atlas by the Ministry of the Environment, Conservation and Parks (accessed online).
14. Natural Heritage Areas by the Ministry of Natural Resources and Forestry (accessed online).

10.0 LIMITATIONS

This report was prepared by Azure Group Inc. (Azure) for the account of Alliance United Corporation (The Client) and for review by its designated agents and financial institutions and government agencies. The material in it reflects the judgement of Mr. Ahmed Al-Temimi, M.Sc., P.Eng. $QP_{(ESA)}$, in light of the information available to it at the time of preparation.

The report may not be relied upon by any other person or entity without the express written consent of Azure and the Client. Any use that a third party makes of this report, or any reliance on decisions made based on it, is the responsibility of such third parties. Azure accepts no responsibility for damages, if any, suffered by any party as a result of decisions made or actions based on this report.

One must understand that the mandate of Azure is to obtain readily available past and present information pertinent to the subject site for a Phase One Environmental Site Assessment only. No other warranty or representation expressed or implied, as to the accuracy of the information is included or intended by this assessment. Site conditions, environmental or otherwise, are not static and this report documents site conditions observed at the time of the site reconnaissance. Azure makes no other representation whatsoever, including those concerning the legal significance of its findings or as to the other legal matters addressed incidentally in this report, including but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation. These interpretations may change over time; thus, the Client should review such issues with appropriate legal counsel.

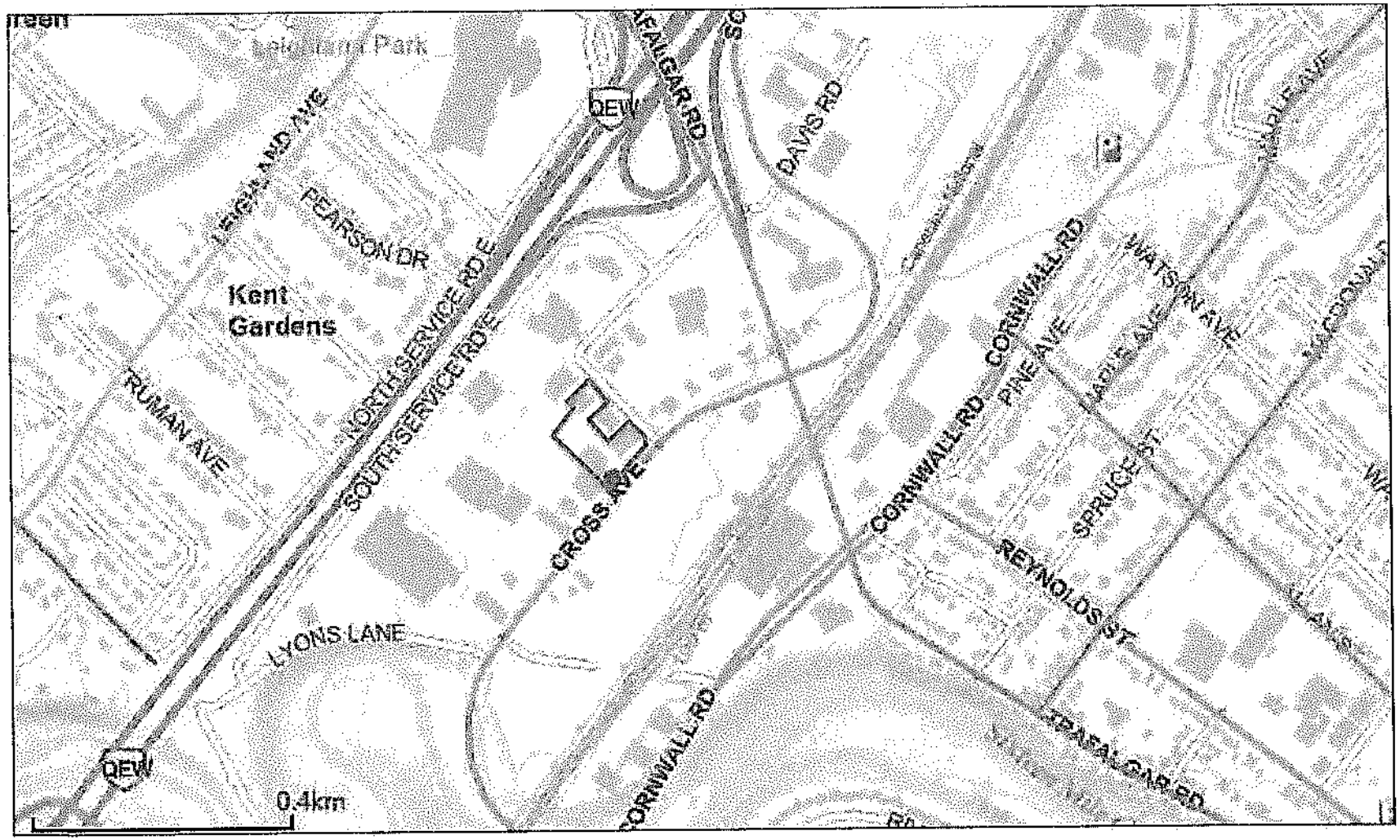
It should be noted that the information supplied in this report is not sufficient to obtain approval for disposal of excess soil or materials generated during construction. An environmental site characterization is a limited sampling of a site. Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, Azure in certain instances has been required to assume that this information provided is accurate. Due to the nature of the investigation and the limited data available, Azure cannot warrant against undiscovered environmental liabilities. No other warranty or representation, either expressed or implied, is included or intended in this report.

© Azure Group Inc. • 2024

APPENDIX A

FIGURES

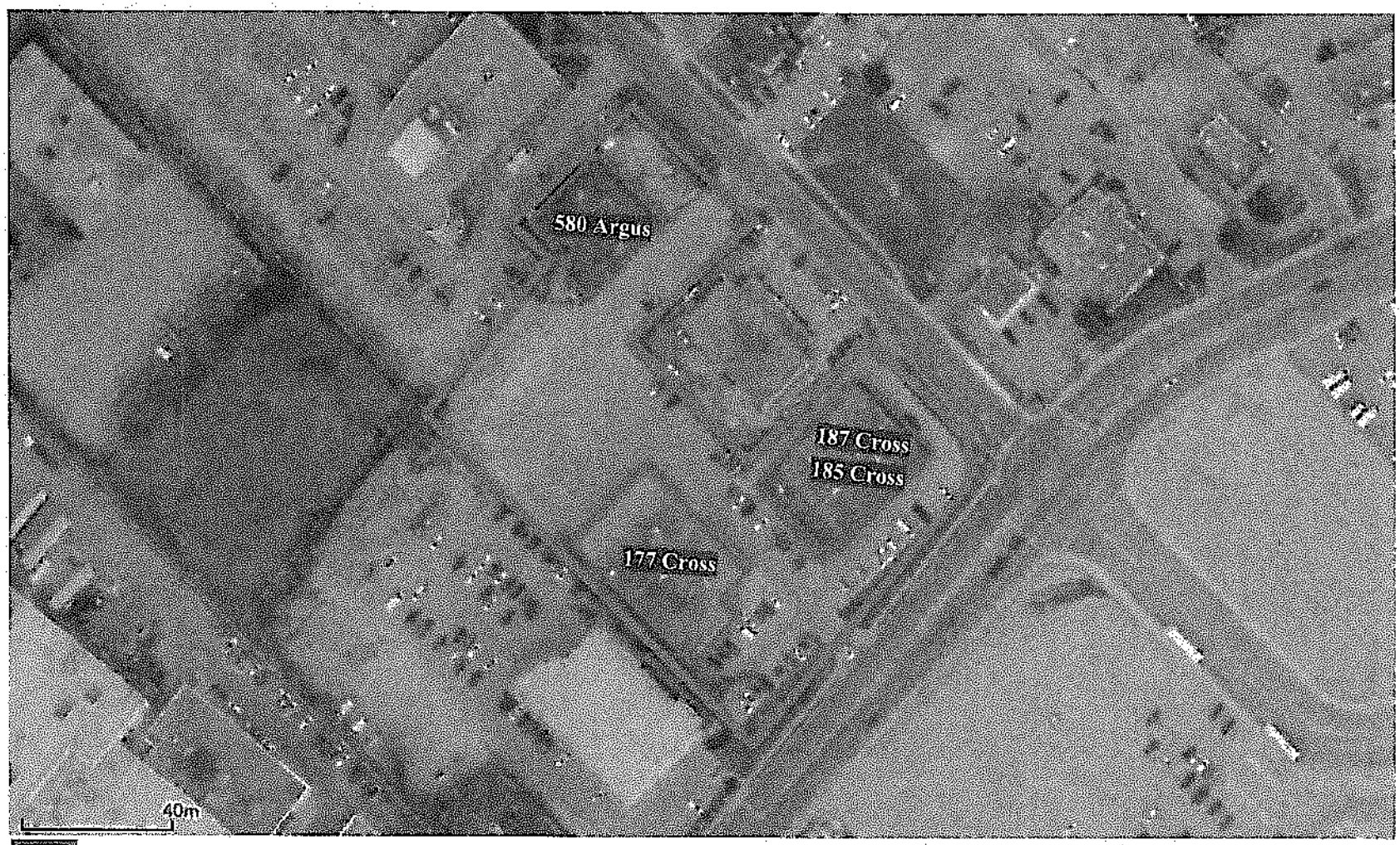
© Azure Group Inc. • 2024



Approximate Location of Phase One Property

Source: Town of Oakville Interactive Maps

Title	Project	Project No.	Scale	Date	Figure No.
Site Location Plan	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As Shown	April, 2023	1

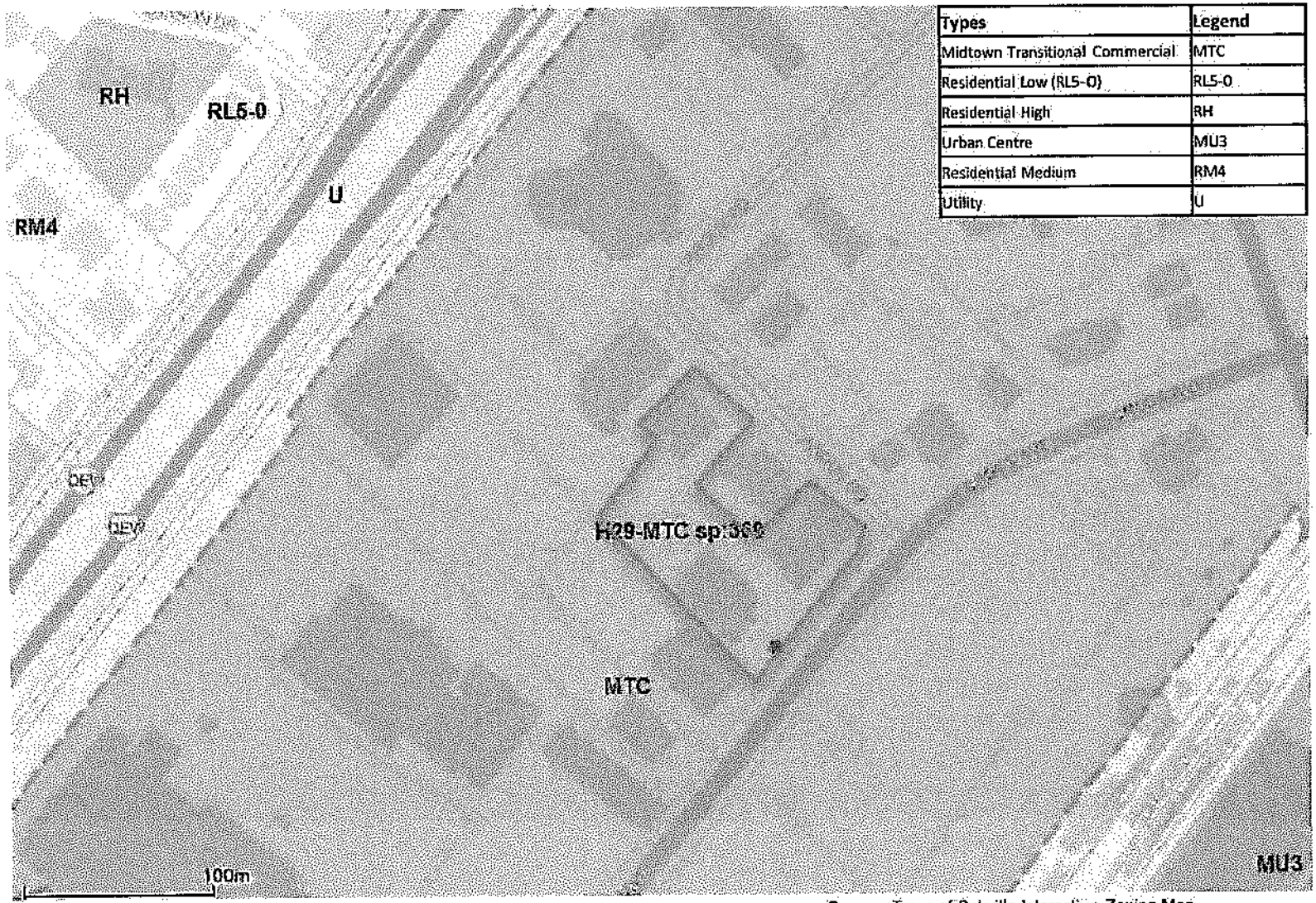


Approximate Location of Phase One Property

Approximate Location of Existing Buildings

Source: Town of Oakville Interactive Maps

Title	Project	Project No.	Scale	Date	Figure No.
Phase One Property Location Plan	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As Shown	April, 2023	2

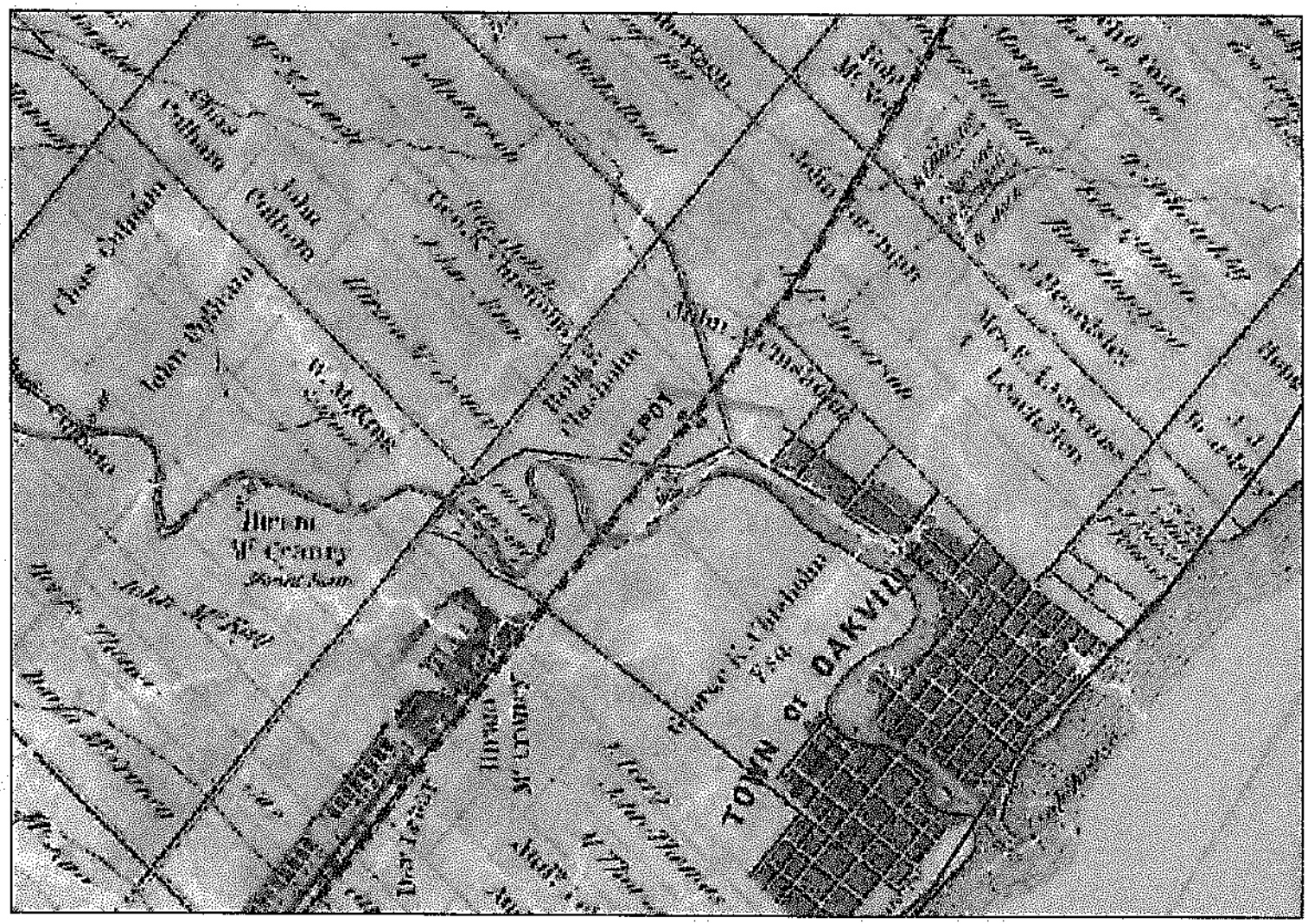


Types	Legend
Midtown Transitional Commercial	MTC
Residential Low (RL5-0)	RL5-0
Residential High	RH
Urban Centre	MU3
Residential Medium	RM4
Utility	U

Approximate Location of Phase One Property

Source: Town of Oakville Interactive Zoning Map
© Town of Oakville Zoning By-laws 2014-014, 2009-189 and 1984-63.

Title	Project	Project No.	Scale	Date	Figure No.
Zoning Map	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As Shown	April, 2023	3



Approximate Location of Phase One Property

Source: Ontario Historical County Maps
© 1858 County of Trafalgar – Town of Oakville

Title	Project	Project No.	Scale	Date	Figure No.
Historical Map	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	NTS	April, 2023	4



Grand Water Flow Direction

Approximate Location of Phase One Property

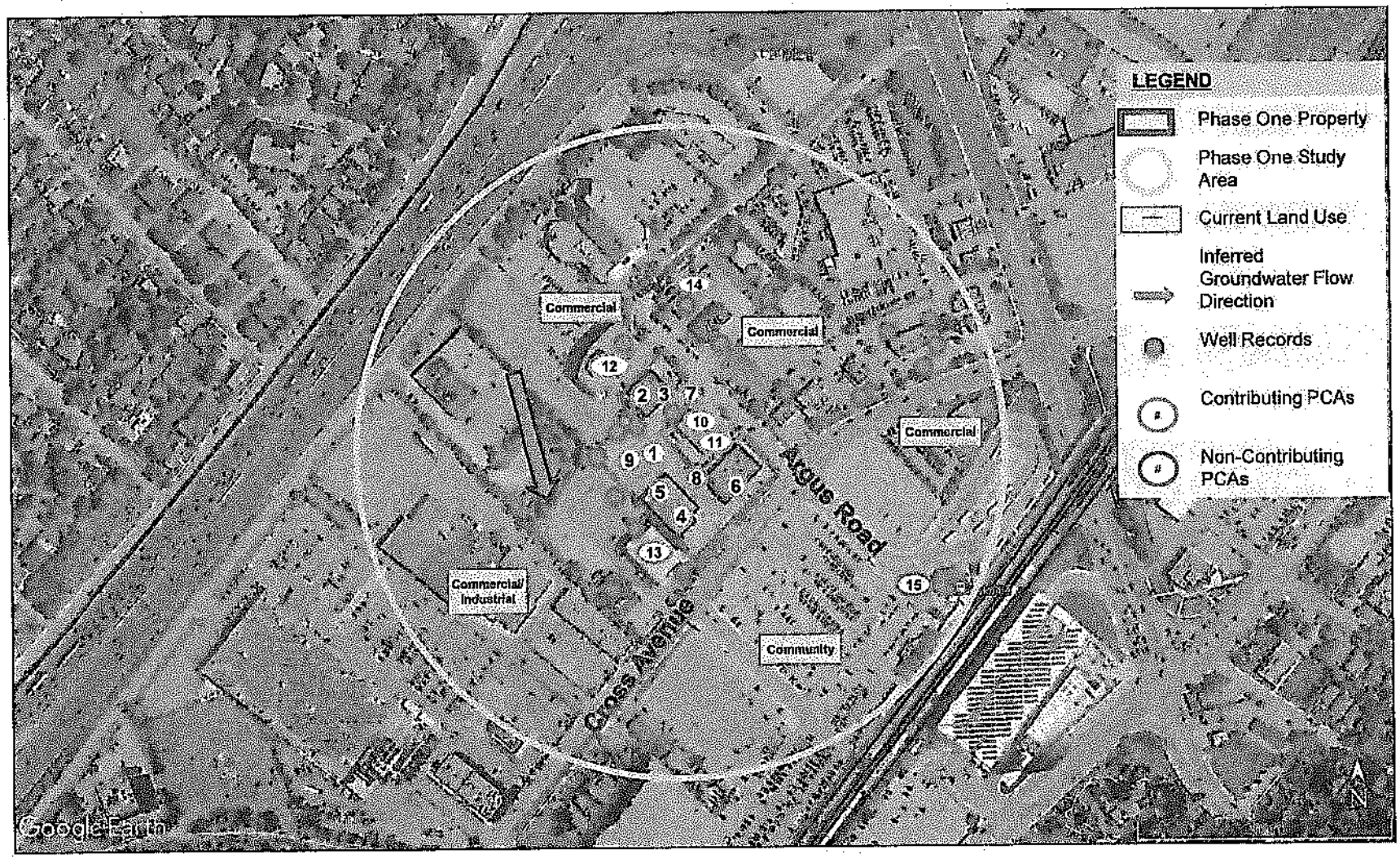
Title	Project	Project No.	Scale	Date	Figure No.
Topographic Map	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As Shown	April, 2023	5



Approximate Location of Phase One Property

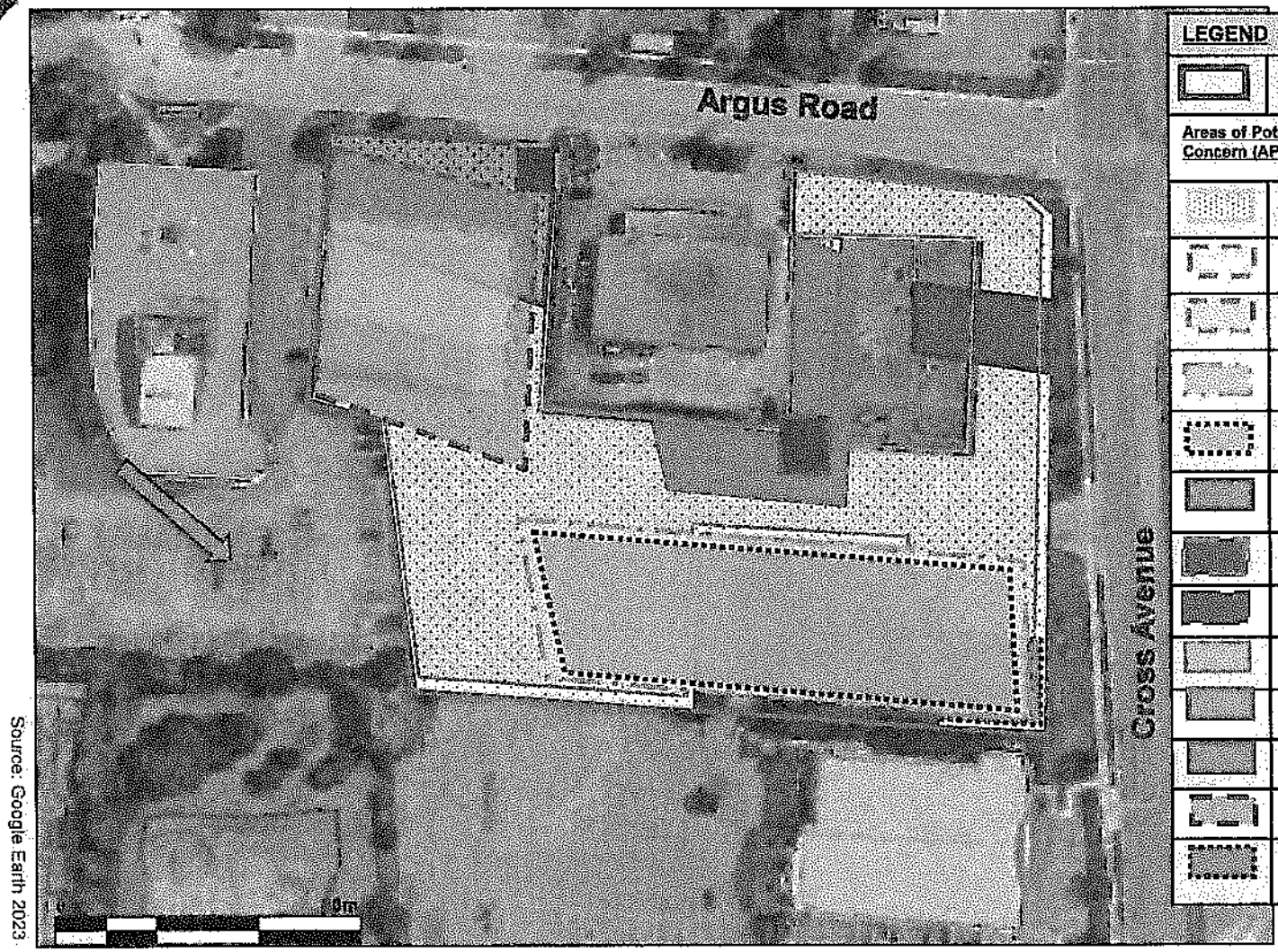
Source: Make a Topographic Map Ontario
© Ministry of Natural Resources and Forestry

Title	Project	Project No.	Scale	Date	Figure No.
Natural Heritage Map	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As drawn	April, 2023	6



Source: Google Earth Pro
© 2023 Google Earth

Title	Project	Project No.	Scale	Date	Figure No.
Phase One Conceptual Site Model	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As Shown	April, 2023	7

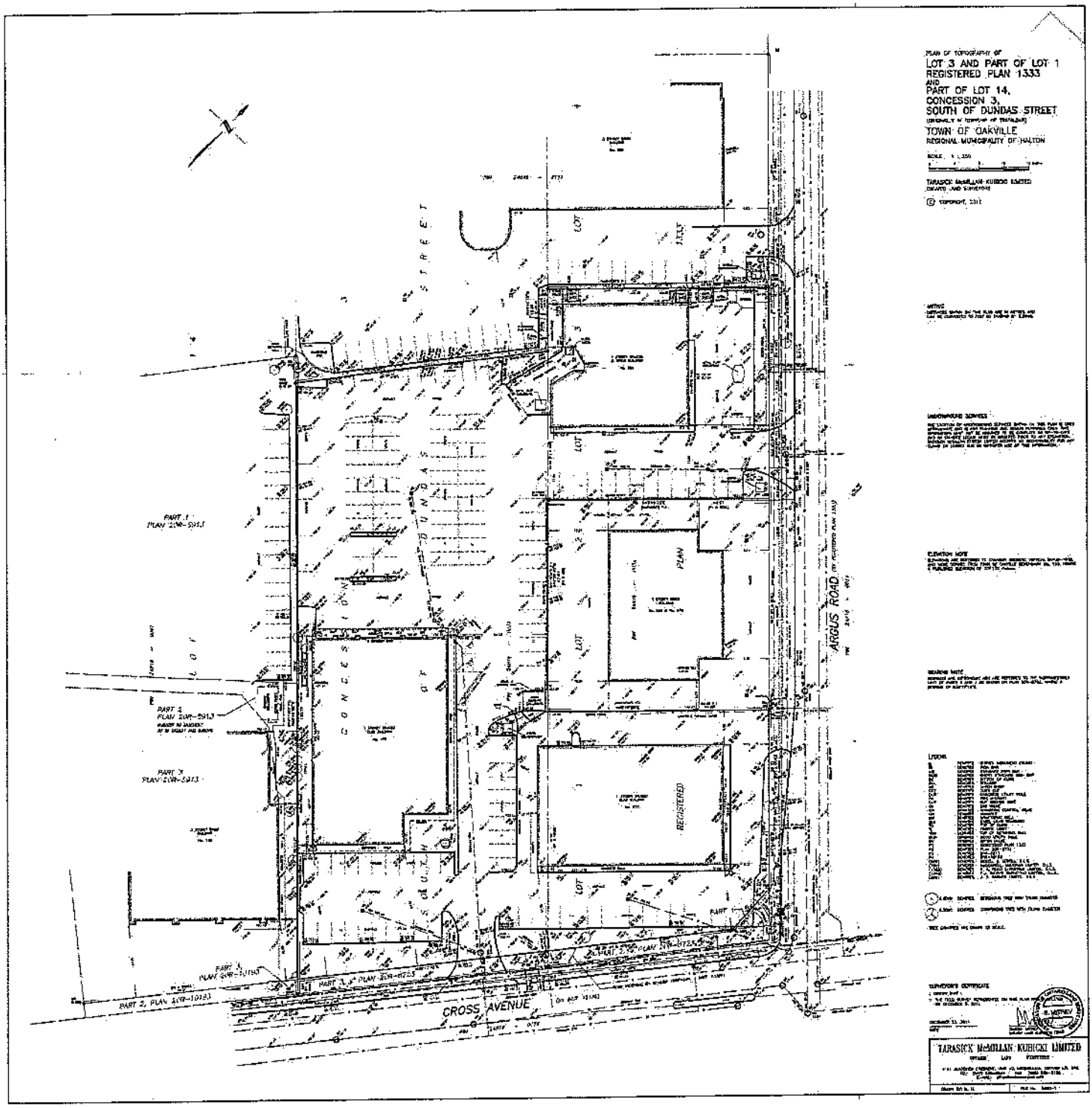


Title	Project	Project No.	Scale	Date	Figure No.
Location of APECs	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003		April, 2023	8

APPENDIX B

PLAN OF SURVEY

© Azure Group Inc. • 2024


PLAN OF TOPOGRAPHY OF
LOT 3 AND PART OF LOT 1
REGISTERED PLAN 1333
AND
PART OF LOT 14,
CONCESSION 3,
SOUTH OF DUNDAS STREET
TOWN OF OAKVILLE
REGIONAL MUNICIPALITY OF HALTON
TARASICK McMILLAN KUBICKI LIMITED
© COPYRIGHT, 2011
DUNDAS STREET
ARGUS ROAD
CROSS AVENUE
CONCESSION
REGISTERED
PLAN
LOT
PART 1
PLAN 20R-5913
PART 2
PLAN 20R-5913
PART 3
PLAN 20R-5913
PART 4
PLAN 20R-5913
PART 2, PLAN 20R-10333
SURVEYOR'S CERTIFICATE
TARASICK McMILLAN KUBICKI LIMITED

APPENDIX C

Current and Past Use Table

© Azure Group Inc. • 2024

"Table of current and past uses of the phase one property"
(Refer to clause 16(2)(b), Schedule D, O.Reg. 153/04)

177, 185 & 187 Cross Avenue, and 580 Argus Road, Oakville PIN: 24816-0031 (LT)

Year	Name of owner	Description of property use	Property use	Other observations from aerial photographs, fire insurance plans, etc
Part of Lot 14, Concession 3, South of Dundas Street, Township of Trafalgar				
Prior to 1831	Crown	Undeveloped	Agricultural or Other use	The Phase One Property is part of Lot 14, Concession 3, South of Dundas Street granted to William Chisholm in 1831.
1831 – 1866	William Chisholm			
1866 – 1871	John Cross			Based on the historical aerial photographs, historical county maps, and fire insurances maps, the RSC Property appears to be part of undeveloped land.
1871 – 1883	William Wardall			
1883 – 1907	John Cross			
1907 – 1921	Charles Cross			
1921 – 1921	Walter Ward Price			
1921 – 1946	Edith Mary Paqt, Spinister Marion, Elizabeth Paqt, Spinister Robert, Harold Paqt, Rosa Paqt, William Paqt			
1946 – 1948	James Locke			
1948 – 1950	James Kendall			
1950 – 1965	James Kendall Leather Company Limited	Developed with at least three building structures likely for tanning, carwash and retail businesses	Industrial use	Based on historical aerial photogrpaghs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least three building structures likely utilized for tanning, carwash and retail businesses
Subdivided into three Parts, with first part being (Part 1)				

1965 – 1969	James Kendall Leather Company Limited	Developed with at least one building structures likely for tanning	Industrial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least one building structures likely utilized for tanning
1969 – 1973	Eric Thorne, Jordon Brown			
1973 – 1985	John Duncan, James Duncan	Various Businesses for Trailer Center and Hardware Store	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least one building structures likely utilized for various repair and retail businesses
1985 – 1986	572578 Ontario Limited			
1986 – 1988	Gobram Developments Ltd.			
Subdivided as Lot 1, Plan 1333, Town of Oakville (Part 2)				
1965 – 1977	Eric Thorne, Jordon Brown	Developed with at least one building utilized for carwash business	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least one building structures likely utilized for Carwash business
1977 – 1987	The Howard Conquergood Memorial Building Association			
1987 – 1988	Dollarbram Developments Inc.			
Subdivided as Lot 3, Plan 1333, Town of Oakville (Part 3)				
1965 – 1968	Snow Properties Limited	Developed with at least one building utilized for various retail businesses including offices, wholesale, plumbing, electrical contractors, etc.	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least one building structures likely utilized for various retail businesses including offices, wholesale, plumbing, electrical contractors, etc.
1968 – 1977	Dede Limited			
1977 – 1979	Bootsma Holdings Limited			
1979 – 1979	Komaster Corporation Limited			
1979 – 1983	John Duncan			
1983 – 1986	572578 Ontario Limited			
1986 – 1988	Gobram Developments Ltd.			
Consolidation of 3 Parts (Part 1 to 3)				

1988 – 1990	Gobram Developments Ltd.	Hardware stores, truck rental business	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least three building structures likely utilized for various retail businesses
1990 – 2023	915643 Ontario Inc.	Various commercial & institutional uses including dry cleaning, automotive repair, restaurants, day care	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS and site visits, the RSC property appears to be developed with at least three building structures likely utilized for various commercial and institutional use.
2023 – Current	177 Cross Argus Development Inc.			

Notes:

1 - for each owner, specify one of the following types of property use (as defined in O.Reg. 153/04) that applies:

Agriculture or other use
Commercial use
Community use
Industrial use
Institutional use
Parkland use
Residential use

2 - when submitting a record of site condition for filing, a copy of this table must be attached

Cette publication hautement spécialisée n'est disponible qu'en anglais en vertu du règlement 671/92, qui en exempte l'application de la Loi sur les services en français. Pour obtenir de l'aide en francais, veuillez communiquer avec le ministère de l'Environnement et de l'Action en matière de changement climatique au 1-800-461-6290

APPENDIX D

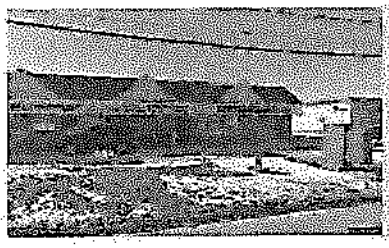
MPAC REPORT

© Azure Group Inc. • 2024

mpac | propertyline™

Commercial/Industrial Report

[redacted]



Property Address	177-187 CROSS AVE
Municipality	OAKVILLE TOWN
Roll Number	2401030010029000
Property Code & Description	430-Neighbourhood shopping centre - with more than 2 stores attached, under one ownership, without anchor - generally less than 150,000 s.f.

Legal Description	CON 3 SDS PT LOT 14 PLAN 1333 LOT 1
Last Valid Sale Date (yyyy-mm-dd)	2023-03-15
Last Valid Sale Amount	$53,000,000

Valuation Date (yyy-mm-dd)	January 1, 2016	Taxation Year	2023
Assessed Value*	$4,854,000	Phased-In Assessment**	$4,854,000

Realty Tax Class (RTC)	Realty Tax Class (RTQ)	Realty Portion
C-Commercial	T-Taxable, Full	$4,854,000

Frontage (ft)	167.33	Depth (ft)	402.00
Site Area (A)	1.55	Zoning	H29-MTC sp:368

Business Name	Business Mailing Address
177 CROSS ARGUS DEVELOPMENT INC	3190 HARVESTER RD SUITE 201A BURLINGTON ON L7N 3T1

Permit Details

Number	Issue Date (yyyy/mm/dd)	MPAC Work Description	MPAC Status
10001719000000CA	2010/12/03	Alterations/Renovations	CLOSED
10501804000000CA	2010/12/02	Alterations/Renovations	CLOSED
09-001520	2009/10/14	Demolition	CLOSED
09-000765	2009/07/15	Alterations/Renovations	CLOSED
7001977	2007/11/21	Alterations/Renovations	CLOSED
3001768	2004/12/23	Alterations/Renovations	CLOSED
3002840	2004/01/27	Alterations/Renovations	CLOSED
3002768	2003/12/04	Alterations/Renovations	CLOSED
2002526	2003/01/28	Alterations/Renovations	CLOSED

Income

Structure Description	SHOPPING CENTRE NEIGHBOURHD		
Building ID Number	2	Year Built	1989
Number of Storeys	1	Number of Units	8
Total Gross Leasable Area (sqft)	15,051		

Tenancy Type	Gross Leasable Area (sqft)	PGI	VAC	EXP	NOI	CAP
Allied	15,051	$217,502	5%	5%	$196,294	6%

Income

Structure Description	SHOPPING CENTRE NEIGHBOURHD		
Building ID Number	1	Year Built	1989
Number of Storeys	1	Number of Units	3
Total Gross Leasable Area (sqft)	6,816		

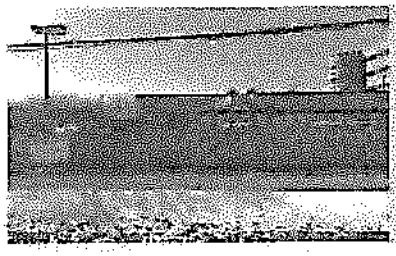
Tenancy Type	Gross Leasable Area (sqft)	PGI	VAC	EXP	NOI	CAP
Specialty Retail	6,816	$105,253	5%	5%	$94,990	6%

NOTE: *Pursuant to the Ontario Assessment Act, assessed values for taxation years from 2017 onwards are currently based on a January 1, 2016 valuation date. This valuation date is subject to change through legislation. For more information regarding assessments, visit www.mpac.ca
**Phased-in Assessment reflects the phased-in portion of the Assessed Value returned to the municipal/local taxing authority. Property assessments for taxation years from 2020 onwards are based on the fully phased-in January 1, 2016 assessed values.

mpac | propertyline™

Commercial/Industrial Report

[redacted]



Property Address	580 ARGUS RD
Municipality	OAKVILLE TOWN
Roll Number	2401030010000300
Property Code & Description	400-Small Office building (generally single tenant or owner occupied under 7,500 s.f.)

Legal Description	PLAN 1333 LOT 3
Last Valid Sale Date (yyyy-mm-dd)	2023-03-15
Last Valid Sale Amount	$53,000,000

Valuation Date (yyy-mm-dd)	January 1, 2016	Taxation Year	2023
Assessed Value*	$1,739,000	Phased-In Assessment**	$1,735,000

Realty Tax Class (RTC)	Realty Tax Class (RTQ)	Realty Portion
C-Commercial	T-Taxable: Full	$1,739,000

Frontage (ft)	140.00	Depth (ft)	146.00
Site Area (A)	0.47	Zoning	H29-MTC sp:365

Business Name	Business Mailing Address
177 CROSS ARGUS DEVELOPMENT INC	3190 HARVESTER RD SUITE 201A BURLINGTON ON L7N 3T1

Permit Details

Number	Issue Date (yyyy/mm/dd)	MPAC Work Description	MPAC Status
1000391	2001/04/18	Alterations/Renovations	CLOSED

Cost Property Information

Land Size (A)	20,473.20	Total Refrigeration (cuft)	-
Total Land Value	$1,164,656.37	Total No. of Dock Levelers	-
Total RCN for Yardwork	$31,029	Total No. of Walk In Coolers	-
Total RCNLD for Yardwork	$12,101	Total Floor Area (sqft)	6,855
Total RCN for Building	$938,319	Total Inc. Office Area (sqft)	-
Total RCNLD for Building	$562,991	Total Heating Area (sqft)	6,855
Year Built Range	1989 - 1989	Max Height (ft)	18

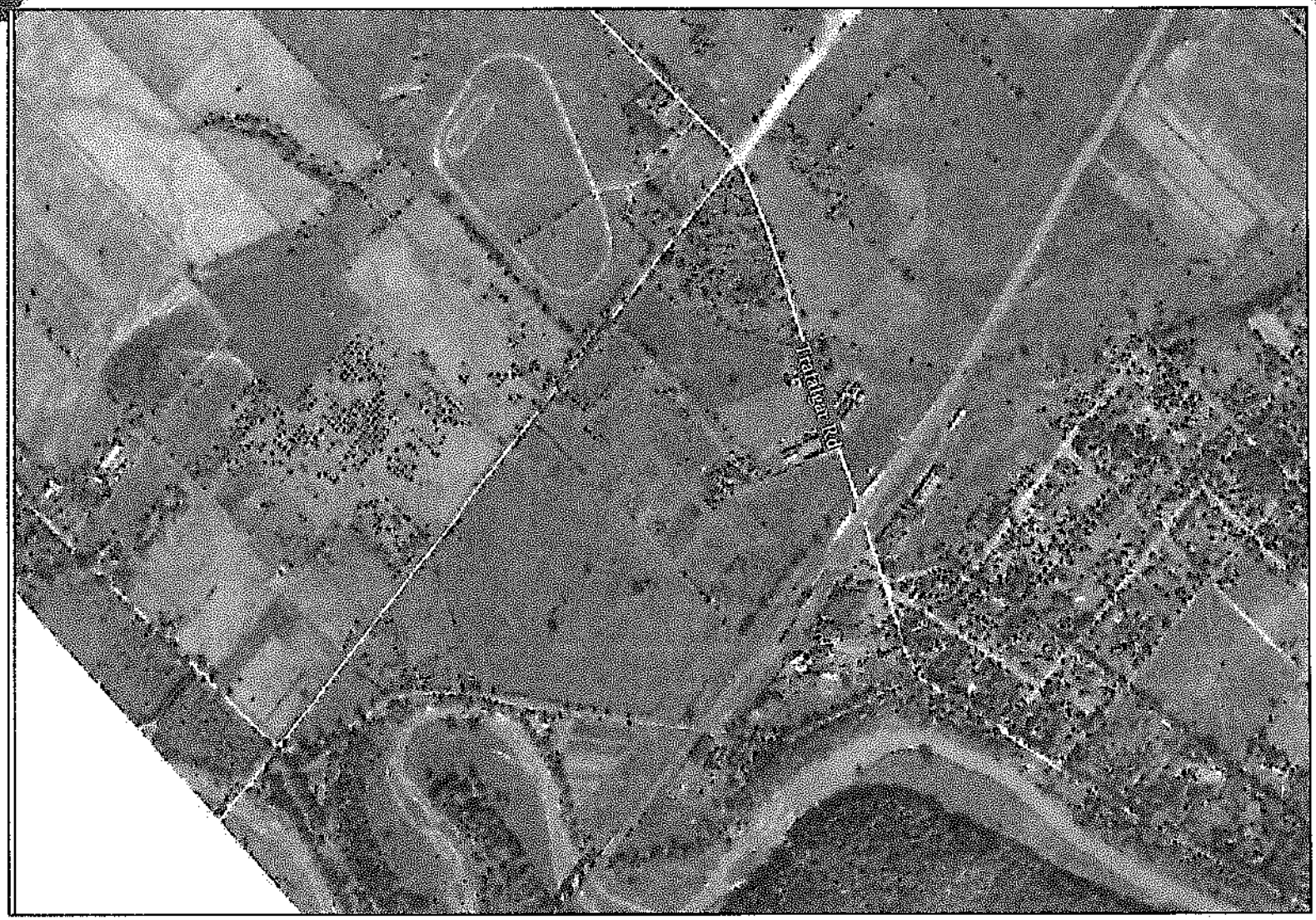
BIN	Bldg No.	Structure Desc.	Year Built	Building Use	Floor Area(sqft)	Inc. Off Area(sqft)	Height (ft)	Floor Level
1	1	OFFICE COMMERCIAL	1989	CHILD CARE CENTRE	6,855	-	18.0	1

NOTE: *Pursuant to the Ontario Assessment Act, assessed values for taxation years from 2017 onwards are currently based on a January 1, 2016 valuation date. This valuation date is subject to change through legislation. For more information regarding assessment, visit www.mpac.ca
**Phased-in Assessment reflects the phased-in portion of the Assessed Value returned to the municipality/local taxing authority. Property assessments for taxation years from 2020 onwards are based on the fully phased-in January 1, 2016 assessed values.

APPENDIX E

AERIAL PHOTOGRAPHS

© Azure Group Inc. • 2024



Approximate Area of Subject Property

Source: ERIS

Title	Project	Project No.	Scale	Date	Appendix C
1934 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 1 of 9



Approximate Area of Subject Property

Source: 1954 Air Photos of Southern Ontario

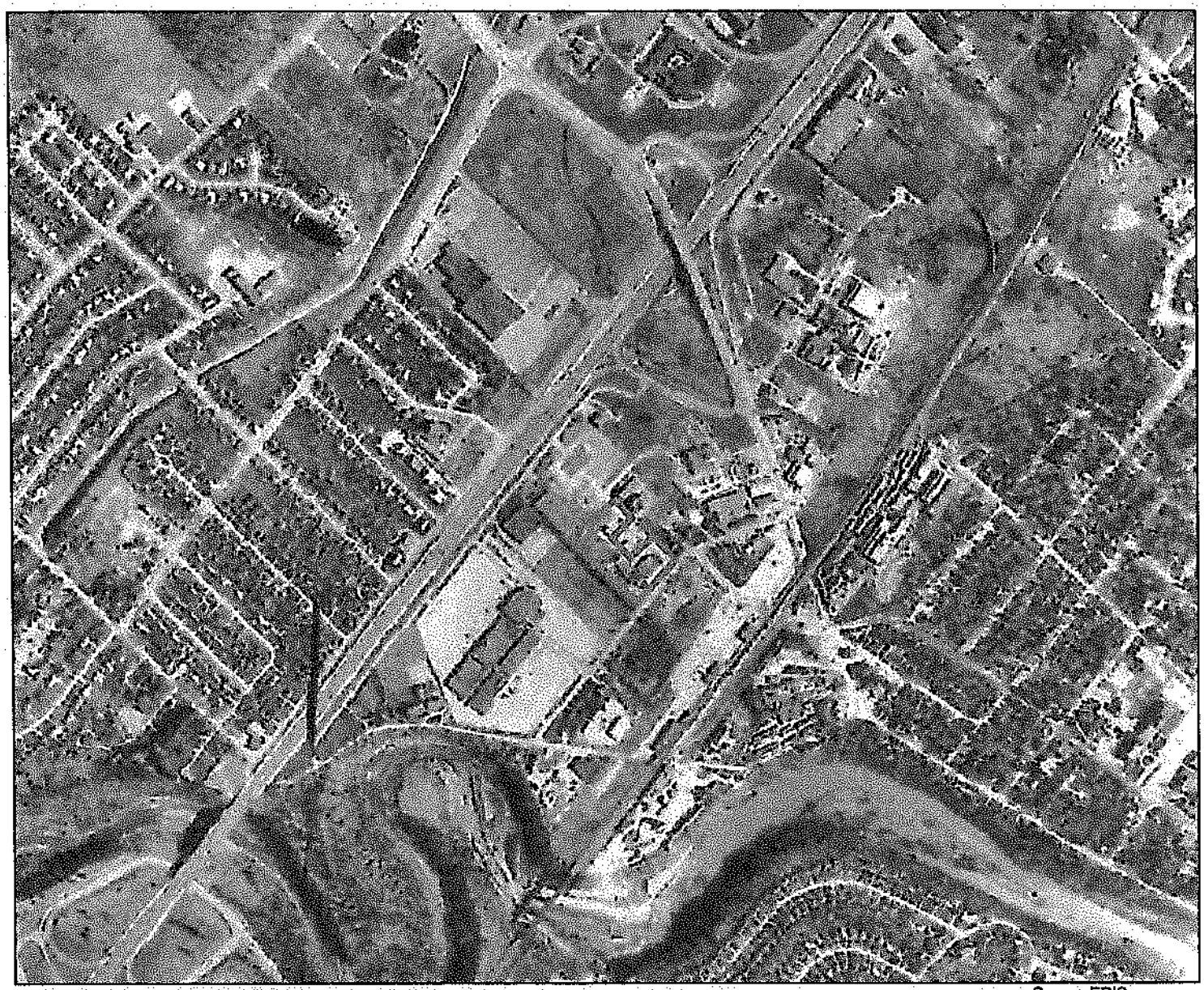
Title	Project	Project No.	Scale	Date	Appendix C
1954 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 2 of 9



Source:ERIS

Approximate Area of Subject Property

Title	Project	Project No.	Scale	Date	Appendix C
1967 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 3 of 9



Source:ERIS

Approximate Area of Subject Property

Title	Project	Project No.	Scale	Date	Appendix C
1974 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 4 of 9



Source: ERIS

Approximate Area of Subject Site

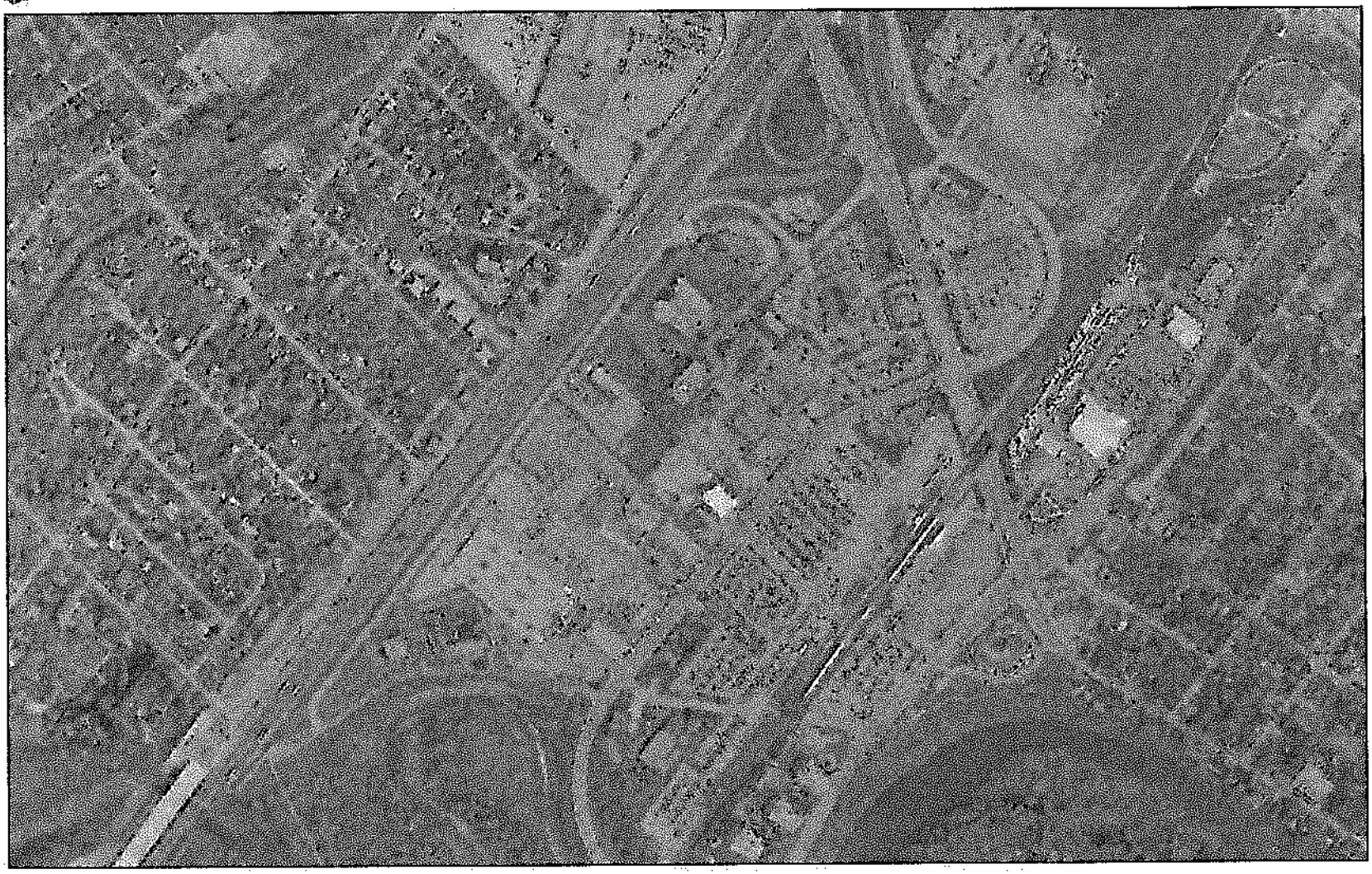
Title	Project	Project No.	Scale	Date	Appendix C
1985 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 5 of 9



Source: town of Oakville interactive map

Approximate Area of Subject Property

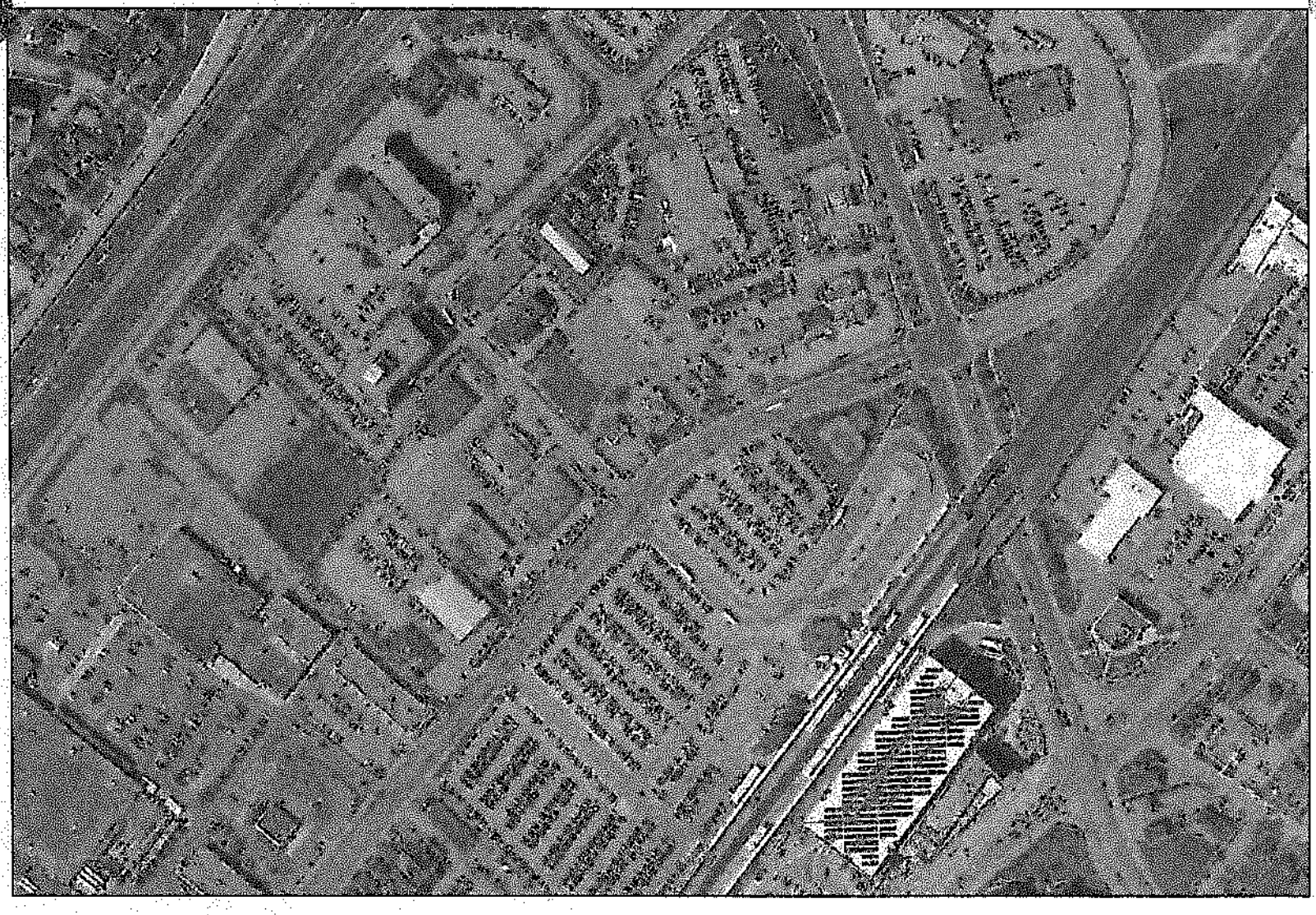
Title	Project	Project No.	Scale	Date	Appendix C
1999 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 6 of 9



Approximate Area of Subject Property

Source: town of Oakville interactive map

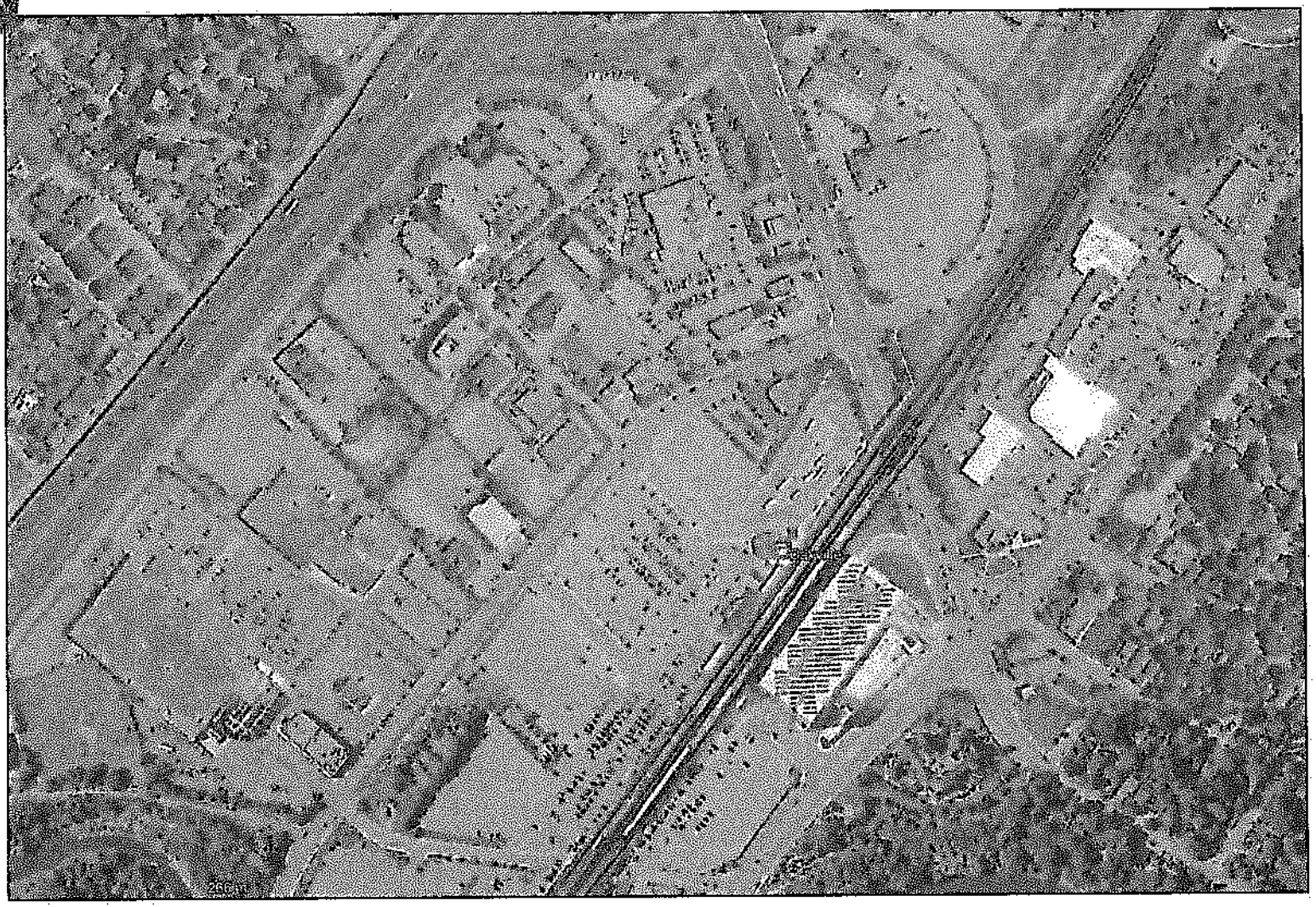
Title	Project	Project No.	Scale	Date	Appendix C
2008 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 7 of 9



Approximate Area of Subject Property

Source: town of Oakville interactive map

Title	Project	Project No.	Scale	Date	Appendix C
2017 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 8 of 9



Approximate Area of Phase One Property

Source: Google Earth

Title	Project	Project No.	Scale	Date	Appendix C
2021 Aerial Photograph	Phase One Environmental Site Assessment 177 & 185 Cross Avenue, and 580 Argus Road, Oakville	2303-003	Not to Scale	April, 2023	Page 9 of 9

APPENDIX F

CITY DIRECTORIES

© Azure Group Inc. • 2024

ERIS

CITY DIRECTORY

Project Property:	*2303-003* *177 Cross Avenue* *Oakville,ON L6J 2W7*
Project No:	*2303-003*
Requested By:	*Azure Group Inc.*
Order No:	*23042600187*
Date Completed:	*April 27, 2023*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 · info@erisinfo.com · erisinfo.com

April 27, 2023
RE: CITY DIRECTORY RESEARCH
177 Cross Avenue
Oakville,ON L6J 2W7

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:
560-605 of Argus Road
177 of Cross Avenue
99 of Cross Avenue
110-240 of Cross Avenue
No Civic Address Within Radius of Queen Elizabeth Way
166-234 Even of South Service Road East
540-570 Even of Trafalgar Road
Search Notes:
Oakville, ON last listed in 1960.

Search Results Summary

Date	Source	Comment
2021	DIGITAL BUSINESS DIRECTORY	
2017	DIGITAL BUSINESS DIRECTORY	
2012	DIGITAL BUSINESS DIRECTORY	
2001	POLKS	
1996	MIGHTS	
1996	POLKS	
1991	MIGHTS	
1985	MIGHTS	
1981	MIGHTS	
1975	MIGHTS	
1971	MIGHTS	
1965	MIGHTS	
1960	MIGHTS	

570 ALLFIX AUTOMOTIVE...AUTOMOBILE REPAIRING & SERVICE
570 ZONED USED PROPERTIES INC...AUTOMOBILE REPAIRING & SERVICE
580 KIDLOGIC...CHILD CARE SERVICE
581 ARGUS MEDICAL CTR...PHYSICIANS & SURGEONS
581 LIFELABS...LABORATORIES-MEDICAL
581 MEDCARE PHARMACY...PHARMACIES
581 PHYSICAL EDGE PHYSIOTHERAPY...PHYSIOTHERAPISTS
581 W H X-RAY ULTRASOUND INC...PHYSICIANS & SURGEONS
586 BENCHMARK REHABILITATION INC...INSURANCE
586 IDA ST MARKS PHARMACY...PHARMACIES
586 ROBERT J WISE LAWYER-TRADE...ASSOCIATIONS
586 SHAW FAMILY CHIOROPRACTIC...MASSAGE THERAPISTS
586 VELOCITY EHS...COMPUTER SERVICES
587 FAMILY DENTIST TREE...DENTISTS
589 MOBILITY PLUS CHIROPRACTIC...MASSAGE THERAPISTS
590 ATM...AUTOMATED TELLER MACHINES
590 HOLIDAY INN OAKVILLE...HOTELS & MOTELS
591 CO-OPERATORS...INSURANCE-GROUP
595 OAKVILLE SHT ACUPUNCTURE...MASSAGE THERAPISTS
603 HENRY KATE...PSYCHOLOGISTS
603 ITI BUILDING PERMIT DESIGNER...ARCHITECTS
603 JOHNSON ROSS...COUNSELING SERVICES
603 OAKIN INSURANCE BROKERS LTD...INSURANCE
603 PARHAR LAW...ASSOCIATIONS
603 REVIVE MASSAGE THERAPY...ALTERNATIVE MEDICINE
603 SALES RESOURCE GROUP INC...SALES TRAINING
603 SAMIA MALIK-NOOR...HEALTH SERVICES
603 UFANS INSURANCE SVC...INSURANCE
603 WELLNESS COUNSELLING GROUP...MARRIAGE & FAMILY COUNSELORS

111 TIM HORTONS...COFFEE & TEA
117 CELEBRITY HOUSE OF CIGARS...GIFT SHOPS
117 CHEFS DOOR...FOODS-CARRY OUT
117 FIRST STOP HAIR SALON...BEAUTY SALONS
117 PERFECT TEN NAIL SPA...MANICURING
117 SUPER ORGANIC DRY CLEANERS...CLEANERS
117 TRAFALGAR VILLAGE DENTAL...DENTISTS
117 U-HAUL NEIGHBORHOOD DEALER...BOXES-CORRUGATED & FIBER (WHLS)
117 WASABI TERRIYAKI...FOODS-CARRY OUT
125 COLANGELO'S NO FRILLS...GROCERS-RETAIL
125 DAVID DANIELS FINE JEWELRY...JEWELERS-RETAIL
125 DOLLARAMA...VARIETY STORES
125 FLOORINGCA.COM OUTLET STORE...FLOOR MATERIALS
125 LOBLAWS PHARMACY...PHARMACIES
125 MANNING FINE JEWELLERY...JEWELERS-RETAIL
125 SPACE OPTICAL LTD...NURSES & NURSES' REGISTRIES
125 VALUE VILLAGE...SECOND HAND STORES
136 S A PARTNERS...TAX RETURN PREPARATION & FILING
142 AVIS RENT A CAR...AUTOMOBILE RENTING
142 BUDGET RENT A CAR...AUTOMOBILE RENTING
142 BUDGET TRUCK RENTAL...TRUCK-DEALERS-USED
142 MASTER MECHANIC...TRAILER HITCHES
157 LIGHTING CENTER...LIGHTING FIXTURES-RETAIL
165 16 MILE DENTAL...DENTISTS
165 ADAPT HALTON ALCOHOL...HEALTH SERVICES
165 CCI NORTH AMERICA LTD...OIL FIELD CHEMICALS (WHLS)
165 DESJARDINS...INSURANCE
165 HEPWORTH DAMAS ENDODONTICS...DENTISTS
165 INSTANT IMPRINTS CANADA...SCREEN PRINTING (MFRS)
165 MEALS ON WHEELS...SOCIAL SERVICE & WELFARE ORGANIZATIONS
165 NRS MEDIA CANADA...MEDIA CONSULTANTS
165 ROCK STAR REAL ESTATE...REAL ESTATE INSPECTION
165 SHIELD MANAGEMENT SVC LTD...FINANCING CONSULTANTS
177 TORONTO INTERNATIONAL ACADEMY...SCHOOLS
187 AMI SUSHI...FOODS-CARRY OUT
187 CROSS MEDICAL THERAPY CLINIC...DENTISTS
187 FAMOUS OWL OF MINERVA...FOODS-CARRY OUT
187 FINE DETAILS...BOAT REPAIRING
187 RIVIERA HAIRSTYLISTS...BARBERS
187 SUBWAY...CATERERS
200 AMTRAK-OKL...TRAINS
207 J Y JEWELRY...JEWELERS-RETAIL
214 GATEWAY OAKVILLE GO...VARIETY STORES
214 PARK RIDE...PARK & RIDE
217 HARVEY'S...FOODS-CARRY OUT
217 SWISS CHALET ROTISSERIE/GRILL...FOODS-CARRY OUT
227 MC DONALD'S...FOODS-CARRY OUT
233 APPLEONE EMPLOYMENT SVC...MARKETING CONSULTANTS
233 BRIMDALE INTERNATIONAL INC...NONCLASSIFIED ESTABLISHMENTS
233 CONSPIRACY COMICS GAMES-ANIME...GAMES & GAME SUPPLIES
233 EXSALONCE LASER-ESTHETICS CLNC...ESTHETICIANS
233 HANDYSCAPES INC...LAWN & GROUNDS MAINTENANCE
233 SLIMSCORE...NONCLASSIFIED ESTABLISHMENTS
233 TANNING SHOP...TANNING SALONS
233 THOMAS COOK TRAVEL...TRAVEL AGENCIES & BUREAUS
233 TOP HAT CLEANERS...CLEANERS
238 CARPET WAREHOUSE...FEDERAL GOVERNMENT CONTRACTORS

2021 SOUTH SERVICE ROAD EAST

SOURCE: DIGITAL BUSINESS DIRECTORY

166 **EUROPE BOUND**...*SPORTING GOODS-RETAIL*
166 **HIKER'S HAVEN**...*SPORTING GOODS-RETAIL*
166 **SPARTAN FITNESS EQUIPMENT**...*SPORTING GOODS-RETAIL*
226 **GRAHAM BROWN WALLCOVERINGS**...*UPHOLSTERY FABRICS-WHOLESALE*
226 **GRAHAM BROWN WALLCOVERINGS**...*CURTAIN & DRAPERY-MANUFACTURERS*
226 **ROSART PROPERTIES INC**...*GENERAL CONTRACTORS-NONRESIDENTIAL BLDGS*
226 **ROSART PROPERTIES INC**...*REAL ESTATE DEVELOPERS*
232 **ELLEPHYSIO**...*PHYSIOTHERAPISTS*
234 **ANIMAL HOSPITAL OF OAKVILLE**...*ANIMAL HOSPITALS*

2021 TRAFALGAR ROAD

SOURCE: DIGITAL BUSINESS DIRECTORY

548 **HWY 55 BURGERS SHAKES FRIES**...*FOODS-CARRY OUT*
562 **ATM**...*AUTOMATED TELLER MACHINES*
562 **CIRCLE K**...*OIL & GAS PRODUCERS*
562 **TIM HORTONS**...*COFFEE & TEA*
570 **OAK-LAND FORD LINCOLN**...*AUTOMOBILE DEALERS-NEW CARS*
570 **QUICK LANE**...*TIRE-DEALERS-RETAIL*

568 AUTOHIRE RENT A CAR INC...PASSENGER CARS RENTAL
568 PROPERTIES INC ZONED USED...GENERAL AUTOMOTIVE REPAIR
570 ALL FIX AUTOMOTIVE...GENERAL AUTOMOTIVE REPAIR
570 ZONED USED PROPERTIES INC...GENERAL AUTOMOTIVE REPAIR
580 KID LOGIC CHILDCARE LEARNING...CHILD DAY CARE SVCS
581 ARGUS MEDICAL CTR...OFFICES OF PHYSICIANS, EXCEPT MENTAL HEALTH
581 ARGUS MEDICAL DIET CLINIC...FREESTANDING EMERGENCY MEDICAL CENTERS
581 CML HEALTH CARE INC...MEDICAL LABORATORIES
581 LIFELABS...MEDICAL LABORATORIES
581 MEDCARE PHARMACY...PHARMACIES & DRUG STORES
581 PERFORMANCE ORTHOTICS...ALL OTHER HEALTH & PERSONAL CARE STORES
581 PHYSICAL EDGE PHYSIOTHERAPY...OFFICES OF MISC HEALTH PRACTITIONERS
586 COMARK SERVICES INC...WOMENS CLOTHING STORES
586 KMI...CUSTOM COMPUTER PROGRAMMING SVCS
586 KNOWLEDGE MANAGEMENT INNOVATIONS, LTD...SOFTWARE & INTERNET
586 KNOWLEDGE MANAGEMENT INNVTNS...OFFICE ADMINISTRATIVE SVCS
586 MATORCA INC...UNCLASSIFIED
586 MC CULLOCH HEALTH WELLNESS...MISC AMBULATORY HEALTH CARE SVCS
586 NPOST/KNOWLEDGE MANAGEMENT...CUSTOM COMPUTER PROGRAMMING SVCS
586 SHAW FAMILY CHIOROPRACTIC...OFFICES OF CHIROPRACTORS
586 ST MARK'S PHARMACY...PHARMACIES & DRUG STORES
586 STATE FARM INSURANCE CO...INSURANCE AGENCIES & BROKERAGES
590 HEAT WAVE NIGHT CLUB HOLIDAY...DRINKING PLACES, ALCOHOLIC BEVERAGES
590 HOLIDAY INN OAKVILLE-CTR...HOTELS & MOTELS, EXCEPT CASINO HOTELS
591 CO-OPERATORS GENERAL INSURANCE...INSURANCE AGENCIES & BROKERAGES
593 MC CARNEY ASSOC...ALL OTHER PUBLISHERS
593 MC CARNEY & ASSOC...ALL OTHER PUBLISHERS
595 NIZAMI KARL DPM...OFFICES OF PODIATRISTS
595 OAKVILLE PODIATRY...OFFICES OF PODIATRISTS
603 CANADIAN FOOTBALL LEAGUE PLAYERS' ASSOCIATION...BUSINESS SERVICES
603 EXECUTAYNE MARKETING LTD...OTHER SVCS RELATED TO ADVERTISING
603 HYNEK FINANCIAL...HUMAN RESOURCE CONSULTING SVCS
603 JOHNSON ROSS...OFFICES OF MENTAL HEALTH PRACTITIONERS
603 MALIK-NOOR SAMIA...OFFICES OF MENTAL HEALTH PRACTITIONERS
603 MEDICAL IMAGE...CLOTHING ACCESSORIES STORES
603 OAKIN INSURANCE BROKERS LTD...INSURANCE AGENCIES & BROKERAGES
603 PARHAR LAW OFFICE...ATTORNEYS
603 REVIVE MASSAGE THERAPY...OTHER PERSONAL CARE SVCS
603 REYNOLDS ASSOC...INVESTMENT ADVICE
603 SALES RESOURCES GROUP INC...SOFTWARE & INTERNET
603 SELECT TILES.CA...TILE & TERRAZZO CONTRS
603 UFANS INSURANCE SVC...INSURANCE AGENCIES & BROKERAGES
603 WELLNESS COUNSELLING GROUP...OTHER INDIVIDUAL & FAMILY SVCS

111 TIM HORTONS...SNACK & NONALCOHOLIC BEVERAGE BARS
117 CELEBRITY HOUSE OF CIGARS...TOBACCO STORES
117 EXTREME PITA...FULL-SERVICE RESTAURANTS
117 PERFECT TEN NAIL SPA...BEAUTY SALONS
117 SENTIMENTS CARDS GIFTS...POSTAL SVC
117 U-HAUL NEIGHBORHOOD DEALER...TRUCK, TRAILER, & RV RENTAL & LEASING
117 VERDI HAIR DESIGN...BEAUTY SALONS
117 WASABI TERRIYAKI...FULLSERVICE RESTAURANTS
117 WHITE SWAN...DRYCLEANING & LAUNDRY SVCS
125 DAVID DANIEL'S FINE JEWELRY...JEWELRY STORES
125 DOLLARAMA...ALL OTHER GENERAL MERCHANDISE STORES
125 FLOORINGCA.COM OUTLET STORE...FLOOR COVERING STORES
125 GOLDEN GRIDDLE FAMILY RSTRNT...FULL-SERVICE RESTAURANTS
125 KEVIN'S NO FRILLS...SUPERMARKETS & OTHER GROCERY STORES
125 LOBLAW PHARMACY...PHARMACIES & DRUG STORES
125 MANNING FINE JEWELLERY...JEWELRY STORES
125 SPACE OPTICAL LTD...OPTICAL GOODS STORES
125 SURROUNDINGS GALLERY...ART DEALERS
125 TIM HORTON DONUTS...ALL OTHER SPECIALTY FOOD STORES
125 WOMEN'S CLUB FITNESS...DIET & WEIGHT REDUCING CENTERS
136 AD DYNAMICS INC...PHOTOCOPYING AND DUPLICATING SERVICES
136 CANADIAN MENTAL HEALTH ASSN...BUSINESS ASSOCIATIONS
136 SCHIZOPHRENIA SOCIETY-ONTARIO...CIVIL & SOCIAL ORGANIZATIONS
142 CROSS AVENUE AUTO...GENERAL AUTOMOTIVE REPAIR
157 ARMADILLO TEXAS GRILL...FULL-SERVICE RESTAURANTS
157 LIGHTING CENTER...OTHER TECHNICAL CONSULTING SVCS
165 ADAPT HALTON ALCOHOL...PSYCHIATRIC & SUBSTANCE ABUSE HOSPITALS
165 INSTANT IMPRINTS CANADA...OTHER SPECIALIZED DESIGN SVCS
165 KAREN A THOMPSON LAW...OFFICES OF LAWYERS
165 MEALS ON WHEELS...OTHER INDIVIDUAL & FAMILY SVCS
165 OAKVILLE KIWANIS MEALS ON WHLS...OTHER INDIVIDUAL & FAMILY SVCS
165 SHIELD MANAGEMENT SVC LTD...FINANCING CONSULTANTS
165 TUTOR SERVICE...EXAM PREPARATION & TUTORING
165 UPS STORE...DIRECT MAIL ADVERTISING
177 OAKVILLE YOUTH CTR...CHILD & YOUTH SVCS
177 ONTARIO TRANSPORTATION MNSTRY...AUTOMOBILE DRIVING SCHOOLS
177 SIBIU-HERMANNSTADT DELI...LIMITEDSERVICE RESTAURANTS
187 AMI SUSHI...FULLSERVICE RESTAURANTS
187 FAMOUS OWL OF MINERVA...RESTAURANTS
187 FINE DETAILS...CAR WASHES
187 RIVIERA HAIRSTYLISTS...BEAUTY SALONS
187 SIMON PONG FAMILY DENTISTRY...OFFICES OF DENTISTS
187 SUBWAY...LIMITEDSERVICE RESTAURANTS
187 SUPERB NAILS...NAIL SALONS
187 THAI SATAY MORE...CATERERS
200 AMTRAK-OKL...COMMUTER & PASSENGER RAIL SERVICE
207 J Y JEWELRY...JEWELRY STORES
214 GATEWAY OAKVILLE GO...ALL OTHER GENERAL MERCHANDISE STORES
217 SWISS CHALET ROTISSERIE/GRILL...FULLSERVICE RESTAURANTS
227 MC DONALD'S...LIMITEDSERVICE RESTAURANTS
233 APPLE ONE CANADA...EMPLOYMENT PLACEMENT AGENCIES
233 CONSPIRACY COMICS GAMES-ANIME...HOBBY, TOY, & GAME STORES
233 EXSALONCE LASER ESTHETICS...BEAUTY SALONS
233 FEDEX AUTHORIZED SHIP CTR...COURIERS
233 HANDYSCAPES INC,...PAINT & WALL COVERING CONTRS
233 PAK MAIL...COURIERS
233 TANNING SHOP...OTHER PERSONAL CARE SVCS
233 THOMAS COOK TRAVEL...TRAVEL AGENCIES & BUREAUS
233 TOP HAT CLEANERS...DRYCLEANING & LAUNDRY SVCS
233 TRIP TRANSPORTATION SVC INC...FREIGHT TRANSPORTATION ARRANGEMENT
233 U SAVE PROPERTY MAINTANCE...JANITORIAL SVCS
238 CARPET WAREHOUSE...FLOOR COVERING STORES

2017 SOUTH SERVICE ROAD EAST
SOURCE: DIGITAL BUSINESS DIRECTORY

166 **EASTERN OUTDOOR SALES INC...** *ADVERTISING MATERIAL DISTRIBUTION SVCS*
166 **EUROPE BOUND...** *SPORTING GOODS STORES*
166 **FITNESS SOURCE...** *SPORTING GOODS STORES*
166 **FORZANI GROUP...** *UNCLASSIFIED*
166 **HIKER'S HAVEN...** *SPORTING GOODS STORES*
166 **SPARTAN FITNESS EQUIPMENT...** *SPORTING GOODS-RETAIL*
226 **GRAHAM BROWN WALLCOVERINGS...** *PAINT & SUPPLIES MERCHANT WHOLS*
226 **ROSART PROPERTIES INC...** *LAND SUBDIVISION*
234 **ANIMAL HOSPITAL OF OAKVILLE...** *VETERINARIANS*

2017 TRAFALGAR ROAD
SOURCE: DIGITAL BUSINESS DIRECTORY

546 **TACO BELL...** *FULLSERVICE RESTAURANTS*
548 **HWY 55 BURGERS SHAKES FRIES...** *FULLSERVICE RESTAURANTS*
548 **LICK'S ICE CREAM BURGER...** *FULLSERVICE RESTAURANTS*
562 **TRAFALGAR ESSO...** *ALTERNATIVE FUELS*
562 **ZULFI ESSO...** *ALTERNATIVE FUELS*
570 **OAK-LAND FORD LINCOLN-SVC DEPT...** *GENERAL AUTOMOTIVE REPAIR*
570 **OAKLAND FORD LINCOLN SALES...** *AUTOMOTIVE PARTS & ACCESSORIES STORES*

568 PROPERTIES INC ZONED USED...GENERAL AUTOMOTIVE REPAIR
568 SOVEREIGN AUTO LEASING...USED CAR DEALERS
570 ALL FIX AUTOMOTIVE...GENERAL AUTOMOTIVE REPAIR
570 ZONED USED PROPERTIES INC...GENERAL AUTOMOTIVE REPAIR
580 KID LOGIC CHILDCARE LEARNING...CHILD DAY CARE SVCS
581 ARGUS MEDICAL DIET CLINIC...FREESTANDING EMERGENCY MEDICAL CENTERS
581 CANADIAN MEDICAL LABORATORIES...MEDICAL LABORATORIES
581 CML HEALTHCARE INC...MEDICAL LABORATORIES
581 MEDCARE PHARMACY...PHARMACIES & DRUG STORES
581 OAKVILLE ORTHOTICS...ALL OTHER HEALTH & PERSONAL CARE STORES
581 PERFORMANCE ORTHOTICS...ALL OTHER HEALTH & PERSONAL CARE STORES
581 PHYSICAL EDGE PHYSIOTHERAPY...OFFICES OF MISC HEALTH PRACTITIONERS
586 CMX RESEARCH...UNCLASSIFIED
586 COMARK SERVICES INC...WOMEN'S CLOTHING STORES
586 KNOWLEDGE MANAGEMENT INNVTNS...OFFICE ADMINISTRATIVE SVCS
586 LIFEMARK HEALTH MANAGEMENT INC...VOLUNTARY HEALTH ORGANIZATIONS
586 LOMAR SECURITY SVC LTD...SECURITY GUARDS & PATROL SVCS
586 MAPLE LEAF FOODS...SUPERMARKETS & OTHER GROCERY STORES
586 MATORCA INC...UNCLASSIFIED
586 MC CULLOCH HEALTH & WELLNESS...MISC AMBULATORY HEALTH CARE SVCS
586 PURE BALANCE MASSAGE THERAPY...OTHER PERSONAL CARE SVCS
586 SHAW CHIROPRACTIC CTR...OFFICES OF CHIROPRACTORS
586 ST MARK'S PHARMACY...PHARMACIES & DRUG STORES
586 STATE FARM INSURANCE...INSURANCE AGENCIES & BROKERAGES
590 HEAT WAVE NIGHT CLUB HOLIDAY...DRINKING PLACES, ALCOHOLIC BEVERAGES
590 HOLIDAY INN OAKVILLE-CTR...HOTELS & MOTELS, EXCEPT CASINO HOTELS
591 CO-OPERATORS GENERAL INSURANCE...INSURANCE AGENCIES & BROKERAGES
593 MC CARNEY & ASSOC...ALL OTHER PUBLISHERS
603 CANADIAN FOOTBALL LEAGUE PLYRS...LABOR UNIONS & SIMILAR LABOR ORGANIZATIONS
603 CARTWRIGHT HOLISTICS...OFFICES OF PHYSICIANS, EXCEPT MENTAL HEALTH
603 DANATEC EDUCATIONAL SVC...HUMAN RESOURCE CONSULTING SVCS
603 EXECUTAYNE MARKETING LTD...OTHER SVCS RELATED TO ADVERTISING
603 HYNEK FINANCIAL...HUMAN RESOURCE CONSULTING SVCS
603 J & J ACCOUNTING FIRM...OTHER ACCOUNTING SVCS
603 MEDICAL IMAGE...CLOTHING ACCESSORIES STORES
603 NCOMPASS NUTRITIONAL...OFFICES OF MISC HEALTH PRACTITIONERS
603 OAKIN CONSULTANTS LTD...INSURANCE AGENCIES & BROKERAGES
603 PURE RADIANCE...BEAUTY SALONS
603 REVIVE MASSAGE THERAPY...OTHER PERSONAL CARE SVCS
603 REYNOLDS & ASSOC...INVESTMENT ADVICE
603 SALES RESOURCES GROUP INC...OTHER TECHNICAL CONSULTING SVCS
603 SELECT TILES.CA...TILE & TERRAZZO CONTRS
603 TUCK PHINNEMORE & ASSOC INC...PAINT & WALL COVERING CONTRS
603 UFANS INSURANCE SVC...INSURANCE AGENCIES & BROKERAGES
603 WELLNESS COUNSELLING GROUP...OTHER INDIVIDUAL & FAMILY SVCS

111 TIM HORTONS...SNACK & NONALCOHOLIC BEVERAGE BARS
117 AT YOUR CONVENIENCE...POSTAL SVC
117 CELEBRITY HOUSE OF CIGARS...TOBACCO STORES
117 FCS COMPUTER...COMPUTER & SOFTWARE STORES
117 OPAZ GREEK MEDITERRANEAN GRILL...FULL-SERVICE RESTAURANTS
117 PERFECT TEN NAIL & SPA...BEAUTY SALONS
117 S & H HEALTH FOODS...FOOD, HEALTH, SUPPLEMENT STORES
117 VENCASH ATM POS...OFFICE EQUIP MERCHANT WHOLS
117 VERDI HAIR DESIGN...BEAUTY SALONS
117 WHITE SWAN CLEANERS...DRYCLEANING & LAUNDRY SVCS
125 FLOORINGCA.COM...FLOOR COVERING STORES
125 GINO'S PIZZA...FULL-SERVICE RESTAURANTS
125 GOLDEN GRIDDLE FAMILY RSTRNT...FULL-SERVICE RESTAURANTS
125 GREENSCAPE EXTERIORS...LANDSCAPE CONTRACTORS
125 MANNING FINE JEWELLERY...JEWELRY STORES
125 ONTARIO DRIVERS & VEHICLE...LEGISLATIVE BODIES
125 SPACE OPTICAL LTD...OPTICAL GOODS STORES
125 SURROUNDINGS GALLERY LTD...ART DEALERS
125 TIM HORTON DONUTS...ALL OTHER SPECIALTY FOOD STORES
125 WOMEN'S CLUB FITNESS...DIET & WEIGHT REDUCING CENTERS
136 AD DYNAMICS INC...MARKETING RESEARCH & PUBLIC OPEN POLLING
136 CANADIAN MENTAL HEALTH ASSN...BUSINESS ASSOCIATIONS
136 SCHIZOPHRENIA SOCIETY-ON...CIVIL & SOCIAL ORGANIZATIONS
142 CROSS AVENUE AUTO...GENERAL AUTOMOTIVE REPAIR
157 ARMADILLO TEXAS GRILL...FULL-SERVICE RESTAURANTS
157 LIGHTING CENTER...ALL OTHER HOME FURNISHINGS STORES
165 DATS AMORE...FULL-SERVICE RESTAURANTS
177 CORE REHAB & HEALTH SVC INC...OFFICES OF CHIROPRACTORS
177 ONTARIO TRANSPORTATION MNSTRY...LEGISLATIVE BODIES
177 SIBIU-HERMANNSTADT DELI...LIMITED-SERVICE RESTAURANTS
187 A FINE DETAILS...CAR WASHES
187 AMI SUSHI...FULL-SERVICE RESTAURANTS
187 CROSS & ARGUS CAR WASH LTD...CAR WASHES
187 CROSS AVENUE DENTAL...OFFICES OF DENTISTS
187 FOR EYES OPTICAL...OPTICAL GOODS STORES
187 RIVIERA HAIRSTYLISTS OF DSTNCT...BEAUTY SALONS
187 SUPERB NAILS...NAIL SALONS
187 THAI SATAY & MORE...FULL-SERVICE RESTAURANTS
207 J Y JEWELRY...JEWELRY STORES
207 MY BAGEL...FULL-SERVICE RESTAURANTS
214 CANCAFE INTERNATIONAL...CAFETERIAS
214 GATEWAY OAKVILLE GO...ALL OTHER GENERAL MERCHANDISE STORES
217 SWISS CHALET ROTISSERIE/GRILL...FULL-SERVICE RESTAURANTS
227 MC DONALD'S...FULL-SERVICE RESTAURANTS
233 APPLE ONE EMPLOYMENT SVC...EMPLOYMENT PLACEMENT AGENCIES
233 EXSALONCE LASER & ESTHETICS...BEAUTY SALONS
233 FEDEX AUTHORIZED SHIP CTR...COURIERS
233 SIMPLY AUDIO BOOKS STORE...BOOK STORES
233 STRATEGIC TAX PLANNERS...INVESTMENT ADVICE
233 TANNING SHOP...OTHER PERSONAL CARE SVCS
233 TELESTRATEGY CONSULTING GROUP...OTHER MANAGEMENT CONSULTING SVCS
233 THOMAS COOK TRAVEL...TRAVEL AGENCIES
233 TOP HAT CLEANERS...DRYCLEANING & LAUNDRY SVCS
238 CARPET WAREHOUSE...FLOOR COVERING STORES

Report ID: 23042600187 - 04/27/2023
www.ersinfo.com

2012 SOUTH SERVICE ROAD EAST

SOURCE: DIGITAL BUSINESS DIRECTORY

166 **CAN SCOOT**...*MOTORCYCLE DEALERS*
166 **EASTERN OUTDOOR SALES INC.**...*ADVERTISING MATERIAL DISTRIBUTION SVCS*
166 **EUROPE BOUND**...*SPORTING GOODS STORES*
166 **FITNESS SOURCE**...*SPORTING GOODS STORES*
166 **FORZANI GROUP LTD.**...*UNCLASSIFIED*
166 **TORONTO PADDLE SHACK**...*BOAT DEALERS*
166 **TRAVEL CUTS**...*TRAVEL AGENCIES*
178 **MAPLE LEAF FRESH FOODS**...*SUPERMARKETS & OTHER GROCERY STORES*
226 **GRAHAM & BROWN WALLCOVERINGS**...*PAINT & SUPPLIES MERCHANT WHOLS*
226 **ROSART PROPERTIES INC.**...*LAND SUBDIVISION*
232 **ABSOLUTE FOOT CARE CLINIC**...*OFFICES OF PODIATRISTS*
234 **ANIMAL HOSPITAL OF OAKVILLE**...*VETERINARIANS*

2012 TRAFALGAR ROAD

SOURCE: DIGITAL BUSINESS DIRECTORY

548 **LICK'S ICE CREAM & BURGER**...*FULL-SERVICE RESTAURANTS*
562 **QEW TRAFALGAR**...*OTHER GASOLINE STATIONS*
562 **TIM HORTONS**...*SNACK & NONALCOHOLIC BEVERAGE BARS*
570 **OAK-LAND FORD LINCOLN SALES**...*NEW CAR DEALERS*

568	LIFEMARK HEALTH
568	ZONED USED PROPERTIES INC
570	ACE AUTOMOTIVE
581	ARGUS MEDICAL CENTRE
581	ARGUS MEDICAL DIET CLINIC
581	MCTU DIAGNOSTICS LTD
581	MED - CHEM LABORATORIES LTD
581	MEDCARE PHARMACY
581	MULTI TENANT RESIDENTIAL
581	NADEL ENGINEERING
581	PHYSICAL EDGE PHYSIOTHERAPHY
581	RMR MANAGEMENT SERVICES LTD
586	COMARK SERVICES INC
586	DIONEX CANADA LTD
586	DIONEZ CANADA LTD
586	IRENE HILL LTD
586	MATORCA INC
586	MULTI TENANT RESIDENTIAL
586	SHAW CHIROPRACTIC WELLNESS CENTRE
586	ST MARK'S PHARMACY
587	DARBY MANAGEMENT SERVICES LTD
587	GNATHIC MANAGEMENT SERVICES LTD
587	RESIDENTIAL (1 TENANT)
589	RESIDENTIAL (1 TENANT)
590	CARMEN'S CATERING
590	HEAT WAVE NIGHT CLUB
590	HOLIDAY INN
591	TARGET MARKETING CORP
595	CANADIAN TRAFFIC SERVICES GROUP
603	AN INSOLVENCY SERVICE CO
603	EXECUTAYNE MARKETING LTD
603	FOX & PARTNERS LTD
603	LIFE QUOTE CANADA INSURANCE AGENCY LTD
603	LUDLOW PROJECT SERVICES INC
603	MAURICE HUNT CO
603	NAVITRAK INTERNATIONAL
603	OAKIN CONSULTANTS LTD
603	OAKIN CORP
603	OAKIN INSURANCE BROKERS LTD
603	UFANS INSURANCE SERVICES
603	WELLNESS COUNSELLING GROUP

99	ADDRESS NOT LISTED
118	RESIDENTIAL (1 TENANT)
122	RESIDENTIAL (1 TENANT)
125	A V CONNECTION
125	CADET CLEANERS
125	CELEBRITY HOUSE OF CIGARS
125	CELEBRITY TOBACCO & GIFTS
125	CHEAP & SWEET FRAGRANCES
125	DR FLEA'S QEW TRAFALGAR RD FLEA ANTIQUE MARKET
125	FASHIONS BY MICHELINE
125	FIRST COMPUTER
125	GINO'S PIZZA ,
125	GREENSCAPE EXTERIORS
125	JOGGERS LICENCE BUREAU
125	MADD HALTON
125	MANNING JEWELLERS
125	MR FLEA'S FLEA MARKET
125	NAIL QUEEN
125	NOVELTY TOYS & GIFTS
125	OAKVILLE CYCLE & SPORTS
125	OFF BROADWAY
125	OMNI FASHION & ACCESSORIES
125	PAM'S COFFEE & TEA CO
125	PENNINGTON'S WEARHOUSE
125	PETS & MORE
125	QUALITY JEWELLERS
125	ROSALEN JEWELLERS
125	ROTARY TV AUCTION
125	S& H HEALTH FOODS
125	SMART SELECTION
125	SNAD INTERNATIONAL
125	SUPER FINE ELECTRONICS
125	SURROUNDINGS GALLERY LTD
125	TRAFALGAR VILLAGE SHOPPING CENTRE
125	TRAFALGAR VILLAGE DENTAL GROUP
125	VERDI HAIR DESIGN
125	VILLAGE TAILOR
125	WOMENS CLUB FITNESS
125	WORLD JEWELLERY
125	WWW.FLOORING.CA.COM
136	AD DYNAMICS INC
136	VERY'S FLOWERS LTD
142	NOEL'S AUTO SERVICE SPORTS CARS RESTORATION
142	ROGERS CUSTOM STUFF
148	BIBBY FOUNDRY LTD
157	ARMADILLO TEXAS GRILL
177	BLOCKBUSTER VIDEO
187	A FINE DETAILS
187	CROSS & ARGUS CAR WASH
187	FINE DETAILS INC
187	KEKOS DRYCLEAN & ALTERATIONS
187	OISHI SUSHI JAPANESE RESTAURANT
207	MY BAGEL
214	CANCAFE INTERNATIONAL
227	COFFEE TIME DONUTS
233	AFFINITY TRAVEL INC
233	APPLE ONE EMPLOYMENT SERVICES
233	PAKMAIL
233	PHOTOGRAPHIC SOLUTIONS LTD
233	THOMAS COOK TRAVEL
233	TOP HAT CLEANERS
238	CARPET WAREHOUSE
110-240	ALL RESIDENTIAL

2001 SOUTH SERVICE ROAD EAST
SOURCE: POLK

166 HIKER'S HAVEN

2001 TRAFALGAR ROAD
SOURCE: POLK

546 TACO BELL
548 LICK'S ICE CREAM & BURGER
562 TRAFALGAR ESSO
570 OAK - LAND FORD LINCOLN SALES LTD

1996 ARGUS ROAD
SOURCE: MIGHTS

570 ARGUS AUTOMOTIVE
580 JET AUTO CTR
581 ARGUS ELECTROLYSIS CLINIC
581 ARGUS MEDICAL CENTRE
581 ARGUS MEDICAL CLINIC
581 COLUMBIA REHABILITATION CENTRE
581 MCTU DIAGNOSTICS LTD
581 NADEL ENGINEERING
581 VEIN & LASER CENTRE
586 DIONEX CANADA LTD
586 SHAW CHIROPRACTIC CENTRE
587 DENTIST OFFICE
589 EXECUTAYNE MARKETING LTD
591 SUNNY CHOI FASHION HOUSE
593 PRINCIPLE DESIGNS
603 CEP
603 DESJARDINS B
603 LIFE QUOTE CANADA INSURANCE
603 MAURICE HUNT & CO
603 OAKIN CONSULTANTS LTD
603 OAKVILLE ALLIANCE CHURCH
603 SELECTACARE

1996 ARGUS ROAD
SOURCE: POLKS

560-605 ALL RESIDENTIAL

1996 CROSS AVENUE
SOURCE: MICRO

125	BURAK JACOBSON RESEARCH PRTNRS
125	CELEBRITY TOBACCO & GIFTS
125	COLIO WINES OF CANADA
125	FAR EAST GIFTS
125	GREENSCAPE EXTERIORS
125	KELLY'S CAFE
125	MATCH - UPS
125	NAIL QUEEN
125	OFF BROADWAY
125	OMNI FASHION & ACCESSORIES
125	PAM'S COFFEE & TEA CO
125	TOTAL INVESTIGATION SERVICES LTD
125	TRAFALGAR VILLAGE SHOPPING CENTRE
125	WACHAMACALIT'S
125	WAL - MART
136	SEARS CANADA INC
136	VERY'S FLOWERS LTD
142	JAGER AUTOMOTIVE LTD
142	NOEL'S AUTO SERVICES
148	WOTHERSPOON FOUNDRY LTD
157	ARMADILLO TEXAS GRILL
165	OLIVE GARDEN ITALIAN CAFE
177	BLOCKBUSTER VIDEO CANADA INC
177	ONTARIO TRANSPORTATION MINISTRY
185	MR SUBMARINE
187	CROSS & ARGUS CAR WASH LTD
187	MAPLE CONVENIENCE
187	RODEO DAY CLEANERS
187	THAI SATAY & MORE
207	MY BAGEL
217	BIGGALO'S RESTAURANT & BAR
227	HARVEY'S RESTAURANT
233	TOP HAT CLEANERS
238	AJD SOFTWARE CONSULTING INC
238	CARPET WAREHOUSE
238	SIRUS COMPUTER CENTRE

1996 CROSS AVENUE
SOURCE: POLK

99	ADDRESS NOT LISTED
110-240	ALL RESIDENTIAL

1996 SOUTH SERVICE ROAD EAST

SOURCE: MIGHTS

226	JOHN D ROSART LTD
226	ROSART PROPERTIES INC
232	RED LOBSTER
234	ANIMAL HOSPITAL OF OAKVILLE
234	OAKVILLE PET GROOMING SERVICE

1996 TRAFALGAR ROAD

SOURCE: MIGHTS

562	TRAFALGAR ESSO SELF SERVE
570	A DISCOUNT CAR & TRUCK RENTALS
570	OAK - LAND LINCOLN MERCURY

580	GOODYEAR CERTIFIED AUTO SERVICE CENTRE
581	ADCOM
581	CAMEO INTERIORS JOBSITE
581	ENDODONTIST OFFICE
581	KEL OAK MANAGEMENT
581	MCTU DIAGNOSTICS LTD
581	MEDCARE OAKVILLE PHARMACY INC
581	MEDCHEM LABORATORIES LTD
581	RMR MANAGEMENT SERVICES LTD
587	DARBY MANAGEMENT SERVICES LTD
587	GNATHIC MANAGEMENT SERVICES LTD
589	ULTRATYPE INC
591	BAUMANN JOHN R INSURANCE AGENCY
593	SOUTHAM PARAGON GRAPHICS LTD
595	STEWART LAKE RESOURCES INC
603	ENERGY & CHEMICAL WORKERS UNION
603	HOMES WEEKLY
603	INTERNATIONAL SCHOOL OF INVESTIGATION & PROTECT
603	OAKIN CONSULTANTS LTD
603	OKOM DESIGN INC
603	OLYNYK FOODS LTD
603	SELECTACARE
603	STALEY LTD
603	TRAFALGAR PROPERTY MANAGEMENT & REALTY INC
604	LEDGER & FINLAY ASSOCIATES

99	ADDRESS NOT LISTED
125	ACCESSORY IDEAS LTD
125	ACCOUNTANTS OFFICE
125	BRASS & LIGHT
125	BURAK JACOBSON RESEARCH PARTNERS INC
125	BURGER KING CANADA INC
125	CELEBRITY TOBACCO & GIFTS
125	CIBC
125	COLES THE BOOK PEOPLE
125	CUSTOM TS
125	GINOS PIZZA
125	GOLDEN GRIDDLEPANCAKE HOUSE
125	GRAPHEX ENGRAVING
125	GREENSCAPE EXTERIORS
125	HOUSTON NORTH
125	KELLY'S CAFE
125	MANNING JEWELLERS
125	MATCH UPS
125	PHILDAR WOOLS
125	SURROUNDING GALLERY LTD
125	TRAFALGAR VILLAGE SHOPPING CENTRE
125	WOOLCO AUTO CENTRE
125	WORK WORLD
136	MAGIC LANTERN FILM DISTRIBUTORS LTD
142	CROSS AVENUE AUTO BODY
142	NOELS AUTO SERVICE
142	P&J AUTO BODY
148	WOTHERSPOON FOUNDRY LTD
152	CADET CLEANERS
157	PETE & MARTYS
165	MUNCHHAUSENS
177	MAJOR VIDEO CANADA INC
185	FOURTH LINE
185	HELP U SELL OAKVILLE REAL ESTATE LTD
185	MR SUBMARINE
187	BAKERS DOZEN DONUTS
187	CROSS & ARGUS CAR WASH LTD
187	GRANNYS CHICKEN COOP
187	RODEO DRY CLEANERS
187	TIDY CAR
207	BIG MARKS RESTAURANT
217	MOTHERS INC RESTAURANT
226	AUTO GENICS TOTAL AUTO SERVICE
226	ENLAN REALTY CORP
227	HARVEY'S RESTAURANT
238	BEST LITTLE HAIR HOUSE IN OAKVILLE
238	CARPET WAREHOUSE
238	CEST BELLE
110-240	ALL RESIDENTIAL

1991 SOUTH SERVICE ROAD EAST
SOURCE: MIGHTS

166 OAKVILLE HONDA
178 SHERIDAN COLLEGE CAMPUSES BRAMPTON CAMPUS
226 ROSART JOHN D LTD
234 OAKVILLE GROOMING SERVICES

1991 TRAFALGAR ROAD
SOURCE: MIGHTS

546 BEAVER LUMBER CO LTD
562 TEXACO CANADA INC HOME COMFORT FUEL OIL DELIVERY
570 OAK LAND LINCOLN MERCURY

1985 ARGUS ROAD
SOURCE: MIGHTS

581 ALL SERVICES LABORATORIES
581 MACKENZIE PHARMACY
581 OAKVILLE X-RAY LTD
581 PARA MED HEALTH SERVICES
581 RMR MANAGEMENT SERVICES LTD
581 TRAFALGAR MEDICAL BUILDERS LTD
581 TRALFALGAR MEDICAL CLINIC
587 THE PRINTING SHOP
591 DRIVE LINE INC
595 GRAPHIC SQUARE
603 BANK OF MONTREAL COMMERCIAL BANKING UNIT
603 ENERGY & CHEMICAL WORKERS UNION
603 FAIRMAN GEO CUSTOMS HOUSE BROKERS & CONSULTANTS
603 OAKIN CONSULTANTS LTD
603 OLYNYK FOOD LTD
603 ONLINE FINANCIAL SYSTEMS LTD
603 RG TRANSPORTATION SERVICES
603 STALEY LTD

1985 CROSS AVENUE
SOURCE: MIGHTS

99 ADDRESS NOT LISTED
125 BELINDA & BROTHER
125 BREAD MAN LTD
125 BURGER KING CANADA INC
125 CIBC
125 COLES THE BOOK PEOPLE
125 COMPUTER ACQUAINTANCE CENTRE
125 DA VINCI SHOES
125 DENTIST OFFICE
125 DIRECT FILM
125 JJ'S LADIES WEAR
125 KELLY'S CAFE
125 KELSEY'S ROAD HOUSE
125 MANNING JEWELLERS
125 MARK'S WORK WEARHOUSE
125 MCTAVISH TRAVEL CENTRE TRAFALGAR VILLAGE
125 MILKY WAY
125 OAK QUEEN MALL MAINTENANCE ROOM
125 SEARS
125 SHOE WORLD
125 SHOPPERS DRUG MART
125 SURROUNDINGS GALLERY LTD
125 TRAFALGAR VILLAGE SHOPPING CENTRE
125 WOOLCO AUTO CENTRE
138 LATTO CONSTRUCTION LTD
142 NOEL'S AUTO SERVICE
148 TITAN FOUNDRY LTD
148 WOTHERSPOON FOUNDRY LTD
152 CADET CLEANERS
157 PETER & MARTYS
165 CORKSCREW RESTAURANT
177 ADDRESS NOT LISTED
185 DUNCAN'S INDUSTRIAL HARDWARE
191 CARPET WAREHOUSE
193 SUPERIOR DRAPERY INC
195 ENERGY & CHEMICAL WORKERS UNION
207 BIG MACK'S RESTAURANT
217 MOTHERS PIZZA PARLOUR & SPAGHETTI HOUSE
227 HARVEY'S RESTAURANT
238 D&R GARDEN SUPPLY LTD
110-240 ALL RESIDENTIAL

1985 SOUTH SERVICE ROAD EAST
SOURCE: MIGHTS

178 SHERIDAN COLLEGE QUEEN ELIZABETH CAMPUS
226 ROSART JOHN D LTD
234 ANIMAL HOSPITAL OF OAKVILLE

1985 TRAFALGAR ROAD
SOURCE: MIGHTS

546 BEAVER LUMBER CO LTD
562 RESIDENTIAL (1 TENANT)
570 OAKLAND LINCOLN MERCURY

1981 ARGUS ROAD
SOURCE: MIGHTS

568	HALTON INDUSTRIAL SUPPLIES LTD
570	ALLISON TROPHIE & ENGRAVING
572	OAKVILLE SHEET METAL CO LTD
581	ALL SERVICES LABORATORIES
581	DENTIST OFFICE
581	DOCTORS OFFICE
581	MACKENZIE PHARMACY
581	OAKVILLE XRAY LTD
581	RMR MANAGEMENT SERVICES LTD
581	TRAFALGAR MEDICAL BUILDING LTD
587	ASSOCIATED PRINTING SERVICES
589	MID KNIGHT CATERING
591	EARLY CANADIAN LIFE
595	GRAPHIC SQUARE

1981 CROSS AVENUE
SOURCE: MIGHTS

99	ADDRESS NOT LISTED
125	BREAD MAN LTD
125	BURGER KING
125	CIBC
125	DIRECT FILM
125	KELSEY'S ROAD HOUSE
125	MANNING JEWELLERS
125	MCTAVISH TRAVEL CENTRE LTD
125	MOORES FIRESTONE TIRE CENTRE
125	OAK QUEEN MALL MAINTENANCE ROOM
125	OAK QUEEN PAINT & WALLPAPER LTD
125	OAKVILLE FURNITURE CO
125	PERMANENT THE REAL ESTATE OFFICE
125	SHOPPERS DRUG MART
125	STEREO VILLAGE
125	TRAFALGAR HEALTH FOODS
125	TRAFALGAR VILLAGE SHOPPING CENTRE
125	YUSTIN CONSTRUCTION LTD
138	GRAFTON HOUSE DESIGN
138	YOUNGE DRIVERS OF CANADA
148	TITAN FOUNDRY LTD
148	WOTHERSPOON JA & SON LTD FOUNDRY
152	CADET CLEANERS
165	CORKSCREW RESTAURANT
177	ADDRESS NOT LISTED
185	DUNCANS INDUSTRIAL HARDWARE
185	TANDET TRUCK RENTAL & LEASING
191	CARPET WAREHOUSE
217	MOTHERS PIZZA PARLOUR & SPAGHETTI HOUSE
238	D&R GARDEN SUPPLY LTD
110-240	ALL RESIDENTIAL

1981 SOUTH SERVICE ROAD EAST
SOURCE: MIGHTS

196 LUCERNE FOODS LTD
226 HAMMOND THOMAS N & ASSOCIATES LTD
226 QUENNELL HOWARD INVESTMENTS LTD
226 ROADHOUSE PROPERTIES INC
226 ROSART BROTHERS LTD
226 ROSART PROPERTIES
234 CORMACK ANIMAL CLINIC LTD

1981 TRAFALGAR ROAD
SOURCE: MIGHTS

546 BEAVER LUMBER CO LTD
562 FLIEGERS TEXACO
570 OAKLAND LINCOLN MERCURY

1975 ARGUS ROAD
SOURCE: MIGHTS

570 ALLISON TROPHIES & ENGRAVING
572 OAKVILLE SHEET METAL CO LTD
580 POWER SPRAY
581 DENTIST OFFICE
581 DOCTORS OFFICE
581 MACKENZIE PHARMACY
581 OAKVILLE XRAY
581 TRAFALGAR MEDICAL BUILDING
581 TRAFALGAR MEDICAL LABORATORY
587 ASSOCIATES PRINTING SERVICES
589 NORTH ENNISCLARE REALTY LTD
591 ONTARIO WEEKLY NEWS ASSOCIATION
593 GRAPHIC SQUARE
595 JAYMAC LIQUOR CONTROLS

1975 CROSS AVENUE
SOURCE: MIGHTS

99 ADDRESS NOT LISTED
125 BATA SHOE STORE
125 CARDS GALORE & CANDLES TOO LTD
125 CIBC
125 CLOAK & SON LTD
125 DOMINION STORES LTD
125 FAMILY HOBBYCRAFT LEISURE WORLD
125 FAULKNER'S FINE FOOTWEAR
125 FOSS HARDWARE & GIFT
125 IRV BURNS ELKS MEN'S WEAR
125 KERNS JEWELLERS
125 KM BRADLEY & ASSOCIATES
125 L&M SMOKE & GIFT
125 LAURA SECORD CANDIES LTD
125 MINISTRY OF THE ENVIRONMENT
125 MOORE'S TIRE CENTRE
125 OAK QUEEN BARBER SHOP
125 OAK QUEEN MALL ADMINISTRATIVE OFFICE
125 OAK QUEEN PAINT & WALLPAPER
125 OAK QUEEN PLAZA
125 OAK QUEEN SHOE REPAIR
125 OAKDALE RESTAURANT
125 OAKVILLE CYCLE & SPORTS
125 POP CITY
125 PROVINCIAL DEPT OF TRANSPORTATION & COMMUNICATIONS
125 SHEA'S OAK QUEEN BOWLING
125 SHOPPERS DRUG MART
125 TERESA'S FASHIONS
125 TEX STYLES
125 WOOLCO CATALOGUE SALES
125 YOUNG CANADA CHILDRENS SHOPS
138 GADOURY ELECTRIC LTD
138 J KANE CONSTRUCTION CARP & DRYWALL
138 OIL CHEMICAL & ATOMIC WORKERS INTERNATIONAL UNION
142 WRIGHT CE STAMPINGS LTD
148 WOTHERSPIIN JA & SON LTD
177 ADDRESS NOT LISTED
185 DUNCAN'S INDUSTRIAL HARDWARE LTD
185 THE TRAILER CENTRE
191 GESCAN ELECTRICAL DISTRIBUTORS
193 THORNE E PLUMBING & HEATING LTD
195 BROWN ELECTRIC CO LTD
238 D&R GARDEN SUPPLY LTD
110-240 ALL RESIDENTIAL

1975 SOUTH SERVICE ROAD EAST
SOURCE: MIGHTS

166	FLINTKOTE CO OF CANADA LTD
226	BARINGHAM ESTATES
226	CHAINGATE DEVELOPMENTS LTD
226	MORO APARTMENTS LTD
226	ROLLING LANDS LTD
226	ROSART JOHN D LTD
226	SUNNINGHILL DEVELOPMENTS
226	TORONTO HAMILTON DEVELOPMENT
226	VILLAGEFIELD ESTATES
226	WILCOX GROUP LTD
234	CORMACK ANIMAL CLINIC LTD

1975 TRAFALGAR ROAD
SOURCE: MIGHTS

546	BEAVER LUMBER CO LTD
562	ROY FLEIGER LTD SERVICE STATION
570	OAKLAND LINCOLN MERCURY SALES LTD

1971 ARGUS ROAD
SOURCE: MIGHTS

568	FISHER GORD VEHICLE DEVELOPMENT
570	TOLLEFSON LITHOGRAPHING LTD
572	OAKVILLE SHEET METAL CO LTD
581	RUSSELL'S CLINIC PHARMACY
587	ASSOCIATED PRINTING SERVICES LTD
589	SNOW CONSTRUCTION LTD
591	ASL TRAFFIC MANAGEMENT LTD
593	GRAPHIC SQUARE
595	JAYMAC COATINGS LTD

1971 CROSS AVENUE
SOURCE: MIGHTS

99	ADDRESS NOT LISTED
125	BATA SHOE STORE LTD
125	BOOK FAIR LTD
125	BOSLEY WH & CO LTD
125	CIBC
125	DEPT OF TRANSPORT DRIVER EXAMINATION CENTRE
125	DOMINION STORES LTD
125	ELK'S MEN'S BOYS WEAR STORES
125	FANN ETTE FASHIONS LTD
125	FAULKNER'S FINE FOOTWEAR LTD
125	FIRESTONE TIRE & RUBBER CO OF CANADA LTD
125	FOSS HARDWARE & GIFT
125	HUNT'S BAKERIES
125	LAURA SECORD CANDIES LTD
125	OAK QUEEN BARBER SHOP
125	OAK QUEEN PAINT & WALLPAPER LTD
125	OAK QUEEN SHOE REPAIR
125	OAKVILLE RESTAURANT
125	POST OFFICE
125	REITMAN'S ONTARIO LTD
125	RIVIERA HAIR STYLISTS
125	ROBERT STONE FASHIONS
125	SHEA'S OAK QUEEN BOWLING CENTRE
125	SHOPPERS DRUG MART
125	SLEEPLAND
125	TEX STYLES
125	WINSTON JEWELLERS
125	YOUNG CANADA CHILDREN'S SHOPS
142	WRIGHT CE STAMPING LTD
148	WOTHERSPOON JA & SON LTD
177	ADDRESS NOT LISTED
193	THORNE E PLUMBING & HEATING LTD
195	BROWN ELECTRIC CO LTD
214	CANADIAN PACIFIC EXPRESS CO
238	D&R GARDEN SUPPLY LTD
238	OFFURNISH
110-240	ALL RESIDENTIAL

1971 SOUTH SERVICE ROAD EAST

SOURCE: MIGHTS

166 HALTON COUNTY BOARD OF EDUCATION
218 QUEEN ELIZABETH MOTOR HOTEL
226 BARRINGHAM ESTATES
226 BLUEBERRY BEACH DEVELOPMENT
226 CHAIN GATE DEVELOPMENT LTD
226 CHILDRENS AID SOCIETY
226 DOM J ROSART LTD
226 MARCROB ESTATES LTD
226 MORO APARTMENTS LTD
226 ROLLING LANDS LTD
226 ROSART JOHN D LTD
226 TORONTO HAMILTON DEVELOPMENT
226 VILLAGE FIELD ESTATES
234 CORMACK ANIMAL CLINIC LTD

1971 TRAFALGAR ROAD

SOURCE: MIGHTS

546 BEAVER LUMBER CO LTD
562 FLIEGER'S TEXACO SERVICE STATION

1965 ARGUS ROAD
SOURCE: MIGHTS

572 OAKVILLE SHEET METAL CO LTD

1965 CROSS AVENUE
SOURCE: MIGHTS

99 ADDRESS NOT LISTED
125 ALLEN EDDIE LTD
125 AMATO LILLIAN OAK QUEEN SNACK BAR
125 ARCADE MEAT MARKET
125 BATA SHOE STORE
125 BOOK FAIR LTD
125 CIBC
125 COLOUR COUNSELLORS
125 DOMINION STORES LTD
125 ELK'S MEN'S BOYS WEAR
125 FAN ETTE FASHIONS LTD
125 FAULKNER'S FINE FOOTWEAR LTD
125 FIRESTONE STORES
125 FOSS HARDWARE & GIFTS LTD
125 HUNT'S BAKERIES
125 KEITH'S CLEANERS LTD
125 LAURA SECORD CANDY SHOP
125 MAHER SHOES LTD
125 OAK QUEEN BARBER SHOP
125 OAK QUEEN BEAUTY SALON
125 OAK QUEEN MALL
125 OAK QUEEN SHOE REPAIR
125 OAKDALE RESTAURANT LTD
125 REITMAN'S LTD
125 SHEA'S OAK QUEEN BOWLING CENTRE
125 STONE ROBERT FASHIONS
125 SUB POST OFFICE
125 TEX STYLES
125 TRAFALGAR OAK QUEEN DRUGS LTD
125 UNITED CIGAR STORES LTD
125 WINSTON JEWELLERS LTD
125 WOOLWORTH FW CO LTD
125 YOUNG CANADA
125 ZELLERS LTD
136 BROEDERS' DUTCH BAKERY
142 WRIGHT CE CO
148 WOTHERSPOON JA & SON LTD
177 ADDRESS NOT LISTED
185 KENDALL JAS R LEATHER CO LTD
193 THORNE E PLUMBING & HEATING LTD
195 BROWN ELECTRIC CO LTD
214 CANADIAN NATIONAL RAILWAY
214 CANADIAN PACIFIC EXPRESS CO
218 HOME DIAPER SERVICE
227 DAUBNEY FC FflorIST
238 D&R GARDEN SUPPLY LTD
110-240 ALL RESIDENTIAL

1965 SOUTH SERVICE ROAD EAST
SOURCE: MIGHTS

166 SINGER CO OF CANADA LTD
166 SINGER CREDIT OF CANADA LTD
218 QUEEN ELIZABETH MOTOR HOTEL
234 CORMACK ANIMAL CLINIC LTD

1965 TRAFALGAR ROAD
SOURCE: MIGHTS

546 BEAVER LUMBER CO LTD
562 FLIEGER'S TEXACO SERVICE STATION

1960 ARGUS ROAD
SOURCE: MIGHTS

560-605 STREET NOT LISTED

1960 CROSS AVENUE
SOURCE: MIGHTS

99 ADDRESS NOT LISTED
118 WRIGHT CE CO
124 BROADERS DUTCH BAKERY
126 MOBILE REPAIR SHOP
177 ADDRESS NOT LISTED
110-240 ALL RESIDENTIAL

1960 SOUTH SERVICE ROAD EAST
SOURCE: MIGHTS

200 QUEEN ELIZABETH COFFEE SHOP
200 QUEEN ELIZABETH MOTEL
200 SINGER SEWING MACHINE CO

1960 TRAFALGAR ROAD
SOURCE: MIGHTS

540-570 Even STREET NOT LISTED

APPENDIX G

REGULATORY DOCUMENTS

© Azure Group Inc. • 2024

Ministry of the Environment, Conservation and Parks

Emergency Management and Access Branch

40 St. Clair Avenue West
Toronto ON M4V 1M2

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction de la gestion des situations d'urgence et de l'accès à l'information

40, avenue St. Clair ouest
Toronto ON M4V 1M2

Ontario

October 3, 2023

Ahmed Al-Temimi
Azure Group Inc.
6751 Professional Court, Suite 201 and 202
Mississauga, Ontario L4V 1Y3
aaltemimi@azuregroup.ca

Dear Ahmed Al-Temimi:

RE: MECP FOI A-2023-05312, Your Reference #: 2303-003 – Decision Letter

This letter is further to your request made pursuant to the Freedom of Information and Protection of Privacy Act (the Act) relating to 177, 185 Cross Avenue and 580 Argus Road, Oakville.

After a thorough search through the ministry files, records were located in response to your request. The final decision has been made to provide partial access to the requested information. The official responsible for making the access decision on your request is the undersigned.

Some of the information has been removed to protect privacy (Section 21 of the Act). Section 57 of the Act authorizes certain fees to be charged for processing a request. Our charges for processing this request are:

Search Time 1.25 hours @ $30/hour o Time taken to locate and retrieve records	$37.50
Total	**$ 37.50**

In order to receive a copy of the records please forward this amount in Canadian dollars to our office. Payment(s) may be made by **November 2, 2023**. If payment has not been received by this date, the file will be closed and you will be required to submit a new request.

The ministry's District Office has advised that there may be inactive records in the Records Centre, Mississauga. If you would like us to retrieve these files, please submit a separate request quoting this file number. The $5 application fee will be applied towards any costs incurred with the retrieval of the records from the Records Centre. Please note there is no guarantee that any records will be located responsive to your request.

Payment(s) may be made in Canadian dollars by one of the following options:

- Pay online through the Freedom of Information Request for Property Information Form: https://forms.mgcs.gov.on.ca/en/dataset/012-2146. Both the pdf download or "HTML" versions provide access to the payment option.
- Mail money order or cheque made payable to the "Minister of Finance (FOI)" or provide credit card information through the mail-in version of the form mentioned above.

Please **do not** mail cash or send your payment information via email.

You may request a review of my decision within 30 days from the date of this letter by contacting the Information and Privacy Commissioner/Ontario at http://www.ipc.on.ca. Please note there may be a fee associated with submitting the appeal.

If you have any questions, please contact Nicole Pitton at 1-807-933-0928 or Nicole.Pitton@ontario.ca.

Yours truly,



for
Josephine DeSouza
Manager (A), Access and Privacy Office

Attachment

Ministry of the Environment, Conservation and Parks

Emergency Management and Access Branch

40 St. Clair Avenue West
Toronto ON M4V 1M2

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction de la gestion des situations d'urgence et de l'accès à l'information

40, avenue St. Clair ouest
Toronto ON M4V 1M2

Ontario

October 4, 2023

Ahmed Al-Temimi
Azure Group Inc.
6751 Professional Court, Suite 201 and 202
Mississauga, Ontario L4V 1Y3
aaltemimi@azuregroup.ca

Dear Ahmed Al-Temimi:

RE: MECP FOI A-2023-05312, Your Reference #: 2303-003 – Record Release Letter

This letter is further to your request made pursuant to the Freedom of Information and Protection of Privacy Act (the Act) relating to 177, 185 Cross Avenue and 580 Argus Road, Oakville.

Attached is a copy of the records.

If you have any questions, please contact Nicole Pitton at 1-807-933-0928 or Nicole.Pitton@ontario.ca.

Yours truly,

Nicole Pitton

for
Josephine DeSouza
Manager (A), Access and Privacy Office

Attachment

Generator Details

Registration/Notification Number

ON5859726

Legal Company Name

Primary Name:	915643 Ontario Inc	Division Name:	NA

Company Operating Name

Primary Name:	915643 Ontario Inc	Division Name:	NA

Mailing Address

Division Building:	NA	Post Box Number:	NA
Address Line 1:	185 Beaver Creek Road, Unit 12	Address Line 2:	NA
Town/City:	Richmond Hill	Postal Code / Zip Code:	L4B 2N2
County: (if inside Ontario)	YORK (R. M.)	Province/State (If inside Canada/US)	ONTARIO
County: (if outside Ontario)	NA	Province / State (If outside Canada / US)	NA
Country:	Canada		

Site Location

This should be the street address of the site that is being registered. You are required to register each site that generates hazardous waste separately.

Division Building:	NA	Post Box Number:	NA
Address Line 1:	185 Cross Ave		
Address Line 2:	NA		
Town/City:	Oakville	Postal Code / Zip Code:	L6J 2W7
County: (if inside Ontario)	HALTON (R. M.)	Province / State (If inside Canada / US)	ONTARIO
County: (if outside Ontario)	NA	Province / State (If outside Canada / US)	NA
Country:	Canada		

Company Name: **915643 Ontario Inc**
Company Number: **ON5859726 (Generator)**

Active Waste Classes

Active Waste Class Listing

Add New Waste Class Inactive waste classes

Active On-site Waste Classes

Waste Class	View Details	Hazardous Waste Number (per waste stream)	Reg. 347 Schedules	Disposal Method	Part 2B required	Part 2B complete	Physical State	Off-Site	Status
146 - L	View Details	N/A					Solid	Off-Site	Active

Back

© 2002-2018 Queen's Printer for Ontario

Amit Pal <amit@azuregroup.ca>

2303-003: 177 Cross Avenue, Oakville | Tank Record Search Request

Public Information Services <publicinformationservices@tssa.org> Wed, Jun 7, 2023 at 7:45 AM
To: Amit Pal <amit@azuregroup.ca>

Hello,

NO RECORD FOUND IN CURRENT DATABASE

Thank you for your request for confirmation of public information. TSSA has performed a preliminary search of TSSA's current database.

- We confirm that there are no records in our database of any **fuel storage tanks** at the subject address(es).

This is not a confirmation that there are no records in the archives. For a further search in our archives, please submit an application for release of public information (PI Form) through TSSA's new Service Prepayment Portal. The associated fee must be paid via credit card (Visa or MasterCard) through a secure site.

Please follow the steps below to access the new application(s) and Service Prepayment Portal:

1. Click Release of Public Information - TSSA - TSSA and click "need a copy of a document";
2. Select the appropriate application, download it and complete it in full; and
3. Proceed to page 3 of the application and click the link TSSA Service Prepayment Portal under payment options (the link will take you the secure site to pay for the release via credit card).

Accessing the Service Prepayment Portal:

1. Select new or existing customer (*if you are an existing customer, you will need your account # & postal code to access your account);
2. Select the program area: AD (Amusement Devices), BPV (Boilers and Pressure Vessels), ED (Elevating Devices), FS (Fuels Services), OE (Operating Engineers) or SKI (Ski Lifts) and click continue;
3. Enter the application form number (obtained from bottom left corner of application form) and click continue;

a. When selecting the application form number from the drop-down menu, please make sure you select the application that begins with "PI" (i.e. PI-FS, PI-BPV etc.);

4. Complete the primary contact information section;
5. Complete the fees section;
6. Upload your completed application; and
7. Upload supporting documents (if required) and click continue.

Once all steps have been successfully completed, you will receive your receipt via email.

Questions? Please contact TSSA's Public Information Release team at publicinformationservices@tssa.org.

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Kind regards,

Kimberly Gage | Public Information Agent

Legal

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1 416-734-3348 | Fax: +1 416-734-3568 | E-Mail: kgage@tssa.org

www.tssa.org



Winner of 2022 5-Star Safety Cultures Award

From: Amit Pal <amit@azuregroup.ca>
Sent: Tuesday, June 6, 2023 2:18 PM
To: Public Information Services <publicinformationservices@tssa.org>
Cc: Azure Group Inc. <aaltemimi@azuregroup.ca>; Samantha Desgrosseilliers <samantha@azuregroup.ca>
Subject: 2303-003: 177 Cross Avenue, Oakville | Tank Record Search Request

Good Afternoon Officer,

[CAUTION]: This email originated outside the organisation.
Please do not click links or open attachments unless you recognise the source of this email and know the content is safe.

May I request a tank record search for the following addresses:

- 177 Cross Avenue, Oakville, ON L6J2W7;
- 185 Cross Avenue, Oakville, ON L6J2W7;
- 187 Cross Avenue, Oakville, ON L6J2W7;
- 165 Cross Avenue, Oakville, ON L6J2W7;
- 580 Argus Road, Oakville , ON L6J3J3;
- 586 Argus Road, Oakville, ON L6J3J3;
- 590 Argus Road, Oakville, ON L6J3J3;
- 589 Argus Road, Oakville, ON L6J3J3;
- 581 Argus Road, Oakville, ON L6J3J3;
- 568 Argus Road, Oakville, ON L6J3J3;

Thank You,

--

Best Regards,

Amit Pal, B.Eng.

Project Scientist

==========

Direct: +1 (705) 289-6005

Office: +1 (905) 673-2694

Fax: +1 (416) 907-2694

Email: amitamit@azuregroup.ca

6751 Professional Court, Suite 201 & 202

Mississauga, Ontario

L4V 1Y3

www.azuregroup.ca

Proudly selected as one of the top 7 environmental firms in GTA & Toronto in 2021.

The information contained in this e-mail is intended only for the individual or entity to which it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message.
This electronic message and any attached documents are intended only for the named recipients. This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message.

APPENDIX H

ERIS REPORT

© Azure Group Inc. • 2024

ERIS

DATABASE REPORT

Project Property:	*2303-003* *177 Cross Avenue* *Oakville ON L6J 2W7*
Project No:	*2303-003*
Report Type:	*RSC Report (Urban)*
Order No:	*23042600187*
Requested by:	*Azure Group Inc.*
Date Completed:	*April 27, 2023*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 info@erisinfo.com erisinfo.com

Table of Contents

Table of Contents.....2
Executive Summary.....3
Executive Summary: Report Summary.....4
Executive Summary: Site Report Summary - Project Property.....6
Executive Summary: Site Report Summary - Surrounding Properties.....7
Executive Summary: Summary By Data Source.....35
Map.....69
Aerial.....70
Topographic Map.....71
Detail Report.....72
Unplottable Summary.....313
Unplottable Report.....315
Appendix: Database Descriptions.....327
Definitions.....336

Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on Information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a database review of environmental records.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Limited Partnership ("ERIS") using various sources of information, including information provided by Federal and Provincial government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Trademark and Copyright: You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report (s) are protected by copyright owned by ERIS Information Limited Partnership. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERIS.

Executive Summary

Property Information:

Project Property:	*2303-003* *177 Cross Avenue Oakville ON L6J 2W7*
Project No:	*2303-003*

Order Information:

Order No:	*23042600187*
Date Requested:	*April 26, 2023*
Requested by:	*Azure Group Inc.*
Report Type:	*RSC Report (Urban)*

Historical/Products:

Aerial Photographs	*Aerials - National Collection*
City Directory Search	*CD - QUOTE Custom City Directory Search*
ERIS Xplorer	*ERIS Xplorer*
Insurance Products	*Fire Insurance Maps/Inspection Reports/Site Plans*
Topographic Map	*RSC Maps*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	0
AST	Aboveground Storage Tanks	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	8	8
CA	Certificates of Approval	Y	0	5	5
CDRY	Dry Cleaning Facilities	Y	0	0	0
CFOT	Commercial Fuel Oil Tanks	Y	0	2	2
CHEM	Chemical Manufacturers and Distributors	Y	0	0	0
CHM	Chemical Register	Y	0	0	0
CNG	Compressed Natural Gas Stations	Y	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	Y	0	0	0
CONV	Compliance and Convictions	Y	0	0	0
CPU	Certificates of Property Use	Y	0	0	0
DRL	Drill Hole Database	Y	0	0	0
DTNK	Delisted Fuel Tanks	Y	0	21	21
EASR	Environmental Activity and Sector Registry	Y	0	2	2
EBR	Environmental Registry	Y	0	0	0
ECA	Environmental Compliance Approval	Y	0	3	3
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	1	63	64
EIIS	Environmental Issues Inventory System	Y	0	0	0
EMHE	Emergency Management Historical Event	Y	0	0	0
EPAR	Environmental Penalty Annual Report	Y	0	0	0
EXP	List of Expired Fuels Safety Facilities	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Y	0	0	0
FRST	Federal Identification Registry for Storage Tank Systems (FIRSTS)	Y	0	0	0
FST	Fuel Storage Tank	Y	0	13	13
FSTH	Fuel Storage Tank - Historic	Y	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Y	1	137	138
GHG	Greenhouse Gas Emissions from Large Facilities	Y	0	0	0
HINC	TSSA Historic Incidents	Y	0	0	0

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	Fuel Oil Spills and Leaks	Y	0	0	0
LIMO	Landfill Inventory Management Ontario	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBP	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	6	6
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGWE	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	4	4
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	14	14
PINC	Pipeline Incidents	Y	0	1	1
PRT	Private and Retail Fuel Storage Tanks	Y	0	4	4
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	1	1
RSC	Record of Site Condition	Y	0	8	8
RST	Retail Fuel Storage Tanks	Y	0	4	4
SCT	Scott's Manufacturing Directory	Y	0	7	7
SPL	Ontario Spills	Y	0	16	16
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	2	2
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	3	22	25
		Total:	5	343	348

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
1	WWIS		ON *Well ID:* 7286766	E/0.0	-1.09	72
2	WWIS		ON *Well ID:* 7327366	WNW/0.0	-0.11	73
3	GEN	915643 Ontario Inc	185 Cross Ave Oakville ON	ESE/0.0	-1.01	74
3	EHS		185 Cross Ave Oakville ON L6J2W7	ESE/0.0	-1.01	74
4	WWIS		586 ARGUS RD OAKVILLE ON *Well ID:* 7161332	WNW/0.0	0.76	74

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
5	WWIS		586 ARGUS RD OAKVILLE ON *Well ID:* 7161333	WNW/0.5	0.39	77
6	WWIS		ON *Well ID:* 7182191	N/0.6	0.00	81
7	EHS		Argus Road And Cross Avenue Oakville ON	ENE/1.2	-0.21	82
8	CA	R.M. OF HALTON	CROSS AVE./ARGUS RD. OAKVILLE TOWN ON	E/5.0	-2.51	82
9	SCT	DIONEX CANADA LTD.	586 ARGUS RD UNIT 4 OAKVILLE ON L6J 7S1	NNW/13.8	-0.12	82
9	GEN	DR. GREGORY A. SHAW	100 - 586 ARGUS ROAD OAKVILLE ON L6J 7S1	NNW/13.8	-0.12	82
9	GEN	DR. GREGORY A. SHAW	586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 3J3	NNW/13.8	-0.12	83
9	GEN	DR. GREGORY A. SHAW	586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 3J3	NNW/13.8	-0.12	83
9	EHS		586 Argus Road Oakville ON L6J 7S1	NNW/13.8	-0.12	83
9	GEN	DR. GREGORY A. SHAW	586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 7S1	NNW/13.8	-0.12	83
9	EHS		586 Argus Road Oakville ON L6J 3J3	NNW/13.8	-0.12	84
9	EHS		586 Argus Road Oakville ON L6J 3J3	NNW/13.8	-0.12	84

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
9	WWIS		586 ARGUS RD OAKVILLE ON *Well ID:* 7161334	NNW/13.8	-0.12	84
9	EHS		586 Argus Rd Oakville ON L6J3J3	NNW/13.8	-0.12	87
9	GEN	586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	NNW/13.8	-0.12	87
9	GEN	586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	NNW/13.8	-0.12	88
9	GEN	586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	NNW/13.8	-0.12	88
9	GEN	586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	NNW/13.8	-0.12	89
9	EHS		586 Argus Rd Oakville ON L6J3J3	NNW/13.8	-0.12	89
9	GEN	586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	NNW/13.8	-0.12	89
9	GEN	586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	NNW/13.8	-0.12	90
9	GEN	586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	NNW/13.8	-0.12	90
10	SCT	Instant Imprints Canada Inc.	165 Cross Ave Suite 6 Oakville ON L6J 0A9	SSW/20.1	-0.06	90
10	GEN	Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	SSW/20.1	-0.06	91
10	GEN	Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	SSW/20.1	-0.06	91

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
10	GEN	Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	SSW/20.1	-0.06	92
10	GEN	Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	SSW/20.1	-0.06	92
10	EHS		165 Cross Avenue Oakville ON L6J 0A9	SSW/20.1	-0.06	92
10	GEN	Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	SSW/20.1	-0.06	93
10	WWIS		165 CROSS AVE OAKVILLE ON *Well ID:* 7322522	SSW/20.1	-0.06	93
10	WWIS		165 CROSS AVE OAKVILLE ON *Well ID:* 7322523	SSW/20.1	-0.06	96
10	WWIS		165 CROSS AVE OAKVILLE ON *Well ID:* 7322524	SSW/20.1	-0.06	99
10	GEN	Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	SSW/20.1	-0.06	103
10	GEN	Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	SSW/20.1	-0.06	103
10	GEN	Dr. B. Kostovic Medical Professional Corporation	165 Cross Ave 105 Oakville ON L6J 0A9	SSW/20.1	-0.06	103
11	GEN	Dr Sam Jomehri	587 argus road oakville ON L6J3J4	N/20.4	0.00	104
11	GEN	Dr Sam Jomehri	587 argus road oakville ON L6J3J4	N/20.4	0.00	104
11	GEN	Dr Sam Jomehri	587 argus road oakville ON L6J3J4	N/20.4	0.00	105

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
11	GEN	Dr Sam Jomehri	587 argus road oakville ON L6J3J4	N/20.4	0.00	105
11	GEN	Dr Sam Jomehri	587 argus road oakville ON L6J3J4	N/20.4	0.00	105
12	EHS		207 Cross Avenue Oakville ON L6J 2W9	ENE/21.2	-1.99	106
12	EHS		207 Cross Avenue Oakville ON L6J 2W9	ENE/21.2	-1.99	106
13	EHS		176 Cross Avenue Oakville ON L6J 2W6	SSE/21.2	-1.00	106
13	EHS		176 Cross Avenue Oakville ON L6J 2W6	SSE/21.2	-1.00	106
13	EHS		176 Cross Avenue Oakville ON L6J 2W6	SSE/21.2	-1.00	107
14	GEN	MED-CHEM LABORATORIES LTD.	581 ARGUS ROAD BASEMENT OAKVILLE ON L6L 3J4	NNE/21.9	-0.97	107
14	GEN	MED-CHEM LABORATORIES LIMITED	581 ARGUS ROAD BASEMENT OAKVILLE ON L6L 3J4	NNE/21.9	-0.97	107
14	GEN	CMLHealthCare	581 ARGUS ROAD OAKVILLE ON	NNE/21.9	-0.97	108
14	GEN	CMLHealthCare	581 ARGUS ROAD OAKVILLE ON	NNE/21.9	-0.97	108
14	GEN	CMLHealthCare	581 ARGUS ROAD OAKVILLE ON	NNE/21.9	-0.97	108
14	GEN	LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON	NNE/21.9	-0.97	109

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
14	GEN	LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON	NNE/21.9	-0.97	109
14	GEN	Argus Medical Centre	581 Argus rd, ste 300 Oakville ON	NNE/21.9	-0.97	109
14	GEN	LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	NNE/21.9	-0.97	110
14	GEN	LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	NNE/21.9	-0.97	110
14	GEN	Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J3J4	NNE/21.9	-0.97	110
14	GEN	Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J3J4	NNE/21.9	-0.97	111
14	GEN	Adamson Properties Inc.	581 Argus Rd. Oakville ON L6J 3J4	NNE/21.9	-0.97	111
14	GEN	LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	NNE/21.9	-0.97	112
14	GEN	Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J3J4	NNE/21.9	-0.97	112
14	GEN	LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	NNE/21.9	-0.97	112
14	GEN	Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J3J4	NNE/21.9	-0.97	113
14	GEN	LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	NNE/21.9	-0.97	113
14	GEN	Argus Medical Centre	581 Argus Rd, ste 300 Oakville ON L6J3J4	NNE/21.9	-0.97	113

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
14	GEN	LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	NNE/21.9	-0.97	114
14	GEN	Argus Medical Centre	581 Argus Rd, ste 300 Oakville ON L6J3J4	NNE/21.9	-0.97	114
14	GEN	Argus Medical Centre	581 Argus Rd, ste 300 Oakville ON L6J3J4	NNE/21.9	-0.97	115
15	GEN	MED-CHEM LABORATORIES LTD.	581 ARGUS ROAD, BASEMENT, OAKVILLE C/O 8150 SHEPPARD EAST SCARBOROUGH ON L6J 3J4	NNE/21.9	-0.97	115
15	GEN	MED-CHEM LABORATORIES LTD. 25-656	581 ARGUS ROAD, BASEMENT, OAKVILLE C/O 8150 SHEPPARD EAST SCARBOROUGH ON L6J 3J4	NNE/21.9	-0.97	115
15	GEN	MCTU DIAGNOSTICS LIMITED	581 ARGUS ROAD OAKVILLE ON L6J 3J4	NNE/21.9	-0.97	116
15	GEN	MCTU DI(OUT OF BUSINESS)	581 ARGUS ROAD OAKVILLE ON L6J 3J4	NNE/21.9	-0.97	116
15	GEN	Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J 3J4	NNE/21.9	-0.97	116
15	GEN	Camista Holdings	581 Argus Road Suite 202 Oakville ON L6J 3J4	NNE/21.9	-0.97	117
15	GEN	Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J 3J4	NNE/21.9	-0.97	117
15	GEN	Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J 3J4	NNE/21.9	-0.97	117
16	WWIS		ON *Well ID:* 7325283	NE/28.6	-2.12	118

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
17	SCT	TARGET MARKETING CORP.	591 ARGUS RD OAKVILLE ON L6J 3J4	N/44.1	-0.21	119
18	EHS		217 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	ENE/45.1	-2.00	119
19	EHS		Argus Road Oakville ON L6J 3J3	NNE/50.2	-1.11	119
19	EHS		Argus Road Oakville ON L6J 3J3	NNE/50.2	-1.11	120
19	EHS		Argus Road Oakville ON L6J 3J3	NNE/50.2	-1.11	120
20	GEN	E. MYMRYK INVESTMENTS INC.	595 ARGUS ROAD OAKVILLE ON L6J 3J4	N/52.9	-0.96	120
20	GEN	E. MYMRYK INVESTMENTS INC. 14-201	595 ARGUS ROAD OAKVILLE ON L6J 3J4	N/52.9	-0.96	120
20	SCT	Rubicon Publishing Inc.	595 Argus Rd Oakville ON L6J 3J4	N/52.9	-0.96	121
21	EHS		217-227 Cross Avenue and 571-595 Argus Road Oakville ON L6J 2W9	NE/64.1	-1.98	121
21	EHS		217-227 Cross Avenue and 571-595 Argus Road Oakville ON L6J 2W9	NE/64.1	-1.98	121
22	EHS		157 Cross Avenue Oakville ON L6J 2W7	SW/64.4	0.17	121
22	EHS		157 Cross Avenue Oakville ON L6J 2W7	SW/64.4	0.17	122
22	EHS		157 Cross Avenue Oakville ON L6J 2W7	SW/64.4	0.17	122

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
23	WWIS		214 CROSS AVE. Oakville ON *Well ID:* 7134031	SW/65.0	0.50	122
24	EHS		217 Cross Avenue Oakville ON L6J 2W9	ENE/65.0	-3.00	125
24	WWIS		217 CROSS AVE lot 13 con 3 OAKVILLE ON *Well ID:* 2810039	ENE/65.0	-3.00	125
25	EHS		217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	ENE/66.4	-2.95	128
25	EHS		217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	ENE/66.4	-2.95	128
25	EHS		217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	ENE/66.4	-2.95	128
26	EHS		590 Argus Rd Oakville ON L6J3J3	NNW/76.3	0.95	129
27	RSC		148 Cross Ave. Part of Lot 14, Conc. 3 Oakville ON L6J 2W6	S/79.5	-0.04	129
27	RSC		148 Cross Avenue Part of Lot 14, Concession 3 Oakville ON L6J 2W6	S/79.5	-0.04	129
27	RSC		148 Cross Avenue Oakville ON L6J 2W6	S/79.5	-0.04	130
27	RSC		148 Cross Avenue Oakville ON L6J 2W6	S/79.5	-0.04	130
27	RSC		148 Cross Ave. Oakville ON L6J 2W6	S/79.5	-0.04	131

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
27	GEN	WOTHERSPOON FOUNDRY LTD.	148 CROSS AVENUE P.O.BOX 400 OAKVILLE ON L6J 2W6	S/79.5	-0.04	131
27	GEN	WOTHERSPOON FOUNDRY LTD. 42-157	148 CROSS AVENUE P.O.BOX 400 OAKVILLE ON L6J 2W6	S/79.5	-0.04	131
28	GEN	WOTHERSPOON FOUNDRY LTD.	148 CROSS AVENUE OAKVILLE ON L6J 5A8	S/79.6	-0.04	132
29	EHS		166 South Service Road East Oakville ON L6J 0A5	W/82.0	0.95	133
30	EHS		590 Argus Road Oakville ON	NNW/85.2	0.95	133
31	EHS		166 South Service Road East Oakville ON L6J 2X5	W/85.3	0.95	133
31	EHS		166 South Service Road East Oakville ON L6J 2X5	W/85.3	0.95	133
31	EHS		166 South Service Road East Oakville ON L6J 2X5	W/85.3	0.95	133
32	EHS		603 Argus Rd. Oakville ON L6J 6G6	NNE/90.3	-1.27	134
32	GEN	Inside Health Inc.	100-603 Argus Road Oakville ON L6J 6G6	NNE/90.3	-1.27	134
33	EHS		590 Argus Road Oakville ON L6J 6G6	NNW/95.1	0.95	134
33	EHS		590 Argus Road Oakville ON L6J 6G6	NNW/95.1	0.95	134
34	BORE		ON	WSW/102.2	0.95	135

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
35	BORE		ON	W/110.0	0.95	136
36	PES	WOOLCO DEPARTMENT STORES #6497	TRAFALGAR VILLAGE 125 CROSS AVE OAKVILLE ON L6J 2W8	W/114.1	0.95	137
36	EHS		125 Cross Avenue Oakville ON L6J 2W8	W/114.1	0.95	138
36	PES	GARRIE & CHRIS NO FRILLS #700	125 CROSS AVE OAKVILLE ON L6J2W8	W/114.1	0.95	138
36	PES	812918 ONTARIO LIMITED O/A KEVIN'S NO FRILLS	125 CROSS AVENUE OAKVILLE ON L6J2W8	W/114.1	0.95	138
36	GEN	BLACK PHOTO CORPORATION	125 CROSS AVENUE OAKVILLE ON L6J 2W8	W/114.1	0.95	139
36	GEN	BLACK PHOTO CORPORATION	125 CROSS AVENUE OAKVILLE ON L6J 2W8	W/114.1	0.95	139
36	GEN	WAL-MART CANADA INC.	125 CROSS AVENUE TRAFALGAR VILLAGE OAKVILLE ON L6J 2W8	W/114.1	0.95	139
36	GEN	WAL-MART CANADA INC.	TRAFALGAR VILLAGE 125 CROSS AVENUE OAKVILLE ON L5J 2W3	W/114.1	0.95	140
36	SPL	Kevin's No Frills<UNOFFICIAL>	125 Cross Ave Oakville ON	W/114.1	0.95	141
36	SPL	Crossroads Refrigeration <UNOFFICIAL>	125 Cross Ave. Oakville ON	W/114.1	0.95	141
36	PES	812918 ONTARIO LIMITED O/A KEVIN'S NO FRILLS	125 CROSS AVENUE OAKVILLE ON L6J 2W8	W/114.1	0.95	142
36	EHS		125 Cross Ave Oakville ON L6J2W8	W/114.1	0.95	142

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
36	SPL	Neelands Refrigeration Limited	125 Cross Ave Oakville ON L6J 2W8	W/114.1	0.95	143
36	PES	1950409 ONTARIO LIMITED O/A COLANGELO'S NO FRILLS	1-125 CROSS AVE OAKVILLE ON L6J2W8	W/114.1	0.95	143
36	PES	1950409 ONTARIO LIMITED O/A COLANGELO'S NO FRILLS	1-125 CROSS AVE OAKVILLE ON L6J2W8	W/114.1	0.95	144
36	SPL		125 Cross Ave Oakville ON L6J 2W8	W/114.1	0.95	144
36	GEN	Loblaw Companies Inc	1-125 Cross Ave. Oakville ON L6J 2W8	W/114.1	0.95	145
36	GEN	Loblaw Companies Inc	1-125 Cross Ave. Oakville ON L6J 2W8	W/114.1	0.95	145
36	GEN	LOBLAWS INC.	1-125 Cross Ave. Oakville ON L6J 2W8	W/114.1	0.95	146
36	PES	GARRIE & CHRIS' NO FRILLS	125 CROSS AVENUE OAKVILLE ON L6J2W8	W/114.1	0.95	146
36	PES	GARRIE & CHRIS NO FRILLS #700	125 CROSS AVE OAKVILLE ON L6J2W8	W/114.1	0.95	146
36	GEN	LOBLAWS INC.	1-125 Cross Ave. Oakville ON L6J 2W8	W/114.1	0.95	147
36	GEN	Value Village Stores	125 Cross Avenue Oakville ON L6J 2W8	W/114.1	0.95	147
36	GEN	LOBLAWS INC.	1-125 Cross Ave. Oakville ON L6J 2W8	W/114.1	0.95	149
36	GEN	Value Village Stores	125 Cross Avenue Oakville ON L6J 2W8	W/114.1	0.95	149

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
36	GEN	LOBLAWS INC.	1-125 Cross Ave. Oakville ON L6J 2W8	W/114.1	0.95	150
36	GEN	Value Village Stores	125 Cross Avenue Oakville ON L6J 2W8	W/114.1	0.95	151
37	EHS		166 South Service Road East Oakville ON L6J 0A5	WNW/117.2	0.88	152
37	EHS		166 South Service Road East Oakville ON L6J 0A5	WNW/117.2	0.88	152
37	EHS		166 South Service Road East Oakville ON L6J 0A5	WNW/117.2	0.88	153
38	BORE		ON	WSW/121.2	0.95	153
39	SCT	Colourchrome Imaging	117 Cross Ave Suite 52062 Oakville ON L6J 2W7	SW/121.9	0.95	154
40	EHS		142 Cross Avenue Oakville ON L6K 2G4	SSW/131.6	0.95	155
40	EHS		142 Cross Avenue Oakville ON L6K 2G4	SSW/131.6	0.95	155
40	EHS		142 Cross Avenue Oakville ON L6K 2G4	SSW/131.6	0.95	155
41	GEN	Priestly demolition Inc	214 Cross Avenue Oakville ON L6J 2W6	ESE/152.1	-4.05	155
41	SPL	Oakville Go Station	214 Cross Ave Oakville ON L6J 2W6	ESE/152.1	-4.05	156
41	EHS		214 Cross Ave Oakville ON L6J2W6	ESE/152.1	-4.05	156

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
41	SPL		214 Cross Ave OAKVILLE ON	ESE/152.1	-4.05	157
42	EHS		105, 111, 117 and 125 Cross Avenue Oakville ON L6J	WSW/153.7	0.95	157
42	EHS		105, 111, 117 and 125 Cross Avenue Oakville ON L6J	WSW/153.7	0.95	157
42	EHS		105, 111, 117 and 125 Cross Avenue Oakville ON L6J	WSW/153.7	0.95	158
43	SCT	BRUKAR INC.	136 CROSS AVE OAKVILLE ON L6J 2W6	SSW/153.8	0.95	158
43	WWIS		136 CROSS AVE. OAKVILLE ON ***Well ID:*** 7253999	SSW/153.8	0.95	158
43	EHS		136 Cross Avenue Oakville ON	SSW/153.8	0.95	162
44	BORE		ON	SW/160.3	0.95	162
45	EHS		136 Cross Avenue Oakville ON L6J 2W6	SSW/160.7	0.95	163
45	EHS		136 Cross Avenue Oakville ON L6J 2W6	SSW/160.7	0.95	163
45	EHS		136 Cross Avenue Oakville ON L6J 2W6	SSW/160.7	0.95	163
46	BORE		ON	SW/162.6	0.95	164
47	WWIS		136 CROSS AVE. OAKVILLE ON	SSW/164.6	0.95	165

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
			Well ID: 7254000			
48	EHS		233 Cross Avenue Oakville ON L6J 2W9	ENE/166.0	-3.44	168
48	EHS		233 Cross Avenue Oakville ON L6J 2W9	ENE/166.0	-3.44	168
48	EHS		233 Cross Avenue Oakville ON L6J 2W9	ENE/166.0	-3.44	168
49	EHS		200 Cross Ave Oakville ON L6J2W6	ESE/174.8	-4.05	169
49	GEN	Grascan on behalf of Metrolinx	200 Cross Ave Oakville ON L6J 2W6	ESE/174.8	-4.05	169
49	GEN	Grascan on behalf of Metrolinx	200 Cross Ave Oakville ON L6J 2W6	ESE/174.8	-4.05	169
50	GEN	GS Wark Limited	503 Lyonds Lane Oakville ON L6J 0A1	SE/175.6	-4.13	170
51	BORE		ON	ESE/177.8	-4.05	170
52	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	171
52	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	171
52	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	172
53	GEN	CORMACK ANIMAL CLINIC LIMITED	234 SOUTH SERVICE ROAD ANIMAL HOSPITAL OF OAKVILLE OAKVILLE ON L6J 2X5	N/182.3	-0.06	172
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	172

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON	N/182.3	-0.06	173
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON	N/182.3	-0.06	173
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON	N/182.3	-0.06	174
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	174
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON	N/182.3	-0.06	174
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	175
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	175
53	GEN	Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	176
53	GEN	Dr. Michelle Cutler VPC	234 South Service Rd. Oakville ON L6J 2X5	N/182.3	-0.06	176
54	NPCB	ROSART PROPERTIES INC.	226 SOUTH SERVICE ROAD OAKVILLE ON L6J 2X5	NNW/182.9	0.95	176
54	SCT	Rubicon Publishing Inc.	226 South Service Rd E Oakville ON L6J 2X5	NNW/182.9	0.95	177
54	NPCB	ROSART PROPERTIES INC.	226 SOUTH SERVICE ROAD OAKVILLE ON L6J 2X5	NNW/182.9	0.95	177
55	NPCB	ROSART PROPERTIES INC.	226 SOUTH SERVICE ROAD Oakville ON	NNW/182.9	0.95	177

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
56	EHS		570 Trafalgar Road Oakville ON L6J 3J2	NE/185.8	-0.98	178
57	SPL	PRIVATE OWNER	570 TRAFALGAR ROAD OAKLAND MERCURY MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2	NE/185.8	-0.98	178
57	PRT	OAK-LAND LINCOLN MERCURY SALES	570 TRAFALGAR RD OAKVILLE ON L6J 3J2	NE/185.8	-0.98	178
58	GEN	Regional Municipality of Halton	232 South Service Road Unit B Oakville ON L6J 2X5	N/192.1	0.94	179
58	GEN	Regional Municipality of Halton	232 South Service Road Unit B Oakville ON L6J 2X5	N/192.1	0.94	179
58	GEN	Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	N/192.1	0.94	179
58	GEN	Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	N/192.1	0.94	180
58	GEN	Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	N/192.1	0.94	180
58	GEN	Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	N/192.1	0.94	181
58	GEN	Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	N/192.1	0.94	181
59	BORE		ON	ESE/198.5	-4.05	182
60	EHS		105 Cross Avenue Oakville ON L6J 7N5	WSW/200.6	0.95	182

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
61	WWIS		ON *Well ID:* 7374253	ENE/205.3	-3.99	183
62	CA	TACO BELL OF CANADA	546 TRAFALGAR ROAD OAKVILLE TOWN ON L6J 3J2	ENE/208.3	-3.93	184
62	PES	BEAVER LUMBER CO LTD	546 TRAFALGAR RD OAKVILLE ON L6J 3J2	ENE/208.3	-3.93	184
63	CA	FIELDFRESH FARMS LTD.	196 SOUTH SERVICE ROAD WEST OAKVILLE TOWN ON	W/210.6	-1.32	184
64	SPL	UNKNOWN	TRAFALGAR AND CROSS ST. OAKVILLE TOWN ON	ENE/211.8	-4.65	184
64	SPL	ONTARIO HYDRO	CORNER OF SOUTH SERVICE ROAD AND TRAFALGAR IN ONTARIO HYDRO ROW PARKING. OAKVILLE TOWN ON	ENE/211.8	-4.65	185
65	WWIS		562 TAFALGAR RD Oakville ON *Well ID:* 7263648	ENE/212.5	-2.43	186
66	ECA	The TDL Group Corp./Groupe TDL Corporation	111 Cross Ave Oakville ON L6K 2Y1	SW/219.9	1.25	189
67	SPL	Oakville Transit	Cornwall Rd, Trafalgar, Cross Ave, Lions Lane; 214 Cross Ave Oakville; Oakville ON NA	E/220.0	-5.05	189
68	RSC	SZR Oakville II Inc.	155 Cornwall Road (Formerly 466 Trafalgar Road), Oakville, Ontario OAKVILLE ON	ESE/222.5	-4.05	190
68	EASR	Metrolinx	155 CORNWALL RD OAKVILLE ON L6H 0E8	ESE/222.5	-4.05	190
68	EASR	Metrolinx	155 CORNWALL RD OAKVILLE ON L6H 0E8	ESE/222.5	-4.05	191
68	GEN	Black and McDonald Limited	155 Cornwall Road Oakville ON L6H 0E8	ESE/222.5	-4.05	191

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
68	CFOT	METROLINX	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	ESE/222.5	-4.05	191
68	CFOT	METROLINX	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	ESE/222.5	-4.05	192
68	DTNK	METROLINX	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	ESE/222.5	-4.05	192
68	DTNK	METROLINX	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	ESE/222.5	-4.05	193
68	PINC	PIPELINE HIT 2"	155 CORNWALL RD,,OAKVILLE,ON,L6H 0E8,CA ON	ESE/222.5	-4.05	193
68	GEN	Metrolinx	155 Cornwall Road Oakville ON L6H 0E8	ESE/222.5	-4.05	194
68	GEN	Metrolinx	155 Cornwall Road Oakville ON L6H 0E8	ESE/222.5	-4.05	194
69	EHS		200-240 North Service Road E Oakville ON	NW/227.6	-0.05	195
70	SPL	PRIVATELY OWNED	562 TRAFALGAR RD. MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2	ENE/228.6	-2.19	195
70	SPL	PRIVATELY OWNED	562 TRAFALGAR RD. TEXACO SERVICE STATION MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2	ENE/228.6	-2.19	196
70	SPL	ESSO PETROLEUM CANADA	562 TRAFALGAR RD SERVICE STATION OAKVILLE TOWN ON L6J 3J2	ENE/228.6	-2.19	196
70	PRT	TRAFALGAR ESSO SELF SERVE 487346 ONTARIO LTD	562 TRAFALGAR RD OAKVILLE ON L6J 3J2	ENE/228.6	-2.19	197

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
70	RST	TRAFALGAR ESSO	562 TRAFALGAR RD OAKVILLE ON L6J3J2	ENE/228.6	-2.19	197
70	RST	1285118 ONT INC	562 TRAFALGAR RD OAKVILLE ON L6J 3J2	ENE/228.6	-2.19	197
70	EHS		562 Trafalgar Rd Oakville ON L6J 3J2	ENE/228.6	-2.19	198
70	RST	ZULFI ESSO	562 TRAFALGAR RD OAKVILLE ON L6J 3J2	ENE/228.6	-2.19	198
70	CA	Imperial Oil Limited	562 Trafalgar Rd Oakville ON L6J 3J2	ENE/228.6	-2.19	198
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	ENE/228.6	-2.19	198
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	ENE/228.6	-2.19	199
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	ENE/228.6	-2.19	199
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	ENE/228.6	-2.19	200
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	ENE/228.6	-2.19	201
70	FST	MAC'S CONVENIENCE STORES INC	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	201
70	FST	MAC'S CONVENIENCE STORES INC	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	202

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
70	FST	MAC'S CONVENIENCE STORES INC	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	202
70	FST	MAC'S CONVENIENCE STORES INC	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	203
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	203
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	204
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	204
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	205
70	DTNK	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	206
70	EHS		562 Trafalgar Rd Oakville ON L6J3J2	ENE/228.6	-2.19	206
70	ECA	Imperial Oil Limited	562 Trafalgar Rd Oakville ON M3C 1K5	ENE/228.6	-2.19	206
70	FST	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	207
70	DTNK		562 TRAFALGAR RD OAKVILLE ON L6J 3J2	ENE/228.6	-2.19	207
70	FST	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	208

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
70	FST	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	208
70	FST	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	209
70	FST	GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	ENE/228.6	-2.19	209
71	WWIS		562 TAFAKGAR RD Oakville ON *Well ID:* 7263649	ENE/231.0	-2.71	210
72	WWIS		562 TAFALGAR RD Oakville ON *Well ID:* 7263647	NE/231.6	-1.31	213
73	RST	ZULFI ESSO	562 TRAFALGAR RD OAKVILLE ON L6J3J2	ENE/235.3	-2.16	216
74	BORE		ON	SW/240.7	1.84	216
75	WWIS		562 TAFALGAR RD Oakville ON *Well ID:* 7263650	ENE/242.1	-1.70	217
76	SPL	SUNOCO	155 NORTH SERVICE ROAD SERVICE STATION OAKVILLE TOWN ON	WNW/242.7	-1.05	220
77	GEN	OAKVILLE HYDRO-ELECTRIC COMMISSION29-491	539 LYONS LANE C/O 2350 TRAFALGAR ROAD OAKVILLE ON L6J 5E3	SSW/245.9	1.94	221
77	GEN	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC	539 LYON'S LANE OAKVILLE ON	SSW/245.9	1.94	221
78	GEN	Canadian National Railroad	501 Lyons lane Oakville ON L6J 0A1	SSE/247.1	-3.77	222
79	WWIS		ON	NE/247.9	-0.78	222

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
			Well ID: 7376602			
80	EHS		105, 111, 117, 125 Cross Avenue Oakville ON	SW/251.5	1.24	223
81	WWIS		lot 14 con 3 ON Well ID: 2802422	W/256.9	-2.88	223
82	PES	HOME DEPOT OD CANADA INC. STORE #7157	99 CROSS AVE OAKVILLE ON L6J2W7	WSW/264.3	-1.05	226
82	GEN	The Home Depot	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	226
82	PES	HOME DEPOT OD CANADA INC. STORE #7157	99 CROSS AVE OAKVILLE ON L6J 2W7	WSW/264.3	-1.05	227
82	GEN	The Home Depot	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	228
82	GEN	The Home Depot	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	229
82	GEN	The Home Depot	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	230
82	GEN	The Home Depot # 7157	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	231
82	GEN	The Home Depot # 7157	99 Cross Avenue Oakville ON	WSW/264.3	-1.05	232
82	GEN	The Home Depot # 7157	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	233
82	GEN	The Home Depot # 7157	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	234
82	GEN	The Home Depot # 7157	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	235

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
82	GEN	HOME DEPOT CANADA, THE # 7157	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	236
82	PES	HOME DEPOT OD CANADA INC. STORE #7157	99 CROSS AVE OAKVILLE ON L6J2W7	WSW/264.3	-1.05	238
82	GEN	HOME DEPOT CANADA, THE # 7157	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	238
82	GEN	HOME DEPOT CANADA, THE # 7157	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	239
82	PES		99 CROSS AVE OAKVILLE ON L6J 2W7	WSW/264.3	-1.05	240
82	GEN	HOME DEPOT CANADA, THE # 7157	99 Cross Avenue Oakville ON L6J 2W7	WSW/264.3	-1.05	241
83	PRT	KEMSAN INC	462 TRAFALGAR RD OAKVILLE ON L6J 3H9	ESE/270.3	-5.03	242
83	PES	KEMSAN INC.	462 TRAFALGAR ROAD OAKVILLE ON L6J 3H9	ESE/270.3	-5.03	242
83	GEN	KEMSAN INC	462 TRAFALGAR RD. P.O. BOX 727 OAKVILLE ON L6J 3H9	ESE/270.3	-5.03	242
83	GEN	KEMSAN INC.	462 TRAFALGAR RD. P.O. BOX 727 OAKVILLE ON L6J 3H9	ESE/270.3	-5.03	243
83	GEN	KEMSAN (OUT OF BUS) 23-003	462 TRAFALGAR RD. P.O. BOX 727 OAKVILLE ON L6J 3H9	ESE/270.3	-5.03	243
83	GEN	KEMSAN (OUT OF BUS)	462 TRAFALGAR ROAD OAKVILLE ON L6J 3H9	ESE/270.3	-5.03	243
83	DTNK	KEMSAN INC	462 TRAFALGAR RD OAKVILLE ON	ESE/270.3	-5.03	244

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
83	DTNK	KEMSAN INC	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	ESE/270.3	-5.03	244
83	DTNK	KEMSAN INC	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	ESE/270.3	-5.03	245
83	FST	KEMSAN INC	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	ESE/270.3	-5.03	246
83	FST	KEMSAN INC	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	ESE/270.3	-5.03	246
84	EHS		485 Trafalger Rd Oakville ON	E/275.1	-5.22	247
84	GEN	MAIN LUMBER CO	485 TRAFALGAR ROAD OAKVILLE ON L6J 4Z5	E/275.1	-5.22	247
84	GEN	MAIN LUMBER CO. 27-741	485 TRAFALGAR RD. P.O. BOX 68 OAKVILLE ON L6J 3J1	E/275.1	-5.22	247
84	GEN	MAIN LUMBER CO.	485 TRAFALGAR ROAD OAKVILLE ON L6J 4Z5	E/275.1	-5.22	248
84	EHS		485 Trafalgar Road Oakville ON L6J 3J1	E/275.1	-5.22	248
84	WWIS		485 TRAFALGAR RD OAKVILLE ON *Well ID:* 2810392	E/275.1	-5.22	248
84	RSC	FCHT Holdings (Ontario) Corporation	No municipal address, Oakville, Ontario Oakville ON	E/275.1	-5.22	251
84	RSC	FCHT Holdings (Ontario) Corporation	485 Trafalgar Road, Oakville, Ontario L6T 3J1, and lands with no municipal addre ON L6J 3J1	E/275.1	-5.22	252

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
84	GEN	West Marine	485 Trafalger Road Oakville ON	E/275.1	-5.22	252
84	GEN	West Marine	485 Trafalger Road Oakville ON L6J 3J1	E/275.1	-5.22	253
84	GEN	West Marine	485 Trafalger Road Oakville ON L6J 3J1	E/275.1	-5.22	254
84	GEN	West Marine	485 Trafalger Road Oakville ON L6J 3J1	E/275.1	-5.22	254
84	GEN	West Marine	485 Trafalger Road Oakville ON L6J 3J1	E/275.1	-5.22	255
85	SPL	LECLAIR FUELS LTD.	CROSS AVENUE AND LYONS LANE TANK TRUCK (CARGO) OAKVILLE TOWN ON	SW/275.6	1.95	256
85	CA		Cross Avenue, Lyons Lane Oakville ON	SW/275.6	1.95	257
85	ECA	The Regional Municipality of Halton	Cross Avenue, Lyons Lane Oakville ON L6M 3L1	SW/275.6	1.95	257
86	WWIS		547 TRAFALGAR RD Oakville ON *Well ID:* 7100453	ENE/277.5	-2.49	257
87	WWIS		485 TREFALGER RD OAKVILLE ON *Well ID:* 7041205	E/279.5	-5.90	262
88	NPCB	OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON	SSW/279.9	0.95	265
88	PRT	OAKVILLE HYDRO ELECTRIC COMMISSION ATTN ED BENSON	530 LYONS LA OAKVILLE ON	SSW/279.9	0.95	266
88	WDS	Safety-Kleen (On-Site) Inc.	530 Lyons Lane, Oakville Hydro Oakville ON N1G 4P5	SSW/279.9	0.95	266

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
88	WDS		530 LYONS LANE, OAKVILLE OAKVILLE ON	SSW/279.9	0.95	267
88	EHS		530 Lyons Lane Oakville ON	SSW/279.9	0.95	267
88	OPCB	OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON	SSW/279.9	0.95	267
88	GEN	OAKVILLE HYDRO ELECTRIC COMM.	530 LYONS LANE OAKVILLE ON L6J 2Y1	SSW/279.9	0.95	268
88	GEN	OAKVILLE HYDRO ELECTRIC COMMISSION	530 LYONS LANE OAKVILLE ON L6J 2Y1	SSW/279.9	0.95	268
88	GEN	OAKVILLE HYDRO 29-136	530 LYONS LANE OAKVILLE ON L6J 2Y1	SSW/279.9	0.95	269
88	GEN	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC	530 LYONS LANE OAKVILLE ON L6J 2Y1	SSW/279.9	0.95	270
88	DTNK	OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE ON	SSW/279.9	0.95	270
88	DTNK	OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE ON	SSW/279.9	0.95	271
88	DTNK	OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE ON	SSW/279.9	0.95	271
88	DTNK	OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	SSW/279.9	0.95	272
88	DTNK	OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	SSW/279.9	0.95	272

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
88	FST	OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	SSW/279.9	0.95	273
88	FST	OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	SSW/279.9	0.95	274
88	REC	OAKVILLE HYDRO ELECTRIC COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	SSW/279.9	0.95	274
89	NPCB	OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE LYONS LANE OAKVILLE ON L6J 5E3	SSW/279.9	0.95	275
89	OPCB	OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	SSW/279.9	0.95	275
89	OPCB	OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	SSW/279.9	0.95	276
89	OPCB	OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	SSW/279.9	0.95	277
89	NPCB	OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	SSW/279.9	0.95	278
90	SPL		125 North Service Rd E Oakville ON L6H 1A3	W/292.7	-3.05	278
91	GEN	KING PAVING & MATERIALS LTD.	68 OLD MILL ROAD OAKVILLE ON L7R 3Y5	SSE/293.1	-7.63	279
91	GEN	KING PAVING & MATERIALS LTD. 23-156	68 OLD MILL ROAD OAKVILLE ON L7R 3Y5	SSE/293.1	-7.63	279
91	GEN	KING PAVING & MATERIALS LIMITED	68 OLD MILL ROAD OAKVILLE ON	SSE/293.1	-7.63	280
91	GEN	GENSTAR DEVELOPMENT COMPANY	68 OLD MILL ROAD, OAKVILLE C/O 302 THE EAST MALL SUITE 502 ETOBICOKE ON M9B 6C7	SSE/293.1	-7.63	280

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
92	WWIS		547 TRAFALGAR RD OAKVILLE ON *Well ID:* 7152039	ENE/298.6	-2.22	280

Executive Summary: Summary By Data Source

BORE - Borehole

A search of the BORE database, dated 1875-Jul 2018 has found that there are 8 BORE site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	ON	102.2	34
	ON	110.0	35
	ON	121.2	38
	ON	160.3	44
	ON	162.6	46
	ON	177.8	51
	ON	198.5	59
	ON	240.7	74

CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011* has found that there are 5 CA site(s) within approximately 0.30 kilometers of

the project property.

Site	Address	Distance (m)	Map Key
R.M. OF HALTON	CROSS AVE./ARGUS RD. OAKVILLE TOWN ON	5.0	8
TACO BELL OF CANADA	546 TRAFALGAR ROAD OAKVILLE TOWN ON L6J 3J2	208.3	62
FIELDFRESH FARMS LTD.	196 SOUTH SERVICE ROAD WEST OAKVILLE TOWN ON	210.6	63
Imperial Oil Limited	562 Trafalgar Rd Oakville ON L6J 3J2	228.6	70
	Cross Avenue, Lyons Lane Oakville ON	275.6	85

CFOT - Commercial Fuel Oil Tanks

A search of the CFOT database, dated Feb 28, 2022 has found that there are 2 CFOT site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
METROLINX	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	222.5	68
METROLINX	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	222.5	68

DTNK - Delisted Fuel Tanks

A search of the DTNK database, dated Feb 28, 2022 has found that there are 21 DTNK site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
METROLINX	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	222.5	68

Site	Address	Distance (m)	Map Key
METROLINX	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	222.5	68
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
	562 TRAFALGAR RD OAKVILLE ON L6J 3J2	228.6	70

Site	Address	Distance (m)	Map Key
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE ON	228.6	70
KEMSAN INC	462 TRAFALGAR RD OAKVILLE ON	270.3	83
KEMSAN INC	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	270.3	83
KEMSAN INC	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	270.3	83
OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE ON	279.9	88
OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE ON	279.9	88
OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE ON	279.9	88
OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	279.9	88
OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	279.9	88

EASR - Environmental Activity and Sector Registry

A search of the EASR database, dated Oct 2011- Feb 28, 2023 has found that there are 2 EASR site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Metrolinx	155 CORNWALL RD OAKVILLE ON L6H 0E8	222.5	68

Site	Address	Distance (m)	Map Key
Metrolinx	155 CORNWALL RD OAKVILLE ON L6H 0E8	222.5	68

ECA - Environmental Compliance Approval

A search of the ECA database, dated Oct 2011- Feb 28, 2023 has found that there are 3 ECA site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
The TDL Group Corp./Groupe TDL Corporation	111 Cross Ave Oakville ON L6K 2Y1	219.9	66
Imperial Oil Limited	562 Trafalgar Rd Oakville ON M3C 1K5	228.6	70
The Regional Municipality of Halton	Cross Avenue, Lyons Lane Oakville ON L6M 3L1	275.6	85

EHS - ERIS Historical Searches

A search of the EHS database, dated 1999-Dec 31, 2022 has found that there are 64 EHS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	185 Cross Ave Oakville ON L6J2W7	0.0	3
	Argus Road And Cross Avenue Oakville ON	1.2	7
	586 Argus Road Oakville ON L6J 7S1	13.8	9
	586 Argus Road Oakville ON L6J 3J3	13.8	9

Site	Address	Distance (m)	Map Key
	586 Argus Road Oakville ON L6J 3J3	13.8	9
	586 Argus Rd Oakville ON L6J3J3	13.8	9
	586 Argus Rd Oakville ON L6J3J3	13.8	9
	165 Cross Avenue Oakville ON L6J 0A9	20.1	10
	207 Cross Avenue Oakville ON L6J 2W9	21.2	12
	207 Cross Avenue Oakville ON L6J 2W9	21.2	12
	176 Cross Avenue Oakville ON L6J 2W6	21.2	13
	176 Cross Avenue Oakville ON L6J 2W6	21.2	13
	176 Cross Avenue Oakville ON L6J 2W6	21.2	13
	217 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	45.1	16
	Argus Road Oakville ON L6J 3J3	50.2	19

Site	Address	Distance (m)	Map Key
	Argus Road Oakville ON L6J 3J3	50.2	19
	Argus Road Oakville ON L6J 3J3	50.2	19
	217-227 Cross Avenue and 571-595 Argus Road Oakville ON L6J 2W9	64.1	21
	217-227 Cross Avenue and 571-595 Argus Road Oakville ON L6J 2W9	64.1	21
	157 Cross Avenue Oakville ON L6J 2W7	64.4	22
	157 Cross Avenue Oakville ON L6J 2W7	64.4	22
	157 Cross Avenue Oakville ON L6J 2W7	64.4	22
	217 Cross Avenue Oakville ON L6J 2W9	65.0	24
	217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	66.4	25
	217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	66.4	25
	217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	66.4	25
	590 Argus Rd Oakville ON L6J3J3	76.3	26

Site	Address	Distance (m)	Map Key
	166 South Service Road East Oakville ON L6J 0A5	82.0	29
	590 Argus Road Oakville ON	85.2	30
	166 South Service Road East Oakville ON L6J 2X5	85.3	31
	166 South Service Road East Oakville ON L6J 2X5	85.3	31
	166 South Service Road East Oakville ON L6J 2X5	85.3	31
	603 Argus Rd. Oakville ON L6J 6G6	90.3	32
	590 Argus Road Oakville ON L6J 6G6	95.1	33
	590 Argus Road Oakville ON L6J 6G6	95.1	33
	125 Cross Avenue Oakville ON L6J 2W8	114.1	36
	125 Cross Ave Oakville ON L6J2W8	114.1	36
	166 South Service Road East Oakville ON L6J 0A5	117.2	37

Site	Address	Distance (m)	Map Key
	166 South Service Road East Oakville ON L6J 0A5	117.2	37
	166 South Service Road East Oakville ON L6J 0A5	117.2	37
	142 Cross Avenue Oakville ON L6K 2G4	131.6	40
	142 Cross Avenue Oakville ON L6K 2G4	131.6	40
	142 Cross Avenue Oakville ON L6K 2G4	131.6	40
	214 Cross Ave Oakville ON L6J2W6	152.1	41
	105, 111, 117 and 125 Cross Avenue Oakville ON L6J	153.7	42
	105, 111, 117 and 125 Cross Avenue Oakville ON L6J	153.7	42
	105, 111, 117 and 125 Cross Avenue Oakville ON L6J	153.7	42
	136 Cross Avenue Oakville ON	153.8	43
	136 Cross Avenue Oakville ON L6J 2W6	160.7	45
	136 Cross Avenue Oakville ON L6J 2W6	160.7	45

Site	Address	Distance (m)	Map Key
	136 Cross Avenue Oakville ON L6J 2W6	160.7	45
	233 Cross Avenue Oakville ON L6J 2W9	166.0	48
	233 Cross Avenue Oakville ON L6J 2W9	166.0	48
	233 Cross Avenue Oakville ON L6J 2W9	166.0	48
	200 Cross Ave Oakville ON L6J2W6	174.8	49
	570 Trafalgar Road Oakville ON L6J 3J2	185.8	56
	105 Cross Avenue Oakville ON L6J 7N5	200.6	60
	200-240 North Service Road E Oakville ON	227.6	69
	562 Trafalgar Rd Oakville ON L6J 3J2	228.6	70
	562 Trafalgar Rd Oakville ON L6J3J2	228.6	70
	105, 111, 117, 125 Cross Avenue Oakville ON	251.5	80

Site	Address	Distance (m)	Map Key
	485 Trafalger Rd Oakville ON	275.1	84
	485 Trafalgar Road Oakville ON L6J 3J1	275.1	84
	530 Lyons Lane Oakville ON	279.9	88

FST - Fuel Storage Tank

A search of the FST database, dated Feb 28, 2022 has found that there are 13 FST site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
MAC'S CONVENIENCE STORES INC	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
MAC'S CONVENIENCE STORES INC	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
MAC'S CONVENIENCE STORES INC	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
MAC'S CONVENIENCE STORES INC	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70

Site	Address	Distance (m)	Map Key
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
GEETANJALI ADHYAPAK O/A GAS STN	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	228.6	70
KEMSAN INC	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	270.3	83
KEMSAN INC	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	270.3	83
OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	279.9	88
OAKVILLE HYDRO CORPORATION ATTN ED BENSON	530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	279.9	88

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-Oct 31, 2022 has found that there are 138 GEN site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
915643 Ontario Inc	185 Cross Ave Oakville ON	0.0	3
DR. GREGORY A. SHAW	100 - 586 ARGUS ROAD OAKVILLE ON L6J 7S1	13.8	9
DR. GREGORY A. SHAW	586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 3J3	13.8	9

Site	Address	Distance (m)	Map Key
DR. GREGORY A. SHAW	586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 3J3	13.8	9
DR. GREGORY A. SHAW	586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 7S1	13.8	9
586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	13.8	9
586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	13.8	9
586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	13.8	9
586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	13.8	9
586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	13.8	9
586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	13.8	9
586 Argus Clinic	586 Argus Rd, Suite 101 Oakville ON L6J 3J3	13.8	9
Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	20.1	10
Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	20.1	10
Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	20.1	10

Site	Address	Distance (m)	Map Key
Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	20.1	10
Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	20.1	10
Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	20.1	10
Hepworth and Damas Endodontics	165 Cross Ave, Suite 200 Oakville ON L6J 0A9	20.1	10
Dr. B. Kostovic Medical Professional Corporation	165 Cross Ave 105 Oakville ON L6J 0A9	20.1	10
Dr Sam Jomehri	587 argus road oakville ON L6J3J4	20.4	11
Dr Sam Jomehri	587 argus road oakville ON L6J3J4	20.4	11
Dr Sam Jomehri	587 argus road oakville ON L6J3J4	20.4	11
Dr Sam Jomehri	587 argus road oakville ON L6J3J4	20.4	11
Dr Sam Jomehri	587 argus road oakville ON L6J3J4	20.4	11
MED-CHEM LABORATORIES LTD.	581 ARGUS ROAD BASEMENT OAKVILLE ON L6L 3J4	21.9	14

Site	Address	Distance (m)	Map Key
MED-CHEM LABORATORIES LIMITED	581 ARGUS ROAD BASEMENT OAKVILLE ON L6L 3J4	21.9	14
CMLHealthCare	581 ARGUS ROAD OAKVILLE ON	21.9	14
CMLHealthCare	581 ARGUS ROAD OAKVILLE ON	21.9	14
CMLHealthCare	581 ARGUS ROAD OAKVILLE ON	21.9	14
LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON	21.9	14
LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON	21.9	14
Argus Medical Centre	581 Argus rd, ste 300 Oakville ON	21.9	14
LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	21.9	14
LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	21.9	14
Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J3J4	21.9	14
Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J3J4	21.9	14
Adamson Properties Inc.	581 Argus Rd. Oakville ON L6J 3J4	21.9	14

Site	Address	Distance (m)	Map Key
LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	21.9	14
Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J3J4	21.9	14
LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	21.9	14
Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J3J4	21.9	14
LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	21.9	14
Argus Medical Centre	581 Argus Rd, ste 300 Oakville ON L6J3J4	21.9	14
LifeLabs LP	581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	21.9	14
Argus Medical Centre	581 Argus Rd, ste 300 Oakville ON L6J3J4	21.9	14
Argus Medical Centre	581 Argus Rd, ste 300 Oakville ON L6J3J4	21.9	14
MED-CHEM LABORATORIES LTD.	581 ARGUS ROAD, BASEMENT, OAKVILLE C/O 8150 SHEPPARD EAST SCARBOROUGH ON L6J 3J4	21.9	15
MED-CHEM LABORATORIES LTD. 25-656	581 ARGUS ROAD, BASEMENT, OAKVILLE C/O 8150 SHEPPARD EAST SCARBOROUGH ON L6J 3J4	21.9	15

Site	Address	Distance (m)	Map Key
MCTU DIAGNOSTICS LIMITED	581 ARGUS ROAD OAKVILLE ON L6J 3J4	21.9	15
MCTU DI(OUT OF BUSINESS)	581 ARGUS ROAD OAKVILLE ON L6J 3J4	21.9	15
Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J 3J4	21.9	15
Camista Holdings	581 Argus Road Suite 202 Oakville ON L6J 3J4	21.9	15
Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J 3J4	21.9	15
Argus Medical Centre	581 Argus rd, ste 300 Oakville ON L6J 3J4	21.9	15
E. MYMRYK INVESTMENTS INC.	595 ARGUS ROAD OAKVILLE ON L6J 3J4	52.9	20
E. MYMRYK INVESTMENTS INC. 14-201	595 ARGUS ROAD OAKVILLE ON L6J 3J4	52.9	20
WOTHERSPOON FOUNDRY LTD.	148 CROSS AVENUE P.O.BOX 400 OAKVILLE ON L6J 2W6	79.5	27
WOTHERSPOON FOUNDRY LTD. 42-157	148 CROSS AVENUE P.O.BOX 400 OAKVILLE ON L6J 2W6	79.5	27
WOTHERSPOON FOUNDRY LTD.	148 CROSS AVENUE OAKVILLE ON L6J 5A8	79.6	28
Inside Health Inc.	100-603 Argus Road Oakville ON L6J 6G6	90.3	32

Site	Address	Distance (m)	Map Key
BLACK PHOTO CORPORATION	125 CROSS AVENUE OAKVILLE ON L6J 2W8	114.1	36
BLACK PHOTO CORPORATION	125 CROSS AVENUE OAKVILLE ON L6J 2W8	114.1	36
WAL-MART CANADA INC.	125 CROSS AVENUE TRAFALGAR VILLAGE OAKVILLE ON L6J 2W8	114.1	36
WAL-MART CANADA INC.	TRAFALGAR VILLAGE 125 CROSS AVENUE OAKVILLE ON L5J 2W3	114.1	36
Loblaw Companies Inc	1-125 Cross Ave. Oakville ON L6J 2W8	114.1	36
Loblaw Companies Inc	1-125 Cross Ave. Oakville ON L6J 2W8	114.1	36
LOBLAWS INC.	1-125 Cross Ave. Oakville ON L6J 2W8	114.1	36
LOBLAWS INC.	1-125 Cross Ave. Oakville ON L6J 2W8	114.1	36
Value Village Stores	125 Cross Avenue Oakville ON L6J 2W8	114.1	36
LOBLAWS INC.	1-125 Cross Ave. Oakville ON L6J 2W8	114.1	36
Value Village Stores	125 Cross Avenue Oakville ON L6J 2W8	114.1	36

Site	Address	Distance (m)	Map Key
LOBLAWS INC.	1-125 Cross Ave. Oakville ON L6J 2W8	114.1	36
Value Village Stores	125 Cross Avenue Oakville ON L6J 2W8	114.1	36
Priestly demolition Inc	214 Cross Avenue Oakville ON L6J 2W6	152.1	41
Grascan on behalf of Metrolinx	200 Cross Ave Oakville ON L6J 2W6	174.8	49
Grascan on behalf of Metrolinx	200 Cross Ave Oakville ON L6J 2W6	174.8	49
GS Wark Limited	503 Lyonds Lane Oakville ON L6J 0A1	175.6	50
Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	182.3	52
Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	182.3	52
Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	182.3	52
CORMACK ANIMAL CLINIC LIMITED	234 SOUTH SERVICE ROAD ANIMAL HOSPITAL OF OAKVILLE OAKVILLE ON L6J 2X5	182.3	53
Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	182.3	53
Animal Hospital of Oakville	234 South Service Rd. Oakville ON	182.3	53

Site	Address	Distance (m)	Map Key
Animal Hospital of Oakville	234 South Service Rd. Oakville ON	182.3	53
Animal Hospital of Oakville	234 South Service Rd. Oakville ON	182.3	53
Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	182.3	53
Animal Hospital of Oakville	234 South Service Rd. Oakville ON	182.3	53
Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	182.3	53
Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	182.3	53
Animal Hospital of Oakville	234 South Service Rd. Oakville ON L6J 2X5	182.3	53
Dr. Michelle Cutler VPC	234 South Service Rd. Oakville ON L6J 2X5	182.3	53
Regional Municipality of Halton	232 South Service Road Unit B Oakville ON L6J 2X5	192.1	58
Regional Municipality of Halton	232 South Service Road Unit B Oakville ON L6J 2X5	192.1	58
Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	192.1	58

Site	Address	Distance (m)	Map Key
Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	192.1	58
Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	192.1	58
Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	192.1	58
Regional Municipality of Halton Health Department	232 South Service Road Unit B Oakville ON L6J 2X5	192.1	58
Black and McDonald Limited	155 Cornwall Road Oakville ON L6H 0E8	222.5	68
Metrolinx	155 Cornwall Road Oakville ON L6H 0E8	222.5	68
Metrolinx	155 Cornwall Road Oakville ON L6H 0E8	222.5	68
OAKVILLE HYDRO-ELECTRIC COMMISSION29-491	539 LYONS LANE C/O 2350 TRAFALGAR ROAD OAKVILLE ON L6J 5E3	245.9	77
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	539 LYON'S LANE OAKVILLE ON	245.9	77
Canadian National Railroad	501 Lyons lane Oakville ON L6J 0A1	247.1	78
The Home Depot	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
The Home Depot	99 Cross Avenue Oakville ON L6J 2W7	264.3	82

Site	Address	Distance (m)	Map Key
The Home Depot	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
The Home Depot	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
The Home Depot # 7157	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
The Home Depot # 7157	99 Cross Avenue Oakville ON	264.3	82
The Home Depot # 7157	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
The Home Depot # 7157	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
The Home Depot # 7157	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
HOME DEPOT CANADA, THE # 7157	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
HOME DEPOT CANADA, THE # 7157	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
HOME DEPOT CANADA, THE # 7157	99 Cross Avenue Oakville ON L6J 2W7	264.3	82
HOME DEPOT CANADA, THE # 7157	99 Cross Avenue Oakville ON L6J 2W7	264.3	82

Site	Address	Distance (m)	Map Key
KEMSAN INC	462 TRAFALGAR RD. P.O. BOX 727 OAKVILLE ON L6J 3H9	270.3	83
KEMSAN INC.	462 TRAFALGAR RD. P.O. BOX 727 OAKVILLE ON L6J 3H9	270.3	83
KEMSAN (OUT OF BUS) 23-003	462 TRAFALGAR RD. P.O. BOX 727 OAKVILLE ON L6J 3H9	270.3	83
KEMSAN (OUT OF BUS)	462 TRAFALGAR ROAD OAKVILLE ON L6J 3H9	270.3	83
MAIN LUMBER CO	485 TRAFALGAR ROAD OAKVILLE ON L6J 4Z5	275.1	84
MAIN LUMBER CO. 27-741	485 TRAFALGAR RD. P.O. BOX 68 OAKVILLE ON L6J 3J1	275.1	84
MAIN LUMBER CO.	485 TRAFALGAR ROAD OAKVILLE ON L6J 4Z5	275.1	84
West Marine	485 Trafalger Road Oakville ON	275.1	84
West Marine	485 Trafalger Road Oakville ON L6J 3J1	275.1	84
West Marine	485 Trafalger Road Oakville ON L6J 3J1	275.1	84
West Marine	485 Trafalger Road Oakville ON L6J 3J1	275.1	84
West Marine	485 Trafalger Road Oakville ON L6J 3J1	275.1	84

Site	Address	Distance (m)	Map Key
OAKVILLE HYDRO ELECTRIC COMM.	530 LYONS LANE OAKVILLE ON L6J 2Y1	279.9	88
OAKVILLE HYDRO ELECTRIC COMMISSION	530 LYONS LANE OAKVILLE ON L6J 2Y1	279.9	88
OAKVILLE HYDRO 29-136	530 LYONS LANE OAKVILLE ON L6J 2Y1	279.9	88
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC	530 LYONS LANE OAKVILLE ON L6J 2Y1	279.9	88
KING PAVING & MATERIALS LTD.	68 OLD MILL ROAD OAKVILLE ON L7R 3Y5	293.1	91
KING PAVING & MATERIALS LTD. 23-156	68 OLD MILL ROAD OAKVILLE ON L7R 3Y5	293.1	91
KING PAVING & MATERIALS LIMITED	68 OLD MILL ROAD OAKVILLE ON	293.1	91
GENSTAR DEVELOPMENT COMPANY	68 OLD MILL ROAD, OAKVILLE C/O 302 THE EAST MALL SUITE 502 ETOBICOKE ON M9B 6C7	293.1	91

NPCB - National PCB Inventory

A search of the NPCB database, dated 1988-2008* has found that there are 6 NPCB site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
ROSART PROPERTIES INC.	226 SOUTH SERVICE ROAD OAKVILLE ON L6J 2X5	182.9	54

Site	Address	Distance (m)	Map Key
ROSART PROPERTIES INC.	226 SOUTH SERVICE ROAD OAKVILLE ON L6J 2X5	182.9	54
ROSART PROPERTIES INC.	226 SOUTH SERVICE ROAD Oakville ON	182.9	55
OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON	279.9	88
OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE LYONS LANE OAKVILLE ON L6J 5E3	279.9	89
OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	279.9	89

OPCB - Inventory of PCB Storage Sites

A search of the OPCB database, dated 1987-Oct 2004; 2012-Dec 2013 has found that there are 4 OPCB site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON	279.9	88
OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	279.9	89
OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	279.9	89
OAKVILLE PUBLIC UTILITIES COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	279.9	89

PES - Pesticide Register

A search of the PES database, dated Oct 2011- Feb 28, 2023 has found that there are 14 PES site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
GARRIE & CHRIS NO FRILLS #700	125 CROSS AVE OAKVILLE ON L6J2W8	114.1	36
GARRIE & CHRIS' NO FRILLS	125 CROSS AVENUE OAKVILLE ON L6J2W8	114.1	36
1950409 ONTARIO LIMITED O/A COLANGELO'S NO FRILLS	1-125 CROSS AVE OAKVILLE ON L6J2W8	114.1	36
WOOLCO DEPARTMENT STORES #6497	TRAFALGAR VILLAGE 125 CROSS AVE OAKVILLE ON L6J 2W8	114.1	36
GARRIE & CHRIS NO FRILLS #700	125 CROSS AVE OAKVILLE ON L6J2W8	114.1	36
812918 ONTARIO LIMITED O/A KEVIN'S NO FRILLS	125 CROSS AVENUE OAKVILLE ON L6J2W8	114.1	36
812918 ONTARIO LIMITED O/A KEVIN'S NO FRILLS	125 CROSS AVENUE OAKVILLE ON L6J 2W8	114.1	36
1950409 ONTARIO LIMITED O/A COLANGELO'S NO FRILLS	1-125 CROSS AVE OAKVILLE ON L6J2W8	114.1	36
BEAVER LUMBER CO LTD	546 TRAFALGAR RD OAKVILLE ON L6J 3J2	208.3	62
HOME DEPOT OD CANADA INC. STORE #7157	99 CROSS AVE OAKVILLE ON L6J2W7	264.3	82
HOME DEPOT OD CANADA INC. STORE #7157	99 CROSS AVE OAKVILLE ON L6J 2W7	264.3	82

Site	Address	Distance (m)	Map Key
HOME DEPOT OD CANADA INC. STORE #7157	99 CROSS AVE OAKVILLE ON L6J2W7	264.3	82
	99 CROSS AVE OAKVILLE ON L6J 2W7	264.3	82
KEMSAN INC.	462 TRAFALGAR ROAD OAKVILLE ON L6J 3H9	270.3	83

PINC - Pipeline Incidents

A search of the PINC database, dated Feb 28, 2021 has found that there are 1 PINC site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
PIPELINE HIT 2"	155 CORNWALL RD,,OAKVILLE,ON,L6H 0E8,CA ON	222.5	68

PRT - Private and Retail Fuel Storage Tanks

A search of the PRT database, dated 1989-1996* has found that there are 4 PRT site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
OAK-LAND LINCOLN MERCURY SALES	570 TRAFALGAR RD OAKVILLE ON L6J 3J2	185.8	57
TRAFALGAR ESSO SELF SERVE 487346 ONTARIO LTD	562 TRAFALGAR RD OAKVILLE ON L6J 3J2	228.6	70
KEMSAN INC	462 TRAFALGAR RD OAKVILLE ON L6J 3H9	270.3	83
OAKVILLE HYDRO ELECTRIC COMMISSION ATTN ED BENSON	530 LYONS LA OAKVILLE ON	279.9	88

REC - Ontario Regulation 347 Waste Receivers Summary

A search of the REC database, dated 1986-1990, 1992-2020 has found that there are 1 REC site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
OAKVILLE HYDRO ELECTRIC COMMISSION	530 LYONS LANE OAKVILLE ON L6J 5E3	279.9	88

RSC - Record of Site Condition

A search of the RSC database, dated 1997-Sept 2001, Oct 2004-Mar 2023 has found that there are 8 RSC site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	148 Cross Ave. Part of Lot 14, Conc. 3 Oakville ON L6J 2W6	79.5	27
	148 Cross Avenue Part of Lot 14, Concession 3 Oakville ON L6J 2W6	79.5	27
	148 Cross Avenue Oakville ON L6J 2W6	79.5	27
	148 Cross Avenue Oakville ON L6J 2W6	79.5	27
	148 Cross Ave. Oakville ON L6J 2W6	79.5	27
SZR Oakville II Inc.	155 Cornwall Road (Formerly 466 Trafalgar Road), Oakville, Ontario OAKVILLE ON	222.5	68
FCHT Holdings (Ontario) Corporation	485 Trafalgar Road, Oakville, Ontario L6T 3J1, and lands with no municipal addre ON L6J 3J1	275.1	84
FCHT Holdings (Ontario) Corporation	No municipal address, Oakville, Ontario Oakville ON	275.1	84

Site	Address	Distance (m)	Map Key

RST - Retail Fuel Storage Tanks

A search of the RST database, dated 1999-Feb 28, 2023 has found that there are 4 RST site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
ZULFI ESSO	562 TRAFALGAR RD OAKVILLE ON L6J 3J2	228.6	70
TRAFALGAR ESSO	562 TRAFALGAR RD OAKVILLE ON L6J3J2	228.6	70
1285118 ONT INC	562 TRAFALGAR RD OAKVILLE ON L6J 3J2	228.6	70
ZULFI ESSO	562 TRAFALGAR RD OAKVILLE ON L6J3J2	235.3	73

SCT - Scott's Manufacturing Directory

A search of the SCT database, dated 1992-Mar 2011* has found that there are 7 SCT site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
DIONEX CANADA LTD.	586 ARGUS RD UNIT 4 OAKVILLE ON L6J 7S1	13.8	9
Instant Imprints Canada Inc.	165 Cross Ave Suite 6 Oakville ON L6J 0A9	20.1	10
TARGET MARKETING CORP.	591 ARGUS RD OAKVILLE ON L6J 3J4	44.1	17
Rubicon Publishing Inc.	595 Argus Rd Oakville ON L6J 3J4	52.9	20

Site	Address	Distance (m)	Map Key
Colourchrome Imaging	117 Cross Ave Suite 52062 Oakville ON L6J 2W7	121.9	39
BRUKAR INC.	136 CROSS AVE OAKVILLE ON L6J 2W6	153.8	43
Rubicon Publishing Inc.	226 South Service Rd E Oakville ON L6J 2X5	182.9	54

SPL - Ontario Spills

A search of the SPL database, dated 1988-Mar 2021; May 2021-Oct 2021 has found that there are 16 SPL site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	125 Cross Ave Oakville ON L6J 2W8	114.1	36
Neelands Refrigeration Limited	125 Cross Ave Oakville ON L6J 2W8	114.1	36
Kevin's No Frills<UNOFFICIAL>	125 Cross Ave Oakville ON	114.1	36
Crossroads Refrigeration <UNOFFICIAL>	125 Cross Ave. Oakville ON	114.1	36
Oakville Go Station	214 Cross Ave Oakville ON L6J 2W6	152.1	41
	214 Cross Ave OAKVILLE ON	152.1	41

Site	Address	Distance (m)	Map Key
PRIVATE OWNER	570 TRAFALGAR ROAD OAKLAND MERCURY MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2	185.8	57
UNKNOWN	TRAFALGAR AND CROSS ST. OAKVILLE TOWN ON	211.8	64
ONTARIO HYDRO	CORNER OF SOUTH SERVICE ROAD AND TRAFALGAR IN ONTARIO HYDRO ROW PARKING. OAKVILLE TOWN ON	211.8	64
Oakville Transit	Cornwall Rd, Trafalgar, Cross Ave, Lions Lane; 214 Cross Ave Oakville; Oakville ON NA	220.0	67
PRIVATELY OWNED	562 TRAFALGAR RD. MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2	228.6	70
PRIVATELY OWNED	562 TRAFALGAR RD. TEXACO SERVICE STATION MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2	228.6	70
ESSO PETROLEUM CANADA	562 TRAFALGAR RD SERVICE STATION OAKVILLE TOWN ON L6J 3J2	228.6	70
SUNOCO	155 NORTH SERVICE ROAD SERVICE STATION OAKVILLE TOWN ON	242.7	76
LECLAIR FUELS LTD.	CROSS AVENUE AND LYONS LANE TANK TRUCK (CARGO) OAKVILLE TOWN ON	275.6	85
	125 North Service Rd E Oakville ON L6H 1A3	292.7	90

WDS - Waste Disposal Sites - MOE CA Inventory

A search of the WDS database, dated Oct 2011- Feb 28, 2023 has found that there are 2 WDS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	530 LYONS LANE, OAKVILLE OAKVILLE ON	279.9	88
Safety-Kleen (On-Site) Inc.	530 Lyons Lane, Oakville Hydro Oakville ON N1G 4P5	279.9	88

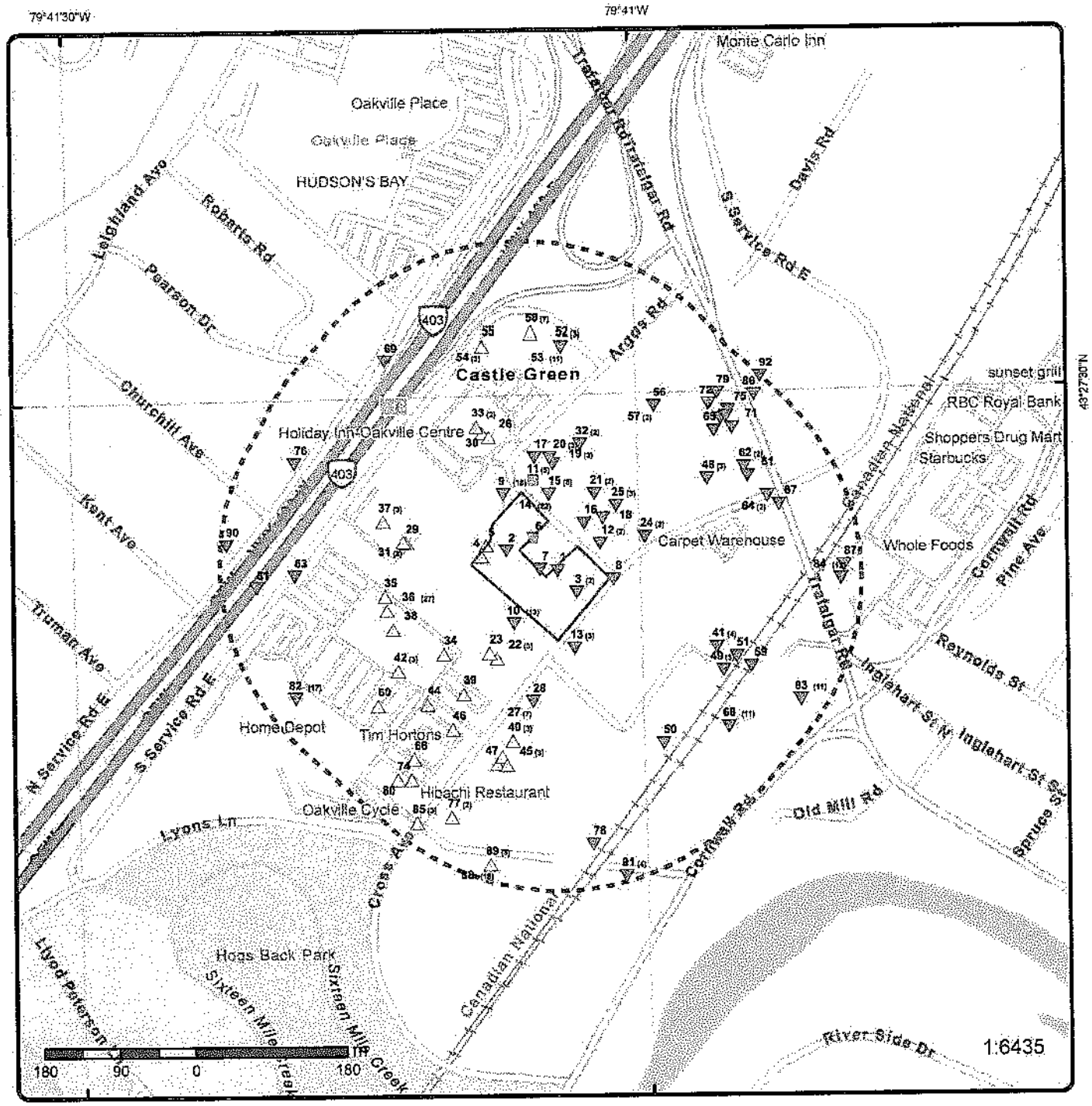
WWIS - Water Well Information System

A search of the WWIS database, dated Jun 30 2022 has found that there are 25 WWIS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	ON *Well ID:* 7286766	0.0	1
	ON *Well ID:* 7327366	0.0	2
	586 ARGUS RD OAKVILLE ON *Well ID:* 7161332	0.0	4
	586 ARGUS RD OAKVILLE ON *Well ID:* 7161333	0.5	5
	ON *Well ID:* 7192191	0.6	6
	586 ARGUS RD OAKVILLE ON *Well ID:* 7161334	13.8	9
	165 CROSS AVE OAKVILLE ON *Well ID:* 7322522	20.1	10

Site	Address	Distance (m)	Map Key
	165 CROSS AVE OAKVILLE ON ***Well ID:*** 7322523	20.1	10
	165 CROSS AVE OAKVILLE ON ***Well ID:*** 7322524	20.1	10
	ON ***Well ID:*** 7325283	28.6	16
	214 CROSS AVE. Oakville ON ***Well ID:*** 7134031	65.0	23
	217 CROSS AVE lot 13 con 3 OAKVILLE ON ***Well ID:*** 2810039	65.0	24
	136 CROSS AVE. OAKVILLE ON ***Well ID:*** 7253999	153.8	43
	136 CROSS AVE. OAKVILLE ON ***Well ID:*** 7254000	164.6	47
	ON ***Well ID:*** 7374253	205.3	61
	562 TAFALGAR RD Oakville ON ***Well ID:*** 7263648	212.5	65
	562 TAFAKGAR RD Oakville ON ***Well ID:*** 7263649	231.0	71
	562 TAFALGAR RD Oakville ON ***Well ID:*** 7263647	231.6	72
	562 TAFALGAR RD Oakville ON	242.1	75

Site	Address	Distance (m)	Map Key
	Well ID: 7263650		
	ON	247.9	79
	Well ID: 7376602		
	lot 14 con 3 ON	256.9	81
	Well ID: 2802422		
	485 TRAFALGAR RD OAKVILLE ON	275.1	84
	Well ID: 2810392		
	547 TRAFALGAR RD Oakville ON	277.5	86
	Well ID: 7100453		
	485 TREFALGER RD OAKVILLE ON	279.5	87
	Well ID: 7041205		
	547 TRAFALGAR RD OAKVILLE ON	298.6	92
	Well ID: 7152039		



Map: 0.3 Kilometer Radius

Order Number: 23042600187

Address: 177 Cross Avenue, Oakville, ON

ERIS

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Freeways; Highways
- Traffic Circle, Ramp
- Major Arterial; Minor Arterial
- Local Road
- Service Road; Traffic Circle; Ramp
- Rail
- Beach
- Airport
- Industrial Area
- Military Base
- Aircraft Roads
- Native Reservation
- Hospital
- Shopping & Sports Area
- University/College
- Cemetery; Golf Course
- Parkt (National)
- Park (City/County)

Source: © 2021 ESRI StreetMap Premium.

© ERIS Information Limited Partnership

79°40'30"W



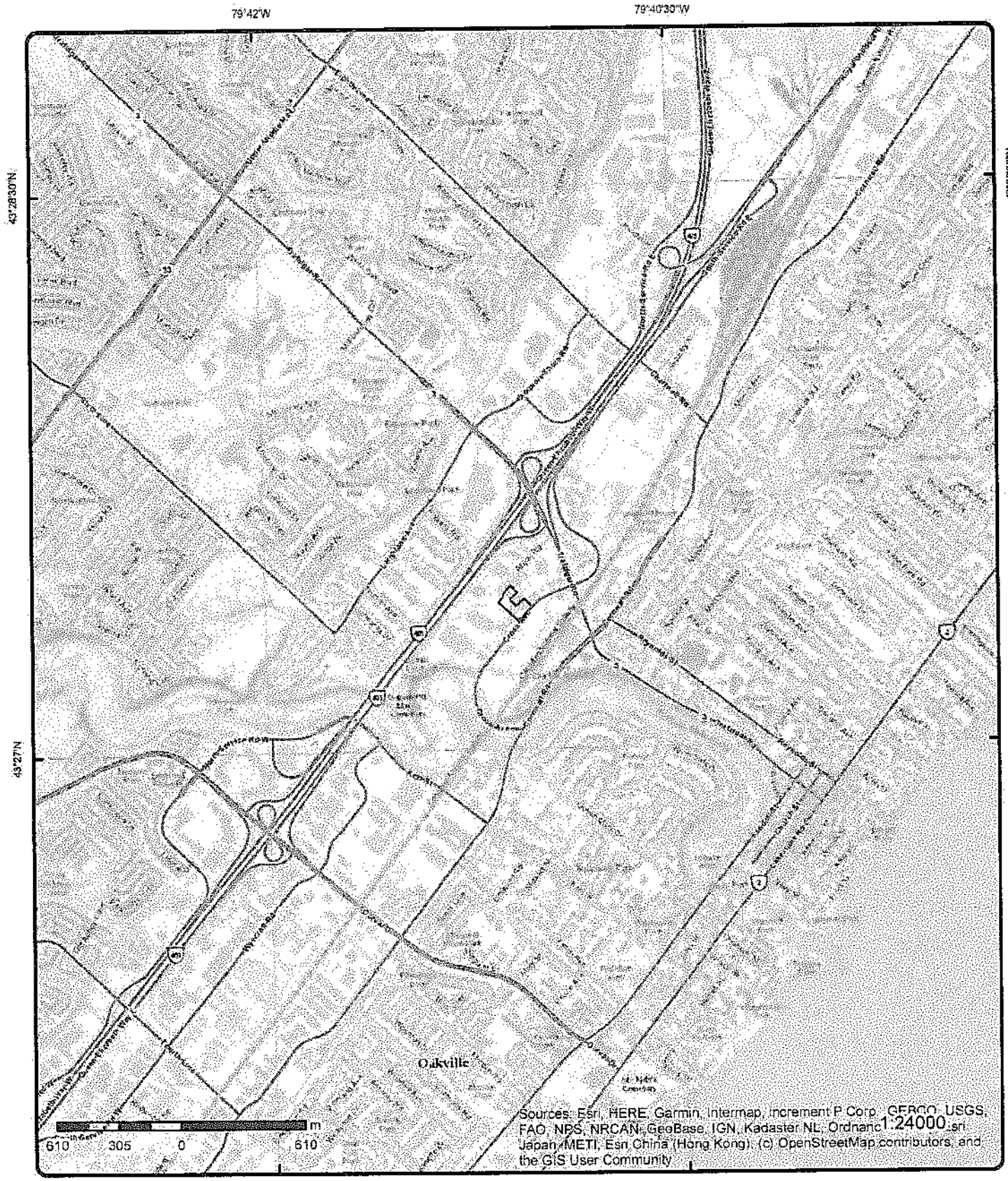
Aerial Year: 2021

Order Number: 23042600187

Address: 177 Cross Avenue, Oakville, ON

Source: ESRI World Imagery

© ERIS Information Limited Partnership



Topographic Map

Address: 177 Cross Avenue, ON

Source: ESRI World Topographic Map

Order Number: 23042600187

ERIS

© ERIS Information Limited Partnership

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	1 of 1	E/0.0	102.8 / -1.09	ON	WWIS

Well ID:	7286766	Flowing (Y/N):	
Construction Date:		Flow Rate:	
Use 1st:		Data Entry Status:	Yes
Use 2nd:		Data Src:	
Final Well Status:		Date Received:	17-May-2017 00:00:00
Water Type:		Selected Flag:	TRUE
Casing Material:		Abandonment Rec:	
Audit No:	C37214	Contractor:	7147
Tag:	A216335	Form Version:	8
Constructn Method:		Owner:	
Elevation (m):		County:	HALTON
Elevatn Reliabilty:		Lot:	
Depth to Bedrock:		Concession:	
Well Depth:		Concession Name:	
Overburden/Bedrock:		Easting NAD83:	
Pump Rate:		Northing NAD83:	
Static Water Level:		Zone:	
Clear/Cloudy:		UTM Reliability:	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	
Year Completed:	
Depth (m):	
Latitude:	43.4564217649793
Longitude:	-79.6845827118728
Path:	

Bore Hole Information

Bore Hole ID:	1006448975	Elevation:	
DP2BR:		Elevrc:	
Spatial Status:		Zone:	17
Code OB:		East83:	606421.00
Code OB Desc:		North83:	4812342.00
Open Hole:		Org CS:	UTM83
Cluster Kind:		UTMRC:	4
Date Completed:		UTMRC Desc:	margin of error : 30 m - 100 m
Remarks:		Location Method:	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Links

Bore Hole ID:	1006448975	Tag No:	A216335
Depth M:		Contractor:	7147
Year Completed:		Path:	
Well Completed Dt:		Latitude:	43.4564217649793
Audit No:	C37214	Longitude:	-79.6845827116728

2	1 of 1	WNW/0.0	103.8 / -0.11	ON	WWIS

Well ID:	7327366	Flowing (Y/N):	
Construction Date:		Flow Rate:	
Use 1st:		Data Entry Status:	Yes
Use 2nd:		Data Src:	
Final Well Status:		Date Received:	21-Jan-2019 00:00:00
Water Type:		Selected Flag:	TRUE
Casing Material:		Abandonment Rec:	
Audit No:	C45033	Contractor:	7324
Tag:	A256355	Form Version:	8
Constructn Method:		Owner:	
Elevation (m):		County:	HALTON
Elevatn Reliabilty:		Lot:	
Depth to Bedrock:		Concession:	
Well Depth:		Concession Name:	
Overburden/Bedrock:		Easting NAD83:	
Pump Rate:		Northing NAD83:	
Static Water Level:		Zone:	
Clear/Cloudy:		UTM Reliability:	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2018/08/29
Year Completed:	2018
Depth (m):	
Latitude:	43.4566464829796
Longitude:	-79.6853318261117
Path:	

Bore Hole Information

Bore Hole ID:	1007360911	Elevation:	
DP2BR:		Elevrc:	
Spatial Status:		Zone:	17
Code OB:		East83:	606360.00
Code OB Desc:		North83:	4812366.00
Open Hole:		Org CS:	UTM83
Cluster Kind:		UTMRC:	4
Date Completed:	29-Aug-2018 00:00:00	UTMRC Desc:	margin of error : 30 m - 100 m
Remarks:		Location Method:	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Links

Bore Hole ID:	1007360911	**Tag No:**	A256355
Depth M:		**Contractor:**	7324
Year Completed:	2018	**Path:**	
Well Completed Dt:	2018/08/29	**Latitude:**	43.4566464829796
Audit No:	C45033	**Longitude:**	-79.6853318261117

3	1 of 2	ESE/0.0	102.9 / -1.01	915643 Ontario Inc 185 Cross Ave Oakville ON	GEN

Generator No:	ON5859726
SIC Code:	531120
SIC Description:	Lessors of Non-Residential Buildings (except Mini-Warehouses)
Approval Years:	2012
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

3	2 of 2	ESE/0.0	102.9 / -1.01	185 Cross Ave Oakville ON L6J2W7	EHS

Order No:	20170223053	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	RSC Report (Urban)	**Client Prov/State:**	ON
Report Date:	01-MAR-17	**Search Radius (km):**	.3
Date Received:	23-FEB-17	**X:**	-79.68493
Previous Site Name:		**Y:**	43.456403
Lot/Building Size:			
Additional Info Ordered:	City Directory; Aerial Photos		

4	1 of 1	WNW/0.0	104.7 / 0.76	586 ARGUS RD OAKVILLE ON	WWIS

Well ID:	7161332	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring and Test Hole	**Data Entry Status:**	
Use 2nd:	0	**Data Src:**	
Final Well Status:	0	**Date Received:**	05-Apr-2011 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z130927	**Contractor:**	7241
Tag:	A115646	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/716\7161332.pdf

Additional Detail(s) (Map)

Well Completed Date:	2011/03/29
Year Completed:	2011
Depth (m):	3.3528
Latitude:	43.4565967332124
Longitude:	-79.6857037167002
Path:	716\7161332.pdf

Bore Hole Information

Bore Hole ID:	1003493418	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606330.00
Code OB Desc:		**North83:**	4812360.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	3
Date Completed:	29-Mar-2011 00:00:00	**UTMRC Desc:**	margin of error : 10 - 30 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1003828429
Layer:	3
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	28
Mat2 Desc:	SAND
Mat3:	66
Mat3 Desc:	DENSE
Formation Top Depth:	1.0
Formation End Depth:	11.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1003828428
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	11
Mat2 Desc:	GRAVEL
Mat3:	77
Mat3 Desc:	LOOSE
Formation Top Depth:	0.5
Formation End Depth:	1.0

Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1003828427
Layer: 1
Color: 8
General Color: BLACK
Mat1: 27
Most Common Material: OTHER
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 0.5
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003828440
Layer: 3
Plug From: 3.0
Plug To: 11.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003828439
Layer: 2
Plug From: 0.5
Plug To: 3.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003828438
Layer: 1
Plug From: 0.0
Plug To: 0.5
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1003828436
Method Construction Code: D
Method Construction: Direct Push
Other Method Construction:

Pipe Information

Pipe ID: 1003828426
Casing No: 0
Comment:
Alt Name:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Construction Record - Casing

Casing ID:	1003828432
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	4.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003828433
Layer:	1
Slot:	10
Screen Top Depth:	4.0
Screen End Depth:	11.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.2799999713897705

Water Details

Water ID:	1003828431
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1003828430
Diameter:	4.5
Depth From:	0.0
Depth To:	11.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1003493418	***Tag No:***	A115646
Depth M:	3.3528	***Contractor:***	7241
Year Completed:	2011	***Path:***	716\7161332.pdf
Well Completed Dt:	2011/03/29	***Latitude:***	43.4565967332124
Audit No:	Z130927	***Longitude:***	-79.6857037167002

5	1 of 1	WNW/0.5	104.3 / 0.39	586 ARGUS RD OAKVILLE ON	WWIS

Well ID:	7161333	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:	Monitoring and Test Hole	***Data Entry Status:***	
Use 2nd:	0	***Data Src:***	
Final Well Status:	0	***Date Received:***	05-Apr-2011 00:00:00
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	Z130926	***Contractor:***	7241

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Tag:	A115645	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliability:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/716\7161333.pdf

Additional Detail(s) (Map)

Well Completed Date:	2011/03/29
Year Completed:	2011
Depth (m):	3.3528
Latitude:	43.4567129068101
Longitude:	-79.6856270374759
Path:	716\7161333.pdf

Bore Hole Information

Bore Hole ID:	1003493420	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606336.00
Code OB Desc:		**North83:**	4812373.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	3
Date Completed:	29-Mar-2011 00:00:00	**UTMRC Desc:**	margin of error : 10 - 30 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1003828442
Layer:	1
Color:	8
General Color:	BLACK
Mat1:	27
Most Common Material:	OTHER
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	0.5
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1003828443
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	11
Mat2 Desc:	GRAVEL
Mat3:	77
Mat3 Desc:	LOOSE
Formation Top Depth:	0.5
Formation End Depth:	1.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1003828444
Layer:	3
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	28
Mat2 Desc:	SAND
Mat3:	66
Mat3 Desc:	DENSE
Formation Top Depth:	1.0
Formation End Depth:	11.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1003828453
Layer:	1
Plug From:	0.0
Plug To:	0.5
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1003828455
Layer:	3
Plug From:	3.0
Plug To:	11.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1003828454
Layer:	2
Plug From:	0.5
Plug To:	3.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1003828451
Method Construction Code:	D
Method Construction:	Direct Push
Other Method Construction:	

Pipe Information

Pipe ID:	1003828441
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003828447
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	4.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003828448
Layer:	1
Slot:	10
Screen Top Depth:	4.0
Screen End Depth:	11.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.2799999713897705

Water Details

Water ID:	1003828446
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1003828445
Diameter:	4.5
Depth From:	0.0
Depth To:	11.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1003493420	**Tag No:**	A115645
Depth M:	3.3528	**Contractor:**	7241
Year Completed:	2011	**Path:**	716\7161333.pdf
Well Completed Dt:	2011/03/29	**Latitude:**	43.4567129068101
Audit No:	Z130926	**Longitude:**	-79.6856270374759

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
6	1 of 1	N/0.6	103.9 / 0.00	ON	WWIS

Well ID:	7192191	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	28-Nov-2012 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	C19728	**Contractor:**	7230
Tag:	A128931	**Form Version:**	8
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliablity:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/719\7192191.pdf

Additional Detail(s) (Map)

Well Completed Date:	2012/05/18
Year Completed:	2012
Depth (m):	
Latitude:	43.4567949691795
Longitude:	-79.6849330739409
Path:	719\7192191.pdf

Bore Hole Information

Bore Hole ID:	1004211033	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606392.00
Code OB Desc:		**North83:**	4812383.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	18-May-2012 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1004211033	**Tag No:**	A128931
Depth M:		**Contractor:**	7230
Year Completed:	2012	**Path:**	719\7192191.pdf
Well Completed Dt:	2012/05/18	**Latitude:**	43.4567949691795
Audit No:	C19728	**Longitude:**	-79.6849330739409

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
7	1 of 1	ENE/1.2	103.7 / -0.21	Argus Road And Cross Avenue Oakville ON	EHS

Order No:	20111129030	Nearest Intersection:	
Status:	C	Municipality:	Oakville
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	12/8/2011 3:22:17 PM	Search Radius (km):	0.25
Date Received:	11/29/2011 3:22:18 PM	X:	-79.684844
Previous Site Name:		Y:	43.456439
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; Aerial Photos		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
8	1 of 1	E/5.0	101.4 / -2.51	R.M. OF HALTON CROSS AVE./ARGUS RD. OAKVILLE TOWN ON	CA

Certificate #:	7-0313-99-
Application Year:	99
Issue Date:	5/14/1999
Approval Type:	Municipal water
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	1 of 18	NNW/13.8	103.8 / -0.12	DIONEX CANADA LTD. 586 ARGUS RD UNIT 4 OAKVILLE ON L6J 7S1	SCT

Established:	1986
Plant Size (ft²):	2500
Employment:	8
--Details--	
Description:	PROFESSIONAL EQUIPMENT AND SUPPLIES, NOT ELSEWHERE CLASSIFIED
SIC/NAICS Code:	5049

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	2 of 18	NNW/13.8	103.8 / -0.12	DR. GREGORY A. SHAW 100 - 586 ARGUS ROAD OAKVILLE ON L6J 7S1	GEN

Generator No:	ON1806700
SIC Code:	8653
SIC Description:	DENTISTS, GP., OFF.
Approval Years:	93,94,95,96,97,98
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Detail(s)

Waste Class: 264
Waste Class Name: PHOTOPROCESSING WASTES

9	3 of 18	NNW/13.8	103.8 / -0.12	DR. GREGORY A. SHAW 586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 3J3	GEN

Generator No: ON1806700
SIC Code: 8653
SIC Description: DENTISTS, GP., OFF.
Approval Years: 99,00,01,03
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 264
Waste Class Name: PHOTOPROCESSING WASTES

9	4 of 18	NNW/13.8	103.8 / -0.12	DR. GREGORY A. SHAW 586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 3J3	GEN

Generator No: ON1806700
SIC Code:
SIC Description:
Approval Years: 02
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

9	5 of 18	NNW/13.8	103.8 / -0.12	586 Argus Road Oakville ON L6J 7S1	EHS

Order No: 20041203037
Status: C
Report Type: Basic Report
Report Date: 12/14/04
Date Received: 12/3/04
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection:
Municipality: Halton Region
Client Prov/State: ON
Search Radius (km): 0.25
X: -79.685329
Y: 43.457428

9	6 of 18	NNW/13.8	103.8 / -0.12	DR. GREGORY A. SHAW 586 ARGUS ROAD, UNIT 100 OAKVILLE ON L6J 7S1	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Generator No:	ON1806700
SIC Code:	
SIC Description:	
Approval Years:	04
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

---

9 | 7 of 18 | NNW/13.8 | 103.8 / -0.12 | 586 Argus Road Oakville ON L6J 3J3 | EHS

Order No:	20110323010	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Site Report	Client Prov/State:	ON
Report Date:	3/24/2011	Search Radius (km):	0.25
Date Received:	3/23/2011 11:24:06 AM	X:	-79.685598
Previous Site Name:		Y:	43.457189
Lot/Building Size:			
Additional Info Ordered:			

---

9 | 8 of 18 | NNW/13.8 | 103.8 / -0.12 | 586 Argus Road Oakville ON L6J 3J3 | EHS

Order No:	20110310045	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	3/15/2011	Search Radius (km):	0.25
Date Received:	3/10/2011	X:	-79.685302
Previous Site Name:		Y:	43.45734
Lot/Building Size:			
Additional Info Ordered:			

---

9 | 9 of 18 | NNW/13.8 | 103.8 / -0.12 | 586 ARGUS RD OAKVILLE ON | WWIS

Well ID:	7161334	Flowing (Y/N):	
Construction Date:		Flow Rate:	
Use 1st:	Monitoring and Test Hole	Data Entry Status:	
Use 2nd:	0	Data Src:	
Final Well Status:	0	Date Received:	05-Apr-2011 00:00:00
Water Type:		Selected Flag:	TRUE
Casing Material:		Abandonment Rec:	
Audit No:	Z130919	Contractor:	7241
Tag:	A115644	Form Version:	7
Constructn Method:		Owner:	
Elevation (m):		County:	HALTON
Elevatn Reliability:		Lot:	
Depth to Bedrock:		Concession:	
Well Depth:		Concession Name:	
Overburden/Bedrock:		Easting NAD83:	
Pump Rate:		Northing NAD83:	
Static Water Level:		Zone:	
Clear/Cloudy:		UTM Reliability:	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/716\7161334.pdf

Additional Detail(s) (Map)

Well Completed Date: 2011/03/29
Year Completed: 2011
Depth (m): 3.3528
Latitude: 43.457259044851
Longitude: -79.685355634465
Path: 716\7161334.pdf

Bore Hole Information

Bore Hole ID: 1003493422
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:
Date Completed: 29-Mar-2011 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606357.00
North83: 4812434.00
Org CS: UTM83
UTMRC: 3
UTMRC Desc: margin of error : 10 - 30 m
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1003828465
Layer: 1
Color: 8
General Color: BLACK
Mat1: 02
Most Common Material: TOPSOIL
Mat2:
Mat2 Desc:
Mat3: 77
Mat3 Desc: LOOSE
Formation Top Depth: 0.0
Formation End Depth: 0.5
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1003828466
Layer: 2
Color: 6
General Color: BROWN
Mat1: 06
Most Common Material: SILT
Mat2: 28
Mat2 Desc: SAND
Mat3: 66
Mat3 Desc: DENSE
Formation Top Depth: 0.5
Formation End Depth: 11.0

Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003828476
Layer: 2
Plug From: 0.5
Plug To: 3.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003828477
Layer: 3
Plug From: 3.0
Plug To: 11.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003828475
Layer: 1
Plug From: 0.0
Plug To: 0.5
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1003828473
Method Construction Code: D
Method Construction: Direct Push
Other Method Construction:

Pipe Information

Pipe ID: 1003828464
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003828469
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 4.0
Casing Diameter: 2.0
Casing Diameter UOM: Inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1003828470
Layer: 1

Slot:	10
Screen Top Depth:	4.0
Screen End Depth:	11.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.2799999713897705

Water Details

Water ID:	1003828468
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1003828467
Diameter:	4.5
Depth From:	0.0
Depth To:	11.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1003493422	**Tag No:**	A115644
Depth M:	3.3528	**Contractor:**	7241
Year Completed:	2011	**Path:**	716\7161334.pdf
Well Completed Dt:	2011/03/29	**Latitude:**	43.457259044851
Audit No:	Z130919	**Longitude:**	-79.685355634465

---

9 | **10 of 18** | **NNW/13.8** | **103.8 / -0.12** | **586 Argus Rd**
Oakville ON L6J3J3 | **EHS**

Order No:	20140505063	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	09-MAY-14	**Search Radius (km):**	.25
Date Received:	05-MAY-14	**X:**	-79.685333
Previous Site Name:		**Y:**	43.457263
Lot/Building Size:			
Additional Info Ordered:			

---

9 | **11 of 18** | **NNW/13.8** | **103.8 / -0.12** | **586 Argus Clinic**
586 Argus Rd, Suite 101
Oakville ON L6J 3J3 | **GEN**

Generator No:	ON3344499
SIC Code:	621110
SIC Description:	OFFICES OF PHYSICIANS
Approval Years:	2015
PO Box No:	
Country:	Canada
Status:	
Co Admin:	Sherine Soliman
Choice of Contact:	CO_ADMIN
Phone No Admin:	905-842-2410 Ext.
Contaminated Facility:	No

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
MHSW Facility:		No			
Detail(s)					
Waste Class:		312			
Waste Class Name:		PATHOLOGICAL WASTES			
Waste Class:		261			
Waste Class Name:		PHARMACEUTICALS			
9	12 of 18	NNW/13.8	103.8 / -0.12	586 Argus Clinic 586 Argus Rd, Suite 101 Oakville ON L6J 3J3	GEN
Generator No:		ON3344499			
SIC Code:		621110			
SIC Description:		OFFICES OF PHYSICIANS			
Approval Years:		2016			
PO Box No:					
Country:		Canada			
Status:					
Co Admin:		Sherine Soliman			
Choice of Contact:		CO_ADMIN			
Phone No Admin:		905-842-2410 Ext.			
Contaminated Facility:		No			
MHSW Facility:		No			
Detail(s)					
Waste Class:		261			
Waste Class Name:		PHARMACEUTICALS			
Waste Class:		312			
Waste Class Name:		PATHOLOGICAL WASTES			
9	13 of 18	NNW/13.8	103.8 / -0.12	586 Argus Clinic 586 Argus Rd, Suite 101 Oakville ON L6J 3J3	GEN
Generator No:		ON3344499			
SIC Code:		621110			
SIC Description:		OFFICES OF PHYSICIANS			
Approval Years:		2014			
PO Box No:					
Country:		Canada			
Status:					
Co Admin:		Sherine Soliman			
Choice of Contact:		CO_ADMIN			
Phone No Admin:		905-842-2410 Ext.			
Contaminated Facility:		No			
MHSW Facility:		No			
Detail(s)					
Waste Class:		261			
Waste Class Name:		PHARMACEUTICALS			
Waste Class:		312			
Waste Class Name:		PATHOLOGICAL WASTES			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	14 of 18	NNW/13.8	103.8 / -0.12	586 Argus Clinic 586 Argus Rd, Suite 101 Oakville ON L6J 3J3	GEN

Generator No: ON3344499
SIC Code:
SIC Description:
Approval Years: As of Dec 2016
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Waste Class: 312 P
Waste Class Name: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	15 of 18	NNW/13.8	103.8 / -0.12	586 Argus Rd Oakville ON L6J3J3	EHS

Order No: 20170626334
Status: C
Report Type: Standard Report
Report Date: 04-JUL-17
Date Received: 26-JUN-17
Previous Site Name: unknown
Lot/Building Size: 1.0 hectares
Additional Info Ordered: Fire Insur. Maps and/or Site Plans; City Directory

Nearest Intersection:
Municipality: Halton
Client Prov/State: ON
Search Radius (km): .25
X: -79.685333
Y: 43.457263

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	16 of 18	NNW/13.8	103.8 / -0.12	586 Argus Clinic 586 Argus Rd, Suite 101 Oakville ON L6J 3J3	GEN

Generator No: ON3344499
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Waste Class: 312 P
Waste Class Name: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	17 of 18	NNW/13.8	103.8 / -0.12	586 Argus Clinic 586 Argus Rd, Suite 101 Oakville ON L6J 3J3	GEN

Generator No:	ON3344499
SIC Code:	
SIC Description:	
Approval Years:	As of Nov 2021
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	261 A
Waste Class Name:	Pharmaceuticals
Waste Class:	312 P
Waste Class Name:	Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	18 of 18	NNW/13.8	103.8 / -0.12	586 Argus Clinic 586 Argus Rd, Suite 101 Oakville ON L6J 3J3	GEN

Generator No:	ON3344499
SIC Code:	
SIC Description:	
Approval Years:	As of Oct 2022
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312 P
Waste Class Name:	PATHOLOGICAL WASTES
Waste Class:	261 A
Waste Class Name:	PHARMACEUTICALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
10	1 of 13	SSW/20.1	103.8 / -0.06	Instant Imprints Canada Inc. 165 Cross Ave Suite 6 Oakville ON L6J 0A9	SCT

Established:	
Plant Size (ft²):	
Employment:	

--Details--

Description:	Commercial Screen Printing
SIC/NAICS Code:	323113

Description: Other Printing
SIC/NAICS Code: 323119

Description: All Other Textile Product Mills
SIC/NAICS Code: 314990

Description: Sign Manufacturing
SIC/NAICS Code: 339950

Description: Lessors of Non-Financial Intangible Assets (Except Copyrighted Works)
SIC/NAICS Code: 533110

Description: Commercial Screen Printing
SIC/NAICS Code: 323113

---

10 | **2 of 13** | **SSW/20.1** | **103.8 / -0.06** | **Hepworth and Damas Endodontics**
165 Cross Ave, Suite 200
Oakville ON L6J 0A9 | **GEN**

Generator No: ON3034609
SIC Code: 621390
SIC Description: OFFICES OF ALL OTHER HEALTH PRACTITIONERS
Approval Years: 2016
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 261
Waste Class Name: PHARMACEUTICALS

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

---

10 | **3 of 13** | **SSW/20.1** | **103.8 / -0.06** | **Hepworth and Damas Endodontics**
165 Cross Ave, Suite 200
Oakville ON L6J 0A9 | **GEN**

Generator No: ON3034609
SIC Code: 621390
SIC Description: OFFICES OF ALL OTHER HEALTH PRACTITIONERS
Approval Years: 2015
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 261
Waste Class Name: PHARMACEUTICALS

---

10 | **4 of 13** | **SSW/20.1** | **103.8 / -0.06** | **Hepworth and Damas Endodontics**
165 Cross Ave, Suite 200
Oakville ON L6J 0A9 | **GEN**

Generator No: ON3034609
SIC Code: 621390
SIC Description: OFFICES OF ALL OTHER HEALTH PRACTITIONERS
Approval Years: 2014
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 261
Waste Class Name: PHARMACEUTICALS

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

---

10 | **5 of 13** | **SSW/20.1** | **103.8 / -0.06** | **Hepworth and Damas Endodontics**
165 Cross Ave, Suite 200
Oakville ON L6J 0A9 | **GEN**

Generator No: ON3034609
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Waste Class: 312 P
Waste Class Name: Pathological wastes

---

10 | **6 of 13** | **SSW/20.1** | **103.8 / -0.06** | **165 Cross Avenue**
Oakville ON L6J 0A9 | **EHS**

Order No: 20180419009
Status: C
Report Type: Standard Report
Report Date: 25-APR-18
Date Received: 19-APR-18
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.684934

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans

Y: 43.455628

10	7 of 13	SSW/20.1	103.8 / -0.06	Hepworth and Damas Endodontics 165 Cross Ave, Suite 200 Oakville ON L6J 0A9	GEN

Generator No: ON3034609
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Waste Class: 312 P
Waste Class Name: Pathological wastes

10	8 of 13	SSW/20.1	103.8 / -0.06	165 CROSS AVE OAKVILLE ON	WWIS

Well ID: 7322522
Construction Date:
Use 1st: Test Hole
Use 2nd: Monitoring
Final Well Status: Monitoring and Test Hole
Water Type:
Casing Material:
Audit No: Z286921
Tag: A220541
Constructn Method:
Elevation (m):
Elevatn Reliabilty:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: OAKVILLE TOWN
Site Info:

PDF URL (Map):

Flowing (Y/N):
Flow Rate:
Data Entry Status:
Data Src:
Date Received: 01-Nov-2018 00:00:00
Selected Flag: TRUE
Abandonment Rec:
Contractor: 7241
Form Version: 7
Owner:
County: HALTON
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Additional Detail(s) (Map)

Well Completed Date: 2018/05/17
Year Completed: 2018
Depth (m): 6.096
Latitude: 43.4555792736207
Longitude: -79.68492234252

Path:

Bore Hole Information

Bore Hole ID:	1007311285	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606395.00
Code OB Desc:		**North83:**	4812248.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	17-May-2018 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1007586787
Layer:	3
Color:	2
General Color:	GREY
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	92
Mat3 Desc:	WEATHERED
Formation Top Depth:	8.0
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1007586786
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	06
Mat2 Desc:	SILT
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.3330000042915344
Formation End Depth:	8.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1007586785
Layer:	1
Color:	8
General Color:	BLACK

Mat1: 27
Most Common Material: OTHER
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 0.3330000042915344
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1007586795
Layer: 1
Plug From: 20.0
Plug To: 9.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1007586797
Layer: 3
Plug From:
Plug To:
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1007586796
Layer: 2
Plug From: 9.0
Plug To: 0.0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1007586794
Method Construction Code: D
Method Construction: Direct Push
Other Method Construction:

Pipe Information

Pipe ID: 1007586784
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1007586790
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 10.0
Casing Diameter: 2.0

Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1007586791
Layer:	1
Slot:	10
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Water Details

Water ID:	1007586789
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1007586788
Diameter:	6.0
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1007311285	**Tag No:**	A220541
Depth M:	6.096	**Contractor:**	7241
Year Completed:	2018	**Path:**	732\7322522.pdf
Well Completed Dt:	2018/05/17	**Latitude:**	43.4555792736207
Audit No:	Z286921	**Longitude:**	-79.68492234252

10 | **9 of 13** | **SSW/20.1** | **103.8 / -0.06** | **165 CROSS AVE OAKVILLE ON** | **WWIS**

Well ID:	7322523	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Test Hole	**Data Entry Status:**	
Use 2nd:	Monitoring	**Data Src:**	
Final Well Status:	Monitoring and Test Hole	**Date Received:**	01-Nov-2018 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z286920	**Contractor:**	7241
Tag:	A243697	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	

Municipality: OAKVILLE TOWN
Site Info:

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 2018/05/17
Year Completed: 2018
Depth (m): 5.0292
Latitude: 43.4560607849357
Longitude: -79.6852950756888
Path:

Bore Hole Information

Bore Hole ID: 1007311288
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:
Date Completed: 17-May-2018 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606364.00
North83: 4812301.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1007586802
Layer: 1
Color: 8
General Color: BLACK
Mat1: 27
Most Common Material: OTHER
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 0.3330000042915344
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1007586803
Layer: 2
Color: 6
General Color: BROWN
Mat1: 28
Most Common Material: SAND
Mat2: 06
Mat2 Desc: SILT
Mat3:

Mat3 Desc:
Formation Top Depth: 0.3330000042915344
Formation End Depth: 8.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1007586804
Layer: 3
Color: 2
General Color: GREY
Mat1: 17
Most Common Material: SHALE
Mat2:
Mat2 Desc:
Mat3: 92
Mat3 Desc: WEATHERED
Formation Top Depth: 8.0
Formation End Depth: 16.5
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1007586812
Layer: 1
Plug From: 16.5
Plug To: 5.5
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1007586814
Layer: 3
Plug From:
Plug To:
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1007586813
Layer: 2
Plug From: 5.5
Plug To: 0.0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1007586811
Method Construction Code: D
Method Construction: Direct Push
Other Method Construction:

Pipe Information

Pipe ID: 1007586801
Casing No: 0

Comment:
Alt Name:

Construction Record - Casing

Casing ID:	1007586807
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	5.5
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1007586808
Layer:	1
Slot:	10
Screen Top Depth:	5.5
Screen End Depth:	16.5
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Water Details

Water ID:	1007586806
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1007586805
Diameter:	6.0
Depth From:	0.0
Depth To:	16.5
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1007311288	**Tag No:**	A243697
Depth M:	5.0292	**Contractor:**	7241
Year Completed:	2018	**Path:**	732\7322523.pdf
Well Completed Dt:	2018/05/17	**Latitude:**	43.4560607849357
Audit No:	Z286920	**Longitude:**	-79.6852950756888

10	10 of 13	SSW/20.1	103.8 / -0.06	165 CROSS AVE OAKVILLE ON	WWIS

Well ID:	7322524	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Test Hole	**Data Entry Status:**	
Use 2nd:	Monitoring	**Data Src:**	
Final Well Status:	Monitoring and Test Hole	**Date Received:**	01-Nov-2018 00:00:00

Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z286917	**Contractor:**	7241
Tag:	A243641	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliability:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2018/05/17
Year Completed:	2018
Depth (m):	6.4008
Latitude:	43.4562073743833
Longitude:	-79.6855143854592
Path:	

Bore Hole Information

Bore Hole ID:	1007311291	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606346.00
Code OB Desc:		**North83:**	4812317.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	17-May-2018 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1007586823
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	06
Mat2 Desc:	SILT
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.3330000042915344
Formation End Depth:	8.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1007586824
Layer:	3
Color:	2
General Color:	GREY
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	8.0
Formation End Depth:	21.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1007586822
Layer:	1
Color:	8
General Color:	BLACK
Mat1:	27
Most Common Material:	OTHER
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	0.3330000042915344
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1007586833
Layer:	2
Plug From:	10.0
Plug To:	0.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1007586834
Layer:	3
Plug From:	
Plug To:	
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1007586832
Layer:	1
Plug From:	21.0
Plug To:	10.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1007586831
Method Construction Code:	D
Method Construction:	Direct Push
Other Method Construction:	

Pipe Information

Pipe ID:	1007586821
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1007586827
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	11.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1007586828
Layer:	1
Slot:	10
Screen Top Depth:	11.0
Screen End Depth:	21.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Water Details

Water ID:	1007586826
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1007586825
Diameter:	6.0
Depth From:	0.0
Depth To:	21.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1007311291	***Tag No:***	A243641
Depth M:	6.4008	***Contractor:***	7241

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Year Completed:	2018	Path:	732\7322524.pdf
Well Completed Dt:	2018/05/17	Latitude:	43.4562073743833
Audit No:	Z286917	Longitude:	-79.6855143854592

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
10	11 of 13	SSW/20.1	103.8 / -0.06	Hepworth and Damas Endodontics 165 Cross Ave, Suite 200 Oakville ON L6J 0A9	GEN

Generator No:	ON3034609
SIC Code:	
SIC Description:	
Approval Years:	As of Nov 2021
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	261 A
Waste Class Name:	Pharmaceuticals
Waste Class:	312 P
Waste Class Name:	Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
10	12 of 13	SSW/20.1	103.8 / -0.06	Hepworth and Damas Endodontics 165 Cross Ave, Suite 200 Oakville ON L6J 0A9	GEN

Generator No:	ON3034609
SIC Code:	
SIC Description:	
Approval Years:	As of Oct 2022
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	261 A
Waste Class Name:	PHARMACEUTICALS
Waste Class:	312 P
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
10	13 of 13	SSW/20.1	103.8 / -0.06	Dr. B. Kostovic Medical Professional Corporation 165 Cross Ave 105 Oakville ON L6J 0A9	GEN

Generator No:	ON6125184
SIC Code:	
SIC Description:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Approval Years:	As of Oct 2022
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	146 P
Waste Class Name:	OTHER SPECIFIED INORGANICS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	1 of 5	N/20.4	103.9 / 0.00	Dr Sam Jomehri 587 argus road oakville ON L6J3J4	GEN

Generator No:	ON6499580
SIC Code:	621210
SIC Description:	OFFICES OF DENTISTS
Approval Years:	2016
PO Box No:	
Country:	Canada
Status:	
Co Admin:	
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	2 of 5	N/20.4	103.9 / 0.00	Dr Sam Jomehri 587 argus road oakville ON L6J3J4	GEN

Generator No:	ON6499580
SIC Code:	
SIC Description:	
Approval Years:	As of Dec 2018
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	264 L
Waste Class Name:	Photoprocessing wastes
Waste Class:	312 P
Waste Class Name:	Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	3 of 5	N/20.4	103.9 / 0.00	Dr Sam Jomehri 587 argus road oakville ON L6J3J4	GEN

Generator No:	ON6499580
SIC Code:	
SIC Description:	
Approval Years:	As of Jul 2020
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312 P
Waste Class Name:	Pathological wastes
Waste Class:	264 L
Waste Class Name:	Photoprocessing wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	4 of 5	N/20.4	103.9 / 0.00	Dr Sam Jomehri 587 argus road oakville ON L6J3J4	GEN

Generator No:	ON6499580
SIC Code:	
SIC Description:	
Approval Years:	As of Nov 2021
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	264 L
Waste Class Name:	Photoprocessing wastes
Waste Class:	312 P
Waste Class Name:	Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	5 of 5	N/20.4	103.9 / 0.00	Dr Sam Jomehri 587 argus road oakville ON L6J3J4	GEN

Generator No:	ON6499580
SIC Code:	
SIC Description:	
Approval Years:	As of Oct 2022
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312 P
Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 264 L
Waste Class Name: PHOTOPROCESSING WASTES

---

12 | ***1 of 2*** | ***ENE/21.2*** | ***101.9 / -1.99*** | ***207 Cross Avenue*** ***Oakville ON L6J 2W9*** | ***EHS***

Order No: 20040504006
Status: C
Report Type: Complete Report
Report Date: 5/12/04
Date Received: 5/4/04
Previous Site Name:
Lot/Building Size: 13175 square feet (lot size)
Additional Info Ordered: Fire Insur. Maps and/or Site Plans; Title Search

Nearest Intersection: cross av/argus rd
Municipality: halton
Client Prov/State: ON
Search Radius (km): 0.25
X: -79.68379
Y: 43.456578

---

12 | ***2 of 2*** | ***ENE/21.2*** | ***101.9 / -1.99*** | ***207 Cross Avenue*** ***Oakville ON L6J 2W9*** | ***EHS***

Order No: 20051018005
Status: C
Report Type: Complete Report
Report Date: 10/19/2005
Date Received: 10/18/2005
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): 0.25
X: -79.683658
Y: 43.456629

---

13 | ***1 of 3*** | ***SSE/21.2*** | ***102.9 / -1.00*** | ***176 Cross Avenue*** ***Oakville ON L6J 2W6*** | ***EHS***

Order No: 21102000420
Status: C
Report Type: Standard Report
Report Date: 25-OCT-21
Date Received: 20-OCT-21
Previous Site Name:
Lot/Building Size: 4736.12 sq.ft
Additional Info Ordered: Fire Insur, Maps and/or Site Plans; Aerial Photos

Nearest Intersection:
Municipality: Oakville
Client Prov/State: ON
Search Radius (km): .25
X: -79.6843593
Y: 43.4555805

---

13 | ***2 of 3*** | ***SSE/21.2*** | ***102.9 / -1.00*** | ***176 Cross Avenue*** ***Oakville ON L6J 2W6*** | ***EHS***

Order No: 21102000420
Status: C
Report Type: Standard Report
Report Date: 25-OCT-21
Date Received: 20-OCT-21
Previous Site Name:
Lot/Building Size: 4736.12 sq.ft

Nearest Intersection:
Municipality: Oakville
Client Prov/State: ON
Search Radius (km): .25
X: -79.6843593
Y: 43.4555805

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Additional Info Ordered:		Fire Insur. Maps and/or Site Plans; Aerial Photos			

13	3 of 3	SSE/21.2	102.9 / -1.00	176 Cross Avenue Oakville ON L6J 2W6	EHS

Order No:	21102000420	Nearest Intersection:	
Status:	C	Municipality:	Oakville
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	25-OCT-21	Search Radius (km):	.25
Date Received:	20-OCT-21	X:	-79.6843593
Previous Site Name:		Y:	43.4555805
Lot/Building Size:	4736.12 sq.ft		
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; Aerial Photos		

14	1 of 22	NNE/21.9	102.9 / -0.97	MED-CHEM LABORATORIES LTD. 581 ARGUS ROAD BASEMENT OAKVILLE ON L6L 3J4	GEN

Generator No:	ON0120608
SIC Code:	8681
SIC Description:	MEDICAL LABORATORIES
Approval Years:	92,93,97
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

14	2 of 22	NNE/21.9	102.9 / -0.97	MED-CHEM LABORATORIES LIMITED 581 ARGUS ROAD BASEMENT OAKVILLE ON L6L 3J4	GEN

Generator No:	ON0120608
SIC Code:	8681
SIC Description:	MEDICAL LABORATORIES
Approval Years:	98,99,00,01
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	3 of 22	NNE/21.9	102.9 / -0.97	CMLHealthCare 581 ARGUS ROAD OAKVILLE ON	GEN

Generator No: ON7643250
SIC Code: 621510
SIC Description: Medical and Diagnostic Laboratories
Approval Years: 2009
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	4 of 22	NNE/21.9	102.9 / -0.97	CMLHealthCare 581 ARGUS ROAD OAKVILLE ON	GEN

Generator No: ON7643250
SIC Code: 621510
SIC Description: Medical and Diagnostic Laboratories
Approval Years: 2010
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	5 of 22	NNE/21.9	102.9 / -0.97	CMLHealthCare 581 ARGUS ROAD OAKVILLE ON	GEN

Generator No: ON7643250
SIC Code: 621510
SIC Description: Medical and Diagnostic Laboratories
Approval Years: 2011
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Waste Class:		312			
Waste Class Name:		PATHOLOGICAL WASTES			
14	6 of 22	NNE/21.9	102.9 / -0.97	LifeLabs LP 581 ARGUS ROAD, Unit 103 OAKVILLE ON	GEN

Generator No: ON7643250
SIC Code: 621510
SIC Description: Medical and Diagnostic Laboratories
Approval Years: 2012
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	7 of 22	NNE/21.9	102.9 / -0.97	LifeLabs LP 581 ARGUS ROAD, Unit 103 OAKVILLE ON	GEN

Generator No: ON7643250
SIC Code: 621510
SIC Description: MEDICAL AND DIAGNOSTIC LABORATORIES
Approval Years: 2013
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	8 of 22	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus rd, ste 300 Oakville ON	GEN

Generator No: ON7527744
SIC Code: 621110
SIC Description: OFFICES OF PHYSICIANS
Approval Years: 2013
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Contaminated Facility:					
MHSW Facility:					

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	9 of 22	NNE/21.9	102.9 / -0.97	LifeLabs LP 581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	GEN

Generator No:	ON7643250
SIC Code:	621510
SIC Description:	MEDICAL AND DIAGNOSTIC LABORATORIES
Approval Years:	2016
PO Box No:	
Country:	Canada
Status:	
Co Admin:	
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	10 of 22	NNE/21.9	102.9 / -0.97	LifeLabs LP 581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	GEN

Generator No:	ON7643250
SIC Code:	621510
SIC Description:	MEDICAL AND DIAGNOSTIC LABORATORIES
Approval Years:	2015
PO Box No:	
Country:	Canada
Status:	
Co Admin:	
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	11 of 22	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus rd, ste 300 Oakville ON L6J3J4	GEN

Generator No:	ON7527744
SIC Code:	621110
SIC Description:	OFFICES OF PHYSICIANS
Approval Years:	2016
PO Box No:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Country:	Canada
Status:	
Co Admin:	Meera Ramakrishnar
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	905338-9900 Ext.4
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	261
Waste Class Name:	PHARMACEUTICALS
Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	12 of 22	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus rd, ste 300 Oakville ON L6J3J4	GEN

Generator No:	ON7527744
SIC Code:	621110
SIC Description:	OFFICES OF PHYSICIANS
Approval Years:	2015
PO Box No:	
Country:	Canada
Status:	
Co Admin:	Meera Ramakrishnar
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	905338-9900 Ext.4
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	13 of 22	NNE/21.9	102.9 / -0.97	Adamson Properties Inc. 581 Argus Rd. Oakville ON L6J 3J4	GEN

Generator No:	ON7415460
SIC Code:	621110
SIC Description:	OFFICES OF PHYSICIANS
Approval Years:	2014
PO Box No:	
Country:	Canada
Status:	
Co Admin:	
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	14 of 22	NNE/21.9	102.9 / -0.97	LifeLabs LP 581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	GEN

Generator No:	ON7643250
SIC Code:	621510
SIC Description:	MEDICAL AND DIAGNOSTIC LABORATORIES
Approval Years:	2014
PO Box No:	
Country:	Canada
Status:	
Co Admin:	Jacquie Maertz
Choice of Contact:	CO_ADMIN
Phone No Admin:	905-565-0433 Ext.2202
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	15 of 22	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus rd, ste 300 Oakville ON L6J3J4	GEN

Generator No:	ON7527744
SIC Code:	621110
SIC Description:	OFFICES OF PHYSICIANS
Approval Years:	2014
PO Box No:	
Country:	Canada
Status:	
Co Admin:	Meera Ramakrishnar
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	905338-9900 Ext.4
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	16 of 22	NNE/21.9	102.9 / -0.97	LifeLabs LP 581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	GEN

Generator No:	ON7643250
SIC Code:	
SIC Description:	
Approval Years:	As of Dec 2018
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Waste Class:		312 P			
Waste Class Name:		Pathological wastes			
14	17 of 22	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus rd, ste 300 Oakville ON L6J3J4	GEN
Generator No:		ON7527744			
SIC Code:					
SIC Description:					
Approval Years:		As of Dec 2018			
PO Box No:					
Country:		Canada			
Status:		Registered			
Co Admin:					
Choice of Contact:					
Phone No Admin:					
Contaminated Facility:					
MHSW Facility:					
Detail(s)					
Waste Class:		261 A			
Waste Class Name:		Pharmaceuticals			
Waste Class:		312 P			
Waste Class Name:		Pathological wastes			
14	18 of 22	NNE/21.9	102.9 / -0.97	LifeLabs LP 581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	GEN
Generator No:		ON7643250			
SIC Code:					
SIC Description:					
Approval Years:		As of Jul 2020			
PO Box No:					
Country:		Canada			
Status:		Registered			
Co Admin:					
Choice of Contact:					
Phone No Admin:					
Contaminated Facility:					
MHSW Facility:					
Detail(s)					
Waste Class:		312 P			
Waste Class Name:		Pathological wastes			
14	19 of 22	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus Rd, ste 300 Oakville ON L6J3J4	GEN
Generator No:		ON7527744			
SIC Code:					
SIC Description:					
Approval Years:		As of Jul 2020			
PO Box No:					
Country:		Canada			
Status:		Registered			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Waste Class: 312 P
Waste Class Name: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	20 of 22	NNE/21.9	102.9 / -0.97	LifeLabs LP 581 ARGUS ROAD, Unit 103 OAKVILLE ON L6J3J4	GEN

Generator No: ON7643250
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312 P
Waste Class Name: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	21 of 22	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus Rd, ste 300 Oakville ON L6J3J4	GEN

Generator No: ON7527744
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312 P
Waste Class Name: Pathological wastes

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	22 of 22	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus Rd, ste 300 Oakville ON L6J3J4	GEN

Generator No: ON7527744
SIC Code:
SIC Description:
Approval Years: As of Oct 2022
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312 P
Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 261 A
Waste Class Name: PHARMACEUTICALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
15	1 of 8	NNE/21.9	102.9 / -0.97	MED-CHEM LABORATORIES LTD. 581 ARGUS ROAD, BASEMENT, OAKVILLE C/O 8150 SHEPPARD EAST SCARBOROUGH ON L6J 3J4	GEN

Generator No: ON0120608
SIC Code: 8681
SIC Description: MEDICAL LABORATORIES
Approval Years: 89,90
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
15	2 of 8	NNE/21.9	102.9 / -0.97	MED-CHEM LABORATORIES LTD. 25-656 581 ARGUS ROAD, BASEMENT, OAKVILLE C/O 8150 SHEPPARD EAST SCARBOROUGH ON L6J 3J4	GEN

Generator No: ON0120608
SIC Code: 8681
SIC Description: MEDICAL LABORATORIES
Approval Years: 94,95,96
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Contaminated Facility:					
MHSW Facility:					

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

15	3 of 8	NNE/21.9	102.9 / -0.97	MCTU DIAGNOSTICS LIMITED 581 ARGUS ROAD OAKVILLE ON L6J 3J4	GEN

Generator No:	ON1939813
SIC Code:	8682
SIC Description:	RADIOLOGICAL LAB.
Approval Years:	94,95,96,97,98,99,00
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	264
Waste Class Name:	PHOTOPROCESSING WASTES

15	4 of 8	NNE/21.9	102.9 / -0.97	MCTU DI(OUT OF BUSINESS) 581 ARGUS ROAD OAKVILLE ON L6J 3J4	GEN

Generator No:	ON1939813
SIC Code:	8682
SIC Description:	RADIOLOGICAL LAB.
Approval Years:	01
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	264
Waste Class Name:	PHOTOPROCESSING WASTES

15	5 of 8	NNE/21.9	102.9 / -0.97	Argus Medical Centre 581 Argus rd, ste 300 Oakville ON L6J 3J4	GEN

Generator No:	ON7527744
SIC Code:	621110
SIC Description:	Offices of Physicians
Approval Years:	2010
PO Box No:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

15	6 of 8	NNE/21.9	102.9 / -0.97	***Camista Holdings*** ***581 Argus Road Suite 202*** ***Oakville ON L6J 3J4***	GEN

Generator No: ON2647312
SIC Code: 621390
SIC Description: Offices of All Other Health Practitioners
Approval Years: 2010
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

15	7 of 8	NNE/21.9	102.9 / -0.97	***Argus Medical Centre*** ***581 Argus rd, ste 300*** ***Oakville ON L6J 3J4***	GEN

Generator No: ON7527744
SIC Code: 621110
SIC Description: Offices of Physicians
Approval Years: 2011
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

15	8 of 8	NNE/21.9	102.9 / -0.97	***Argus Medical Centre*** ***581 Argus rd, ste 300*** ***Oakville ON L6J 3J4***	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Generator No:	ON7527744
SIC Code:	621110
SIC Description:	Offices of Physicians
Approval Years:	2012
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

16 **1 of 1** **NE/28.6** **101.8 / -2.12** **ON** **WWIS**

Well ID:	7325283	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	28-Dec-2018 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	C42401	**Contractor:**	7609
Tag:	A248729	**Form Version:**	8
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2018/09/11
Year Completed:	2018
Depth (m):	
Latitude:	43.456930328172
Longitude:	-79.6841761502853
Path:	

Bore Hole Information

Bore Hole ID:	1007329148	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606453.00
Code OB Desc:		**North83:**	4812399.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Date Completed:	11-Sep-2018 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1007329146	**Tag No:**	A248729
Depth M:		**Contractor:**	7609
Year Completed:	2018	**Path:**	
Well Completed Dt:	2018/09/11	**Latitude:**	43.456930328172
Audit No:	C42401	**Longitude:**	-79.6841761502853

---

17 | **1 of 1** | **N/44.1** | **103.7 / -0.21** | **TARGET MARKETING CORP.**
591 ARGUS RD
OAKVILLE ON L6J 3J4 | **SCT**

Established:	1979
Plant Size (ft²):	0
Employment:	4

--Details--

Description:	OFFICE EQUIPMENT
SIC/NAICS Code:	5044
Description:	ELECTRICAL APPLIANCES, TELEVISION & RADIO SETS
SIC/NAICS Code:	5064
Description:	ELECTRONIC PARTS & EQUIPMENT, N.E.C.
SIC/NAICS Code:	5065
Description:	JEWELLERY, WATCHES, PRECIOUS STONES & PRECIOUS METALS
SIC/NAICS Code:	5094
Description:	STATIONERY & OFFICE SUPPLIES
SIC/NAICS Code:	5112

---

18 | **1 of 1** | **ENE/45.1** | **101.9 / -2.00** | **217 Cross Avenue and 571 Argus Road**
Oakville ON L6J 2W9 | **EHS**

Order No:	20180505018	**Nearest Intersection:**	
Status:	C	**Municipality:**	Oakville
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	14-MAY-18	**Search Radius (km):**	.3
Date Received:	05-MAY-18	**X:**	-79.683902
Previous Site Name:		**Y:**	43.456984
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; City Directory		

---

19 | **1 of 3** | **NNE/50.2** | **102.8 / -1.11** | **Argus Road**
Oakville ON L6J 3J3 | **EHS**

Order No:	21051300283	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Standard Express Report	**Client Prov/State:**	ON

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Report Date:	13-MAY-21	Search Radius (km):	.25
Date Received:	13-MAY-21	X:	-79.6846167
Previous Site Name:		Y:	43.457578
Lot/Building Size:			
Additional Info Ordered:			

19	2 of 3	NNE/50.2	102.8 / -1.11	Argus Road Oakville ON L6J 3J3	EHS

Order No:	21051300283	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Express Report	Client Prov/State:	ON
Report Date:	13-MAY-21	Search Radius (km):	.25
Date Received:	13-MAY-21	X:	-79.6846167
Previous Site Name:		Y:	43.457578
Lot/Building Size:			
Additional Info Ordered:			

19	3 of 3	NNE/50.2	102.8 / -1.11	Argus Road Oakville ON L6J 3J3	EHS

Order No:	21051300283	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Express Report	Client Prov/State:	ON
Report Date:	13-MAY-21	Search Radius (km):	.25
Date Received:	13-MAY-21	X:	-79.6846167
Previous Site Name:		Y:	43.457578
Lot/Building Size:			
Additional Info Ordered:			

20	1 of 3	N/52.9	102.9 / -0.96	E. MYMRYK INVESTMENTS INC. 595 ARGUS ROAD OAKVILLE ON L6J 3J4	GEN

Generator No:	ON0588100
SIC Code:	7214
SIC Description:	INVESTMENT COMPANIES
Approval Years:	86,87,88,89,90
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	264
Waste Class Name:	PHOTOPROCESSING WASTES

20	2 of 3	N/52.9	102.9 / -0.96	E. MYMRYK INVESTMENTS INC. 14-201 595 ARGUS ROAD OAKVILLE ON L6J 3J4	GEN

Generator No:	ON0588100
SIC Code:	7214
SIC Description:	INVESTMENT COMPANIES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Approval Years: 92,93,94,95,96,97,98
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 264
Waste Class Name: PHOTOPROCESSING WASTES

20	3 of 3	N/52.9	102.9 / -0.96	Rubicon Publishing Inc. 595 Argus Rd Oakville ON L6J 3J4	SCT

Established: 1987
Plant Size (ft²): 1000
Employment: 7

--Details--
Description: Book Publishers
SIC/NAICS Code: 511130

21	1 of 2	NE/64.1	101.9 / -1.98	217-227 Cross Avenue and 571-595 Argus Road Oakville ON L6J 2W9	EHS

Order No: 22051600189
Status: C
Report Type: RSC Report (Urban)
Report Date: 19-MAY-22
Date Received: 16-MAY-22
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: City Directory

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .3
X: -79.6840132
Y: 43.45724888

21	2 of 2	NE/64.1	101.9 / -1.98	217-227 Cross Avenue and 571-595 Argus Road Oakville ON L6J 2W9	EHS

Order No: 22051600189
Status: C
Report Type: RSC Report (Urban)
Report Date: 19-MAY-22
Date Received: 16-MAY-22
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: City Directory

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .3
X: -79.6840132
Y: 43.45724888

22	1 of 3	SW/64.4	104.1 / 0.17	157 Cross Avenue Oakville ON L6J 2W7	EHS

Order No: 21021000037
Status: C
Report Type: Standard Report
Report Date: 16-FEB-21

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Date Received:	10-FEB-21	X:	-79.6855096
Previous Site Name:		Y:	43.4554877
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans		

---

22 | 2 of 3 | SW/64.4 | 104.1 / 0.17 | 157 Cross Avenue Oakville ON L6J 2W7 | EHS

Order No:	21021000037	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	16-FEB-21	Search Radius (km):	.25
Date Received:	10-FEB-21	X:	-79.6855096
Previous Site Name:		Y:	43.4554877
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans		

---

22 | 3 of 3 | SW/64.4 | 104.1 / 0.17 | 157 Cross Avenue Oakville ON L6J 2W7 | EHS

Order No:	21021000037	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	16-FEB-21	Search Radius (km):	.25
Date Received:	10-FEB-21	X:	-79.6855096
Previous Site Name:		Y:	43.4554877
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans		

---

23 | 1 of 1 | SW/65.0 | 104.4 / 0.50 | 214 CROSS AVE. Oakville ON | WWIS

Well ID:	7134031	Flowing (Y/N):	
Construction Date:		Flow Rate:	
Use 1st:	Monitoring	Data Entry Status:	
Use 2nd:		Data Src:	
Final Well Status:	Observation Wells	Date Received:	16-Nov-2009 00:00:00
Water Type:		Selected Flag:	TRUE
Casing Material:		Abandonment Rec:	
Audit No:	Z097369	Contractor:	7295
Tag:	A090329	Form Version:	7
Constructn Method:		Owner:	
Elevation (m):		County:	HALTON
Elevatn Reliability:		Lot:	
Depth to Bedrock:		Concession:	
Well Depth:		Concession Name:	
Overburden/Bedrock:		Easting NAD83:	
Pump Rate:		Northing NAD83:	
Static Water Level:		Zone:	
Clear/Cloudy:		UTM Reliability:	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/713\7134031.pdf

Additional Detail(s) (Map)

Well Completed Date:	2009/09/16
Year Completed:	2009
Depth (m):	6.096

Latitude:	43.4555512231044
Longitude:	-79.6856151220795
Path:	713\7134031.pdf

Bore Hole Information

Bore Hole ID:	1002820681	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606339.00
Code OB Desc:		**North83:**	4812244.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	3
Date Completed:	16-Sep-2009 00:00:00	**UTMRC Desc:**	margin of error : 10 - 30 m
Remarks:		**Location Method:**	gcode
Loc Method Desc:	Geocoding from address		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1003023960
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	01
Most Common Material:	FILL
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	1.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1003023961
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	34
Most Common Material:	TILL
Mat2:	17
Mat2 Desc:	SHALE
Mat3:	
Mat3 Desc:	
Formation Top Depth:	1.0
Formation End Depth:	11.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1003023962
Layer:	3

Color:	7
General Color:	RED
Mat1:	17
Most Common Material:	SHALE
Mat2:	15
Mat2 Desc:	LIMESTONE
Mat3:	74
Mat3 Desc:	LAYERED
Formation Top Depth:	11.0
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1003023964
Layer:	1
Plug From:	0.0
Plug To:	9.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1003023969
Method Construction Code:	6
Method Construction:	Boring
Other Method Construction:	

Pipe Information

Pipe ID:	1003023959
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003023966
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	
Casing Diameter:	1.7999999523162842
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003023967
Layer:	1
Slot:	10
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.0

Water Details

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Water ID:	1003023965
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1003023963
Diameter:	
Depth From:	
Depth To:	
Hole Depth UOM:	ft
Hole Diameter UOM:	Inch

Links

Bore Hole ID:	1002820681	**Tag No:**	A090329
Depth M:	6.096	**Contractor:**	7295
Year Completed:	2009	**Path:**	713\7134031.pdf
Well Completed Dt:	2009/09/16	**Latitude:**	43.4555512231044
Audit No:	Z097369	**Longitude:**	-79.6856151220795

---

24 **1 of 2** ***ENE/65.0*** ***100.9 / -3.00*** ***217 Cross Avenue Oakville ON L6J 2W9*** ***EHS***

Order No:	20040903002	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Complete Report	**Client Prov/State:**	ON
Report Date:	9/14/04	**Search Radius (km):**	0.25
Date Received:	9/3/04	**X:**	-79.683393
Previous Site Name:		**Y:**	43.456767
Lot/Building Size:			
Additional Info Ordered:			

---

24 **2 of 2** ***ENE/65.0*** ***100.9 / -3.00*** ***217 CROSS AVE lot 13 con 3 OAKVILLE ON*** ***WWIS***

Well ID:	2810039	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Not Used	**Data Entry Status:**	
Use 2nd:		**Data Src:**	1
Final Well Status:	Observation Wells	**Date Received:**	25-Aug-2004 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z17060	**Contractor:**	6607
Tag:	A014511	**Form Version:**	3
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	013
Depth to Bedrock:		**Concession:**	03
Well Depth:		**Concession Name:**	DS S
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/281\2810039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2004/04/06
Year Completed:	2004
Depth (m):	5.1
Latitude:	43.4567760531386
Longitude:	-79.6832895432616
Path:	281\2810039.pdf

Bore Hole Information

Bore Hole ID:	11174656	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	606525.00
Code OB Desc:		***North83:***	4812383.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	3
Date Completed:	06-Apr-2004 00:00:00	***UTMRC Desc:***	margin of error : 10 - 30 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	932974870
Layer:	3
Color:	2
General Color:	GREY
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	2.4000000953674316
Formation End Depth:	5.099999904632568
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	932974869
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	2.200000047683716
Formation End Depth:	2.4000000953674316
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	932974868
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	06
Mat2 Desc:	SILT
Mat3:	01
Mat3 Desc:	FILL
Formation Top Depth:	0.0
Formation End Depth:	2.200000047683716
Formation End Depth UOM:	m

Annular Space/Abandonment Sealing Record

Plug ID:	933255878
Layer:	2
Plug From:	3.0999999046325684
Plug To:	5.099999904632568
Plug Depth UOM:	m

Annular Space/Abandonment Sealing Record

Plug ID:	933255877
Layer:	1
Plug From:	0.0
Plug To:	3.0999999046325684
Plug Depth UOM:	m

Method of Construction & Well Use

Method Construction ID:	962810039
Method Construction Code:	6
Method Construction:	Boring
Other Method Construction:	

Pipe Information

Pipe ID:	11183175
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930845963
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	3.5999999046325684
Casing Diameter:	2.5
Casing Diameter UOM:	cm

Casing Depth UOM: m

Construction Record - Screen

Screen ID: 933409563
Layer: 1
Slot: 10
Screen Top Depth: 3.5999999046325684
Screen End Depth: 5.099999904632568
Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter: 3.5

Hole Diameter

Hole ID: 11308258
Diameter: 21.0
Depth From: 0.0
Depth To: 5.099999904632568
Hole Depth UOM: m
Hole Diameter UOM: cm

Links

Bore Hole ID: 11174656
Depth M: 5.1
Year Completed: 2004
Well Completed Dt: 2004/04/06
Audit No: Z17060
Tag No: A014511
Contractor: 6607
Path: 281\2810039.pdf
Latitude: 43.4567760531386
Longitude: -79.6832895432616

25	1 of 3	ENE/66.4	100.9 / -2.95	217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	EHS

Order No: 20310200160
Status: C
Report Type: RSC Report (Urban)
Report Date: 05-NOV-20
Date Received: 02-NOV-20
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .3
X: -79.68370151
Y: 43.45711061

25	2 of 3	ENE/66.4	100.9 / -2.95	217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	EHS

Order No: 20310200160
Status: C
Report Type: RSC Report (Urban)
Report Date: 05-NOV-20
Date Received: 02-NOV-20
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .3
X: -79.68370151
Y: 43.45711061

25	3 of 3	ENE/66.4	100.9 / -2.95	217, 227 Cross Avenue and 571 Argus Road Oakville ON L6J 2W9	EHS

Order No: 20310200160
Nearest Intersection:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Status:	C	Municipality:	
Report Type:	RSC Report (Urban)	Client Prov/State:	ON
Report Date:	05-NOV-20	Search Radius (km):	.3
Date Received:	02-NOV-20	X:	-79.68370151
Previous Site Name:		Y:	43.45711061
Lot/Building Size:			
Additional Info Ordered:			

26	1 of 1	NNW/76.3	104.8 / 0.95	590 Argus Rd Oakville ON L6J3J3	EHS

Order No:	20150731030	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Custom Report	Client Prov/State:	ON
Report Date:	06-AUG-15	Search Radius (km):	.25
Date Received:	31-JUL-15	X:	-79.685553
Previous Site Name:		Y:	43.457883
Lot/Building Size:			
Additional Info Ordered:			

27	1 of 7	S/79.5	103.9 / -0.04	148 Cross Ave. Part of Lot 14, Conc. 3 Oakville ON L6J 2W6	RSC

RSC ID:		Cert Date:	
RA No:		Cert Prop Use No:	
RSC Type:		Intended Prop Use:	
Curr Property Use:		Qual Person Name:	
Ministry District:	Burlington	Stratified (Y/N):	N
Filing Date:	11/22/99	Audit (Y/N):	
Date Ack:	01/06/00	Entire Leg Prop. (Y/N):	
Date Returned:		Accuracy Estimate:	
Restoration Type:	Generic	Telephone:	
Soil Type:	Medium/fine	Fax:	
Criteria:	Ind/comm; nonpotable	Email:	
CPU Issued Sect 1686:			
Asmt Roll No:			
Prop ID No (PIN):			
Property Municipal Address:			
Mailing Address:			
Latitude & Latitude:			
UTM Coordinates:			
Consultant:	Robert Ferris, Trow Cosulting Engineers		
Legal Desc:			
Measurement Method:			
Applicable Standards:			
RSC PDF:			

27	2 of 7	S/79.5	103.9 / -0.04	148 Cross Avenue Part of Lot 14, Concession 3 Oakville ON L6J 2W6	RSC

RSC ID:		Cert Date:	
RA No:		Cert Prop Use No:	
RSC Type:		Intended Prop Use:	
Curr Property Use:		Qual Person Name:	
Ministry District:	Burlington	Stratified (Y/N):	N
Filing Date:	11/22/99	Audit (Y/N):	
Date Ack:	02/01/00	Entire Leg Prop. (Y/N):	
Date Returned:		Accuracy Estimate:	
Restoration Type:	Generic	Telephone:	
Soil Type:	Medium/fine	Fax:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Criteria: Ind/comm; nonpotable
Email:
CPU Issued Sect
1686:
Asmt Roll No:
Prop ID No (PIN):
Property Municipal Address:
Mailing Address:
Latitude & Latitude:
UTM Coordinates:
Consultant: Robert Ferris, Trow Cosulting Engineers
Legal Desc:
Measurement Method:
Applicable Standards:
RSC PDF:

---

27 | 3 of 7 | S/79.5 | 103.9 / -0.04 | 148 Cross Avenue Oakville ON L6J 2W6 | RSC

RSC ID:
RA No:
RSC Type:
Curr Property Use:
Ministry District: Burlington
Filing Date: 12/03/99
Date Ack: 02/02/00
Date Returned:
Restoration Type: Generic
Soil Type: med/fine
Criteria: Res/parkland + nonpotable
CPU Issued Sect
1686:
Asmt Roll No:
Prop ID No (PIN):
Property Municipal Address:
Mailing Address:
Latitude & Latitude:
UTM Coordinates:
Consultant: Soiltest Services Inc.
Legal Desc:
Measurement Method:
Applicable Standards:
RSC PDF:
Cert Date:
Cert Prop Use No:
Intended Prop Use:
Qual Person Name:
Stratified (Y/N): N
Audit (Y/N): N
Entire Leg Prop. (Y/N):
Accuracy Estimate:
Telephone:
Fax:
Email:

---

27 | 4 of 7 | S/79.5 | 103.9 / -0.04 | 148 Cross Avenue Oakville ON L6J 2W6 | RSC

RSC ID:
RA No:
RSC Type:
Curr Property Use:
Ministry District: Guelph
Filing Date: 12/06/99
Date Ack: 02/22/00
Date Returned:
Restoration Type: Generic
Soil Type: Coarse
Criteria: Res/parkland + potable
CPU Issued Sect
1686:
Asmt Roll No:
Prop ID No (PIN):
Property Municipal Address:
Mailing Address:
Latitude & Latitude:
Cert Date:
Cert Prop Use No:
Intended Prop Use:
Qual Person Name:
Stratified (Y/N): N
Audit (Y/N): N
Entire Leg Prop. (Y/N):
Accuracy Estimate:
Telephone:
Fax:
Email:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
UTM Coordinates:					
Consultant:		William Geddes, Trow Consulting, Stoney Creek			
Legal Desc:					
Measurement Method:					
Applicable Standards:					
RSC PDF:					

27	5 of 7	S/79.5	103.9 / -0.04	148 Cross Ave. Oakville ON L6J 2W6	RSC

RSC ID:		Cert Date:	
RA No:		Cert Prop Use No:	
RSC Type:		Intended Prop Use:	
Curr Property Use:		Qual Person Name:	
Ministry District:	Ottawa	Stratified (Y/N):	
Filing Date:	02/11/00	Audit (Y/N):	
Date Ack:		Entire Leg Prop. (Y/N):	
Date Returned:	02/11/00	Accuracy Estimate:	
Restoration Type:		Telephone:	
Soil Type:		Fax:	
Criteria:		Email:	
CPU Issued Sect 1686:			
Asmt Roll No:			
Prop ID No (PIN):			
Property Municipal Address:			
Mailing Address:			
Latitude & Latitude:			
UTM Coordinates:			
Consultant:			
Legal Desc:			
Measurement Method:			
Applicable Standards:			
RSC PDF:			

27	6 of 7	S/79.5	103.9 / -0.04	WOTHERSPOON FOUNDRY LTD. 148 CROSS AVENUE P.O.BOX 400 OAKVILLE ON L6J 2W6	GEN

Generator No:	ON0661700
SIC Code:	2941
SIC Description:	IRON FOUNDARIES
Approval Years:	86,87,88,89,90
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	143
Waste Class Name:	STEEL MAKING RESIDUES

27	7 of 7	S/79.5	103.9 / -0.04	WOTHERSPOON FOUNDRY LTD. 42-157 148 CROSS AVENUE P.O.BOX 400 OAKVILLE ON L6J 2W6	GEN

Generator No:	ON0661700
SIC Code:	2941

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

SIC Description:	IRON FOUNDARIES
Approval Years:	94,95,96
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	143
Waste Class Name:	STEEL MAKING RESIDUES
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS

28	1 of 1	S/79.6	103.9 / -0.04	WOTHERSPOON FOUNDRY LTD. 148 CROSS AVENUE OAKVILLE ON L6J 5A8	GEN

Generator No:	ON0661700
SIC Code:	2941
SIC Description:	IRON FOUNDARIES
Approval Years:	92,93,97,98,99,00,01
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	143
Waste Class Name:	STEEL MAKING RESIDUES
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
29	1 of 1	W/82.0	104.8 / 0.95	166 South Service Road East Oakville ON L6J 0A5	EHS

Order No:	20180803072	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Custom Report	Client Prov/State:	ON
Report Date:	09-AUG-18	Search Radius (km):	.25
Date Received:	03-AUG-18	X:	-79.686803
Previous Site Name:		Y:	43.456766
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; City Directory; Aerial Photos		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
30	1 of 1	NNW/85.2	104.8 / 0.95	590 Argus Road Oakville ON	EHS

Order No:	20160712020	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	15-JUL-16	Search Radius (km):	.25
Date Received:	12-JUL-16	X:	-79.685645
Previous Site Name:		Y:	43.457936
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
31	1 of 3	W/85.3	104.8 / 0.95	166 South Service Road East Oakville ON L6J 2X5	EHS

Order No:	22032800814	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	RSC Report (Urban)	Client Prov/State:	ON
Report Date:	31-MAR-22	Search Radius (km):	.3
Date Received:	28-MAR-22	X:	-79.68684167
Previous Site Name:		Y:	43.45677424
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
31	2 of 3	W/85.3	104.8 / 0.95	166 South Service Road East Oakville ON L6J 2X5	EHS

Order No:	22032800814	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	RSC Report (Urban)	Client Prov/State:	ON
Report Date:	31-MAR-22	Search Radius (km):	.3
Date Received:	28-MAR-22	X:	-79.68684167
Previous Site Name:		Y:	43.45677424
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
31	3 of 3	W/85.3	104.8 / 0.95	166 South Service Road East Oakville ON L6J 2X5	EHS

Order No:	22032800814	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	RSC Report (Urban)	Client Prov/State:	ON
Report Date:	31-MAR-22	Search Radius (km):	.3
Date Received:	28-MAR-22	X:	-79.68684167
Previous Site Name:		Y:	43.45677424
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
32	1 of 2	NNE/90.3	102.6 / -1.27	603 Argus Rd. Oakville ON L6J 6G6	EHS

Order No:	20030620007	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Site Report	Client Prov/State:	ON
Report Date:	6/23/03	Search Radius (km):	0.25
Date Received:	6/20/03	X:	-79.68454
Previous Site Name:		Y:	43.458004
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
32	2 of 2	NNE/90.3	102.6 / -1.27	Inside Health Inc. 100-603 Argus Road Oakville ON L6J 6G6	GEN

Generator No:	ON5885545
SIC Code:	
SIC Description:	
Approval Years:	As of Dec 2018
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312 P
Waste Class Name:	Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
33	1 of 2	NNW/95.1	104.8 / 0.95	590 Argus Road Oakville ON L6J 6G6	EHS

Order No:	22051900354	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	25-MAY-22	Search Radius (km):	.25
Date Received:	19-MAY-22	X:	-79.6857288
Previous Site Name:		Y:	43.4580028
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
33	2 of 2	NNW/95.1	104.8 / 0.95	590 Argus Road Oakville ON L6J 6G6	EHS

Order No:	22051900354	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	25-MAY-22	Search Radius (km):	.25
Date Received:	19-MAY-22	X:	-79.6857288
Previous Site Name:		Y:	43.4580028
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
34	1 of 1	WSW/102.2	104.8 / 0.95	ON	BORE

Borehole ID:	646014	**Inclin FLG:**	No
OGF ID:	215546397	**SP Status:**	Initial Entry
Status:		**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	APR-1958	**Municipality:**	
Static Water Level:	0.3	**Lot:**	
Primary Water Use:	Not Used	**Township:**	
Sec. Water Use:		**Latitude DD:**	43.455548
Total Depth m:	3.7	**Longitude DD:**	-79.686288
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	606285
Drill Method:	Diamond Drill	**Northing:**	4812243
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Not Applicable
DEM Ground Elev m:	104		
Concession:			
Location D:			
Survey D:			
Comments:	Location out of Province. Reason not known.		

Borehole Geology Stratum

Geology Stratum ID:	218513221	**Mat Consistency:**	Loose
Top Depth:	.3	**Material Moisture:**	
Bottom Depth:	3.2	**Material Texture:**	Fine to Medium
Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Sand	**Geologic Formation:**	
Material 2:	Silt	**Geologic Group:**	
Material 3:	Shale	**Geologic Period:**	
Material 4:		**Depositional Gen:**	glacial
Gsc Material Description:			
Stratum Description:	SAND-FINE TO MEDIUM,SILT,SHALE. BROWN,GREY,LOOSE,AGE GLACIAL, WATER STABLE AT 344.0 FEET.		

Geology Stratum ID:	218513220	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.3	**Material Texture:**	
Material Color:	Black	**Non Geo Mat Type:**	
Material 1:	Soil	**Geologic Formation:**	
Material 2:		**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			
Stratum Description:	SOIL, BLACK,AGE POST-GLACIAL.		

Geology Stratum ID:	218513222	**Mat Consistency:**	Hard
Top Depth:	3.2	**Material Moisture:**	
Bottom Depth:	3.7	**Material Texture:**	
Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Clay	**Geologic Formation:**	
Material 2:	Shale	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	glacial
Gsc Material Description:			
Stratum Description:	CLAY,SHALE. BROWN,VERY HARD,AGE GLACIAL. 0001000800105060000006 **Note: Many records provided by the department have a truncated [Stratum Description] field.		

Source

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Source Type:	Data Survey	**Source Appl:**	Spatial/Tabular
Source Orig:	Geological Survey of Canada	**Source Iden:**	1
Source Date:	1956-1972	**Scale or Res:**	Varies
Confidence:	M	**Horizontal:**	NAD27
Observatio:		**Verticalda:**	Mean Average Sea Level
Source Name:	Urban Geology Automated Information System (UGAIS)		
Source Details:	File: TOR2.txt RecordID: 140360 NTS_Sheet: 30M05H		
Confiden 1:	Reliable information but incomplete.		

Source List

Source Identifier:	1	**Horizontal Datum:**	NAD27
Source Type:	Data Survey	**Vertical Datum:**	Mean Average Sea Level
Source Date:	1956-1972	**Projection Name:**	Universal Transverse Mercator
Scale or Resolution:	Varies		
Source Name:	Urban Geology Automated Information System (UGAIS)		
Source Originators:	Geological Survey of Canada		

---

35 *1 of 1* *W/110.0* *104.8 / 0.95* *ON* **BORE**

Borehole ID:	646019	**Inclin FLG:**	No
OGF ID:	215546402	**SP Status:**	Initial Entry
Status:		**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	APR-1958	**Municipality:**	
Static Water Level:		**Lot:**	
Primary Water Use:	Not Used	**Township:**	
Sec. Water Use:		**Latitude DD:**	43.456188
Total Depth m:	7.6	**Longitude DD:**	-79.687139
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	606215
Drill Method:	Diamond Drill	**Northing:**	4812313
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Not Applicable
DEM Ground Elev m:	105		
Concession:			
Location D:			
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	218513233	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	3	**Material Texture:**	
Material Color:	Black	**Non Geo Mat Type:**	
Material 1:	Soil	**Geologic Formation:**	
Material 2:		**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			
Stratum Description:	SOIL. BLACK,AGE POST-GLACIAL.		

Geology Stratum ID:	218513236	**Mat Consistency:**	
Top Depth:	3	**Material Moisture:**	
Bottom Depth:	7.6	**Material Texture:**	
Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Bedrock	**Geologic Formation:**	
Material 2:	Shale	**Geologic Group:**	
Material 3:	Limestone	**Geologic Period:**	Ordovician

Material 4: **Depositional Gen:**
Gsc Material Description:
Stratum Description: BEDROCK,SHALE, LIMESTONE. BROWN,LAYERED,AGE ORDOVICIAN. 0001002200050200 **Note: Many records provided by the department have a truncated [Stratum Description] field.

Geology Stratum ID: 218513234
Top Depth: .3
Bottom Depth: 1.5
Material Color: Brown
Material 1: Clay
Material 2: Silt
Material 3:
Material 4:
Gsc Material Description:
Stratum Description: CLAY,SILT. BROWN,VERY SOFT,AGE GLACIAL.

Mat Consistency: Soft
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen: glacial

Geology Stratum ID: 218513235
Top Depth: 1.5
Bottom Depth: 3
Material Color: Brown
Material 1: Clay
Material 2: Shale
Material 3: Sand
Material 4:
Gsc Material Description:
Stratum Description: CLAY,SHALE,SAND MEDIUM. BROWN,VERY HARD,LAYERED, AGE GLACIAL.

Mat Consistency: Hard
Material Moisture:
Material Texture: Medium
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen: glacial

Source

Source Type: Data Survey
Source Orig: Geological Survey of Canada
Source Date: 1956-1972
Confidence: M
Observatio:
Source Name: Urban Geology Automated Information System (UGAIS)
Source Details: File: TOR2.txt RecordID: 140410 NTS_Sheet: 30M05H
Confiden 1: Reliable information but incomplete.

Source Appl: Spatial/Tabular
Source Iden: 1
Scale or Res: Varies
Horizontal: NAD27
Verticalda: Mean Average Sea Level

Source List

Source Identifier: 1
Source Type: Data Survey
Source Date: 1956-1972
Scale or Resolution: Varies
Source Name: Urban Geology Automated Information System (UGAIS)
Source Originators: Geological Survey of Canada

Horizontal Datum: NAD27
Vertical Datum: Mean Average Sea Level
Projection Name: Universal Transverse Mercator

36	1 of 27	W/114.1	104.8 / 0.95	**WOOLCO DEPARTMENT STORES #6497** **TRAFALGAR VILLAGE 125 CROSS AVE** **OAKVILLE ON L6J 2W8**	PES

Detail Licence No:
Licence No:
Status:
Approval Date:
Report Source:
Licence Type: Vendor
Licence Type Code:
Licence Class:
Licence Control:
Latitude:
Longitude:
Lot:

Operator Box:
Operator Class:
Operator No:
Operator Type:
Oper Area Code:
Oper Phone No:
Operator Ext:
Operator Lot:
Oper Concession:
Operator Region:
Operator District:
Operator County:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Concession:
Region:
District:
County:
Trade Name:
PDF URL:

Op Municipality:
Post Office Box:
MOE District:
SWP Area Name:

---

36 2 of 27 W/114.1 104.8 / 0.95 125 Cross Avenue Oakville ON L6J 2W8 EHS

Order No: 20001121001
Status: C
Report Type: Complete Report
Report Date: 11/24/00
Date Received: 11/20/00
Previous Site Name:
Lot/Building Size: 18.7 acres
Additional Info Ordered:

Nearest Intersection: Cross Avenue and Lyons Lane
Municipality: Halton
Client Prov/State: ON
Search Radius (km): 0.25
X: -79.686493
Y: 43.454296

---

36 3 of 27 W/114.1 104.8 / 0.95 GARRIE & CHRIS NO FRILLS #700
125 CROSS AVE
OAKVILLE ON L6J2W8 PES

Detail Licence No: 23-01-11159-0
Licence No: 11159
Status:
Approval Date:
Report Source: Legacy Licenses (Excluding TS)
Licence Type: Limited Vendor
Licence Type Code: 23
Licence Class: 01
Licence Control: 0
Latitude:
Longitude:
Lot:
Concession:
Region: 3
District:
County: 28
Trade Name:
PDF URL:

Operator Box:
Operator Class:
Operator No:
Operator Type:
Oper Area Code: 905
Oper Phone No: 8447493
Operator Ext:
Operator Lot:
Oper Concession:
Operator Region: 3
Operator District:
Operator County: 28
Op Municipality:
Post Office Box:
MOE District:
SWP Area Name:

---

36 4 of 27 W/114.1 104.8 / 0.95 812918 ONTARIO LIMITED O/A KEVIN'S NO FRILLS
125 CROSS AVENUE
OAKVILLE ON L6J2W8 PES

Detail Licence No: 23-01-12256-0
Licence No: 12256
Status:
Approval Date:
Report Source: Legacy Licenses (Excluding TS)
Licence Type: Limited Vendor
Licence Type Code: 23
Licence Class: 01
Licence Control: 0
Latitude:
Longitude:
Lot:
Concession:

Operator Box:
Operator Class:
Operator No:
Operator Type:
Oper Area Code: 905
Oper Phone No: 8447493
Operator Ext:
Operator Lot:
Oper Concession:
Operator Region: 3
Operator District:
Operator County: 28
Op Municipality:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Region:				Post Office Box:	
District:				MOE District:	
County:				SWP Area Name:	
Trade Name:					
PDF URL:					

36	5 of 27	W/114.1	104.8 / 0.95	BLACK PHOTO CORPORATION 125 CROSS AVENUE OAKVILLE ON L6J 2W8	GEN

Generator No:	ON0074324
SIC Code:	6571
SIC Description:	CAMERA/PHOTO. SUPPLY
Approval Years:	86,87,88,89
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	264
Waste Class Name:	PHOTOPROCESSING WASTES

36	6 of 27	W/114.1	104.8 / 0.95	BLACK PHOTO CORPORATION 125 CROSS AVENUE OAKVILLE ON L6J 2W8	GEN

Generator No:	ON0074324
SIC Code:	6571
SIC Description:	CAMERA/PHOTO. SUPPLY
Approval Years:	90,92,93,97,98,99,00,01
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	264
Waste Class Name:	PHOTOPROCESSING WASTES

36	7 of 27	W/114.1	104.8 / 0.95	WAL-MART CANADA INC. 125 CROSS AVENUE TRAFALGAR VILLAGE OAKVILLE ON L6J 2W8	GEN

Generator No:	ON1881529
SIC Code:	6031
SIC Description:	PHARMACIES
Approval Years:	97,98
PO Box No:	
Country:	
Status:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

36	8 of 27	W/114.1	104.8 / 0.95	WAL-MART CANADA INC. TRAFALGAR VILLAGE 125 CROSS AVENUE OAKVILLE ON L5J 2W3	GEN

Generator No: ON1881529
SIC Code: 6031
SIC Description: PHARMACIES
Approval Years: 99;00;01
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

---

36 9 of 27 W/114.1 104.8 / 0.95 Kevin's No Frills<UNOFFICIAL> SPL
125 Cross Ave
Oakville ON

Ref No: 7032-73NJ33
Site No:
Incident Dt:
Year:
Incident Cause: Discharge or Emission to Air
Incident Event:
Environment Impact: Confirmed
Nature of Impact: Air Pollution
MOE Response: No Field Response
Dt MOE Arvl on Scn:
MOE Reported Dt: 5/29/2007
Dt Document Closed: 7/4/2007
Municipality No:
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code: 38
Contaminant Name: REFRIGERANT GAS, N.O.S.
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: Air
Receiving Environment:
Incident Reason:
Incident Summary: No Frills: 300lbs AZ 50 to Atmosphere
Site Region:
Site Municipality: Oakville
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type: Other
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name: Kevin's No Frills<UNOFFICIAL>
Site Address:

Contaminant Qty: 300 lb
Nature of Damage:
Discharger Report:
Material Group: Gases/Particulate
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

---

36 10 of 27 W/114.1 104.8 / 0.95 Crossroads Refrigeration <UNOFFICIAL> SPL
125 Cross Ave.
Oakville ON

Ref No: 1707-7HBSNX
Site No:
Incident Dt:
Year:
Incident Cause: Valve / Fitting Leak Or Failure
Incident Event:
Environment Impact: Not Anticipated
Nature of Impact:
MOE Response: No Field Response

Contaminant Qty: 135 kg
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Dt MOE Arvl on Scn:		Site Map Datum:	
MOE Reported Dt:	8/8/2008	Northing:	
Dt Document Closed:		Easting:	
Municipality No:			
System Facility Address:			
Client Type:			
Call Report Location Geodata:			
Contaminant Code:	38		
Contaminant Name:	FREON HP-62 (CFC)		
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:			
Receiving Environment:			
Incident Reason:	Equipment Failure		
Incident Summary:	Crossroads Refrigeration - 135 kg. of freon to air.		
Site Region:			
Site Municipality:	Oakville		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:	Other		
SAC Action Class:	Air Spills - Gases and Vapours		
Source Type:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:	Halton-Peel		
Nearest Watercourse:			
Site Name:	Kevin's No Frills Grocery Store <UNOFFICIAL>		
Site Address:			

36	11 of 27	W/114.1	104.8 / 0.95	812918 ONTARIO LIMITED O/A KEVIN'S NO FRILLS 125 CROSS AVENUE OAKVILLE ON L6J 2W8	PES

Detail Licence No:		Operator Box:	
Licence No:		Operator Class:	
Status:		Operator No:	
Approval Date:		Operator Type:	
Report Source:		Oper Area Code:	
Licence Type:	Vendor	Oper Phone No:	
Licence Type Code:		Operator Ext:	
Licence Class:		Operator Lot:	
Licence Control:		Oper Concession:	
Latitude:		Operator Region:	
Longitude:		Operator District:	
Lot:		Operator County:	
Concession:		Op Municipality:	
Region:		Post Office Box:	
District:		MOE District:	
County:		SWP Area Name:	
Trade Name:			
PDF URL:			

36	12 of 27	W/114.1	104.8 / 0.95	125 Cross Ave Oakville ON L6J2W8	EHS

Order No:	20140227102	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Custom Report	Client Prov/State:	ON
Report Date:	10-MAR-14	Search Radius (km):	.3

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Date Received:	27-FEB-14	X:	-79.686932
Previous Site Name:		Y:	43.45551
Lot/Building Size:			
Additional Info Ordered:			

36 | 13 of 27 | W/114.1 | 104.8 / 0.95 | Neelands Refrigeration Limited, 125 Cross Ave, Oakville ON L6J 2W8 | SPL

Ref No:	4118-9PETE7	Contaminant Qty:	265.5 kg
Site No:	9323-8DMNLU	Nature of Damage:	
Incident Dt:	2014/09/29	Discharger Report:	
Year:		Material Group:	
Incident Cause:	Leak/Break	Health/Env Conseq:	
Incident Event:		Agency Involved:	
Environment Impact:	Confirmed	Site Lot:	
Nature of Impact:	Air Pollution	Site Conc:	
MOE Response:	No Field Response	Site Geo Ref Accu:	NA
Dt MOE Arvl on Scn:		Site Map Datum:	NA
MOE Reported Dt:	2014/09/29	Northing:	NA
Dt Document Closed:	2014/10/09	Easting:	NA
Municipality No:			
System Facility Address:			
Client Type:			
Call Report Location Geodata:			
Contaminant Code:	38		
Contaminant Name:	REFRIGERANT GAS, N.O.S.		
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:			
Receiving Environment:			
Incident Reason:	Equipment Failure		
Incident Summary:	Kevin's No Frills- R507 to atmos.		
Site Region:			
Site Municipality:	Oakville		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:	Valve/Fitting/Piping		
SAC Action Class:	Air Spills - Gases and Vapours		
Source Type:			
Site County/District:			
Site Geo Ref Meth:	NA		
Site District Office:			
Nearest Watercourse:			
Site Name:	Kevin's No Frills		
Site Address:	125 Cross Ave		

36 | 14 of 27 | W/114.1 | 104.8 / 0.95 | 1950409 ONTARIO LIMITED O/A COLANGELO'S NO FRILLS, 1-125 CROSS AVE, OAKVILLE ON L6J2W8 | PES

Detail Licence No:		Operator Box:	
Licence No:	17926	Operator Class:	
Status:		Operator No:	
Approval Date:		Operator Type:	
Report Source:	Legacy Licenses (Excluding TS)	Oper Area Code:	905
Licence Type:	Limited Vendor	Oper Phone No:	8441614
Licence Type Code:	23	Operator Ext:	
Licence Class:	01	Operator Lot:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Licence Control:
Latitude:
Longitude:
Lot:
Concession:
Region:
District:
County:
Trade Name:
PDF URL:

Oper Concession:
Operator Region:
Operator District:
Operator County:
Op Municipality:
Post Office Box:
MOE District:
SWP Area Name:

---

36 | 15 of 27 | W/114.1 | 104.8 / 0.95 | 1950409 ONTARIO LIMITED O/A COLANGELO'S NO FRILLS
1-125 CROSS AVE
OAKVILLE ON L6J2W8 | PES

Detail Licence No:
Licence No: 17936
Status:
Approval Date:
Report Source: Legacy Licenses (Excluding TS)
Licence Type: Limited Vendor
Licence Type Code: 23
Licence Class: 01
Licence Control:
Latitude:
Longitude:
Lot:
Concession:
Region:
District:
County:
Trade Name:
PDF URL:

Operator Box:
Operator Class:
Operator No:
Operator Type:
Oper Area Code: 905
Oper Phone No: 8447493
Operator Ext:
Operator Lot:
Oper Concession:
Operator Region:
Operator District:
Operator County:
Op Municipality:
Post Office Box:
MOE District:
SWP Area Name:

---

36 | 16 of 27 | W/114.1 | 104.8 / 0.95 | 125 Cross Ave
Oakville ON L6J 2W8 | SPL

Ref No: 4201-AH9TK8
Site No: 9323-8DMNLU
Incident Dt: 2017/01/03
Year:
Incident Cause:
Incident Event: Leak/Break
Environment Impact:
Nature of Impact:
MOE Response: No
Dt MOE Arvl on Scn:
MOE Reported Dt: 2017/01/03
Dt Document Closed:
Municipality No:
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code: 38
Contaminant Name: REFRIGERANT GAS, N.O.S.
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium:
Receiving Environment: Air
Incident Reason: Unknown / N/A

Contaminant Qty: 300 lb
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu: NA
Site Map Datum: NA
Northing: NA
Easting: NA

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Incident Summary:	No Frills- R507A Refrigerant Leak
Site Region:	
Site Municipality:	Oakville
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	Miscellaneous Industrial
SAC Action Class:	Air Spills - Gases and Vapours
Source Type:	
Site County/District:	
Site Geo Ref Meth:	NA
Site District Office:	
Nearest Watercourse:	
Site Name:	Kevin's No Frills
Site Address:	125 Cross Ave

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	17 of 27	W/114.1	104.8 / 0.95	**Loblaw Companies Inc** **1-125 Cross Ave.** **Oakville ON L6J 2W8**	GEN

Generator No:	ON6167022
SIC Code:	445110
SIC Description:	SUPERMARKETS AND OTHER GROCERY (EXCEPT CONVENIENCE) STORES
Approval Years:	2016
PO Box No:	
Country:	Canada
Status:	
Co Admin:	James Williams
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	6472883298 Ext.
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	18 of 27	W/114.1	104.8 / 0.95	**Loblaw Companies Inc** **1-125 Cross Ave.** **Oakville ON L6J 2W8**	GEN

Generator No:	ON6167022
SIC Code:	445110
SIC Description:	SUPERMARKETS AND OTHER GROCERY (EXCEPT CONVENIENCE) STORES
Approval Years:	2015
PO Box No:	
Country:	Canada
Status:	
Co Admin:	James Williams
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	6472883298 Ext.
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	312
Waste Class Name:	PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	19 of 27	W/114.1	104.8 / 0.95	LOBLAWS INC. 1-125 Cross Ave. Oakville ON L6J 2W8	GEN

Generator No: ON6167022
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 212 I
Waste Class Name: Aliphatic solvents and residues

Waste Class: 312 P
Waste Class Name: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	20 of 27	W/114.1	104.8 / 0.95	GARRIE & CHRIS' NO FRILLS 125 CROSS AVENUE OAKVILLE ON L6J2W8	PES

Detail Licence No:
Licence No: 10686
Status:
Approval Date:
Report Source: Legacy Licenses (Excluding TS)
Licence Type: Retail Vendor Class 03
Licence Type Code: 21
Licence Class: 03
Licence Control:
Latitude:
Longitude:
Lot:
Concession:
Region:
District:
County:
Trade Name:
PDF URL:

Operator Box:
Operator Class:
Operator No:
Operator Type:
Oper Area Code: 905
Oper Phone No: 8447493
Operator Ext:
Operator Lot:
Oper Concession:
Operator Region:
Operator District:
Operator County:
Op Municipality:
Post Office Box:
MOE District:
SWP Area Name:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	21 of 27	W/114.1	104.8 / 0.95	GARRIE & CHRIS NO FRILLS #700 125 CROSS AVE OAKVILLE ON L6J2W8	PES

Detail Licence No:
Licence No: 11159
Status:
Approval Date:
Report Source: Legacy Licenses (Excluding TS)
Licence Type: Retail Vendor Class 03
Licence Type Code: 21
Licence Class: 03
Licence Control:
Latitude:
Longitude:

Operator Box:
Operator Class:
Operator No:
Operator Type:
Oper Area Code: 905
Oper Phone No: 8447493
Operator Ext:
Operator Lot:
Oper Concession:
Operator Region:
Operator District:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Lot: Concession: Region: District: County: Trade Name: PDF URL:				Operator County: Op Municipality: Post Office Box: MOE District: SWP Area Name:	
36	22 of 27	W/114.1	104.8 / 0.95	LOBLAWS INC. 1-125 Cross Ave. Oakville ON L6J 2W8	GEN

Generator No:	ON6167022
SIC Code:	
SIC Description:	
Approval Years:	As of Jul 2020
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312 P
Waste Class Name:	Pathological wastes
Waste Class:	212 I
Waste Class Name:	Aliphatic solvents and residues

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	23 of 27	W/114.1	104.8 / 0.95	Value Village Stores 125 Cross Avenue Oakville ON L6J 2W8	GEN

Generator No:	ON7256727
SIC Code:	
SIC Description:	
Approval Years:	As of Jul 2020
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	331 L
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	263 A
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	262 C
Waste Class Name:	Detergents and soaps
Waste Class:	263 L

Waste Class Name:	Misc. waste organic chemicals
Waste Class:	261 L
Waste Class Name:	Pharmaceuticals
Waste Class:	242 L
Waste Class Name:	Halogenated pesticides and herbicides
Waste Class:	261 A
Waste Class Name:	Pharmaceuticals
Waste Class:	252 L
Waste Class Name:	Waste crankcase oils and lubricants
Waste Class:	112 C
Waste Class Name:	Acid solutions - containing heavy metals
Waste Class:	148 C
Waste Class Name:	Misc. wastes and inorganic chemicals
Waste Class:	312 P
Waste Class Name:	Pathological wastes
Waste Class:	145 L
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	262 L
Waste Class Name:	Detergents and soaps
Waste Class:	146 T
Waste Class Name:	Other specified inorganic sludges, slurries or solids
Waste Class:	269 L
Waste Class Name:	Organic non-halogenated pesticide and herbicide wastes
Waste Class:	212 L
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	263 I
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	242 T
Waste Class Name:	Halogenated pesticides and herbicides
Waste Class:	148 I
Waste Class Name:	Misc. wastes and inorganic chemicals
Waste Class:	145 I
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	212 I
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	269 T
Waste Class Name:	Organic non-halogenated pesticide and herbicide wastes
Waste Class:	148 A
Waste Class Name:	Misc. wastes and inorganic chemicals
Waste Class:	331 I
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	122 C
Waste Class Name:	Alkaline slutions - containing other metals and non-metals (not cyanide)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	24 of 27	W/114.1	104.8 / 0.95	LOBLAWS INC. 1-125 Cross Ave. Oakville ON L6J 2W8	GEN

Generator No: ON6167022
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 212 I
Waste Class Name: Aliphatic solvents and residues

Waste Class: 312 P
Waste Class Name: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	25 of 27	W/114.1	104.8 / 0.95	Value Village Stores 125 Cross Avenue Oakville ON L6J 2W8	GEN

Generator No: ON7256727
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145 I
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 261 L
Waste Class Name: Pharmaceuticals

Waste Class: 242 L
Waste Class Name: Halogenated pesticides and herbicides

Waste Class: 148 A
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 122 C
Waste Class Name: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 263 I
Waste Class Name: Misc. waste organic chemicals

Waste Class: 148 I

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Name:	Misc. wastes and inorganic chemicals
Waste Class:	269 T
Waste Class Name:	Organic non-halogenated pesticide and herbicide wastes
Waste Class:	146 T
Waste Class Name:	Other specified inorganic sludges, slurries or solids
Waste Class:	269 L
Waste Class Name:	Organic non-halogenated pesticide and herbicide wastes
Waste Class:	252 L
Waste Class Name:	Waste crankcase oils and lubricants
Waste Class:	263 A
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	212 L
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	212 I
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	312 P
Waste Class Name:	Pathological wastes
Waste Class:	331 I
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	331 L
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	262 L
Waste Class Name:	Detergents and soaps
Waste Class:	261 A
Waste Class Name:	Pharmaceuticals
Waste Class:	263 L
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	242 T
Waste Class Name:	Halogenated pesticides and herbicides
Waste Class:	145 L
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	112 C
Waste Class Name:	Acid solutions - containing heavy metals
Waste Class:	148 C
Waste Class Name:	Misc. wastes and inorganic chemicals
Waste Class:	262 C
Waste Class Name:	Detergents and soaps

36	26 of 27	W/114.1	104.8 / 0.95	**LOBLAWS INC.** **1-125 Cross Ave.** **Oakville ON L6J 2W8**	GEN

Generator No:	ON6167022
SIC Code:	
SIC Description:	
Approval Years:	As of Oct 2022
PO Box No:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312 P
Waste Class Name:	PATHOLOGICAL WASTES
Waste Class:	212 I
Waste Class Name:	ALIPHATIC SOLVENTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
36	27 of 27	W/114.1	104.8 / 0.95	Value Village Stores 125 Cross Avenue Oakville ON L6J 2W8	GEN

Generator No:	ON7256727
SIC Code:	
SIC Description:	
Approval Years:	As of Oct 2022
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	212 L
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	148 I
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	122 C
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	146 T
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	242 L
Waste Class Name:	HALOGENATED PESTICIDES
Waste Class:	312 P
Waste Class Name:	PATHOLOGICAL WASTES
Waste Class:	269 L
Waste Class Name:	NON-HALOGENATED PESTICIDES
Waste Class:	262 C
Waste Class Name:	DETERGENTS/SOAPS
Waste Class:	331 L
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	112 C

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	263 A
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	261 A
Waste Class Name:	PHARMACEUTICALS
Waste Class:	212 I
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	331 I
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	252 L
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	261 L
Waste Class Name:	PHARMACEUTICALS
Waste Class:	148 C
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	263 I
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	263 L
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	148 A
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	145 L
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	269 T
Waste Class Name:	NON-HALOGENATED PESTICIDES
Waste Class:	242 T
Waste Class Name:	HALOGENATED PESTICIDES
Waste Class:	145 I
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	262 L
Waste Class Name:	DETERGENTS/SOAPS

37	1 of 3	WNW/117.2	104.8 / 0.88	166 South Service Road East Oakville ON L6J 0A5	EHS

Order No:	21040700388	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Standard Report	**Client Prov/State:**	ON
Report Date:	12-APR-21	**Search Radius (km):**	.25
Date Received:	07-APR-21	**X:**	-79.6871351
Previous Site Name:		**Y:**	43.4569981
Lot/Building Size:			
Additional Info Ordered:			

37	2 of 3	WNW/117.2	104.8 / 0.88	166 South Service Road East Oakville ON L6J 0A5	EHS

Order No:	21040700388	**Nearest Intersection:**	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	12-APR-21	Search Radius (km):	.25
Date Received:	07-APR-21	X:	-79.6871351
Previous Site Name:		Y:	43.4569981
Lot/Building Size:			
Additional Info Ordered:			

---

37 3 of 3 WNW/117.2 104.8 / 0.88 166 South Service Road East EHS
Oakville ON L6J 0A5

Order No:	21040700388	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	12-APR-21	Search Radius (km):	.25
Date Received:	07-APR-21	X:	-79.6871351
Previous Site Name:		Y:	43.4569981
Lot/Building Size:			
Additional Info Ordered:			

---

38 1 of 1 WSW/121.2 104.8 / 0.95 ON BORE

Borehole ID:	646018	Inclin FLG:	No
OGF ID:	215546401	SP Status:	Initial Entry
Status:		Surv Elev:	No
Type:	Borehole	Piezometer:	No
Use:	Geotechnical/Geological Investigation	Primary Name:	
Completion Date:	APR-1958	Municipality:	
Static Water Level:		Lot:	
Primary Water Use:	Not Used	Township:	
Sec. Water Use:		Latitude DD:	43.455826
Total Depth m:	7.6	Longitude DD:	-79.687023
Depth Ref:	Ground Surface	UTM Zone:	17
Depth Elev:		Easting:	606225
Drill Method:	Diamond Drill	Northing:	4812273
Orig Ground Elev m:	105	Location Accuracy:	
Elev Reliabil Note:		Accuracy:	Not Applicable
DEM Ground Elev m:	105		
Concession:			
Location D:			
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	218513232	Mat Consistency:	
Top Depth:	3.2	Material Moisture:	
Bottom Depth:	7.6	Material Texture:	
Material Color:	Brown	Non Geo Mat Type:	
Material 1:	Bedrock	Geologic Formation:	
Material 2:	Shale	Geologic Group:	
Material 3:	Limestone	Geologic Period:	Ordovician
Material 4:		Depositional Gen:	
Gsc Material Description:			
Stratum Description:	BEDROCK,SHALE, LIMESTONE. BROWN,GREY,LAYERED, AGE ORDOVICIAN. 00010012 **Note: Many records provided by the department have a truncated [Stratum Description] field.		

Geology Stratum ID:	218513230	Mat Consistency:	Compact
Top Depth:	.3	Material Moisture:	
Bottom Depth:	1.7	Material Texture:	

Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Topsoil	**Geologic Formation:**	
Material 2:	Sand	**Geologic Group:**	
Material 3:	Gravel	**Geologic Period:**	
Material 4:		**Depositional Gen:**	glacial

Gsc Material Description:
Stratum Description: LOAM,SAND,GRAVEL. BROWN,COMPACT,AGE GLACIAL.

Geology Stratum ID:	218513231	**Mat Consistency:**	Hard
Top Depth:	1.7	**Material Moisture:**	
Bottom Depth:	3.2	**Material Texture:**	
Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Shale	**Geologic Formation:**	
Material 2:	Clay	**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	glacial

Gsc Material Description:
Stratum Description: SHALE,CLAY. BROWN,VERY HARD,AGE GLACIAL.

Geology Stratum ID:	218513229	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.3	**Material Texture:**	
Material Color:	Black	**Non Geo Mat Type:**	
Material 1:	Soil	**Geologic Formation:**	
Material 2:		**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	

Gsc Material Description:
Stratum Description: SOIL. BLACK,AGE POST-GLACIAL.

Source

Source Type:	Data Survey	**Source Appl:**	Spatial/Tabular
Source Orig:	Geological Survey of Canada	**Source Iden:**	1
Source Date:	1956-1972	**Scale or Res:**	Varies
Confidence:	M	**Horizontal:**	NAD27
Observatio:		**Verticalda:**	Mean Average Sea Level
Source Name:	Urban Geology Automated Information System (UGAIS)		
Source Details:	File: TOR2.txt RecordID: 140400 NTS_Sheet: 30M05H		
Confiden 1:	Reliable information but incomplete.		

Source List

Source Identifier:	1	**Horizontal Datum:**	NAD27
Source Type:	Data Survey	**Vertical Datum:**	Mean Average Sea Level
Source Date:	1956-1972	**Projection Name:**	Universal Transverse Mercator
Scale or Resolution:	Varies		
Source Name:	Urban Geology Automated Information System (UGAIS)		
Source Originators:	Geological Survey of Canada		

---

39 | ***1 of 1*** | ***SW/121.9*** | ***104.8 / 0.95*** | ***Colourchrome Imaging*** | ***SCT***

117 Cross Ave Suite 52062
Oakville ON L6J 2W7

Established: 01-OCT-90
Plant Size (ft²):
Employment:

--Details--
Description: Digital Printing
SIC/NAICS Code: 323115

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Description: Digital Printing
SIC/NAICS Code: 323115

Description: Other Printing
SIC/NAICS Code: 323119

Description: Sign Manufacturing
SIC/NAICS Code: 339950

---

40 **1 of 3** **SSW/131.6** **104.8 / 0.95** **142 Cross Avenue**
Oakville ON L6K 2G4 **EHS**

Order No: 20191114032
Status: C
Report Type: Standard Express Report
Report Date: 14-NOV-19
Date Received: 14-NOV-19
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.685309
Y: 43.4545993

---

40 **2 of 3** **SSW/131.6** **104.8 / 0.95** **142 Cross Avenue**
Oakville ON L6K 2G4 **EHS**

Order No: 20191114032
Status: C
Report Type: Standard Express Report
Report Date: 14-NOV-19
Date Received: 14-NOV-19
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.685309
Y: 43.4545993

---

40 **3 of 3** **SSW/131.6** **104.8 / 0.95** **142 Cross Avenue**
Oakville ON L6K 2G4 **EHS**

Order No: 20191114032
Status: C
Report Type: Standard Express Report
Report Date: 14-NOV-19
Date Received: 14-NOV-19
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.685309
Y: 43.4545993

---

41 **1 of 4** **ESE/152.1** **99.8 / -4.05** **Priestly demolition Inc**
214 Cross Avenue
Oakville ON L6J 2W6 **GEN**

Generator No: ON6035931
SIC Code: 238910
SIC Description: Site Preparation Contractors
Approval Years: 07,08
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 243
Waste Class Name: PCB'S

---

41 2 of 4 ESE/152.1 99.8 / -4.05 **Oakville Go Station**
214 Cross Ave
Oakville ON L6J 2W6 SPL

Ref No: 0728-7WSRDB
Site No:
Incident Dt:
Year:
Incident Cause: Pipe Or Hose Leak
Incident Event:
Environment Impact: Confirmed
Nature of Impact: Surface Water Pollution
MOE Response: No Field Response
Dt MOE Arvl on Scn:
MOE Reported Dt: 10/13/2009
Dt Document Closed: 11/20/2009
Municipality No:
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code: 27
Contaminant Name: COOLANT N.O.S.
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium:
Receiving Environment:
Incident Reason: Spill
Incident Summary: Oakville Transit: 3 L Rad fluid to CB
Site Region:
Site Municipality:
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type: Motor Vehicle
SAC Action Class: Land Spills
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name: Oakville Go Station
Site Address:

Contaminant Qty: 3 L
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing: NA
Easting: NA

---

41 3 of 4 ESE/152.1 99.8 / -4.05 **214 Cross Ave**
Oakville ON L6J2W6 EHS

Order No: 20171027046
Status: C
Report Type: Custom Report
Report Date: 08-NOV-17
Date Received: 27-OCT-17
Previous Site Name:
Lot/Building Size:

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .5
X: -79.682231
Y: 43.455552

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Additional Info Ordered:					

41	4 of 4	ESE/152.1	99.8 / -4.05	214 Cross Ave OAKVILLE ON	SPL

Ref No:	1-ZH5DB	Contaminant Qty:	1 litre (L)
Site No:		Nature of Damage:	
Incident Dt:	7/19/2021 8:27:00 PM	Discharger Report:	
Year:		Material Group:	
Incident Cause:		Health/Env Conseq:	0 No Impact
Incident Event:	Leak/Break	Agency Involved:	
Environment Impact:	1 Minor Impact	Site Lot:	
Nature of Impact:		Site Conc:	
MOE Response:	Desktop Response	Site Geo Ref Accu:	
Dt MOE Arvl on Scn:		Site Map Datum:	
MOE Reported Dt:	7/19/2021 9:29:06 PM	Northing:	
Dt Document Closed:	9/9/2021 7:17:57 AM	Easting:	
Municipality No:			
System Facility Address:			
Client Type:			
Call Report Location Geodata:	{"integration_ids":["PR00000416204"],"wkts":["POINT (-79.6822662000 43.4555627000)"],"creation_date":"2021-07-19"}		
Contaminant Code:			
Contaminant Name:	DIESEL FUEL		
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:	Land		
Receiving Environment:			
Incident Reason:	Human error (Specify)		
Incident Summary:	Metrolinx: 1 L diesel from backhoe onto rail ties and ballast - 214 Cross Ave, Oakville		
Site Region:	REGIONAL MUNICIPALITY OF HALTON		
Site Municipality:	OAKVILLE		
Activity Preceding Spill:	Construction or repair		
Property 2nd Watershed:	Lake Ontario and Niagara Peninsula		
Property Tertiary Watershed:	02HB-Credit - 16 Mile		
Sector Type:	OTHER HEAVY AND CIVIL ENGINEERING CONSTRUCTION		
SAC Action Class:			
Source Type:	Motor Vehicle		
Site County/District:			
Site Geo Ref Meth:			
Site District Office:	Halton-Peel District Office		
Nearest Watercourse:			
Site Name:			
Site Address:	214 Cross Ave		

42	1 of 3	WSW/153.7	104.8 / 0.95	105, 111, 117 and 125 Cross Avenue Oakville ON L6J	EHS

Order No:	20200121037	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Custom Report	Client Prov/State:	ON
Report Date:	24-JAN-20	Search Radius (km):	.25
Date Received:	21-JAN-20	X:	-79.68696472
Previous Site Name:		Y:	43.45537247
Lot/Building Size:			
Additional Info Ordered:			

42	2 of 3	WSW/153.7	104.8 / 0.95	105, 111, 117 and 125 Cross Avenue Oakville ON L6J	EHS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Order No:	20200121037	Nearest Intersection:		
Status:	C	Municipality:		
Report Type:	Custom Report	Client Prov/State:	ON	
Report Date:	24-JAN-20	Search Radius (km):	.25	
Date Received:	21-JAN-20	X:	-79.68696472	
Previous Site Name:		Y:	43.45537247	
Lot/Building Size:				
Additional Info Ordered:				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
42	3 of 3	WSW/153.7	104.8 / 0.95	105, 111, 117 and 125 Cross Avenue Oakville ON L6J	EHS

Order No:	20200121037	Nearest Intersection:		
Status:	C	Municipality:		
Report Type:	Custom Report	Client Prov/State:	ON	
Report Date:	24-JAN-20	Search Radius (km):	.25	
Date Received:	21-JAN-20	X:	-79.68696472	
Previous Site Name:		Y:	43.45537247	
Lot/Building Size:				
Additional Info Ordered:				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
43	1 of 3	SSW/153.8	104.8 / 0.95	BRUKAR INC. 136 CROSS AVE OAKVILLE ON L6J 2W6	SCT

Established:	0000
Plant Size (ft²):	0
Employment:	12

--Details--

Description:	TOTALIZING FLUID METERS AND COUNTING DEVICES
SIC/NAICS Code:	3824

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
43	2 of 3	SSW/153.8	104.8 / 0.95	136 CROSS AVE. OAKVILLE ON	WWIS

Well ID:	7253999	Flowing (Y/N):	
Construction Date:		Flow Rate:	
Use 1st:	Monitoring and Test Hole	Data Entry Status:	
Use 2nd:	0	Data Src:	
Final Well Status:	Observation Wells	Date Received:	10-Dec-2015 00:00:00
Water Type:		Selected Flag:	TRUE
Casing Material:		Abandonment Rec:	
Audit No:	Z224734	Contractor:	7241
Tag:	A183242	Form Version:	7
Constructn Method:		Owner:	
Elevation (m):		County:	HALTON
Elevatn Reliabilty:		Lot:	
Depth to Bedrock:		Concession:	
Well Depth:		Concession Name:	
Overburden/Bedrock:		Easting NAD83:	
Pump Rate:		Northing NAD83:	
Static Water Level:		Zone:	
Clear/Cloudy:		UTM Reliability:	
Municipality:	OAKVILLE TOWN		
Site Info:	WKQ-008480 A0-A02		

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2015/11/20
Year Completed:	2015
Depth (m):	6.096
Latitude:	43.4544329864413
Longitude:	-79.6854663056749
Path:	

Bore Hole Information

Bore Hole ID:	1005833288	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	606353.00
Code OB Desc:		***North83:***	4812120.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	20-Nov-2015 00:00:00	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1005879163
Layer:	1
Color:	8
General Color:	BLACK
Mat1:	
Most Common Material:	
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	3.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1005879166
Layer:	4
Color:	2
General Color:	GREY
Mat1:	17
Most Common Material:	SHALE
Mat2:	92
Mat2 Desc:	WEATHERED
Mat3:	
Mat3 Desc:	
Formation Top Depth:	13.0
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1005879164
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	06
Mat2 Desc:	SILT
Mat3:	
Mat3 Desc:	
Formation Top Depth:	3.0
Formation End Depth:	4.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1005879165
Layer:	3
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	66
Mat2 Desc:	DENSE
Mat3:	
Mat3 Desc:	
Formation Top Depth:	4.0
Formation End Depth:	13.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1005879175
Layer:	2
Plug From:	6.0
Plug To:	9.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1005879176
Layer:	3
Plug From:	9.0
Plug To:	20.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1005879174
Layer:	1
Plug From:	0.0
Plug To:	6.0
Plug Depth UOM:	ft

Method of Construction & Well

Use

Method Construction ID:	1005879173
Method Construction Code:	D
Method Construction:	Direct Push
Other Method Construction:	

Pipe Information

Pipe ID:	1005879162
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1005879169
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	10.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1005879170
Layer:	1
Slot:	10
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Water Details

Water ID:	1005879168
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1005879167
Diameter:	4.25
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1005833288	***Tag No:***	A183242
Depth M:	6.096	***Contractor:***	7241
Year Completed:	2015	***Path:***	725\7253999.pdf

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Well Completed Dt:	2015/11/20	**Latitude:**	43.4544329864413
Audit No:	Z224734	**Longitude:**	-79.6854663056749

43 3 of 3 SSW/153.8 104.8 / 0.95 136 Cross Avenue Oakville ON EHS

Order No:	20150915014	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	18-SEP-15	**Search Radius (km):**	.25
Date Received:	15-SEP-15	**X:**	-79.685382
Previous Site Name:		**Y:**	43.454337
Lot/Building Size:			
Additional Info Ordered:			

44 1 of 1 SW/160.3 104.8 / 0.95 ON BORE

Borehole ID:	646013	**Inclin FLG:**	No
OGF ID:	215546396	**SP Status:**	Initial Entry
Status:		**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	APR-1958	**Municipality:**	
Static Water Level:	0.3	**Lot:**	
Primary Water Use:	Not Used	**Township:**	
Sec. Water Use:		**Latitude DD:**	43.45501
Total Depth m:	4.5	**Longitude DD:**	-79.686547
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	606265
Drill Method:	Diamond Drill	**Northing:**	4812183
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Not Applicable
DEM Ground Elev m:	104		
Concession:			
Location D:			
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	218513219	**Mat Consistency:**	Hard
Top Depth:	2.1	**Material Moisture:**	
Bottom Depth:	4.5	**Material Texture:**	
Material Color:	Grey	**Non Geo Mat Type:**	
Material 1:	Silt	**Geologic Formation:**	
Material 2:	Sand	**Geologic Group:**	
Material 3:	Shale	**Geologic Period:**	
Material 4:		**Depositional Gen:**	glacial
Gsc Material Description:			

Stratum Description: SILT,SAND,SHALE. GREY,VERY HARD,AGE GLACIAL. 0001001500070170000009 **Note: Many records provided by the department have a truncated [Stratum Description] field.

Geology Stratum ID:	218513218	**Mat Consistency:**	Compact
Top Depth:	.3	**Material Moisture:**	
Bottom Depth:	2.1	**Material Texture:**	
Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Topsoil	**Geologic Formation:**	
Material 2:	Sand	**Geologic Group:**	
Material 3:	Gravel	**Geologic Period:**	
Material 4:		**Depositional Gen:**	glacial
Gsc Material Description:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Stratum Description: LOAM,SAND,GRAVEL. BROWN,COMPACT,AGE GLACIAL, WATER STABLE AT 344.0 FEET.

Geology Stratum ID: 218513217
Top Depth: 0
Bottom Depth: .3
Material Color: Black
Material 1: Soil
Material 2:
Material 3:
Material 4:
Gsc Material Description:
Stratum Description: SOIL. BLACK,AGE POST-GLACIAL.

Mat Consistency:
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen:

Source

Source Type: Data Survey
Source Orig: Geological Survey of Canada
Source Date: 1956-1972
Confidence: M
Observatio:
Source Name: Urban Geology Automated Information System (UGAIS)
Source Details: File: TOR2.txt RecordID: 140350 NTS_Sheet: 30M05H
Confiden 1: Reliable information but incomplete.

Source Appl: Spatial/Tabular
Source Iden: 1
Scale or Res: Varies
Horizontal: NAD27
Verticalda: Mean Average Sea Level

Source List

Source Identifier: 1
Source Type: Data Survey
Source Date: 1956-1972
Scale or Resolution: Varies
Source Name: Urban Geology Automated Information System (UGAIS)
Source Originators: Geological Survey of Canada

Horizontal Datum: NAD27
Vertical Datum: Mean Average Sea Level
Projection Name: Universal Transverse Mercator

45	1 of 3	SSW/160.7	104.8 / 0.95	136 Cross Avenue Oakville ON L6J 2W6	EHS

Order No: 20320700294
Status: C
Report Type: Standard Report
Report Date: 10-DEC-20
Date Received: 07-DEC-20
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.6854
Y: 43.4543418

45	2 of 3	SSW/160.7	104.8 / 0.95	136 Cross Avenue Oakville ON L6J 2W6	EHS

Order No: 20320700294
Status: C
Report Type: Standard Report
Report Date: 10-DEC-20
Date Received: 07-DEC-20
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.6854
Y: 43.4543418

45	3 of 3	SSW/160.7	104.8 / 0.95	136 Cross Avenue Oakville ON L6J 2W6	EHS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Order No:	20320700294	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Standard Report	**Client Prov/State:**	ON
Report Date:	10-DEC-20	**Search Radius (km):**	.25
Date Received:	07-DEC-20	**X:**	-79.6854
Previous Site Name:		**Y:**	43.4543418
Lot/Building Size:			
Additional Info Ordered:			

46 **1 of 1** **SW/162.6** **104.8 / 0.95** **ON** **BORE**

Borehole ID:	646012	**Inclin FLG:**	No
OGF ID:	215546395	**SP Status:**	Initial Entry
Status:		**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	APR-1958	**Municipality:**	
Static Water Level:	0.2	**Lot:**	
Primary Water Use:	Not Used	**Township:**	
Sec. Water Use:		**Latitude DD:**	43.454736
Total Depth m:	4.8	**Longitude DD:**	-79.686182
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	606295
Drill Method:	Diamond Drill	**Northing:**	4812153
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Not Applicable
DEM Ground Elev m:	104		
Concession:			
Location D:			
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	218513215	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.3	**Material Texture:**	
Material Color:	Black	**Non Geo Mat Type:**	
Material 1:	Soil	**Geologic Formation:**	
Material 2:		**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			
Stratum Description:	SOIL. BLACK,AGE POST-GLACIAL.		

Geology Stratum ID:	218513216	**Mat Consistency:**	Dense
Top Depth:	.3	**Material Moisture:**	
Bottom Depth:	4.8	**Material Texture:**	
Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Silt	**Geologic Formation:**	
Material 2:	Sand	**Geologic Group:**	
Material 3:	Gravel	**Geologic Period:**	
Material 4:	Shale	**Depositional Gen:**	glacial
Gsc Material Description:			
Stratum Description:	SILT,SAND,GRAVEL, SHALE, BROWN,VERY DENSE,AGE GLACIAL, WATER STABLE AT 344.5 FEET. 0001005000005 **Note: Many records provided by the department have a truncated [Stratum Description] field.		

Source

Source Type:	Data Survey	**Source Appl:**	Spatial/Tabular
Source Orig:	Geological Survey of Canada	**Source Iden:**	1

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Source Date:	1956-1972	**Scale or Res:**	Varies
Confidence:	M	**Horizontal:**	NAD27
Observatio:		**Verticalda:**	Mean Average Sea Level
Source Name:	Urban Geology Automated Information System (UGAIS)		
Source Details:	File: TOR2.txt RecordID: 140340 NTS_Sheet: 30M05H		
Confiden 1:	Reliable information but incomplete.		

Source List

Source Identifier:	1	**Horizontal Datum:**	NAD27
Source Type:	Data Survey	**Vertical Datum:**	Mean Average Sea Level
Source Date:	1956-1972	**Projection Name:**	Universal Transverse Mercator
Scale or Resolution:	Varies		
Source Name:	Urban Geology Automated Information System (UGAIS)		
Source Originators:	Geological Survey of Canada		

---

47 | 1 of 1 | SSW/164.6 | 104.8 / 0.95 | 136 CROSS AVE.
OAKVILLE ON | WWIS

Well ID:	7254000	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring and Test Hole	**Data Entry Status:**	
Use 2nd:	0	**Data Src:**	
Final Well Status:	Observation Wells	**Date Received:**	10-Dec-2015 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z224735	**Contractor:**	7241
Tag:	A183243	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliability:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:	WKQ-008480 A0-A02		

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2015/11/20
Year Completed:	2015
Depth (m):	6.096
Latitude:	43.4543528208685
Longitude:	-79.6855422021778
Path:	

Bore Hole Information

Bore Hole ID:	1005833291	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606347.00
Code OB Desc:		**North83:**	4812111.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	20-Nov-2015 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr

Loc Method Desc:	on Water Well Record
Elevrc Desc:	
Location Source Date:	
Improvement Location Source:	
Improvement Location Method:	
Source Revision Comment:	
Supplier Comment:	

Overburden and Bedrock Materials Interval

Formation ID:	1005879178
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	05
Mat2 Desc:	CLAY
Mat3:	85
Mat3 Desc:	SOFT
Formation Top Depth:	0.0
Formation End Depth:	8.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1005879179
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	05
Mat2 Desc:	CLAY
Mat3:	66
Mat3 Desc:	DENSE
Formation Top Depth:	8.0
Formation End Depth:	11.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1005879180
Layer:	3
Color:	2
General Color:	GREY
Mat1:	17
Most Common Material:	SHALE
Mat2:	92
Mat2 Desc:	WEATHERED
Mat3:	
Mat3 Desc:	
Formation Top Depth:	11.0
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1005879189
Layer:	2
Plug From:	6.0
Plug To:	9.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1005879190
Layer:	3
Plug From:	9.0
Plug To:	20.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1005879188
Layer:	1
Plug From:	0.0
Plug To:	6.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1005879187
Method Construction Code:	D
Method Construction:	Direct Push
Other Method Construction:	

Pipe Information

Pipe ID:	1005879177
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1005879183
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	10.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1005879184
Layer:	1
Slot:	10
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch

Screen Diameter: 2.25

Water Details

Water ID: 1005879182
Layer:
Kind Code:
Kind:
Water Found Depth:
Water Found Depth UOM: ft

Hole Diameter

Hole ID: 1005879181
Diameter:
Depth From:
Depth To:
Hole Depth UOM: ft
Hole Diameter UOM: Inch

Links

Bore Hole ID: 1005833291
Depth M: 6.096
Year Completed: 2015
Well Completed Dt: 2015/11/20
Audit No: Z224735
Tag No: A183243
Contractor: 7241
Path: 725\7254000.pdf
Latitude: 43.4543528208685
Longitude: -79.6855422021778

---

48 *1 of 3* *ENE/166.0* *100.5 / -3.44* **233 Cross Avenue Oakville ON L6J 2W9** **EHS**

Order No: 20200312237
Status: C
Report Type: RSC Report (Urban)
Report Date: 17-MAR-20
Date Received: 12-MAR-20
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .3
X: -79.6823592
Y: 43.45738204

---

48 *2 of 3* *ENE/166.0* *100.5 / -3.44* **233 Cross Avenue Oakville ON L6J 2W9** **EHS**

Order No: 20200312237
Status: C
Report Type: RSC Report (Urban)
Report Date: 17-MAR-20
Date Received: 12-MAR-20
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .3
X: -79.6823592
Y: 43.45738204

---

48 *3 of 3* *ENE/166.0* *100.5 / -3.44* **233 Cross Avenue Oakville ON L6J 2W9** **EHS**

Order No: 20200312237
Status: C
Report Type: RSC Report (Urban)
Report Date: 17-MAR-20
Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .3

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Date Received: 12-MAR-20
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans

X: -79.6823592
Y: 43.45738204

---

49 | 1 of 3 | ESE/174.8 | 99.8 / -4.05 | 200 Cross Ave Oakville ON L6J2W6 | EHS

Order No: 20130426035
Status: C
Report Type: Standard Report
Report Date: 07-MAY-13
Date Received: 26-APR-13
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans; Aerial Photos

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -79.682587
Y: 43.455014

---

49 | 2 of 3 | ESE/174.8 | 99.8 / -4.05 | Grascan on behalf of Metrolinx 200 Cross Ave Oakville ON L6J 2W6 | GEN

Generator No: ON8918015
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

---

49 | 3 of 3 | ESE/174.8 | 99.8 / -4.05 | Grascan on behalf of Metrolinx 200 Cross Ave Oakville ON L6J 2W6 | GEN

Generator No: ON8918015
SIC Code:
SIC Description:
Approval Years: As of Jan 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
50	1 of 1	SE/175.6	99.8 / -4.13	GS Wark Limited 503 Lyonds Lane Oakville ON L6J 0A1	GEN

Generator No: ON7017464
SIC Code: 236210
SIC Description: Industrial Building and Structure Construction
Approval Years: 07,08
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
51	1 of 1	ESE/177.8	99.8 / -4.05	ON	BORE

Borehole ID: 890634
OGF ID: 215583564
Status: Decommissioned
Type: Borehole
Use: Geotechnical/Geological Investigation
Completion Date: 05-MAY-1966
Static Water Level:
Primary Water Use:
Sec. Water Use:
Total Depth m: 2.1
Depth Ref: Ground Surface
Depth Elev:
Drill Method: Power auger
Orig Ground Elev m: 99.9
Elev Reliabil Note:
DEM Ground Elev m: 100
Concession: CON 3 SOUTH OF DUNDAS ST
Location D: Foundation investigation report for proposed commuter station pedestrian Underpass - Oakville District #4 (Hamilton) W.J. 65-F-41 W.P 110-66-3
Survey D:
Comments:

Inclin FLG: No
SP Status: Initial Entry
Surv Elev: No
Piezometer: No
Primary Name:
Municipality:
Lot: LOT 13
Township: TRAFALGAR
Latitude DD: 43.455455
Longitude DD: -79.681983
UTM Zone: 17
Easting: 608633
Northing: 4812238
Location Accuracy:
Accuracy: Within 10 metres

Borehole Geology Stratum

Geology Stratum ID: 8502231
Top Depth: 1.8
Bottom Depth: 2.1
Material Color:
Material 1: Shale
Material 2: Bedrock
Material 3:
Material 4:
Gsc Material Description:
Stratum Description: Weathered shale probably sound bedrock **Note: Many records provided by the department have a truncated [Stratum Description] field.

Mat Consistency:
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen:

Geology Stratum ID: 8502229
Mat Consistency:

Top Depth:	0			Material Moisture:	
Bottom Depth:	1.1			Material Texture:	
Material Color:				Non Geo Mat Type:	Fill-Misc
Material 1:	Fill			Geologic Formation:	
Material 2:	Sand			Geologic Group:	
Material 3:	Silt			Geologic Period:	
Material 4:	Clayey			Depositional Gen:	
Gsc Material Description:					
Stratum Description:	Fill (Mixt. Of debris sand and clayey silt) **Note: Many records provided by the department have a truncated [Stratum Description] field.				

Geology Stratum ID:	8502230			Mat Consistency:	Stiff
Top Depth:	1.1			Material Moisture:	
Bottom Depth:	1.8			Material Texture:	
Material Color:				Non Geo Mat Type:	
Material 1:	Silt			Geologic Formation:	
Material 2:	Clayey			Geologic Group:	
Material 3:	Sand			Geologic Period:	
Material 4:				Depositional Gen:	
Gsc Material Description:					
Stratum Description:	Clayey silt with sand stiff **Note: Many records provided by the department have a truncated [Stratum Description] field.				

52	1 of 3	N/182.3	103.8 / -0.06	Animal Hospital of Oakville 234 South Service Rd. Oakville ON L6J 2X5	GEN

Generator No:	ON5424429
SIC Code:	
SIC Description:	
Approval Years:	As of Dec 2018
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	261 A
Waste Class Name:	Pharmaceuticals
Waste Class:	312 P
Waste Class Name:	Pathological wastes

52	2 of 3	N/182.3	103.8 / -0.06	Animal Hospital of Oakville 234 South Service Rd. Oakville ON L6J 2X5	GEN

Generator No:	ON5424429
SIC Code:	
SIC Description:	
Approval Years:	As of Jul 2020
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
MHSW Facility:					
Detail(s)					
Waste Class:		312 P			
Waste Class Name:		Pathological wastes			
Waste Class:		261 A			
Waste Class Name:		Pharmaceuticals			
52	**3 of 3**	**N/182.3**	**103.8 / -0.06**	**Animal Hospital of Oakville** **234 South Service Rd.** **Oakville ON L6J 2X5**	**GEN**
Generator No:		ON5424429			
SIC Code:					
SIC Description:					
Approval Years:		As of Nov 2021			
PO Box No:					
Country:		Canada			
Status:		Registered			
Co Admin:					
Choice of Contact:					
Phone No Admin:					
Contaminated Facility:					
MHSW Facility:					
Detail(s)					
Waste Class:		261 A			
Waste Class Name:		Pharmaceuticals			
Waste Class:		312 P			
Waste Class Name:		Pathological wastes			
53	**1 of 11**	**N/182.3**	**103.8 / -0.06**	**CORMACK ANIMAL CLINIC LIMITED** **234 SOUTH SERVICE ROAD ANIMAL HOSPITAL OF OAKVILLE** **OAKVILLE ON L6J 2X5**	**GEN**
Generator No:		ON2284105			
SIC Code:		0211			
SIC Description:		VETERINARY SERVICE			
Approval Years:		97,98,99,00,01			
PO Box No:					
Country:					
Status:					
Co Admin:					
Choice of Contact:					
Phone No Admin:					
Contaminated Facility:					
MHSW Facility:					
Detail(s)					
Waste Class:		312			
Waste Class Name:		PATHOLOGICAL WASTES			
53	**2 of 11**	**N/182.3**	**103.8 / -0.06**	**Animal Hospital of Oakville** **234 South Service Rd.** **Oakville ON L6J 2X5**	**GEN**

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Generator No: ON5424429
SIC Code:
SIC Description:
Approval Years: 02,03,04,05,06,07,08
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

53	3 of 11	N/182.3	103.8 / -0.06	Animal Hospital of Oakville 234 South Service Rd. Oakville ON	GEN

Generator No: ON5424429
SIC Code: 541940
SIC Description: Veterinary Services
Approval Years: 2009
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

53	4 of 11	N/182.3	103.8 / -0.06	Animal Hospital of Oakville 234 South Service Rd. Oakville ON	GEN

Generator No: ON5424429
SIC Code: 541940
SIC Description: Veterinary Services
Approval Years: 2010
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Waste Class:		261			
Waste Class Name:		PHARMACEUTICALS			
53	5 of 11	N/182.3	103.8 / -0.06	Animal Hospital of Oakville 234 South Service Rd. Oakville ON	GEN
Generator No:		ON5424429			
SIC Code:		541940			
SIC Description:		Veterinary Services			
Approval Years:		2011			
PO Box No:					
Country:					
Status:					
Co Admin:					
Choice of Contact:					
Phone No Admin:					
Contaminated Facility:					
MHSW Facility:					
Detail(s)					
Waste Class:		261			
Waste Class Name:		PHARMACEUTICALS			
Waste Class:		312			
Waste Class Name:		PATHOLOGICAL WASTES			
53	6 of 11	N/182.3	103.8 / -0.06	Animal Hospital of Oakville 234 South Service Rd. Oakville ON L6J 2X5	GEN
Generator No:		ON5424429			
SIC Code:		541940			
SIC Description:		Veterinary Services			
Approval Years:		2012			
PO Box No:					
Country:					
Status:					
Co Admin:					
Choice of Contact:					
Phone No Admin:					
Contaminated Facility:					
MHSW Facility:					
Detail(s)					
Waste Class:		261			
Waste Class Name:		PHARMACEUTICALS			
Waste Class:		312			
Waste Class Name:		PATHOLOGICAL WASTES			
53	7 of 11	N/182.3	103.8 / -0.06	Animal Hospital of Oakville 234 South Service Rd. Oakville ON	GEN
Generator No:		ON5424429			
SIC Code:		541940			
SIC Description:		VETERINARY SERVICES			
Approval Years:		2013			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 261
Waste Class Name: PHARMACEUTICALS

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

53	8 of 11	N/182.3	103.8 / -0.06	**Animal Hospital of Oakville** **234 South Service Rd.** **Oakville ON L6J 2X5**	GEN

Generator No: ON5424429
SIC Code: 541940
SIC Description: VETERINARY SERVICES
Approval Years: 2016
PO Box No:
Country: Canada
Status:
Co Admin: Tracy Edwards
Choice of Contact: CO_ADMIN
Phone No Admin: 905-844-3331 Ext.
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 261
Waste Class Name: PHARMACEUTICALS

53	9 of 11	N/182.3	103.8 / -0.06	**Animal Hospital of Oakville** **234 South Service Rd.** **Oakville ON L6J 2X5**	GEN

Generator No: ON5424429
SIC Code: 541940
SIC Description: VETERINARY SERVICES
Approval Years: 2015
PO Box No:
Country: Canada
Status:
Co Admin: Tracy Edwards
Choice of Contact: CO_ADMIN
Phone No Admin: 905-844-3331 Ext.
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 312

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Waste Class Name:		PATHOLOGICAL WASTES			
Waste Class:		261			
Waste Class Name:		PHARMACEUTICALS			
53	10 of 11	N/182.3	103.8 / -0.06	**Animal Hospital of Oakville** **234 South Service Rd.** **Oakville ON L6J 2X5**	GEN
Generator No:		ON5424429			
SIC Code:		541940			
SIC Description:		VETERINARY SERVICES			
Approval Years:		2014			
PO Box No:					
Country:		Canada			
Status:					
Co Admin:		Tracy Edwards			
Choice of Contact:		CO_ADMIN			
Phone No Admin:		905-844-3331 Ext.			
Contaminated Facility:		No			
MHSW Facility:		No			
Detail(s)					
Waste Class:		312			
Waste Class Name:		PATHOLOGICAL WASTES			
Waste Class:		261			
Waste Class Name:		PHARMACEUTICALS			
53	11 of 11	N/182.3	103.8 / -0.06	**Dr. Michelle Cutler VPC** **234 South Service Rd.** **Oakville ON L6J 2X5**	GEN
Generator No:		ON5424429			
SIC Code:					
SIC Description:					
Approval Years:		As of Oct 2022			
PO Box No:					
Country:		Canada			
Status:		Registered			
Co Admin:					
Choice of Contact:					
Phone No Admin:					
Contaminated Facility:					
MHSW Facility:					
Detail(s)					
Waste Class:		312 P			
Waste Class Name:		PATHOLOGICAL WASTES			
Waste Class:		261 A			
Waste Class Name:		PHARMACEUTICALS			
54	1 of 3	NNW/182.9	104.8 / 0.95	**ROSART PROPERTIES INC.** **226 SOUTH SERVICE ROAD** **OAKVILLE ON L6J 2X5**	NPCB
Company Code:		O0686			
Industry:		Metal Refining			
Site Status:					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Transaction Date:		10/29/1990			
Inspection Date:					

54	2 of 3	NNW/182.9	104.8 / 0.95	Rubicon Publishing Inc. 226 South Service Rd E Oakville ON L6J 2X5	SCT

Established:	1987
Plant Size (ft²):	1000
Employment:	7
--Details--	
Description:	Book Publishers
SIC/NAICS Code:	511130

54	3 of 3	NNW/182.9	104.8 / 0.95	ROSART PROPERTIES INC. 226 SOUTH SERVICE ROAD OAKVILLE ON L6J 2X5	NPCB

Company Code:	O0686
Industry:	METAL REFINING
Site Status:	STORAGE ONLY (NON FEDERAL)
Transaction Date:	10/29/1990
Inspection Date:	
--Details--	
Label:	OR20366
Serial No.:	254500
PCB Type/Code:	ASKAREL/ASKAREL
Location:	
Item/State:	TRANSFORMER/FULL
No. of Items:	1
Manufacturer:	
Status:	STORED FOR DISPOSAL
Contents:	1092 L

55	1 of 1	NNW/182.9	104.8 / 0.95	ROSART PROPERTIES INC. 226 SOUTH SERVICE ROAD Oakville ON	NPCB

Company Code:	O0686
Industry:	Metal Refining
Site Status:	Stored for Disposal
Transaction Date:	11/9/1989
Inspection Date:	
--Details--	
Label:	
Serial No.:	
PCB Type/Code:	Askarel/Askarel
Location:	681 KING ST. W. HAMILTON (SLAT
Item/State:	
No. of Items:	
Manufacturer:	
Status:	Stored for disposal
Contents:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
56	1 of 1	NE/185.8	102.9 / -0.98	570 Trafalgar Road Oakville ON L6J 3J2	EHS

Order No:	20191015178	Nearest Intersection:	
Status:	C	Municipality:	
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	18-OCT-19	Search Radius (km):	.25
Date Received:	15-OCT-19	X:	-79.683116
Previous Site Name:		Y:	43.458184
Lot/Building Size:			

Additional Info Ordered: Fire Insur. Maps and/or Site Plans; Aerial Photos

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
57	1 of 2	NE/185.8	102.9 / -0.98	PRIVATE OWNER 570 TRAFALGAR ROAD OAKLAND MERCURY MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2	SPL

Ref No:	29271	Contaminant Qty:	
Site No:		Nature of Damage:	
Incident Dt:	12/14/1989	Discharger Report:	
Year:		Material Group:	
Incident Cause:	VALVE/FITTING LEAK OR FAILURE	Health/Env Conseq:	
Incident Event:		Agency Involved:	
Environment Impact:		Site Lot:	
Nature of Impact:		Site Conc:	
MOE Response:		Site Geo Ref Accu:	
Dt MOE Arvl on Scn:		Site Map Datum:	
MOE Reported Dt:	12/14/1989	Northing:	
Dt Document Closed:		Easting:	
Municipality No:	14403		
System Facility Address:			
Client Type:			
Call Report Location Geodata:			
Contaminant Code:			
Contaminant Name:			
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:	LAND		
Receiving Environment:			
Incident Reason:	WELD/SEAM FAILURE		
Incident Summary:	BACKENTRY- 5 LTR HYDRAULIC FLUID SPILLED FROM TRUCK AT DEALERSHIP		
Site Region:			
Site Municipality:	OAKVILLE TOWN		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:			
SAC Action Class:			
Source Type:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:			
Nearest Watercourse:			
Site Name:			
Site Address:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
57	2 of 2	NE/185.8	102.9 / -0.98	OAK-LAND LINCOLN MERCURY SALES 570 TRAFALGAR RD OAKVILLE ON L6J 3J2	PRT

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Location ID: 10421
Type: private
Expiry Date: 1994-07-31
Capacity (L): 0.00
Licence #: 0037612001

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
58	1 of 7	N/192.1	104.8 / 0.94	Regional Municipality of Halton 232 South Service Road Unit B Oakville ON L6J 2X5	GEN

Generator No: ON5902620
SIC Code: 621499
SIC Description: ALL OTHER OUT-PATIENT CARE CENTRES
Approval Years: 2016
PO Box No:
Country: Canada
Status:
Co Admin: Melanie A Reffell
Choice of Contact: CO_ADMIN
Phone No Admin: 905 825 6000 Ext.3509
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 261
Waste Class Name: PHARMACEUTICALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
58	2 of 7	N/192.1	104.8 / 0.94	Regional Municipality of Halton 232 South Service Road Unit B Oakville ON L6J 2X5	GEN

Generator No: ON5902620
SIC Code: 621499
SIC Description: ALL OTHER OUT-PATIENT CARE CENTRES
Approval Years: 2015
PO Box No:
Country: Canada
Status:
Co Admin: Melanie A Reffell
Choice of Contact: CO_ADMIN
Phone No Admin: 905 825 6000 Ext.3509
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 312
Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 261
Waste Class Name: PHARMACEUTICALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
58	3 of 7	N/192.1	104.8 / 0.94	Regional Municipality of Halton Health Department 232 South Service Road Unit B Oakville ON L6J 2X5	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Generator No: ON5902620
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Waste Class: 312 P
Waste Class Name: Pathological wastes

58	*4 of 7*	*N/192.1*	*104.8 / 0.94*	***Regional Municipality of Halton Health Department*** ***232 South Service Road Unit B*** ***Oakville ON L6J 2X5***	***GEN***

Generator No: ON5902620
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312 P
Waste Class Name: Pathological wastes

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

58	*5 of 7*	*N/192.1*	*104.8 / 0.94*	***Regional Municipality of Halton Health Department*** ***232 South Service Road Unit B*** ***Oakville ON L6J 2X5***	***GEN***

Generator No: ON5902620
SIC Code:
SIC Description:
Approval Years: As of Jan 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

MHSW Facility:

Detail(s)

Waste Class: 312 P
Waste Class Name: Pathological wastes

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
58	6 of 7	N/192.1	104.8 / 0.94	**Regional Municipality of Halton Health** ***Department*** ***232 South Service Road Unit B*** ***Oakville ON L6J 2X5***	GEN

Generator No: ON5902620
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 261 A
Waste Class Name: Pharmaceuticals

Waste Class: 312 P
Waste Class Name: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
58	7 of 7	N/192.1	104.8 / 0.94	**Regional Municipality of Halton Health** ***Department*** ***232 South Service Road Unit B*** ***Oakville ON L6J 2X5***	GEN

Generator No: ON5902620
SIC Code:
SIC Description:
Approval Years: As of Oct 2022
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 312 P
Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 261 A
Waste Class Name: PHARMACEUTICALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
59	1 of 1	ESE/198.5	99.8 / -4.05	ON	BORE

Borehole ID:	890635	**Inclin FLG:**	No
OGF ID:	215583555	**SP Status:**	Initial Entry
Status:	Decommissioned	**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	05-MAY-1966	**Municipality:**	
Static Water Level:		**Lot:**	LOT 13
Primary Water Use:		**Township:**	TRAFALGAR
Sec. Water Use:		**Latitude DD:**	43.455345
Total Depth m:	2.3	**Longitude DD:**	-79.681776
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	606650
Drill Method:	Power auger	**Northing:**	4812226
Orig Ground Elev m:	100	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Within 10 metres
DEM Ground Elev m:	100		

Concession: CON 3 SOUTH OF DUNDAS ST
Location D: Foundation Investigation report for proposed commuter station pedestrian Underpass - Oakville District #4 (Hamilton) W.J. 66-F-41 W.P 110-66-3
Survey D:
Comments:

Borehole Geology Stratum

Geology Stratum ID:	8502234	**Mat Consistency:**	
Top Depth:	2	**Material Moisture:**	
Bottom Depth:	2.3	**Material Texture:**	
Material Color:		**Non Geo Mat Type:**	
Material 1:	Shale	**Geologic Formation:**	
Material 2:		**Geologic Group:**	
Material 3:		**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: Weathered shale **Note: Many records provided by the department have a truncated [Stratum Description] field.

Geology Stratum ID:	8502233	**Mat Consistency:**	
Top Depth:	1.5	**Material Moisture:**	
Bottom Depth:	2	**Material Texture:**	
Material Color:		**Non Geo Mat Type:**	
Material 1:	Silt	**Geologic Formation:**	
Material 2:	Clayey	**Geologic Group:**	
Material 3:	Sand	**Geologic Period:**	
Material 4:		**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: clayey silt with sand **Note: Many records provided by the department have a truncated [Stratum Description] field.

Geology Stratum ID:	8502232	**Mat Consistency:**	Loose
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	1.5	**Material Texture:**	
Material Color:		**Non Geo Mat Type:**	
Material 1:	Fill	**Geologic Formation:**	
Material 2:	Sand	**Geologic Group:**	
Material 3:	Silt	**Geologic Period:**	
Material 4:	Clayey	**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: Fill (mixt. Of debris sand and clayey silt) loose **Note: Many records provided by the department have a truncated [Stratum Description] field.

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
60	1 of 1	WSW/200.6	104.8 / 0.95	105 Cross Avenue Oakville ON L6J 7N5	EHS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Order No:	20191029167	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Standard Report	**Client Prov/State:**	ON
Report Date:	01-NOV-19	**Search Radius (km):**	.25
Date Received:	29-OCT-19	**X:**	-79.687275
Previous Site Name:		**Y:**	43.455006
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans		

61 **1 of 1** **ENE/205.3** **99.9 / -3.99** **ON** **WWIS**

Well ID:	7374253	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	Yes
Use 2nd:		**Data Src:**	
Final Well Status:		**Date Received:**	03-Dec-2020 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	C47678	**Contractor:**	7609
Tag:	A304621	**Form Version:**	8
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

Bore Hole Information

Bore Hole ID:	1008519639	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606648.00
Code OB Desc:		**North83:**	4812455.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	29-Oct-2020 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1008519639	**Tag No:**	A304621
Depth M:		**Contractor:**	7609
Year Completed:	2020	**Path:**	
Well Completed Dt:	2020/10/29	**Latitude:**	43.4574066809584
Audit No:	C47678	**Longitude:**	-79.6817555053095

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
62	1 of 2	ENE/208.3	100.0 / -3.93	TACO BELL OF CANADA 546 TRAFALGAR ROAD OAKVILLE TOWN ON L6J 3J2	CA

Certificate #:	8-3451-94-
Application Year:	94
Issue Date:	9/29/1994
Approval Type:	Industrial air
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	CONDENSATE HOOD & FRYER EXHAUST HOOD
Contaminants:	Nitrogen Oxides, Odour/Fumes
Emission Control:	No Controls

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
62	2 of 2	ENE/208.3	100.0 / -3.93	BEAVER LUMBER CO LTD 546 TRAFALGAR RD OAKVILLE ON L6J 3J2	PES

Detail Licence No:		Operator Box:	
Licence No:		Operator Class:	
Status:		Operator No:	
Approval Date:		Operator Type:	
Report Source:		Oper Area Code:	
Licence Type:	Vendor	Oper Phone No:	
Licence Type Code:		Operator Ext:	
Licence Class:		Operator Lot:	
Licence Control:		Oper Concession:	
Latitude:		Operator Region:	
Longitude:		Operator District:	
Lot:		Operator County:	
Concession:		Op Municipality:	
Region:		Post Office Box:	
District:		MOE District:	
County:		SWP Area Name:	
Trade Name:			
PDF URL:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
63	1 of 1	W/210.6	102.6 / -1.32	FIELDFRESH FARMS LTD. 196 SOUTH SERVICE ROAD WEST OAKVILLE TOWN ON	CA

Certificate #:	8-3109-96-
Application Year:	96
Issue Date:	4/25/1996
Approval Type:	Industrial air
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	COMBUSTION EQUIPMENT AND AMMONIA RELIEF
Contaminants:	Ammonia, Nitrogen Oxides, Sulphur Dioxide, Carbon Monoxide, Suspended Particulate Matter
Emission Control:	No Controls,

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
64	1 of 2	ENE/211.8	99.2 / -4.65	UNKNOWN	SPL

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
				TRAFALGAR AND CROSS ST. OAKVILLE TOWN ON	

Ref No: 74272
Site No:
Incident Dt: 8/6/1992
Year:
Incident Cause: OTHER CONTAINER LEAK
Incident Event:
Environment Impact: POSSIBLE
Nature of Impact: Soil contamination
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 8/6/1992
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: ERROR
Incident Summary: TRANSPORT TRUCK - APPROX. 350 L OF SURFACTANT SPILLED TO ROADWAY
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

64	2 of 2	ENE/211.8	99.2 / -4.65	ONTARIO HYDRO CORNER OF SOUTH SERVICE ROAD AND TRAFALGAR IN ONTARIO HYDRO ROW PARKING. OAKVILLE TOWN ON	SPL

Ref No: 134679
Site No:
Incident Dt: 11/26/1996
Year:
Incident Cause: OTHER CAUSE (N.O.S.)
Incident Event:
Environment Impact: CONFIRMED
Nature of Impact: Soil contamination
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 11/26/1996
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Call Report Location Geodata:	
Contaminant Code:	
Contaminant Name:	
Contaminant Limit 1:	
Contam Limit Freq 1:	
Contaminant UN No 1:	
Receiving Medium:	LAND
Receiving Environment:	
Incident Reason:	INTENTIONAL/PLANNED
Incident Summary:	ONTARIO HYDRO-HYDROCARBONCONTAMINATION IN SUBSURFACE SOIL.
Site Region:	
Site Municipality:	OAKVILLE TOWN
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	
SAC Action Class:	
Source Type:	
Site County/District:	
Site Geo Ref Meth:	
Site District Office:	
Nearest Watercourse:	
Site Name:	
Site Address:	

65 1 of 1 ENE/212.5 101.5 / -2.43 **562 TAFALGAR RD Oakville ON** WWIS

Well ID:	7263648	Flowing (Y/N):	
Construction Date:		Flow Rate:	
Use 1st:	Monitoring and Test Hole	Data Entry Status:	
Use 2nd:	0	Data Src:	
Final Well Status:	Monitoring and Test Hole	Date Received:	27-May-2016 00:00:00
Water Type:		Selected Flag:	TRUE
Casing Material:		Abandonment Rec:	
Audit No:	Z231456	Contractor:	7241
Tag:	A197866	Form Version:	7
Constructn Method:		Owner:	
Elevation (m):		County:	HALTON
Elevatn Reliabilty:		Lot:	
Depth to Bedrock:		Concession:	
Well Depth:		Concession Name:	
Overburden/Bedrock:		Easting NAD83:	
Pump Rate:		Northing NAD83:	
Static Water Level:		Zone:	
Clear/Cloudy:		UTM Reliability:	
Municipality:	OAKVILLE TOWN		
Site Info:	WKQ-008914		

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2016/04/23
Year Completed:	2016
Depth (m):	6.096
Latitude:	43.4578984861838
Longitude:	-79.6822392467418
Path:	

Bore Hole Information

Bore Hole ID:	1006016610	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606608.00
Code OB Desc:		**North83:**	4812509.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	23-Apr-2016 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1006126152
Layer:	1
Color:	2
General Color:	GREY
Mat1:	01
Most Common Material:	FILL
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	4.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1006126153
Layer:	2
Color:	2
General Color:	GREY
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	4.0
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1006126161
Layer:	1
Plug From:	0.0
Plug To:	0.5
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID: 1006126162
Layer: 2
Plug From: 0.5
Plug To: 9.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1006126163
Layer: 3
Plug From: 9.0
Plug To: 20.0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1006126160
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction: DIRECT PUSH

Pipe Information

Pipe ID: 1006126151
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1006126156
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 10.0
Casing Diameter: 2.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Screen

Screen ID: 1006126157
Layer: 1
Slot: 10
Screen Top Depth: 10.0
Screen End Depth: 20.0
Screen Material: 5
Screen Depth UOM: ft
Screen Diameter UOM: inch
Screen Diameter: 2.25

Water Details

Water ID: 1006126155
Layer:
Kind Code:
Kind:

Water Found Depth:
Water Found Depth UOM: ft

Hole Diameter

Hole ID: 1006126154
Diameter:
Depth From: 0.0
Depth To: 20.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

Links

Bore Hole ID: 1006016610
Depth M: 6.096
Year Completed: 2016
Well Completed Dt: 2016/04/23
Audit No: Z231456
Tag No: A197866
Contractor: 7241
Path: 726\7263648.pdf
Latitude: 43.4578984861838
Longitude: -79.6822392467418

---

66 | **1 of 1** | **SW/219.9** | **105.1 / 1.25** | **The TDL Group Corp./Groupe TDL Corporation**
111 Cross Ave
Oakville ON L6K 2Y1 | **ECA**

Approval No: 0356-78RL63
Approval Date: 2007-11-08
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name: Halton
MOE District: Halton-Peel
City:
Longitude: -79.68631
Latitude: 43.454197
Geometry X:
Geometry Y:
Approval Type: ECA-AIR
Project Type: AIR
Business Name: The TDL Group Corp./Groupe TDL Corporation
Address: 111 Cross Ave
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/8731-76DQGT-14.pdf
PDF Site Location:

---

67 | **1 of 1** | **E/220.0** | **98.8 / -5.05** | **Oakville Transit**
Cornwall Rd, Trafalgar, Cross Ave, Lions Lane;
214 Cross Ave
Oakville; Oakville ON NA | **SPL**

Ref No: 7584-BYXLB5
Site No: NA; 0472-7WTHM6
Incident Dt: 2021/03/09
Year:
Incident Cause:
Incident Event: Leak/Break
Environment Impact:
Nature of Impact:
MOE Response: No
Dt MOE Arvl on Scn:
MOE Reported Dt: 2021/03/09
Dt Document Closed: 2021/09/22
Municipality No:
System Facility Address:
Client Type: Municipal Government
Call Report Location Geodata:
Contaminant Code: 27
Contaminant Name: COOLANT N.O.S.
Contaminant Limit 1:
Contaminant Qty: 40 L
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq: 2 - Minor Environment
Agency Involved:
Site Lot:
Site Conc: NA
Site Geo Ref Accu: NA
Site Map Datum: NA
Northing: 4812420.49; NA
Easting: 606684.79; NA

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Contam Limit Freq 1:	
Contaminant UN No 1:	n/a
Receiving Medium:	
Receiving Environment:	Land
Incident Reason:	Equipment Failure
Incident Summary:	Oakville Transit: bus leaked glycol coolant on the roadway
Site Region:	Central
Site Municipality:	Oakville; Oakville
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	Other
SAC Action Class:	
Source Type:	Motor Vehicle
Site County/District:	Regional Municipality of Halton; Regional Municipality of Halton
Site Geo Ref Meth:	NA
Site District Office:	Halton-Peel; Halton-Peel
Nearest Watercourse:	
Site Name:	Oakville Roads<UNOFFICIAL>; Oakville Go Station
Site Address:	Cornwall Rd, Trafalgar, Cross Ave, Lions Lane; 214 Cross Ave

---

68 | **1 of 11** | **ESE/222.5** | **99.8 / -4.05** | **SZR Oakville II Inc.**
155 Cornwall Road (Formerly 466 Trafalgar Road), Oakville, Ontario
OAKVILLE ON | **RSC**

RSC ID:	44612	**Cert Date:**	24-Jan-08
RA No:		**Cert Prop Use No:**	No CPU
RSC Type:		**Intended Prop Use:**	Residential
Curr Property Use:	Commercial	**Qual Person Name:**	Mr. David R. Ennis
Ministry District:	OAKVILLE	**Stratified (Y/N):**	
Filing Date:	7-Mar-08	**Audit (Y/N):**	
Date Ack:		**Entire Leg Prop. (Y/N):**	No
Date Returned:		**Accuracy Estimate:**	6 to 10 meters
Restoration Type:		**Telephone:**	610-5201132
Soil Type:		**Fax:**	610-5201136
Criteria:		**Email:**	David.Ennis@sunriseseniorliving.com
CPU Issued Sect 1686:	No		
Asmt Roll No:			

Prop ID No (PIN):	24816-0103 and 24816-0104
Property Municipal Address:	155 Cornwall Road (Formerly 466 Trafalgar Road), Oakville, Ontario
Mailing Address:	771 E. Lancaster Avenue, Villanova, Pa., 19085, USA
Latitude & Latitude:	43.45475650N 79.68150410W (converted from UTM)
UTM Coordinates:	NAD83 17-606673-4812161
Consultant:	
Legal Desc:	Firstly: PT LTS 13 & 14, CON 3 SDS, PTS, 1 & 2, 20R12296 EXCEPT PT 1, 20R12663, S/T 557121. T/W 557121, 806347; OAKVILLE Secondly: PT LT 14, CON 3, SDS, PT 2, 20R12663; OAKVILLE **The RSC covers only the portion of the property described as: Firstly: PT LTS 13& 14, CON 3, SDS, shown as PT 1 on 20R-17481. Subject to Instrument No. 557123 and together with as in Instrument Nos. 557123 and 806347, Town of Oakville, Regional Municipality of Halton, being a portion of PIN24816-0103 (LT) Secondly: PT LT 14, CON 3, SDS, shown as PT 4 on 20R-17481, Town of Oakville, Regional Municipality of Halton, being a portion of PIN24816-0104 (LT)
Measurement Method:	Digitized from a map
Applicable Standards:	Full Depth Site Conditions Standard, with Nonpotable Ground Water, Medium/Fine Textured Soil, for Residential/Parkland/Institutional property use
RSC PDF:	

---

68 | **2 of 11** | **ESE/222.5** | **99.8 / -4.05** | **Metrolinx**
155 CORNWALL RD
OAKVILLE ON L6H 0E8 | **EASR**

Approval No:	R-002-8127802928	**MOE District:**	
Status:	REGISTERED	**Municipality:**	OAKVILLE

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Date: 2012-06-20
Record Type: EASR
Link Source: MOFA
Project Type: Standby Power System
Full Address:
Approval Type: EASR-Standby Power System
SWP Area Name:
PDF URL:
PDF Site Location:
Latitude:
Longitude:
Geometry X:
Geometry Y:

---

68 | 3 of 11 | ESE/222.5 | 99.8 / -4.05 | **Metrolinx**
155 CORNWALL RD
OAKVILLE ON L6H 0E8 | EASR

Approval No: R-003-1611350256
Status: REGISTERED
Date: 2016-07-18
Record Type: EASR
Link Source: MOFA
Project Type: Heating System
Full Address:
Approval Type: EASR-Heating System
SWP Area Name:
PDF URL:
PDF Site Location:
MOE District:
Municipality: OAKVILLE
Latitude:
Longitude:
Geometry X:
Geometry Y:

---

68 | 4 of 11 | ESE/222.5 | 99.8 / -4.05 | **Black and McDonald Limited**
155 Cornwall Road
Oakville ON L6H 0E8 | GEN

Generator No: ON4840105
SIC Code:
SIC Description:
Approval Years: As of Dec 2017
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 221 L
Waste Class Name: Light fuels

---

68 | 5 of 11 | ESE/222.5 | 99.8 / -4.05 | **METROLINX**
155 CORNWALL RD OAKVILLE L6H 0E8 ON CA
ON | CFOT

Licence No:
Registration No:
Posse File No:
Posse Reg No:
Status Name:
Tank Type: Double Wall UST
Tank Size: 50000
Tank Material: Fiberglass (FRP)
Instance No: 64787314
Item Description: Fuel Oil Tank
Instance Type:
Facility Type:
Fuel Type:
Distributor:
Letter Sent:
Comments:
Corrosion Protect:
Province:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Inst Creation Date:	4/10/2018 10:19:48 AM	Nbr:	
Inst Install Date:	4/10/2018 10:19:48 AM	Context:	FS Fuel Oil Tank
Item:	FS FUEL OIL TANK		
Tank Age (as of 05/1992):			
Device Installed Location:	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA		
Description:	NULL		
Contact Name:			
Contact Address:			
Contact Address2:			
Contact Suite:			
Contact City:			
Contact Prov:			
Contact Postal:			

---

68 | 6 of 11 | ESE/222.5 | 99.8 / -4.05 | METROLINX 155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON | CFOT

Licence No:		Item Description:	Fuel Oil Tank
Registration No:		Instance Type:	
Posse File No:		Facility Type:	
Posse Reg No:		Fuel Type:	
Status Name:		Distributor:	
Tank Type:	Double Wall UST	Letter Sent:	
Tank Size:	50000	Comments:	
Tank Material:	Fiberglass (FRP)	Corrosion Protect:	
Instance No:	64787315	Province:	
Inst Creation Date:	4/10/2018 10:27:26 AM	Nbr:	
Inst Install Date:	4/10/2018 10:27:26 AM	Context:	FS Fuel Oil Tank
Item:	FS FUEL OIL TANK		
Tank Age (as of 05/1992):			
Device Installed Location:	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA		
Description:	NULL		
Contact Name:			
Contact Address:			
Contact Address2:			
Contact Suite:			
Contact City:			
Contact Prov:			
Contact Postal:			

---

68 | 7 of 11 | ESE/222.5 | 99.8 / -4.05 | METROLINX 155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON | DTNK

Delisted Fuel Storage Tank

Instance No:	64787314	Creation Date:	4/10/2018 10:25:07 AM
Status:	Active	Overfill Prot Type:	
Instance Type:		Facility Location:	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA
Fuel Type:		Piping SW Steel:	
Cont Name:		Piping SW Galvan:	
Capacity:	50000	Tanks SW Steel:	
Tank Material:	Fiberglass (FRP)	Piping Underground:	
Corrosion Prot:	NULL	No Underground:	
Tank Type:	Double Wall UST	Max Hazard Rank:	NULL
Install Year:	2016	Max Hazard Rank 1:	NULL
Facility Type:	FS FUEL OIL TANK	Nxt Period Start Dt:	NULL
Device Installed Loc:		Program Area 1:	NULL

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Fuel Type 2:		Program Area 2:	NULL
Fuel Type 3:		Nxt Period Strt Dt 2:	NULL
Item:		Risk Based Periodic:	NULL
Item Description:	Fuel Oil Tank	Vol of Directives:	NULL
Model:	NULL	Years in Service:	NULL
Description:	NULL	Created Date:	NULL
Instance Creation Dt:	4/10/2018 10:19:48 AM	Federal Device:	NULL
Instance Install Dt:	4/10/2018 10:19:48 AM	Periodic Exempt:	NULL
Manufacturer:	ZCL	Statutory Interval:	NULL
Serial No:	19819	Rcomnd Insp Interval:	NULL
ULC Standard:	ULC-S615	Recommended Toler:	NULL
Quantity:	1	Panam Venue Name:	NULL
Unit of Measure:	EA	External Identifier:	NULL
Parent Fac Type:			
TSSA Base Sched Cycle 1:	NULL		
TSSA Base Sched Cycle 2:	NULL		
Original Source:	FST		
Record Date:	31-MAY-2021		

68	8 of 11	ESE/222.5	99.8 / -4.05	METROLINX 155 CORNWALL RD OAKVILLE L6H 0E8 ON CA ON	DTNK

Delisted Fuel Storage Tank

Instance No:	64787315	Creation Date:	4/10/2018 10:28:08 AM
Status:	Active	Overfill Prot Type:	
Instance Type:		Facility Location:	155 CORNWALL RD OAKVILLE L6H 0E8 ON CA
Fuel Type:		Piping SW Steel:	
Cont Name:		Piping SW Galvan:	
Capacity:	50000	Tanks SW Steel:	
Tank Material:	Fiberglass (FRP)	Piping Underground:	
Corrosion Prot:	NULL	No Underground:	
Tank Type:	Double Wall UST	Max Hazard Rank:	NULL
Install Year:	2016	Max Hazard Rank 1:	NULL
Facility Type:	FS FUEL OIL TANK	Nxt Period Start Dt:	NULL
Device Installed Loc:		Program Area 1:	NULL
Fuel Type 2:		Program Area 2:	NULL
Fuel Type 3:		Nxt Period Strt Dt 2:	NULL
Item:		Risk Based Periodic:	NULL
Item Description:	Fuel Oil Tank	Vol of Directives:	NULL
Model:	NULL	Years in Service:	NULL
Description:	NULL	Created Date:	NULL
Instance Creation Dt:	4/10/2018 10:27:26 AM	Federal Device:	NULL
Instance Install Dt:	4/10/2018 10:27:26 AM	Periodic Exempt:	NULL
Manufacturer:	ZCL	Statutory Interval:	NULL
Serial No:	19818	Rcomnd Insp Interval:	NULL
ULC Standard:	ULC-S615	Recommended Toler:	NULL
Quantity:	1	Panam Venue Name:	NULL
Unit of Measure:	EA	External Identifier:	NULL
Parent Fac Type:			
TSSA Base Sched Cycle 1:	NULL		
TSSA Base Sched Cycle 2:	NULL		
Original Source:	FST		
Record Date:	31-MAY-2021		

68	9 of 11	ESE/222.5	99.8 / -4.05	PIPELINE HIT 2" 155 CORNWALL RD,,OAKVILLE,ON,L6H 0E8,CA ON	PINC

Incident Id:		Pipe Material:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Incident No:	2171092	**Fuel Category:**	
Incident Reported Dt:	10/12/2017	**Health Impact:**	
Type:	FS-Pipeline Incident	**Environment Impact:**	
Status Code:		**Property Damage:**	
Tank Status:	Pipeline Damage Reason Est	**Service Interrupt:**	
Task No:		**Enforce Policy:**	
Spills Action Centre:		**Public Relation:**	
Fuel Type:		**Pipeline System:**	
Fuel Occurrence Tp:		**PSIG:**	
Date of Occurrence:		**Attribute Category:**	
Occurrence Start Dt:		**Regulator Location:**	
Depth:		**Method Details:**	
Customer Acct Name:	PIPELINE HIT 2"		
Incident Address:	155 CORNWALL RD,,OAKVILLE,ON,L6H 0E8,CA		
Operation Type:			
Pipeline Type:			
Regulator Type:			
Summary:			
Reported By:			
Affiliation:			
Occurrence Desc:			
Damage Reason:			
Notes:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
68	10 of 11	ESE/222.5	99.8 / -4.05	Metrolinx 155 Cornwall Road Oakville ON L6H 0E8	GEN

Generator No:	ON3245414
SIC Code:	
SIC Description:	
Approval Years:	As of Nov 2021
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	312 P
Waste Class Name:	Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
68	11 of 11	ESE/222.5	99.8 / -4.05	Metrolinx 155 Cornwall Road Oakville ON L6H 0E8	GEN

Generator No:	ON3245414
SIC Code:	
SIC Description:	
Approval Years:	As of Oct 2022
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Detail(s)

Waste Class: 312 P
Waste Class Name: PATHOLOGICAL WASTES

---

69 1 of 1 NW/227.6 103.8 / -0.05 **200-240 North Service Road E Oakville ON** EHS

Order No: 20050608006
Status: C
Report Type:
Report Date: 6/17/2005
Date Received: 6/8/2005
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): 0.35
X: -79.686848
Y: 43.461119

---

70 1 of 31 ENE/228.6 101.7 / -2.19 **PRIVATELY OWNED 562 TRAFALGAR RD. MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2** SPL

Ref No: 25744
Site No:
Incident Dt: 9/24/1989
Year:
Incident Cause: OTHER CONTAINER LEAK
Incident Event:
Environment Impact: NOT ANTICIPATED
Nature of Impact:
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 9/25/1989
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: MATERIAL FAILURE
Incident Summary: TEXACO - TANKFULL OF GAS TO PVMT. AT SERVICE STN. CONTAINED.
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	2 of 31	ENE/228.6	101.7 / -2.19	PRIVATELY OWNED 562 TRAFALGAR RD. TEXACO SERVICE STATION MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3J2	SPL

Ref No: 28990
Site No:
Incident Dt: 11/30/1989
Year:
Incident Cause: OTHER CAUSE (N.O.S.)
Incident Event:
Environment Impact: NOT ANTICIPATED
Nature of Impact:
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 12/1/1989
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: VANDALISM
Incident Summary: BACKENTRY- TEXACO 3-4 LITRES GAS TO PVMT. FROM DISGRUNTLED CUSTOMER.
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	3 of 31	ENE/228.6	101.7 / -2.19	ESSO PETROLEUM CANADA 562 TRAFALGAR RD SERVICE STATION OAKVILLE TOWN ON L6J 3J2	SPL

Ref No: 149981
Site No:
Incident Dt: 12/27/1990
Year:
Incident Cause: VALVE/FITTING LEAK OR FAILURE
Incident Event:
Environment Impact: NOT ANTICIPATED
Nature of Impact:
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 12/27/1990
Dt Document Closed:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Municipality No:	14403
System Facility Address:	
Client Type:	
Call Report Location Geodata:	
Contaminant Code:	
Contaminant Name:	
Contaminant Limit 1:	
Contam Limit Freq 1:	
Contaminant UN No 1:	
Receiving Medium:	LAND
Receiving Environment:	
Incident Reason:	EQUIPMENT FAILURE
Incident Summary:	ESSO:SMALL QUANTITY GASOLINE SPILLED TO CONCRETE PAD.
Site Region:	
Site Municipality:	OAKVILLE TOWN
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	
SAC Action Class:	
Source Type:	
Site County/District:	
Site Geo Ref Meth:	
Site District Office:	
Nearest Watercourse:	
Site Name:	
Site Address:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	4 of 31	ENE/228.6	101.7 / -2.19	TRAFALGAR ESSO SELF SERVE 487346 ONTARIO LTD 562 TRAFALGAR RD OAKVILLE ON L6J 3J2	PRT

Location ID:	10420
Type:	retail
Expiry Date:	1995-03-31
Capacity (L):	39947
Licence #:	0014569001

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	5 of 31	ENE/228.6	101.7 / -2.19	TRAFALGAR ESSO 562 TRAFALGAR RD OAKVILLE ON L6J3J2	RST

Headcode:	1186800
Headcode Desc:	Service Stations-Gasoline, Oil & Natural Gas
Phone:	9058450202
List Name:	
Description:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	6 of 31	ENE/228.6	101.7 / -2.19	1285118 ONT INC 562 TRAFALGAR RD OAKVILLE ON L6J 3J2	RST

Headcode:	1186800
Headcode Desc:	Service Stations-Gasoline, Oil & Natural Gas
Phone:	9053370834
List Name:	
Description:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	7 of 31	ENE/228.6	101.7 / -2.19	562 Trafalgar Rd Oakville ON L6J 3J2	EHS

Order No:	20001127002	Nearest Intersection:	QEW
Status:	C	Municipality:	Halton
Report Type:	Basic Report	Client Prov/State:	ON
Report Date:	12/4/00	Search Radius (km):	0.25
Date Received:	11/27/00	X:	-79.682121
Previous Site Name:		Y:	43.458179
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	8 of 31	ENE/228.6	101.7 / -2.19	ZULFI ESSO 562 TRAFALGAR RD OAKVILLE ON L6J 3J2	RST

Headcode:	01186800
Headcode Desc:	SERVICE STATIONS-GASOLINE, OIL & NATURAL GAS
Phone:	
List Name:	
Description:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	9 of 31	ENE/228.6	101.7 / -2.19	Imperial Oil Limited 562 Trafalgar Rd Oakville ON L6J 3J2	CA

Certificate #:	8204-7STR6J
Application Year:	2009
Issue Date:	6/9/2009
Approval Type:	Industrial Sewage Works
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	10 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No:	10888938	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	
Instance ID:	49163	Facility Location:	
Instance Type:	FS Piping	Facility Type:	
Instance Creation Dt:		Fuel Type 2:	
Instance Install Dt:		Fuel Type 3:	
Item Description:		Panam Related:	
Manufacturer:		Panam Venue Nm:	
Model:		External Identifier:	
Serial No:		Item:	
ULC Standard:		Piping Steel:	
Quantity:		Piping Galvanized:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Unit of Measure:
Overfill Prot Type:
Creation Date:
Next Periodic Str DT:
TSSA Base Sched Cycle 2:
TSSAMax Hazard Rank 1:
TSSA Risk Based Periodic Yn:
TSSA Volume of Directives:
TSSA Periodic Exempt:
TSSA Statutory Interval:
TSSA Recd Insp Interva:
TSSA Recd Tolerance:
TSSA Program Area:
TSSA Program Area 2:
Description: FS Piping
Original Source: EXP
Record Date: Up to Mar 2012

Tank Single Wall St:
Piping Underground:
Tank Underground:
Source:

70	11 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No: 10889008
Status: EXPIRED
Instance ID: 49218
Instance Type: FS Piping
Instance Creation Dt:
Instance Install Dt:
Item Description:
Manufacturer:
Model:
Serial No:
ULC Standard:
Quantity:
Unit of Measure:
Overfill Prot Type:
Creation Date:
Next Periodic Str DT:
TSSA Base Sched Cycle 2:
TSSAMax Hazard Rank 1:
TSSA Risk Based Periodic Yn:
TSSA Volume of Directives:
TSSA Periodic Exempt:
TSSA Statutory Interval:
TSSA Recd Insp Interva:
TSSA Recd Tolerance:
TSSA Program Area:
TSSA Program Area 2:
Description: FS Piping
Original Source: EXP
Record Date: Up to Mar 2012

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:
Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source:

70	12 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE ON	DTNK

Delisted Expired Fuel Safety Facilities

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Instance No: 10888953
Status: EXPIRED
Instance ID: 49659
Instance Type: FS Piping
Instance Creation Dt:
Instance Install Dt:
Item Description:
Manufacturer:
Model:
Serial No:
ULC Standard:
Quantity:
Unit of Measure:
Overfill Prot Type:
Creation Date:
Next Periodic Str DT:
TSSA Base Sched Cycle 2:
TSSAMax Hazard Rank 1:
TSSA Risk Based Periodic Yn:
TSSA Volume of Directives:
TSSA Periodic Exempt:
TSSA Statutory Interval:
TSSA Recd Insp Interva:
TSSA Recd Tolerance:
TSSA Program Area:
TSSA Program Area 2:
Description: FS Piping
Original Source: EXP
Record Date: Up to Mar 2012

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:
Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source:

70	13 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No: 10888986
Status: EXPIRED
Instance ID: 49877
Instance Type: FS Piping
Instance Creation Dt:
Instance Install Dt:
Item Description:
Manufacturer:
Model:
Serial No:
ULC Standard:
Quantity:
Unit of Measure:
Overfill Prot Type:
Creation Date:
Next Periodic Str DT:
TSSA Base Sched Cycle 2:
TSSAMax Hazard Rank 1:
TSSA Risk Based Periodic Yn:
TSSA Volume of Directives:
TSSA Periodic Exempt:
TSSA Statutory Interval:
TSSA Recd Insp Interva:
TSSA Recd Tolerance:
TSSA Program Area:

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:
Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
TSSA Program Area 2:					
Description:		FS Piping			
Original Source:		EXP			
Record Date:		Up to Mar 2012			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	14 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No:	10888971	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	
Instance ID:	50105	Facility Location:	
Instance Type:	FS Piping	Facility Type:	
Instance Creation Dt:		Fuel Type 2:	
Instance Install Dt:		Fuel Type 3:	
Item Description:		Panam Related:	
Manufacturer:		Panam Venue Nm:	
Model:		External Identifier:	
Serial No:		Item:	
ULC Standard:		Piping Steel:	
Quantity:		Piping Galvanized:	
Unit of Measure:		Tank Single Wall St:	
Overfill Prot Type:		Piping Underground:	
Creation Date:		Tank Underground:	
Next Periodic Str DT:		Source:	
TSSA Base Sched Cycle 2:			
TSSAMax Hazard Rank 1:			
TSSA Risk Based Periodic Yn:			
TSSA Volume of Directives:			
TSSA Periodic Exempt:			
TSSA Statutory Interval:			
TSSA Recd Insp Interva:			
TSSA Recd Tolerance:			
TSSA Program Area:			
TSSA Program Area 2:			
Description:	FS Piping		
Original Source:	EXP		
Record Date:	Up to Mar 2012		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
70	15 of 31	ENE/228.6	101.7 / -2.19	MAC'S CONVENIENCE STORES INC 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	FST

Instance No:	11635006	Manufacturer:	
Status:		Serial No:	
Cont Name:		Ulc Standard:	
Instance Type:	FS Liquid Fuel Tank	Quantity:	
Item:		Unit of Measure:	
Item Description:	FS Liquid Fuel Tank	Fuel Type:	Gasoline
Tank Type:	Double Wall UST	Fuel Type2:	NULL
Install Date:	6/25/2009	Fuel Type3:	NULL
Install Year:	2001	Piping Steel:	
Years in Service:		Piping Galvanized:	
Model:	NULL	Tanks Single Wall St:	
Description:		Piping Underground:	
Capacity:	46400	No Underground:	
Tank Material:	Fiberglass (FRP)	Panam Related:	
Corrosion Protect:	Fiberglass	Panam Venue:	
Overfill Protect:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: MAC'S CONVENIENCE STORES INC
Item: FS LIQUID FUEL TANK

---

70 | ***16 of 31*** | ***ENE/228.6*** | ***101.7 / -2.19*** | ***MAC'S CONVENIENCE STORES INC 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON*** | ***FST***

Instance No: 11645263
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 6/25/2009
Install Year: 2001
Years In Service:
Model: NULL
Description:
Capacity: 46400
Tank Material: Fiberglass (FRP)
Corrosion Protect: Fiberglass
Overfill Protect:
Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Gasoline
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:

Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: MAC'S CONVENIENCE STORES INC
Item: FS LIQUID FUEL TANK

---

70 | ***17 of 31*** | ***ENE/228.6*** | ***101.7 / -2.19*** | ***MAC'S CONVENIENCE STORES INC 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON*** | ***FST***

Instance No: 11645275
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 6/25/2009
Install Year: 2001
Years in Service:
Model: NULL
Description:
Capacity: 22700
Tank Material: Fiberglass (FRP)
Corrosion Protect: Fiberglass
Overfill Protect:
Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Diesel
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:

Facility Type: FS Liquid Fuel Tank

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: MAC'S CONVENIENCE STORES INC
Item: FS LIQUID FUEL TANK

---

70 | **18 of 31** | **ENE/228.6** | **101.7 / -2.19** | **MAC'S CONVENIENCE STORES INC**
562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
ON | **FST**

Instance No: 11645269
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 6/25/2009
Install Year: 2001
Years in Service:
Model: NULL
Description:
Capacity: 46400
Tank Material: Fiberglass (FRP)
Corrosion Protect: Fiberglass
Overfill Protect:
Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Gasoline
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:

Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: MAC'S CONVENIENCE STORES INC
Item: FS LIQUID FUEL TANK

---

70 | **19 of 31** | **ENE/228.6** | **101.7 / -2.19** | **GEETANJALI ADHYAPAK O/A GAS STN**
562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
ON | **DTNK**

Delisted Expired Fuel Safety Facilities

Instance No: 10888925
Status: EXPIRED
Instance ID:
Instance Type:
Instance Creation Dt: 10/2/1989
Instance Install Dt: 10/2/1989
Item Description: FS Liquid Fuel Tank
Manufacturer: NULL
Model: NULL
Serial No: NULL
ULC Standard: NULL
Quantity: 1
Expired Date:
Max Hazard Rank: NULL
Facility Location: 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
Facility Type: FS LIQUID FUEL TANK
Fuel Type 2: NULL
Fuel Type 3: NULL
Panam Related: NULL
Panam Venue Nm: NULL
External Identifier: NULL
Item:
Piping Steel:
Piping Galvanized:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Unit of Measure:	EA			Tank Single Wall St:	
Overfill Prot Type:	NULL			Piping Underground:	
Creation Date:	7/5/2009 1:21:54 AM			Tank Underground:	
Next Periodic Str DT:	NULL			Source:	FS Liquid Fuel Tank
TSSA Base Sched Cycle 2:	NULL				
TSSAMax Hazard Rank 1:	NULL				
TSSA Risk Based Periodic Yn:	NULL				
TSSA Volume of Directives:	NULL				
TSSA Periodic Exempt:	NULL				
TSSA Statutory Interval:	NULL				
TSSA Recd Insp Interva:	NULL				
TSSA Recd Tolerance:	NULL				
TSSA Program Area:	NULL				
TSSA Program Area 2:	NULL				
Description:	UNDERGROUND TANK				
Original Source:	EXP				
Record Date:	31-JUL-2020				

70	20 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No:	10888999	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	NULL
Instance ID:		Facility Location:	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
Instance Type:		Facility Type:	FS LIQUID FUEL TANK
Instance Creation Dt:	10/2/1989	Fuel Type 2:	NULL
Instance Install Dt:	10/2/1989	Fuel Type 3:	NULL
Item Description:	FS Liquid Fuel Tank	Panam Related:	NULL
Manufacturer:	NULL	Panam Venue Nm:	NULL
Model:	NULL	External Identifier:	NULL
Serial No:	NULL	Item:	
ULC Standard:	NULL	Piping Steel:	
Quantity:	1	Piping Galvanized:	
Unit of Measure:	EA	Tank Single Wall St:	
Overfill Prot Type:	NULL	Piping Underground:	
Creation Date:	7/5/2009 1:21:56 AM	Tank Underground:	
Next Periodic Str DT:	NULL	Source:	FS Liquid Fuel Tank
TSSA Base Sched Cycle 2:	NULL		
TSSAMax Hazard Rank 1:	NULL		
TSSA Risk Based Periodic Yn:	NULL		
TSSA Volume of Directives:	NULL		
TSSA Periodic Exempt:	NULL		
TSSA Statutory Interval:	NULL		
TSSA Recd Insp Interva:	NULL		
TSSA Recd Tolerance:	NULL		
TSSA Program Area:	NULL		
TSSA Program Area 2:	NULL		
Description:	UNDERGROUND TANK		
Original Source:	EXP		
Record Date:	31-JUL-2020		

70	21 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	DTNK

Delisted Expired Fuel Safety

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Facilities

Instance No:	10888947	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	NULL
Instance ID:		Facility Location:	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
Instance Type:		Facility Type:	FS LIQUID FUEL TANK
Instance Creation Dt:	10/2/1989	Fuel Type 2:	NULL
Instance Install Dt:	10/2/1989	Fuel Type 3:	NULL
Item Description:	FS Liquid Fuel Tank	Panam Related:	NULL
Manufacturer:	NULL	Panam Venue Nm:	NULL
Model:	NULL	External Identifier:	NULL
Serial No:	NULL	Item:	
ULC Standard:	NULL	Piping Steel:	
Quantity:	1	Piping Galvanized:	
Unit of Measure:	EA	Tank Single Wall St:	
Overfill Prot Type:	NULL	Piping Underground:	
Creation Date:	7/5/2009 1:21:57 AM	Tank Underground:	
Next Periodic Str DT:	NULL	Source:	FS Liquid Fuel Tank
TSSA Base Sched Cycle 2:	NULL		
TSSAMax Hazard Rank 1:	NULL		
TSSA Risk Based Periodic Yn:	NULL		
TSSA Volume of Directives:	NULL		
TSSA Periodic Exempt:	NULL		
TSSA Statutory Interval:	NULL		
TSSA Recd Insp Interva:	NULL		
TSSA Recd Tolerance:	NULL		
TSSA Program Area:	NULL		
TSSA Program Area 2:	NULL		
Description:	UNDERGROUND TANK		
Original Source:	EXP		
Record Date:	31-JUL-2020		

70	22 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No:	10888962	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	NULL
Instance ID:		Facility Location:	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
Instance Type:		Facility Type:	FS LIQUID FUEL TANK
Instance Creation Dt:	10/2/1989	Fuel Type 2:	NULL
Instance Install Dt:	10/2/1989	Fuel Type 3:	NULL
Item Description:	FS Liquid Fuel Tank	Panam Related:	NULL
Manufacturer:	NULL	Panam Venue Nm:	NULL
Model:	NULL	External Identifier:	NULL
Serial No:	NULL	Item:	
ULC Standard:	NULL	Piping Steel:	
Quantity:	1	Piping Galvanized:	
Unit of Measure:	EA	Tank Single Wall St:	
Overfill Prot Type:	NULL	Piping Underground:	
Creation Date:	7/5/2009 1:21:58 AM	Tank Underground:	
Next Periodic Str DT:	NULL	Source:	FS Liquid Fuel Tank
TSSA Base Sched Cycle 2:	NULL		
TSSAMax Hazard Rank 1:	NULL		
TSSA Risk Based Periodic Yn:	NULL		
TSSA Volume of Directives:	NULL		
TSSA Periodic Exempt:	NULL		
TSSA Statutory Interval:	NULL		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

TSSA Recd Insp Interva:	NULL
TSSA Recd Tolerance:	NULL
TSSA Program Area:	NULL
TSSA Program Area 2:	NULL
Description:	UNDERGROUND TANK
Original Source:	EXP
Record Date:	31-JUL-2020

70	23 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No:	10888977	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	NULL
Instance ID:		Facility Location:	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
Instance Type:		Facility Type:	FS LIQUID FUEL TANK
Instance Creation Dt:	10/2/1989	Fuel Type 2:	NULL
Instance Install Dt:	10/2/1989	Fuel Type 3:	NULL
Item Description:	FS Liquid Fuel Tank	Panam Related:	NULL
Manufacturer:	NULL	Panam Venue Nm:	NULL
Model:	NULL	External Identifier:	NULL
Serial No:	NULL	Item:	
ULC Standard:	NULL	Piping Steel:	
Quantity:	1	Piping Galvanized:	
Unit of Measure:	EA	Tank Single Wall St:	
Overfill Prot Type:	NULL	Piping Underground:	
Creation Date:	7/5/2009 1:21:59 AM	Tank Underground:	
Next Periodic Str DT:	NULL	Source:	FS Liquid Fuel Tank

TSSA Base Sched Cycle 2:	NULL
TSSAMax Hazard Rank 1:	NULL
TSSA Risk Based Periodic Yn:	NULL
TSSA Volume of Directives:	NULL
TSSA Periodic Exempt:	NULL
TSSA Statutory Interval:	NULL
TSSA Recd Insp Interva:	NULL
TSSA Recd Tolerance:	NULL
TSSA Program Area:	NULL
TSSA Program Area 2:	NULL
Description:	UNDERGROUND TANK
Original Source:	EXP
Record Date:	31-JUL-2020

70	24 of 31	ENE/228.6	101.7 / -2.19	562 Trafalgar Rd Oakville ON L6J3J2	EHS

Order No:	20150629046	Nearest Intersection:	
Status:	C	Municipality:	Oakville
Report Type:	Standard Report	Client Prov/State:	ON
Report Date:	07-JUL-15	Search Radius (km):	.25
Date Received:	29-JUN-15	X:	-79.682136
Previous Site Name:		Y:	43.458031
Lot/Building Size:			
Additional Info Ordered:	City Directory; Aerial Photos		

70	25 of 31	ENE/228.6	101.7 / -2.19	Imperial Oil Limited 562 Trafalgar Rd	ECA

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
				Oakville ON M3C 1K5	

Approval No:	8204-7STR6J	MOE District:	Halton-Peel
Approval Date:	2009-06-09	City:	
Status:	Approved	Longitude:	-79.68219
Record Type:	ECA	Latitude:	43.458027
Link Source:	IDS	Geometry X:	
SWP Area Name:	Halton	Geometry Y:	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Imperial Oil Limited		
Address:	562 Trafalgar Rd		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/8797-7RZSRX-14.pdf		
PDF Site Location:			

70	26 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	FST

Instance No:	10888977	Manufacturer:	
Status:		Serial No:	
Cont Name:		Ulc Standard:	
Instance Type:		Quantity:	
Item:		Unit of Measure:	
Item Description:	FS Liquid Fuel Tank	Fuel Type:	Gasoline
Tank Type:	Liquid Fuel Single Wall UST	Fuel Type2:	NULL
Install Date:	10/2/1989	Fuel Type3:	NULL
Install Year:	1981	Piping Steel:	
Years In Service:		Piping Galvanized:	
Model:	NULL	Tanks Single Wall St:	
Description:		Piping Underground:	
Capacity:	22700	No Underground:	
Tank Material:	Steel	Panam Related:	
Corrosion Protect:	Sacrificial anode	Panam Venue:	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:			
Facility Location:			
Device Installed Location:	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA		

Liquid Fuel Tank Details

Overfill Protection:	
Owner Account Name:	GEETANJALI ADHYAPAK O/A GAS STN
Item:	FS LIQUID FUEL TANK

70	27 of 31	ENE/228.6	101.7 / -2.19	562 TRAFALGAR RD OAKVILLE ON L6J 3J2	DTNK

Delisted Fuel Storage Tank

Instance No:	9486833	Creation Date:	
Status:	Active	Overfill Prot Type:	
Instance Type:		Facility Location:	
Fuel Type:		Piping SW Steel:	0
Cont Name:		Piping SW Galvan:	0
Capacity:		Tanks SW Steel:	0
Tank Material:		Piping Underground:	4
Corrosion Prot:		No Underground:	4

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Tank Type:
Install Year:
Facility Type:
Device Installed Loc:
Fuel Type 2:
Fuel Type 3:
Item: FS GASOLINE STATION - SELF SERVE
Item Description:
Model:
Description:
Instance Creation Dt:
Instance Install Dt:
Manufacturer:
Serial No:
ULC Standard:
Quantity:
Unit of Measure:
Parent Fac Type:
TSSA Base Sched Cycle 1:
TSSA Base Sched Cycle 2:
Original Source: FST
Record Date: 31-MAY-2021

Max Hazard Rank:
Max Hazard Rank 1:
Nxt Period Start Dt:
Program Area 1:
Program Area 2:
Nxt Period Strt Dt 2:
Risk Based Periodic:
Vol of Directives:
Years in Service:
Created Date:
Federal Device:
Periodic Exempt:
Statutory Interval:
Rcomnd Insp Interval:
Recommended Toler:
Panam Venue Name:
External Identifier:

---

70 | **28 of 31** | **ENE/228.6** | **101.7 / -2.19** | **GEETANJALI ADHYAPAK O/A GAS STN**
562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
ON | **FST**

Instance No: 10888962
Status:
Cont Name:
Instance Type:
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Liquid Fuel Singla Wall UST
Install Date: 10/2/1989
Install Year: 1981
Years in Service:
Model: NULL
Description:
Capacity: 45400
Tank Material: Steel
Corrosion Protect: Sacrificial anode
Overfill Protect:
Facility Type: FS Liquid Fuel Tank
Parent Facility Type:
Facility Location:
Device Installed Location: 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA

Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Gasoline
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: GEETANJALI ADHYAPAK O/A GAS STN
Item: FS LIQUID FUEL TANK

---

70 | **29 of 31** | **ENE/228.6** | **101.7 / -2.19** | **GEETANJALI ADHYAPAK O/A GAS STN**
562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA
ON | **FST**

Instance No: 10888999
Status:
Cont Name:
Instance Type:
Item:

Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Item Description:	FS Liquid Fuel Tank	Fuel Type:	Diesel
Tank Type:	Liquid Fuel Single Wall UST	Fuel Type2:	NULL
Install Date:	10/2/1989	Fuel Type3:	NULL
Install Year:	1981	Piping Steel:	
Years in Service:		Piping Galvanized:	
Model:	NULL	Tanks Single Wall St:	
Description:		Piping Underground:	
Capacity:	22700	No Underground:	
Tank Material:	Steel	Panam Related:	
Corrosion Protect:	Sacrificial anode	Panam Venue:	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:			
Facility Location:			
Device Installed Location:	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA		

Liquid Fuel Tank Details

Overfill Protection:	
Owner Account Name:	GEETANJALI ADHYAPAK O/A GAS STN
Item:	FS LIQUID FUEL TANK

70	30 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	FST

Instance No:	10888925	Manufacturer:	
Status:		Serial No:	
Cont Name:		Uic Standard:	
Instance Type:		Quantity:	
Item:		Unit of Measure:	
Item Description:	FS Liquid Fuel Tank	Fuel Type:	Gasoline
Tank Type:	Liquid Fuel Single Wall UST	Fuel Type2:	NULL
Install Date:	10/2/1989	Fuel Type3:	NULL
Install Year:	1981	Piping Steel:	
Years in Service:		Piping Galvanized:	
Model:	NULL	Tanks Single Wall St:	
Description:		Piping Underground:	
Capacity:	45400	No Underground:	
Tank Material:	Steel	Panam Related:	
Corrosion Protect:	Sacrificial anode	Panam Venue:	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:			
Facility Location:			
Device Installed Location:	562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA		

Liquid Fuel Tank Details

Overfill Protection:	
Owner Account Name:	GEETANJALI ADHYAPAK O/A GAS STN
Item:	FS LIQUID FUEL TANK

70	31 of 31	ENE/228.6	101.7 / -2.19	GEETANJALI ADHYAPAK O/A GAS STN 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA ON	FST

Instance No:	10888947	Manufacturer:	
Status:		Serial No:	
Cont Name:		Uic Standard:	
Instance Type:		Quantity:	
Item:		Unit of Measure:	
Item Description:	FS Liquid Fuel Tank	Fuel Type:	Gasoline

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Tank Type:	Liquid Fuel Single Wall UST	**Fuel Type2:**	NULL
Install Date:	10/2/1989	**Fuel Type3:**	NULL
Install Year:	1981	**Piping Steel:**	
Years in Service:		**Piping Galvanized:**	
Model:	NULL	**Tanks Single Wall St:**	
Description:		**Piping Underground:**	
Capacity:	45400	**No Underground:**	
Tank Material:	Steel	**Panam Related:**	
Corrosion Protect:	Sacrificial anode	**Panam Venue:**	
Overfill Protect:			

Facility Type: FS Liquid Fuel Tank
Parent Facility Type:
Facility Location:
Device Installed Location: 562 TRAFALGAR RD OAKVILLE L6J 3J2 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: GEETANJALI ADHYAPAK O/A GAS STN
Item: FS LIQUID FUEL TANK

---

71 | 1 of 1 | ENE/231.0 | 101.2 / -2.71 | 562 TAFAKGAR RD Oakville ON | WWIS

Well ID:	7263649	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring and Test Hole	**Data Entry Status:**	
Use 2nd:	0	**Data Src:**	
Final Well Status:	Monitoring and Test Hole	**Date Received:**	27-May-2016 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z231455	**Contractor:**	7241
Tag:	A197867	**Form Version:**	7
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	

Municipality: OAKVILLE TOWN
Site Info: WKQ-008914

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 2016/04/23
Year Completed: 2016
Depth (m): 6.096
Latitude: 43.4579313602983
Longitude: -79.6819666975057
Path:

Bore Hole Information

Bore Hole ID:	1006016613	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606630.00

Code OB Desc:		**North83:**	4812513.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	23-Apr-2016 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1006126182
Layer:	2
Color:	2
General Color:	GREY
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	6.0
Formation End Depth:	20.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1006126181
Layer:	1
Color:	2
General Color:	GREY
Mat1:	01
Most Common Material:	FILL
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	6.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1006126190
Layer:	1
Plug From:	0.0
Plug To:	0.5
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1006126192
Layer:	3
Plug From:	10.0

Plug To:	20.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1006126191
Layer:	2
Plug From:	0.5
Plug To:	10.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1006126189
Method Construction Code:	5
Method Construction:	Air Percussion
Other Method Construction:	DIRECT PUSH

Pipe Information

Pipe ID:	1006126180
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1006126185
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	10.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1006126186
Layer:	1
Slot:	10
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Water Details

Water ID:	1006126184
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Hole Diameter

Hole ID:	1006126183
Diameter:	
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1006016613	***Tag No:***	A197867
Depth M:	6.096	***Contractor:***	7241
Year Completed:	2016	***Path:***	726\7263649.pdf
Well Completed Dt:	2016/04/23	***Latitude:***	43.4579313602983
Audit No:	Z231455	***Longitude:***	-79.6819665975057

---

72 **1 of 1** ***NE/231.6*** ***102.6 / -1.31*** ***562 TAFALGAR RD Oakville ON*** ***WWIS***

Well ID:	7263647	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:	Monitoring and Test Hole	***Data Entry Status:***	
Use 2nd:	0	***Data Src:***	
Final Well Status:	Monitoring and Test Hole	***Date Received:***	27-May-2016 00:00:00
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:	Z231457	***Contractor:***	7241
Tag:	A197865	***Form Version:***	7
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	HALTON
Elevatn Reliabilty:		***Lot:***	
Depth to Bedrock:		***Concession:***	
Well Depth:		***Concession Name:***	
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	OAKVILLE TOWN		
Site Info:	WKO-008914		

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2016/04/23
Year Completed:	2016
Depth (m):	6.096
Latitude:	43.458196406129
Longitude:	-79.6823069403049
Path:	

Bore Hole Information

Bore Hole ID:	1006016582	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	606602.00
Code OB Desc:		***North83:***	4812542.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	23-Apr-2016 00:00:00	***UTMRC Desc:***	margin of error : 30 m - 100 m

Remarks: **Location Method:** wwr
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 1006126098
Layer: 2
Color: 2
General Color: GREY
Mat1: 17
Most Common Material: SHALE
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 8.0
Formation End Depth: 20.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1006126097
Layer: 1
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2: 01
Mat2 Desc: FILL
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 8.0
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1006126107
Layer: 2
Plug From: 0.5
Plug To: 9.0
Plug Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1006126106
Layer: 1
Plug From: 0.0
Plug To: 0.5
Plug Depth UOM: ft

Annular Space/Abandonment

Sealing Record

Plug ID:	1006126108
Layer:	3
Plug From:	9.0
Plug To:	20.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1006126105
Method Construction Code:	5
Method Construction:	Air Percussion
Other Method Construction:	DIRECT PUSH

Pipe Information

Pipe ID:	1006126096
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1006126101
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	10.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1006126102
Layer:	1
Slot:	10
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Water Details

Water ID:	1006126100
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1006126099
Diameter:	
Depth From:	0.0

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1006016582	**Tag No:**	A197865
Depth M:	6.096	**Contractor:**	7241
Year Completed:	2016	**Path:**	726\7263647.pdf
Well Completed Dt:	2016/04/23	**Latitude:**	43.458196406129
Audit No:	Z231457	**Longitude:**	-79.6823069403049

73 1 of 1 ENE/235.3 101.7 / -2.16 **ZULFI ESSO** **562 TRAFALGAR RD** **OAKVILLE ON L6J3J2** **RST**

Headcode:	01186800
Headcode Desc:	SERVICE STATIONS GASOLINE OIL & NATURAL GAS
Phone:	9053370834
List Name:	INFO-DIRECT(TM) BUSINESS FILE
Description:	

74 1 of 1 SW/240.7 105.7 / 1.84 **ON** **BORE**

Borehole ID:	646011	**Inclin FLG:**	No
OGF ID:	215546394	**SP Status:**	Initial Entry
Status:		**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	APR-1958	**Municipality:**	
Static Water Level:		**Lot:**	
Primary Water Use:	Not Used	**Township:**	
Sec. Water Use:		**Latitude DD:**	43.454203
Total Depth m:	4.6	**Longitude DD:**	-79.686811
Depth Ref:	Ground Surface	**UTM Zone:**	17
Depth Elev:		**Easting:**	606245
Drill Method:	Diamond Drill	**Northing:**	4812093
Orig Ground Elev m:	105	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Not Applicable
DEM Ground Elev m:	104		
Concession:			
Location D:			
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	218513214	**Mat Consistency:**	Dense
Top Depth:	1.5	**Material Moisture:**	
Bottom Depth:	4.6	**Material Texture:**	
Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Silt	**Geologic Formation:**	
Material 2:	Sand	**Geologic Group:**	
Material 3:	Gravel	**Geologic Period:**	
Material 4:	Shale	**Depositional Gen:**	glacial
Gsc Material Description:			
Stratum Description:	SILT,SAND,GRAVEL, SHALE. BROWN,GREY,VERY DENSE, AGE GLACIAL. 0001001900050088 **Note: Many records provided by the department have a truncated [Stratum Description] field.		

Geology Stratum ID:	218513212	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Bottom Depth: .3
Material Color: Black
Material 1: Soil
Material 2:
Material 3:
Material 4:
Gsc Material Description:
Stratum Description: SOIL, BLACK,AGE POST-GLACIAL.

Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen:

Geology Stratum ID: 218513213
Top Depth: .3
Bottom Depth: 1.5
Material Color: Brown
Material 1: Silt
Material 2: Clay
Material 3: Stones
Material 4:
Gsc Material Description:
Stratum Description: SILT,CLAY,STONES, BROWN,COMPACT,AGE GLACIAL.

Mat Consistency: Compact
Material Moisture:
Material Texture:
Non Geo Mat Type:
Geologic Formation:
Geologic Group:
Geologic Period:
Depositional Gen: glacial

Source

Source Type: Data Survey
Source Orig: Geological Survey of Canada
Source Date: 1956-1972
Confidence: M
Observatio:
Source Name: Urban Geology Automated Information System (UGAIS)
Source Details: File: TOR2.txt RecordID: 140330 NTS_Sheet: 30M05H
Confiden 1: Reliable information but incomplete.

Source Appl: Spatial/Tabular
Source Iden: 1
Scale or Res: Varies
Horizontal: NAD27
Verticalda: Mean Average Sea Level

Source List

Source Identifier: 1
Source Type: Data Survey
Source Date: 1956-1972
Scale or Resolution: Varies
Source Name: Urban Geology Automated Information System (UGAIS)
Source Originators: Geological Survey of Canada

Horizontal Datum: NAD27
Vertical Datum: Mean Average Sea Level
Projection Name: Universal Transverse Mercator

75	1 of 1	ENE/242.1	102.2 / -1.70	562 TAFALGAR RD Oakville ON	WWIS

Well ID: 7263650
Construction Date:
Use 1st: Monitoring and Test Hole
Use 2nd: 0
Final Well Status: Monitoring and Test Hole
Water Type:
Casing Material:
Audit No: Z231454
Tag: A197868
Constructn Method:
Elevation (m):
Elevatn Reliabilty:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: OAKVILLE TOWN
Site Info: WKQ-008914

Flowing (Y/N):
Flow Rate:
Data Entry Status:
Data Src:
Date Received: 27-May-2016 00:00:00
Selected Flag: TRUE
Abandonment Rec:
Contractor: 7241
Form Version: 7
Owner:
County: HALTON
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 2016/04/23
Year Completed: 2016
Depth (m): 6.096
Latitude: 43.4581211141711
Longitude: -79.6820242787988
Path:

Bore Hole Information

Bore Hole ID: 1006016616
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:
Date Completed: 23-Apr-2016 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606625.00
North83: 4812534.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1006126217
Layer: 2
Color: 2
General Color: GREY
Mat1: 17
Most Common Material: SHALE
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 4.0
Formation End Depth: 20.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 1006126216
Layer: 1
Color: 2
General Color: GREY
Mat1: 01
Most Common Material: FILL
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0

Formation End Depth:	4.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1006126227
Layer:	3
Plug From:	9.0
Plug To:	20.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1006126226
Layer:	2
Plug From:	0.5
Plug To:	9.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1006126225
Layer:	1
Plug From:	0.0
Plug To:	0.5
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1006126224
Method Construction Code:	5
Method Construction:	Air Percussion
Other Method Construction:	DIRECT PUSH

Pipe Information

Pipe ID:	1006126215
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1006126220
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	10.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1006126221

Layer:	1
Slot:	10
Screen Top Depth:	10.0
Screen End Depth:	20.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.25

Water Details

Water ID:	1006126219
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1006126218
Diameter:	
Depth From:	0.0
Depth To:	20.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	1006016616	Tag No:	A197868
Depth M:	6.096	Contractor:	7241
Year Completed:	2016	Path:	726\7263650.pdf
Well Completed Dt:	2016/04/23	Latitude:	43.4581211141711
Audit No:	Z231454	Longitude:	-79.6820242787988

---

76 | 1 of 1 | WNW/242.7 | 102.8 / -1.05 | SUNOCO
155 NORTH SERVICE ROAD SERVICE STATION
OAKVILLE TOWN ON | SPL

Ref No:	96915	Contaminant Qty:	
Site No:		Nature of Damage:	
Incident Dt:	3/1/1994	Discharger Report:	
Year:		Material Group:	
Incident Cause:	PIPE/HOSE LEAK	Health/Env Conseq:	
Incident Event:		Agency Involved:	
Environment Impact:	POSSIBLE	Site Lot:	
Nature of Impact:	Soil contamination	Site Conc:	
MOE Response:		Site Geo Ref Accu:	
Dt MOE Arvl on Scn:		Site Map Datum:	
MOE Reported Dt:	3/1/1994	Northing:	
Dt Document Closed:		Easting:	
Municipality No:	14403		
System Facility Address:			
Client Type:			
Call Report Location Geodata:			
Contaminant Code:			
Contaminant Name:			
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:	LAND		
Receiving Environment:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Incident Reason:	EQUIPMENT FAILURE
Incident Summary:	SUNOCO-20 L GASOLINE TO GROUND FROM FAILED PIPE DURING PRESSURE TEST.
Site Region:	
Site Municipality:	OAKVILLE TOWN
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	
SAC Action Class:	
Source Type:	
Site County/District:	
Site Geo Ref Meth:	
Site District Office:	
Nearest Watercourse:	
Site Name:	
Site Address:	

77	1 of 2	SSW/245.9	105.8 / 1.94	OAKVILLE HYDRO-ELECTRIC COMMISSION29-491 539 LYONS LANE C/O 2350 TRAFALGAR ROAD OAKVILLE ON L6J 5E3	GEN

Generator No:	ON0552804
SIC Code:	4911
SIC Description:	ELECT. POWER SYS.
Approval Years:	92,93,94,95,96,97,98
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES

77	2 of 2	SSW/245.9	105.8 / 1.94	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC 539 LYON'S LANE OAKVILLE ON	GEN

Generator No:	ON9575839
SIC Code:	221122
SIC Description:	Electric Power Distribution
Approval Years:	06
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 243
Waste Class Name: PCB'S

---

78 **1 of 1** **SSE/247.1** **100.1 / -3.77** **Canadian National Railroad** **GEN**
501 Lyons lane
Oakville ON L6J 0A1

Generator No: ON9225121
SIC Code: 210250
SIC Description:
Approval Years: 2009
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

---

79 **1 of 1** **NE/247.9** **103.1 / -0.78** **ON** **WWIS**

Well ID: 7376602
Construction Date:
Use 1st:
Use 2nd:
Final Well Status:
Water Type:
Casing Material:
Audit No: C49404
Tag: A290707
Constructn Method:
Elevation (m):
Elevatn Reliability:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: OAKVILLE TOWN
Site Info:

Flowing (Y/N):
Flow Rate:
Data Entry Status: Yes
Data Src:
Date Received: 31-Dec-2020 00:00:00
Selected Flag: TRUE
Abandonment Rec:
Contractor: 7215
Form Version: 8
Owner:
County: HALTON
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Bore Hole ID:	1008558437	Elevation:	
DP2BR:		Elevrc:	
Spatial Status:		Zone:	17
Code OB:		East83:	606612.00
Code OB Desc:		North83:	4812655.00
Open Hole:		Org CS:	UTM83
Cluster Kind:		UTMRC:	4
Date Completed:	13-Aug-2020 00:00:00	UTMRC Desc:	margin of error : 30 m - 100 m
Remarks:		Location Method:	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Links

Bore Hole ID:	1008558437	Tag No:	A290707
Depth M:		Contractor:	7215
Year Completed:	2020	Path:	
Well Completed Dt:	2020/08/13	Latitude:	43.4583120075637
Audit No:	C49404	Longitude:	-79.6821808218347

80 | 1 of 1 | SW/251.5 | 105.1 / 1.24 | 105, 111, 117, 125 Cross Avenue Oakville ON | EHS

Order No:	20091027005	Nearest Intersection:	Lyons Lane and Cross ave
Status:	C	Municipality:	
Report Type:	Custom Report	Client Prov/State:	ON
Report Date:	10/30/2009	Search Radius (km):	0.25
Date Received:	10/27/2009	X:	-79.687012
Previous Site Name:		Y:	43.454205
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Sire Plans		

81 | 1 of 1 | W/256.9 | 101.0 / -2.88 | lot 14 con 3 ON | WWIS

Well ID:	2802422	Flowing (Y/N):	
Construction Date:		Flow Rate:	
Use 1st:	Industrial	Data Entry Status:	
Use 2nd:	0	Data Src:	1
Final Well Status:	Water Supply	Date Received:	21-Nov-1949 00:00:00
Water Type:		Selected Flag:	TRUE
Casing Material:		Abandonment Rec:	
Audit No:		Contractor:	2613
Tag:		Form Version:	1
Constructn Method:		Owner:	
Elevation (m):		County:	HALTON
Elevatn Reliabilty:		Lot:	014
Depth to Bedrock:		Concession:	03
Well Depth:		Concession Name:	DS S
Overburden/Bedrock:		Easting NAD83:	
Pump Rate:		Northing NAD83:	
Static Water Level:		Zone:	
Clear/Cloudy:		UTM Reliability:	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/280\2802422.pdf

Additional Detail(s) (Map)

Well Completed Date: 1948/07/21
Year Completed: 1948
Depth (m): 12.192
Latitude: 43.4563015962397
Longitude: -79.6890152702976
Path: 280\2802422.pdf

Bore Hole Information

Bore Hole ID: 10148972
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind:
Date Completed: 21-Jul-1948 00:00:00
Remarks:
Loc Method Desc: Original Pre1985 UTM Rel Code 9: unknown UTM
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606062.60
North83: 4812323.00
Org CS:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: p9

Overburden and Bedrock Materials Interval

Formation ID: 931428497
Layer: 2
Color: 7
General Color: RED
Mat1: 17
Most Common Material: SHALE
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 11.0
Formation End Depth: 40.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931428496
Layer: 1
Color: 7
General Color: RED
Mat1: 05
Most Common Material: CLAY
Mat2: 12
Mat2 Desc: STONES
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 11.0

Formation End Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	962802422
Method Construction Code:	1
Method Construction:	Cable Tool
Other Method Construction:	

Pipe Information

Pipe ID:	10697542
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930253509
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	
Depth To:	11.0
Casing Diameter:	6.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Casing

Casing ID:	930253510
Layer:	2
Material:	4
Open Hole or Material:	OPEN HOLE
Depth From:	
Depth To:	40.0
Casing Diameter:	6.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Results of Well Yield Testing

Pumping Test Method Desc:	PUMP
Pump Test ID:	992802422
Pump Set At:	
Static Level:	16.0
Final Level After Pumping:	20.0
Recommended Pump Depth:	
Pumping Rate:	20.0
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	1
Pumping Duration HR:	1
Pumping Duration MIN:	0
Flowing:	No

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Water Details

Water ID:	933604501
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	40.0
Water Found Depth UOM:	ft

Links

Bore Hole ID:	10148972	Tag No:	
Depth M:	12.192	Contractor:	2613
Year Completed:	1948	Path:	280\2802422.pdf
Well Completed Dt:	1948/07/21	Latitude:	43.4563015962397
Audit No:		Longitude:	-79.6890152702976

---

82 1 of 17 | WSW/264.3 | 102.8 / -1.05 | **HOME DEPOT OD CANADA INC. STORE #7157**
99 CROSS AVE
OAKVILLE ON L6J2W7 | PES

Detail Licence No:	23-01-12262-0	Operator Box:	
Licence No:	12262	Operator Class:	
Status:		Operator No:	
Approval Date:		Operator Type:	
Report Source:	Legacy Licenses (Excluding TS)	Oper Area Code:	905
Licence Type:	Limited Vendor	Oper Phone No:	8155000
Licence Type Code:	23	Operator Ext:	
Licence Class:	01	Operator Lot:	
Licence Control:	0	Oper Concession:	
Latitude:		Operator Region:	3
Longitude:		Operator District:	
Lot:		Operator County:	28
Concession:		Op Municipality:	
Region:	3	Post Office Box:	
District:		MOE District:	
County:	28	SWP Area Name:	
Trade Name:			
PDF URL:			

---

82 2 of 17 | WSW/264.3 | 102.8 / -1.05 | **The Home Depot**
99 Cross Avenue
Oakville ON L6J 2W7 | GEN

Generator No:	ON4389477
SIC Code:	
SIC Description:	
Approval Years:	02,03,04,05,06,07,08
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	269
Waste Class Name:	NON-HALOGENATED PESTICIDES

Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	221
Waste Class Name:	LIGHT FUELS
Waste Class:	242
Waste Class Name:	HALOGENATED PESTICIDES
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	263
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	147
Waste Class Name:	CHEMICAL FERTILIZER WASTES
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS

82 | **3 of 17** | **WSW/264.3** | **102.8 / -1.05** | **HOME DEPOT OD CANADA INC. STORE #7157**
99 CROSS AVE
OAKVILLE ON L6J 2W7 | **PES**

Detail Licence No:		Operator Box:	
Licence No:		Operator Class:	
Status:		Operator No:	
Approval Date:		Operator Type:	
Report Source:		Oper Area Code:	
Licence Type:	Vendor	Oper Phone No:	
Licence Type Code:		Operator Ext:	
Licence Class:		Operator Lot:	
Licence Control:		Oper Concession:	
Latitude:		Operator Region:	
Longitude:		Operator District:	
Lot:		Operator County:	
Concession:		Op Municipality:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Region:
District:
County:
Trade Name:
PDF URL:

Post Office Box:
MOE District:
SWP Area Name:

---

82 | 4 of 17 | WSW/264.3 | 102.8 / -1.05 | The Home Depot
99 Cross Avenue
Oakville ON L6J 2W7 | GEN

Generator No: ON4389477
SIC Code: 452999
SIC Description: All Other Miscellaneous General Merchandise Stores
Approval Years: 2009
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 147
Waste Class Name: CHEMICAL FERTILIZER WASTES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 221
Waste Class Name: LIGHT FUELS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 242
Waste Class Name: HALOGENATED PESTICIDES

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

---

82 **5 of 17** **WSW/264.3** **102.8 / -1.05** **The Home Depot**
99 Cross Avenue
Oakville ON L6J 2W7 **GEN**

Generator No: ON4389477
SIC Code: 452999
SIC Description: All Other Miscellaneous General Merchandise Stores
Approval Years: 2010
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 242
Waste Class Name: HALOGENATED PESTICIDES

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 147
Waste Class Name: CHEMICAL FERTILIZER WASTES

Waste Class: 221
Waste Class Name: LIGHT FUELS

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

---

82 | **6 of 17** | **WSW/264.3** | **102.8 / -1.05** | **The Home Depot**
99 Cross Avenue
Oakville ON L6J 2W7 | **GEN**

Generator No: ON4389477
SIC Code: 452999
SIC Description: All Other Miscellaneous General Merchandise Stores
Approval Years: 2011
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 221
Waste Class Name: LIGHT FUELS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class:	147
Waste Class Name:	CHEMICAL FERTILIZER WASTES
Waste Class:	242
Waste Class Name:	HALOGENATED PESTICIDES
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS

82 | 7 of 17 | WSW/264.3 | 102.8 / -1.05 | **The Home Depot # 7157**
99 Cross Avenue
Oakville ON L6J 2W7 | GEN

Generator No:	ON4389477
SIC Code:	416390, 416320, 416330
SIC Description:	Other Specialty-Line Building Supplies Wholesaler-Distributors, Lumber Plywood and Millwork Wholesaler-Distributors, Hardware Wholesaler-Distributors
Approval Years:	2012
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	269
Waste Class Name:	NON-HALOGENATED PESTICIDES
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	242
Waste Class Name:	HALOGENATED PESTICIDES
Waste Class:	147
Waste Class Name:	CHEMICAL FERTILIZER WASTES
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	112

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	263
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	221
Waste Class Name:	LIGHT FUELS
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES

82 **8 of 17** **WSW/264.3** **102.8 / -1.05** **The Home Depot # 7157**
99 Cross Avenue
Oakville ON
GEN

Generator No:	ON4389477
SIC Code:	416390, 416320, 416330
SIC Description:	OTHER SPECIALTY-LINE BUILDING SUPPLIES WHOLESALER-DISTRIBUTORS, LUMBER, PLYWOOD AND MILLWORK WHOLESALER-DISTRIBUTORS, HARDWARE WHOLESALER-DISTRIBUTORS
Approval Years:	2013
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	147
Waste Class Name:	CHEMICAL FERTILIZER WASTES
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	242
Waste Class Name:	HALOGENATED PESTICIDES
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	263
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	269
Waste Class Name:	NON-HALOGENATED PESTICIDES
Waste Class:	221
Waste Class Name:	LIGHT FUELS
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES

B2	9 of 17	WSW/264.3	102.8 / -1.05	**The Home Depot # 7157** **99 Cross Avenue** **Oakville ON L6J 2W7**	GEN

Generator No:	ON4389477
SIC Code:	416390, 416320, 416330
SIC Description:	OTHER SPECIALTY-LINE BUILDING SUPPLIES WHOLESALER-DISTRIBUTORS, LUMBER, PLYWOOD AND MILLWORK WHOLESALER-DISTRIBUTORS, HARDWARE WHOLESALER-DISTRIBUTORS
Approval Years:	2016
PO Box No:	
Country:	Canada
Status:	
Co Admin:	Krista Finlay
Choice of Contact:	CO_ADMIN
Phone No Admin:	9056231367 Ext.
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES

Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	263
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	269
Waste Class Name:	NON-HALOGENATED PESTICIDES
Waste Class:	147
Waste Class Name:	CHEMICAL FERTILIZER WASTES
Waste Class:	242
Waste Class Name:	HALOGENATED PESTICIDES
Waste Class:	221
Waste Class Name:	LIGHT FUELS
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS

82 **10 of 17** **WSW/264.3** **102.8 / -1.05** **The Home Depot # 7157**
99 Cross Avenue
Oakville ON L6J 2W7
GEN

Generator No:	ON4389477
SIC Code:	416390, 416320, 416330
SIC Description:	OTHER SPECIALTY-LINE BUILDING SUPPLIES WHOLESALER-DISTRIBUTORS, LUMBER, PLYWOOD AND MILLWORK WHOLESALER-DISTRIBUTORS, HARDWARE WHOLESALER-DISTRIBUTORS
Approval Years:	2015
PO Box No:	
Country:	Canada
Status:	
Co Admin:	Krista Finlay
Choice of Contact:	CO_ADMIN
Phone No Admin:	9056231367 Ext
Contaminated Facility:	No
MHSW Facility:	No

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Detail(s)

Waste Class: 113
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

Waste Class: 112
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 221
Waste Class Name: LIGHT FUELS

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 147
Waste Class Name: CHEMICAL FERTILIZER WASTES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 146
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 242
Waste Class Name: HALOGENATED PESTICIDES

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

82	11 of 17	WSW/264.3	102.8 / -1.05	The Home Depot # 7157 99 Cross Avenue Oakville ON L6J 2W7	GEN

Generator No: ON4389477
SIC Code: 416390, 416320, 416330
SIC Description: OTHER SPECIALTY-LINE BUILDING SUPPLIES WHOLESALER-DISTRIBUTORS, LUMBER, PLYWOOD AND MILLWORK WHOLESALER-DISTRIBUTORS, HARDWARE WHOLESALER-DISTRIBUTORS
Approval Years: 2014
PO Box No:
Country: Canada
Status:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Co Admin:	Krista Finlay
Choice of Contact:	CO_ADMIN
Phone No Admin:	9056231367 Ext:
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	212
Waste Class Name:	ALIPHATIC SOLVENTS
Waste Class:	148
Waste Class Name:	INORGANIC LABORATORY CHEMICALS
Waste Class:	221
Waste Class Name:	LIGHT FUELS
Waste Class:	147
Waste Class Name:	CHEMICAL FERTILIZER WASTES
Waste Class:	269
Waste Class Name:	NON-HALOGENATED PESTICIDES
Waste Class:	122
Waste Class Name:	ALKALINE WASTES - OTHER METALS
Waste Class:	242
Waste Class Name:	HALOGENATED PESTICIDES
Waste Class:	145
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	263
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	146
Waste Class Name:	OTHER SPECIFIED INORGANICS
Waste Class:	112
Waste Class Name:	ACID WASTE - HEAVY METALS
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	113
Waste Class Name:	ACID WASTE - OTHER METALS
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	251
Waste Class Name:	OIL SKIMMINGS & SLUDGES

82	*12 of 17*	*WSW/264.3*	*102.8 / -1.05*	***HOME DEPOT CANADA, THE # 7157*** ***99 Cross Avenue*** ***Oakville ON L6J 2W7***	***GEN***

Generator No:	ON4389477

SIC Code:	
SIC Description:	
Approval Years:	As of Dec 2018
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	112 C
Waste Class Name:	Acid solutions - containing heavy metals
Waste Class:	113 C
Waste Class Name:	Acid solutions - containing other metals and non-metals
Waste Class:	122 C
Waste Class Name:	Alkaline slutions - containing other metals and non-metals (not cyanide)
Waste Class:	145 I
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	145 L
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	146 T
Waste Class Name:	Other specified inorganic sludges, slurries or solids
Waste Class:	147 T
Waste Class Name:	Chemical fertilizer wastes
Waste Class:	212 I
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	213 I
Waste Class Name:	Petroleum distillates
Waste Class:	221 I
Waste Class Name:	Light fuels
Waste Class:	242 A
Waste Class Name:	Halogenated pesticides and herbicides
Waste Class:	251 L
Waste Class Name:	Waste oils/sludges (petroleum based)
Waste Class:	251 T
Waste Class Name:	Waste oils/sludges (petroleum based)
Waste Class:	252 L
Waste Class Name:	Waste crankcase oils and lubricants
Waste Class:	263 A
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	331 A
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	331 I
Waste Class Name:	Waste compressed gases including cylinders

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
82	13 of 17	WSW/264.3	102.8 / -1.05	HOME DEPOT OD CANADA INC. STORE #7157 99 CROSS AVE OAKVILLE ON L6J2W7	PES

Detail Licence No:		Operator Box:	
Licence No:	18134	Operator Class:	
Status:		Operator No:	
Approval Date:		Operator Type:	
Report Source:	Legacy Licenses (Excluding TS)	Oper Area Code:	905
Licence Type:	Limited Vendor	Oper Phone No:	8155000
Licence Type Code:	23	Operator Ext:	
Licence Class:	01	Operator Lot:	
Licence Control:		Oper Concession:	
Latitude:		Operator Region:	
Longitude:		Operator District:	
Lot:		Operator County:	
Concession:		Op Municipality:	
Region:		Post Office Box:	
District:		MOE District:	
County:		SWP Area Name:	
Trade Name:			
PDF URL:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
82	14 of 17	WSW/264.3	102.8 / -1.05	HOME DEPOT CANADA, THE # 7157 99 Cross Avenue Oakville ON L6J 2W7	GEN

Generator No:	ON4389477
SIC Code:	
SIC Description:	
Approval Years:	As of Jul 2020
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	146 T
Waste Class Name:	Other specified inorganic sludges, slurries or solids
Waste Class:	263 I
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	112 C
Waste Class Name:	Acid solutions - containing heavy metals
Waste Class:	213 I
Waste Class Name:	Petroleum distillates
Waste Class:	145 I
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	147 T
Waste Class Name:	Chemical fertilizer wastes
Waste Class:	331 A
Waste Class Name:	Waste compressed gases including cylinders

Waste Class:	251 T
Waste Class Name:	Waste oils/sludges (petroleum based)
Waste Class:	263 A
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	252 L
Waste Class Name:	Waste crankcase oils and lubricants
Waste Class:	122 C
Waste Class Name:	Alkaline slutions - containing other metals and non-metals (not cyanide)
Waste Class:	251 L
Waste Class Name:	Waste oils/sludges (petroleum based)
Waste Class:	145 L
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	221 I
Waste Class Name:	Light fuels
Waste Class:	212 I
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	242 A
Waste Class Name:	Halogenated pesticides and herbicides
Waste Class:	331 I
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	113 C
Waste Class Name:	Acid solutions - containing other metals and non-metals

82	15 of 17	WSW/264.3	102.8 / -1.05	HOME DEPOT CANADA, THE # 7157 99 Cross Avenue Oakville ON L6J 2W7	GEN

Generator No:	ON4389477
SIC Code:	
SIC Description:	
Approval Years:	As of Nov 2021
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	113 C
Waste Class Name:	Acid solutions - containing other metals and non-metals
Waste Class:	251 L
Waste Class Name:	Waste oils/sludges (petroleum based)
Waste Class:	147 T
Waste Class Name:	Chemical fertilizer wastes
Waste Class:	263 I
Waste Class Name:	Misc. waste organic chemicals

Waste Class:	251 T
Waste Class Name:	Waste oils/sludges (petroleum based)
Waste Class:	122 C
Waste Class Name:	Alkaline slutions - containing other metals and non-metals (not cyanide)
Waste Class:	213 I
Waste Class Name:	Petroleum distillates
Waste Class:	145 L
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	331 A
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	146 T
Waste Class Name:	Other specified inorganic sludges, slurries or solids
Waste Class:	212 I
Waste Class Name:	Aliphatic solvents and residues
Waste Class:	263 A
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	145 I
Waste Class Name:	Wastes from the use of pigments, coatings and paints
Waste Class:	242 A
Waste Class Name:	Halogenated pesticides and herbicides
Waste Class:	252 L
Waste Class Name:	Waste crankcase oils and lubricants
Waste Class:	331 I
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	112 C
Waste Class Name:	Acid solutions - containing heavy metals
Waste Class:	221 I
Waste Class Name:	Light fuels

82 **16 of 17** **WSW/264.3** **102.8 / -1.05** **99 CROSS AVE OAKVILLE ON L6J 2W7** **PES**

Detail Licence No:		**Operator Box:**	
Licence No:	L-232-1166987699	**Operator Class:**	
Status:	Active	**Operator No:**	
Approval Date:	February 25, 2022	**Operator Type:**	
Report Source:	PEST-Limited Vendor	**Oper Area Code:**	
Licence Type:	Limited Vendor	**Oper Phone No:**	
Licence Type Code:		**Operator Ext:**	
Licence Class:		**Operator Lot:**	
Licence Control:		**Oper Concession:**	
Latitude:	43.455	**Operator Region:**	
Longitude:	-79.68833333	**Operator District:**	
Lot:		**Operator County:**	
Concession:		**Op Municipality:**	
Region:		**Post Office Box:**	
District:		**MOE District:**	Halton-Peel
County:		**SWP Area Name:**	Halton
Trade Name:			

PDF URL: http://www.accessenvironment.ene.gov.on.ca/AEWeb/ae/ViewDocument.action?documentRefID=2585106

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
82	17 of 17	WSW/264.3	102.8 / -1.05	HOME DEPOT CANADA, THE # 7157 99 Cross Avenue Oakville ON L6J 2W7	GEN

Generator No: ON4389477
SIC Code:
SIC Description:
Approval Years: As of Oct 2022
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 263 A
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 122 C
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 113 C
Waste Class Name: ACID WASTE - OTHER METALS

Waste Class: 331 A
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 221 I
Waste Class Name: LIGHT FUELS

Waste Class: 213 I
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252 L
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 212 I
Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 251 T
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 147 T
Waste Class Name: CHEMICAL FERTILIZER WASTES

Waste Class: 251 L
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 145 I
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 263 I
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 146 T
Waste Class Name: OTHER SPECIFIED INORGANICS

Waste Class: 145 L
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 242 A
Waste Class Name: HALOGENATED PESTICIDES

Waste Class: 112 C
Waste Class Name: ACID WASTE - HEAVY METALS

Waste Class: 331 I
Waste Class Name: WASTE COMPRESSED GASES

---

83 1 of 11 ESE/270.3 98.9 / -5.03 KEMSAN INC
462 TRAFALGAR RD
OAKVILLE ON L6J 3H9 PRT

Location ID: 10419
Type: private
Expiry Date:
Capacity (L): 0.00
Licence #: 0001068896

---

83 2 of 11 ESE/270.3 98.9 / -5.03 KEMSAN INC.
462 TRAFALGAR ROAD
OAKVILLE ON L6J 3H9 PES

Detail Licence No:
Licence No:
Status:
Approval Date:
Report Source:
Licence Type: Vendor
Licence Type Code:
Licence Class:
Licence Control:
Latitude:
Longitude:
Lot:
Concession:
Region:
District:
County:
Trade Name:
PDF URL:

Operator Box:
Operator Class:
Operator No:
Operator Type:
Oper Area Code:
Oper Phone No:
Operator Ext:
Operator Lot:
Oper Concession:
Operator Region:
Operator District:
Operator County:
Op Municipality:
Post Office Box:
MOE District:
SWP Area Name:

---

83 3 of 11 ESE/270.3 98.9 / -5.03 KEMSAN INC
462 TRAFALGAR RD. P.O. BOX 727
OAKVILLE ON L6J 3H9 GEN

Generator No: ON0108100
SIC Code: 3799
SIC Description: OTHER CHEM. PROD.
Approval Years: 86,87,88
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

---

83 *4 of 11* | *ESE/270.3* | *98.9 / -5.03* | ***KEMSAN INC.***
462 TRAFALGAR RD. P.O. BOX 727
OAKVILLE ON L6J 3H9 | ***GEN***

Generator No: ON0108100
SIC Code: 3799
SIC Description: OTHER CHEM. PROD.
Approval Years: 89,90
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

---

83 *5 of 11* | *ESE/270.3* | *98.9 / -5.03* | ***KEMSAN (OUT OF BUS) 23-003***
462 TRAFALGAR RD. P.O. BOX 727
OAKVILLE ON L6J 3H9 | ***GEN***

Generator No: ON0108100
SIC Code: 3799
SIC Description: OTHER CHEM. PROD.
Approval Years: 92,93,94,95,96,97
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

---

83 *6 of 11* | *ESE/270.3* | *98.9 / -5.03* | ***KEMSAN (OUT OF BUS)***
462 TRAFALGAR ROAD
OAKVILLE ON L6J 3H9 | ***GEN***

Generator No: ON0108100
SIC Code: 3799
SIC Description: OTHER CHEM. PROD.
Approval Years: 98

PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 241
Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 269
Waste Class Name: NON-HALOGENATED PESTICIDES

---

83 **7 of 11** **ESE/270.3** **98.9 / -5.03** **KEMSAN INC**
462 TRAFALGAR RD
OAKVILLE ON **DTNK**

Delisted Expired Fuel Safety Facilities

Instance No: 9448589
Status: EXPIRED
Instance ID: 383543
Instance Type: FS Facility
Instance Creation Dt:
Instance Install Dt:
Item Description:
Manufacturer:
Model:
Serial No:
ULC Standard:
Quantity:
Unit of Measure:
Overfill Prot Type:
Creation Date:
Next Periodic Str DT:
TSSA Base Sched Cycle 2:
TSSAMax Hazard Rank 1:
TSSA Risk Based Periodic Yn:
TSSA Volume of Directives:
TSSA Periodic Exempt:
TSSA Statutory Interval:
TSSA Recd Insp Interva:
TSSA Recd Tolerance:
TSSA Program Area:
TSSA Program Area 2:
Description: Fuels Safety Private Fuel Outlet - Self Serve
Original Source: EXP
Record Date: Up to Mar 2012

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:
Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source:

---

83 **8 of 11** **ESE/270.3** **98.9 / -5.03** **KEMSAN INC**
462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA
ON **DTNK**

Delisted Expired Fuel Safety Facilities

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Instance No: 10888907
Status: EXPIRED
Instance ID:

Instance Type:
Instance Creation Dt: 11/20/1992
Instance Install Dt: 11/20/1992
Item Description: FS Liquid Fuel Tank
Manufacturer: NULL
Model: NULL
Serial No: NULL
ULC Standard: NULL
Quantity: 1
Unit of Measure: EA
Overfill Prot Type: NULL
Creation Date: 7/5/2009 1:21:56 AM
Next Periodic Str DT: NULL
TSSA Base Sched Cycle 2: NULL
TSSAMax Hazard Rank 1: NULL
TSSA Risk Based Periodic Yn: NULL
TSSA Volume of Directives: NULL
TSSA Periodic Exempt: NULL
TSSA Statutory Interval: NULL
TSSA Recd Insp Interva: NULL
TSSA Recd Tolerance: NULL
TSSA Program Area: NULL
TSSA Program Area 2: NULL
Description: UNDERGROUND TANK
Original Source: EXP
Record Date: 31-JUL-2020

Expired Date:
Max Hazard Rank: NULL
Facility Location: 462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA
Facility Type: FS LIQUID FUEL TANK
Fuel Type 2: NULL
Fuel Type 3: NULL
Panam Related: NULL
Panam Venue Nm: NULL
External Identifier: NULL
Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source: FS Liquid Fuel Tank

83	9 of 11	ESE/270.3	98.9 / -5.03	KEMSAN INC 462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No: 10888916
Status: EXPIRED
Instance ID:

Instance Type:
Instance Creation Dt: 11/20/1992
Instance Install Dt: 11/20/1992
Item Description: FS Liquid Fuel Tank
Manufacturer: NULL
Model: NULL
Serial No: NULL
ULC Standard: NULL
Quantity: 1
Unit of Measure: EA
Overfill Prot Type: NULL
Creation Date: 7/5/2009 1:22:03 AM
Next Periodic Str DT: NULL
TSSA Base Sched Cycle 2: NULL
TSSAMax Hazard Rank 1: NULL
TSSA Risk Based Periodic Yn: NULL
TSSA Volume of Directives: NULL
TSSA Periodic Exempt: NULL
TSSA Statutory Interval: NULL
TSSA Recd Insp Interva: NULL

Expired Date:
Max Hazard Rank: NULL
Facility Location: 462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA
Facility Type: FS LIQUID FUEL TANK
Fuel Type 2: NULL
Fuel Type 3: NULL
Panam Related: NULL
Panam Venue Nm: NULL
External Identifier: NULL
Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source: FS Liquid Fuel Tank

TSSA Recd Tolerance:	NULL
TSSA Program Area:	NULL
TSSA Program Area 2:	NULL
Description:	UNDERGROUND TANK
Original Source:	EXP
Record Date:	31-JUL-2020

---

83 | **10 of 11** | **ESE/270.3** | **98.9 / -5.03** | **KEMSAN INC**
462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA
ON | **FST**

Instance No:	10888907	Manufacturer:	
Status:		Serial No:	
Cont Name:		Ulc Standard:	
Instance Type:		Quantity:	
Item:		Unit of Measure:	
Item Description:	FS Liquid Fuel Tank	Fuel Type:	Gasoline
Tank Type:	Liquid Fuel Single Wall UST	Fuel Type2:	NULL
Install Date:	11/20/1992	Fuel Type3:	NULL
Install Year:	1972	Piping Steel:	
Years In Service:		Piping Galvanized:	
Model:	NULL	Tanks Single Wall St:	
Description:		Piping Underground:	
Capacity:	7000	No Underground:	
Tank Material:	Steel	Panam Related:	
Corrosion Protect:	Coating	Panam Venue:	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:			
Facility Location:			
Device Installed Location:	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA		

Liquid Fuel Tank Details

Overfill Protection:	
Owner Account Name:	KEMSAN INC
Item:	FS LIQUID FUEL TANK

---

83 | **11 of 11** | **ESE/270.3** | **98.9 / -5.03** | **KEMSAN INC**
462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA
ON | **FST**

Instance No:	10888916	Manufacturer:	
Status:		Serial No:	
Cont Name:		Ulc Standard:	
Instance Type:		Quantity:	
Item:		Unit of Measure:	
Item Description:	FS Liquid Fuel Tank	Fuel Type:	Gasoline
Tank Type:	Liquid Fuel Single Wall UST	Fuel Type2:	NULL
Install Date:	11/20/1992	Fuel Type3:	NULL
Install Year:	1972	Piping Steel:	
Years In Service:		Piping Galvanized:	
Model:	NULL	Tanks Single Wall St:	
Description:		Piping Underground:	
Capacity:	3000	No Underground:	
Tank Material:	Steel	Panam Related:	
Corrosion Protect:	Coating	Panam Venue:	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:			
Facility Location:			
Device Installed Location:	462 TRAFALGAR RD OAKVILLE L6J 3H9 ON CA		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: KEMSAN INC
Item: FS LIQUID FUEL TANK

---

84 *1 of 13* *E/275.1* *98.7 / -5.22* ***485 Trafalger Rd Oakville ON*** ***EHS***

Order No: 20031111025
Status: C
Report Type: Basic Report
Report Date: 11/20/03
Date Received: 11/11/03
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans and/or Inspection Reports

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): 0.30
X: -79.679986
Y: 43.456322

---

84 *2 of 13* *E/275.1* *98.7 / -5.22* ***MAIN LUMBER CO 485 TRAFALGAR ROAD OAKVILLE ON L6J 4Z5*** ***GEN***

Generator No: ON1308100
SIC Code: 5993
SIC Description: FOREST PROD., WH.
Approval Years: 92,93,97,98
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

---

84 *3 of 13* *E/275.1* *98.7 / -5.22* ***MAIN LUMBER CO. 27-741 485 TRAFALGAR RD. P.O. BOX 68 OAKVILLE ON L6J 3J1*** ***GEN***

Generator No: ON1308100
SIC Code: 5993
SIC Description: FOREST PROD., WH.
Approval Years: 94,95,96
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
84	4 of 13	E/275.1	98.7 / -5.22	MAIN LUMBER CO. 485 TRAFALGAR ROAD OAKVILLE ON L6J 4Z5	GEN

Generator No: ON1308100
SIC Code: 5993
SIC Description: FOREST PROD., WH.
Approval Years: 99,00,01
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
84	5 of 13	E/275.1	98.7 / -5.22	485 Trafalgar Road Oakville ON L6J 3J1	EHS

Order No: 20050810052
Status: C
Report Type: Complete Report
Report Date: 8/19/2005
Date Received: 8/10/2005
Previous Site Name:
Lot/Building Size: Site approx. 3 acres
Additional Info Ordered:

Nearest Intersection: Trafalgar Road and Cornwall Road
Municipality: Halton
Client Prov/State: ON
Search Radius (km): 0.25
X: -79.680078
Y: 43.456297

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
84	6 of 13	E/275.1	98.7 / -5.22	485 TRAFALGAR RD OAKVILLE ON	WWIS

Well ID: 2810392
Construction Date:
Use 1st:
Use 2nd:
Final Well Status: Observation Wells
Water Type:
Casing Material:
Audit No: Z35444
Tag: A031711
Constructn Method:
Elevation (m):
Elevatn Reliabilty:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: OAKVILLE TOWN
Site Info:

Flowing (Y/N):
Flow Rate:
Data Entry Status:
Data Src:
Date Received: 24-Oct-2005 00:00:00
Selected Flag: TRUE
Abandonment Rec:
Contractor: 6607
Form Version: 3
Owner:
County: HALTON
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/281\2810392.pdf

Additional Detail(s) (Map)

Well Completed Date:	2005/09/20
Year Completed:	2005
Depth (m):	4.5
Latitude:	43.4565403920923
Longitude:	-79.6800315099415
Path:	281\2810392.pdf

Bore Hole Information

Bore Hole ID:	11319347	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	606789.00
Code OB Desc:		***North83:***	4812361.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	20-Sep-2005 00:00:00	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	933007689
Layer:	3
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	28
Mat2 Desc:	SAND
Mat3:	
Mat3 Desc:	
Formation Top Depth:	1.7999999523162842
Formation End Depth:	3.0
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	933007688
Layer:	2
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	06
Mat2 Desc:	SILT
Mat3:	01
Mat3 Desc:	FILL
Formation Top Depth:	1.2000000476837158
Formation End Depth:	1.7999999523162842
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	933007690
Layer:	4
Color:	2
General Color:	GREY
Mat1:	17
Most Common Material:	SHALE
Mat2:	92
Mat2 Desc:	WEATHERED
Mat3:	
Mat3 Desc:	
Formation Top Depth:	3.0
Formation End Depth:	4.5
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	933007687
Layer:	1
Color:	8
General Color:	BLACK
Mat1:	28
Most Common Material:	SAND
Mat2:	06
Mat2 Desc:	SILT
Mat3:	01
Mat3 Desc:	FILL
Formation Top Depth:	0.0
Formation End Depth:	1.2000000476837158
Formation End Depth UOM:	m

Annular Space/Abandonment Sealing Record

Plug ID:	933279461
Layer:	1
Plug From:	0.0
Plug To:	1.2000000476837158
Plug Depth UOM:	m

Method of Construction & Well Use

Method Construction ID:	962810392
Method Construction Code:	6
Method Construction:	Boring
Other Method Construction:	

Pipe Information

Pipe ID:	11334202
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930860350
Layer:	1

Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	1.5
Casing Diameter:	5.099999904632568
Casing Diameter UOM:	cm
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	933415185
Layer:	1
Slot:	10
Screen Top Depth:	1.5
Screen End Depth:	4.5
Screen Material:	5
Screen Depth UOM:	m
Screen Diameter UOM:	cm
Screen Diameter:	6.400000095367432

Water Details

Water ID:	934066551
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	3.9000000953674316
Water Found Depth UOM:	m

Hole Diameter

Hole ID:	11537936
Diameter:	21.0
Depth From:	0.0
Depth To:	4.5
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Links

Bore Hole ID:	11319347	**Tag No:**	A031711
Depth M:	4.5	**Contractor:**	6607
Year Completed:	2005	**Path:**	281\2810392.pdf
Well Completed Dt:	2005/09/20	**Latitude:**	43.4565403920923
Audit No:	Z35444	**Longitude:**	-79.6800315099415

---

84 | 7 of 13 | E/275.1 | 98.7 / -5.22 | **FCHT Holdings (Ontario) Corporation**
No municipal address, Oakville, Ontario
Oakville ON | RSC

RSC ID:	45594	**Cert Date:**	6-May-08
RA No:		**Cert Prop Use No:**	No CPU
RSC Type:		**Intended Prop Use:**	Commercial
Curr Property Use:	Commercial	**Qual Person Name:**	Jodi Shpigel
Ministry District:	OAKVILLE	**Stratified (Y/N):**	
Filing Date:	29-Oct-08	**Audit (Y/N):**	
Date Ack:		**Entire Leg Prop. (Y/N):**	No
Date Returned:		**Accuracy Estimate:**	21 to 100 meters
Restoration Type:		**Telephone:**	416-5044114
Soil Type:		**Fax:**	416-9411655
Criteria:		**Email:**	jodi.shpigel@firstcapitalrealty.ca
CPU Issued Sect	No		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

1686:
Asmt Roll No: 2401-040-060-12700-0000
Prop ID No (PIN): 24806-0343 LT
Property Municipal Address: No municipal address, Oakville, Ontario
Mailing Address: Suite 400, 85 HANNA AVE, TORONTO, ON, M6K 3S3
Latitude & Latitude: 43.45627480N 79.68042050W (converted from UTM)
UTM Coordinates: NAD83 17-606758-4812331
Consultant:
Legal Desc: Entire Property: PT LT 13, CON 3, SDS, TRAF, PARTS 1 AND 2, 20R12464; OAKVILLE and PT LT 121, PL 127, AS IN 497758, S/T 101633, 491003; PT LT 2, PL 131, AS IN 497758, EXCEPT PTS 58, 62 & 66, 20R5105; LT 1, PL 131, S/T & T/W 497758; EXCEPT PT 54, 20R5105; OAKVILLE RSC Property: Part of Lot 13, Concession 3, South of Dundas Street, Geographic Township of Trafalgar, now Town of Oakville, Regional Municipality of Halton designated as Part 2 on Plan 20R17925 being part of PIN 24806-0343 (LT).
Measurement Method: Digitized from a map
Applicable Standards: Background Site Conditions Standard, with Potable Ground Water, Medium/Fine Textured Soil, for Industrial/Commercial/Community property use
RSC PDF:

84	8 of 13	E/275.1	98.7 / -5.22	FCHT Holdings (Ontario) Corporation 485 Trafalgar Road, Oakville, Ontario L6T 3J1, and lands with no municipal addre ON L6J 3J1	RSC

RSC ID: 45591
RA No:
RSC Type:
Curr Property Use: Commercial
Ministry District: OAKVILLE
Filing Date: 29-Oct-08
Date Ack:
Date Returned:
Restoration Type:
Soil Type:
Criteria:
CPU Issued Sect 1686: No
Cert Date: 6-May-08
Cert Prop Use No: No CPU
Intended Prop Use: Commercial
Qual Person Name: Jodi Shpigel
Stratified (Y/N):
Audit (Y/N):
Entire Leg Prop. (Y/N): No
Accuracy Estimate: 21 to 100 meters
Telephone: 416-5044114
Fax: 416-9411655
Email: jodi.shpigel@firstcapitalrealty.ca
Asmt Roll No: 2401-040-060-17800-0000 (PIN 24806-0343 LT) and 2401-040-060-12700-0000 (PIN 24806-0325 LT)
Prop ID No (PIN): 24806-0343 LT and 24806-0325 LT
Property Municipal Address: 485 Trafalgar Road, Oakville, Ontario L6T 3J1, and lands with no municipal address, Oakville, Ontario
Mailing Address: Suite 400, 85 HANNA AVE, TORONTO, ON, M6K 3S3
Latitude & Latitude: 43.45627480N 79.68042050W (converted from UTM)
UTM Coordinates: NAD83 17-606758-4812331
Consultant:
Legal Desc: Entire Property: PT LT 13, CON 3, SDS, TRAF, PARTS 1 AND 2, 20R12464; OAKVILLE and PT LT 121, PL 127, AS IN 497758, S/T 101633, 491003; PT LT 2, PL 131, AS IN 497758, EXCEPT PTS 58, 62 & 66, 20R5105; LT 1, PL 131, S/T & T/W 497758; EXCEPT PT 54, 20R5105; OAKVILLE RSC Property: Part of Lot 13, Concession 3, South of Dundas Street, Geographic Township of Trafalgar, now Town of Oakville, Regional Municipality of Halton designated as Part 1 on Plan 20R17925 being part of PIN 24806-0343 (LT) and Part of Lot 121, Plan 127 as in 497758, subject to 101633 and 491003; Part of Lot 2, Plan 131 as in 497758 except Parts 58, 62 and 66 Plan 20R5105; Lot 1, Plan 131, except Part 54, Plan 20R5105, subject to and together with 497758, Geographic Township of Trafalgar, now Town of Oakville, Regional Municipality of Halton being all of PIN 24806-0325 (LT).
Measurement Method: Digitized from a map
Applicable Standards: Full Depth Site Conditions Standard, with Potable Ground Water, Medium/Fine Textured Soil, for Industrial/Commercial/Community property use
RSC PDF:

84	9 of 13	E/275.1	98.7 / -5.22	West Marine 485 Trafalger Road Oakville ON	GEN

Generator No: ON7064469
SIC Code: 441310
SIC Description: AUTOMOTIVE PARTS AND ACCESSORIES STORES
Approval Years: 2013
PO Box No:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 232
Waste Class Name: POLYMERIC RESINS

Waste Class: 266
Waste Class Name: AMINES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
84	10 of 13	E/275.1	98.7 / -5.22	***West Marine*** ***485 Trafalger Road*** ***Oakville ON L6J 3J1***	GEN

Generator No: ON7064469
SIC Code: 441310
SIC Description: AUTOMOTIVE PARTS AND ACCESSORIES STORES
Approval Years: 2016
PO Box No:
Country: Canada
Status:
Co Admin: Mark Hadley
Choice of Contact: CO_OFFICIAL
Phone No Admin: 831-761-6836 Ext.
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 232
Waste Class Name: POLYMERIC RESINS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 268
Waste Class Name: AMINES

---

84 | **11 of 13** | **E/275.1** | **98.7 / -5.22** | **West Marine**
485 Trafalger Road
Oakville ON L6J 3J1 | **GEN**

Generator No: ON7064469
SIC Code: 441310
SIC Description: AUTOMOTIVE PARTS AND ACCESSORIES STORES
Approval Years: 2015
PO Box No:
Country: Canada
Status:
Co Admin: Mark Hadley
Choice of Contact: CO_OFFICIAL
Phone No Admin: 831-761-6836 Ext.
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 148
Waste Class Name: INORGANIC LABORATORY CHEMICALS

Waste Class: 263
Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 232
Waste Class Name: POLYMERIC RESINS

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Waste Class: 268
Waste Class Name: AMINES

Waste Class: 145
Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 331
Waste Class Name: WASTE COMPRESSED GASES

---

84 | **12 of 13** | **E/275.1** | **98.7 / -5.22** | **West Marine**
485 Trafalger Road
Oakville ON L6J 3J1 | **GEN**

Generator No: ON7064469
SIC Code: 441310
SIC Description: AUTOMOTIVE PARTS AND ACCESSORIES STORES
Approval Years: 2014
PO Box No:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Country:	Canada
Status:	
Co Admin:	Mark Hadley
Choice of Contact:	CO_OFFICIAL
Phone No Admin:	831-761-6836 Ext.
Contaminated Facility:	No
MHSW Facility:	No

Detail(s)

Waste Class:	268
Waste Class Name:	AMINES
Waste Class:	331
Waste Class Name:	WASTE COMPRESSED GASES
Waste Class:	263
Waste Class Name:	ORGANIC LABORATORY CHEMICALS
Waste Class:	211
Waste Class Name:	AROMATIC SOLVENTS
Waste Class:	232
Waste Class Name:	POLYMERIC RESINS
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS
Waste Class:	146
Waste Class Name:	PAINT/PIGMENT/COATING RESIDUES

84	13 of 13	E/275.1	98.7 / -5.22	**West Marine** **485 Trafalger Road** **Oakville ON L6J 3J1**	GEN

Generator No:	ON7064469
SIC Code:	
SIC Description:	
Approval Years:	As of Dec 2017
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	232 L
Waste Class Name:	Polymeric resins
Waste Class:	331 I
Waste Class Name:	Waste compressed gases including cylinders
Waste Class:	263 L
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	263 C
Waste Class Name:	Misc. waste organic chemicals
Waste Class:	211 I

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Name: Aromatic solvents and residues

Waste Class: 148 C
Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 145 I
Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 268 C
Waste Class Name: Amines

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 263 I
Waste Class Name: Misc. waste organic chemicals

85	1 of 3	SW/275.6	105.8 / 1.95	LECLAIR FUELS LTD. CROSS AVENUE AND LYONS LANE TANK TRUCK (CARGO) OAKVILLE TOWN ON	SPL

Ref No: 17430
Site No:
Incident Dt: 4/14/1989
Year:
Incident Cause: OTHER TRANSPORTATION ACCIDENT
Incident Event:
Environment Impact: NOT ANTICIPATED
Nature of Impact:
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 4/14/1989
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: DAMAGE BY MOVING EQUIPMENT
Incident Summary: BACKENTRY-DUMP TRUCK - 10 LITRES HYDRAULIC OILTO GROUND.
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved: F.D. HALTON REGION
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
85	2 of 3	SW/275.6	105.8 / 1.95	Cross Avenue, Lyons Lane Oakville ON	CA

Certificate #: 7196-53DLBL
Application Year: 01
Issue Date: 10/30/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name: The Corporation of the Regional Municipality of Halton
Client Address: 1151 Bronte Road
Client City: Oakville
Client Postal Code: L6M 3L1
Project Description: Installation of Sanitary Sewers
Contaminants:
Emission Control:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
85	3 of 3	SW/275.6	105.8 / 1.95	The Regional Municipality of Halton Cross Avenue, Lyons Lane Oakville ON L6M 3L1	ECA

Approval No: 7196-53DLBL
Approval Date: 2001-10-30
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name: Halton
MOE District: Halton-Peel
City:
Longitude: -79.8749
Latitude: 43.5252
Geometry X:
Geometry Y:
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Business Name: The Regional Municipality of Halton
Address: Cross Avenue; Lyons Lane
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/0176-525K8Z-14.pdf
PDF Site Location:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
86	1 of 1	ENE/277.5	101.4 / -2.49	547 TRAFALGAR RD Oakville ON	WWIS

Well ID: 7100453
Construction Date:
Use 1st: Monitoring
Use 2nd:
Final Well Status: Observation Wells
Water Type:
Casing Material:
Audit No: M00219
Tag: A050034
Constructn Method:
Elevation (m):
Elevatn Reliablity:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Clear/Cloudy:
Municipality: OAKVILLE TOWN
Site Info:
Flowing (Y/N):
Flow Rate:
Data Entry Status:
Data Src:
Date Received: 08-Jan-2008 00:00:00
Selected Flag: TRUE
Abandonment Rec:
Contractor: 6988
Form Version: 5
Owner:
County: HALTON
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/710\7100453.pdf

Additional Detail(s) (Map)

Well Completed Date: 2007/09/26
Year Completed: 2007
Depth (m): 4.7
Latitude: 43.4575973135981
Longitude: -79.6811086108846
Path: 710\7100453.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/710\7100453.pdf

Additional Detail(s) (Map)

Well Completed Date: 2007/09/26
Year Completed: 2007
Depth (m):
Latitude: 43.4582877350223
Longitude: -79.6816374754632
Path: 710\7100453.pdf

Bore Hole Information

Bore Hole ID: 1000044211
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole: No
Cluster Kind:
Date Completed: 26-Sep-2007 00:00:00
Remarks:
Loc Method Desc: Not Applicable i.e. no UTM
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606700.00
North83: 4812477.00
Org CS:
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 1002634254
Layer: 2
Color: 2
General Color: GREY
Mat1: 28
Most Common Material: SAND
Mat2: 11
Mat2 Desc: GRAVEL
Mat3: 01
Mat3 Desc: FILL
Formation Top Depth: 0.6000000238418579
Formation End Depth: 1.2000000476837158
Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

Formation ID: 1002634257
Layer: 5
Color: 2
General Color: GREY

Mat1:	17
Most Common Material:	SHALE
Mat2:	05
Mat2 Desc:	CLAY
Mat3:	68
Mat3 Desc:	DRY
Formation Top Depth:	3.0
Formation End Depth:	4.699999809265137
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	1002634253
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	05
Mat2 Desc:	CLAY
Mat3:	11
Mat3 Desc:	GRAVEL
Formation Top Depth:	0.0
Formation End Depth:	0.6000000238418579
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	1002634256
Layer:	4
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	06
Mat2 Desc:	SILT
Mat3:	92
Mat3 Desc:	WEATHERED
Formation Top Depth:	1.7999999523162842
Formation End Depth:	3.0
Formation End Depth UOM:	m

Overburden and Bedrock Materials Interval

Formation ID:	1002634255
Layer:	3
Color:	6
General Color:	BROWN
Mat1:	06
Most Common Material:	SILT
Mat2:	05
Mat2 Desc:	CLAY
Mat3:	
Mat3 Desc:	
Formation Top Depth:	1.2000000476837158
Formation End Depth:	1.7999999523162842
Formation End Depth UOM:	m

Annular Space/Abandonment

Sealing Record

Plug ID:	1002634259
Layer:	1
Plug From:	0.0
Plug To:	1.2000000476837158
Plug Depth UOM:	m

Method of Construction & Well Use

Method Construction ID:	1002634264
Method Construction Code:	E
Method Construction:	Auger
Other Method Construction:	

Pipe Information

Pipe ID:	1002634252
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1002634260
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	1.7000000476837158
Casing Diameter:	5.099999904632568
Casing Diameter UOM:	cm
Casing Depth UOM:	m

Construction Record - Casing

Casing ID:	1002634261
Layer:	2
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	1.7000000476837158
Depth To:	4.699999809265137
Casing Diameter:	5.099999904632568
Casing Diameter UOM:	cm
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1002634262
Layer:	1
Slot:	10
Screen Top Depth:	
Screen End Depth:	
Screen Material:	5
Screen Depth UOM:	m
Screen Diameter UOM:	cm
Screen Diameter:	6.0

Hole Diameter

Hole ID:	1002634258
Diameter:	10.199999809265137
Depth From:	0.0
Depth To:	4.699999809265137
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Bore Hole Information

Bore Hole ID:	1002634243	Elevation:	
DP2BR:		Elevrc:	
Spatial Status:		Zone:	17
Code OB:		East83:	606656.00
Code OB Desc:		North83:	4812553.00
Open Hole:		Org CS:	UTM83
Cluster Kind:	This is a record from cluster log sheet	UTMRC:	3
Date Completed:	26-Sep-2007 00:00:00	UTMRC Desc:	margin of error : 10 - 30 m
Remarks:		Location Method:	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID:	1002634247
Layer:	
Plug From:	
Plug To:	
Plug Depth UOM:	

Method of Construction & Well Use

Method Construction ID:	1002634246
Method Construction Code:	
Method Construction:	
Other Method Construction:	AUGER

Pipe Information

Pipe ID:	1002634248
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1002634250
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	1.2000000476837158
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Construction Record - Screen

Screen ID:	1002634249
Layer:	
Slot:	
Screen Top Depth:	1.399999976158142
Screen End Depth:	4.199999809265137
Screen Material:	
Screen Depth UOM:	m
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1002634251
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	
Rate UOM:	
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1002634245
Diameter:	10.199999809265137
Depth From:	
Depth To:	4.199999809265137
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Links

Bore Hole ID:	1000044211	***Tag No:***	A050034
Depth M:	4.7	***Contractor:***	6988
Year Completed:	2007	***Path:***	710\7100453.pdf
Well Completed Dt:	2007/09/26	***Latitude:***	43.4575973135981
Audit No:	M00219	***Longitude:***	-79.6811086108846

Links

Bore Hole ID:	1002634243	***Tag No:***	A050034
Depth M:		***Contractor:***	6988
Year Completed:	2007	***Path:***	710\7100453.pdf
Well Completed Dt:	2007/09/26	***Latitude:***	43.4582877350223
Audit No:	M00219	***Longitude:***	-79.6816374754632

87	***1 of 1***	***E/279.5***	***98.0 / -5.90***	***485 TREFALGER RD OAKVILLE ON***	***WWIS***

Well ID:	7041205	***Flowing (Y/N):***	

Construction Date:		Flow Rate:	
Use 1st:		Data Entry Status:	
Use 2nd:		Data Src:	
Final Well Status:	Observation Wells	Date Received:	26-Feb-2007 00:00:00
Water Type:		Selected Flag:	TRUE
Casing Material:		Abandonment Rec:	
Audit No:	Z73545	Contractor:	6809
Tag:	A052979	Form Version:	3
Constructn Method:		Owner:	
Elevation (m):		County:	HALTON
Elevatn Reliabilty:		Lot:	
Depth to Bedrock:		Concession:	
Well Depth:		Concession Name:	
Overburden/Bedrock:		Easting NAD83:	
Pump Rate:		Northing NAD83:	
Static Water Level:		Zone:	
Clear/Cloudy:		UTM Reliability:	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/704\7041205.pdf

Additional Detail(s) (Map)

Well Completed Date:	2007/01/12
Year Completed:	2007
Depth (m):	2.4384
Latitude:	43.4564182159166
Longitude:	-79.6803678982566
Path:	704\7041205.pdf

Bore Hole Information

Bore Hole ID:	11763698	Elevation:	
DP2BR:		Elevrc:	
Spatial Status:		Zone:	17
Code OB:		East83:	606762.00
Code OB Desc:		North83:	4812347.00
Open Hole:		Org CS:	UTM83
Cluster Kind:		UTMRC:	3
Date Completed:	12-Jan-2007 00:00:00	UTMRC Desc:	margin of error : 10 - 30 m
Remarks:		Location Method:	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	933093135
Layer:	2
Color:	2
General Color:	GREY
Mat1:	28
Most Common Material:	SAND
Mat2:	12
Mat2 Desc:	STONES
Mat3:	
Mat3 Desc:	

Formation Top Depth:	5.0
Formation End Depth:	8.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	933093134
Layer:	1
Color:	8
General Color:	BLACK
Mat1:	12
Most Common Material:	STONES
Mat2:	28
Mat2 Desc:	SAND
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	5.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	933314684
Layer:	2
Plug From:	1.0
Plug To:	2.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	933314683
Layer:	1
Plug From:	0.0
Plug To:	1.0
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	933314685
Layer:	3
Plug From:	2.0
Plug To:	8.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	967041205
Method Construction Code:	6
Method Construction:	Boring
Other Method Construction:	

Pipe Information

Pipe ID:	11771568
Casing No:	1
Comment:	

Alt Name:

Construction Record - Casing

Casing ID:	930896374
Layer:	1
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0.0
Depth To:	3.0
Casing Diameter:	2.0
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	933423323
Layer:	1
Slot:	10
Screen Top Depth:	3.0
Screen End Depth:	8.0
Screen Material:	5
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	2.0

Hole Diameter

Hole ID:	11849848
Diameter:	8.25
Depth From:	0.0
Depth To:	8.0
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Links

Bore Hole ID:	11763698	*Tag No:*	A052979
Depth M:	2.4384	*Contractor:*	6809
Year Completed:	2007	*Path:*	704\7041205.pdf
Well Completed Dt:	2007/01/12	*Latitude:*	43.4564182159166
Audit No:	Z73545	*Longitude:*	-79.6803678982566

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
88	1 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE PUBLIC UTILITIES COMMISSION 530 LYONS LANE OAKVILLE ON	NPCB

Company Code:	F1046
Industry:	
Site Status:	
Transaction Date:	1/29/1996
Inspection Date:	

--Details--

Label:	
Serial No.:	
PCB Type/Code:	Askarel
Location:	
Item/State:	
No. of Items:	
Manufacturer:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Status:		Stored for Disposal			
Contents:		0.00 KG			

88	2 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO ELECTRIC COMMISSION ATTN ED BENSON 530 LYONS LA OAKVILLE ON	PRT

Location ID: 10368
Type: private
Expiry Date:
Capacity (L): 27276.00
Licence #: 0001033603

88	3 of 18	SSW/279.9	104.8 / 0.95	Safety-Kleen (On-Site) Inc. 530 Lyons Lane, Oakville Hydro Oakville ON N1G 4P5	WDS

Approval No: 5710-4Q8L46
Mob Unit Cert No:
EBR Registry No:
Status: Approved
Facility Type:
Record Type: ECA
Link Source: IDS
Project Type: WASTE DISPOSAL SITES
Application Status:
Issue Date: 2000-11-22
Input Date:
Date Received:
Est Closure Date:
Mobile Capacity:
Mobile Units:
Mobile Description:
Prop City:
Prop Postal:
Prop Phone:
Serial Link:
Approval Type: ECA-WASTE DISPOSAL SITES
Proponent:
Prop Address:
Proponent County/District:
Full Address: 530 Lyons Lane, Oakville Hydro
Site Lot:
Waste Class Code:
Waste Class:
Waste Type:
Waste Type Other:
Waste Description:
Landfill Monitoring:
Landfill Ctrl Type:
Site Closing Description:
Project Description:
Municipalities Served:
Approval Description:
Other Approvals/Permits:
PDF URL: https://www.accessenvironment.ene.gov.on.ca/instruments/6500-4PMPXQ-14.pdf
PDF Site Location:

Total Area (ha):
Landfill Cap (m³):
Transfer Area (ha):
Transfer Cap (m³):
Transfer Cert No:
Inciner. Area (ha):
Inciner. Cap (t):
Process Area (m²):
Process Cap (m³/d):
Process Vol (m³):
Process Feed (m³):
Site Concession:
Site Region/County:
SWP Area Name: Halton
MOE District: Halton-Peel
District Office:
Latitude: 43.453506
Longitude: -79.68611
Geometry X:
Geometry Y:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
88	4 of 18	SSW/279.9	104.8 / 0.95	530 LYONS LANE, OAKVILLE OAKVILLE ON	WDS

Approval No:	A680344	Total Area (ha):	0
Mob Unit Cert No:		Landfill Cap (m^3):	0
EBR Registry No:		Transfer Area (ha):	0
Status:	Approved	Transfer Cap (m^3):	0
Facility Type:	Mobile Unit	Transfer Cert No:	
Record Type:		Inciner. Area (ha):	0
Link Source:		Inciner. Cap (t):	0
Project Type:		Process Area (m^3):	0
Application Status:		Process Cap (m^3/d):	0
Issue Date:	07/20/1999	Process Vol (m^3):	0
Input Date:	7/26/99	Process Feed (m^3):	0
Date Received:	6/7/99	Site Concession:	
Est Closure Date:		Site Region/County:	HALTON-PEEL
Mobile Capacity:	0	SWP Area Name:	
Mobile Units:		MOE District:	
Mobile Description:		District Office:	Halton-Peel
Prop City:	GUELPH, ONTARIO	Latitude:	
Prop Postal:	N1G-4P5	Longitude:	
Prop Phone:	519-824-2025	Geometry X:	
Serial Link:	680344	Geometry Y:	
Approval Type:			
Proponent:	SAFETY-KLEEN (ON-SITE) INC.		
Prop Address:	520 SOUTHGATE DRIVE		
Proponent County/District:			
Full Address:			
Site Lot:	PCB DECONTAMINATION AT OAKVILLE HYDRO		
Waste Class Code:			
Waste Class:			
Waste Type:			
Waste Type Other:	No		
Waste Description:			
Landfill Monitoring:			
Landfill Ctrl Type:			
Site Closing Description:			
Project Description:			
Municipalities Served:			
Approval Description:			
Other Approvals/Permits:			
PDF URL:			
PDF Site Location:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
88	5 of 18	SSW/279.9	104.8 / 0.95	530 Lyons Lane Oakville ON	EHS

Order No:	20011106008	Nearest Intersection:	Cross Ave and Lyons Lane
Status:	C	Municipality:	
Report Type:	Site Report	Client Prov/State:	ON
Report Date:	11/8/01	Search Radius (km):	0.25
Date Received:	11/6/01	X:	-79.685654
Previous Site Name:		Y:	43.453354
Lot/Building Size:	Site is 2.059 Acres		
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
88	6 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE PUBLIC UTILITIES COMMISSION 530 LYONS LANE OAKVILLE ON	OPCB

Year:	1995
Site Number:	30283A017

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Name Owner:
Additional Site Information:

--Details--

Quantity: 15.00
Address Site:
Description: Number of Drums of Ballasts with High Level PCBs (>1000 ppm)

Quantity: 3000.00
Address Site:
Description: Weight of Drums of Ballasts with High Level PCBs (>1000 ppm) kg

Quantity: 15561.00
Address Site:
Description: Weight of Bulk Liquid with Low Level PCBs (< 1000 ppm) kg

Quantity: 1.00
Address Site:
Description: Number of Drums of Soil with Low Level PCBs (< 1000 ppm) kg

Quantity: 400.00
Address Site:
Description: Weight of Drums of Soil with Low Level PCBs (< 1000 ppm) kg

Quantity: 1.00
Address Site:
Description: Number of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg

Quantity: 150.00
Address Site:
Description: Weight of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg

---

88	7 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO ELECTRIC COMM. 530 LYONS LANE OAKVILLE ON L6J 2Y1	GEN

Generator No: ON0552800
SIC Code: 4911
SIC Description: ELECT. POWER SYS.
Approval Years: 86,87,88,89
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

88	8 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO ELECTRIC COMMISSION 530 LYONS LANE OAKVILLE ON L6J 2Y1	GEN

Generator No: ON0552800

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

SIC Code: 4911
SIC Description: ELECT. POWER SYS.
Approval Years: 92,93,96,97,98,99,00,01
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 121
Waste Class Name: ALKALINE WASTES - HEAVY METALS

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 221
Waste Class Name: LIGHT FUELS

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 243
Waste Class Name: PCB'S

88	9 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO 29-136 530 LYONS LANE OAKVILLE ON L6J 2Y1	GEN

Generator No: ON0552800
SIC Code: 4911
SIC Description: ELECT. POWER SYS.
Approval Years: 94,95
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 122
Waste Class Name: ALKALINE WASTES - OTHER METALS

Waste Class: 243
Waste Class Name: PCB'S

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Waste Class:		252			
Waste Class Name:		WASTE OILS & LUBRICANTS			
88	10 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC 530 LYONS LANE OAKVILLE ON L6J 2Y1	GEN

Generator No: ON5389994
SIC Code:
SIC Description:
Approval Years: 02,03,04
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 212
Waste Class Name: ALIPHATIC SOLVENTS

88	11 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO CORPORATION ATTN ED BENSON 530 LYONS LA OAKVILLE ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No: 9328182
Status: EXPIRED
Instance ID: 384215
Instance Type: FS Facility
Instance Creation Dt:
Instance Install Dt:
Item Description:
Manufacturer:
Model:
Serial No:
ULC Standard:
Quantity:
Unit of Measure:
Overfill Prot Type:
Creation Date:
Next Periodic Str DT:
TSSA Base Sched Cycle 2:
TSSAMax Hazard Rank 1:
TSSA Risk Based Periodic Yn:
TSSA Volume of Directives:
TSSA Periodic Exempt:
TSSA Statutory Interval:
TSSA Recd Insp Interva:
TSSA Recd Tolerance:
TSSA Program Area:
TSSA Program Area 2:
Description: Fuels Safety Private Fuel Outlet - Self Serve
Original Source: EXP

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:
Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Record Date:		Up to Mar 2012			
88	12 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO CORPORATION ATTN ED BENSON 530 LYONS LA OAKVILLE ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No:	10887407	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	
Instance ID:	48921	Facility Location:	
Instance Type:	FS Piping	Facility Type:	
Instance Creation Dt:		Fuel Type 2:	
Instance Install Dt:		Fuel Type 3:	
Item Description:		Panam Related:	
Manufacturer:		Panam Venue Nm:	
Model:		External Identifier:	
Serial No:		Item:	
ULC Standard:		Piping Steel:	
Quantity:		Piping Galvanized:	
Unit of Measure:		Tank Single Wall St:	
Overfill Prot Type:		Piping Underground:	
Creation Date:		Tank Underground:	
Next Periodic Str DT:		Source:	
TSSA Base Sched Cycle 2:			
TSSAMax Hazard Rank 1:			
TSSA Risk Based Periodic Yn:			
TSSA Volume of Directives:			
TSSA Periodic Exempt:			
TSSA Statutory Interval:			
TSSA Recd Insp Interva:			
TSSA Recd Tolerance:			
TSSA Program Area:			
TSSA Program Area 2:			
Description:	FS Piping		
Original Source:	EXP		
Record Date:	Up to Mar 2012		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
88	13 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO CORPORATION ATTN ED BENSON 530 LYONS LA OAKVILLE ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No:	10887380	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	
Instance ID:	50592	Facility Location:	
Instance Type:	FS Piping	Facility Type:	
Instance Creation Dt:		Fuel Type 2:	
Instance Install Dt:		Fuel Type 3:	
Item Description:		Panam Related:	
Manufacturer:		Panam Venue Nm:	
Model:		External Identifier:	
Serial No:		Item:	
ULC Standard:		Piping Steel:	
Quantity:		Piping Galvenized:	
Unit of Measure:		Tank Single Wall St:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Overfill Prot Type:			Piping Underground:	
Creation Date:			Tank Underground:	
Next Periodic Str DT:			Source:	
TSSA Base Sched Cycle 2:				
TSSAMax Hazard Rank 1:				
TSSA Risk Based Periodic Yn:				
TSSA Volume of Directives:				
TSSA Periodic Exempt:				
TSSA Statutory Interval:				
TSSA Recd Insp Interva:				
TSSA Recd Tolerance:				
TSSA Program Area:				
TSSA Program Area 2:				
Description:	FS Piping			
Original Source:	EXP			
Record Date:	Up to Mar 2012			

88	14 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO CORPORATION ATTN ED BENSON 530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	DTNK

Delisted Expired Fuel Safety Facilities

Instance No:	10887394	Expired Date:	
Status:	EXPIRED	Max Hazard Rank:	NULL
Instance ID:		Facility Location:	530 LYONS LA OAKVILLE L6L 2X1 ON CA
Instance Type:		Facility Type:	FS LIQUID FUEL TANK
Instance Creation Dt:	10/2/1990	Fuel Type 2:	NULL
Instance Install Dt:	10/2/1990	Fuel Type 3:	NULL
Item Description:	FS Liquid Fuel Tank	Panam Related:	NULL
Manufacturer:	NULL	Panam Venue Nm:	NULL
Model:	NULL	External Identifier:	NULL
Serial No:	NULL	Item:	
ULC Standard:	NULL	Piping Steel:	
Quantity:	1	Piping Galvanized:	
Unit of Measure:	EA	Tank Single Wall St:	
Overfill Prot Type:	NULL	Piping Underground:	
Creation Date:	7/5/2009 1:21:53 AM	Tank Underground:	
Next Periodic Str DT:	NULL	Source:	FS Liquid Fuel Tank
TSSA Base Sched Cycle 2:	NULL		
TSSAMax Hazard Rank 1:	NULL		
TSSA Risk Based Periodic Yn:	NULL		
TSSA Volume of Directives:	NULL		
TSSA Periodic Exempt:	NULL		
TSSA Statutory Interval:	NULL		
TSSA Recd Insp Interva:	NULL		
TSSA Recd Tolerance:	NULL		
TSSA Program Area:	NULL		
TSSA Program Area 2:	NULL		
Description:	UNDERGROUND TANK		
Original Source:	EXP		
Record Date:	31-JUL-2020		

88	15 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO CORPORATION ATTN ED BENSON 530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	DTNK

Delisted Expired Fuel Safety

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Facilities

Instance No:	10887371	***Expired Date:***	
Status:	EXPIRED	***Max Hazard Rank:***	NULL
Instance ID:		***Facility Location:***	530 LYONS LA OAKVILLE L6L 2X1 ON CA
Instance Type:		***Facility Type:***	FS LIQUID FUEL TANK
Instance Creation Dt:	10/2/1990	***Fuel Type 2:***	NULL
Instance Install Dt:	10/2/1990	***Fuel Type 3:***	NULL
Item Description:	FS Liquid Fuel Tank	***Panam Related:***	NULL
Manufacturer:	NULL	***Panam Venue Nm:***	NULL
Model:	NULL	***External Identifier:***	NULL
Serial No:	NULL	***Item:***	
ULC Standard:	NULL	***Piping Steel:***	
Quantity:	1	***Piping Galvanized:***	
Unit of Measure:	EA	***Tank Single Wall St:***	
Overfill Prot Type:	NULL	***Piping Underground:***	
Creation Date:	7/5/2009 1:21:55 AM	***Tank Underground:***	
Next Periodic Str DT:	NULL	***Source:***	FS Liquid Fuel Tank
TSSA Base Sched Cycle 2:	NULL		
TSSAMax Hazard Rank 1:	NULL		
TSSA Risk Based Periodic Yn:	NULL		
TSSA Volume of Directives:	NULL		
TSSA Periodic Exempt:	NULL		
TSSA Statutory Interval:	NULL		
TSSA Recd Insp Interva:	NULL		
TSSA Recd Tolerance:	NULL		
TSSA Program Area:	NULL		
TSSA Program Area 2:	NULL		
Description:	UNDERGROUND TANK		
Original Source:	EXP		
Record Date:	31-JUL-2020		

---

88 ***16 of 18*** ***SSW/279.9*** ***104.8 / 0.95*** ***OAKVILLE HYDRO CORPORATION ATTN ED BENSON 530 LYONS LA OAKVILLE L6L 2X1 ON CA ON*** ***FST***

Instance No:	10887371	***Manufacturer:***	
Status:		***Serial No:***	
Cont Name:		***Ulc Standard:***	
Instance Type:		***Quantity:***	
Item:		***Unit of Measure:***	
Item Description:	FS Liquid Fuel Tank	***Fuel Type:***	Gasoline
Tank Type:	Liquid Fuel Single Wall UST	***Fuel Type2:***	NULL
Install Date:	10/2/1990	***Fuel Type3:***	NULL
Install Year:	1981	***Piping Steel:***	
Years In Service:		***Piping Galvanized:***	
Model:	NULL	***Tanks Single Wall St:***	
Description:		***Piping Underground:***	
Capacity:	13638	***No Underground:***	
Tank Material:	Steel	***Panam Related:***	
Corrosion Protect:	Impressed Current	***Panam Venue:***	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:			
Facility Location:			
Device Installed Location:	530 LYONS LA OAKVILLE L6L 2X1 ON CA		

Liquid Fuel Tank Details

Overfill Protection:	
Owner Account Name:	OAKVILLE HYDRO CORPORATION ATTN ED BENSON
Item:	FS LIQUID FUEL TANK

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
88	17 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO CORPORATION ATTN ED BENSON 530 LYONS LA OAKVILLE L6L 2X1 ON CA ON	FST

Instance No:	10887394	Manufacturer:	
Status:		Serial No:	
Cont Name:		Ulc Standard:	
Instance Type:		Quantity:	
Item:		Unit of Measure:	
Item Description:	FS Liquid Fuel Tank	Fuel Type:	Diesel
Tank Type:	Liquid Fuel Single Wall UST	Fuel Type2:	NULL
Install Date:	10/2/1990	Fuel Type3:	NULL
Install Year:	1981	Piping Steel:	
Years in Service:		Piping Galvanized:	
Model:	NULL	Tanks Single Wall St:	
Description:		Piping Underground:	
Capacity:	13638	No Underground:	
Tank Material:	Steel	Panam Related:	
Corrosion Protect:	Impressed Current	Panam Venue:	
Overfill Protect:			

Facility Type: FS Liquid Fuel Tank
Parent Facility Type:
Facility Location:
Device Installed Location: 530 LYONS LA OAKVILLE L6L 2X1 ON CA

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: OAKVILLE HYDRO CORPORATION ATTN ED BENSON
Item: FS LIQUID FUEL TANK

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
88	18 of 18	SSW/279.9	104.8 / 0.95	OAKVILLE HYDRO ELECTRIC COMMISSION 530 LYONS LANE OAKVILLE ON L6J 5E3	REC

ID:		Province In:	ONTARIO
Company ID:		Province Out:	
Receiver No:	302-83A017	County Out:	
Co Admin:		Mail Addr:	
Choice of Contact:		Site PO Box:	
Phone Number:			
Rec Div:			
Rec Op Div:			

Rec Op Name: OAKVILLE HYDRO ELECTRIC COMMISSION
Site Bldg:
Facility Type: PCB STORAGE SITE
Approval Yrs: 1988; 1989; 1990; 1992; 1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008

1995 Receiver Manifest Details

Gen Dist: 100
Gen District Office Name: LONDON, ONT
Gen Region Code: 01
Gen Region Office Name: SOUTHWESTERN REGION
Gen Sic: 9999
NAICS Desc: OTHER SERVICES
Waste Code: 252
Waste Class: WASTE OILS & LUBRICANTS
Waste Chara: L
Char Desc: LIQUID INDUSTRIAL WASTE

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Count: 1
Qty Recvd: 455

1999 Receiver Waste Information Details

Waste Code: 243
Waste Desc: PCB'S

2001 Receiver Manifest Details

Gen Dist: 100
Gen District Office Name:
Gen Region Code:
Gen Region Office Name:
Gen Sic: 4911
NAICS Desc: ELECT. POWER SYS.
Waste Code: 243
Waste Class: PCB'S
Waste Chara: D
Char Desc: PCB WASTE
Waste Count: 1
Qty Recvd: 5000

89	1 of 5	SSW/279.9	104.8 / 0.95	OAKVILLE PUBLIC UTILITIES COMMISSION 530 LYONS LANE LYONS LANE OAKVILLE ON L6J 5E3	NPCB

Company Code: F0954
Industry:
Site Status:
Transaction Date:
Inspection Date:

--Details--
Label:
Serial No.:
PCB Type/Code:
Location:
Item/State:
No. of Items:
Manufacturer:
Status: In-Storage
Contents:

89	2 of 5	SSW/279.9	104.8 / 0.95	OAKVILLE PUBLIC UTILITIES COMMISSION 530 LYONS LANE OAKVILLE ON L6J 5E3	OPCB

Year: 1998
Site Number: 30283A017
Name Owner:
Additional Site Information:

--Details--
Quantity: 68.10
Address Site:
Description: Weight of Liquid in Transformers with Low Level PCBs (< 1000 ppm) kg

Quantity: 1.00

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Address Site:
Description: Number of Transformers with Low Level PCBs (< 1000 ppm) kg

Quantity: 7.00
Address Site:
Description: Number of Drums of Soil with Low Level PCBs (< 1000 ppm) kg

Quantity: 2800.00
Address Site:
Description: Calculated Weight (Kg) of Drums of Soil with Low Level PCBs (< 1000 ppm) kg

Quantity: 13.00
Address Site:
Description: Number of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg

Quantity: 1950.00
Address Site:
Description: Calculated Weight of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg

Quantity: 17.00
Address Site:
Description: Number of Drums of Ballasts with High Level PCBs (>1000 ppm)

Quantity: 3400.00
Address Site:
Description: Calculated Weight (Kg) of Drums of Ballasts with High Level PCBs (>1000 ppm)

Quantity: 4.00
Address Site:
Description: Number of Capacitors with High Level PCBs (>1000 ppm)

Quantity: 4599.00
Address Site:
Description: Weight of Bulk Liquid with Low Level PCBs (< 1000 ppm) kg

---

69	3 of 5	SSW/279.9	104.8 / 0.95	OAKVILLE PUBLIC UTILITIES COMMISSION 530 LYONS LANE OAKVILLE ON L6J 5E3	OPCB

Year: 1999
Site Number: 30283A017
Name Owner:
Additional Site Information:

--Details--
Quantity: 17.00
Address Site:
Description: Number of Drums of Ballasts with High Level PCBs (>1000 ppm)

Quantity: 3400.00
Address Site:
Description: Calculated Weight (Kg) of Drums of Ballasts with High Level PCBs (>1000 ppm)

Quantity: 4.00
Address Site:
Description: Number of Capacitors with High Level PCBs (>1000 ppm)

Quantity: 4599.00
Address Site:
Description: Weight of Bulk Liquid with Low Level PCBs (< 1000 ppm) kg

Quantity: 68.10
Address Site:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Description: Weight of Liquid in Transformers with Low Level PCBs (< 1000 ppm) kg

Quantity: 1.00
Address Site:
Description: Number of Transformers with Low Level PCBs (< 1000 ppm) kg

Quantity: 7.00
Address Site:
Description: Number of Drums of Soil with Low Level PCBs (< 1000 ppm) kg

Quantity: 2800.00
Address Site:
Description: Calculated Weight (Kg) of Drums of Soil with Low Level PCBs (< 1000 ppm) kg

Quantity: 13.00
Address Site:
Description: Number of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg

Quantity: 1950.00
Address Site:
Description: Calculated Weight of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg

---

89	4 of 5	SSW/279.9	104.8 / 0.95	OAKVILLE PUBLIC UTILITIES COMMISSION 530 LYONS LANE OAKVILLE ON L6J 5E3	OPCB

Year: 2000
Site Number: 30283A017
Name Owner:
Additional Site Information:

--Details---
Quantity: 4599.00
Address Site:
Description: Weight of Bulk Liquid with Low Level PCBs (< 1000 ppm) kg

Quantity: 68.10
Address Site:
Description: Weight of Liquid in Transformers with Low Level PCBs (< 1000 ppm) kg

Quantity: 1.00
Address Site:
Description: Number of Transformers with Low Level PCBs (< 1000 ppm) kg

Quantity: 17.00
Address Site:
Description: Number of Drums of Ballasts with High Level PCBs (>1000 ppm)

Quantity: 7.00
Address Site:
Description: Number of Drums of Soil with Low Level PCBs (< 1000 ppm) kg

Quantity: 3400.00
Address Site:
Description: Calculated Weight (Kg) of Drums of Ballasts with High Level PCBs (>1000 ppm)

Quantity: 4.00
Address Site:
Description: Number of Capacitors with High Level PCBs (>1000 ppm)

Quantity: 2800.00
Address Site:
Description: Calculated Weight (Kg) of Drums of Soil with Low Level PCBs (< 1000 ppm) kg

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Quantity: 13.00
Address Site:
Description: Number of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg

Quantity: 1950.00
Address Site:
Description: Calculated Weight of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg

---

89 **5 of 5** **SSW/279.9** **104.8 / 0.95** **OAKVILLE PUBLIC UTILITIES COMMISSION**
530 LYONS LANE
OAKVILLE ON L6J 5E3 **NPCB**

Company Code: F0976
Industry: UNDEFINED
Site Status:
Transaction Date:
Inspection Date:

--Details--
Label: F097601
Serial No.:
PCB Type/Code: MINERAL OIL/UNKNOWN
Location:
Item/State: TRANSFORMER/FULL
No. of Items: 1
Manufacturer:
Status: STORED FOR DISPOSAL
Contents: 68.1 KG

Label: F097600
Serial No.:
PCB Type/Code: MINERAL OIL/UNKNOWN
Location:
Item/State: BARREL MINERAL OIL/FULL
No. of Items: 26
Manufacturer:
Status: STORED FOR DISPOSAL
Contents: 4599 KG

---

90 **1 of 1** **W/292.7** **100.8 / -3.05** **125 North Service Rd E**
Oakville ON L6H 1A3 **SPL**

Ref No: 4718-7KLPQP
Site No:
Incident Dt:
Year:
Incident Cause: Discharge Or Bypass To A Watercourse
Incident Event:
Environment Impact: Confirmed
Nature of Impact: Surface Water Pollution
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 10/20/2008
Dt Document Closed:
Municipality No:
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code: 13
Contaminant Name: DIESEL FUEL

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Contaminant Limit 1:	
Contam Limit Freq 1:	
Contaminant UN No 1:	
Receiving Medium:	
Receiving Environment:	
Incident Reason:	
Incident Summary:	Oakville strip mall: fuel in basement sump, storm sewer
Site Region:	
Site Municipality:	Oakville
Activity Preceding Spill:	
Property 2nd Watershed:	
Property Tertiary Watershed:	
Sector Type:	Other
SAC Action Class:	Watercourse Spills
Source Type:	
Site County/District:	
Site Geo Ref Meth:	
Site District Office:	Halton-Peel
Nearest Watercourse:	
Site Name:	Strip Mall<UNOFFICIAL>
Site Address:	

91	1 of 4	SSE/293.1	96.3 / -7.63	KING PAVING & MATERIALS LTD. 68 OLD MILL ROAD OAKVILLE ON L7R 3Y5	GEN

Generator No:	ON0321101
SIC Code:	4121
SIC Description:	HIGHWAYS, STR., ETC.
Approval Years:	86,87,88,89,90
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	213
Waste Class Name:	PETROLEUM DISTILLATES
Waste Class:	252
Waste Class Name:	WASTE OILS & LUBRICANTS

91	2 of 4	SSE/293.1	96.3 / -7.63	KING PAVING & MATERIALS LTD. 23-156 68 OLD MILL ROAD OAKVILLE ON L7R 3Y5	GEN

Generator No:	ON0321101
SIC Code:	4121
SIC Description:	HIGHWAYS, STR., ETC.
Approval Years:	92,93,94,95,96,97
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
MHSW Facility:					

Detail(s)

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
91	3 of 4	SSE/293.1	96.3 / -7.63	KING PAVING & MATERIALS LIMITED 68 OLD MILL ROAD OAKVILLE ON	GEN

Generator No: ON0321101
SIC Code: 4121
SIC Description: HIGHWAYS, STR., ETC.
Approval Years: 98
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213
Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
91	4 of 4	SSE/293.1	96.3 / -7.63	GENSTAR DEVELOPMENT COMPANY 68 OLD MILL ROAD, OAKVILLE C/O 302 THE EAST MALL SUITE 502 ETOBICOKE ON M9B 6C7	GEN

Generator No: ON1135500
SIC Code: 4011
SIC Description: SINGLE FAMILY HOUS.
Approval Years: 89
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 211
Waste Class Name: AROMATIC SOLVENTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
92	1 of 1	ENE/298.6	101.7 / -2.22	547 TRAFALGAR RD OAKVILLE ON	WWIS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Well ID:	7152039	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Monitoring and Test Hole	**Data Entry Status:**	
Use 2nd:	0	**Data Src:**	
Final Well Status:	Test Hole	**Date Received:**	24-Sep-2010 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	M03210	**Contractor:**	7241
Tag:	A092505	**Form Version:**	5
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	HALTON
Elevatn Reliabilty:		**Lot:**	
Depth to Bedrock:		**Concession:**	
Well Depth:		**Concession Name:**	
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	OAKVILLE TOWN		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/07
Year Completed:	2010
Depth (m):	
Latitude:	43.4582706085422
Longitude:	-79.6809332843026
Path:	715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/09
Year Completed:	2010
Depth (m):	
Latitude:	43.458512071972
Longitude:	-79.6815707964689
Path:	715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/07
Year Completed:	2010
Depth (m):	
Latitude:	43.4582623194152
Longitude:	-79.6809952683158
Path:	715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/07
Year Completed:	2010
Depth (m):	
Latitude:	43.4584306479407

Longitude:	-79.6807567536246
Path:	715\7152039.pdf
PDF URL (Map):	https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/08
Year Completed:	2010
Depth (m):	
Latitude:	43.4586435385822
Longitude:	-79.6812589185742
Path:	715\7152039.pdf
PDF URL (Map):	https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/03
Year Completed:	2010
Depth (m):	
Latitude:	43.4582475941358
Longitude:	-79.6812798856298
Path:	715\7152039.pdf
PDF URL (Map):	https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/03
Year Completed:	2010
Depth (m):	3.96
Latitude:	43.4583398943142
Longitude:	-79.6814756519566
Path:	715\7152039.pdf
PDF URL (Map):	https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/07
Year Completed:	2010
Depth (m):	
Latitude:	43.4582921957207
Longitude:	-79.6804631059109
Path:	715\7152039.pdf
PDF URL (Map):	https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/09/08
Year Completed:	2010
Depth (m):	
Latitude:	43.4586436811205
Longitude:	-79.681271276312
Path:	715\7152039.pdf
PDF URL (Map):	https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date: 2010/09/09
Year Completed: 2010
Depth (m):
Latitude: 43.4584937830039
Longitude: -79.6815464723062
Path: 715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date: 2010/09/08
Year Completed: 2010
Depth (m):
Latitude: 43.4580005492567
Longitude: -79.6809391558751
Path: 715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date: 2010/09/03
Year Completed: 2010
Depth (m):
Latitude: 43.4582959034943
Longitude: -79.6807844051593
Path: 715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date: 2010/09/03
Year Completed: 2010
Depth (m):
Latitude: 43.4583137434443
Longitude: -79.6815503849081
Path: 715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date: 2010/09/03
Year Completed: 2010
Depth (m):
Latitude: 43.4583983469935
Longitude: -79.6810788364438
Path: 715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date: 2010/09/07
Year Completed: 2010
Depth (m):
Latitude: 43.458292053096
Longitude: -79.6804507482487
Path: 715\7152039.pdf

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/715\7152039.pdf

Additional Detail(s) (Map)

Well Completed Date: 2010/09/07
Year Completed: 2010
Depth (m):
Latitude: 43.4582621768481
Longitude: -79.680982910657
Path: 715\7152039.pdf

Bore Hole Information

Bore Hole ID: 1003603965
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 07-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606752.00
North83: 4812555.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID: 1003603969
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003603968
Method Construction Code:
Method Construction:
Other Method Construction: DIRECT PUSH

Pipe Information

Pipe ID: 1003603970
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003603972
Layer:
Material: 5
Open Hole or Material: PLASTIC

Depth From:
Depth To: 0.6100000143051147
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003603971
Layer:
Slot:
Screen Top Depth: 0.6100000143051147
Screen End Depth: 2.799999952316284
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003603973
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003603967
Diameter: 8.26
Depth From:
Depth To: 2.799999952316284
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003604020
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 08-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:

Elevation:
Elevrc:
Zone: 17
East83: 606685.00
North83: 4812593.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Annular Space/Abandonment Sealing Record

Plug ID: 1003604024
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003604023
Method Construction Code:
Method Construction:
Other Method Construction: AIR PERCUSSION

Pipe Information

Pipe ID: 1003604025
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003604027
Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 7.599999904632568
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003604026
Layer:
Slot:
Screen Top Depth: 7.599999904632568
Screen End Depth: 9.100000381469727
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003604028
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:

Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003604022
Diameter: 8.25
Depth From:
Depth To: 9.100000381469727
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003604038
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 09-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606661.00
North83: 4812578.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID: 1003604042
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003604041
Method Construction Code:
Method Construction:
Other Method Construction: AIR PERCUSSION

Pipe Information

Pipe ID: 1003604043
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID:	1003604045
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	2.130000114440918
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1003604044
Layer:	
Slot:	
Screen Top Depth:	2.130000114440918
Screen End Depth:	5.179999828338623
Screen Material:	
Screen Depth UOM:	m
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1003604046
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	
Rate UOM:	
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1003604040
Diameter:	8.25
Depth From:	
Depth To:	5.179999828338623
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Bore Hole Information

Bore Hole ID:	1003603929	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	606685.00
Code OB Desc:		***North83:***	4812549.00
Open Hole:		***Org CS:***	UTM83

Cluster Kind: This is a record from cluster log sheet
Date Completed: 03-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID: 1003603933
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003603932
Method Construction Code:
Method Construction:
Other Method Construction: DIRECT PUSH

Pipe Information

Pipe ID: 1003603934
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003603936
Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 0.6100000143051147
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003603935
Layer:
Slot:
Screen Top Depth: 0.6100000143051147
Screen End Depth: 3.509999990463257
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003603937
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003603931
Diameter: 8.25
Depth From:
Depth To: 3.509999990463257
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003603983
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 07-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606709.00
North83: 4812551.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID: 1003603987
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003603986
Method Construction Code:
Method Construction:
Other Method Construction: DIRECT PUSH

Pipe Information

Pipe ID:	1003603988
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003603990
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	0.6100000143051147
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1003603989
Layer:	
Slot:	
Screen Top Depth:	0.6100000143051147
Screen End Depth:	3.299999952316284
Screen Material:	
Screen Depth UOM:	m
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1003603991
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	
Rate UOM:	
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1003603985
Diameter:	8.25
Depth From:	
Depth To:	3.299999952316284
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Bore Hole Information

Bore Hole ID:	1003603992	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	606708.00
Code OB Desc:		***North83:***	4812551.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:	This is a record from cluster log sheet	***UTMRC:***	4
Date Completed:	07-Sep-2010 00:00:00	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID:	1003603996
Layer:	
Plug From:	
Plug To:	
Plug Depth UOM:	

Method of Construction & Well Use

Method Construction ID:	1003603995
Method Construction Code:	
Method Construction:	
Other Method Construction:	DIRECT PUSH

Pipe Information

Pipe ID:	1003603997
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003603999
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	7.599999904632568
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1003603998
Layer:	
Slot:	
Screen Top Depth:	7.599999904632568
Screen End Depth:	9.140000343322754

Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003604000
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003603994
Diameter: 8.25
Depth From:
Depth To: 9.140000343322754
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003603938
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 03-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606701.00
North83: 4812566.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID: 1003603942
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID:	1003603941
Method Construction Code:	
Method Construction:	
Other Method Construction:	DIRECT PUSH

Pipe Information

Pipe ID:	1003603943
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003603945
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	0.6100000143051147
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1003603944
Layer:	
Slot:	
Screen Top Depth:	0.6100000143051147
Screen End Depth:	3.3499999046325684
Screen Material:	
Screen Depth UOM:	m
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1003603946
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	
Rate UOM:	
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1003603940

Diameter:	8.25
Depth From:	
Depth To:	3.3499999046325684
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Bore Hole Information

Bore Hole ID:	1003603947	Elevation:	
DP2BR:		Elevrc:	
Spatial Status:		Zone:	17
Code OB:		East83:	606725.00
Code OB Desc:		North83:	4812555.00
Open Hole:		Org CS:	UTM83
Cluster Kind:	This is a record from cluster log sheet	UTMRC:	4
Date Completed:	03-Sep-2010 00:00:00	UTMRC Desc:	margin of error : 30 m - 100 m
Remarks:		Location Method:	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID:	1003603951
Layer:	
Plug From:	
Plug To:	
Plug Depth UOM:	

Method of Construction & Well Use

Method Construction ID:	1003603950
Method Construction Code:	
Method Construction:	
Other Method Construction:	DIRECT PUSH

Pipe Information

Pipe ID:	1003603952
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003603954
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	0.6100000143051147
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1003603953
Layer:	
Slot:	
Screen Top Depth:	0.6100000143051147
Screen End Depth:	3.3499999046325684
Screen Material:	
Screen Depth UOM:	m
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1003603955
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	
Rate UOM:	
Water State After Test Code:	
Water State After Test:	
Pumping Test Method:	
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	

Hole Diameter

Hole ID:	1003603949
Diameter:	8.25
Depth From:	
Depth To:	3.3499999046325684
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Bore Hole Information

Bore Hole ID:	1003603974	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	606751.00
Code OB Desc:		**North83:**	4812555.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:	This is a record from cluster log sheet	**UTMRC:**	4
Date Completed:	07-Sep-2010 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID: 1003603978
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003603977
Method Construction Code:
Method Construction:
Other Method Construction: DIRECT PUSH

Pipe Information

Pipe ID: 1003603979
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003603981
Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 7.599999904632568
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003603980
Layer:
Slot:
Screen Top Depth: 7.599999904632568
Screen End Depth: 10.0
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003603982
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:

Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003603976
Diameter: 8.25
Depth From:
Depth To: 10.0
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003340124
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole: No
Cluster Kind:
Date Completed: 03-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606669.00
North83: 4812559.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1003604060
Layer: 4
Color: 2
General Color: GREY
Mat1: 17
Most Common Material: SHALE
Mat2: 92
Mat2 Desc: WEATHERED
Mat3: 73
Mat3 Desc: HARD
Formation Top Depth: 3.048999952316284
Formation End Depth: 3.9600000381469727
Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

Formation ID: 1003604058
Layer: 2
Color: 6
General Color: BROWN
Mat1: 28
Most Common Material: SAND
Mat2: 05
Mat2 Desc: CLAY
Mat3: 77
Mat3 Desc: LOOSE

Formation Top Depth: 0.3100000023841858
Formation End Depth: 1.2200000286102295
Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

Formation ID: 1003604057
Layer: 1
Color: 2
General Color: GREY
Mat1: 01
Most Common Material: FILL
Mat2: 11
Mat2 Desc: GRAVEL
Mat3: 77
Mat3 Desc: LOOSE
Formation Top Depth: 0.0
Formation End Depth: 0.3100000023841858
Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

Formation ID: 1003604059
Layer: 3
Color: 7
General Color: RED
Mat1: 05
Most Common Material: CLAY
Mat2:
Mat2 Desc:
Mat3: 85
Mat3 Desc: SOFT
Formation Top Depth: 1.2200000286102295
Formation End Depth: 3.049999952316284
Formation End Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 1003604063
Layer: 2
Plug From: 0.6100000143051147
Plug To: 3.9600000381469727
Plug Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 1003604062
Layer: 1
Plug From: 0.0
Plug To: 0.6100000143051147
Plug Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 1003604068
Method Construction Code: B
Method Construction: Other Method

Other Method Construction: DIRECT PUSH

Pipe Information

Pipe ID: 1003604056
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003604064
Layer: 1
Material: 5
Open Hole or Material: PLASTIC
Depth From: 0.0
Depth To: 0.9100000262260437
Casing Diameter:
Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003604065
Layer: 1
Slot: 10
Screen Top Depth:
Screen End Depth:
Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter:

Hole Diameter

Hole ID: 1003604061
Diameter: 8.25
Depth From: 0.0
Depth To: 3.9600000381469727
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003603956
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 07-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606727.00
North83: 4812570.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID:	1003603960
Layer:	
Plug From:	
Plug To:	
Plug Depth UOM:	

Method of Construction & Well Use

Method Construction ID:	1003603959
Method Construction Code:	
Method Construction:	
Other Method Construction:	DIRECT PUSH

Pipe Information

Pipe ID:	1003603961
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003603963
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	0.6100000143051147
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1003603962
Layer:	
Slot:	
Screen Top Depth:	0.6100000143051147
Screen End Depth:	3.9600000381469727
Screen Material:	
Screen Depth UOM:	m
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:	
Pump Test ID:	1003603964
Pump Set At:	
Static Level:	
Final Level After Pumping:	
Recommended Pump Depth:	
Pumping Rate:	
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	
Rate UOM:	
Water State After Test Code:	

Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003603958
Diameter: 8.25
Depth From:
Depth To: 3.9600000381469727
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003604001
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 07-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606713.00
North83: 4812552.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID: 1003604005
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003604004
Method Construction Code:
Method Construction:
Other Method Construction: DIRECT PUSH

Pipe Information

Pipe ID: 1003604006
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003604008

Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 0.6100000143051147
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003604007
Layer:
Slot:
Screen Top Depth: 0.6100000143051147
Screen End Depth: 2.5999999046325684
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003604009
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003604003
Diameter: 8.25
Depth From:
Depth To: 2.5999999046325684
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003604011
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 08-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record

Elevation:
Elevrc:
Zone: 17
East83: 606713.00
North83: 4812522.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Annular Space/Abandonment Sealing Record

Plug ID: 1003604015
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003604014
Method Construction Code:
Method Construction:
Other Method Construction: SIR PERCUSSION

Pipe Information

Pipe ID: 1003604016
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003604018
Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 7.300000190734863
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003604017
Layer:
Slot:
Screen Top Depth: 7.300000190734863
Screen End Depth: 8.800000190734863
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003604019
Pump Set At:
Static Level:

Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003604013
Diameter: 8.25
Depth From:
Depth To: 8.800000190734863
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003604029
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 08-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606686.00
North83: 4812593.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID: 1003604033
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003604032
Method Construction Code:
Method Construction:
Other Method Construction: AIR PERCUSSION

Pipe Information

Pipe ID: 1003604034

Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003604036
Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 0.9100000262260437
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003604035
Layer:
Slot:
Screen Top Depth: 0.9100000262260437
Screen End Depth: 2.5
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003604037
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003604031
Diameter: 8.25
Depth From:
Depth To: 2.5
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003603920
DP2BR:
Spatial Status:
Elevation:
Elevrc:
Zone: 17

Code OB:		**East83:**	606663.00
Code OB Desc:		**North83:**	4812556.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:	This is a record from cluster log sheet	**UTMRC:**	4
Date Completed:	03-Sep-2010 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID:	1003603924
Layer:	
Plug From:	
Plug To:	
Plug Depth UOM:	

Method of Construction & Well Use

Method Construction ID:	1003603923
Method Construction Code:	
Method Construction:	
Other Method Construction:	DIRECT PUSH

Pipe Information

Pipe ID:	1003603925
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003603927
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	0.6100000143051147
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1003603926
Layer:	
Slot:	
Screen Top Depth:	0.6100000143051147
Screen End Depth:	2.2899999618530273
Screen Material:	
Screen Depth UOM:	m
Screen Diameter UOM:	
Screen Diameter:	

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003603928
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003603922
Diameter: 8.25
Depth From:
Depth To: 2.2899999618530273
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID: 1003604047
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole:
Cluster Kind: This is a record from cluster log sheet
Date Completed: 09-Sep-2010 00:00:00
Remarks:
Loc Method Desc: on Water Well Record
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 17
East83: 606663.00
North83: 4812576.00
Org CS: UTM83
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Annular Space/Abandonment Sealing Record

Plug ID: 1003604051
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003604050
Method Construction Code:

Method Construction:
Other Method Construction: AIR PERCUSSION

Pipe Information

Pipe ID: 1003604052
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003604054
Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 2.130000114440918
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1003604053
Layer:
Slot:
Screen Top Depth: 2.130000114440918
Screen End Depth: 5.179999828338623
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pumping Test Method Desc:
Pump Test ID: 1003604055
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1003604049
Diameter: 8.25
Depth From:
Depth To: 5.179999828338623
Hole Depth UOM: m
Hole Diameter UOM: cm

Links

Bore Hole ID:	1003603965	*Tag No:*	A092505
Depth M:		*Contractor:*	7241
Year Completed:	2010	*Path:*	715\7152039.pdf
Well Completed Dt:	2010/09/07	*Latitude:*	43.458292053096
Audit No:	M03210	*Longitude:*	-79.6804507482487

Links

Bore Hole ID:	1003604020	*Tag No:*	A092505
Depth M:		*Contractor:*	7241
Year Completed:	2010	*Path:*	715\7152039.pdf
Well Completed Dt:	2010/09/08	*Latitude:*	43.4586436811205
Audit No:	M03210	*Longitude:*	-79.681271276312

Links

Bore Hole ID:	1003603920	*Tag No:*	A092505
Depth M:		*Contractor:*	7241
Year Completed:	2010	*Path:*	715\7152039.pdf
Well Completed Dt:	2010/09/03	*Latitude:*	43.4583137434443
Audit No:	M03210	*Longitude:*	-79.6815503849081

Links

Bore Hole ID:	1003603929	*Tag No:*	A092505
Depth M:		*Contractor:*	7241
Year Completed:	2010	*Path:*	715\7152039.pdf
Well Completed Dt:	2010/09/03	*Latitude:*	43.4582475941358
Audit No:	M03210	*Longitude:*	-79.6812798858298

Links

Bore Hole ID:	1003603956	*Tag No:*	A092505
Depth M:		*Contractor:*	7241
Year Completed:	2010	*Path:*	715\7152039.pdf
Well Completed Dt:	2010/09/07	*Latitude:*	43.4584306479407
Audit No:	M03210	*Longitude:*	-79.6807567536246

Links

Bore Hole ID:	1003604001	*Tag No:*	A092505
Depth M:		*Contractor:*	7241
Year Completed:	2010	*Path:*	715\7152039.pdf
Well Completed Dt:	2010/09/07	*Latitude:*	43.4582706085422
Audit No:	M03210	*Longitude:*	-79.6809332843026

Links

Bore Hole ID:	1003603938	*Tag No:*	A092505
Depth M:		*Contractor:*	7241
Year Completed:	2010	*Path:*	715\7152039.pdf
Well Completed Dt:	2010/09/03	*Latitude:*	43.4583983469935
Audit No:	M03210	*Longitude:*	-79.6810788364438

Links

Bore Hole ID:	1003604036	**Tag No:**	A092505
Depth M:		**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/09	**Latitude:**	43.458512071972
Audit No:	M03210	**Longitude:**	-79.6815707964689

Links

Bore Hole ID:	1003603947	**Tag No:**	A092505
Depth M:		**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/03	**Latitude:**	43.4582959034943
Audit No:	M03210	**Longitude:**	-79.6807844051593

Links

Bore Hole ID:	1003603974	**Tag No:**	A092505
Depth M:		**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/07	**Latitude:**	43.4582921957207
Audit No:	M03210	**Longitude:**	-79.6804631059109

Links

Bore Hole ID:	1003604029	**Tag No:**	A092505
Depth M:		**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/08	**Latitude:**	43.4586435385822
Audit No:	M03210	**Longitude:**	-79.6812589185742

Links

Bore Hole ID:	1003340124	**Tag No:**	A092505
Depth M:	3.96	**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/03	**Latitude:**	43.4583398943142
Audit No:	M03210	**Longitude:**	-79.6814756519566

Links

Bore Hole ID:	1003603983	**Tag No:**	A092505
Depth M:		**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/07	**Latitude:**	43.4582621768481
Audit No:	M03210	**Longitude:**	-79.680982910657

Links

Bore Hole ID:	1003604011	**Tag No:**	A092505
Depth M:		**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/08	**Latitude:**	43.4580005492567
Audit No:	M03210	**Longitude:**	-79.6809391558751

Links

Bore Hole ID:	1003604047	**Tag No:**	A092505
Depth M:		**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/09	**Latitude:**	43.4584937830039

Audit No:	M03210	**Longitude:**	-79.6815464723062

Links

Bore Hole ID:	1003603992	**Tag No:**	A092505
Depth M:		**Contractor:**	7241
Year Completed:	2010	**Path:**	715\7152039.pdf
Well Completed Dt:	2010/09/07	**Latitude:**	43.4582623194152
Audit No:	M03210	**Longitude:**	-79.6809952683158

Unplottable Summary

Total: 27 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	MARKBOROUGH PROPERTIES INC.-WEDGEWOOD CR	EASEMENT/CORNWALL AVE.	OAKVILLE TOWN ON	
CA	OAKVILLE TOWN	CORNWALL RD.	OAKVILLE TOWN ON	
CA	R.M. OF HALTON	TRAFALGAR RD.	OAKVILLE TOWN ON	
CA	TOWN	CORNWALL RD.	OAKVILLE ON	
CA		Trafalgar Road	Oakville ON	
CA		Trafalgar Road	Oakville ON	
CA		Cross Avenue	Oakville ON	
CA		Trafalgar Road	Oakville ON	
CA	Trafalgar Road Townhouse Development	Trafalgar Road	Oakville ON	
CA	The Regional Municipality of Halton	Trafalgar Rd	Oakville ON	
CA	R.M. OF HALTON	TRAFALGAR RD.	OAKVILLE TOWN ON	
CA	OAKVILLE TOWN	CORNWALL RD.	OAKVILLE TOWN ON	
GEN	Metrolinx GO Expansion Early Works, Capital Projects Group	MX Lakeshore West Corridor Mi 22- Mi28	Oakville & Burlington ON	L6K 3T6
LIMO	Regional Municipality of Halton Oakville 4th Line Landfill (see also A210401	and X7048) Lot 21 Concession 1 NORTH OF DUNDAS STREET TRAFALGAR Oakville	ON	
NEES	LECLAIR FUELS LTD.		OAKVILLE TOWN ON	
NEES	LECLAIR FUELS LTD.		OAKVILLE TOWN ON	
PINC	PIPELINE HIT 2"	MILLICENT AVE,,OAKVILLE,ON,L6H,CA	ON	

SPL	TRANSPORT TRUCK	TRAFALAR ROAD FROM CROSS STREET TO ALPHA LUMBER YARD MOTOR VEHICLE (OPERATING FLUID)	OAKVILLE TOWN ON	
SPL	TRANSPORT TRUCK	GRAVEL RD && TRAFALGAR TRANSPORT TRUCK (CARGO)	OAKVILLE ON	
SPL	Oakville Transit<UNOFFICIAL>	McCraney St West of Trafalgar St	Oakville ON	
SPL	Oakville Transit<UNOFFICIAL>	Cross Avenue	Oakville ON	
SPL	UNKNOWN	LAKE ONTARIO VIA STORM SEWER TRAFALGAR ROAD/LAKESHORE ROAD EAST	OAKVILLE TOWN ON	
SPL	TRANSPORT TRUCK	HWY 401 EAST OF TRAFALGAR ROAD. MOTOR VEHICLE (OPERATING FLUID)	OAKVILLE TOWN ON	L6J 3H8
SPL	PRIVATE OWNER	Q.E.W. EASTBOUND AT THE FORD PLANT, EAST OF TRAFALGAR ROAD. MOTOR VEHICLE (OPERATING FLUID)	OAKVILLE TOWN ON	
SPL	PRIVATE OWNER	TRAFALGAR ROAD SOUTH OF BURNHAMTHORPE MOTOR VEHICLE (OPERATING FLUID)	OAKVILLE TOWN ON	
SPL	MTO	401 EASTBOUND, JUST WEST OF TRAFALGAR RD MOTOR VEHICLE (OPERATING FLUID)	OAKVILLE TOWN ON	
SPL	PRIVATE OWNER	LOWER BASE LINE/TRAFALGAR RD. MOTOR VEHICLE (OPERATING FLUID)	OAKVILLE TOWN ON	

Unplottable Report

Site: *MARKBOROUGH PROPERTIES INC.-WEDGEWOOD CR EASEMENT/CORNWALL AVE. OAKVILLE TOWN ON*

Database: *CA*

Certificate #:	3-0498-90-
Application Year:	90
Issue Date:	4/10/1990
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: *OAKVILLE TOWN CORNWALL RD. OAKVILLE TOWN ON*

Database: *CA*

Certificate #:	3-1628-88-
Application Year:	88
Issue Date:	9/15/1988
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: *R.M. OF HALTON TRAFALGAR RD. OAKVILLE TOWN ON*

Database: *CA*

Certificate #:	7-1043-89-
Application Year:	89
Issue Date:	7/7/1989
Approval Type:	Municipal water
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: *TOWN CORNWALL RD. OAKVILLE ON*

Database: *CA*

Certificate #:	3-1152-85-006

Application Year:	85
Issue Date:	10/15/85
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site:
Trafalgar Road Oakville ON

Database:
CA

Certificate #:	8127-4RXLP7
Application Year:	00
Issue Date:	12/21/00
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	Longboat Development (1986) Corporation
Client Address:	228 Lakewood Drive
Client City:	Oakville
Client Postal Code:	L6K 1B2
Project Description:	This is an application for Municipal and Private Sewage Works Certificate of Approval to construct a sanitary sewer.
Contaminants:	
Emission Control:	

Site:
Trafalgar Road Oakville ON

Database:
CA

Certificate #:	4501-4RXKUF
Application Year:	00
Issue Date:	12/21/00
Approval Type:	Municipal & Private water
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	Longboat Development (1986) Corporation
Client Address:	228 Lakewood Drive
Client City:	Oakville
Client Postal Code:	L6K 1B2
Project Description:	This is an application for Municipal and Private Water Works Certificate of Approval to construct a watermain.
Contaminants:	
Emission Control:	

Site:
Cross Avenue Oakville ON

Database:
CA

Certificate #:	0628-53DL9A
Application Year:	01
Issue Date:	10/30/01
Approval Type:	Municipal & Private water
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	The Corporation of the Regional Municipality of Halton
Client Address:	1151 Bronte Road
Client City:	Oakville
Client Postal Code:	L6M 3L1
Project Description:	Installation of Watermains
Contaminants:	
Emission Control:	

Site: *Trafalgar Road Oakville ON*

Database: CA

Certificate #:	3206-53FKG3
Application Year:	01
Issue Date:	10/15/01
Approval Type:	Municipal & Private water
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	The Corporation of the Regional Municipality of Halton
Client Address:	1151 Bronte Road
Client City:	Oakville
Client Postal Code:	L6M 3L1
Project Description:	This application is for the construction of watermains on Trafalgar Road.
Contaminants:	
Emission Control:	

Site: *Trafalgar Road Townhouse Development*
Trafalgar Road Oakville ON

Database: CA

Certificate #:	1210-5DETKS
Application Year:	02
Issue Date:	8/29/02
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	Manor Hill Properties Inc.
Client Address:	115 Sheppard Avenue West
Client City:	Toronto
Client Postal Code:	M2N 1M7
Project Description:	Approval is sought for the construction of storm and sanitary sewers on Street A.
Contaminants:	
Emission Control:	

Site: *The Regional Municipality of Halton*
Trafalgar Rd Oakville ON

Database: CA

Certificate #:	9290-74AH77
Application Year:	2007
Issue Date:	6/25/2007
Approval Type:	Municipal and Private Sewage Works
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: *R.M. OF HALTON*
TRAFALGAR RD. OAKVILLE TOWN ON

Database: CA

Certificate #:	3-1237-89-
Application Year:	89
Issue Date:	7/7/1989
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	

Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***OAKVILLE TOWN***
CORNWALL RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #:	3-1493-87-
Application Year:	87
Issue Date:	9/4/1987
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: ***Metrolinx GO Expansion Early Works, Capital Projects Group***
MX Lakeshore West Corridor Mi 22- Mi28 Oakville & Burlington ON L6K 3T6

Database: ***GEN***

Generator No:	ON3627597
SIC Code:	
SIC Description:	
Approval Years:	As of Nov 2021
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	251 L
Waste Class Name:	Waste oils/sludges (petroleum based)

Site: ***Regional Municipality of Halton Oakville 4th Line Landfill (see also A210401 and X7048) Lot 21 Concession 1 NORTH OF DUNDAS STREET TRAFALGAR Oakville ON***

Database: ***LIMO***

ECA/Instrument No:	X7046	***Natural Attenuation:***	
Operation Status:	Historic	***Liners:***	
C of A Issue Date:		***Cover Material:***	
C of A Issued to:		***Leachate Off-Site:***	
Lndfl Gas Mgmt (P):		***Leachate On Site:***	
Lndfl Gas Mgmt (F):		***Req Coll Lndfll Gas:***	
Lndfl Gas Mgmt (E):		***Lndfill Gas Coll:***	
Lndfl Gas Mgmt Sys:		***Total Waste Rec:***	
Landfill Gas Mntr:		***TWR Methodology:***	
Leachate Coll Sys:		***TWR Unit:***	
ERC Est Vol (m3):		***Tot Aprv Cap Unit:***	
ERC Volume Unit:		***Financial Assurance:***	
ERC Dt Last Det:		***Last Report Year:***	
Landfill Type:		***Region:***	
Source File Type:	Historic and Closed Landfills	***District Office:***	
Fill Rate:		***Site County:***	

Fill Rate Unit:
Tot Fill Area (ha):
Tot Site Area (ha):
Footprint:
Tot Apprv Cap (m3):
Contam Atten Zone:
Grndwtr Mntr:
Surf Wtr Mntr:
Air Emis Monitor:
Approved Waste Type:
Client Site Name: Regional Municipality of Halton
Oakville 4th Line Landfill (see also A210401 and X7048)

ERC Methodology:
Site Name:
Site Location Details: Lot 21 Concession 1 NORTH OF DUNDAS STREET TRAFALGAR

Oakville

Service Area:
Page URL:

Lot:
Concession:
Latitude:
Longitude:
Easting:
Northing:
UTM Zone:
Data Source:

Site: LECLAIR FUELS LTD.
OAKVILLE TOWN ON

Database: NEES

Incident Date: 4/14/89
Contaminant: HYDRAULIC OIL
Amount: 0
Units: OA
Quantity:
Cause: Damage by Equipment
Source: Other Motor Vehicle
Reason:
Sector: Petroleum

Site: LECLAIR FUELS LTD.
OAKVILLE TOWN ON

Database: NEES

Incident Date: 4/4/89
Contaminant: DIESEL FUEL
Amount: 0
Units: OA
Quantity:
Cause: Unknown
Source: Other Motor Vehicle
Reason:
Sector: Petroleum

Site: PIPELINE HIT 2"
MILLICENT AVE,,OAKVILLE,ON,L6H,CA ON

Database: PINC

Incident Id:
Incident No: 2055914
Incident Reported Dt: 4/7/2017
Type: FS-Pipeline Incident
Status Code:
Tank Status: Pipeline Damage Reason Est
Task No:
Spills Action Centre:
Fuel Type:
Fuel Occurrence Tp:
Date of Occurrence:
Occurrence Start Dt:
Depth:
Customer Acct Name: PIPELINE HIT 2"
Incident Address: MILLICENT AVE,,OAKVILLE,ON,L6H,CA

Pipe Material:
Fuel Category:
Health Impact:
Environment Impact:
Property Damage:
Service Interrupt:
Enforce Policy:
Public Relation:
Pipeline System:
PSIG:
Attribute Category:
Regulator Location:
Method Details:

Operation Type:
Pipeline Type:
Regulator Type:
Summary:
Reported By:
Affiliation:
Occurrence Desc:
Damage Reason:
Notes:

Site: ***TRANSPORT TRUCK***
TRAFALAR ROAD FROM CROSS STREET TO ALPHA LUMBER YARD MOTOR VEHICLE (OPERATING FLUID)
OAKVILLE TOWN ON

Database: ***SPL***

Ref No: 119019
Site No:
Incident Dt: 9/27/1995
Year:
Incident Cause: OTHER CONTAINER LEAK
Incident Event:
Environment Impact: CONFIRMED
Nature of Impact: Other
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 9/27/1995
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: NEGLIGENCE (APPARENT)
Incident Summary: ALPHA LUMBER TRUCK: 8 L MOTOR OIL ALONG ROADWAY CAUSED 3 MVA'S; PD, WORKS
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved: OAKVILLE WORKS DEPT. & PD
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Site: ***TRANSPORT TRUCK***
GRAVEL RD && TRAFALGAR TRANSPORT TRUCK (CARGO) OAKVILLE ON

Database: ***SPL***

Ref No: 183886
Site No:
Incident Dt: 7/20/2000
Year:
Incident Cause: OTHER TRANSPORTATION ACCIDENT
Incident Event:
Environment Impact: CONFIRMED
Nature of Impact: Soil contamination
MOE Response:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:

Dt MOE Arvl on Scn:
MOE Reported Dt: 7/21/2000
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: ADVERSE ROAD CONDITION
Incident Summary: LIBERTY LIQUID TRANSPORT-36 METRIC TONNES ASPHALT & 25 L DIESEL/OIL TO GRND
Site Region:
Site Municipality: OAKVILLE
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Site Map Datum:
Northing:
Easting:

Site: Oakville Transit<UNOFFICIAL>
McCraney St West of Trafalgar St Oakville ON

Database: SPL

Ref No: 5868-8FWH8J
Site No:
Incident Dt: 4/14/2011
Year:
Incident Cause: Pipe Or Hose Leak
Incident Event:
Environment Impact: Confirmed
Nature of Impact: Surface Water Pollution
MOE Response: Planned Field Response
Dt MOE Arvl on Scn:
MOE Reported Dt: 4/14/2011
Dt Document Closed: 6/28/2011
Municipality No:
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code: 15
Contaminant Name: TRANSMISSION OIL
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium:
Receiving Environment:
Incident Reason: Equipment/Vehicles
Incident Summary: 25 L's spill of Transmission Fluid to Asphalt and cb
Site Region:
Site Municipality: Oakville
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type: Motor Vehicle
SAC Action Class: Watercourse Spills
Source Type:

Contaminant Qty: 25 L
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name: Spill Site<UNOFFICIAL>
Site Address: McCraney St West of Trafalgar St

Site: ***Oakville Transit<UNOFFICIAL>*** ***Database:*** ***SPL***
Cross Avenue Oakville ON

Ref No:	5558-5ZVU7Q	***Contaminant Qty:***	25 L
Site No:		***Nature of Damage:***	
Incident Dt:	6/12/2004	***Discharger Report:***	
Year:		***Material Group:***	Oil
Incident Cause:	Pipe Or Hose Leak	***Health/Env Conseq:***	
Incident Event:		***Agency Involved:***	
Environment Impact:	Not Anticipated	***Site Lot:***	
Nature of Impact:	Soil Contamination; Surface Water Pollution	***Site Conc:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Map Datum:***	
MOE Reported Dt:	6/12/2004	***Northing:***	
Dt Document Closed:		***Easting:***	
Municipality No:			
System Facility Address:			
Client Type:			
Call Report Location Geodata:			
Contaminant Code:	15		
Contaminant Name:	POWER STEARING FLUID		
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:	Land & Water		
Receiving Environment:			
Incident Reason:	Equipment Failure - Malfunction of system components		
Incident Summary:	Oakville Trans: 25L Power Steer fluid to grnd/strm		
Site Region:	Central		
Site Municipality:	Oakville		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:	Other Motor Vehicle		
SAC Action Class:	Spill to Land		
Source Type:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:	Halton-Peel		
Nearest Watercourse:			
Site Name:	GO STATION - CROSS AVENUE<UNOFFICIAL>		
Site Address:			

Site: ***UNKNOWN*** ***Database:*** ***SPL***
LAKE ONTARIO VIA STORM SEWER TRAFALGAR ROAD/LAKESHORE ROAD EAST OAKVILLE TOWN ON

Ref No:	116795	***Contaminant Qty:***	
Site No:		***Nature of Damage:***	
Incident Dt:	8/5/1995	***Discharger Report:***	
Year:		***Material Group:***	
Incident Cause:	UNKNOWN	***Health/Env Conseq:***	
Incident Event:		***Agency Involved:***	FD, HALTON REG.
Environment Impact:	POSSIBLE	***Site Lot:***	
Nature of Impact:	Water course or lake	***Site Conc:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Map Datum:***	
MOE Reported Dt:	8/5/1995	***Northing:***	
Dt Document Closed:		***Easting:***	
Municipality No:	14403		

System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND / WATER
Receiving Environment:
Incident Reason: UNKNOWN
Incident Summary: DIESEL FUEL IN SEWER SYS-TEM,OUTFALL & LAKE ONT. FD. WORKS, SOURCE UNKNOWN
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Site: TRANSPORT TRUCK
HWY 401 EAST OF TRAFALGAR ROAD. MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON L6J 3H8

Database: SPL

Ref No: 159864
Site No:
Incident Dt: 9/8/1998
Year:
Incident Cause: OTHER CONTAINER LEAK
Incident Event:
Environment Impact: POSSIBLE
Nature of Impact: Water course or lake
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 9/8/1998
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND / WATER
Receiving Environment:
Incident Reason: UNKNOWN
Incident Summary: TRANSPORT TRUCK: UNKNOWN QUANTITY DIESEL FUEL TO ROAD AND CB. MTO NOT.
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved: OPP, F.D.,MTO
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Site Name:
Site Address:

Site: *PRIVATE OWNER*
Q.E.W. EASTBOUND AT THE FORD PLANT, EAST OF TRAFALGAR ROAD. MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON

Database: SPL

Ref No:	120955	*Contaminant Qty:*	
Site No:		*Nature of Damage:*	
Incident Dt:	11/18/1995	*Discharger Report:*	
Year:		*Material Group:*	
Incident Cause:	OTHER TRANSPORTATION ACCIDENT	*Health/Env Conseq:*	
Incident Event:		*Agency Involved:*	F.D., MTO, OPP
Environment Impact:	CONFIRMED	*Site Lot:*	
Nature of Impact:	Soil contamination	*Site Conc:*	
MOE Response:		*Site Geo Ref Accu:*	
Dt MOE Arvl on Scn:		*Site Map Datum:*	
MOE Reported Dt:	11/18/1995	*Northing:*	
Dt Document Closed:		*Easting:*	
Municipality No:	14403		
System Facility Address:			
Client Type:			
Call Report Location Geodata:			
Contaminant Code:			
Contaminant Name:			
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:	LAND / WATER		
Receiving Environment:			
Incident Reason:	ERROR		
Incident Summary:	PRIVATE MOTOR VEHICLE: 135 L DIESEL TO HWY AND DITCH, F.D., MTO, OPP.		
Site Region:			
Site Municipality:	OAKVILLE TOWN		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:			
SAC Action Class:			
Source Type:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:			
Nearest Watercourse:			
Site Name:			
Site Address:			

Site: *PRIVATE OWNER*
TRAFALGAR ROAD SOUTH OF BURNHAMTHORPE MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON

Database: SPL

Ref No:	121269	*Contaminant Qty:*	
Site No:		*Nature of Damage:*	
Incident Dt:	11/27/1995	*Discharger Report:*	
Year:		*Material Group:*	
Incident Cause:	OTHER TRANSPORTATION ACCIDENT	*Health/Env Conseq:*	
Incident Event:		*Agency Involved:*	
Environment Impact:	NOT ANTICIPATED	*Site Lot:*	
Nature of Impact:		*Site Conc:*	
MOE Response:		*Site Geo Ref Accu:*	
Dt MOE Arvl on Scn:		*Site Map Datum:*	
MOE Reported Dt:	11/27/1995	*Northing:*	
Dt Document Closed:		*Easting:*	
Municipality No:	14403		
System Facility Address:			
Client Type:			
Call Report Location Geodata:			

Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: ERROR
Incident Summary: PRIVATE OWNER-40 L OF GASOLINE TO ROAD.
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Site: *MTO*
401 EASTBOUND, JUST WEST OF TRAFALGAR RD MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON

Database: *SPL*

Ref No: 153594
Site No:
Incident Dt: 12/11/1990
Year:
Incident Cause: TRUCK/TRAILER OVERTURN
Incident Event:
Environment Impact: NOT ANTICIPATED
Nature of Impact:
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 12/11/1990
Dt Document Closed:
Municipality No: 14403
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium: LAND
Receiving Environment:
Incident Reason: ADVERSE ROAD CONDITION
Incident Summary: MTO;UNK QUANTITY OF GASOLINE TO HWY FROM FUEL TANK.
Site Region:
Site Municipality: OAKVILLE TOWN
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type:
SAC Action Class:
Source Type:
Site County/District:
Site Geo Ref Meth:
Site District Office:
Nearest Watercourse:
Site Name:
Site Address:

Contaminant Qty:
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

Site: ***PRIVATE OWNER***
LOWER BASE LINE/TRAFALGAR RD. MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON

Database: SPL

Ref No:	133636	***Contaminant Qty:***	
Site No:		***Nature of Damage:***	
Incident Dt:	10/29/1996	***Discharger Report:***	
Year:		***Material Group:***	
Incident Cause:	OTHER TRANSPORTATION ACCIDENT	***Health/Env Conseq:***	
Incident Event:		***Agency Involved:***	FD
Environment Impact:	POSSIBLE	***Site Lot:***	
Nature of Impact:	Water course or lake	***Site Conc:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Map Datum:***	
MOE Reported Dt:	10/29/1996	***Northing:***	
Dt Document Closed:		***Easting:***	
Municipality No:	14403		
System Facility Address:			
Client Type:			
Call Report Location Geodata:			
Contaminant Code:			
Contaminant Name:			
Contaminant Limit 1:			
Contam Limit Freq 1:			
Contaminant UN No 1:			
Receiving Medium:	LAND / WATER		
Receiving Environment:			
Incident Reason:	UNKNOWN		
Incident Summary:	PRIVATE OWNER-20 L DIESELTO GROUND & DITCH, MVA, FD WILL CLEANUP.		
Site Region:			
Site Municipality:	OAKVILLE TOWN		
Activity Preceding Spill:			
Property 2nd Watershed:			
Property Tertiary Watershed:			
Sector Type:			
SAC Action Class:			
Source Type:			
Site County/District:			
Site Geo Ref Meth:			
Site District Office:			
Nearest Watercourse:			
Site Name:			
Site Address:			

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ***Note:*** *Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.*

Abandoned Aggregate Inventory: Provincial AAGR

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.*

Government Publication Date: Sept 2002*

Aggregate Inventory: Provincial AGR

The Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (ONDMNRF) maintains this database of pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

Government Publication Date: Up to Oct 2022

Abandoned Mine Information System: Provincial AMIS

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Government Publication Date: 1800-Mar 2022

Anderson's Waste Disposal Sites: Private ANDR

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1860s-Present

Aboveground Storage Tanks: Provincial AST

Historical listing of aboveground storage tanks made available by the Department of Natural Resources and Forestry. Includes tanks used to hold water or petroleum. This dataset has been retired as of September 25, 2014 and will no longer be updated.

Government Publication Date: May 31, 2014

Automobile Wrecking & Supplies: Private AUWR

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Government Publication Date: 1999-Feb 28, 2022

Borehole: Provincial BORE

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Government Publication Date: 1875-Jul 2018

Certificates of Approval: Provincial CA

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

Government Publication Date: 1985-Oct 30, 2011*

Dry Cleaning Facilities: Federal CDRY

List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.

Government Publication Date: Jan 2004-Dec 2021

Commercial Fuel Oil Tanks: Provincial CFOT

Locations of commercial underground fuel oil tanks. This is not a comprehensive or complete inventory of commercial fuel tanks in the province; this listing is a copy of records of registered commercial underground fuel oil tanks obtained under Access to Public Information.
Note that the following types of tanks do not require registration: waste oil tanks in apartments, office buildings, residences, etc.; aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Chemical Manufacturers and Distributors: Private CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Government Publication Date: 1999-Jan 31, 2020

Chemical Register: Private CHM

This database includes a listing of locations of facilities within the Province or Territory that either manufacture and/or distributes chemicals.

Government Publication Date: 1999-Feb 28, 2023

Compressed Natural Gas Stations: Private CNG

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

Government Publication Date: Dec 2012 -Sep 2022

Inventory of Coal Gasification Plants and Coal Tar Sites: Provincial COAL

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions: Provincial CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Government Publication Date: 1989-Feb 2023

Certificates of Property Use: Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Government Publication Date: 1994 - Feb 28, 2023

Provincial DRL

Drill Hole Database:

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependant upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Government Publication Date: 1886 - Oct 2022

Provincial DTNK

Delisted Fuel Tanks:

List of fuel storage tank sites that were once found in - and have since been removed from - the list of fuel storage tanks made available by the regulatory agency under Access to Public Information.

Government Publication Date: Feb 28, 2022

Provincial EASR

Environmental Activity and Sector Registry:

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval). Please see our ECA database.

Government Publication Date: Oct 2011- Feb 28, 2023

Provincial EBR

Environmental Registry:

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Government Publication Date: 1994 - Feb 28, 2023

Provincial ECA

Environmental Compliance Approval:

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Government Publication Date: Oct 2011- Feb 28, 2023

Federal EEM

Environmental Effects Monitoring:

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Government Publication Date: 1992-2007

Private EHS

ERIS Historical Searches:

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Dec 31, 2022

Federal EIIS

Environmental Issues Inventory System:

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Government Publication Date: 1992-2001

Emergency Management Historical Event: Provincial EMHE

List of locations of historical occurrences of emergency events, including those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act, as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance. EMHE record details are reproduced by ERIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

Government Publication Date: Apr 30, 2022

Environmental Penalty Annual Report: Provincial EPAR

This database contains data from Ontario's annual environmental penalty report published by the Ministry of the Environment and Climate Change. These reports provide information on environmental penalties for land or water violations issued to companies in one of the nine industrial sectors covered by the Municipal Industrial Strategy for Abatement (MISA) regulations.

Government Publication Date: Jan 1, 2011 - Dec 31, 2021

List of Expired Fuels Safety Facilities: Provincial EXP

List of facilities and tanks for which there was once a fuel registration. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province; this listing is a copy of previously registered tanks and facilities obtained under Access to Public Information. Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc; includes tanks which have been removed from the ground.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Federal Convictions: Federal FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Government Publication Date: 1988-Jun 2007

Contaminated Sites on Federal Land: Federal FCS

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government. Includes fire training sites and sites at which Per- and Polyfluoroalkyl Substances (PFAS) are a concern.

Government Publication Date: Jun 2000-Mar 2023

Fisheries & Oceans Fuel Tanks: Federal FOFT

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Government Publication Date: 1964-Sep 2019

Federal Identification Registry for Storage Tank Systems (FIRSTS): Federal FRST

A list of federally regulated Storage tanks from the Federal Identification Registry for Storage Tank Systems (FIRSTS). FIRSTS is Environment and Climate Change Canada's database of storage tank systems subject to the Storage Tank for Petroleum Products and Allied Petroleum Products Regulations. The main objective of the Regulations is to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal lands. Storage tank systems that do not have a valid identification number displayed in a readily visible location on or near the storage tank system may be refused product delivery.

Government Publication Date: May 31, 2018

Fuel Storage Tank: Provincial FST

List of registered private and retail fuel storage tanks. This is not a comprehensive or complete inventory of private and retail fuel storage tanks in the province; this listing is a copy of registered private and retail fuel storage tanks, obtained under Access to Public Information.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Fuel Storage Tank - Historic: Provincial FSTH

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary: Provincial GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Government Publication Date: 1986-Oct 31, 2022

Greenhouse Gas Emissions from Large Facilities: Federal GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

Government Publication Date: 2013-Dec 2019

TSSA Historic Incidents: Provincial HINC

List of historic incidences of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen recorded by the TSSA in their previous incident tracking system. The TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of historical fuel spills and leaks in the province. This listing is a copy of the data captured at one moment in time and is hence limited by the record date provided here.

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks: Federal IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

Government Publication Date: 1950-Aug 2003*

Fuel Oil Spills and Leaks: Provincial INC

Listing of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC). This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province; this listing is a copy of incidents reported to the SAC, obtained under Access to Public Information. Includes incidents from fuel-related hazards such as spills, fires, and explosions. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Landfill Inventory Management Ontario: Provincial LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the Ministry of the Environment, Conservation and Parks compiles new and updated information. Includes small and large landfills currently operating as well as those which are closed and historic. Operators of larger landfills provide landfill information for the previous operating year to the ministry for LIMO including: estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: Mar 21, 2022

Canadian Mine Locations: Private MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Government Publication Date: 1846-Feb 2023

National Analysis of Trends in Emergencies System (NATES): Federal NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

Non-Compliance Reports: Provincial NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Government Publication Date: Dec 31, 2021

National Defense & Canadian Forces Fuel Tanks: Federal NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills: Federal NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: Mar 1999-Apr 2018

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents: Federal NEBI

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Government Publication Date: 2008-Jun 30, 2021

National Energy Board Wells: Federal NEBP

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES): Federal NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

Government Publication Date: 1974-2003*

National PCB Inventory: Federal NPCB

Environment Canada's National PCB Inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

Government Publication Date: 1988-2008*

National Pollutant Release Inventory: Federal NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

Government Publication Date: 1993-May 2017

Oil and Gas Wells: Private OGWE

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Government Publication Date: 1988-Nov 30, 2022

Ontario Oil and Gas Wells: Provincial OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Government Publication Date: 1800-Aug 2021

Inventory of PCB Storage Sites: Provincial OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Government Publication Date: 1987-Oct 2004; 2012-Dec 2013

Orders: Provincial ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Government Publication Date: 1994 - Feb 28, 2023

Canadian Pulp and Paper: Private PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Government Publication Date: 1999, 2002, 2004, 2005, 2009-2014

Parks Canada Fuel Storage Tanks: Federal PCFT

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Government Publication Date: 1920-Jan 2005*

Pesticide Register: Provincial PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

Government Publication Date: Oct 2011- Feb 28, 2023

Pipeline Incidents: Provincial PINC

List of pipeline incidents (strikes, leaks, spills). This is not a comprehensive or complete inventory of pipeline incidents in the province; this listing in an historical copy of records previously obtained under Access to Public Information. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2021

Private and Retail Fuel Storage Tanks: Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Government Publication Date: 1989-1996*

Permit to Take Water: Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994 - Feb 28, 2023

Ontario Regulation 347 Waste Receivers Summary: Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Government Publication Date: 1986-1990, 1992-2020

Record of Site Condition: Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.
RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Government Publication Date: 1997-Sept 2001, Oct 2004-Mar 2023

Retail Fuel Storage Tanks: Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Government Publication Date: 1999-Feb 28, 2023

Scott's Manufacturing Directory: Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Government Publication Date: 1992-Mar 2011*

Ontario Spills: Provincial SPL

List of spills and incidents made available the Ministry of the Environment, Conservation and Parks. This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X. The Ministry of the Environment, Conservation and Parks cites the coronavirus pandemic as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: 1988-Mar 2021; May 2021-Oct 2021

Wastewater Discharger Registration Database: Provincial SRDS

Facilities that report either municipal treated wastewater effluent or industrial wastewater discharges under the Effluent Monitoring and Effluent Limits (EMEL) and Municipal/Industrial Strategy for Abatement Regulations. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment keeps record of direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation, Mining, Petroleum Refining, Organic Chemicals, Inorganic Chemicals, Pulp & Paper, Metal Casting, Iron & Steel, and Quarries.

Government Publication Date: 1990-Dec 31, 2020

Anderson's Storage Tanks: Private TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1915-1953*

Transport Canada Fuel Storage Tanks: Federal TCFT

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

Government Publication Date: 1970 - Apr 2020

Variances for Abandonment of Underground Storage Tanks: Provincial VAR

Listing of variances granted for storage tank abandonment. This is not a comprehensive or complete inventory of tank abandonment variances in the province; this listing is a copy of tank abandonment variance records previously obtained under Access to Public Information. In Ontario, registered underground storage tanks must be removed within two years of disuse; if removal of a tank is not feasible, an application may be sought for a variance from this code requirement.
Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Waste Disposal Sites - MOE CA Inventory: Provincial WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Government Publication Date: Oct 2011- Feb 28, 2023

Waste Disposal Sites - MOE 1991 Historical Approval Inventory: Provincial WDSH

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure dete and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Government Publication Date: Up to Oct 1990*

Water Well Information System: Provincial WWIS

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Government Publication Date: Jun 30 2022

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

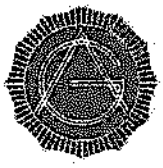
'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.



APPENDIX I

INTERVIEW QUESTIONNAIRE

© Azure Group Inc. • 2024

PHASE I ENVIRONMENTAL SITE ASSESSMENT
Owner/Tenant Questionnaire

Address of Subject Site: 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville

Person Interviewed: Calvin McCourt Relationship to Site: director of Development Project No.: 2303-03

Questions:

1How long have you been involved with the subject site?

2yars

2What is the main use of the subject site?

commercial

3What was the subject site previously used as?

commercial

If the neighbouring properties are or have been previously used as a gasoline station, motor repair facility, 4commercial printing facility, dry cleaners, junkyard or landfill, waste treatment, storage, disposal, processing or recycling facility or photo developing laboratory, etc.?

NO

To the best of your knowledge, have any of the following occurred, or is currently present on the subject site:

- Odours or stained surfaces (i.e. soil, concrete, asphalt, etc.)
- Spills, leaks or hazardous materials activities
- Above ground or underground storage tanks (i.e. utility, fuel or chemical use)
- Specific chemicals located or stored on site in container(s)
- Previous environmental site assessments completed. If yes, what were the results?
- If the property is served by a well or septic system and heating system.
- Dumping of hazardous substances or petroleum products, unidentified waste materials, automotive parts, household garbage, mixed municipal refuse, demolition debris, fill material from an unknown site.

NO

Additional Comments and Explanations

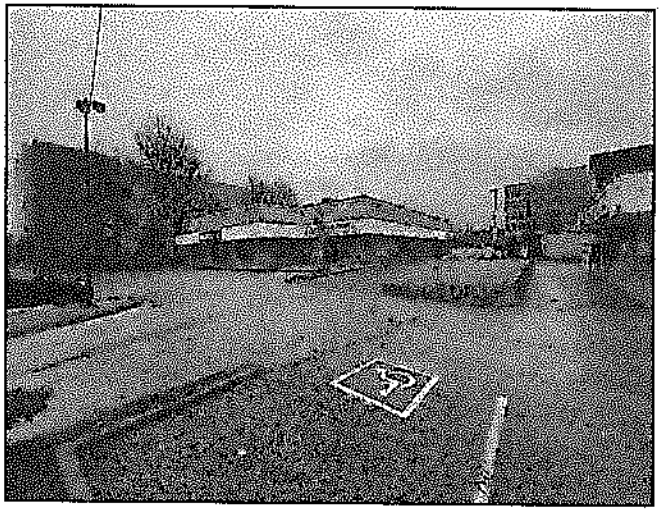
The person completing this report affirms that the above statements and facts are true and correct, based on his/her current knowledge as of the date completed.

Signature of person completing questionnaire Date Completed

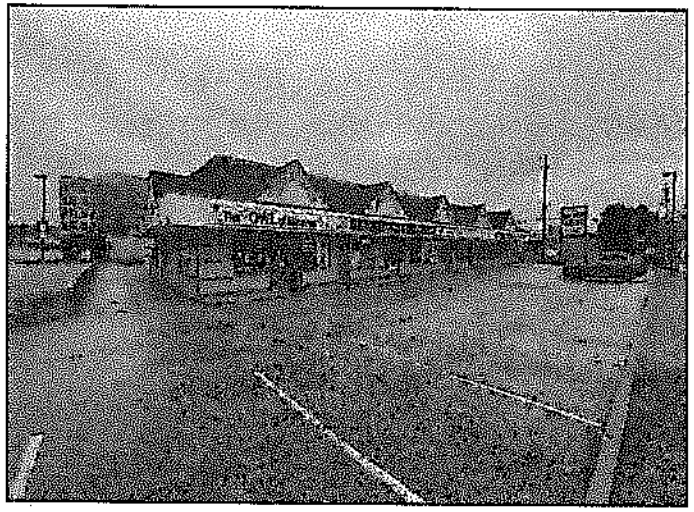
APPENDIX J

SITE PHOTOGRAPHS

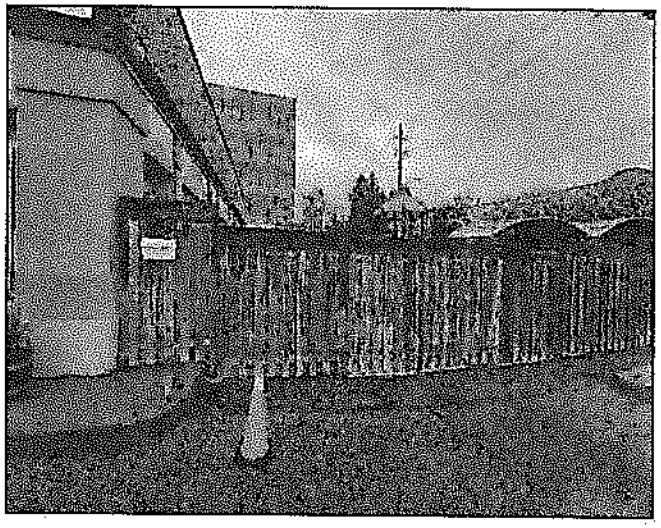
© Azure Group Inc. • 2024



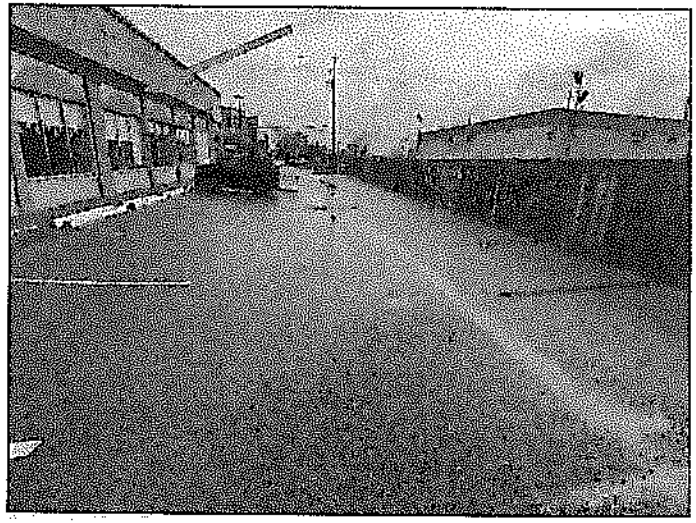
View of the south elevation of the 177 Cross Avenue Site Building, facing northwest.



View of the southern elevation of 185 & 187 Cross Avenue site building, facing northeast.

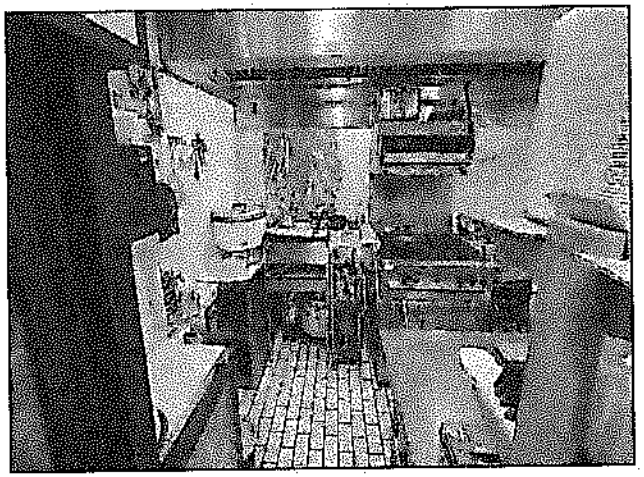


View of the Children play area at 580 Argus Road site building, facing southeast.

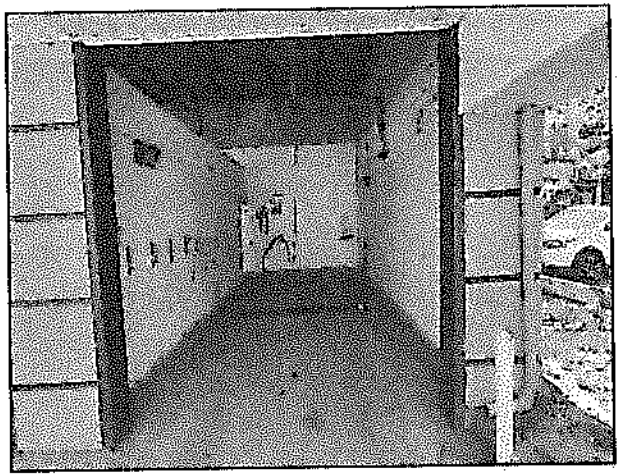


View of the Day care at northeastern portion of the Phase One Property, facing southwest.

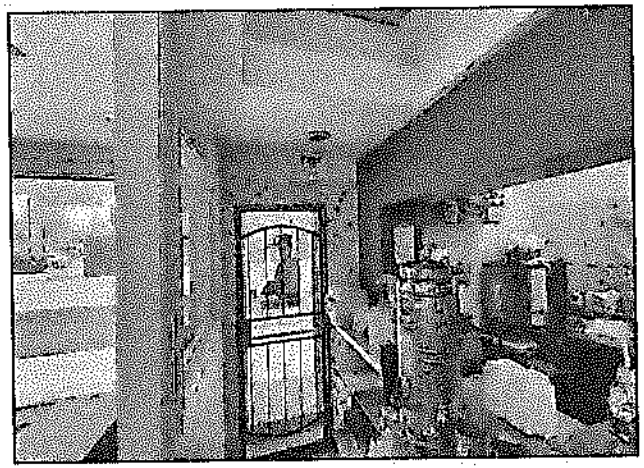
Title	Project	Project No.	Scale	Date	
Site Photographs	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As drawn	April, 2023	Page 1 of 3



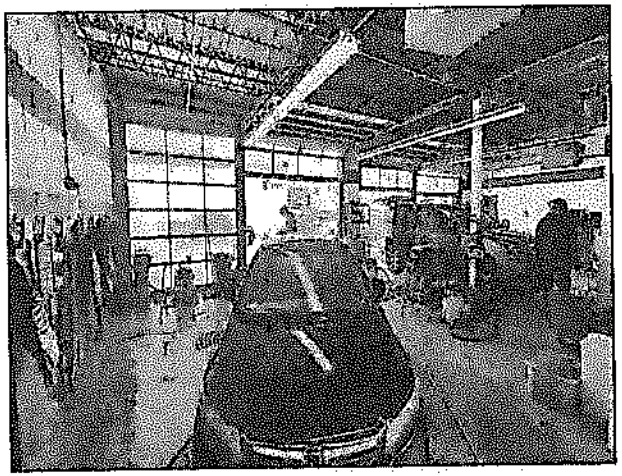
View of the Kitchen portion of the Restaurant at 185 Cross Avenue, Oakville



View of one of the Sections of the Car Wash at 177 Cross Avenue, Oakville

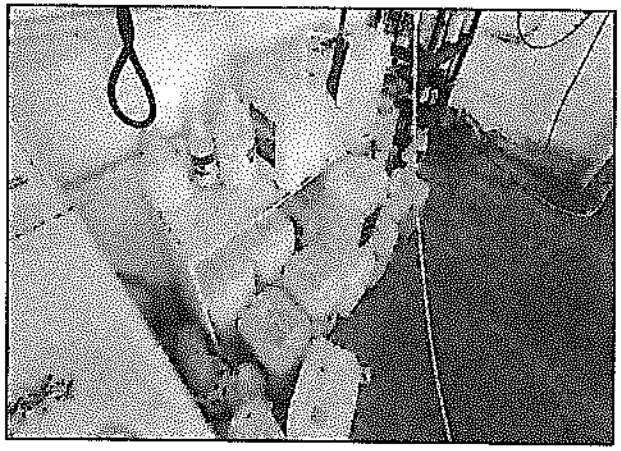


View of the Kitchen portion of the Restaurant at 185 Cross Avenue, Oakville

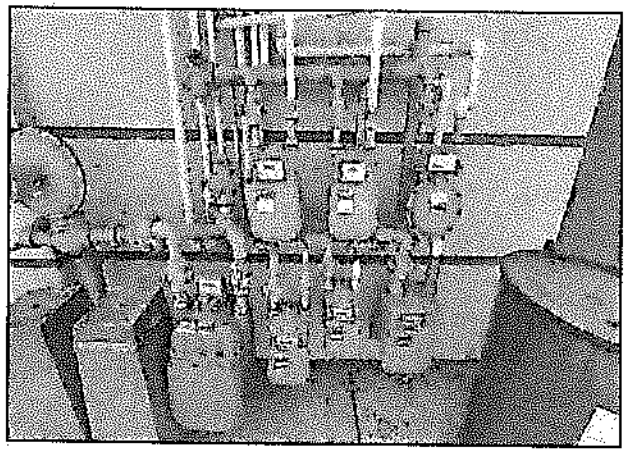


View of the Auto detailing at 187 Cross Avenue, Oakville

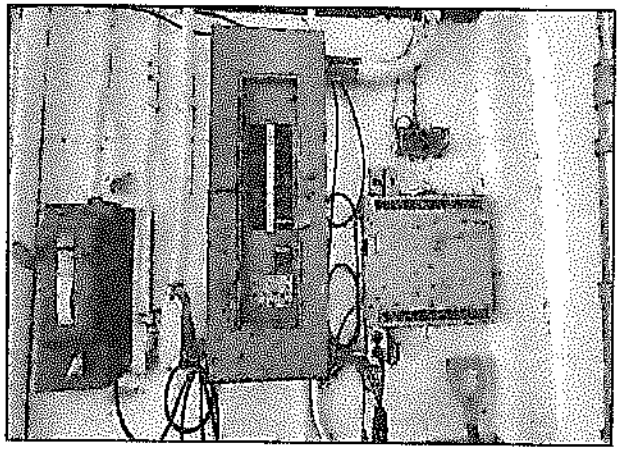
Title	Project	Project No.	Scale	Date	
Site Photographs	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As drawn	April, 2023	Page 2 of 3



View of a Washing Soap Liquids found at the Car Wash space of the Phase One Property.



View of the Gas Meters found at the space of the Phase One Property.



View of the Electrical control unit located at the 177 Cross Avenue Site Building of the Phase One Property.



Approximate location of the historical dry cleaning operation at 185 & 187 Cross Avenue Site Building of the Phase One Property.

Title	Project	Project No.	Scale	Date	
Site Photographs	177 & 185 Cross Avenue & 580 Argus Road, Oakville, Ontario	2303-003	As drawn	April, 2023	Page 3 of 3

This is Exhibit “N” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Azure Group

PHASE TWO
ENVIRONMENTAL SITE ASSESSMENT – RECORD OF SITE CONDITION

177, 185 & 187 CROSS AVENUE AND 580 ARGUS ROAD, OAKVILLE, ONTARIO

PREPARED FOR: 177 CROSS ARGUS DEVELOPMENT INC.

ADDRESS: 201A-3190 HARVESTER ROAD
BURLINGTON, ONTARIO
L7N 3T1

PROJECT NO.: 2303-003

DATE: MARCH 01, 2024
(REVISED ON MAY 21, 2024)

Azure Group Inc.
6751 Professional Court, Suites 201 & 202, Mississauga, Ontario, L4V 1Y3, Canada
T: 905 673 2694 F: 416 907 2694 C: 416 779 2694 E: info@azuregroup.ca www.azuregroup.ca

GLOSSARY OF ABBREVIATIONS

ENVIRONMENTAL MINISTRY TERMS

ESA – Environmental Site Assessment
EPA – Environmental Protection Act
RSC – Record of Site Condition
MECP – Ministry of the Environment, Conservation and Parks
MOE – Ministry of the Environment (name of Ministry prior to 2015)
PCA – Potentially Contaminating Activity
APEC – Areas of Potential Environmental Concern
MNR – Ontario Ministry of Natural Resources
OGS – Ontario Geological Society
ACMs – Asbestos-containing materials
PCBs – Polychlorinated Byphenols
AST – Above-ground Storage Tank
UST – Underground Storage Tank
CSM – Conceptual Site Model
ANSI – Areas of Natural or Scientific Interest
COPC – Contaminants of Potential Concern
WWIS – Water Well Information System
OBM – Ontario Base Map
SCC – Standards Council of Canada
CALA – Canadian Association for Laboratory Accreditation Inc.
QA/QC – Quality Assurance/Quality Control

© Azure Group • 2024

GLOSSARY OF ABBREVIATIONS

MEASUREMENT OR CHEMICAL TERMS

VOCs – Volatile Organic Compounds
PHCs – Petroleum Hydrocarbons, Fractions 1-4
PAHs – Polycyclic Aromatic Hydrocarbons
BTEX – Benzene, Toluene, Ethylbenzene and Xylenes
BH – Borehole
MW – Monitoring Well
ppm – parts per million
mbgs – metres below ground surface
SAR – Sodium Adsorption Ratio
EC – Electrical Conductivity
mamsl – metres above mean sea level
ml/min – millilitres per minute
PID – Photo-Ionization Detector
LEL – Lower Explosive Limit
LNAPL – Light Non Aqueous Phase Liquids
DNAPL – Dense Non Aqueous Phase Liquids
CFCs – Chlorofluorocarbons
IFS – Infrared Sensor
µS/cm – micro Siemens per centimetre
ORP – Oxidation-Reduction Potential
DO – Dissolved Oxygen
RPD - Relative Percent Differences

© Azure Group • 2024

EXECUTIVE SUMMARY

Azure Group Inc. (Azure) was retained by 177 Cross Argus Development Inc. (The Client) to conduct a Phase Two ESA on a irregularly-shaped parcels of land, located to the north of Cross Avenue and west of Argus Road, in Oakville, Ontario. For the purpose of this report, Azure will follow an engineering north, with Cross Avenue oriented in east-west direction. The municipal addresses of the property are 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville, Ontario (herein after referred to as the "Phase Two Property").

This Phase Two ESA report has been produced to address the findings from the previous Phase One ESA conducted by Azure. At the time of the investigation, the Phase Two Property consisted of a mixed commercial/ residential property.

Following tables describes the Potentially Contaminating Activities (PCA) at the Phase One/Two Property and within the surrounding area which generates areas of potential environmental concerns (APEC) on the Phase Two Property.

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
1-9	Phase One Property	1. Potential fill materials of unknown quality may be present at the Phase One Property which were likely imported during the property's development since the late 1940s (approximately).	30. Importation of Fill Material of Unknown Quality	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, pH
		2. Historical auto service garage at the former structure in the northeastern portion of the Phase One Property, close to the present 580 Argus structure.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs
		3. Historical carwash in the northeast portion of the Phase One Property (1967 FIPs), at the former structure in the northeastern portion of the Phase One Property, close to the present 580 Argus structure.	Other- Former Carwash	Soil: PHCs, BTEX, VOCs
		4. Historical use as Tannery, from the early 1950s to mid-1980s, at the former structure in the southwestern portion of the Phase One Property close to the present 177 Cross structure.	53. Tannery	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
		5. Historical warehouse and trailer repair operation from the early 1950s to the mid-1980s, at the former structure in the southwestern portion of the Phase One Property close to the present 177 Cross Avenue structure.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems.	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs
		6. Historical Dry Cleaning depot from 1991 to 2001 at the southeastern portion of the Phase One Property. At present 187 Cross Avenue.	37. Operation of Dry Cleaning Equipment where Chemicals are Used	PHCs, BTEX, VOCs
		7. Current presence of Transformer at the northeastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	Soil: PHCs, PCBs
		8. Current presence of Transformer at the eastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	Soil: PHCs, PCBs
		9. Public Parking of Civilian Vehicles at the portion of the Phase One Property utilized for vehicle parking	N/A. Road Salt/De-Icing on Paved Surfaces	Soil: EC and SAR, However, these are determined not to be associated contaminants of potential concern due to the fact that such PCAs are exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons.
10-11	570 Argus Road (immediately adjacent east)	10. Existing auto garage from approximately 1996 indicated in the city directories.	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs
		11. Historical printing, lithographing & metal fabrication operations were listed in the FIPs from 1967.	Other - Printing	PHCs, BTEX, VOCs

No.	Location of Potentially Contaminating Activity	Summary of Business Type / Activity	Potentially Contaminating Activity as listed in Table 2 Schedule D of O.Reg. 153	Contaminants of Potential Concern
12	586 Argus Road (immediately adjacent to the north and up-gradient)	Historical professional equipment and supplies manufacturing (Dionex Canada Ltd.) from 1996 to 2001, listed in City directories.	19. Electronic and Computer equipment manufacturing	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs
13	165 Cross Avenue (immediate west and trans-gradient)	Instant Imprints Canada Inc. was listed under Scott's manufacturing directory and city directories for commercial screen printing and sign manufacturing from 2017 to 2021	Other - Printing	PHCs, BTEX, VOCs
14	587-589 Argus Road (approximately 20 m northeast and upgradient)	Former printing operations under different business names at this property indicated in the city directory and FIPs from 1966 to 1985.	Other - Printing	PHCs, BTEX, VOCs
15	214 Cross Avenue (approximately 120 m south and downgradient)	Historical Canadian National Railway and presently Metrolinx GO station are operational since 1965	46. Rail Yards, Tracks and Spurs Other – Go Station	No COCs found due to significant distance between the Phase One Property and the PCA location and being downgradient of the Phase One Property

"TABLE OF AREAS OF POTENTIAL ENVIRONMENTAL CONCERN"
Refer to clause 16(2) (a), Schedule D, O. Reg. 153/04

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1 (Due to potential fill materials of unknown quality at the Phase One Property)	The Phase One Property	30. Importation of Fill Material of Unknown Quality	On-site	Metals, As, Sb, Se, Cr(VI), CN, Hg, B-HWS, PAHs, pH	Soil
APEC 2 (historical auto service garage in the northeast portion of the Phase One Property)	Northeastern portion of Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater
APEC 3 (Historical carwash, in the northeast portion of the Phase One Property)	Northeastern portion of Phase One Property	Other- Former Carwash	On-site	Soil: PHCs, BTEX, VOCs	Soil
APEC 4 (Due to historical property use as a Tannery former Structure, at the southwestern portion of the Phase One Property)	Southwestern portion of the Phase One Property	53. Tannery	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs	Soil and Groundwater
APEC 5 (Due to historical property use as, warehouse and trailer repair operation at the southwestern portion of the Phase One Property)	Southwestern portion of the Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 6 (Due to former Dry Cleaning depot at southeast portion of the Phase One Property)	Southeastern portion of the Phase One Property	37. Operation of Dry Cleaning Equipment where Chemicals are Used	On-Site	PHCs, BTEX, VOCs	Soil and Groundwater
APEC 7 (Due to the current presence of the Transformer at the northeastern portion of the Phase One Property)	northeastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	On-Site	PHCs, PCBs	Soil
APEC 8 (Due to the current presence of the Transformer at the eastern portion of the Phase One Property)	Eastern portion of the Phase One Property	18. Electricity Generation, Transformation and Power Stations	On-Site	PHCs, PCBs	Soil
APEC 9 (Due to potential use of salt road at the paved areas of the Phase One Property in winter seasons)	Paved areas of the Phase One Property	N/A. Road Salt/de-Icing on Paved Surfaces	On-site	EC and SAR, However, these are determined not to be associated contaminants of potential concern due to the fact that such PCAs are exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons	Soil
APEC 10 (Due to an auto garage and historical printing, lithographing & metal fabrication operations, at 570 Argus Rd immediate east	Eastern portion of the Phase One Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems Other - Printing	Off-Site	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
of the Phase One Property)					
APEC 11 (Due to Historical equipment and supplies manufacturing immediate north of Phase One Property)	Northern portion of the Phase One Property	19. Electronic and Computer equipment manufacturing	Off-site	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater
APEC 12 (Due to commercial screen printing and sign manufacturing immediate west of Phase One Property)	Southwestern portion of the Phase One Property	Other - Printing	Off-Site	PHCs, BTEX, VOCs	Soil and Groundwater
APEC 13 (Former printing operations at 587-589 Argus Road approximately 20 m northeast of Phase One Property)	Northeastern portion of the Phase One Property	Other - Printing	Off-site	PHCs, BTEX, VOCs	Soil and Groundwater

It is understood that this Phase Two ESA is being carried out for mixed residential and commercial development purposes with the Town of Oakville, Ontario and that an RSC pursuant to O. Reg. 153/04, as amended for the Phase Two Property is anticipated to be filed.

The Phase Two ESA consisted of advancing seven (7) boreholes at the Phase Two Property on May 4, 5 and 9, 2023. BH-3, BH-5, and BH-6 were completed on May 4th; BH-1 and BH-2 were completed on May 5th; and BH-4 and BH-7 were completed on May 9th. A trip blank sample was submitted along with soil submission for volatile organic compounds (VOCs) analysis. Also, three (3) additional boreholes (BH-8, BH-9 and BH-10) were developed at the Phase Two Property on February 15, 2024 for further investigation. To address the above-noted PCAs and APECs from the on-site and/or off-site land uses, as identified in our Phase One ESA report.

All seven boreholes were drilled on May 4, 5 and 9, 2023 and three boreholes were advanced on February 15, 2024. Five (5) of the boreholes (namely, BH1, BH4, BH5, BH6 and BH7)

were completed as groundwater monitoring wells. Installation of all monitoring wells was in accordance with O. Reg. 903.

Soil and groundwater samples from each borehole/monitoring well were collected and submitted for laboratory analyses of concentrations of the chemical parameters identified in our Phase One ESA.

The following table outlines the parameters analyzed for soil in each borehole.

Borehole ID	Sample ID	Sample Depth (mbgs)	Comments / Rationale
BH1 (Located within APEC 1, APEC2, APEC3, APEC9, APEC11 and APEC13)	BH1-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAH, and pH parameters.
	BH1-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs, pH parameters. • Grain Size
	BH1-5 (Native Material)	3.05 – 3.81	• Grain Size
BH2 (Located within APEC 1, APEC9 and APEC11)	BH2-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, BTEX, PHCs, VOCs and pH parameters • DUP-1 was tested for PAH parameters
	BH2-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs parameters. • Grain Size
	BH2-5 (Native Material)	3.05-3.81	• Grain Size
BH3 (Located within APEC 1, APEC4, APEC5 and APEC9)	BH3-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs parameters.
	BH3-3 (Native Material)	1.52 – 2.28	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs, pH parameters.
BH4 (Located within APEC 1, APEC9 and APEC10)	BH4-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAH, and pH parameters.
	BH4-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, BTEX, PHCs, VOCs parameters. • DUP-2 was tested for BTEX, PHCs and VOCs parameters.
BH5 (Located within APEC 1, APEC4, APEC5, APEC9 and APEC12)	BH5-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAH, pH parameters.
	BH5-3 (Native Material)	1.52 – 2.28	• No irregular odours, soil staining or significant vapour reading identified during sampling • PAHs, BTEX, PHCs, VOCs parameters. • Grain Size

Borehole ID	Sample ID	Sample Depth (mbgs)	Comments / Rationale
	BH5-4 (Native Material)	2.28-3.05	• Grain Size
BH6 (Located within APEC 1, APEC6 and APEC9)	BH6-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, pH parameters
	BH6-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs • Grain Size
	BH6-5 (Native Material)	3.05-3.81	• Grain Size
BH7 (Located within APEC 1, APEC9 and APEC10)	BH7-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • PAHs parameters
	BH7-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, BTEX, PHCs, VOCs parameters
BH8 (Additional) (Located within APEC 1, APEC2, APEC3, APEC9, APEC11)	BH8-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs parameters
BH9 (Additional) (Located within APEC 1, APEC7, APEC9 and APEC13)	BH9-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • PHCs, PCBs parameters
BH10 (Additional) (Located within APEC 1, APEC8, APEC9 and APEC10)	BH10-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • PHCs, PCBs parameters

To investigate all APECs located on the Phase Two/RSC Property, selected boreholes (BH1, BH4, BH5, BH6 and BH7) were completed as monitoring wells on May 4, 5 and 9, 2023. The approximate locations of the monitoring wells can be found on Drawings No. 3 and 5 of the CSM. A trip blank groundwater sample was submitted during groundwater submission for VOCs analysis.

Monitoring Well ID (Sample ID)	COMMENTS / RATIONALE
BH1	• Groundwater samples retrieved and tested for PHCs, BTEX, VOCs parameters. • No significant well vapour readings observed using field instruments.
BH4	• Groundwater samples retrieved and tested for Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs, PAHs parameters. • No significant well vapour readings observed using field instruments.
BH5+ Dup-1	• Groundwater samples retrieved and tested for PHCs, BTEX, VOCs, PAHs parameters. • DUP - GW1 was tested for PHCs/BTEX and VOCs parameters. • No significant well vapour readings observed using field instruments.
BH6	• Groundwater samples retrieved and tested for PHCs, BTEX, VOCs parameters. • No significant well vapour readings observed using field instruments.
BH7	• Groundwater samples retrieved and tested for Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs, PAHs parameters. • No significant well vapour readings observed using field instruments.

In accordance with the requirements of O. Reg. 153/04, based on the most sensitive expected residential use of the Subject Propery; coarse-grained soil was determined by laboratory grain size analysis to be present at the Phase Two Property ; and a laboratory-determined pH of 6.70 to 7.27 for surficial soil and 7.28 to 7.34 for subsurface soil. Therefore, Azure determined the appropriate standards for the Phase Two Property are Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA, dated April 15, 2011, Table 2 Full Depth Generic Site Condition Standards in a Potable Groundwater Condition Property Use for Residential/Parkland/Institutional Property Use and for coarse-grained soil (MECP Table 2 SCS).

It should be noted that there was a minor exceedance identified in the groundwater sample collected from BH1 for Toluene & Benzene only, which was sampled on May 11, 2023. Supplemental groundwater sampling was conducted on August 14, 2023 and August 24, 2023 which confirms that the BTEX parameters were meeting the applicable MECP Standards, therefore, Azure concluded that the exceedance was likely a bias result.

Based on the results of laboratory analyses, the measured concentrations of all the submitted soil and groundwater samples met the applicable MECP Standards. Therefore, at this time, no further investigations are recommended in the areas investigated at the Phase Two Property.

The Executive Summary statements are subject to the same limitations included in the Closure, Section 7.0, and are to be read in conjunction with the rest of this report.

TABLE OF CONTENTS

Page No.

1.0 INTRODUCTION 1

1.1 SITE DESCRIPTION 1
1.1.1 Ownership Details 1
1.2 CURRENT AND PROPOSED FUTURE USES 2
1.3 SELECTION OF SITE CONDITION STANDARDS 4
1.3.1 Environmentally Sensitive Areas 4
1.3.2 Land Use 5
1.3.3 Soil Grain Size Analysis 5
1.3.4 Potable Water 5
1.3.5 Applicable Site Condition Standards 5

2.0 BACKGROUND INFORMATION 6

2.1 PHYSICAL SETTING 6
2.1.1. Site Topography, Hydrology, and Regional Geology 6
2.2 PREVIOUS ENVIRONMENTAL INVESTIGATIONS 7

3.0 SCOPE OF SUBSURFACE INVESTIGATION 7

3.1 OVERVIEW OF THE SITE INVESTIGATION 7
3.3.1 Scope of Work 7
3.2 MEDIA INVESTIGATED 8
3.3 PHASE ONE CONCEPTUAL SITE MODEL 8
3.4 SAMPLING AND ANALYSIS PLAN 8
3.4.1 Deviations 13
3.4.2 Impediments 14

4.0 SUBSURFACE INVESTIGATION METHODOLOGY 14

4.1 GENERAL 14
4.2 BOREHOLE INVESTIGATION 14
4.2.1 Soil Sampling 14
4.3 MONITORING WELL INSTALLATION 15
4.3.1 Groundwater Sampling 15
4.4 FIELD SCREENING MEASUREMENTS 16
4.5 LABORATORY ANALYSES 16
4.5.1 Soil 16
4.5.2 Groundwater 16
4.6 RESIDUE MANAGEMENT PRACTICES 17
4.7 ELEVATION SURVEYING 17
4.8 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES 17

5.0 RESULTS OF THE PHASE TWO ESA 17

5.1 SITE GEOLOGY AND STRATIGRAPHY 17
5.2 GROUNDWATER MONITORING 18
5.2.1 Groundwater Flow Direction 18
5.2.2 Groundwater Horizontal Hydraulic Gradient 19
5.2.3 Subsurface Non-Aqueous Phase Liquids 19
5.3 SOIL RESULTS 19
5.3.1 Subsurface Vapour Concentrations 19
5.3.2 Soil Quality 19
5.4 GROUNDWATER RESULTS 20
5.4.1 Groundwater Quality 20

5.5 QUALITY ASSURANCE/QUALITY CONTROL RESULTS 20
5.6 PHASE TWO CONCEPTUAL SITE MODEL 21

6.0 CONCLUSIONS 22

7.0 CLOSURE 23

TABLES

Table 1 – Property Details
Table 2 – Client and Property Ownership Details
Table 3 – Current and Past Use Table
Table 4 – Potentially Contaminating Activities and Areas of Potential Environmental Concern
Table 5 A and B - Sampling and Analysis Plan
Table 6 – Groundwater Elevations and Monitoring Well Installation Details

ANALYTICAL TABLES

Table 7 – Soil Analytical Results for Metals and Inorganics, VOCs, PHCs/BTEX, PAHs, and PCBs
Table 8 – Groundwater Analytical Results for Metals and Inorganics, VOCs, PHCs/BTEX, and PAHs
Table 9 – Maximum Concentrations Tables for Soil Concentrations
Table 10 – Maximum Concentrations Tables for Groundwater Concentrations

DRAWINGS

Drawing No. 1: Site Location Plan
Drawing No. 2: Summary of PCAs (Potentially Contaminating Activities)
Drawing No. 3: Location of Boreholes and Monitoring Wells
Drawing No. 4: Location of APECs (Areas of Potential Environmental Concerns)
Drawing No. 5: Utility Location Plan
Drawing No. 6: Groundwater Flow Direction
Drawing No. 7: Geological Cross-Sections Key Plan
Drawing No. 8: Geological Cross-Sections (A-A' and B-B')

APPENDICES

Appendix A – Drawings
Appendix B – Borehole Logs
Appendix C – Laboratory Certificates of Analyses (Soil)
Appendix D – Laboratory Certificates of Analyses (Groundwater)
Appendix E – Sampling and Analysis Plan
Appendix F – Phase Two Conceptual Site Model

1.0 INTRODUCTION

Azure Group Inc. (Azure) was retained by 177 Cross Argus Development Inc. (The Client) to conduct a Phase Two ESA on an irregular-shaped parcel of land, located to the north of Cross Avenue and west of Argus Road, in Oakville, Ontario. For the purpose of this report, Azure will follow an engineering north, with Cross Avenue oriented in an east-west direction. The municipal addresses of the property are 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville, Ontario (herein after referred to as the "Phase Two Property"). The report format is generally compliant with the format specified for Phase Two ESAs in O. Reg. 153/04 (including amendments up to O. Reg. 362/23) (referred to as amended O. Reg. 153/04).

1.1 Site Description

The Phase Two Property is approximately 1.01 hectares (2.50 acres). The municipal addresses of the Phase Two Property are 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville. From the Parcel Register and Town of Oakville interactive map, it appears that the parcels might have been consolidated and the property identification number (PIN) for the Phase Two Property is 248416-0031(LT). The legal description for the Phase Two Property is as below:

Table 1 – Property Details

Phase Two Property Description: 177 Cross Avenue, Oakville	
Municipal Address	177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville
Property Identification Number (PIN)	248416-0031(LT)
PIN Description	LT 3, PL 1333; PT LT 1, PL 1333, AS IN 755007; PT LT 14, CON 3 TRAF SDS, AS IN 755007; TOWN OF OAKVILLE
Site Area	Approximately 1.01 hectares (2.50 acres)
UTM Coordinates for Approximate Centroid of Phase Two Property	606399.42 m E, 4812305.97 m N (Utilizing a 1983 North American Datum, and currently zoned as 17T)

1.1.1 Ownership Details

The Phase Two Property is currently owned by 177 Cross Argus Development Inc. The client is the owner of the Phase Two Property. The Client details for the Phase Two Property are shown in Table 2:

Table 2 – Client's Information Details

Client	
Client Name and Company	Sam Ganni of 177 Cross Argus Development Inc.
Client Address and Contact Information	3190 Harvester Road, Suite 201A, Burlington, ON
Property Owner, if different from above	177 Cross Argus Development Inc.
Site Contact	Mr. Calvin McCourt

1.2 Current and Proposed Future Uses

Based on the Phase One ESA prepared by Azure Group Inc. *"Phase One Environmental Site Assessment at 177 & 185 Cross Avenue and 580 Argus Road, Oakville ,ON, Ontario dated May 05, 2023 (Revised May 21, 2024) with project number 2303-003 addressed to 177 Cross Argus Development Inc."* the Phase Two Property has presently and historically been used for commercial/industrial purposes. For more information pertaining to the historical land use of the property, please refer to Table 3.

Table 3 – Current and Past Use Table

177, 185 & 187 Cross Avenue, and 580 Argus Road, Oakville PIN: 24816-0031 (LT)

Year	Name of owner	Description of property use	Property use	Other observations from aerial photographs, fire insurance plans, etc
Part of Lot 14, Concession 3, South of Dundas Street, Township of Trafalgar				
Prior to 1831	Crown	Undeveloped	Agricultural or Other use	The Phase One Property is part of Lot 14, Concession 3, South of Dundas Street granted to William Chisholm in 1831.
1831 – 1866	William Chisholm			
1866 – 1871	John Cross			Based on the historical aerial photographs, historical county maps, and fire insurances maps, the RSC Property appears to be part of undeveloped land.
1871 – 1883	William Wardall			
1883 – 1907	John Cross			
1907 – 1921	Charles Cross			
1921 – 1921	Walter Ward Price			
1921 – 1946	Edith Mary Paqt, Spinister Marion, Elizabeth Paqt, Spinister Robert, Harold Paqt, Rosa Paqt, William Paqt			
1946 – 1948	James Locke			
1948 – 1950	James Kendall			

1950 – 1965	James Kendall Leather Company Limited	Developed with at least three building structures likely for tanning, carwash and retail businesses	Industrial use	Based on historical aerial photogrpaghs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least three building structures likely utilized for tanning, carwash and retail businesses
Subdivided into three Parts, with first part being (Part 1)				
1965 – 1969	James Kendall Leather Company Limited	Developed with at least one building structures likely for tanning	Industrial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least one building structures likely utilized for tanning
1969 – 1973	Eric Thorne, Jordon Brown			
1973 – 1985	John Duncan, James Duncan	Various Businesses for Trailer Center and Hardware Store	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least one building structures likely utilized for various repair and retail businesses
1985 – 1986	572578 Ontario Limited			
1986 – 1988	Gobram Developments Ltd.			
Subdivided as Lot 1, Plan 1333, Town of Oakville (Part 2)				
1965 – 1977	Eric Thorne, Jordon Brown	Developed with at least one building utilized for carwash business	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least one building structures likely utilized for Carwash business
1977 – 1987	The Howard Conquergood Memorial Building			
1987 – 1988	Dollarbram Developments Inc.			
Subdivided as Lot 3, Plan 1333, Town of Oakville (Part 3)				
1965 – 1968	Snow Properties Limited	Developed with at least one building utilized for various retail businesses including offices, wholesale, plumbing, electrical contractors, etc.	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least one building structures likely utilized for various retail businesses including offices, wholesale, plumbing, electrical contractors, etc.
1968 – 1977	Dede Limited			
1977 – 1979	Bootsma Holdings Limited			
1979 – 1979	Komaster Corporation Limited			
1979 – 1983	John Duncan			
1983 – 1986	572578 Ontario Limited			
1986 – 1988	Gobram Developments Ltd.			
Consolidation of 3 Parts (Part 1 to 3)				

1988 – 1990	Gobram Developments Ltd.	Hardware stores, truck rental business	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS, the RSC property appears to be developed with at least three building structures likely utilized for various retail businesses
1990 – 2023	915643 Ontario Inc.	Various commercial & institutional uses including dry cleaning, automotive repair, restaurants, day care	Commercial use	Based on historical aerial photographs, fire insurance pans, city directories and ERIS and site visits, the RSC property appears to be developed with at least three building structures likely utilized for various commercial and institutional use
2023 – Current	177 Cross Argus Development Inc.			

A mixed residential and commercial development is being proposed for the Phase Two Property.

1.3 Selection of Site Condition Standards

In accordance with the requirements of the amended O. Reg. 153/04, Azure selected applicable site condition standards. The rationale for the selection of these site condition standards is provided in this section and the reasoning to support the determination of the appropriate site condition standards is presented below.

1.3.1 Environmentally Sensitive Areas

The Phase Two Property was not considered to be environmentally sensitive based on the following details:

- The Phase Two Property was neither located within an area of natural significance nor adjacent to such an area within 30 m from the Phase Two Property boundaries, as defined below:

  - A provincial park designated by a regulation under the Provincial Parks Act;
  - A conservation area established under the Public Lands Act;
  - An ANSI identified by the MNR as having provincial significance;
  - A wetland identified by the MNR as having provincial significance;
  - An area designated by Oakville in its Official Plan as environmentally significant, however expressed, including designations of environmentally sensitive areas, being of environmental concern and being ecologically significant;
  - An area designated as an escarpment natural area or an escarpment protection area by the Niagara Escarpment Plan under the Niagara Escarpment and Development Act;
  - An endangered or threatened species habitat identified by the MNR;

- A property within an area designated as a natural core area or natural linkage area within the area to which the Oak Ridges Moraine Conservation Plan under the Oak Ridges Moraine Conservation Act, 2001, applies.
- The soil pH is within 5 and 9 for surface soil and 5 and 11 for subsurface soils; and
- The Phase Two Property is not a "shallow soil property";
- There is no watercourse or water body located at the Phase Two Property or within 30 m from the Phase Two Property boundaries.

The Schedule H – Source Protection Information Atlas by the MECP (accessed online) was reviewed. The map indicates that the Phase One Property and the Phase One Study Area are not within any well-head protection area.

1.3.2 Land Use

Throughout the years, the Phase Two Property has been used for commercial and/or industrial purposes and is currently a commercial use property. Due to the plans for development of the Phase Two Property to mixed residential-commercial, the residential/parkland/institutional standards shall be applied to determine the sites' suitability for the filing of Record of Site Condition.

1.3.3 Soil Grain Size Analysis

Grain size analyses were conducted on eight soil samples collected from different depths and locations, and the results determined that the soil at the RSC Property was comprised of medium-grained soil. However, a coarse-grained soil classification shall be used for comparison of analytical data which is more stringent than medium-fine grained soil. A copy of the Certificate of Analysis for grain size analysis included in Appendix C.

1.3.4 Potable Water

Water is supplied via municipal services provided by Region of Halton. Region of Halton supplies potable water to residents of Oakville via the Halton Region Water Treatment Plant. However, no potable water well is located at the Phase Two Property or within 250 m from the Phase Two Property boundaries.

1.3.5 Applicable Site Condition Standards

Based on the above information and assumptions, the restoration criteria for this Phase Two Property corresponded to residential/parkland/institutional land use for coarse textured soil using the Full Depth Generic Site Condition Standards in a potable ground water condition (Table 2 RPI, O. Regulation 153/04).

2.0 BACKGROUND INFORMATION

2.1 Physical Setting

The physical setting of the Phase Two Property was also described in further detail in the Phase One ESA report, prepared by Azure, provided under separate cover. A summary of the site topography, hydrology and regional geology is described below.

2.1.1. Site Topography, Hydrology, and Regional Geology

At the time of the initial site visit by Azure, the Phase Two Property was a commercial/institutional-use property including three (3) Site Buildings.

Topographic information that was obtained from the Ministry of Natural Resources Canada showed the site elevation to be approximately 102 masl. The general topography of the Phase Two Property is with the grade descending gradually in the south/southwest direction towards Ontario Lake. Currently, no surface water exists on the Phase Two Property.

The groundwater flow direction in the area, based on the topography, is towards south, towards the Lake Ontario, however, according to the Phase Two investigation, the groundwater flow is south/southwest direction.

According to the physiography of the Southern Ontario, the Phase Two Property is located within the South Slope physiographic region. The South Slope represents the southern slope of the Oak Ridges Moraine and also includes a small strip south of the Peel Plain. This area extends from the Niagara Escarpment to the Trent River. Based on the Ontario Geological Survey (OGS), 2010, the surficial geology of the Phase Two Property consists of clay to silt-textured till (derived from glaciolacustrine deposits or shale); however it contains a variety of soils which are developed upon tills. Most of this area is drumlinized, and displays a gradual slope to the south toward Lake Ontario.

According to the OGS Earth Database shows that the uppermost bedrock unit at the Site consists of shale of the Queenston Formation (OGS, 2023). The Queenston Formation is Upper Ordovican in age and is characterized by a red coloured shale material. This formation outcrops below the Niagara Escarpment from Niagara Falls to Cabot Head on the Bruce Peninsula. Shale fragments/bedrock was encountered at depths between 2.4 and 10.0 mbgs at the Phase Two Property.

During the Phase Two ESA, fill soil was encountered below the asphalt pavement at the location of all boreholes. The fill consisted of loose to compact silty sand, sandy silt, clayey silt, or a mixture of these materials, trace to some gravel. The fill extended to depth ranging between 0.8 m to 1.8 m. Native sandy silt, silty sand with gravel and silty clayey gravel trace shale fragments were encountered below the fill at the location of all boreholes. The consistency of the clayey soil was very stiff to hard, and the relative density of the sandy soil was compact to dense. And weathered shale unit was encountered between 2.4 and 6.8 mbgs, the deepest depth of investigation. The upper portion of the shale was weathered and mixed

with trace silt or sand. Bedrock was encountered between a range of 2.4 and 6.8 mbgs at various location at the Phase Two Property. The upper portion of the shale was weathered and mixed with trace silt or sand. Geologic cross sections of the Phase Two Property are illustrated on Figures 7 and 8a, 8b.

There was no evidence of pits, standing water, lagoons, watercourses or stressed vegetation observed on the Phase Two Property.

2.2 Previous Environmental Investigations

A Phase One ESA was carried out on the Phase Two Property by Azure in April, 2023. Following report was prepared and referenced to develop the Phase Two ESA:

"Phase One Environmental Site Assessment at 177 & 185 Cross Avenue and 580 Argus Road, Oakville ,ON, Ontario dated May 05, 2023 (Revised May 21, 2024) with project number 2303-003 addressed to 177 Cross Argus Development Inc."

3.0 SCOPE OF SUBSURFACE INVESTIGATION

3.1 Overview of the Site Investigation

This Phase Two ESA was carried out for the Phase Two Property in general accordance with O. Reg. 153/04, as amended, to assess the subsurface conditions associated with the PCAs and APECs from the on-site and off-site PCAs as identified in our Phase One ESA report.

3.3.1 Scope of Work

The scope of work for the Phase Two ESA consisted of the following:

- Conducting public and private utility locates for the purpose of clearing individual borehole locations;
- Retaining a drilling company licensed for monitoring well installation, and advancing a total of Ten (10) boreholes for environmental investigation;
- Installing monitoring wells in five (5) of the ten (10) drilled boreholes;
- Conducting vapour measurements, and collecting representative soil samples based on the vapour reading for PHCs/BTEX (F1-F4), VOCs, metals and inorganics, PAHs, pH, and/or grain size analysis including duplicate samples for QC/QA purposes;
- Collecting groundwater samples from the monitoring wells for laboratory analyses of PHCs/BTEX (F1-F4), VOCs, PAHs, and selected metals including duplicate samples for QC/QA purposes;
- Conducting an elevation survey in order to determine the groundwater flow contour; and,
- Reviewing the collected data and preparing the Phase Two ESA in accordance with O.Reg. 153/04.

3.2 Media Investigated

The media investigated during this Phase Two ESA included soil and/or groundwater. There was no surface water or sediment present at the Phase Two Property. As such, no surface water or sediment samples were collected.

3.3 Phase One Conceptual Site Model

The Phase One Conceptual Site Model (CSM) is incorporated into the Phase Two CSM, presented in Appendix F.

3.4 Sampling and Analysis Plan

To determine the extent and nature of the environmental contaminants of concern related to the APECs associated with the PCAs identified in the Phase One CSM, a sampling and analysis plan for the Phase Two Property investigation areas was developed; Table 4 shows the potentially contaminating activities and areas of potential environmental concern. The sampling and analysis plan included the following:

- Ten (10) boreholes were advanced to collect soil samples for laboratory analyses to determine contaminant concentrations across the investigated areas; and
- Five (5) monitoring wells were installed in selected boreholes to obtain groundwater samples and data (samples for laboratory analysis and/or hydrogeologic conditions) at the Phase Two Property.

Table 4 - Potentially Contaminating Activities and Areas of Potential Environmental Concern

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1 (Due to potential fill materials of unknown quality at the RSC Property)	The RSC Property	30. Importation of Fill Material of Unknown Quality	On-site	Metals, As, Sb, Se, Cr(VI), CN, Hg, B-HWS, PAHs, pH	Soil
APEC 2 (historical auto service garage in the northeast portion of the RSC Property)	Northeastern portion of RSC Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 3 (Historical carwash, in the northeast portion of the RSC Property)	Northeastern portion of RSC Property	Other- Former Carwash	On-site	Soil: PHCs, BTEX, VOCs	Soil
APEC 4 (Due to historical property use as a Tannery former Structure, at the southwestern portion of the RSC Property)	Southwestern portion of the RSC Property	53. Tannery	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs	Soil and Groundwater
APEC 5 (Due to historical property use as, warehouse and trailer repair operation at the southwestern portion of the RSC Property)	Southwestern portion of the RSC Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	On-site	Soil: Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs, PAHs	Soil and Groundwater
APEC 6 (Due to former Dry Cleaning depot at southeast portion of the RSC Property)	Southeastern portion of the RSC Property	37. Operation of Dry Cleaning Equipment where Chemicals are Used	On-Site	PHCs, BTEX,VOCs	Soil and Groundwater
APEC 7 (Due to the current presence of the Transformer at the northeastern portion of the RSC Property)	northeastern portion of the RSC Property	18. Electricity Generation, Transformation and Power Stations	On-Site	PHCs, PCBs	Soil
APEC 8 (Due to the current presence of the	Eastern portion of the RSC Property	18. Electricity Generation, Transformation and Power	On-Site	PHCs, PCBs	Soil

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
Transformer at the eastern portion of the RSC Property)		Stations			
APEC 9 (Due to potential use of salt road at the paved areas of the RSC Property in winter seasons)	Paved areas of the RSC Property	N/A. Road Salt/de-Icing on Paved Surfaces	On-site	EC and SAR, However, these are determined not to be associated contaminants of potential concern due to the fact that such PCAs are exempt in the O. Reg. 153/04 (Section 49.1), as amended, due to their necessity for pedestrian and vehicular safety in winter seasons	Soil
APEC 10 (Due to an auto garage and historical printing, lithographing & metal fabrication operations, at 570 Argus Rd immediate east of the RSC Property)	Eastern portion of the RSC Property	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems Other - Printing	Off-Site	Metals, As, Sb, Se, Cr (VI), Hg, PAHs, PHCs, BTEX, VOCs	Soil and Groundwater
APEC 11 (Due to Historical equipment and supplies manufacturing immediate north of RSC Property)	Northern portion of the RSC Property	19. Electronic and Computer equipment manufacturing	Off-site	Soil: Metals, As, Sb, Se, Cr (VI), Hg, PHCs, BTEX, VOCs Groundwater: PHCs, BTEX, VOCs	Soil and Groundwater
APEC 12 (Due to commercial screen printing and sign manufacturing immediate west of RSC Property)	Southwestern portion of the RSC Property	Other - Printing	Off-Site	PHCs, BTEX, VOCs	Soil and Groundwater

Areas of Potential Environmental Concern (APECs)	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 13 (Former printing operations at 587-589 Argus Road approximately 20 m northeast of RSC Property)	Northeastern portion of the RSC Property	Other - Printing	Off-site	PHCs, BTEX, VOCs	Soil and Groundwater

Notes:
PHCs – Petroleum Hydrocarbons
VOCs – Volatile Organic Compounds
BTEX – Benzene, Toluene, Ethylbenzene, Xylenes
PAHs – Polycyclic Aromatic Hydrocarbons
PCBs – Polychlorinated biphenyls
Hg – Mercury
CN- – Cyanide
B-HWS – Boron Hot Water Soluble
Cr (VI) – Hexavalent Chromium
EC – Electrical Conductivity
SAR – Sodium Absorption Ratio

A sampling and analyses rationale table which summarizes the locations of the boreholes and monitoring wells and sampling and analyses conducted (not including deviations or impediments, discussed in the following sections) is presented in Table 5A and B.

Table 5A - Sampling and Analysis Plan - Soil

Borehole ID	Sample ID	Sample Depth (mbgs)	Comments / Rationale
BH1 (Located within APEC 1, APEC2, APEC3, APEC9, APEC11 and APEC13)	BH1-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAH, and pH parameters.
	BH1-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs, pH parameters. • Grain Size
	BH1-5 (Native Material)	3.05 – 3.81	• Grain Size
BH2 (Located within APEC 1, APEC9 and APEC11)	BH2-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, BTEX, PHCs, VOCs and pH parameters • DUP-1 was tested for PAH parameters
	BH2-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs parameters. • Grain Size
	BH2-5 (Native Material)	3.05-3.81	• Grain Size

Borehole ID	Sample ID	Sample Depth (mbgs)	Comments / Rationale
BH3 (Located within APEC 1, APEC4, APEC5 and APEC9)	BH3-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs parameters.
	BH3-3 (Native Material)	1.52 – 2.28	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs, pH parameters.
BH4 (Located within APEC 1, APEC9 and APEC10)	BH4-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAH, and pH parameters.
	BH4-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, BTEX, PHCs, VOCs parameters. • DUP-2 was tested for BTEX, PHCs and VOCs parameters.
BH5 (Located within APEC 1, APEC4, APEC5, APEC9 and APEC12)	BH5-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAH, pH parameters.
	BH5-3 (Native Material)	1.52 – 2.28	• No irregular odours, soil staining or significant vapour reading identified during sampling • PAHs, BTEX, PHCs, VOCs parameters. • Grain Size
	BH5-4 (Native Material)	2.28-3.05	• Grain Size
BH6 (Located within APEC 1, APEC6 and APEC9)	BH6-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, pH parameters
	BH6-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs • Grain Size
	BH6-5 (Native Material)	3.05-3.81	• Grain Size
BH7 (Located within APEC 1, APEC9 and APEC10)	BH7-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • PAHs parameters
	BH7-4 (Native Material)	2.28 – 3.05	• No irregular odours, soil staining or significant vapour reading identified during sampling • Metals, As, Sb, Se, Cr (VI), CN, Hg, B-HWS, PAHs, BTEX, PHCs, VOCs parameters
BH8 (Additional) (Located within APEC 1, APEC2, APEC3, APEC9, APEC11)	BH8-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • BTEX, PHCs, VOCs parameters
BH9 (Additional) (Located within APEC 1, APEC7, APEC9 and APEC13)	BH9-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant vapour reading identified during sampling • PHCs, PCBs parameters
BH10 (Additional)	BH10-2 (Fill Material)	0.76-1.52	• No irregular odours, soil staining or significant

Borehole ID	Sample ID	Sample Depth (mbgs)	Comments / Rationale
(Located within APEC 1, APEC8, APEC9 and APEC10)			vapour reading identified during sampling • PHCs, PCBs parameters

To investigate all APECs located on the Phase Two Property, five (5) of the seven (7) advanced boreholes (BH1, BH4, BH5, BH6 and BH7) were completed as monitoring wells on May 4, 5 and 9, 2023. The approximate locations of the monitoring wells can be found in Drawing 4 of the CSM. A trip blank was submitted with soil and groundwater submission for volatile organic compounds analysis.

Table 5B - Sampling and Analysis Plan – Groundwater

Monitoring Well ID (Sample ID)	COMMENTS / RATIONALE
BH1	• Groundwater samples retrieved and tested for PHCs, BTEX, VOCs parameters. • No significant well vapour readings observed using field instruments. • An additional round of sampling was conducted to confirm BTEX parameters are within applicable standards.
BH4	• Groundwater samples retrieved and tested for Metals, As, Sb, Se, PHCs, BTEX, VOCs, PAHs parameters. • No significant well vapour readings observed using field instruments.
BH5+ Dup-1	• Groundwater samples retrieved and tested for PHCs, BTEX, VOCs, PAHs parameters. • DUP - 1 was tested for PHCs/BTEX and VOCs parameters. • No significant well vapour readings observed using field instruments.
BH6	• Groundwater samples retrieved and tested for PHCs, BTEX, VOCs parameters. • No significant well vapour readings observed using field instruments.
BH7	• Groundwater samples retrieved and tested for Metals, As, Sb, Se, PHCs, BTEX, VOCs, PAHs parameters. • No significant well vapour readings observed using field instruments.

3.4.1 Deviations

It should be noted that there was a minor exceedance identified in the groundwater sample collected from BH1 for Toluene & Benzene only, which was sampled on May 11, 2023. Supplemental groundwater sampling was conducted on August 14, 2023 and August 24, 2023 which confirms that the BTEX parameters were meeting the applicable MECP Standards, therefore, Azure concluded that the exceedance was likely a bias result.

No other deviations to the sampling and analysis plan were made based on field observations during the assessment.

3.4.2 Impediments

The northeast portion of the Phase Two property was occupied with a day care at the time of assessment. BH1 had to be moved towards south i.e. outside the edge of fenced area of the day care, due to safety concerns. No other physical impediments or denial of access were encountered during the implementation of the sampling and analysis plan. The approximate location of the above and underground utilities is shown in Drawing No. 5 of Appendix A.

4.0 SUBSURFACE INVESTIGATION METHODOLOGY

4.1 General

The investigation methodology was conducted in general accordance with O. Reg. 153/04 (including amendments up to O. Reg. 362/23) RSCs, Part XV.1 of the EPA, the former Ministry of the Environment and Energy (now MECP) Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario, December 1996 document (MECP Sampling Guideline), and Azure standard field procedures (collectively referred to as Standard Protocols).

4.2 Borehole Investigation

Azure retained Terra Firma Environmental Services Ltd. of North York (Terra Firma), Ontario, to advance seven (7) boreholes (BH1 to BH7) at the Phase Two Property on May 4, 5 and 9, 2023. SL Sonic Soil Ltd. was retained to advance additional three (3) boreholes (BH8 to BH10) at the Phase Two Property on February 15, 2024.

4.2.1 Soil Sampling

Soil samples from BH1 to BH10 were obtained continuously using 0.76 m split spoon soil sampling equipment. The split spoon samplers were washed with Alconox powder and deionized and distilled water before each use. Subsurface conditions encountered in the boreholes were logged by Azure personnel at the time of drilling. Soil samples were recovered from the boreholes at regular intervals, visually classified, and collected in laboratory prepared bottles, preserved at temperature below 10°C and submitted for laboratory analyses. A portion of each soil sample was placed in a disposable plastic bag and analyzed in the field for petroleum derived headspace vapour concentrations (where possible) using an RKI Model Eagle 2 portable gas monitor equipped with a dual sensor for hydrocarbons (i.e., in the ppm and LEL range) and for volatile compounds (i.e., PID sensor in the ppm range). The hydrocarbon sensor was set to methane elimination mode and calibrated with hexane (for petroleum-derived vapours) and the PID sensor was calibrated with isobutylene (for solvent-derived vapours).

Soil samples were recovered, classified, collected and preserved in accordance with Standard Protocols to minimize the potential for cross-contamination. Disposable nitrile gloves were worn and changed between samples, and sampling tools were washed with Alconox Powder detergent and rinsed with deionized and distilled water prior to use and between samples.

Following the collection of soil samples, the boreholes were completed using 100 mm soild stem augers to facilitate the installation of monitoring wells.

Geologic descriptions of the subsurface soils encountered at the Phase Two Property are discussed in Section 5.1; the borehole logs are presented in Appendix B.

4.3 Monitoring Well Installation

Five (5) of the drilled boreholes (BH1, BH4, BH5, BH6 and BH7) were completed as monitoring wells to facilitate groundwater monitoring and sampling. The monitoring wells consisted of a 50 mm (2 inch) diameter PVC riser pipe fitted with a 50 mm diameter threaded PVC well screen (10 slotted). The annuli of the monitoring wells were filled with silica sand around the well screen (to approximately 0.3 m above the top of the well screen), with the remainder of the well being sealed with hydrated Bentonite pellets. The monitoring wells (BH1, BH4, BH5, BH6 and BH7) were completed with a flushmount protective casing.

On May 11, 2023, August 14, 2023 and August 24, 2023, the monitoring wells were monitored for groundwater levels and for the presence of LNAPL/DNAPL accumulations using a water level equipped with oil/water interface probe. Prior to collection of groundwater samples, the monitoring wells were purged using dedicated polyethylene bailers and wattera tube until a minimum of three well volumes were removed.

4.3.1 Groundwater Sampling

Groundwater samples were collected from the monitoring wells in BH1, BH4, BH5, BH6 and BH7. Following purging and development of the monitoring wells, once the groundwater had recovered to at least 80 percent of static levels, indicating that the observed groundwater was likely to be the formation groundwater. Groundwater samples were collected using dedicated polyethylene bailers and wattera tube along with low-flow (typically less than 200 ml/min) sampling procedures, periodically monitoring both drawdown and the water quality indicator parameters during the well purge. After drawdown and the field indicator parameters had stabilized, indicating that the well was recharging with formation water, groundwater samples were collected in laboratory-supplied sample containers.

Groundwater was subsequently collected in laboratory supplied bottles, generally in order of expected volatility: VOCs, then PHCs, PAHs, and finally selected metals and inorganics.

Samples of groundwater submitted for analysis of concentrations of VOCs and BTEX were collected under zero headspace conditions, while other samples (PHCs, PAHs, Metals and inorganics) were collected under minimal headspace conditions. The groundwater samples were collected in accordance with standard field practices, placed in laboratory prepared bottles, preserved at approximately 6°C and submitted for laboratory analyses.

Groundwater samples were collected and preserved in accordance with Standard Protocols to minimize the potential for cross-contamination. Disposable nitrile gloves were worn and

© Azure Group • 2024

changed between samples, and sampling tools were washed with Alconox powder and rinsed with deionized water prior to use and between samples. The above noted analyses on the soil and groundwater samples were conducted by AGAT Laboratories (AGAT) of Mississauga, Ontario. AGAT is accredited by the Standards Council of Canada (SCC) in co-operation with The Canadian Association for Laboratory Accreditation Inc. (CALA).

4.4 Field Screening Measurements

As noted in Section 4.2 – Borehole Investigation, field screening of the collected soil samples was completed based on visual and olfactory evidence of impact, and analyzed for petroleum- and solvent-derived headspace vapour concentrations (where possible) using an RKI Model Eagle 2, manufactured by RKI Instruments. The Eagle 2 was equipped with PID with a 10.6 eV standard lamp and calibrated on site with 100 ppm isobutylene gas for detection of solvent-derived vapours, as well as an IRS calibrated on-site with 15% LEL hexane for detection of petroleum-derived vapours. The Eagle 2 was selected for field screening purposes since it can be used to field screen for solvent derived headspace vapour concentrations from BTEX compounds, chlorinated hydrocarbons, CFCs, and some semi-volatiles, as well as petroleum-derived vapours from PHCs. The Eagle 2 is reportedly accurate to within 5% of the displayed reading or 25 ppm, whichever is greater.

Groundwater levels in the monitoring wells at the time of the drilling program were monitored using a Solinist Model 122 Interface Meter, which identifies the presence of product (non-conductive liquid) with a steady state light and tone and the presence of water (conductive liquid) with an intermittent tone and light. The conductive liquid must have an EC that is greater than 50 µS/cm. The conductive and non-conductive sensors have a reported accuracy of 1/200 feet or 1.0 mm. The conductive sensor has a reported accuracy of 1/100 feet or 1.0 mm.

4.5 Laboratory Analyses

AGAT Laboratories (AGAT) of Mississauga, Ontario, conducted all chemical analyses. AGAT is a member of the Canadian Association for Laboratory Accreditation Inc. (CALA) and meets the requirements of Section 47 of O. Reg. 153/04 certifying that the analytical laboratory be accredited in accordance with the International Standard ISO/IEC 17025 and with standards developed by the Standards Council of Canada.

4.5.1 Soil

Soil samples were collected during the drilling investigation on the Phase Two Property and submitted for laboratory analyses of the contaminants of potential concern (COPCs).

4.5.2 Groundwater

Groundwater samples were collected from permanent monitoring wells on the Phase Two Property and submitted for laboratory analysis of the COPCs.

4.6 Residue Management Practices

Soil cuttings and purged groundwater were collected in soil drums and stored at the Phase Two Property for subsequent off-site disposal by an MECP approved waste hauler, as per the scope of work.

4.7 Elevation Surveying

Elevations of the boreholes were surveyed by Azure representative on May 11, 2023. For the elevation survey, a signed Topographic survey provided by the client for the Phase Two Property was utilized. Due to presence of existing buildings and irregular shape of parcel, two reference benchmark from the topographic survey was utilized. The first benchmark was a catch basin located at northern portion with an elevation of 103.35 masl (meters above sea level) and second reference benchmark was a manhole located at the southern entrance of the Phase Two property with an elevation of 102.22 masl.

4.8 Quality Assurance and Quality Control Measures

The Quality Assurance and Quality Control (QA/QC) measures are conducted following the Sampling and Analysis Plan, indicating detailed procedures of sample collection, storage, transportation in order to meet the requirements of O.Reg. 153/04 to properly assess the soil and groundwater quality at the Site. The QA/QC program included decontamination procedures to minimize the potential of cross contamination, the selection of worst case samples, and collection of QA/QC samples. The QA/QC details are documented in Appendix E.

Three (3) duplicate soil samples were collected during the drilling program and submitted for analysis of PAHs (DUP-1), PHCs/BTEX and VOC (DUP-2), for QA/QC purposes. Two (2) duplicate groundwater sample (DUP-1) was collected from monitoring well BH5 and submitted for analyses of PHCs/BTEX and VOC for QA/QC purposes. Two (2) trip blank samples were also submitted and analysed for VOCs. There were no deviations between the results and the sampling and analysis plan.

5.0 RESULTS OF THE PHASE TWO ESA

5.1 Site Geology and Stratigraphy

Currently, the Phase Two Property is a commercial use property with three (3) Site Buildings. Potential underground utilities may be present on the boundary of the Phase Two Property and the on-site structures, as shown on Drawing 6 of Appendix A. The locations of the utilities could influence the groundwater flow direction at the Phase Two Property, but they have no affect on potential contaminant migration as all contaminant concentrations were present at concentrations lower than the applicable site condition standards.

Quaternary Geology: According to the physiography of the Southern Ontario, the Phase Two Property is located within the South Slope physiographic region. The South Slope

represents the southern slope of the Oak Ridges Moraine and also includes a small strip south of the Peel Plain. This area extends from the Niagara Escarpment to the Trent River and covers approximately 2,450 square kilometers. The Ontario Geologic Survey characterizes the Phase Two Property as being in an area of thin, discontinuous drift material overlying Paleozoic bedrock, consisting primarily of silt to silty clay matrix, high in matrix carbonate content and clast poor of Halton Till.

Bedrock Geology: According to the Ontario Geologic Survey Earth Database shows that the uppermost bedrock unit at the Phase Two Property consists of shale of the Queenston Formation (OGS, 2023). The Queenston Formation is Upper Ordovican in age and is characterized by a red coloured shale material. This formation outcrops below the Niagara Escarpment from Niagara Falls to Cabot Head on the Bruce Peninsula.

During the Phase Two ESA, the main geology unit was identified to be coarse silty sand, or silty clay overlying grey or red shale. The upper portion of the shale was weathered and mixed with trace silt or sand. The top of the weathered shale unit was encountered between 2.4 and 5.0 meters below grade surface (mbgs). Geologic cross sections of the Phase Two Property are illustrated on Drawings 8 and 8a, 8b, 8c of Appendix A.

5.2 Groundwater Monitoring

5.2.1 Groundwater Flow Direction

The hydrogeological conditions exhibited a shallow and deep aquifer units at the Phase Two Property. Hydraulic conductivity of the deposits is between 1.8 $x10^{-8}$ and 1.02 $x10^{-9}$ m/sec. Ground water within the surface (shallow) water table aquifer was measured between 98.75 masl and 101.79 masl. The ground water level within the underlying shale bedrock aquifer was 96.5 masl, which indicates a downward hydraulic gradient between the overburden sediment and the underlying shale bedrock. The overall groundwater flow for the area is south-southwest towards the Lake Ontario.

Table 6 – Groundwater Elevations and Monitoring Well Installation Details

Monitoring Well ID	Construction	Depth to water table (masl)	Water table elevation[1] (masl)
BH1	Riser: - Screen: 2.29 m	3.39	100.05
BH4	Riser: - Screen: 2.67 m	2.71	100.45
BH5	Riser: - Screen: 0.96 m	1.95	100.79
BH6	Riser: - Screen: 2.06 m	3.50	98.75
BH7	Riser: - Screen: 0.6 m	0.65	101.79

The overall groundwater flow for the area is south- southwest towards the Lake Ontario.

5.2.2 Groundwater Horizontal Hydraulic Gradient

The Phase Two Property hydrogeological conditions exhibited a shallow and deep aquifer unit at the Phase Two Property. Hydraulic conductivity of the deposits is between 1.8×10^{-8} and 1.02×10^{-9} m/sec. According to the hydrogeological assessment at the Phase Two Property, a downward hydraulic gradient between the overburden sediment and the underlying shale bedrock is observed. Based on the groundwater flow pattern for the Phase Two Property as shown on Drawing No. 7, the interpreted groundwater flow direction at the Phase Two Property is to the southwest. It should be noted that the general groundwater flow direction in general area of the Phase Two Property expects to be to the south-southwest, towards the Lake Ontario.

5.2.3 Subsurface Non-Aqueous Phase Liquids

LNAPL/DNAPLs were not encountered in the boreholes during drilling and during monitoring, purging (development) and sampling of the monitoring wells.

5.3 Soil Results

5.3.1 Subsurface Vapour Concentrations

Headspace vapour concentrations that were measured during recovery of the soil samples during drilling are presented on the borehole logs in Appendix B. As shown, soil headspace vapour concentrations in the soil samples recovered from the boreholes at the Phase Two Property were undetectable; the soil samples did not exhibit observable indications of any odours/staining, and the concentrations did not exceed 5 ppm by PID or 25 ppm by IRS.

No regulatory criteria for PHC- or solvent-derived soil vapour concentrations was observed; however, soil vapour concentrations are often used as a field screening tool to practically identify soils which are impacted with combustible liquids or PHCs. Elevated soil vapour concentrations are generally indicative of the presence of volatile combustible products, i.e., gasoline, methane, solvents and, to a lesser extent, diesel and fuel oil. Especially in the absence of visual or olfactory evidence of impact, it should be noted that elevated soil vapour concentrations may also be associated with the presence of moisture, microbial activity or decaying organic matter.

5.3.2 Soil Quality

Soil samples were collected during the drilling investigation on the Phase Two Property and submitted for laboratory analyses of the contaminants of potential concern (COPCs). The analytical results for tested soil samples were all below the MECP Table 2 SCS. Therefore, it is the Azure's opinion that the analytical results for tested soil samples were all below the MECP Table 2 RPI SCS.

Laboratory certificates for the soil analytical results are included in Appendix C.

5.4 Groundwater Results

5.4.1 Groundwater Quality

Groundwater samples were collected from permanent monitoring wells at the Phase Two Property and submitted for laboratory analysis of the COPCs.

It should be noted that there was a minor exceedance identified in the groundwater sample collected from BH1 for Toluene & Benzene only, which was sampled on May 11, 2023. Supplemental groundwater sampling was conducted on August 14, 2023 and August 24, 2023 which confirms that the BTEX parameters were meeting the applicable MECP Standards, therefore, Azure concluded that the exceedance was likely a bias result.

Therefore, it is the Azure's opinion that the analytical results for tested groundwater samples were all below the MECP Table 2 RPI SCS.

The laboratory certificates for the groundwater analytical results are included in Appendix D.

5.5 Quality Assurance/Quality Control Results

Azure staff with experience in both intrusive field investigation techniques and the COPCs that were encountered at the Phase Two Property supervised and/or performed the soil and groundwater sampling under the guidance of the QP_{ESA}. As previously mentioned, the field program maintained QA/QC using all appropriate equipment-cleaning procedures and duplicate sampling. Appropriate measures (such as field staff wearing disposable gloves, using dedicated sampling equipment, decontaminating non-dedicated sampling equipment, using pre-cleaned laboratory supplied sample containers, labelling samples and completing laboratory-supplied chain of custody records) were used to ensure data quality.

Azure collected soil and groundwater samples in conformance with our Standard Operating Procedures, developed in accordance with O. Reg. 153/04, as amended.

Samples were shipped in ice-filled coolers (to maintain temperatures at less than 10°C) along with a chain of custody to an accredited laboratory for conducting required chemical testing. The laboratory performed chemical analysis in compliance with the MECP, Laboratory Services Branch, Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the EPA, as amended.

Field Duplicate samples were collected for a minimum of 10% of the submitted samples in order to evaluate sample precision related to the analysis of all submitted soil and groundwater samples. RPDs were calculated for each compound detected if it was present in both samples of the duplicate pair, at concentrations above 5 times of the method detection limits of each parameter.

To assess any potential contamination introduced during sample transportation or from field handling procedures and/or the sampling process, one laboratory-supplied trip blank would

be submitted per groundwater submission for laboratory analysis.

Field Duplicate samples were collected to evaluate sample precision related to the analysis of all submitted soil and groundwater samples. RPD calculations were determined for each compound if it was measured in both the result of the submitted sample and the corresponding duplicate sample and it was more than 5 times the method detection limit for the respective parameter.

5.5.1 Data Quality Objectives

The analytical data received from the laboratory was reviewed for the following:

- To verify samples were analyzed for the methods requested in the chain of custody;
- To verify the requested analyses were conducted as outlined in the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the EPA, as amended;
- To review any laboratory QA/QC issues with respect to laboratory duplicates, matrix spikes, spiked blanks, method blanks or surrogate; and
- Comparability of the data. Standard analytical procedures and standard units for reporting were used to ensure comparability of the data. The results obtained are comparable to industry standards as the collection and analytical techniques that followed approved documented procedures.

The laboratory certificates for the field QA/QC analytical results are included in Appendix C and D.

5.5.2 Standard Operating Procedures

Azure standard field procedures were developed in compliance with O. Reg. 153/04, as amended, for borehole drilling, soil sampling, field screening measurements, monitoring well installation, monitoring well development, field measurement of water quality indicators and ground water sampling (collectively referred to as Standard Protocols). These Standard Protocols were adhered to in completing the field activities for this Phase Two ESA.

In consultation with Azure field staff, other Azure team members and the laboratory, the QP_{ESA} concluded that the data met the data quality objectives of this investigation and, therefore, the overall objectives of the Phase Two ESA investigation and assessment were met.

5.6 Phase Two Conceptual Site Model

Based on the Phase Two ESA completed for the Phase Two Property, a Phase Two CSM was derived and presented in Appendix F.

6.0 CONCLUSIONS

This Phase Two ESA was carried out for the Phase Two Property located at 177 & 185 Cross Avenue and 580 Argus Road in Oakville in general accordance with O. Reg. 153/04, as amended, to assess the subsurface conditions associated with the PCAs and APECs from both the on-site and off-site land uses, as identified in our Phase One ESA report, dated May 05, 2023 (Revised May 21, 2024).

The Phase Two ESA consisted of the following:

1. Seven (7) boreholes (BH1 to BH7) were completed on May 4, 5 and 9, 2023. Also, three (3) additional boreholes (BH-8, BH-9 and BH-10) were developed at the Phase Two Property on February 15, 2024 for further investigation. Five (5) of the total ten (10) boreholes (BH1, BH4, BH5, BH6 and BH7) were completed as groundwater monitoring wells. Installation of all monitoring wells was in accordance with O. Reg. 903;
2. Soil and groundwater samples from each borehole/monitoring well were collected and submitted for laboratory analysis of concentrations of one or more of the following parameters: VOCs, PHCs/BTEX, Metals, As, Sb, Se, Cr (VI), Hg and inorganics, PAHs, PCBs, pH, and/or grainsize analysis;
3. In accordance with the requirements of O. Reg. 153/04, based on the most sensitive expected residential use of the Subject Propery; coarse-grained soil determined by laboratory griansize analysis; and a laboratory-determined pH of 6.70 to 7.27 for surficial soil and 7.28 to 7.34 for subsurface soil; Azure determined the appropriate standards for the Phase Two Property are Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA, dated April 15, 2011, Table 2 Full Depth Generic Site Condition Standards in a Potable Groundwater Condition Property Use for Residential/Parkland/Institutional Property Use and for coarse-grained soil – MECP Standard (Table 2 SCS).
4. Based on the results of laboratory analyses, the measured concentrations of all the submitted soil and groundwater samples met the applicable MECP Standards.

Therefore, based on the findings of this environmental investigation, no further investigations are recommended at the Phase Two Property at this time.

7.0 CLOSURE

This report has been prepared for the sole benefit of 177 Cross Argus Development Inc. Reliance is also provided to the MECP and the Town of Oakville for the purposes of evaluating this report with respect to an RSC.

This report may not be relied upon by any other person or entity without the express written consent of Azure Group Inc. and 177 Cross Argus Development Inc. Any use that a third party makes of this report, or any reliance on decisions made based on it, is the responsibility of such parties. Azure Group Inc. accepts no responsibility for damages, if any, suffered by any party as a result of decisions made or actions based on this report.

Azure Group Inc. makes no other representation whatsoever, including those concerning the legal significance of its findings or as to the other legal matters addressed incidentally in this report, including but not limited to, ownership of any property or the application of any law to the facts set forth herein. With respect to any regulatory compliance issues, regulatory statutes are subject to interpretation. These interpretations may change over time; thus, the Client should review such issues with appropriate legal counsel.

An environmental site characterization is a limited sampling of a site. The conclusions given herein are based on information gathered at specific borehole locations and, therefore, these conclusions can only be interpreted to an undefined limited area around these locations. The extent of that limited area depends on the soil and groundwater conditions, as well as the history of the site reflecting natural, construction and other activities. In addition, since analyses have been carried out for a limited number of chemical parameters, it should not be inferred that other chemical groups are not present. Due to the nature of the investigation and the limited data available, Azure Group Inc. cannot warrant against undiscovered environmental liabilities. No other warranty or representation, either expressed or implied, is included or intended in this report.

If any conditions at the site are encountered which differ from those at the borehole locations and/or additional site information become available, Azure Group Inc. requests that this information be brought to our attention so that we may re-evaluate the conclusions presented herein. It should also be noted that current environmental Regulations, Guidelines, Policies, Standards, Protocols and Objectives are subject to change, and when and if such changes are then put into effect, this may alter the conclusions and recommendations noted throughout this report.

The undersigned Qualified Person, Ahmed Al-Temimi, P.Eng., QP_{ESA}, confirms that he was responsible for conducting and/or supervising this Phase Two ESA and the associated findings and conclusions.

AZURE GROUP INC.

Amit Pal, B.Eng.
Project Manager
amit@azuregroup.ca

Ahmed Al-Temimi, M.Sc., P.Eng., $QP_{(ESA)}$
Ontario Designated Consulting Engineer
aaltemimi@azuregroup.ca

TABLES
(7 TO 10)

Table 7 - Soil Analytical Results

Phase Two Environmental Site Assessment: 177, 185 & 191 CROSS AVENUE AND 560 ARGUS ROAD, OAKVILLE, ONTARIO

Sample ID				BH1		BH2		BH3		BH4		BH5		BH6		BH7		BH8		DUP1		DUP2		DUP3	
Date Sampled				AS-1	AS-2	AS-1	AS-2	AS-1	AS-2	AS-1	AS-2	AS-1	AS-2	AS-1	AS-2	AS-1	AS-2	AS-1	AS-2	BH1	BH2	BH1	BH3	BH1	BH4
Depth (mBGS)				0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1	0.6-1.2	1.5-2.1
Parameter	Units	Table 1 SCS	RDL	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
All Metals and Metals & Inorganics Parameters																									
Sulphur	ug/g	1400	0.5	0.6	<0.5			<0.5		<0.5		<0.5	<0.5	<0.5		<0.5									
Antimony	ug/g	10	1	4	5.0			3		7.0	5.0	4				1.0									
Arsenic	ug/g	8.70	0.3	42.1	74.9			11.9		8.5	31	132				10.4									
Beryllium	ug/g	5	0.5	0.9	1.3			1		0.6	0.6	0.7				0.5									
Boron	ug/g	120	5	10	16			33		18	13	45				8									
Boron (Hot Water Soluble)	ug/g	1	0.10	0.22				0.23		0.21	0.21	0.19				0.12									
Cadmium	ug/g	1.2	0.5	<0.5	<0.5			<0.5		<0.5	<0.5	<0.5				<0.5									
Chromium	ug/g	160	5	38	77			55		37	17	31				18									
Cobalt	ug/g	80	0.5	14.1	17.2			15.5		10.9	10.1	6.4				10.3									
Copper	ug/g	231	1.0	40.3	37.7			49.7		46.1	19.4	51				21.8									
Lead	ug/g	120	1	13	5			10		6	6	6				8									
Molybdenum	ug/g	40	0.5	<0.5	0.6			0.7		0.7	0.6	1.2				<0.5									
Nickel	ug/g	270	5	26	34			31		27	21	18				17									
Selenium	ug/g	5.5	0.4	<0.4	<0.4			<0.4		<0.4	<0.4	<0.4				<0.4									
Silver	ug/g	20	0.3	<0.3	<0.3			<0.3		<0.3	<0.3	<0.3				<0.3									
Thallium	ug/g	1	0.5	<0.5	<0.5			<0.5		<0.5	<0.5	<0.5				<0.5									
Uranium	ug/g	23	0.50	0.53	0.7			0.62		0.62	0.67	1.76				0.71									
Vanadium	ug/g	86	2.0	23.4	31.8			27.1		20.3	21.6	27.1				24.4									
Zinc	ug/g	340	5	61	72			58		66	37	93				37									
Chromium VI (Hexavalent)	ug/g	8	0.2	<0.2	<0.2			<0.2		<0.2	<0.2	<0.2				<0.2									
Cyanide, WAD	ug/g	0.051	0.040	<0.040	<0.040							<0.040				<0.040									
Mercury	ug/g	2.7	0.10	0.17	<0.10			<0.10		<0.10	<0.10	<0.10				<0.10									
pH, 2:1 CaCl2 Extraction	pH Units	5.0 to 9	NA	7.77	7.78			7.75		7.74		8.17				8.17									
Volatile Organic Compounds (VOCs) in Soil (ug/g)																									
Dichlorodifluoromethane	ug/g	16	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Vinyl Chloride	ug/g	0.032	0.02	<0.02	<0.02	<0.02		<0.02		<0.02	<0.02			<0.02		<0.02									<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50		<0.50		<0.50	<0.50			<0.50		<0.50									<0.50
1,1-Dichloroethene	ug/g	0.064	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
trans-1,2-Dichloroethene	ug/g	0.75	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
1,1-Dichloroethane	ug/g	3.5	0.02	<0.02	<0.02	<0.02		<0.02		<0.02	<0.02			<0.02		<0.02									<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50		<0.50		<0.50	<0.50			<0.50		<0.50									<0.50
cis-1,2-Dichloroethene	ug/g	1.9	0.03	<0.03	<0.03	<0.03		<0.03		<0.03	<0.03			<0.03		<0.03									<0.03
Chloroform	ug/g	0.41	0.04	<0.04	<0.04	<0.04		<0.04		<0.04	<0.04			<0.04		<0.04									<0.04
1,2-Dichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04		<0.04		<0.04	<0.04			<0.04		<0.04									<0.04
1,1,1-Trichloroethane	ug/g	0.5	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02		<0.02		<0.02	<0.02			<0.02		<0.02									<0.02
1,2-Dichloropropane	ug/g	0.18	0.03	<0.03	<0.03	<0.03		<0.03		<0.03	<0.03			<0.03		<0.03									<0.03
Trichloroethene	ug/g	0.91	0.03	<0.03	<0.03	<0.03		<0.03		<0.03	<0.03			<0.03		<0.03									<0.03
Bromodichloromethane	ug/g	13	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04		<0.04		<0.04	<0.04			<0.04		<0.04									<0.04
Toluene	ug/g	2.3	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Dibromochloromethane	ug/g	9.4	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
1,2-Dibromoethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04		<0.04		<0.04	<0.04			<0.04		<0.04									<0.04
Tetrachloroethene	ug/g	4.5	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Bromoform	ug/g	0.27	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Styrene	ug/g	0.7	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
o-Xylene	ug/g	3.1	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
m,p-Xylene	ug/g	3.1	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Xylenes (Total)	ug/g	3.1	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Styrene-Butadiene Rubber	ug/g	0.5	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50	<0.50	<0.50		<0.50		<0.50	<0.50			<0.50		<0.50									<0.50
Methyl-n-Butyl Ketone	ug/g	2.8	0.50	<0.50	<0.50	<0.50		<0.50		<0.50	<0.50			<0.50		<0.50									<0.50
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50	<0.50	<0.50		<0.50		<0.50	<0.50			<0.50		<0.50									<0.50
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50	<0.50	<0.50		<0.50		<0.50	<0.50			<0.50		<0.50									<0.50
Methyl-n-Butyl Ketone	ug/g	2.8	0.50	<0.50	<0.50	<0.50		<0.50		<0.50	<0.50			<0.50		<0.50									<0.50
Vinyl Acetate	ug/g	0.4	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Methyl-tert-butyl Ether	ug/g	0.75	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Xylenes (Total)	ug/g	3.1	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05
Styrene-Butadiene Rubber	ug/g	0.5	0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05			<0.05		<0.05									<0.05

Table 8 - Groundwater Analytical Results
Phase Two Environmental Site Assessment: 177, 185 & 187 CROSS AVENUE AND 580 ARGUS ROAD, OAKVILLE, ONTARIO

				BH1		BH4	BH5	BH6	BH7	QA/QC	
Client Sample ID	Units	Table 2 SCS	RDL	BH1	BH1-1	BH4	BH5	BH6	BH7	DUP-1	Trip Blank
Date Sampled				05/11/2023	05/11/2023	05/11/2023	05/11/2023	05/11/2023	05/11/2023	05/11/2023	05/11/2023
AGAT Sample ID				4982846	4982605	4982838	4982853	4982851	4982850	4981915	4982854
Parameter				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
PAHs											
Naphthalene	µg/L	11	0.20			<0.20	<0.20		<0.20		
Acenaphthylene	µg/L	1	0.20			<0.20	<0.20		<0.20		
Acenaphthene	µg/L	4.1	0.20			<0.20	<0.20		<0.20		
Fluorene	µg/L	120	0.20			<0.20	<0.20		<0.20		
Phenanthrene	µg/L	1	0.10			<0.10	<0.10		<0.10		
Anthracene	µg/L	2.4	0.10			<0.10	<0.10		<0.10		
Fluoranthene	µg/L	0.41	0.20			<0.20	<0.20		<0.20		
Pyrene	µg/L	4.1	0.20			<0.20	<0.20		<0.20		
Benzo(a)anthracene	µg/L	1	0.20			<0.20	<0.20		<0.20		
Chrysene	µg/L	0.1	0.10			<0.10	<0.10		<0.10		
Benzo(b)fluoranthene	µg/L	0.1	0.10			<0.10	<0.10		<0.10		
Benzo(k)fluoranthene	µg/L	0.1	0.10			<0.10	<0.10		<0.10		
Benzo(a)pyrene	µg/L	0.01	0.01			<0.01	<0.01		<0.01		
Indeno(1,2,3-cd)pyrene	µg/L	0.2	0.20			<0.20	<0.20		<0.20		
Dibenz(a,h)anthracene	µg/L	0.2	0.20			<0.20	<0.20		<0.20		
Benzo(g,h,i)perylene	µg/L	0.2	0.20			<0.20	<0.20		<0.20		
2-and 1-methyl Naphthalene	µg/L	3.2	0.30			190	84		169		
Naphthalene-d8	%		1			75	79		78		
Acridine-d9	%		1			68	87		78		
Terphenyl-d14	%		1			1	1		1		
Sediment											
BHC F1-F4 (with VOC)											
F1 (C6 + C10)	µg/L	750	25	72				<25		<25	
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25				<25		<25	
Toluene-d8	%		1	105				98		98	
F2 (C10 to C16)	µg/L	150	100	<100				<100		<100	
F3 (C16 to C34)	µg/L	500	100	<100				<100		<100	
F4 (C34 to C50)	µg/L	500	100	<100				<100		<100	
Gravimetric Heavy Hydrocarbons	µg/L		500	NA				NA		NA	
Terphenyl	% Recovery		1	100				85		89	
Sediment											
BTEX (Water)											
Benzene	µg/L	5.0	0.40	<0.40							
Toluene	µg/L	24	0.40	1.2							
Ethylbenzene	µg/L	2.4	0.20	<0.20							
m & p-Xylene	µg/L		0.40	<0.40							
o-Xylene	µg/L		0.23	<0.20							
Xylenes (Total)	µg/L	300	0.20	<0.20							
Toluene-d8	% Recovery		2	102							
4-Bromofluorobenzene	% Recovery		2	89							
PHCs (with PAHs and VOC)											
F1 (C6-C10)	µg/L	750	25			<25	<25		<25		
F1 (C6 to C10) minus BTEX	µg/L	750	25			<25	<25		<25		
Toluene-d8	%		1			104	106		107		
F2 (C10 to C16)	µg/L	150	100			<100	<100		<100		
F2 (C10 to C16) minus Naphthalene	µg/L		100			<100	<100		<100		
F3 (C16 to C34)	µg/L	500	100			<100	<100		<100		
F3 (C16 to C34) minus PAHs	µg/L		100			<100	<100		<100		
F4 (C34 to C50)	µg/L	500	100			<100	<100		<100		
Gravimetric Heavy Hydrocarbons	µg/L		500			NA	NA		NA		
Terphenyl	% Recovery		1			108	89		94		
Sediment						1	1		1		
Volatile Organic Compounds (VOCs) (with PHC)											
Dichlorodifluoromethane	µg/L	590	0.40	<0.40		<0.40	<0.40	<0.40	<0.80	<0.40	<0.40
Vinyl Chloride	µg/L	0.5	0.17	<0.17		<0.17	<0.17	<0.17	<0.34	<0.17	<0.17
Bromomethane	µg/L	0.89	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Trichlorofluoromethane	µg/L	150	0.40	<0.40		<0.40	<0.40	<0.40	<0.80	<0.40	<0.40
Acetone	µg/L	2700	10	24.8		84.9	<1.0	28.6	58.1	13.1	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	<0.30		<0.30	<0.30	<0.30	<0.60	<0.30	<0.30
Methylene Chloride	µg/L	50	0.30	<0.30		5.99	5.62	5.83	<0.60	5.41	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Methyl tert-butyl ether	µg/L	15	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
1,1-Dichloroethane	µg/L	5	0.30	<0.30		<0.30	<0.30	<0.30	<0.60	<0.30	<0.30
Methyl Ethyl Ketone	µg/L	1.0	1.0	<1.0		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Chloroform	µg/L	2.4	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200	0.30	<0.30		<0.30	<0.30	<0.30	<0.60	<0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Benzene	µg/L	5.0	0.20	17.8		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
1,2-Dichloropropane	µg/L	5	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Trichloroethylene	µg/L	1.6	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Bromodichloromethane	µg/L	16	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L	640	1.0	<1.0		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Toluene	µg/L	24	0.20	42.2		1.64	0.99	1.02	1.24	0.83	<0.20
Dibromochloromethane	µg/L	25	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
Ethylene Dibromide	µg/L	0.2	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
Chlorobenzene	µg/L	30	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
Ethylbenzene	µg/L	2.4	0.10	1.23		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
m & p-Xylene	µg/L		0.20	7.94		0.84	0.7	0.68	<0.40	0.49	<0.20
Bromoform	µg/L	25	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
Styrene	µg/L	5.4	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	1	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
o-Xylene	µg/L		0.10	8.17		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
1,3-Dichloropropene	µg/L	59	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	1	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	3	0.10	<0.10		<0.10	<0.10	<0.10	<0.20	<0.10	<0.10
1,3-Dichloropropene	µg/L	0.5	0.30	<0.30		<0.30	<0.30	<0.30	<0.60	<0.30	<0.30
Xylenes (Total)	µg/L	300	0.20	16.1		0.84	0.7	0.68	<0.40	0.49	<0.20
n-Hexane	µg/L	51	0.20	<0.20		<0.20	<0.20	<0.20	<0.40	<0.20	<0.20
Toluene-d8	% Recovery		1	105		104	106	99	107	98	103
4-Bromofluorobenzene	% Recovery		1	92		84	82	82	78	86	92
All Metals											
Dissolved Antimony	µg/L	6	1.0			<1.0			<1.0		
Dissolved Arsenic	µg/L	25	1.0			2.2			1.7		
Dissolved Barium	µg/L	1000	2.0			165			141		
Dissolved Beryllium	µg/L	4	0.50			<0.50			<0.50		
Dissolved Boron	µg/L	5000	10.0			179			226		
Dissolved Cadmium	µg/L	2.7	0.20			<0.20			<0.20		
Dissolved Chromium	µg/L	50	2.0			<2.0			<2.0		
Dissolved Cobalt	µg/L	3.8	0.50			0.74			1.14		
Dissolved Copper	µg/L	87	1.0			3.1			4.9		
Dissolved Lead	µg/L	10	0.50			<0.50			<0.50		
Dissolved Molybdenum	µg/L	70	0.50			4.09			10.3		
Dissolved Nickel	µg/L	100	1.0			2			5.2		
Dissolved Selenium	µg/L	10	1.0			<1.0			<1.0		
Dissolved Silver	µg/L	1.5	0.20			<0.20			<0.20		
Dissolved Thallium	µg/L	1	0.30			<0.30			<0.30		
Dissolved Uranium	µg/L	20	0.50			1.97			2.97		
Dissolved Vanadium	µg/L	6.2	0.40			0.47			0.78		
Dissolved Zinc	µg/L	1100	5.0			<5.0			<5.0		
Other											
Mercury	µg/L	0.29	0.02			<0.02			<0.02		
Chromium VI	µg/L	25	2			<2			<2		

Table 9 - Maximum Soil Concentration
Phase Two Environmental Site Assessment: 177, 185 & 187 CROSS AVENUE AND 580 ARGUS ROAD, OAKVILLE, ONTARIO

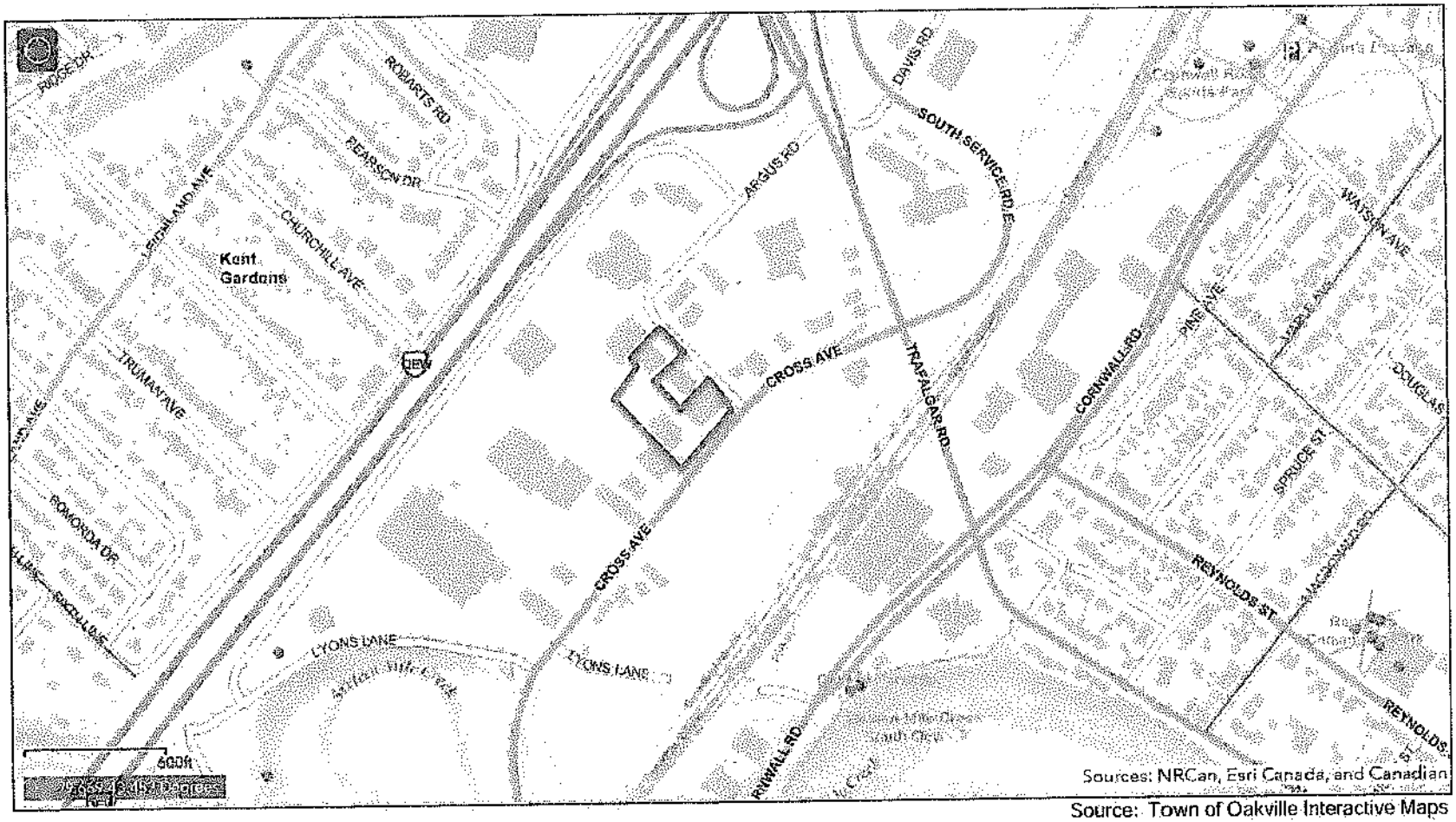
Package Name	Parameter	Unit	Table 2 SCS	Maximum Concentration	Sample ID	Depth (mbgs)
O. Reg. 153(511) - All Metals (Soil)	Antimony	µg/g	40	<0.8		
O. Reg. 153(511) - All Metals (Soil)	Arsenic	µg/g	18	8	BH7-4	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Barium	µg/g	670	73.3	BH3-2	0.76-1.52
O. Reg. 153(511) - All Metals (Soil)	Beryllium	µg/g	8	1	BH3-2	0.76-1.52
O. Reg. 153(511) - All Metals (Soil)	Boron	µg/g	1.0	24	BH7-4	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Boron (Hot Water Soluble)	µg/g	2	0.2	BH7-4	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Cadmium	µg/g	1.9	<0.3		
O. Reg. 153(511) - All Metals (Soil)	Chromium	µg/g	160	28	BH7-4	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Chromium, Hexavalent			<0.2		
O. Reg. 153(511) - All Metals (Soil)	Cobalt	µg/g	80	12.6	BH7-4	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Copper	µg/g	230	97.3	BH7-4	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Lead	µg/g	120	10	BH3-2	0.76-1.52
O. Reg. 153(511) - All Metals (Soil)	Mercury	µg/g	3.9	<0.1		
O. Reg. 153(511) - All Metals (Soil)	Molybdenum	µg/g	40	0.6	BH4-3	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Nickel	µg/g	270	34	BH7-4	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Selenium	µg/g	5.5	<0.8		
O. Reg. 153(511) - All Metals (Soil)	Silver	µg/g	40	<0.5		
O. Reg. 153(511) - All Metals (Soil)	Thallium	µg/g	3.3	<0.5		
O. Reg. 153(511) - All Metals (Soil)	Uranium	µg/g	33	0.79	BH5-2	0.76-1.52
O. Reg. 153(511) - All Metals (Soil)	Vanadium	µg/g	86	39.5	BH7-4	2.29-3.04
O. Reg. 153(511) - All Metals (Soil)	Zinc	µg/g	340	77	BH7-4	2.29-3.04
O. Reg. 153(511) - Metals & Inorganics (Soil)	Antimony	µg/g	40	<0.8		
O. Reg. 153(511) - Metals & Inorganics (Soil)	Arsenic	µg/g	18	7	BH3-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Barium	µg/g	670	153	BH5-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Beryllium	µg/g	8	0.9	BH2-7	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Boron	µg/g	120	18	BH4-7	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Boron (Hot Water Soluble)	µg/g	2	0.4	BH5-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Cadmium	µg/g	1.2	<0.3		
O. Reg. 153(511) - Metals & Inorganics (Soil)	Chromium	µg/g	160	23	BH4-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Chromium, Hexavalent			<0.2		
O. Reg. 153(511) - Metals & Inorganics (Soil)	Cobalt	µg/g	80	11.1	BH1-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Copper	µg/g	230	80.8	BH5-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Cyanide, WAD	µg/g	0.051	<0.04		
O. Reg. 153(511) - Metals & Inorganics (Soil)	Lead	µg/g	120	12	BH3-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Mercury	µg/g	3.9	<0.1		
O. Reg. 153(511) - Metals & Inorganics (Soil)	Molybdenum	µg/g	40	1.8	BH2-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Nickel	µg/g	270	27	BH3-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	7.27	BH4-3	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Selenium	µg/g	5.5	<0.8		
O. Reg. 153(511) - Metals & Inorganics (Soil)	Silver	µg/g	40	<0.5		
O. Reg. 153(511) - Metals & Inorganics (Soil)	Thallium	µg/g	3.3	<0.5		
O. Reg. 153(511) - Metals & Inorganics (Soil)	Uranium	µg/g	33	1.15	BH3-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Vanadium	µg/g	86	30.9	BH4-2	0.76-1.52
O. Reg. 153(511) - Metals & Inorganics (Soil)	Zinc	µg/g	340	72	BH7-2	0.76-1.52
O. Reg. 153(511) - PAHs (Soil)	1 and 2 Methylnaphthalene	µg/g	99	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Acenaphthene	µg/g	99	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Acenaphthylene	µg/g	0.15	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Acridine-d9	%	(blank)	110	BH5-3	1.52-2.28
O. Reg. 153(511) - PAHs (Soil)	Anthracene	µg/g	0.67	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Benz[a]anthracene	µg/g	0.96	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Benzo[a]pyrene	µg/g	0.3	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Benzo[b]fluoranthene	µg/g	0.96	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Benzo[g,h,i]perylene	µg/g	9.6	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Benzo[k]fluoranthene	µg/g	0.96	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Chrysene	µg/g	9.6	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Dibenz[a,h]anthracene	µg/g	0.1	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Fluoranthene	µg/g	9.6	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Fluorene	µg/g	62	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Indeno[1,2,3-cd]pyrene	µg/g	0.76	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Moisture Content	%	(blank)	20.9	BH5-2	0.76-1.52
O. Reg. 153(511) - PAHs (Soil)	Naphthalene	µg/g	9.6	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Naphthalene-d8	%	(blank)	104	BH5-2	0.76-1.52
O. Reg. 153(511) - PAHs (Soil)	Phenanthrene	µg/g	12	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Pyrene	µg/g	96	<0.05		
O. Reg. 153(511) - PAHs (Soil)	Terphenyl-d14	%	(blank)	110		
O. Reg. 153(511) - PCBs (Soil)	Decachlorobiphenyl	%	(blank)	88	BH4-2	0.76-1.52
O. Reg. 153(511) - PCBs (Soil)	Moisture Content	%	(blank)	19.8	BH4-2	0.76-1.52
O. Reg. 153(511) - PCBs (Soil)	Polychlorinated Biphenyls	µg/g	1.1	<0.1		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	F1 (C6 - C10)	µg/g	55	<5		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	F2 (C10 to C16) minus BTEX	µg/g	98	<5		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	F2 (C10 to C16)	µg/g	230	<10		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	F2 (C10 to C16) minus Naphthalene	µg/g	(blank)	<10		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	F3 (C16 to C34)	µg/g	1700	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	F3 (C16 to C34) minus PAHs	µg/g	(blank)	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	F4 (C34 to C50)	µg/g	3300	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	Gravimetric Heavy Hydrocarbons	µg/g	3400	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	Moisture Content	%	(blank)	14	BH3-3	1.52-2.28
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)	Terphenyl	%	(blank)	90	BH3-3	1.52-2.28
O. Reg. 153(511) - PHCs F2 - F4 (with PAHs and VOC) (Soil)	Toluene-d8	%	(blank)	94	BH3-3	1.52-2.28
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	F1 (C6 - C10)	µg/g	55	<5		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	F1 (C6 to C10) minus BTEX	µg/g	55	<5		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	F2 (C10 to C16)	µg/g	89	<10		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	F3 (C16 to C34)	µg/g	1700	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)			300	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)			3100	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	F4 (C34 to C50)	µg/g	2800	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)			3100	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	Gravimetric Heavy Hydrocarbons	µg/g	2800	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)			3100	<50		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	Moisture Content	%	(blank)	12.7	BH3-3	1.52-2.28
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	Terphenyl	%	(blank)	93		
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)	Toluene-d8	%	(blank)	98	BH5-3	1.52-2.28
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,1,1,2-Tetrachloroethane	µg/g	0.087	<0.04		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,1,1-Trichloroethane	µg/g	6.1	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,1,2,2-Tetrachloroethane	µg/g	0.05	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,1,2-Trichloroethane	µg/g	0.05	<0.04		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,1-Dichloroethane	µg/g	0.47	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,1-Dichloroethylene	µg/g	0.064	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,2-Dichloroethylene	µg/g	1.2	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,2-Dichloropropane	µg/g	0.05	<0.03		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,3-Dichlorobenzene	µg/g	0.16	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,3-Dichloropropene (Cis + Trans)	µg/g	0.08	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	1,4-Dichlorobenzene	µg/g	0.2	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	4-Bromofluorobenzene	% Recovery	(blank)	95	BH4-4	2.29-3.04
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Acetone	µg/g	16	<0.5		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Benzene	µg/g	0.32	<0.02		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Bromodichloromethane	µg/g	1.9	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Bromoform	µg/g	0.61	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Bromomethane	µg/g	0.05	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Carbon Tetrachloride	µg/g	0.21	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Chlorobenzene	µg/g	2.4	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Chloroform	µg/g	0.47	<0.04		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Cis-1,2-Dichloroethylene	µg/g	1.9	<0.02		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Dibromochloromethane	µg/g	2.3	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Dichlorodifluoromethane	µg/g	16	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Ethylbenzene	µg/g	1.1	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Ethylene Dibromide	µg/g	0.05	<0.04		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	m & p-Xylene	µg/g	(blank)	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Methyl Ethyl Ketone	µg/g	16	<0.5		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Methyl Isobutyl Ketone	µg/g	31	<0.5		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Methyl tert-Butyl Ether	µg/g	1.8	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Methylene Chloride	µg/g	1.6	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Moisture Content	%	(blank)	14	BH5-3	1.52-2.28
O. Reg. 153(511) - VOCs (with PHC) (Soil)	o-Xylene	µg/g	1.1	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	p-Xylene	µg/g	(blank)	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Styrene	µg/g	34	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Tetrachloroethylene	µg/g	4.5	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Toluene	µg/g	2.3	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Toluene-d8	% Recovery	(blank)	96	BH5-3	1.52-2.28
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Trans-1,2-Dichloroethylene	µg/g	1.3	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Trichloroethylene	µg/g	0.55	<0.03		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Trichlorofluoromethane	µg/g	4	<0.05		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Vinyl Chloride	µg/g	0.032	<0.07		
O. Reg. 153(511) - VOCs (with PHC) (Soil)	Xylenes (Total)	µg/g	25	<0.05		
pH in Soil	pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	7.27	BH3-3	1.52-2.28

Table 10 - Maximum Groundwater Concentration
Phase Two Environmental Site Assessment: 177, 199 & 187 CROSS AVENUE AND 60 ARGUS ROAD, OAKVILLE, ONTARIO

Package Name	Parameter	Unit	Table 2 SCS	Maximum Concentration	Sample ID
O. Reg. 153(511) - BTEX (Water)	4-Bromofluorobenzene	% Recovery	[blank]	88	BH-1
O. Reg. 153(511) - BTEX (Water)	Benzene	ug/L	5	<0.4	
O. Reg. 153(511) - BTEX (Water)	Ethylbenzene	ug/L	2.4	<0.2	
O. Reg. 153(511) - BTEX (Water)	m & p-Xylene	ug/L	[blank]	<0.4	
O. Reg. 153(511) - BTEX (Water)	o-Xylene	ug/L	[blank]	<0.2	
O. Reg. 153(511) - BTEX (Water)	Toluene	ug/L	24	0.2	BH-1
O. Reg. 153(511) - BTEX (Water)	Toluene-d8	% Recovery	[blank]	102	BH-1
O. Reg. 153(511) - BTEX (Water)	Xylenes (Total)	ug/L	300	<0.2	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Antimony	ug/L	6	<1	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Arsenic	ug/L	15	2.3	BH4
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Barium	ug/L	1000	118	BH4
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Beryllium	ug/L	4	<0.5	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Boron	ug/L	5000	222	BH7
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Cadmium	ug/L	2.7	<0.2	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Chromium	ug/L	50	<5	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Cobalt	ug/L	3.8	1.14	BH7
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Copper	ug/L	87	4.6	BH7
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Lead	ug/L	10	<0.5	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Molybdenum	ug/L	70	10.1	BH7
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Nickel	ug/L	100	5.2	BH7
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Selenium	ug/L	10	<1	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Silver	ug/L	1.5	<0.2	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Thallium	ug/L	2	<0.3	
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Uranium	ug/L	20	7.27	BH7
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Vanadium	ug/L	6.2	0.78	BH7
O. Reg. 153(511) - Metals (Including Hydrides) (Water)	Dissolved Zinc	ug/L	1100	<5	
O. Reg. 153(511) - ORPs (Water)	Chromium VI	ug/L	70	<2	BH4
O. Reg. 153(511) - ORPs (Water)	Mercury	ug/L	0.29	<0.02	BH4
O. Reg. 153(511) - PAHs (Water)	2-and 1-methyl Naphthalene	ug/L	2.3	<0.2	
O. Reg. 153(511) - PAHs (Water)	Acenaphthene	ug/L	4.1	<0.2	
O. Reg. 153(511) - PAHs (Water)	Acenaphthylene	ug/L	-	<0.2	
O. Reg. 153(511) - PAHs (Water)	Acridine-d9	%	[blank]	72	BH5
O. Reg. 153(511) - PAHs (Water)	Acridine	ug/L	2.8	<0.1	
O. Reg. 153(511) - PAHs (Water)	Benz(a)anthracene	ug/L	1	<0.2	
O. Reg. 153(511) - PAHs (Water)	Benzo(a)pyrene	ug/L	0.01	<0.01	BH5
O. Reg. 153(511) - PAHs (Water)	Benzo(b)fluoranthene	ug/L	0.1	<0.1	
O. Reg. 153(511) - PAHs (Water)	Benzo(g,h,i)perylene	ug/L	0.2	<0.2	
O. Reg. 153(511) - PAHs (Water)	Benzo(k)fluoranthene	ug/L	0.2	<0.1	
O. Reg. 153(511) - PAHs (Water)	Chrysene	ug/L	0.1	<0.1	
O. Reg. 153(511) - PAHs (Water)	Dibenz(a,h)anthracene	ug/L	0.2	<0.2	
O. Reg. 153(511) - PAHs (Water)	Fluoranthene	ug/L	0.41	<0.2	
O. Reg. 153(511) - PAHs (Water)	Fluorene	ug/L	120	<0.2	
O. Reg. 153(511) - PAHs (Water)	Indeno(1,2,3-cd)pyrene	ug/L	0.2	<0.2	
O. Reg. 153(511) - PAHs (Water)	Naphthalene	ug/L	11	<0.2	
O. Reg. 153(511) - PAHs (Water)	Naphthalene-d8	%	[blank]	103	BH7
O. Reg. 153(511) - PAHs (Water)	Phenanthrene	ug/L	1	<0.1	
O. Reg. 153(511) - PAHs (Water)	Pyrene	ug/L	4.1	<0.2	
O. Reg. 153(511) - PAHs (Water)	2-Fluorobiphenyl	[blank]	[blank]	1	
O. Reg. 153(511) - PAHs (Water)	Terphenyl-d14	%	[blank]	73	BH7
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	F1 (C6 to C10) minus BTEX	ug/L	750	<25	
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	F1 (C6-C10)	ug/L	750	<25	BH4
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	F2 (C10 to C16)	ug/L	150	<100	
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	F2 (C10 to C16) minus Naphthalene	ug/L	[blank]	<100	BH5
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	F3 (C16 to C34)	ug/L	500	<100	BH5
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	F3 (C16 to C34) minus PAHs	ug/L	[blank]	<100	BH5
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	F4 (C34 to C50)	ug/L	500	<100	
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	Gravimetric Heavy Hydrocarbons	ug/L	[blank]	<500	
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	Sediment	[blank]	[blank]	1	
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	Terphenyl	% Recovery	[blank]	108	BH4
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)	Toluene-d8	%	[blank]	101	BH7
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	F1 (C6 - C10)	ug/L	750	72	BH5
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	F1 (C6 to C10) minus BTEX	ug/L	750	<25	
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	F2 (C10 to C16)	ug/L	150	<100	
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	F3 (C16 to C34)	ug/L	500	<100	
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	F4 (C34 to C50)	ug/L	500	<100	
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	Gravimetric Heavy Hydrocarbons	ug/L	[blank]	<500	
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	Sediment	[blank]	[blank]	1	
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	Terphenyl	% Recovery	[blank]	100	BH1
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)	Toluene-d8	%	[blank]	105	BH1
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,1,1-Trichloroethane	ug/L	200	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,1,2,2-Tetrachloroethane	ug/L	1	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,1,2-Trichloroethane	ug/L	4.8	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,1-Dichloroethane	ug/L	5	<0.5	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,1-Dichloroethylene	ug/L	1.6	<0.5	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,2-Dichlorobenzene	ug/L	3	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,2-Dichloroethane	ug/L	1.6	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,2-Dichloropropane	ug/L	5	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,3-Dichlorobenzene	ug/L	59	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,3-Dichloropropene	ug/L	0.5	<0.3	
O. Reg. 153(511) - VOCs (with PHC) (Water)	1,4-Dichlorobenzene	ug/L	1	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	4-Bromofluorobenzene	% Recovery	[blank]	92	BH1
O. Reg. 153(511) - VOCs (with PHC) (Water)	Acetone	ug/L	2100	84.9	BH5
O. Reg. 153(511) - VOCs (with PHC) (Water)	Benzene	ug/L	1	<0.27	BH1
O. Reg. 153(511) - VOCs (with PHC) (Water)	Bromodichloromethane	ug/L	16	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Bromoform	ug/L	25	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Bromomethane	ug/L	0.89	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Carbon Tetrachloride	ug/L	0.77	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Chlorobenzene	ug/L	32	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Chloroform	ug/L	2.4	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	cis-1,2-Dichloroethylene	ug/L	1.6	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	cis-1,3-Dichloropropene	ug/L	25	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Dichlorodifluoromethane	ug/L	3500	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Ethylbenzene	ug/L	2.4	0.29	BH1
O. Reg. 153(511) - VOCs (with PHC) (Water)	Ethylene Dibromide	ug/L	0.2	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	m & p-Xylene	ug/L	[blank]	0.56	BH1
O. Reg. 153(511) - VOCs (with PHC) (Water)	Methyl Ethyl Ketone	ug/L	1300	<2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Methyl Isobutyl Ketone	ug/L	640	<2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Methyl tert-butyl Ether	ug/L	15	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Methylene Chloride	ug/L	50	0.63	BH8
O. Reg. 153(511) - VOCs (with PHC) (Water)	n-Hexane	ug/L	51	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	o-Xylene	ug/L	[blank]	0.17	BH1
O. Reg. 153(511) - VOCs (with PHC) (Water)	Styrene	ug/L	5.4	<0.2	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Tetrachloroethylene	ug/L	1.6	<0.5	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Toluene	ug/L	24	0.29	BH1
O. Reg. 153(511) - VOCs (with PHC) (Water)	Toluene-d8	% Recovery	[blank]	107	BH7
O. Reg. 153(511) - VOCs (with PHC) (Water)	Trans-1,2-Dichloroethylene	ug/L	1.6	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Trichloroethylene	ug/L	1.6	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Trichlorofluoromethane	ug/L	150	<0.4	
O. Reg. 153(511) - VOCs (with PHC) (Water)	Vinyl Chloride	ug/L	0.5	<0.34	BH7
O. Reg. 153(511) - VOCs (with PHC) (Water)	Xylenes (Total)	ug/L	300	0.1	BH1

APPENDIX A

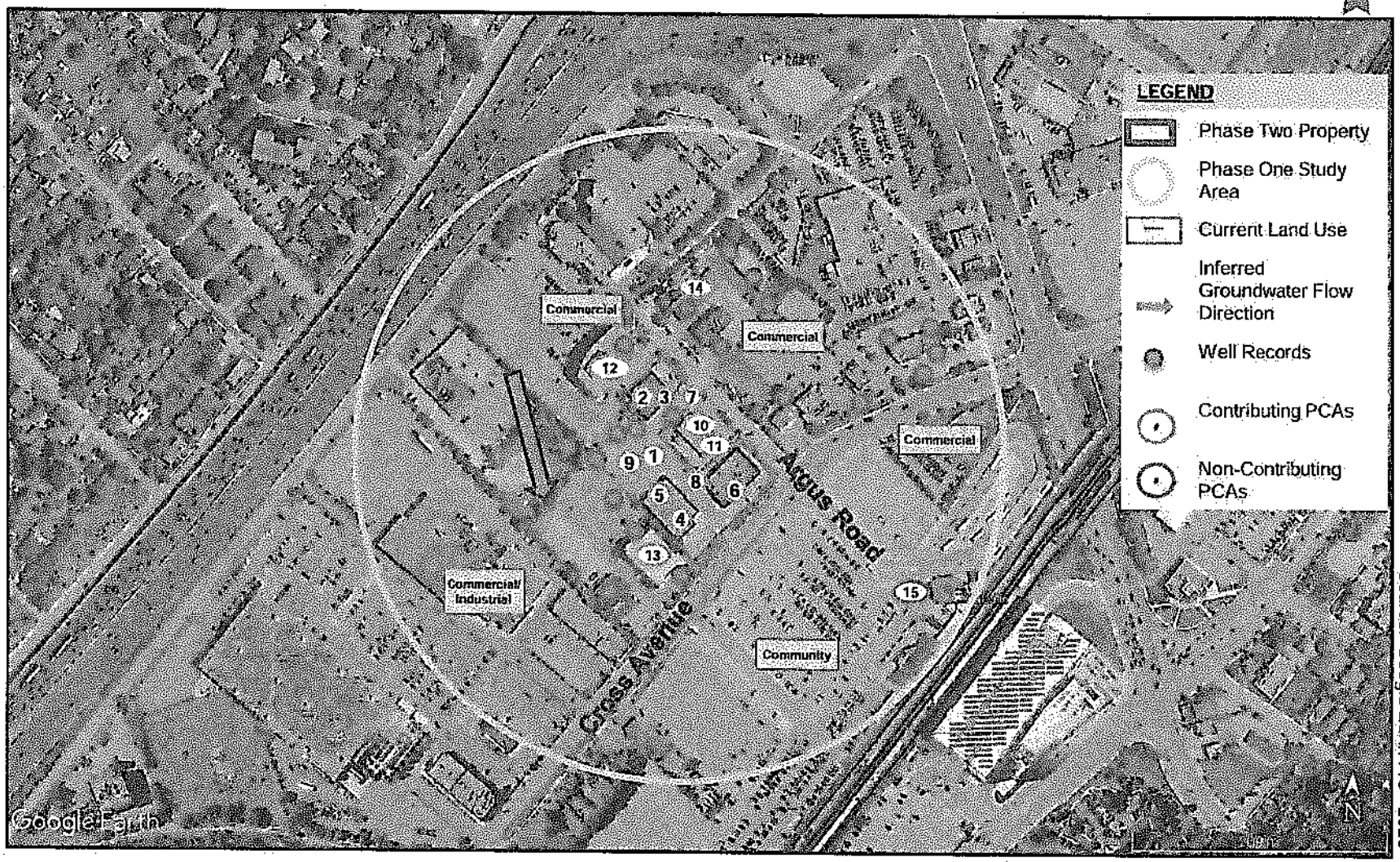
DRAWINGS



Source: Town of Oakville Interactive Maps

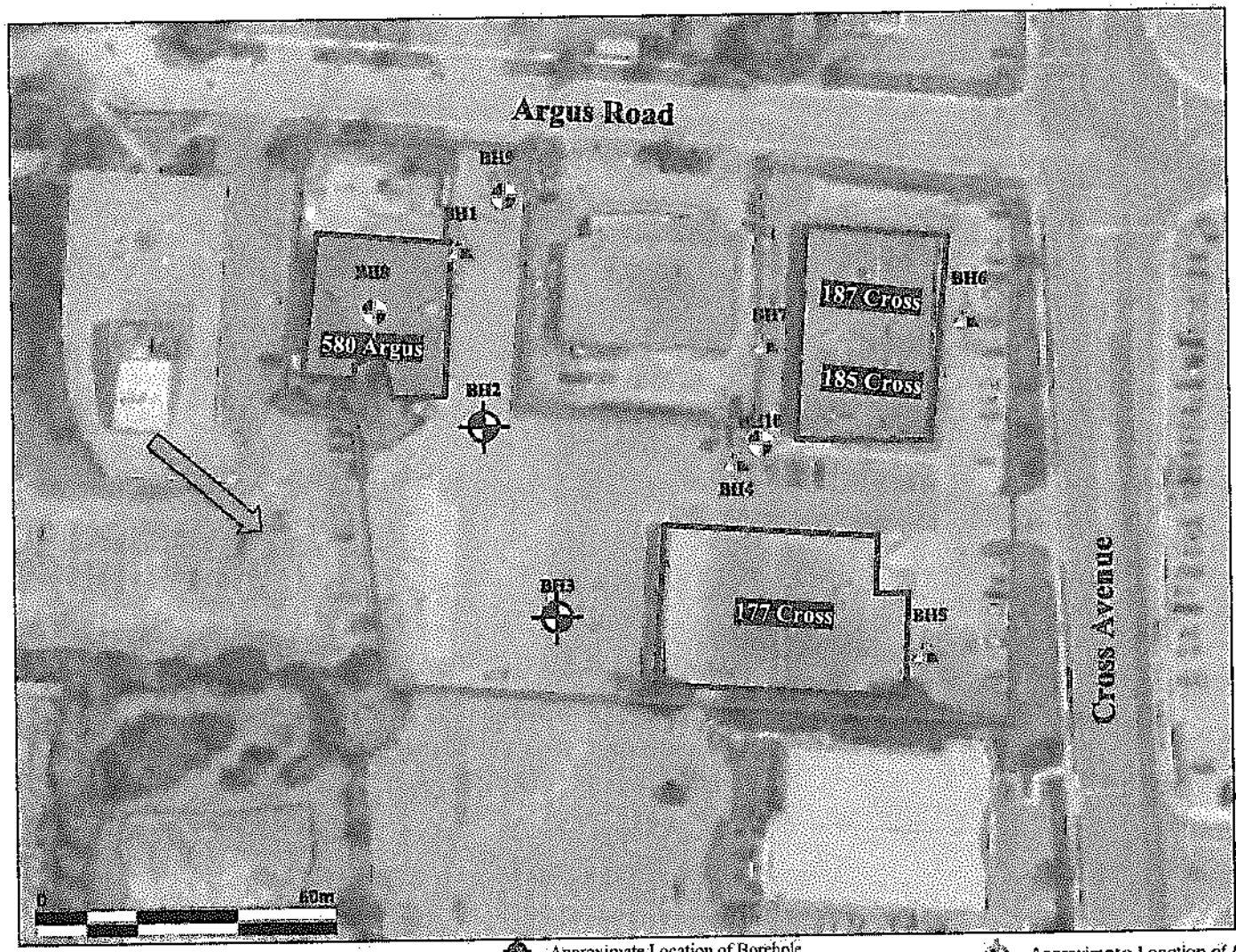
Approximate Location of Phase Two Property

Title	Project	Project No.	Scale	Date	Drawing No.
Site Location Plan	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	1



Source: Google Earth Pro - 2023

Title	Project	Project No.	Scale	Date	Drawing No.
Summary of PCAs	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	2



Approximate Location of the Phase Two Property

Approximate Location of the Current Site Buildings

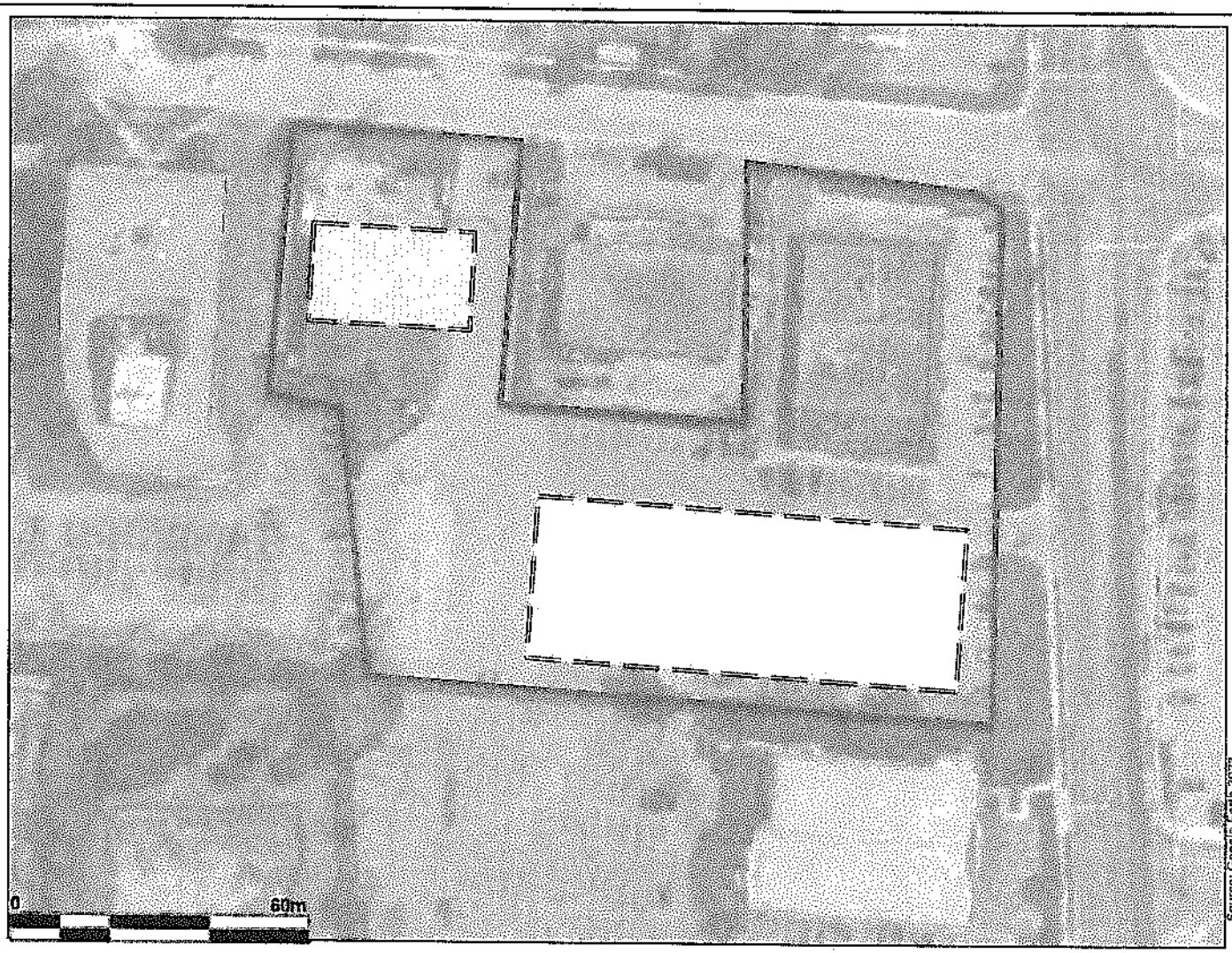
Approximate Location of Borehole

Approximate Location of Azure's Monitoring Well

Approximate Location of Additional Borehole

Inferred Groundwater Flow Direction

Title	Project	Project No.	Scale	Date	Drawing No.
Boreholes Location Plan	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	3a

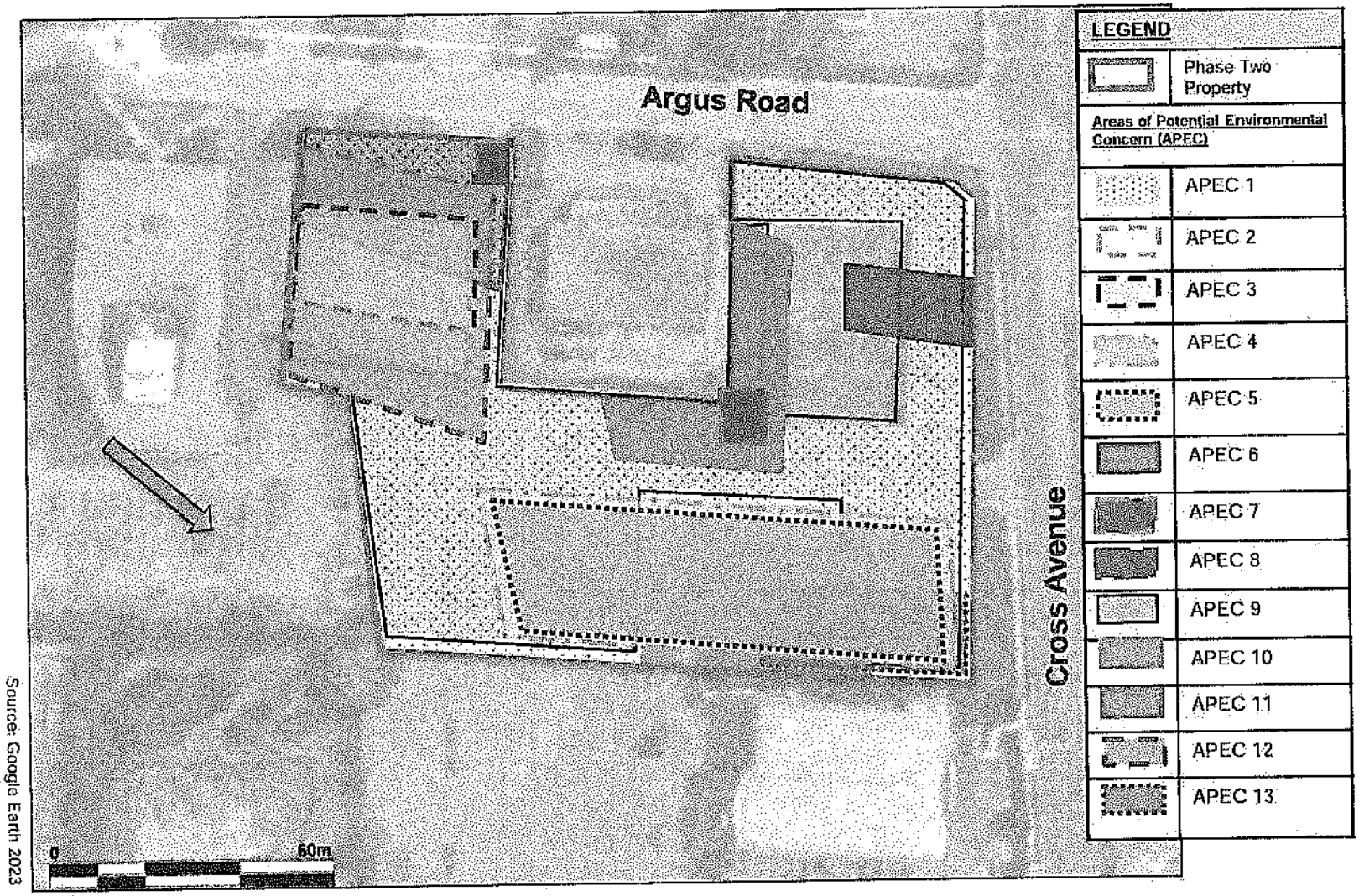


Approximate Location of the Phase Two Property

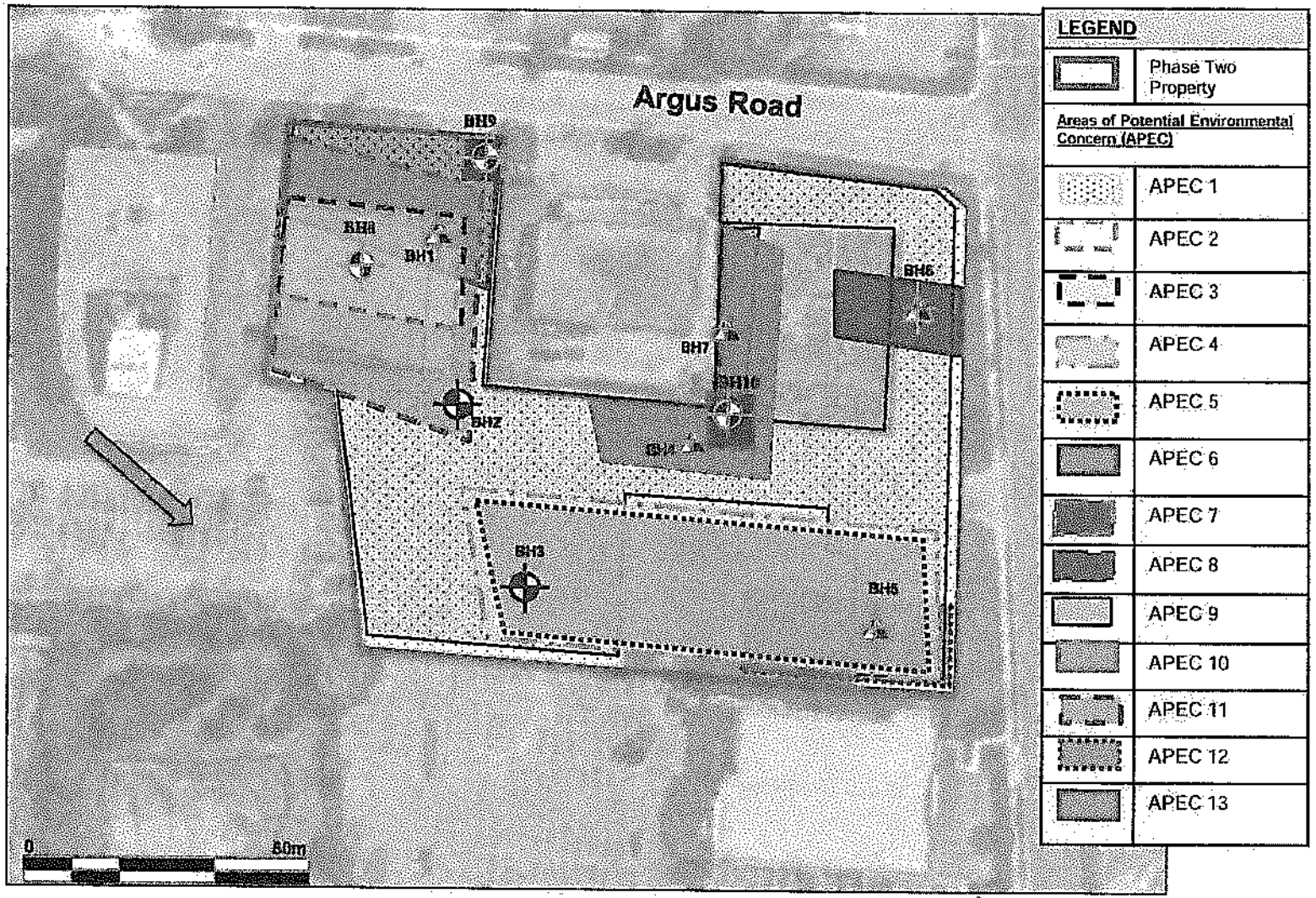
Approximate Location of former Tannery and Trailer repair structure.

Approximate Location of former Carwash and Repair Shop

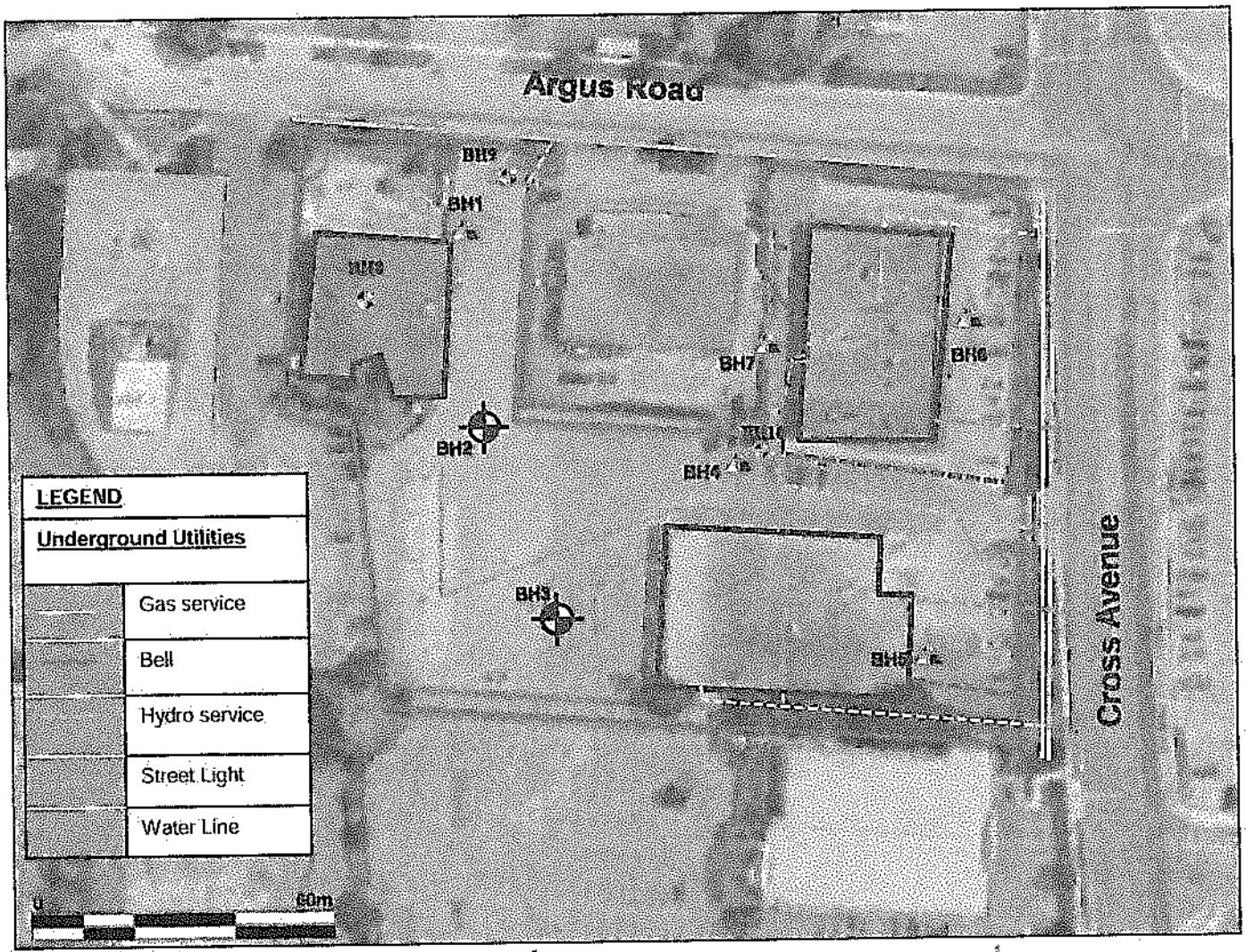
Title	Project	Project No.	Scale	Date	Drawing No.
Location of former structures in the Phase Two Property	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	3b



Title	Project	Project No.	Scale	Date	Drawing No.
Location of APECs	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	4



Title	Project	Project No.	Scale	Date	Drawing No.
Location of BH/MW on APECS	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	5



Approximate Location of the Phase Two Property

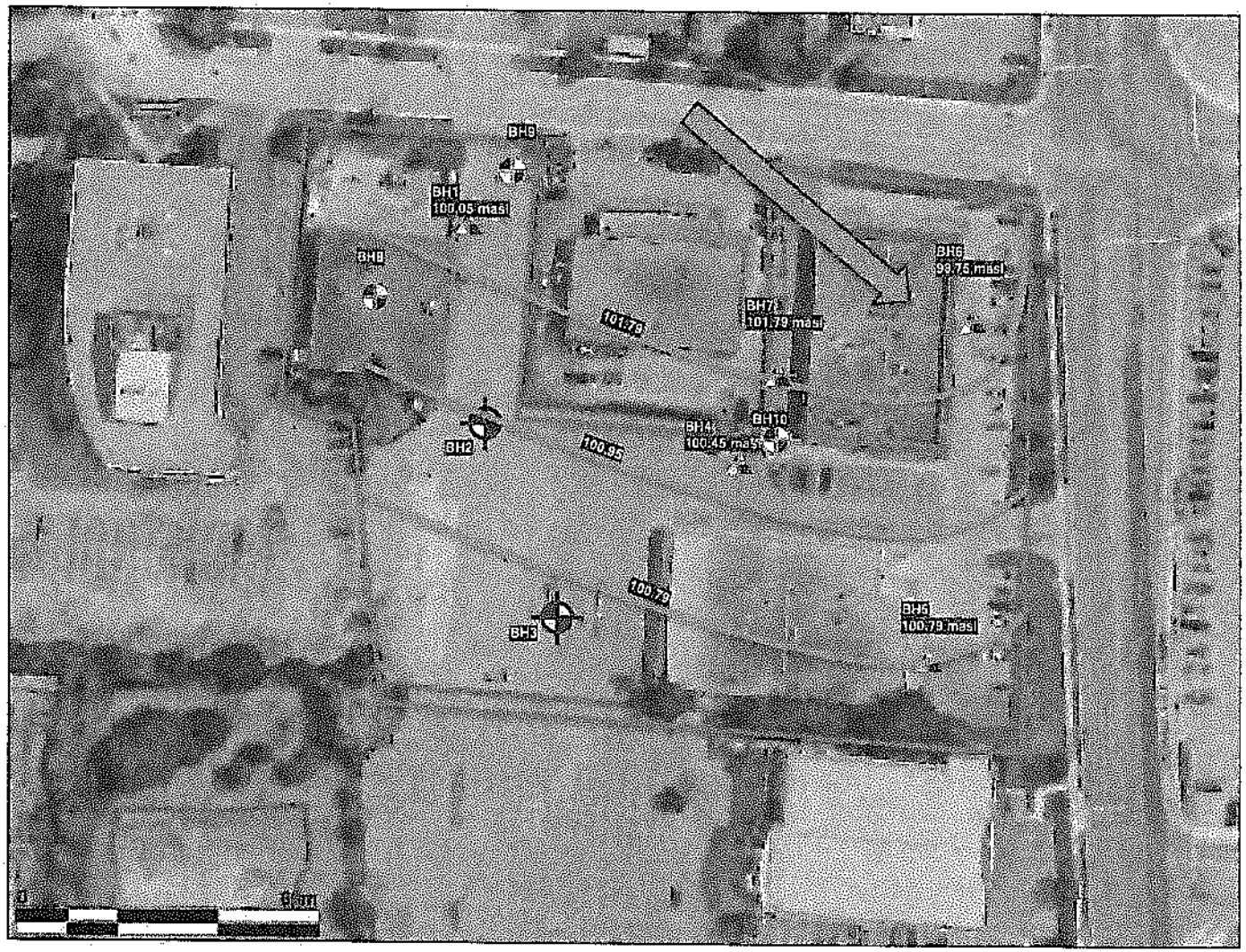
Approximate Location of the Current Site Buildings

Approximate Location of Borehole

Approximate Location of Azure's Monitoring Well

Approximate Location of Additional Borehole

Title	Project	Project No.	Scale	Date	Drawing No.
Utility Location Plan	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	6



Approximate Location of the Phase Two Property

Groundwater Contours

Approximate Location of Additional Borehole

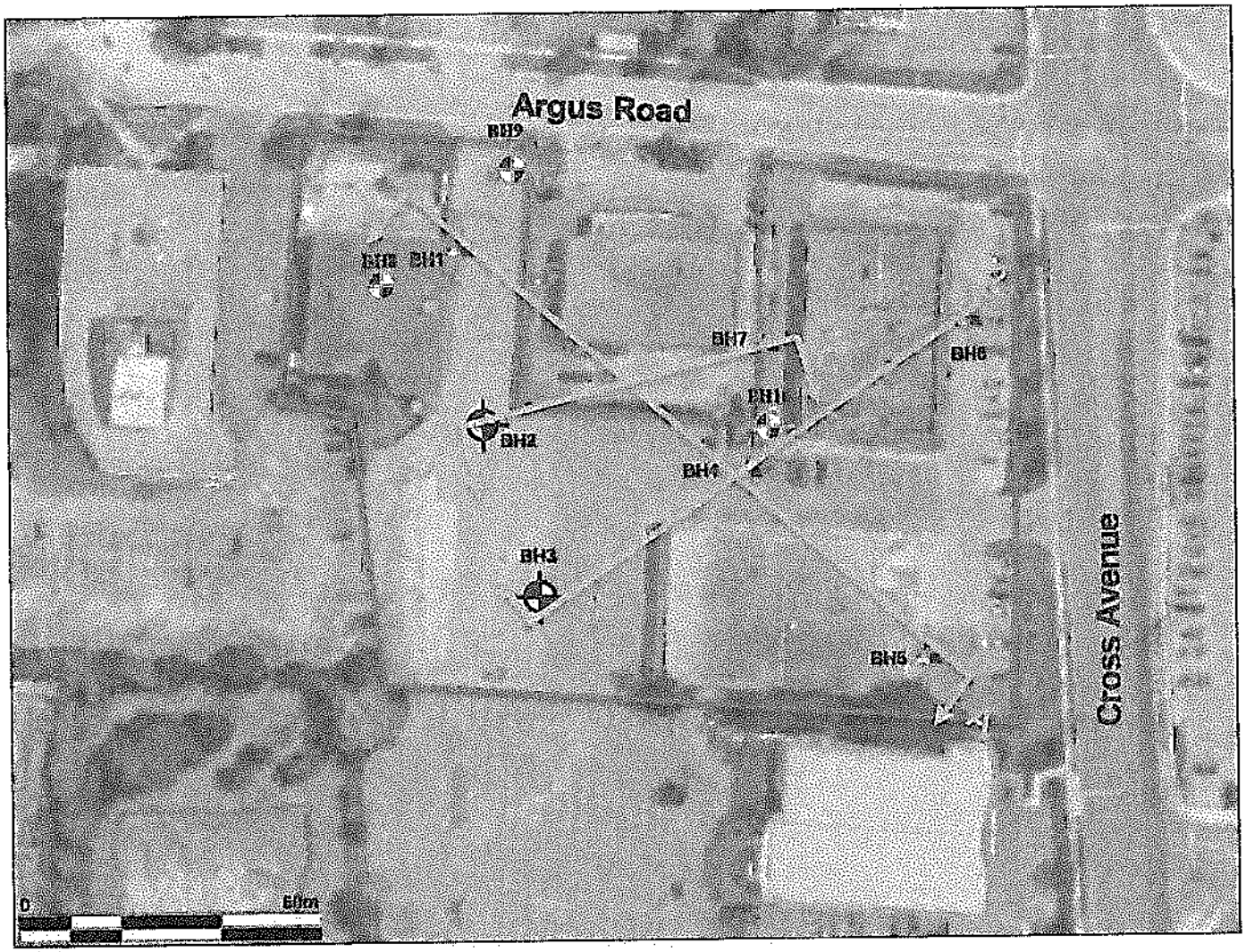
Approximate Location of Azure's Monitoring Well

Environmental Boreholes

Groundwater Flow Direction

Source: Google Earth Pro - 2023

Title	Project	Project No.	Scale	Date	Drawing No.
Groundwater Flow Direction	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	As shown	Nov 8, 2023 Revised: May 14, 2024	7



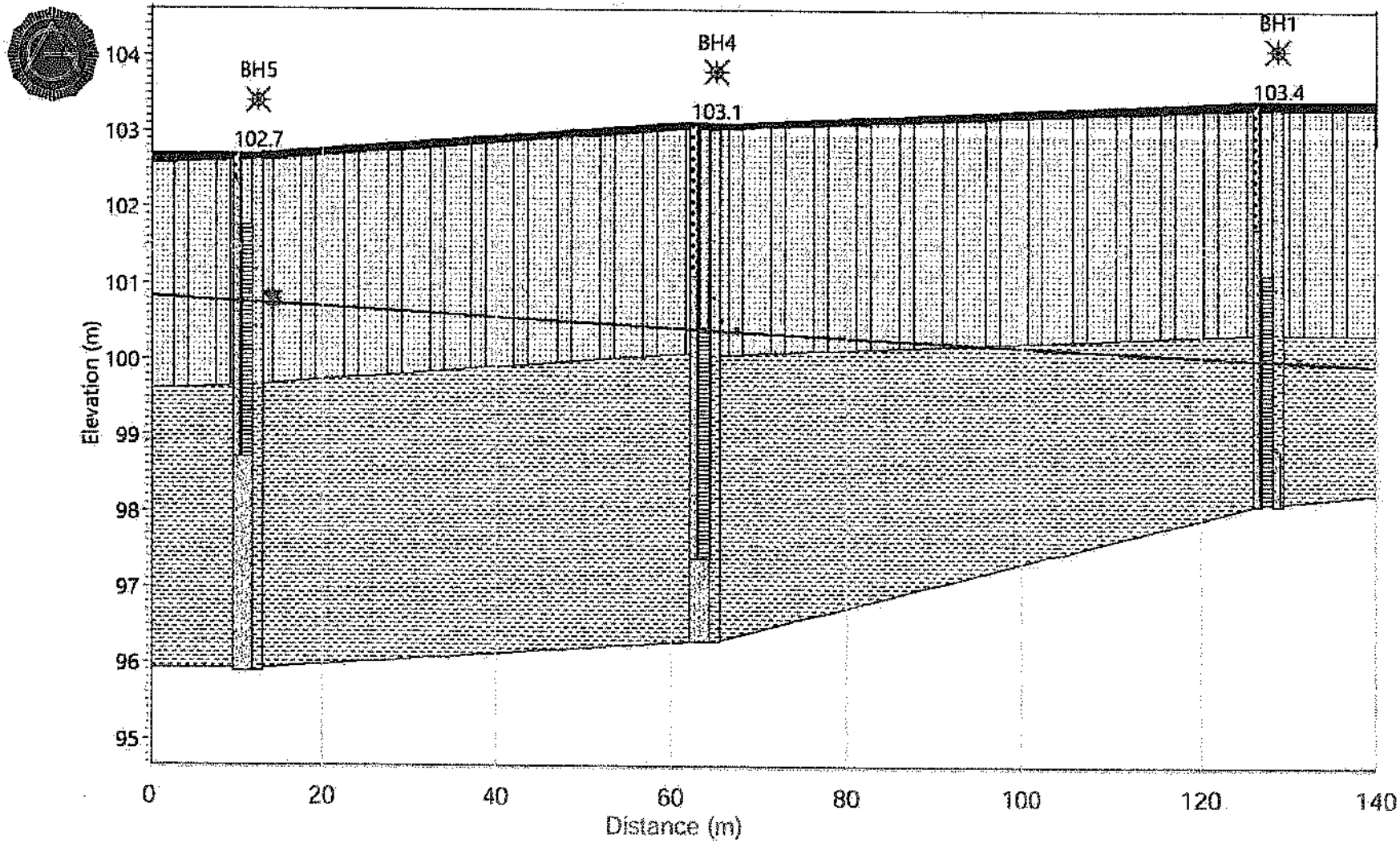
Approximate Location of the Phase Two Property

Environmental Boreholes

Approximate Location of Azure's Monitoring Well

Source: Google Earth Pro - 2023

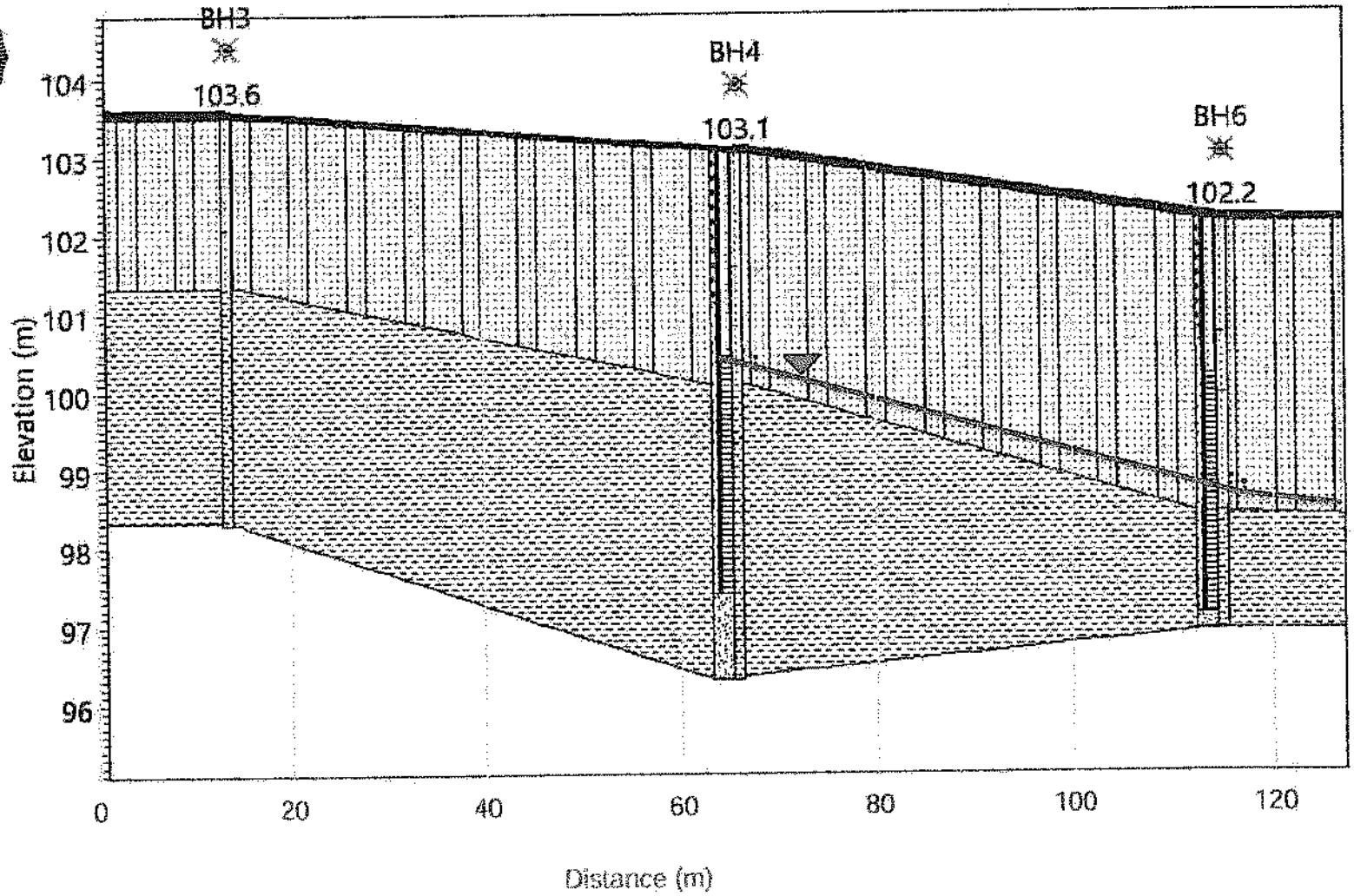
Title	Project	Project No.	Scale	Date	Drawing No.
Geological Cross Sections-Key Plan	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	As shown	Nov 8, 2023 Revised: May 14, 2024	8



Graphic Legend:

Silty Sand | Sand | Bentonite | Weathered Shale | Asphalt | Water Level Indicator

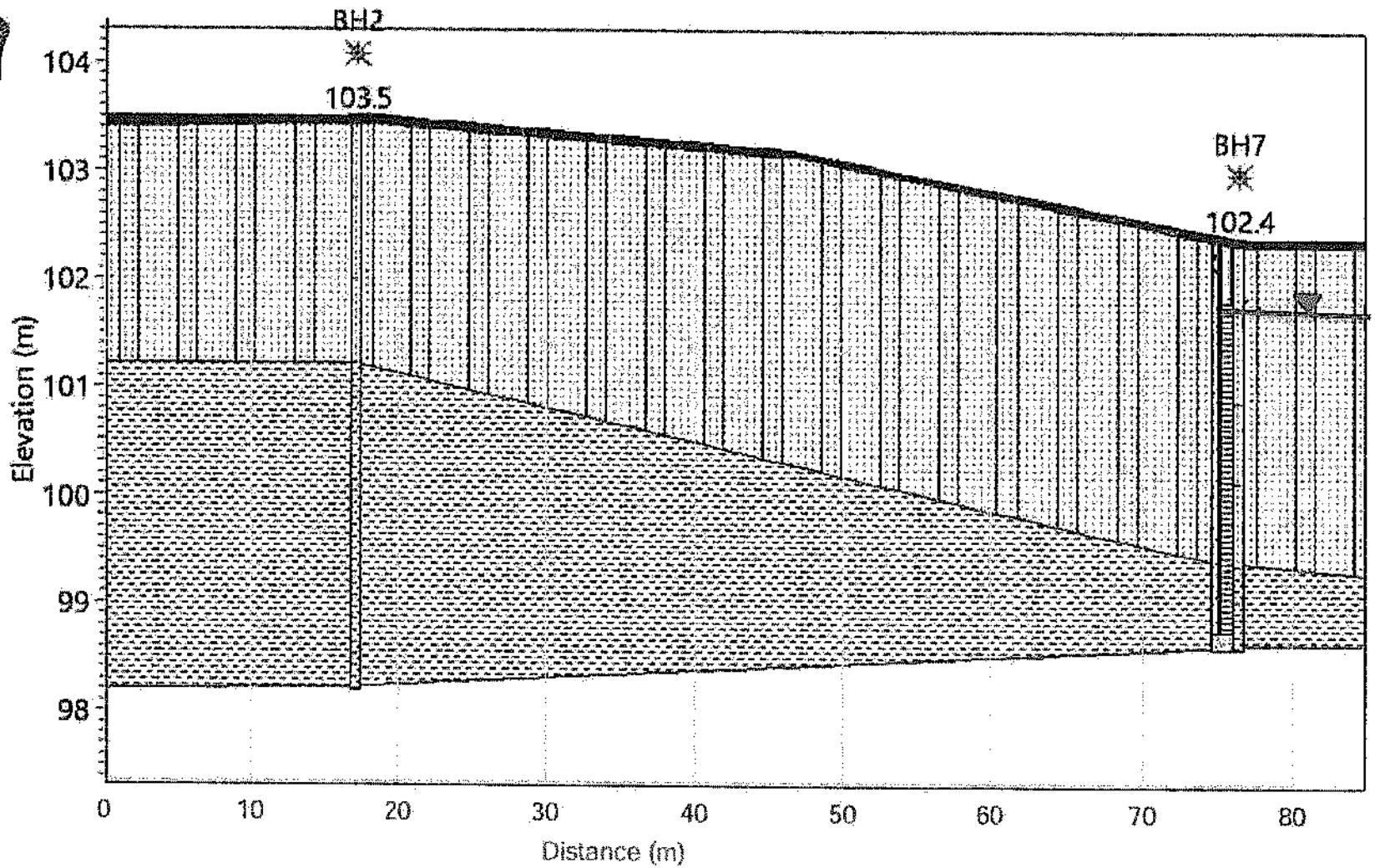
Title	Project	Project No.	Scale	Date	Drawing No.
Cross section A-A	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	8a



Graphic Legend:

Silty Sand | Sand | Bentonite | Weathered Shale | Asphalt | Water Level Indicator

Title	Project	Project No.	Scale	Date	Drawing No.
Cross section B-B	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	8b



Title	Project	Project No.	Scale	Date	Drawing No.
Cross section C-C	Environmental Site Assessment 177, 185 & 187 Cross Avenue and 580 Argus Road, Oakville	2303-003	See Scale	Nov 8, 2023 Revised: May 14, 2024	8c

APPENDIX B

BOREHOLE LOGS

RECORDS OF BOREHOLE: BH1

PAGE: 1 of 1

PROJECT: Phase Two ESA | LOCATION: 177 Cross Ave, Oakville, Ontario | PROJECT NO.: 2303-003

DRILL DATE: May 5, 2023 | DRILL RIG & AUGER: CME - 75 | LOGGED / REVIEWED BY: AP/SD

W. L. UPON COMPLETION: Dry Upon Completion | W. L. LATER: 3.39 mbgs | UTM COORDINATES: 606386 m E, 4812396 m N

DEPTH (m)	DESCRIPTION	STRATIGRAPHY PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa / DYNAMIC CONE PENETRATION "RESISTANCE PLOT"	WATER CONTENT (%)	HSVC as Hexane (ppm)	HSVC as Isobutylene (ppm)	REMARKS
0	Ground Surface						103					
	3-Inches of Asphalt											
	Brown; Silty Sand, Some Gravel, Moist		1	CS			103			0	0	
1			2	CS			102			0	0	M&I/PAHs
	Trace Gravel		3	CS						0	0	
2							101					
	Grey; Moist to Wet		4	CS						0	0	pH/PHCs/VOCs
3	Weathered Shale		5	CS			100			0	0	
4			6	CS			99					
5												Due to machine refusal, the sample was not able to be collected at this interval
	End of Borehole						98					
6							97					
7							96					
8							95					
9							94					
10												

RECORDS OF BOREHOLE: BH2

PAGE: 1 of 1

PROJECT: Phase Two ESA | LOCATION: 177 Cross Ave, Oakville, Ontario | PROJECT NO.: 2303-003

DRILL DATE: May 5, 2023 | DRILL RIG & AUGER: CME - 75 | LOGGED / REVIEWED BY: AP/SD

W. L. UPON COMPLETION: N/A | W. L. LATER: N/A | UTM COORDINATES: 606366 m E, 4812368 m N

DEPTH (m)	DESCRIPTION	STRATIGRAPHY PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa (20 40 60 80) / DYNAMIC CONE PENETRATION "RESISTANCE PLOT" (20 40 60 80)	WATER CONTENT (%) (10 20 30 40)	HSVC as Hexane (ppm)	HSVC as Isobutylene (ppm)	REMARKS
0	Ground Surface						104					
	3 - Inches of Asphalt Brown, Silty Sand, Trace Gravel		1	CS			103			0	0	
1	Light Brown, Moist		2	CS			102			0	0	M&I/PAHs/PHCs/VOCs
2	Grey, Moist to Wet		3	CS			101			0	0	
	Weathered Shale		4	CS						0	0	PHCs/VOCs
3			5	CS			100			0	0	
4			6	CS			99			0	0	
5			7	CS			98			0	0	
	End of Borehole											
6							97					
7							96					
8							95					
9							94					
10												

RECORDS OF BOREHOLE: BH3

PAGE: 1 of 1

PROJECT: Phase Two ESA | LOCATION: 177 Cross Ave, Oakville, Ontario | PROJECT NO.: 2303-003

DRILL DATE: May 4, 2023 | DRILL RIG & AUGER: CME - 75 | LOGGED / REVIEWED BY: AP/SD

W. L. UPON COMPLETION: N/A | W. L. LATER: N/A | UTM COORDINATES: 606355 m E, 4812333 m N

DEPTH (m)	DESCRIPTION	STRATIGRAPHY PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa (20 40 60 80) / DYNAMIC CONE PENETRATION *RESISTANCE PLOT* (20 40 60 80)	WATER CONTENT (%) (10 20 30 40)	HSVC as Hexane (ppm)	HSVC as Isobutylene (ppm)	REMARKS
	Ground Surface						104					
0	2.5 - Inches of Asphalt											
	Brown, Silty Sand, Trace Gravel		1	CS			103			0	0	
1			2	CS						0	0	Metals/PAHs
	Red, Moist		3	CS			102			0	0	pH/PHCs/VOCs
2												
	Grey, Weathered Shale		4	CS			101			0	0	
3			5	CS						0	0	
							100					
4			6	CS						0	0	
							99					
5			7	CS						0	0	
	End of Borehole											
							98					
6												
							97					
7												
							96					
8												
							95					
9												
							94					
10												

RECORDS OF BOREHOLE: BH4

PAGE: 1 of 1

PROJECT: Phase Two ESA | LOCATION: 177 Cross Ave, Oakville, Ontario | PROJECT NO.: 2303-003

DRILL DATE: May 9, 2023 | DRILL RIG & AUGER: CME - 75 | LOGGED / REVIEWED BY: AP/SD

W. L. UPON COMPLETION: Dry Upon Completion | W. L. LATER: 2.71 mbgs | UTM COORDINATES: 606402 m E, 4812334 m N

DEPTH (m)	DESCRIPTION	STRATIGRAPHY PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa / DYNAMIC CONE PENETRATION *RESISTANCE PLOT*	WATER CONTENT (%)	HSVC as Hexane (ppm)	HSVC as Isobutylene (ppm)	REMARKS
0	Ground Surface						103					
0	3 - Inches of Asphalt Brown, Silty Sand, Trace Gravel		1	CS						0	0	
1			2	CS			102			0	0	M&I/PAHs/PCBs
2	Light Brown, Moist		3	CS			101			0	10	
	Grey, Moist to Wet		4	CS						0	10	Metals, PHCs/VOCs, DUP-2 PHCs/VOCs
3	Weathered Shale		5	CS			100			0	10	
4			6	CS			99			5	10	
5			7	CS			98			0	0	
			8	CS						0	0	
6			9	CS			97			0	0	
7	End of Borehole						96					
8							95					
9							94					
10												

RECORDS OF BOREHOLE: BH5

PAGE: 1 of 1

PROJECT: Phase Two ESA | LOCATION: 177 Cross Ave, Oakville, Ontario | PROJECT NO.: 2303-003

DRILL DATE: May 4, 2023 | DRILL RIG & AUGER: CME - 75 | LOGGED / REVIEWED BY: AP/SD

W. L. UPON COMPLETION: Dry Upon Completion | W. L. LATER: 1.95 mbgs | UTM COORDINATES: 606398 m E, 4812279 m N

DEPTH (m)	DESCRIPTION	STRATIGRAPHY PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa (20 40 60 80) / DYNAMIC CONE PENETRATION "RESISTANCE PLOT" (20 40 60 80)	WATER CONTENT % (10 20 30 40)	HSVC as Hexane (ppm)	HSVC as Isobutylene (ppm)	REMARKS
0	Ground Surface						103					
	3 - Inches of Asphalt											
	Brown, Silty Sand, Some Gravel		1	CS						0	0	
1			2	CS			102			0	0	M&I/PAHs
	Moist		3	CS		1.95 m	101			0	0	PAHs/PHCs/VOCs
2	Grey; Moist to Wet		4	CS						0	0	
3	Weathered Shale, Dry		5	CS			100			0	0	
4			6	CS			99			0	0	
5			7	CS			98			0	0	
6			8	CS			97			0	0	
			9	CS						0	0	
7	End of Borehole						96					
8							95					
9							94					
10							93					

RECORDS OF BOREHOLE: BH6

PAGE: 1 of 1

PROJECT: Phase Two ESA | LOCATION: 177 Cross Ave. Oakville, Ontario | PROJECT NO.: 2303-003

DRILL DATE: May 4, 2023 | DRILL RIG & AUGER: CME - 75 | LOGGED / REVIEWED BY: AP/SD

W. L. UPON COMPLETION: Dry Upon Completion | W. L. LATER: 3.5 mbgs | UTM COORDINATES: 606447 m E, 4812324 m N

DEPTH (m)	DESCRIPTION	STRATIGRAPHY PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa / DYNAMIC CONE PENETRATION "RESISTANCE PLOT"	WATER CONTENT (%)	HSVC as Hexane (ppm)	HSVC as Isobutylene (ppm)	REMARKS
0	Ground Surface						102					
	3 - Inches of Asphalt											
	Brown, Silty Sand		1	CS						0	0	
1			2	CS			101			0	0	M&I/PAHs
	Mottled, Trace Gravel, Moist		3	CS						0	0	
2							100					
	Grey, Wet		4	CS						0	0	PHCs/VOCs
3			5	CS			99			0	0	
	Weathered Shale		6	CS						0	0	
4							98					
5			7	CS			97			0	0	
	End of Borehole											
6							96					
7							95					
8							94					
9							93					
10												

RECORDS OF BOREHOLE: BH7

PAGE: 1 of 1

PROJECT: Phase Two ESA | LOCATION: 177 Cross Ave, Oakville, Ontario | PROJECT NO.: 2303-003

DRILL DATE: May 9, 2023 | DRILL RIG & AUGER: CME - 75 | LOGGED / REVIEWED BY: AP/SD

W. L. UPON COMPLETION: Dry Upon Completion | W. L. LATER: 0.65 mbgs | UTM COORDINATES: 606420 m E, 4812342 m N

DEPTH (m)	DESCRIPTION	STRATIGRAPHY PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa / DYNAMIC CONE PENETRATION "RESISTANCE PLOT"	WATER CONTENT (%)	HSVC as Hexane (ppm)	HSVC as Isobutylene (ppm)	REMARKS
0	Ground Surface						102					
	2.5 - Inches of Asphalt											
	Mottled, Silty Sand		1	CS			102			0	0	
1			2	CS						0	0	PAHs
	Trace Gravel, Moist						101					
2			3	CS						0	0	
	Grey, Moist to Wet						100					
			4	CS						0	0	Metals/PAHs/PHCs/VOCs
3	Weathered Shale						99					
			5	CS						0	0	
	End of Borehole											
4							98					
5							97					
6							96					
7							95					
8							94					
9							93					
10												

RECORDS OF BOREHOLE: BH9

PAGE: 1 of 1

PROJECT: Phase Two ESA | LOCATION: 177 Cross Ave, Oakville, Ontario | PROJECT NO.: 2303-003

DRILL DATE: February 15, 2024 | DRILL RIG & AUGER: Pionjar | LOGGED / REVIEWED BY: AP/SD

W. L. UPON COMPLETION: N/A | W. L. LATER: N/A | UTM COORDINATES: 606405 m E, 4812397 m N

DEPTH (m)	DESCRIPTION	STRATIGRAPHY PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH (kPa) / DYNAMIC CONE PENETRATION "+" RESISTANCE PLOT "+"	WATER CONTENT (%)	HSVC as Hexane (ppm)	HSVC as Isobutylene (ppm)	REMARKS
	Ground Surface						104					
0	2 inches of Top Soil Dark Brown, Silty Sand, Trace Gravel, Moist		1	CS			103			0	0	
1	Mottled, Silty Clay, Moist		2	CS			102			5	0	PCBs/PHCs
	End of Borehole						101					
2							100					
3							99					
4							98					
5							97					
6							96					
7							95					
8							94					
9												
10												

APPENDIX C

LABORATORY CERTIFICATES OF ANALYSES (SOIL)

AGAT Laboratories
5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 23T021980
PROJECT: 2303-003

CLIENT NAME: AZURE GROUP INC
SAMPLING SITE:177 Cross Avenue, Oakville

ATTENTION TO: Ahmed Al-Temimi
SAMPLED BY:Akshay

O. Reg. 153(511) - All Metals (Soil)

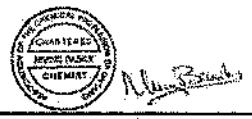
DATE RECEIVED: 2023-05-06 **DATE REPORTED: 2023-05-16**

		SAMPLE DESCRIPTION:		BH3-2
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2023-05-04 17:00
Parameter	Unit	G / S	RDL	4968430
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	7
Barium	µg/g	390	2.0	73.3
Beryllium	µg/g	4	0.5	1.0
Boron	µg/g	120	5	15
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.27
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	19
Cobalt	µg/g	22	0.8	15.3
Copper	µg/g	140	1.0	59.7
Lead	µg/g	120	1	10
Molybdenum	µg/g	6.9	0.5	0.5
Nickel	µg/g	100	1	27
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	20	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	0.62
Vanadium	µg/g	86	2.0	32.1
Zinc	µg/g	340	5	69
Chromium, Hexavalent	µg/g	8	0.2	<0.2
Mercury	µg/g	0.27	0.10	<0.10

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T2 S RPI CT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories
5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 23T021980

PROJECT: 2303-003

CLIENT NAME: AZURE GROUP INC

SAMPLING SITE:177 Cross Avenue, Oakville

ATTENTION TO: Ahmed Al-Temimi

SAMPLED BY:Akshay

pH in Soil

DATE RECEIVED: 2023-05-06

DATE REPORTED: 2023-05-16

				SAMPLE DESCRIPTION:	BH3-3	BH1-4
				SAMPLE TYPE:	Soil	Soil
				DATE SAMPLED:	2023-05-04 17:30	2023-05-05 13:00
Parameter	Unit	G / S	RDL		4968431	4968435
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA		7.34	7.28

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T2 S RPI CT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4968431-4968435 pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio (2 parts extraction fluid : 1 part soil).

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 23T021980

PROJECT: 2303-003

CLIENT NAME: AZURE GROUP INC

SAMPLING SITE:177 Cross Avenue, Oakville

ATTENTION TO: Ahmed Al-Temimi

SAMPLED BY:Akshay

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)

DATE RECEIVED: 2023-05-06

DATE REPORTED: 2023-05-16

		SAMPLE DESCRIPTION:		BH5-3	BH2-2
		SAMPLE TYPE:		Soil	Soil
		DATE SAMPLED:		2023-05-04 12:30	2023-05-05 09:30
Parameter	Unit	G / S	RDL	4968427	4968432
F1 (C6 - C10)	µg/g	55	5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	5	<5	<5
F2 (C10 to C16)	µg/g	98	10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g		10	<10	<10
F3 (C16 to C34)	µg/g	300	50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g		50	<50	<50
F4 (C34 to C50)	µg/g	2800	50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	2800	50	NA	NA
Moisture Content	%		0.1	14.0	10.8
Surrogate	**Unit**	**Acceptable Limits**			
Toluene-d8	%	50-140		96	89
Terphenyl	%	60-140		79	72

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T2 S RPI CT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4968427-4968432 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
C>10 – C16 (F2- Naphthalene) is a calculated parameter. The calculated value is F2 - Naphthalene.
C>16 - C34 (F3-PAH) is a calculated parameter. The calculated value is F3-PAH (PAH: sum of Phenanthrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and Pyrene).
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Poprawski

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories
5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 23T021980

PROJECT: 2303-003

CLIENT NAME: AZURE GROUP INC

SAMPLING SITE:177 Cross Avenue, Oakville

ATTENTION TO: Ahmed Al-Temimi

SAMPLED BY:Akshay

O. Reg. 153(511) - VOCs (with PHC) (Soil)

DATE RECEIVED: 2023-05-06

DATE REPORTED: 2023-05-16

		SAMPLE DESCRIPTION:		BH5-3	BH6-4	BH3-3	BH2-2	BH2-4	BH1-4
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2023-05-04 12:30	2023-05-04 15:30	2023-05-04 17:30	2023-05-05 09:30	2023-05-05 10:00	2023-05-05 13:00
Parameter	Unit	G / S	RDL	4968427	4968429	4968431	4968432	4968433	4968435
Dichlorodifluoromethane	ug/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.084	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.21	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.061	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	0.28	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Certified By: N Popovskaya

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: AZURE GROUP INC

AGAT WORK ORDER: 23T021980

PROJECT: 2303-003

ATTENTION TO: Ahmed Al-Temimi

SAMPLING SITE:177 Cross Avenue, Oakville

SAMPLED BY:Akshay

Soil Analysis

RPT Date: May 16, 2023			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	4979139		<0.8	<0.8	NA	< 0.8	112%	70%	130%	93%	80%	120%	95%	70%	130%
Arsenic	4979139		3	3	NA	< 1	104%	70%	130%	81%	80%	120%	76%	70%	130%
Barium	4979139		179	203	12.6%	< 2.0	107%	70%	130%	90%	80%	120%	125%	70%	130%
Beryllium	4979139		1.2	1.4	NA	< 0.5	113%	70%	130%	97%	80%	120%	110%	70%	130%
Boron	4979139		13	15	NA	< 5	78%	70%	130%	86%	80%	120%	103%	70%	130%
Boron (Hot Water Soluble)	4979139		0.17	0.14	NA	< 0.10	109%	60%	140%	98%	70%	130%	108%	60%	140%
Cadmium	4979139		<0.5	<0.5	NA	< 0.5	112%	70%	130%	98%	80%	120%	104%	70%	130%
Chromium	4979139		32	36	11.8%	< 5	78%	70%	130%	106%	80%	120%	85%	70%	130%
Cobalt	4979139		10.7	11.7	8.9%	< 0.8	90%	70%	130%	91%	80%	120%	94%	70%	130%
Copper	4979139		25.6	27.4	6.8%	< 1.0	93%	70%	130%	88%	80%	120%	91%	70%	130%
Lead	4979139		11	12	8.7%	< 1	105%	70%	130%	88%	80%	120%	88%	70%	130%
Molybdenum	4979139		<0.5	<0.5	NA	< 0.5	114%	70%	130%	101%	80%	120%	102%	70%	130%
Nickel	4979139		27	29	7.1%	< 1	86%	70%	130%	82%	80%	120%	88%	70%	130%
Selenium	4979139		<0.8	<0.8	NA	< 0.8	93%	70%	130%	99%	80%	120%	93%	70%	130%
Silver	4979139		<0.5	<0.5	NA	< 0.5	95%	70%	130%	97%	80%	120%	91%	70%	130%
Thallium	4979139		<0.5	<0.5	NA	< 0.5	102%	70%	130%	91%	80%	120%	92%	70%	130%
Uranium	4979139		0.64	0.69	NA	< 0.50	107%	70%	130%	90%	80%	120%	98%	70%	130%
Vanadium	4979139		47.7	50.8	6.3%	< 2.0	88%	70%	130%	83%	80%	120%	94%	70%	130%
Zinc	4979139		77	81	5.1%	< 5	100%	70%	130%	91%	80%	120%	91%	70%	130%
Chromium, Hexavalent	4968654		<0.2	<0.2	NA	< 0.2	95%	70%	130%	98%	80%	120%	86%	70%	130%
Cyanide, WAD	4985617		<0.040	<0.040	NA	< 0.040	96%	70%	130%	104%	80%	120%	81%	70%	130%
Mercury	4979139		<0.10	<0.10	NA	< 0.10	99%	70%	130%	94%	80%	120%	92%	70%	130%
pH, 2:1 CaCl2 Extraction	4968393		6.69	6.93	3.5%	NA	101%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.

O. Reg. 153(511) - Metals & Inorganics (Soil)									
pH, 2:1 CaCl2 Extraction	4968428	4968428	6.77	7.02	3.6%	NA	100%	80%	120%

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.

Certified By:

AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation. RPDs calculated using raw data. The RPD may not be reflective of duplicate values shown, due to rounding of final results.

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: AZURE GROUP INC

AGAT WORK ORDER: 23T021980

PROJECT: 2303-003

ATTENTION TO: Ahmed Al-Temimi

SAMPLING SITE:177 Cross Avenue, Oakville

SAMPLED BY:Akshay

Trace Organics Analysis (Continued)

RPT Date: May 16, 2023			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Benzene	4971754		<0.02	<0.02	NA	< 0.02	80%	50%	140%	83%	60%	130%	107%	50%	140%
1,2-Dichloropropane	4971754		<0.03	<0.03	NA	< 0.03	84%	50%	140%	79%	60%	130%	91%	50%	140%
Trichloroethylene	4971754		<0.03	<0.03	NA	< 0.03	103%	50%	140%	92%	60%	130%	95%	50%	140%
Bromodichloromethane	4971754		<0.05	<0.05	NA	< 0.05	81%	50%	140%	89%	60%	130%	86%	50%	140%
Methyl Isobutyl Ketone	4971754		<0.50	<0.50	NA	< 0.50	98%	50%	140%	111%	50%	140%	79%	50%	140%
1,1,2-Trichloroethane	4971754		<0.04	<0.04	NA	< 0.04	112%	50%	140%	102%	60%	130%	112%	50%	140%
Toluene	4971754		<0.05	<0.05	NA	< 0.05	92%	50%	140%	84%	60%	130%	109%	50%	140%
Dibromochloromethane	4971754		<0.05	<0.05	NA	< 0.05	80%	50%	140%	89%	60%	130%	93%	50%	140%
Ethylene Dibromide	4971754		<0.04	<0.04	NA	< 0.04	105%	50%	140%	91%	60%	130%	105%	50%	140%
Tetrachloroethylene	4971754		<0.05	<0.05	NA	< 0.05	100%	50%	140%	83%	60%	130%	118%	50%	140%
1,1,1,2-Tetrachloroethane	4971754		<0.04	<0.04	NA	< 0.04	81%	50%	140%	85%	60%	130%	86%	50%	140%
Chlorobenzene	4971754		<0.05	<0.05	NA	< 0.05	97%	50%	140%	84%	60%	130%	112%	50%	140%
Ethylbenzene	4971754		<0.05	<0.05	NA	< 0.05	74%	50%	140%	80%	60%	130%	91%	50%	140%
m & p-Xylene	4971754		<0.05	<0.05	NA	< 0.05	81%	50%	140%	117%	60%	130%	98%	50%	140%
Bromoform	4971754		<0.05	<0.05	NA	< 0.05	74%	50%	140%	71%	60%	130%	78%	50%	140%
Styrene	4971754		<0.05	<0.05	NA	< 0.05	77%	50%	140%	73%	60%	130%	73%	50%	140%
1,1,2,2-Tetrachloroethane	4971754		<0.05	<0.05	NA	< 0.05	90%	50%	140%	108%	60%	130%	NA	50%	140%
o-Xylene	4971754		<0.05	<0.05	NA	< 0.05	90%	50%	140%	80%	60%	130%	106%	50%	140%
1,3-Dichlorobenzene	4971754		<0.05	<0.05	NA	< 0.05	100%	50%	140%	88%	60%	130%	114%	50%	140%
1,4-Dichlorobenzene	4971754		<0.05	<0.05	NA	< 0.05	104%	50%	140%	92%	60%	130%	115%	50%	140%
1,2-Dichlorobenzene	4971754		<0.05	<0.05	NA	< 0.05	96%	50%	140%	87%	60%	130%	105%	50%	140%
n-Hexane	4971754		<0.05	<0.05	NA	< 0.05	114%	50%	140%	80%	60%	130%	111%	50%	140%

Comments: When the average of the sample and duplicate results is less than 5x the RDL, the Relative Percent Difference (RPD) will be indicated as Not Applicable (NA).

Certified By: N Popovski

AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation. RPDs calculated using raw data. The RPD may not be reflective of duplicate values shown, due to rounding of final results.

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Method Summary

CLIENT NAME: AZURE GROUP INC

AGAT WORK ORDER: 23T021980

PROJECT: 2303-003

ATTENTION TO: Ahmed Al-Temimi

SAMPLING SITE:177 Cross Avenue, Oakville

SAMPLED BY:Akshay

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methylnaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
F1 (C6 - C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	P&T GC/FID
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Method Summary

CLIENT NAME: AZURE GROUP INC

AGAT WORK ORDER: 23T021980

PROJECT: 2303-003

ATTENTION TO: Ahmed Al-Temimi

SAMPLING SITE:177 Cross Avenue, Oakville

SAMPLED BY:Akshay

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Ethylbenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5035A & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5035A & EPA 8260D	(P&T)GC/MS

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: AZURE GROUP INC
6751 PROFESSIONAL COURT SUITE 201 & 202
MISSISSAUGA, ON L4V 1Y3
416-779-2694

ATTENTION TO: Ahmed Al-Temimi

PROJECT: 2303-003

AGAT WORK ORDER: 23T022931

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: May 17, 2023

PAGES (INCLUDING COVER): 21

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation. Measurement Uncertainty is not taken into consideration when stating conformity with a specified requirement.

AGAT Laboratories
5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 23T022931
PROJECT: 2303-003

CLIENT NAME: AZURE GROUP INC
SAMPLING SITE:177 Cross Ave, Oakville

ATTENTION TO: Ahmed Al-Temimi
SAMPLED BY:Akshay

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2023-05-10

DATE REPORTED: 2023-05-17

		SAMPLE DESCRIPTION:		BH4-2
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2023-05-09 11:30
Parameter	Unit	G / S	RDL	4975718
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	7
Barium	µg/g	390	2.0	51.8
Beryllium	µg/g	4	0.5	0.8
Boron	µg/g	120	5	18
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.21
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	23
Cobalt	µg/g	22	0.8	12.8
Copper	µg/g	140	1.0	48.1
Lead	µg/g	120	1	8
Molybdenum	µg/g	6.9	0.5	0.7
Nickel	µg/g	100	1	27
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	20	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	0.66
Vanadium	µg/g	86	2.0	30.9
Zinc	µg/g	340	5	82
Chromium, Hexavalent	µg/g	8	0.2	<0.2
Cyanide, WAD	µg/g	0.051	0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.25

Comments: RDL - Reported Detection Limit, G / S - Guideline / Standard: Refers to ON T2 S RPI CT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4975718 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 23T022931
PROJECT: 2303-003

CLIENT NAME: AZURE GROUP INC
SAMPLING SITE:177 Cross Ave, Oakville

ATTENTION TO: Ahmed Al-Temimi
SAMPLED BY:Akshay

O. Reg. 153(511) - PCBs (Soil)

DATE RECEIVED: 2023-05-10

DATE REPORTED: 2023-05-17

				SAMPLE DESCRIPTION:	BH4-2
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2023-05-09 11:30
Parameter	Unit	G / S	RDL		4975718
Polychlorinated Biphenyls	µg/g	0.35	0.1		<0.1
Moisture Content	%		0.1		15.6
Surrogate	Unit	Acceptable Limits			
Decachlorobiphenyl	%	50-140			88

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T2 S RPI CT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

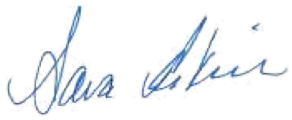
4975718 Results are based on the dry weight of soil extracted.
PCB total is a calculated parameter. The calculated value is the sum of Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Poprocki

Results relate only to the items tested. Results apply to samples as received.

This is Exhibit “O” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Report No. | 92722

ORTECH
AN ALLIANCE TECHNICAL GROUP COMPANY

Report:

Alliance United Corporation
Land Use Compatibility Study (Air)
177 Cross Avenue, Oakville, Ontario

Date: July 11, 2024

DRAFT





Report:

Alliance United Corporation
Land Use Compatibility Study (Air)
177 Cross Avenue, Oakville, Ontario

Submitted to: Calvin McCourt, Director of Development
Alliance United Corporation
3190 Harvester Road, Suite 201A
Burlington, Ontario L7N 3T1
Tel: (647) 746-7737
E-mail: calvin@ddcapital.ca

Prepared by: Ibrahim Syed, P.Eng., Senior Project Manager
ORTECH Consulting Alliance Inc.
804 Southdown Rd., Mississauga, Ontario L5J 2Y4
Tel: (905) 822-4120, Ext. 238
E-mail: isyed@ortech.ca

Reviewed by: Ka-Ming Lin, P.Eng., Senior Project Manager
ORTECH Consulting Alliance Inc.
804 Southdown Rd., Mississauga, Ontario L5J 2Y4
Tel: (905) 822-4120, Ext. 310
E-mail: klin@ortech.ca

Report No.: 92722
12 pages, 3 Appendices

Revision History

Version	Date	Summary Changes/Purpose of Revision
1	July 11, 2024	Draft

NOTICE:
This report was prepared by ORTECH Consulting Alliance Inc. (ORTECH) solely for the Client identified above and is to be used exclusively for the purposes set out in the report. The material in this report reflects the judgment of ORTECH based on information available to them at the time of preparation. Unless manifestly incorrect, ORTECH assumes information provided by others is accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented. Unless otherwise required by law or regulation, this report shall not be shared with any Third Party without the express written consent of ORTECH. ORTECH accepts no responsibility for damages, if any, suffered by any Third Party which makes use of the results and conclusions presented in this report.

Table of Contents

Page

EXECUTIVE SUMMARY 4

1. INTRODUCTION 5
   1.1 Description of the Site and the Study Area 5

2. RELEVANT POLICIES AND GUIDELINES 5
   2.1 MECP's D-6 Guidelines 5
   2.2 Halton Region's Land Use Compatibility Guidelines and Air Quality Guidelines 6
   2.3 Relevant Policy Documents 7
   2.4 Ontario Environmental Protection Act (EPA) and Ontario Regulation 419/05 8

3. LAND USE COMPATIBILITY ASSESSMENT 8
   3.1 Existing Industrial and Commercial Land Uses 8
   3.2 420 South Service Road East – GE HealthCare Canada Property Inc. (Formerly Oakville Lamp Plant) 10
   3.3 AllFix Automotive 10
   3.4 Future Land Uses 10
   3.5 Transportation Facilities 11

4. GENERAL MITIGATION STRATEGIES 11

5. CONCLUSIONS AND RECOMMENDATIONS 12

6. LIMITATIONS 12

Table 1 Minimum Separation Distances and the Potential Influence Areas from Sensitive Land Uses 6
Table 2 Active Industrial Facilities and Non-Industrial Air Emission Sources within the Study Area 9
Table 3 Potential Site-Level Mitigation Strategies 12

APPENDIX A Proposed Development Plans
APPENDIX B Site Location and Land Use within Study Area
APPENDIX C Current Zoning of Study Area

DRAFT

EXECUTIVE SUMMARY

Alliance United Corporation retained ORTECH Consulting Alliance Inc. ("ORTECH") to conduct an air quality-based land use compatibility study for a proposed high-rise mixed-use development at 177-187 Cross Avenue and 580 Argus Road, Oakville, Ontario (the "Site"). This study was completed in support of in support of an Official Plan Amendment and Zoning By-law Amendment for the proposed development, which includes three high-rise towers and one low-rise building. The purpose of this study is to assess the impact at the Site due to air emissions from land uses within 1 km of the Site (the "Study Area"), such as industrial facilities, road traffic, rail lines, etc. The latest development plans are shown in Appendix A. The location of the Site and the boundary of the Study Area is shown in Appendix B.

This study was conducted in consideration of the following resources:

- The Ministry of Environment, Conservation and Parks' (MECP's) D-6 Guidelines.
- Halton Region's Land Use Compatibility Guidelines and Air Quality Guidelines.
- The Provincial Policy Statement (PPS), 2020.
- Livable Oakville - Town of Oakville Official Plan.
- Draft Proposed Midtown Oakville OPA (April 2024).
- The Ontario Environmental Protection Act (EPA), and Ontario Regulations 419/05 and 1/17.

Based on the review of MECP's permit database and relevant land use policy documents, the proposed development at the Site was found to be compatible with the existing industrial facilities within the Study Area and potential future industrial developments on the neighboring lands. The major roadways within the Study Area are adequately separated from the Site to minimize traffic-related air quality impacts at the Site. The rail network is also well separated from the Site such that the air quality impacts from train traffic are expected to be below 30% of background air quality levels.

DRAFT

1. INTRODUCTION

Alliance United Corporation retained ORTECH Consulting Alliance Inc. ("ORTECH") to conduct an air quality-based land use compatibility study for a proposed high-rise mixed-use development at 177-187 Cross Avenue and 580 Argus Road, Oakville, Ontario (the "Site"). This study was completed in support of in support of an Official Plan Amendment and Zoning By-law Amendment for the proposed development, which includes three high-rise towers and one low-rise building. The purpose of this study is to assess the impact at the Site due to air emissions from land uses within 1 km of the Site (the "Study Area"), such as industrial facilities, road traffic, rail lines, etc. The latest development plans are shown in Appendix A. The location of the Site and the boundary of the Study Area is shown in Appendix B.

1.1 Description of the Site and the Study Area

The proposed development consists of Towers A, B and C with 60, 55 and 50 storeys respectively, and Building D with 6 storeys. Commercial/retail spaces are proposed to be located only at ground levels (8 meters in height) of each structure. The remaining floors are proposed to be occupied for residential uses. No residential units are located at the ground level.

The current zoning of the Site is Midtown Transitional Commercial (MTC), per Zoning By-law 2014-014. The neighboring lands are also zoned as MTC or Midtown Transitional Employment (MTE). The Site is located in a densely built urban area in Oakville, approximately 165 meters southeast of the QEW and approximately 170 meters northwest of the rail lines at Via Rail Canada Oakville Station and Oakville GO station. Existing residential land uses within the Study Area are located adjacent to the QEW and also 160 m south of the rail lines. There are various commercial and industrial facilities within the Study Area.

2. RELEVANT POLICIES AND GUIDELINES

2.1 MECP's D-6 Guidelines

MECP's D-6 guidelines (the "Guidelines") recommends a 1000-meter study area for land use proposals, defines three classes of industrial facilities: Class I, Class II and Class III (see definitions below), and defines Sensitive Land Uses. Guideline D-6 also defines Minimum Recommended Separation Distances (MSDs) and Potential Influence Areas (AOIs) between industrial facilities and sensitive land uses for each Class as shown in Table 1. The class designations are based on the potential for noise, dust and odours.

A Class I Industrial Facility is "A place of business for a small scale, self-contained plant or building which produces/stores a product which is contained in a package and has low probability of fugitive emissions. Outputs are infrequent, and could be point source or fugitive emissions for any of the following: noise, odour, dust and/or vibration. There are daytime operations only, with infrequent movement of products and/or heavy trucks and no outside storage".

DRAFT

A Class II Industrial Facility is "A place of business for medium scale processing and manufacturing with outdoor storage of wastes or materials and/or there are periodic outputs of minor annoyance. There are occasional outputs of either point source or fugitive emissions for any of the following: noise, odour, dust and/or vibration, and low probability of fugitive emissions. Shift operations are permitted and there is frequent movement of products and/or heavy trucks during daytime hours".

A Class III Industrial Facility is "A place of business for large scale manufacturing or processing, business characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. It has frequent outputs of major annoyance and there is a high probability of fugitive emissions".

Table 1: Minimum Separation Distances and the Potential Influence Areas from Sensitive Land Uses

Class	Recommended Minimum Separation Distance (m)	Potential Influence Area (m)
I	20	70
II	70	300
III	300	1000

Although Guideline D-6 suggests that distances are normally measured from property line to property line, there is an allowance for measuring from a specific source to sensitive receptors. Guideline D-6 also discusses reducing the minimum separation distance required based on mitigation at industrial sites and provides for exceptions to the Recommended Minimum Separation Distances for some development sites including infilling.

Facilities that do not meet the definition of any one of the three classes are expected to have virtually no potential for creating noise, odour, dust or vibration that would give rise to complaints. The definitions and examples in the MECP Guidelines relevant to air quality concerns were used to characterize each of the nearby facilities. The D-6 Guideline includes "residences, senior citizens homes, schools, daycare facilities, hospitals, churches and other institutional uses" as sensitive land uses.

2.2 Halton Region's Land Use Compatibility Guidelines and Air Quality Guidelines

The Halton Region's Land Use Compatibility Guidelines provide guidance and identify a process for assessing land use compatibility for minimizing adverse effects of "industrial, transportation and utility" uses that emit noise (vibration), odour or air pollution on sensitive uses (e.g. residential). The general framework in Halton Region's Land Use Compatibility Guidelines follows the MECP's D-6 Guidelines. Hence, the land use compatibility assessment presented in this report addresses the Halton Region's Land Use Compatibility Guidelines

DRAFT

Per Halton Region's Air Quality Guidelines, any source emission studies may only be applicable when sensitive land uses (residential, natural heritage) are proposed with these 3 conditions present:

1. Within 30 m of a major arterial road or provincial highway or within 150 m of provincial freeway;
2. In proximity to an industrial use; and a
3. utility use.

The Site is located more than 150 meters away from the QEW and the rail lines. Hence, emissions source assessment using tools such as dispersion modelling is not required. Further, the proximity of existing industrial uses to the Site was addressed in this report through compatibility assessment using MECP's D-6 guidelines.

2.3 Relevant Policy Documents

According to Provincial Policy Statement 2020, "Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures" (Section 1.2.6.1, PPS 2020).

Also, "New development proposed on adjacent lands to existing or planned corridors and transportation facilities should be compatible with, and supportive of, the long-term purposes of the corridor and should be designed to avoid, mitigate or minimize negative impacts on and from the corridor and transportation facilities" (Section 1.6.8.3, PPS 2020).

The Site is located on the lands identified as Midtown Oakville, per Livable Oakville - Town of Oakville Official Plan (the "OP"). Midtown Oakville is one of 25 areas identified as an urban growth centre in the Province's Growth Plan for the Greater Golden Horseshoe: Places to Grow, 2006 (the Growth Plan). Urban growth centres are to be transit-supportive regional focal areas that accommodate a significant portion of future population and employment growth in the Greater Golden Horseshoe. Per OP, the land use designation for the site is Urban Core, which incorporates retail and service commercial, major office, office and residential uses.

Per the draft Midtown Oakville OPA (April 2024), the updated area-specific policies are to be provided for supporting the creation of a transit-supportive and complete community with the town's highest density mix of residential, commercial, institutional and community uses.

DRAFT

2.4 Ontario Environmental Protection Act (EPA) and Ontario Regulation 419/05

Environmental Compliance Approvals (ECA) and Environmental Activity and Sector Registry (EASR) are two permitting instruments for industrial facilities, under Section 9 of the EPA, which follow the requirements of Ontario Regulation 419/05 (O. Reg. 419/05) and Ontario Regulation 1/17 (O. Reg. 1/17). In general, less intensive industries follow the EASR process while more complex industrial operations require an ECA.

Per O. Reg. 419/05, facilities emitting air contaminants are required to comply with MECP's air quality standards at all off-site receptor points. Odours, which are categorized as a nuisance, are regulated at sensitive receptors such as schools, residences, long-term care homes, etc.

Industrial facilities with existing permits (ECAs or EASRs), as identified in Table 2 are expected to meet the MECP's air quality standards at the nearest off-site receptors i.e., their respective property lines. The implications of introducing elevated receptors (proposed development) on the operations of these facilities is further discussed in the report.

3. LAND USE COMPATIBILITY ASSESSMENT

The land use compatibility assessment was based on readily available information, such as conceptual site plans, satellite imagery, Access Environment website (MECP's map-based tool), etc., and direct observations conducted during the site visits on April 9, 2024.

As noted in Section 2.1 of this report, the Guidelines are based on the potential for noise, dust and odours. This study addresses dust, odour sources and other air contaminants but does not address environmental noise or vibration. The industrial land uses within the study area of the proposed development are shown in Table 2.

3.1 Existing Industrial and Commercial Land Uses

As shown in Table 2, all the existing industrial facilities with active MECP permits, within the study area, are at adequate separation distances from the Site, i.e., the separation distances between the Site and each identified industrial facility are more than the AOIs of the respective classes based on D-6 classification. Hence, odour, dust, or air quality impacts from these existing industrial facilities with MECP permits are not anticipated at the Site and the proposed development is considered compatible with these industrial facilities. AllFix Automotive is identified as the only industrial facility within the Study Area without an MECP permit, that has a separation distance less than the MSD from the Site. The compatibility of the Site with AllFix Automotive is further discussed in Section 3.3. Also, there are various commercial buildings around the Site with businesses such as restaurants, offices, clinics, hotels, etc. Adverse air quality impacts from these commercial facilities are not anticipated at the Site and hence, the proposed development is considered compatible with these businesses.

ORTECH
AN ALLIANCE TECHNICAL GROUP COMPANY

Table 2: Active Industrial Facilities and Non-Industrial Air Emission Sources within the Study Area

Active Facilities/Entities within the Study Area	Address	Operations/Equipment	Permit Type	Distance to the Site (m)	D-6 Classification	Within AOI?	Within MSD?
AllFix Automotive*	570 Argus Rd.	Auto repair shop	None	-	Class I	Yes	Yes
The TDL Group Corp.	111 Cross Ave.	Standby generator	ECA	78	Class I	No	No
PRR TRUST	240 Leighland Ave	Heating System	EASR	274	Class I	No	No
Sears Canada Inc	240 Leighland Ave	Heating System	EASR	274	Class I	No	No
1555935 ONTARIO INC	547 Trafalgar Rd	Automotive refinishing	EASR	301	Class I	No	No
Fresh Fields Markets, Inc.	301 Cornwall Rd	Coffee roasting	ECA	337	Class I	No	No
Carstar Corporate Collision Centres Inc.	312 Davis Road	Automotive refinishing	ECA	342	Class I	No	No
Oaktown Collision Inc.	359 Davis Road	Automotive refinishing	ECA	509	Class I	No	No
Halton Condominium Corporation	20 Speers Road	Standby generator	EASR	734	Class I	No	No
The Oakville and District Humane Society	445 Cornwall Road	Animal carcasses incineration	ECA	850	Class I-II	No	No
ANI Pharmaceuticals (Wellspring Pharmaceuticals)	400 Iroquois Shore Road	Pharmaceutical manufacturing facility	ECA	912	Class I-II	No	No
Dana Canada Corporation	656 Kerr St	Automotive drivetrain manufacturing (corporate office)	ECA	928	Class I	No	No

* AllFix Automotive shares the property line with the proposed development.

DRAFT

3.2 420 South Service Road East – GE HealthCare Canada Property Inc. (Formerly Oakville Lamp Plant)

On May 27, 2024, The Town passed a temporary use by-law 2024-088 for the property at 420 South Service Road East. The Town's website indicates that the proposed development is for the temporary use of these lands for the outdoor storage of shipping containers to be utilized for storage purposes, trailers, and motor vehicles by the general public, for a period of up to three years. No new permanent structures are proposed at this location. In ORTECH's opinion, the intended temporary use of the lands is not expected to adversely impact the air quality at the Site. Further, the draft Midtown OPA designates 420 South Service Road East as Urban Core which allows for mixed-use development. Hence, the Site is considered to be compatible with the temporary use and potential future use of lands at 420 South Service Road East.

3.3 AllFix Automotive

AllFix Automotive is an auto repair shop that provides miscellaneous car services such as oil changes, tire repairs, e-diagnostics, etc. The shop manager confirmed over a telephone call that there are no paint spray booths, generators, or boilers at their site. From the walk around the facility, only general HVAC systems were noted. Also, there are no outdoor car servicing activities done at the shop. The potential of nuisance from AllFix Automotive is minimal and hence, adverse air quality impacts from AllFix Automotive are not expected at the Site. Therefore, the Site is considered to be compatible with operations at AllFix Automotive.

3.4 Future Land Uses

The current zoning map for the Study Area is provided in Appendix C. Per Zoning By-law 2014-014, MTC and MTE zones allow for retail/commercial land uses and no industrial uses are permitted on the MTC or MTE zoned lands. As mentioned in Section 2.3, the OP and the draft Midtown OPA identify the subject lands, neighboring vacant lands and the neighboring lands as Urban Core, where mixed-use developments are expected with only retail/commercial uses at the ground level. Hence, the future non-residential developments on the neighboring lands of the Site are considered compatible with the proposed development.

The closest Business Employment (E2) zones are located more than 850 meters away from the Site. While manufacturing uses are permitted in this zone, no Class III facility is anticipated within the Study Area due to the proximity of these identified E2 zones to existing residential land uses. Future Class I or II facilities on these E2 lands will be considered adequately separated from the Site for compatibility purposes. Therefore, the proposed development on the subject lands is not expected to restrict the ability of new or intensified industrial uses to be located in the identified E2 lands.

DRAFT

Additionally, ORTECH reviewed the list of current development and site plan applications and recently approved development and site plan applications, available on the website of the Town of Oakville. The current planning applications within the Study Area include either mixed-use development or residential development, except the proposed development at 420 South Service Road East (Section 3.3). Therefore, the proposed development at the Site is considered compatible with the potential future developments within the Study Area.

3.5 Transportation Facilities

The Site is located approximately 165 meters southeast of the QEW and 230 meters from Trafalgar Road (Highway 3). As mentioned in Section 2.2, the emission source studies may only be applicable if the proposed sensitive land uses are within 30 meters of a major arterial road or 150 meters of a provincial freeway.

Further, in ORTECH's experience with dispersion modelling of roadway emissions and publicly available studies, such as The City of Toronto report "Avoiding the TRAP: Traffic-Related Air Pollution in Toronto and Options for Reducing Exposure" (TRAP, 2017), the preferred mitigation strategy is separation distances or buffer zones. Hence, the detailed air quality assessment of the Site due to air emissions from QEW and Trafalgar Road is not required based on the separation distances from these roadways. However, general mitigation strategies are recommended in this report to prevent TRAP impacts at the Site.

Also, the Site is located approximately 170 meters northwest of the rail lines at Via Rail Canada Oakville Station and Oakville GO station. Per GO Rail Network Electrification Final Environmental Project Report Addendum (Metrolinx, May 2021), the levels of air contaminants from the train traffic on the Lakeshore East segment decreased below 30% of background air quality levels beyond 55 meters from the Metrolinx emission sources. The rail corridor near the Site has rail traffic similar to the Lakeshore East segment (Metrolinx's website). Hence, with a 170 m separation distance, the Site is adequately separated from the rail corridor to avoid adverse air quality effects. Therefore, the proposed development at the Site is considered compatible with the rail corridor.

4. GENERAL MITIGATION STRATEGIES

Although the proposed development at the Site is considered compatible with the road and rail corridors, the following general Site-Level mitigation strategies are recommended to prevent TRAP-related impacts at the Site.

Table 3: Potential Site-Level Mitigation Strategies

Mitigation Option	Strategy Recommended in TRAP Document	ORTECH's Comments/Recommendations
Site Layout	Consideration should also be given to site open spaces in the interior of "U" or "L" shaped buildings, to create open spaces that are located away from the roadways as this provides a physical barrier between traffic emissions and people using the space.	The current development plans (Appendix A), satisfy this recommendation.
Physical Barriers	Vegetative barriers may help in reducing the impacts of some air pollutants.	The current development plans (Appendix A), satisfy this recommendation.
Building Design	When designing a building near a busy roadway, the installation of a mechanical heating, ventilating, and air conditioning (HVAC) system is recommended rather than depending on passive ventilation. Air filtration is the most effective measure to reduce exposure to TRAP indoors.	It is recommended that air intakes should be located away from roadways.

5. CONCLUSIONS AND RECOMMENDATIONS

ORTECH completed this air quality-based land use compatibility study of the subject lands at 177-187 Cross Avenue and 580 Argus Road, Oakville, Ontario (the "Site"), for Alliance United Corporation to support an Official Plan Amendment and Zoning By-law Amendment for the proposed mixed-use development. Based on relevant land use compatibility guidelines, policy documents and publicly available records of MECP's environmental (Air) permits, the proposed development at the Site is found to be compatible with the existing and future industrial facilities and transportation corridors within the Study Area. The recommended Site-Level mitigation strategy to minimize the air quality impacts is to locate air intakes of the building HVAC system away from roadways.

6. LIMITATIONS

The assessment, conclusion and recommendations in this report are based on the information provided by Alliance United Corporation, documented technical guidance from regulatory bodies such as MECP, US EPA, Metrolinx's published report(s) available in the public domain and ORTECH's professional opinion. This report is prepared for the exclusive use of Alliance United Corporation, their representatives and stakeholders of the development plan (Appendix A). The assessment presented in this report does not apply to other sites. Any changes to the site plan may require revision of this assessment. The report should not be misconstrued as a comprehensive air quality report for the Site. In addition to traffic emission sources, other emission sources identified in this report may or may not impact the proposed development.

DRAFT

APPENDIX A

Proposed Development Plans
(20 pages)

DRAFT

APPENDIX B

Site Location and Land Use within Study Area
(1 page)

DRAFT



LEGEND

- 111 Cross Ave.
- 20 Speers Road
- 240 Leighland Ave
- 301 Cornwall Rd
- 312 Davis Road
- 359 Davis Road
- 400 Iroquois Shore Road
- 445 Cornwall Road
- 547 Trafalgar Rd
- 570 Argus Rd
- 656 Kerr St
- Property Line
- 20m Buffer
- 1000m Buffer
- 300m Buffer
- 70m Buffer

PROJECT TITLE:

Land Use Map
- 177 Cross Ave, 580 Argus Rd

OPERATIONS/EQUIPMENT:

In Order of Legend
Standby generator
Heating System
Heating System
Automotive refinishing
Coffee roasting
Automotive refinishing
Automotive refinishing
Standby generator
Animal carcasses incineration
Pharmaceutical manufacturing facility
Automotive drivetrain manufacturing
Auto repair shop

NORTH ARROW:

SCALE BAR:

0 0.15 0.3 Kilometers

COMPANY NAME:
ORTECH Consulting Alliance Inc.

PREPARED BY:
Jenoshan Sivakumar

PREPARED DATE:
11/07/2024

SOURCE:
Open Data: Access Environment
Datum: WGS 1984 UTM Zone 17N

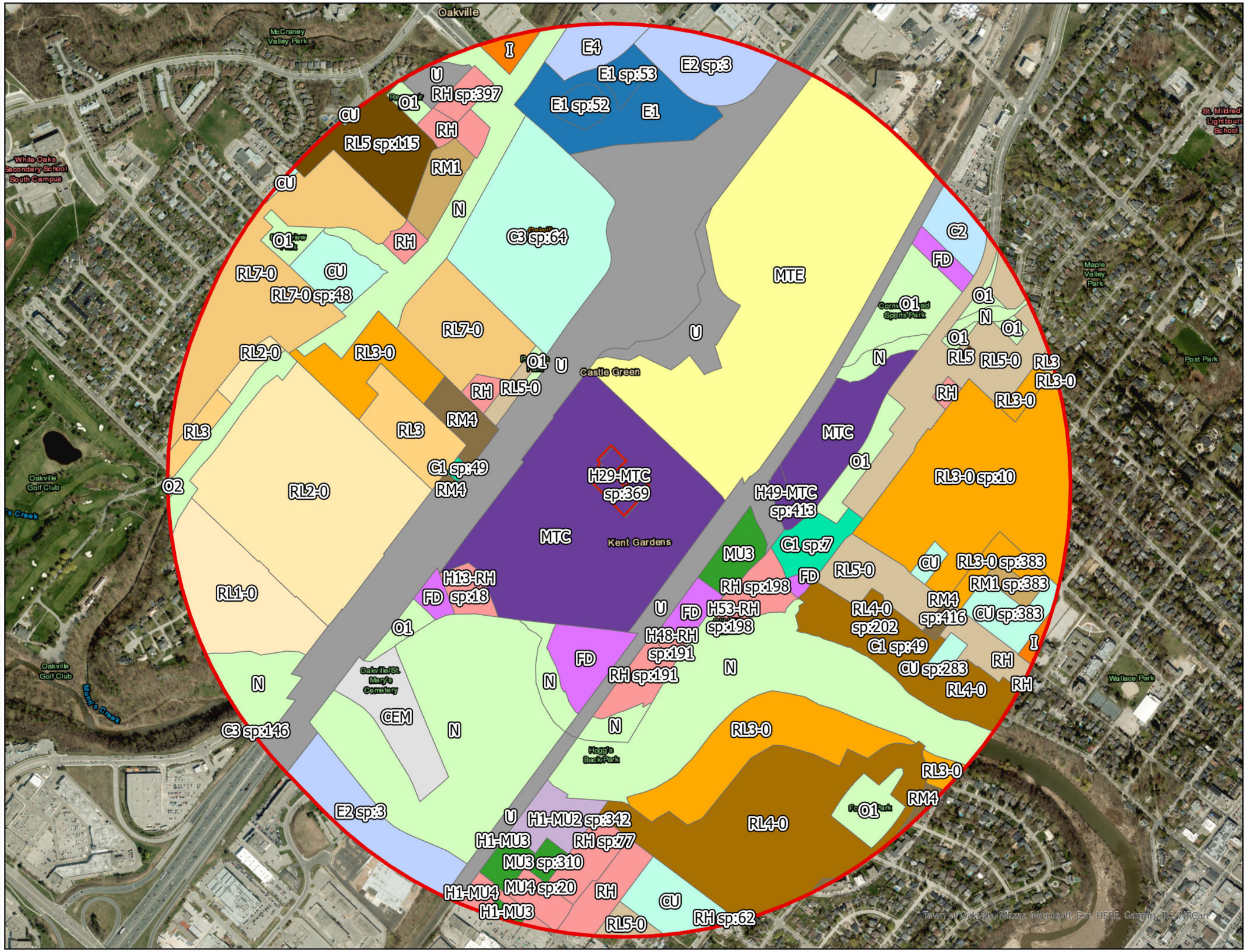
PROJECT NUMBER: 92722

CLIENT: Alliance United Corporation

APPENDIX C

Current Zoning of Study Area
(1 page)

DRAFT



PROJECT TITLE:

Zoning of Study Area Map
- 177 Cross Avenue, 580 Argus Rd

LEGEND:

- Property Line
- 1km Buffer

Zoning Classes

- Business Commercial
- Business Employment
- Cemetery
- Community Commercial
- Community Use
- Core Commercial
- Future Development
- Institutional
- Main Street 2
- Midtown Transitional Commercial
- Midtown Transitional Employment
- Natural Area
- Neighbourhood Commercial
- Office Employment
- Park
- Private Open Space
- Residential High
- Residential Low (RL1-0)
- Residential Low (RL2-0)
- Residential Low (RL3)
- Residential Low (RL3-0)
- Residential Low (RL4-0)
- Residential Low (RL5)
- Residential Low (RL5-0)
- Residential Low (RL7-0)
- Residential Medium (RM1)
- Residential Medium (RM4)
- Urban Centre
- Urban Core
- Utility

NORTH ARROW:

SCALE BAR:

0 0.15 0.3 Kilometers

COMPANY NAME:
ORTECH Consulting Alliance Inc.

PREPARED BY:
Jenoshan Sivakumar

PREPARED DATE:
11/07/2024

SOURCE:
Open Data: City of Oakville
Datum: WGS 1984 UTM Zone 17N

PROJECT NUMBER: 92722

CLIENT: Alliance United Corporation

This is Exhibit “P” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

DRAFT

177 Cross Argus Developments Inc.

TRAFFIC IMPACT STUDY

Proposed Mixed-Use Development

177 Cross Avenue,
Town of Oakville

July 2024
24010

Disclaimer

This Report represents the work of LEA Consulting Ltd ("LEA"). This Report may not be relied upon for detailed implementation or any other purpose not specifically identified within this Report. This Document is confidential and prepared solely for the use of 177 Cross Argus Developments Inc. Neither LEA, its sub-consultants nor their respective employees assume any liability for any reason, including, but not limited to, negligence, to any party other than 177 Cross Argus Developments Inc. for any information or representation herein.

DRAFT

TABLE OF CONTENTS

1 Introduction 1
1.1 Proposed Development *2*
2 Existing Traffic Conditions 3
2.1 Road Network *3*
2.2 Transit Network *5*
2.3 Active Transportation *9*
2.3.1 Cycling Network 9
2.3.2 Pedestrian Network 10
2.4 Traffic Data Collection *10*
3 Future Backgrounds Conditions 13
3.1 Future Road Improvements *13*
3.1.1 Study Area Road Network 13
3.1.2 Speer Road Improvements 13
3.1.3 Trafalgar Road Improvements 14
3.2 Future Transit Improvements *14*
3.2.1 Trafalgar Bus Rapid Transit (BRT) 14
3.2.2 Lakeshore West Line GO Expansion (LWLGOE) 16
3.3 Background Developments *16*
3.4 Corridor Growth *18*
3.5 Future Background Traffic *18*
4 Site Trip Generation 21
4.1 Modal Split *21*
4.2 Vehicle Trip Generation *21*
4.2.1 Multi-Modal Trip Generation 22
4.3 Trip Distribution and Assignment *23*
4.4 Future Total Traffic Volumes *28*
5 Intersection Capacity Analysis 30
5.1 Synchro Model Inputs *30*
5.1.1 Future Optimization 30
5.2 Intersection Capacity Analysis – 2027 Horizon *31*

DRAFT

5.2.1 Signalized Intersection (2027 Horizon) 31
5.2.1.1 Trafalgar Road & Cornwall Road 32
5.2.1.2 Trafalgar Road & Cross Avenue /South Service Road East 33
5.2.1.3 Argus Road/Oakville GO Station Driveway & Cross Avenue 34
5.2.1.4 Trafalgar Road & QEW EB Off-Ramp 35
5.2.1.5 Trafalgar Road & North Service Road East/QEW WB Off-Ramp 36
5.2.1.6 Oakville GO Station Driveway & Cross Avenue 37
5.2.2 Unsignalized Intersections (2027 Horizon) 38
5.2.2.1 Argus Road & South Service Road 38
5.2.2.2 Trafalgar Road & Argus Road 39
5.2.2.3 Argus Road & 580 Argus Road Site Access 39
5.2.2.4 177 Cross Avenue Site Access & Cross Avenue 40
5.2.2.5 Argus Road & 187 Cross Avenue Site Access 41
5.2.2.6 Argus Road & 568-570 Argus Road North Site Access 41
5.2.2.7 Argus Road & 568-570 Argus Road South Site Access 42
5.2.2.8 Argus Road & Street 1 42
5.2.2.9 North Site Access & Street 1 43
5.2.2.10 Street C & West Site Access 43
5.2.2.11 Street C & Street 1 44
5.3 Intersection Capacity ANALYSIS - 2037 Horizon 45
5.3.1 Signalized Intersections (2037 Horizon) 45
5.3.1.1 Trafalgar Road & Cornwall Road 45
5.3.1.2 Trafalgar Road & Cross Avenue/South Service Road East 46
5.3.1.3 Argus Road/Oakville GO Station Driveway & Cross Avenue 47
5.3.1.4 Trafalgar Road & QEW EB Off-Ramp 48
5.3.1.5 Trafalgar Road & North Service Road East/QEW WB Off-Ramp 49
5.3.1.6 Oakville GO Station Driveway & Cross Avenue 50
5.3.2 Unsignalized Intersections (2037 Horizon) 51
5.3.2.1 Argus Road & South Service Road 51
5.3.2.2 Trafalgar Road & Argus Road 52
5.3.2.3 Argus Road & 580 Argus Road Site Access 53
5.3.2.4 177 Cross Avenue Site Access & Cross Avenue 53

DRAFT

5.3.2.5 Argus Road & 187 Cross Avenue Site Access 54
5.3.2.6 Argus Road & 568-570 Argus Road North Site Access 54
5.3.2.7 Argus Road & 568-570 Argus Road South Site Access 55
5.3.2.8 Argus Road & Street 1 55
5.3.2.9 North Site Access & Street 1 56
5.3.2.10 Street C & West Site Access 57
5.3.2.11 Street C & Street 1 58
6 Parking and Loading Review 59
6.1 Vehicle Parking 59
6.1.1 Town of Oakville Zoning By-law 2014-014 59
6.1.2 Parking Justification 59
6.1.2.1 Planning Policy 60
6.1.2.2 Public and Active Transportation Context 65
6.1.3 Accessible Parking Requirements 66
6.2 Bicycle Parking Spaces 66
6.3 Loading Spaces 67
7 Transportation Demand Management (TDM) Plan 68
7.1 Vehicular Parking Reduction Strategies 68
7.2 Active Transportation Strategies 68
7.2.1 Pedestrian 68
7.2.2 Cycling 69
7.3 Transit Based Strategies 69
8 Conclusion 70

LIST OF FIGURES

Figure 1-1: Subject Site 1
Figure 1-2: Site Plan 2
Figure 2-1: Existing Study Area Lane Configuration 4
Figure 2-2: Existing Oakville Transit Network 6
Figure 2-3: GO Transit System Map 9
Figure 2-4: Existing Cycle Network 10

DRAFT

Figure 2-5: Existing Traffic Volumes: Weekday AM (PM) Peak Hour 12
Figure 3-1: Speer Road Improvements - Study Area 13
Figure 3-2: Speer Road Improvement - Preferred Design 14
Figure 3-3: Trafalgar Road Network Improvements 14
Figure 3-4: Proposed Trafalgar Road BRT Route 15
Figure 3-5: Lakeshore West Line GO Expansion - Network Map 16
Figure 3-6: Background Developments Location to the Subject Site 17
Figure 3-7: Future Background Traffic Volumes – 2027 Horizon 19
Figure 3-8: Future Background Traffic Volumes 2037 Horizon 20
Figure 4-1: Residential Site Traffic Volumes 25
Figure 4-2: Retail Site Traffic Volumes 26
Figure 4-3: Net Total Site Traffic Volumes 27
Figure 4-4: Future Total Traffic Volumes – 2027 Horizon 28
Figure 4-5: Future Total Site Traffic Volumes - 2037 Horizon 29
Figure 6-1: Regional Urban Structure (Map1H) - Halton Region 66

LIST OF TABLES

Table 1-1: Proposed Development 2
Table 2-1: Study Area Intersections / Data Collection 11
Table 3-1: Background Development 17
Table 4-1: Residential and Retail Study Area Modal Split 21
Table 4-2: Subject Site Vehicle Trip Generation 22
Table 4-3: Subject Site Multi-Modal Trip Generation 23
Table 4-4: Trip Distribution and Assignment 24
Table 5-1: Signal Timing Optimization 30
Table 5-2: Trafalgar Road & Cornwall Road Intersection 32
Table 5-3: Trafalgar Road & Cross Avenue/South Service Road East Intersection 33
Table 5-4: Argus Road/Oakville GO Station Driveway & Cross Avenue Intersection 34
Table 5-5: Trafalgar Road & QEW EB Off-Ramp Intersection 35
Table 5-6: Trafalgar Road & North Service Road East/QEW WB Off-Ramp Intersection 36

DRAFT

Table 5-7: Argus Road & South Service Road Intersection 38
Table 5-8: Trafalgar Road & Argus Road Intersection 39
Table 5-9: Argus Road & 580 Argus Road Site Access 39
Table 5-10: 177 Cross Avenue Site Access & Cross Avenue Intersection 40
Table 5-11: Argus Road & 187 Cross Avenue Site Access Intersection 41
Table 5-12: Argus Road & 568 -570 Road North Site Access 41
Table 5-13: Argus Road & 568-570 Argus Road North Site Access Intersection 42
Table 5-14: Argus Road & Street 1 Intersection 42
Table 5-15: North Site Access & Street 1 Intersection 43
Table 5-16: Street C & West Site Access Intersection 43
Table 5-17: Street C & Street 1 Intersection 44
Table 5-18: Trafalgar Road & Cornwall Road Intersection 45
Table 5-19: Trafalgar Road & Cross Avenue/South Service Road East Intersection 46
Table 5-20: Argus Road/Oakville GO Station Driveway & Cross Avenue Intersection 47
Table 5-21: Argus Road & South Service Road Intersection 51
Table 5-22: Trafalgar Road & Argus Road Intersection 52
Table 5-23: Argus Road & 580 Argus Road Site Access Intersection 53
Table 5-24: 177 Cross Avenue Site Access & Cross Avenue Intersection 53
Table 5-25: Argus Road & 187 Cross Avenue Site Access Intersection 54
Table 5-26; Argus Road & 568-570 Argus Road North Site Access Intersection 54
Table 5-27: Argus Road & 568 -570 Argus Road South Site Access Intersection 55
Table 5-28: Argus Road & Street 1 Intersection 55
Table 5-29: North Site Access & Street 1 Intersection 56
Table 5-30: Street C & West Site Access Intersection 57
Table 5-31: Street C & Street 1 Intersection 58
Table 6-1: Zoning By-Law 2014-014 Vehicle Parking Standards 59
Table 6-2: Accessible Parking Spaces – By-law 2014-014 66
Table 6-3: Bicycle Parking Supply - Zoning By-law 2014-014 67

APPENDICES

DRAFT

APPENDIX A	Terms of Reference
APPENDIX B	Turning Moving Counts and Signal Timing Plan
APPENDIX C	Background Developments
APPENDIX D	Corridor Growth Rates
APPENDIX E	2016 TTS Data
APPENDIX F	Intersection Capacity Analysis 2027 Horizon
APPENDIX G	Intersection Capacity Analysis 2037 Horizon
APPENDIX H	Swept Path Diagrams

DRAFT

1 INTRODUCTION

LEA Consulting Ltd. (LEA) has been retained by 177 Cross Argus Developments Inc. to undertake a Traffic Impact Study (TIS) for the proposed mixed-use development located at 177 Cross Avenue in the Town of Oakville (herein referred to as the 'subject site). This TIS report has been prepared in support of the Official Plan Amendment and Rezoning By-law (ZBA) applications for the subject site.

The subject site is located within the Midtown Oakville *urban growth centre* at the northwest corner of the Cross Avenue & Argus Road intersection as shown in Figure 1-1.

Figure 1-1: Subject Site



Source: Google Earth accessed May 2024

The purpose of this study is to assess the proposed development from a transportation perspective, to determine the traffic impacts to the adjacent road network over a five-year and 10-year horizon, and to identify any required mitigation measures.

In addition, this report will review the proposed parking supply against existing and emerging by-law requirements and will provide parking justification and a Transportation Demand Management Plan to support a reduced parking supply for the subject site.

Finally, a review of the proposed loading supply and functionality of the subject site will be provided. The study scope is consistent with the *Town of Oakville's Development Application Guidelines, Transportation*

Impact Analysis. The Terms of Reference (TOR) prepared for this study and the relevant correspondence is provided in Appendix A.

1.1 PROPOSED DEVELOPMENT

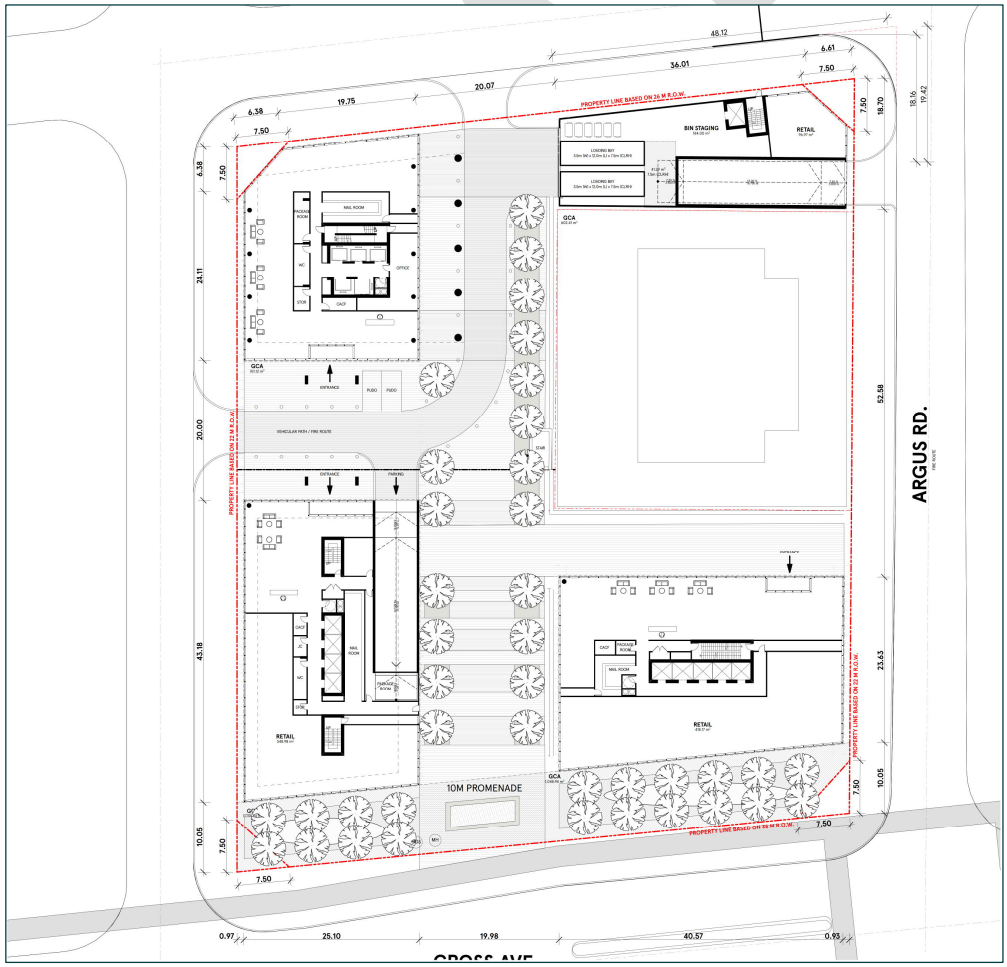
The proposed mixed-use development will consist of three (3) residential towers (50 storeys, 55 storeys, and 60 storeys). and one mid-rise residential block (7 storeys) consisting of 1895 residential units and 846 m^2 of retail GFA. A total of 1,013 vehicle parking spaces will be provided across a six (6) level underground parking garage. Access to the proposed development will be provided via three (3) full moves accesses at Argus Road, the new E-W Street and the new N-S street.

Site statistics for the proposed mixed-use development are shown in Table 1-1 with the site plan illustrated in Figure 1-2.

Table 1-1: Proposed Development

Building #	1 – Bedroom	2 – Bedrooms	3 – Bedrooms	Retail
Buildings A & B	820 unit	401 unit	73 unit	349 m^2
Building C	359 unit	197 unit	20 unit	418 m^2
Building D	10 unit	10 unit	5 units	79 m^2
Subtotal	**1,189 unit**	**608 units**	**98 units**	**846 m^2**
Total	**1895 units**			

Figure 1-2: Site Plan



Source: architects - Alliance, June 2024

2 EXISTING TRAFFIC CONDITIONS

This section provides an overview of the existing transportation conditions within the study area, including the road, transit, cycling and pedestrian networks. The study area was determined by assessing the size of the proposed development and its anticipated impact on the existing road network. The study includes the following intersections:

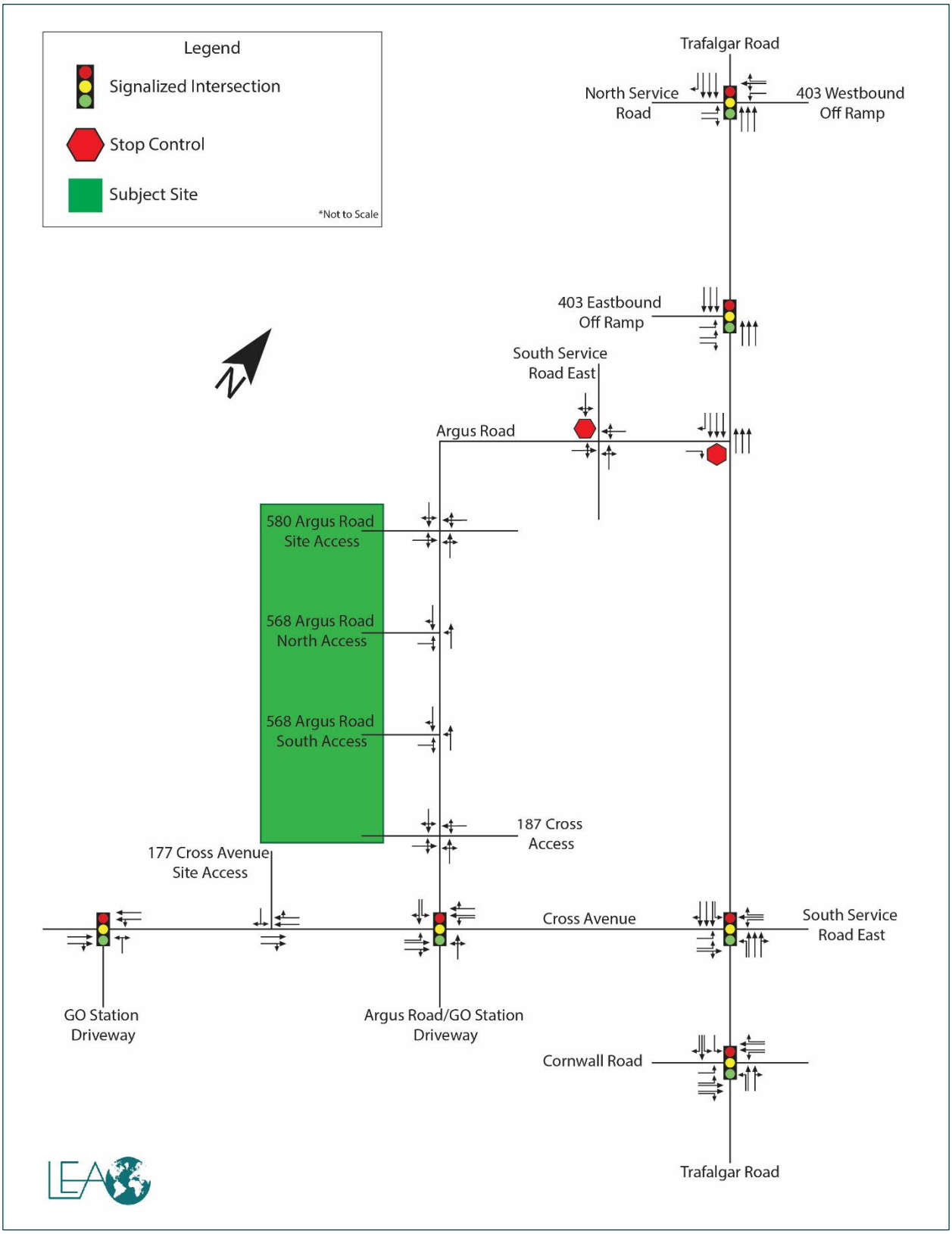
- Trafalgar Road & North Service Road East/QEW Westbound Off-Ramp;
- Trafalgar Road & QEW Eastbound Off-Ramp;
- Trafalgar Road & Argus Road;
- Trafalgar Road & Cross Avenue/South Service Road East;
- Trafalgar Road & Cornwall Road;
- South Service Road East & Argus Road;
- Argus Road/Oakville GO Station Driveway & Cross Avenue;
- Argus Road & 187 Cross Avenue Site Access;
- Argus Road & 568-570 Argus Road South Site Access;
- Argus Road & 568-570 Argus Road North Site Access;
- Argus Road & 580 Argus Road Site Access; and
- Oakville GO Station Driveway & Cross Avenue.

2.1 ROAD NETWORK

The following section provides a description and classification of the roadways within the study area. Figure 2-1 illustrates the existing road network and lane configuration within the study area.

DRAFT

Figure 2-1: Existing Study Area Lane Configuration



Argus Road is a local roadway that generally operates in a north-south direction and alternates to an east-west direction towards Trafalgar Road with a two (2) lane cross section (one lane per direction) and has an speed limit of 50 km/h within the study area. The roadway extends between Cross Avenue and Trafalgar Road within the Town of Oakville.

Cornwall Road is a multi-purpose arterial road that generally operates in an east-west direction with a four-lane cross section (two lanes per direction) and has a posted speed limit on 60 km/h within the study area. The roadway extends between Speers Road and Beryl Road within the Town of Oakville.

Cross Avenue / South Service Road is a minor arterial road that generally operates in an east-west direction and briefly at a north-south direction with a four (4) lane cross section (two lanes per direction) and has a posted speed limit of 50 km/h within the study area. The roadway extends between Spears/Cornwall Road and Trafalgar Road within the Town of Oakville.

Lyons Lane is a local roadway that operates in a north-south direction with a two (2) lane cross-section (one lane per direction) and has a posted speed limit of 50 km/h within the study area. The roadway extends between GO Transit Lakeshore West rail corridor and South Service Road East in the City of Oakville.

Trafalgar Road is a major arterial regional road that generally operates in a north-south direction with a six (6) lane cross section (three lanes per direction) and has a posted speed limit of 50 km/h within the study area. The roadway extends between the shores of Lake Ontario and Highway 7 in Halton Hills.

2.2 TRANSIT NETWORK

The subject site is located in an area which is well serviced by many public transportation options. Within walking distance to the subject site there are many available bus route options operated by Oakville Transit. These routes can provide future residents with reliable transit options to both local and regional destinations. The site is also within walking distance of a VIA Rail train station and Oakville GO Station which operates both national, and regional train and bus services throughout southern Ontario.

When entered into the TransitScore™ database which measures a site's accessibility to/from a destination using the available public transit, the site received a score of 64/100 which indicates many good nearby public transit options. It can be expected that this score will increase as the area of Midtown Oakville, set by the province as an urban growth centre, will increase development to include more mix-use developments and higher frequency transit as discussed in Section 3.2.

Error! Reference source not found. illustrates the existing Oakville transit routes accessible to the subject site.

DRAFT

Figure 2-2: Existing Oakville Transit Network



Source: Oakville Transit accessd May 2024

A description of each transit routes servicing the site including the available access locations have been provided below.

<u>Oakville Transit</u>

Oakville Bus Route 4 – Speers – Cornwall is a bus route that operates in an east-west direction between Clarkson GO Station and Bronte GO Station. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest eastbound and westbound bus routes are located along Cross Avenue at 165 Cross Avenue within 400 metres (5-minute walk) of the subject site.

Oakville Bus Route 10 – West Industrial is a bus route that operates in an east-west direction between Oakville GO Station and Bronte GO Station. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest eastbound and westbound bus routes are located along Cross Avenue at 165 Cross Avenue within 400 metres (5-minute walk) of the subject site.

Oakville Bus Route 14/A – Lakeshore West is a bus route that operates in an east-west direction between Oakville GO Station and Appleby GO Station. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest eastbound and westbound bus routes are located along Cross Avenue at 165 Cross Avenue within 400 metres (5-minute walk) of the subject site.

Oakville Bus Route 15 – Bridge is a bus route that operates in an east-west direction between Oakville GO Station and Appleby GO Station. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest eastbound and westbound bus routes are located along Cross Avenue at 165 Cross Avenue within 400 metres (5-minute walk) of the subject site.

Oakville Bus Route 18 – Glen Abbey South is a bus route that operates in an east-west direction between Oakville GO Station and Bronte GO Station. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest eastbound and westbound bus routes are located along Cross Avenue at 165 Cross Avenue within 400 metres (5-minute walk) of the subject site.

Oakville Bus Route 28 – Glen Abbey North is a bus route that operates in an east-west direction between Oakville GO Station and Bronte GO Station. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest eastbound and westbound bus routes are located along Cross Avenue at 165 Cross Avenue within 400 metres (5-minute walk) of the subject site.

Oakville Bus Route 1 – Trafalgar is a bus route that operates in a north-south direction between Oakville GO Station and the 407 GO Carpool Parking lot at 4180 Trafalgar Road. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest east/westbound and north/southbound bus routes are located along Trafalgar Road at 547 Trafalgar Road within 650 metres (8-minute walk) of the subject site.

Oakville Bus Route 5/A – Dundas is a bus route that operates in a north-south and east-west direction between Oakville GO Station, the area near Dundas Street East &Trafalgar Road, and the GO Carpool Parking lot at 3405 Dundas Street. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest east/westbound and north/southbound bus routes are located along Trafalgar Road at 547 Trafalgar Road within 650 metres (8-minute walk) of the subject site.

Oakville Bus Route 13 – Westoak Trails is a bus route that generally operates in a north-south and east-west direction between Oakville GO Station and Bronte GO Station. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest east/westbound and north/southbound bus routes are located along Trafalgar Road at 547 Trafalgar Road within 650 metres (8-minute walk) of the subject site.

Oakville Bus Route 19 – River Oaks is a bus route that generally operates in a north-south direction between Oakville GO Station and the area near Dundas Street East & Trafalgar Road. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest east/westbound and north/southbound bus routes are located along Trafalgar Road at 547 Trafalgar Road within 650 metres (8-minute walk) of the subject site.

Oakville Bus Route 20 – Northbridge is a bus route that generally operates in a north-south direction between Oakville GO Station, Iroquois Community Centre, and the area near Dundas Street East & Trafalgar Road. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

DRAFT

Access Location: The nearest east/westbound and north/southbound bus routes are located along Trafalgar Road at 547 Trafalgar Road within 650 metres (8-minute walk) of the subject site.

Oakville Bus Route 24 – South Common is a bus route that operates in a north-south and east-west direction between Oakville GO Station, the area near Dundas Street East &Trafalgar Road, and the area near Winston Churchill Boulevard, The Collegeway, and Burnhamthorpe Road West. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest east/westbound and north/southbound bus routes are located along Trafalgar Road at 547 Trafalgar Road within 650 metres (8-minute walk) of the subject site.

Oakville Bus Route 26 – Falgarwood is a bus route that generally operates in a north-south direction between Oakville GO Station and the area of Holton Heights, Falgarwood Drive and Lancaster Drive. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest east/westbound and north/southbound bus routes are located along Trafalgar Road at 547 Trafalgar Road within 650 metres (8-minute walk) of the subject site.

Oakville Bus Route 120 – East Industrial is a bus route that generally operates in an east-west direction between Oakville GO Station and the area east of Highway 403 and Dundas Street. The route operates during the weekdays and weekends with 10 minutes or better headways during weekday peak periods.

Access Location: The nearest east/westbound and north/southbound bus routes are located along Trafalgar Road at 547 Trafalgar Road within 650 metres (8-minute walk) of the subject site.

GO Transit Service

GO Bus Route 18B/C/D/E/F/G/H – Lakeshore West is a bus route that generally operates in an east-west direction between Hamilton GO Centre and Toronto Union Station. The route operates weekday service at select morning and late-night hours.

GO Bus Route 21 – Milton is a bus route that generally operates in an east-west direction between Milton GO Station and Toronto Union Station. The route operates weekday and weekend service at 45 minutes or better headways.

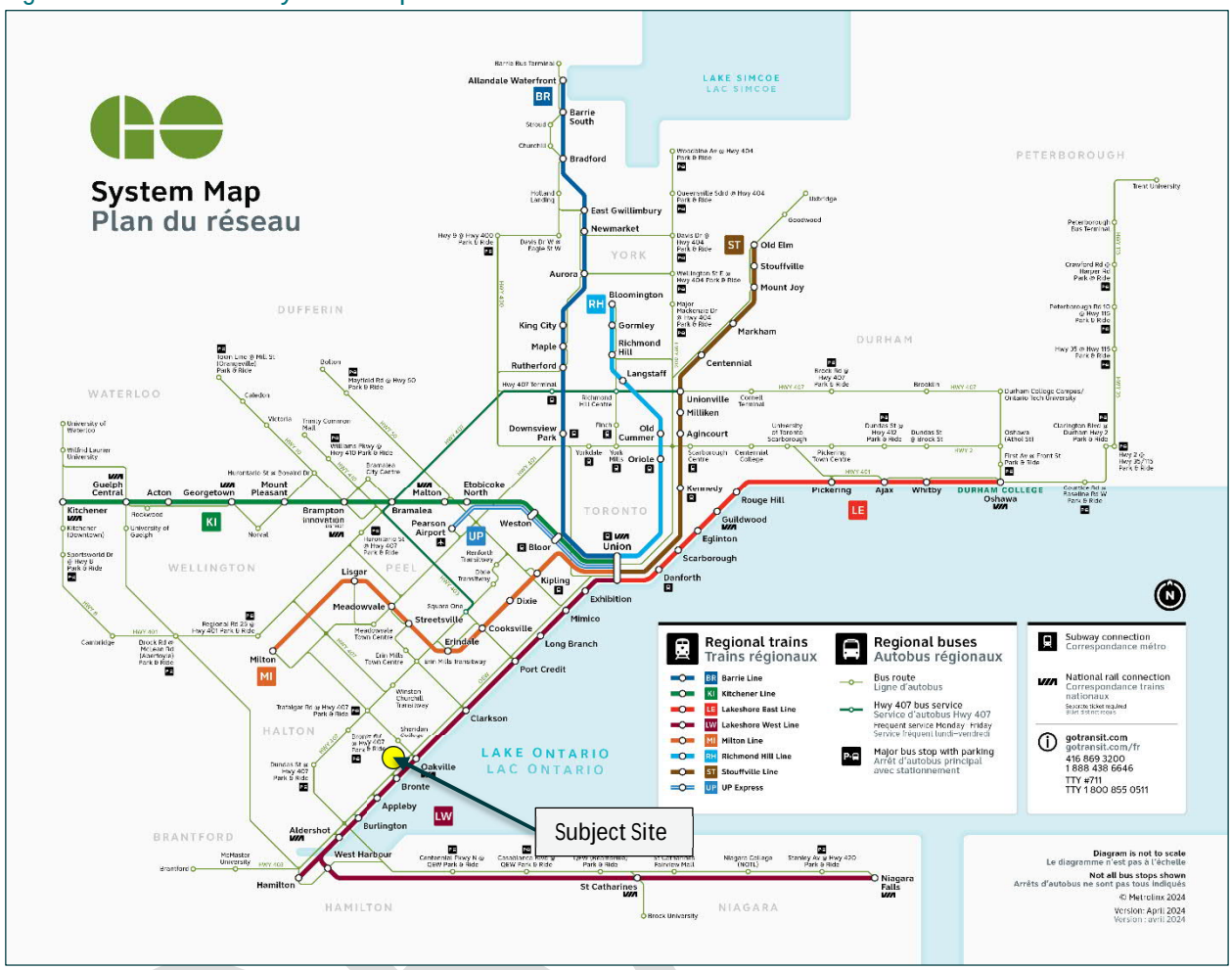
GO Bus Route 56 – Oshawa/Oakville is a bus route that generally operates in an east-west direction between Oshawa GO Station and Oakville GO Station. The route operates weekday service at select morning and late-night hours.

GO Transit Line – Lakeshore Boulevard West is a regional rapid transit route that operates in an east west direction between Hamilton GO Station and Toronto Union Station. At Toronto Union Station the Lakeshore Boulevard West Line continues east towards Oshawa GO Station as the Lakeshore Boulevard East Line. 15-minute service headways are provided along the line at the Long Branch GO Station during the weekday peak periods.

Figure 2-3 illustrates the existing GO Transit Network available to the subject site.

DRAFT

Figure 2-3: GO Transit System Map



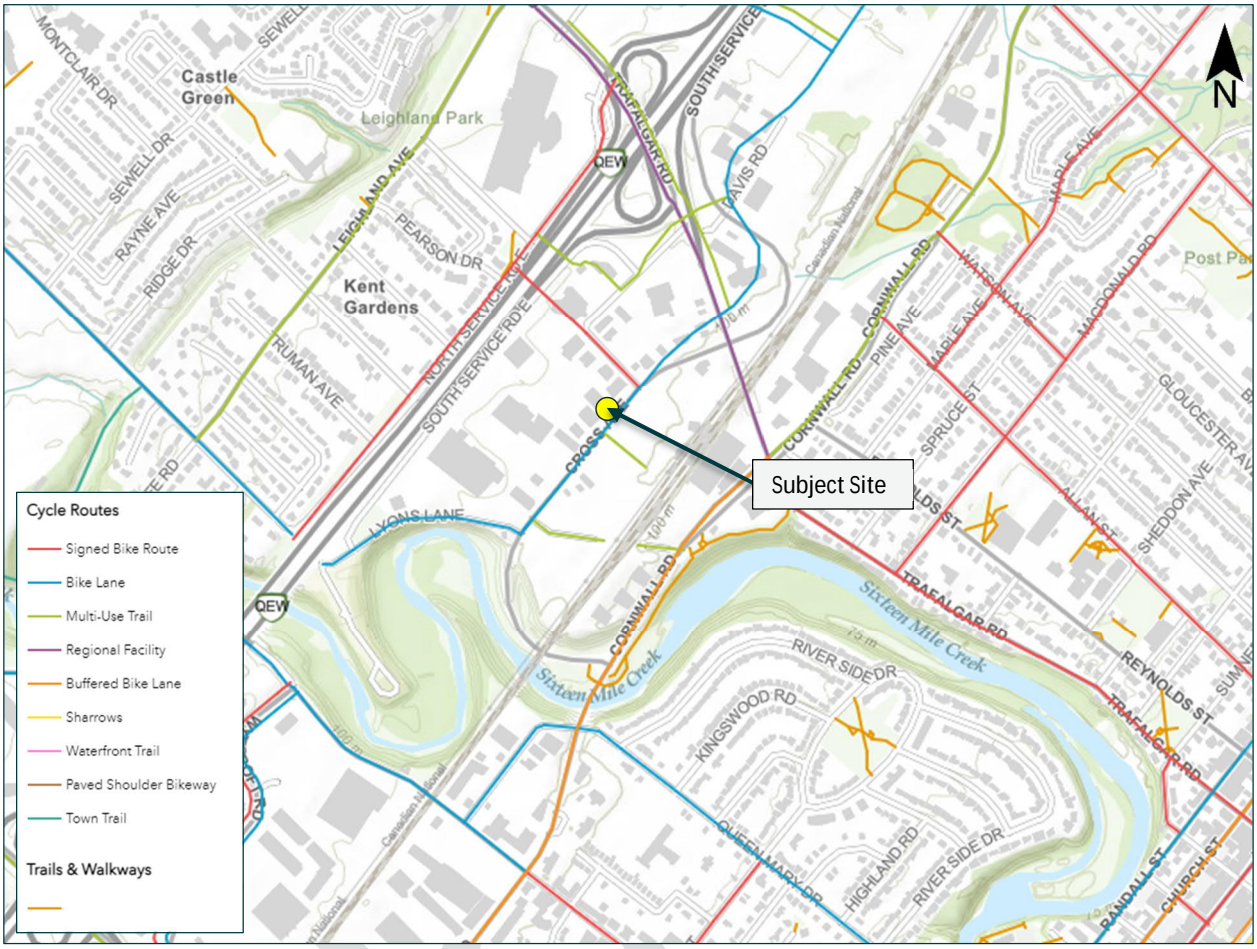
Source: Metrolinx accessed May 2024

2.3 ACTIVE TRANSPORTATION

2.3.1 Cycling Network

The subject site is located in an area of the Town which is accessible to the existing cycle network. As shown in Figure 2-4 there are bike lanes along Cross Avenue which are able to connect future cyclists to residential neighbourhoods north of Highway 403 and to the Oakville GO Transit Station south of the site. Along Trafalgar Road, which connects to the Cross Avenue bike lanes, the existing regional cycle lane connects to buffered bike lanes along Cornwall Road (south of the site) and to many amenities north of the site. East of the site there are buffered bike lanes and a signed bike route along Angus Road. When entered in the BikeScore™ database which measures how good a cycle network is surrounding a particular location, the site received a score of 55/100 indicating some available bike routes.

Figure 2-4: Existing Cycle Network



Source: Town of Oakville accessed June 2024

2.3.2 Pedestrian Network

The pedestrian network servicing the site is characterized by permeable sidewalks along both sides of Cross Avenue, Trafalgar Road, and Cornwall Road, and along the eastern and southern sides of Argus Road. Signalized pedestrian crosswalks are available at all study area intersections which provide safe pedestrian crossings to the available bus stops and rail transit at the Oakville GO, and VIA Rail train stations respectively. Although the site's WalkScore™ is 29/100, indicating a car dominant area, as the study area continues to develop with more mixed-use residential developments this score is expected to change given the proximity to excellent transit options within walking distance.

2.4 TRAFFIC DATA COLLECTION

Turning moving counts (TMCs) were used as the underlying source of traffic data for the intersection capacity analysis. TMC data was collected by LEA on May 4, 2024, during the weekday AM and PM peak periods. A summary of the TMC data is provided in Table 2-1, with raw traffic data provided in Appendix B. Signal timing plans were obtained from the Town of Oakville and are also provided in Appendix B.

Table 2-1: Study Area Intersections / Data Collection

Intersection	TMC Date	Source
Trafalgar Road & North Service Road East/QEW WB Off-Ramp	Thursday, May 4, 2023	LEA Consulting
Trafalgar Road & QEW EB Off-Ramp		
Trafalgar Road & Argus Road		
Trafalgar Road & Cross Avenue/South Service Road East		
Trafalgar Road & Cornwall Road		
South Service Road East & Argus Road		
Argus Road/Oakville GO Station Driveway & Cross Avenue		
177 Cross Avenue Site Access & Cross Avenue		
Argus Road & 187 Cross Avenue Site Access		
Argus Road & 568-570 Argus Road South Site Access		
Argus Road & 568-570 Argus Road North Site Access		
Argus Road & 580 Argus Road Site Access		
Oakville GO Station Driveway & Cross Avenue	Tuesday, June 25, 2024	

For existing traffic conditions existing traffic volumes were balanced along the On Ramps to ensure consistency. In addition, a lost time adjustment and change in lane utilization factor were utilized to calibrate the existing conditions for movements where the volume to capacity ratio was over 1.0, as it is theoretically impossible for any movement to be above capacity under current conditions. For Trafalgar Road & North Service Road/403 Westbound Off Ramp the following lost time adjustments and lane utilization were applied.

- A lost time adjustment of -4.0 was applied to the Southbound Through movement for the AM peak hour.
- A lost time adjustment of -4.0 was applied to the Northbound Through movement for the PM peak hour.
- The lane utilization factor for the southbound through movement was increased to 1.00 from 0.91 for both peaks.
- The lane utilization factor for the northbound through movement was increased to 1.00 from 0.91 for both peaks.

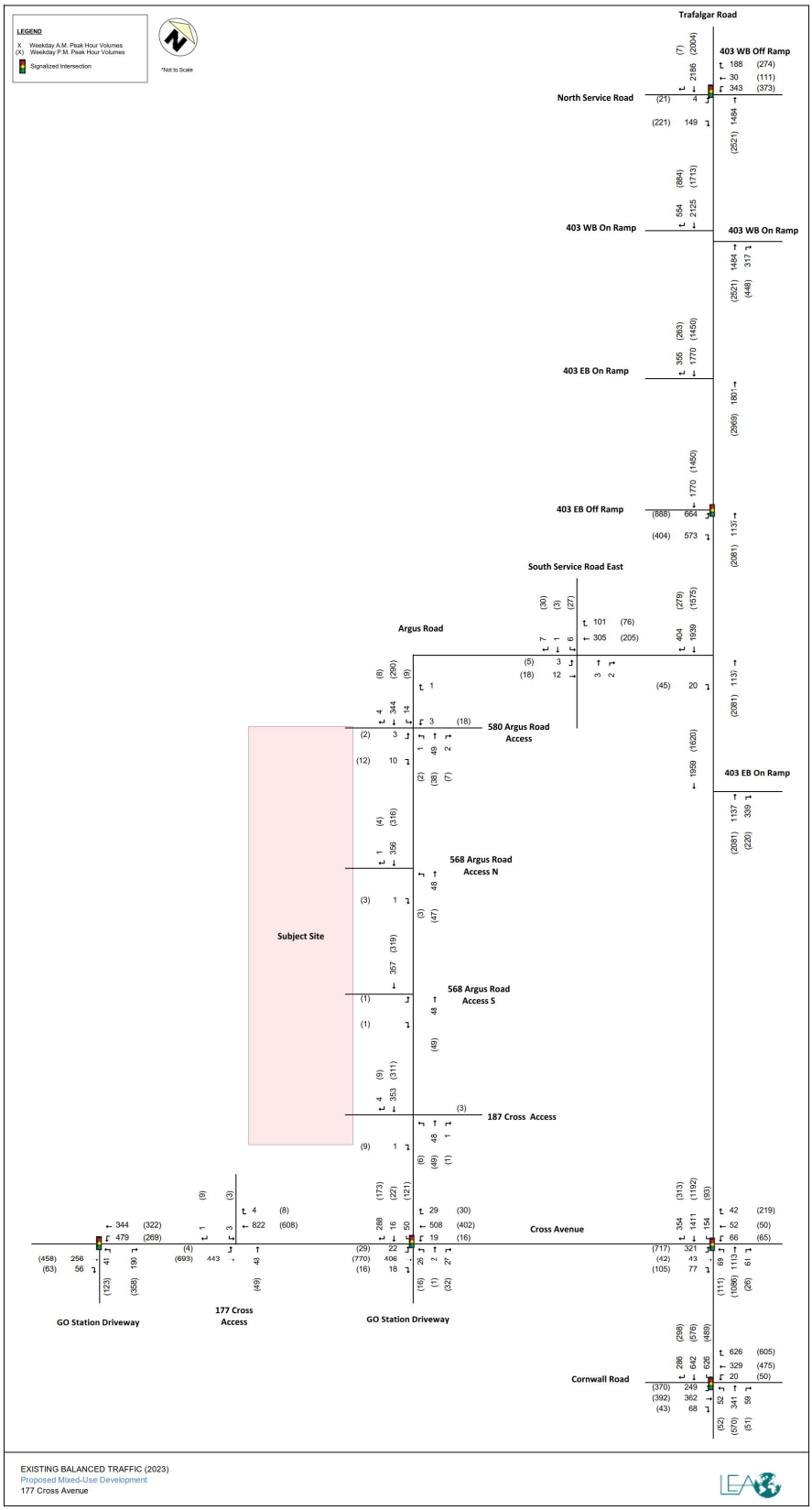
At the Trafalgar Road & Eastbound Off Ramp intersection the Saturated Flow rate for right turns on red (RTOR) was increased to 120, to represent the observations made in the video collected at the time of the survey which demonstrated that more drivers turned during RTOR for the eastbound movement. Figure 2-5 illustrates the existing traffic volumes.

The following access assumptions for the site under existing conditions include:

- 177 Cross Avenue Site Access & Cross Avenue, (Unsignalized, Full Moves);
- Argus Road & 187 Cross Avenue Site Access, (Unsignalized, Full Moves);
- Argus Road & 568-570 Argus Road North Site Access, (Unsignalized, Full Moves);
- Argus Road & 568-570 Argus Road South Site Access, (Unsignalized, Full Moves); and
- Argus Road & 580 Argus Road Site Access, (Unsignalized, Full Moves).

DRAFT

Figure 2-5: Existing Traffic Volumes: Weekday AM (PM) Peak Hour



3 FUTURE BACKGROUNDS CONDITIONS

The analysis of future backgrounds conditions considered a four (4) year horizon from existing year 2023 to a full buildout in year 2027, and a 10 year post buildout horizon to year 2037. Future background conditions include traffic added to the road network from other developments near the subject site as well as planned transportation infrastructure improvements within the study area.

3.1 FUTURE ROAD IMPROVEMENTS

The following subsections detail the road network improvements within the study area or within proximity to the study area.

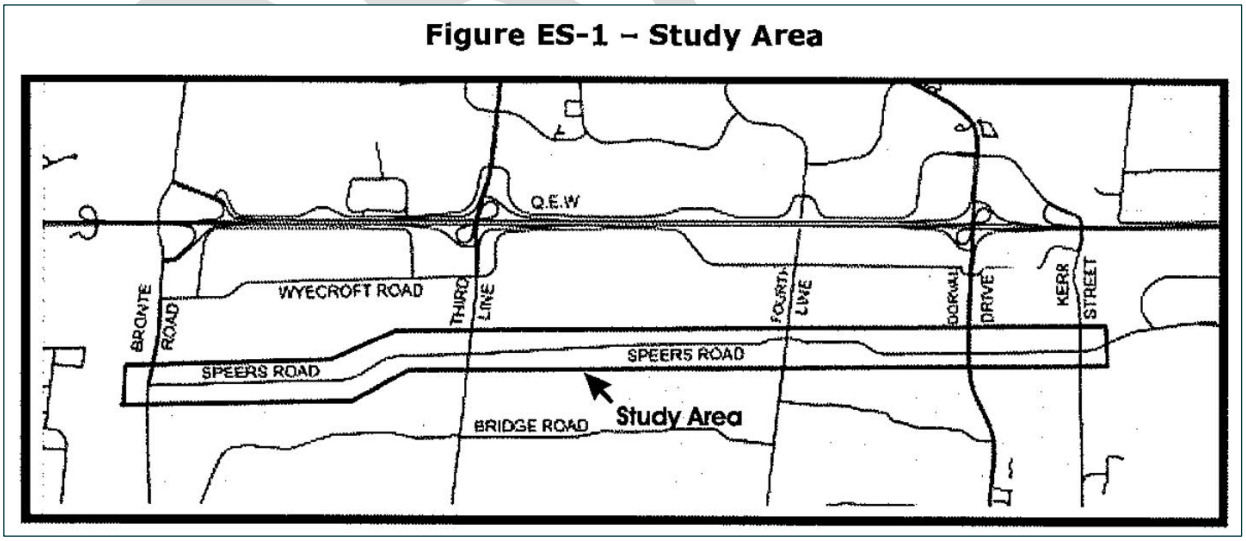
3.1.1 Study Area Road Network

Road network improvements within the study area includes an addition of a fourth (4th) leg to the Cross Avenue & GO Station Driveway intersection, and a north-south 'Street C' and east-west 'Street 1' for the proposed development.

3.1.2 Speer Road Improvements

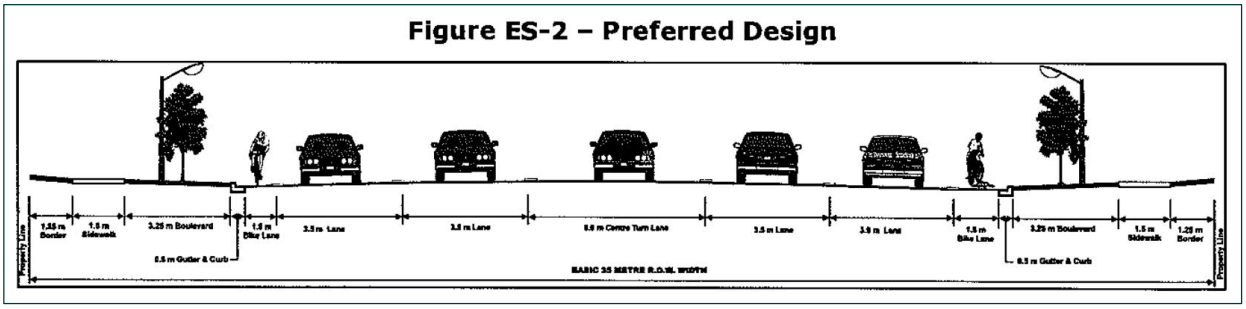
Although Speer Road is not within the study area the roadway is within a 15-minute walk from the subject site and borders Cornwall Road. As such any improvements to Speer Road near the study area have been noted. Lane widening improvements to Speer Road are expected to occur between Bronte Road and Kerr Street (west of the subject site) to include a five (5) lane cross-section (2 lanes per direction and a centre left turn lane). The Town has already completed a Class Environmental Assessment (CEA) study of the proposed improvements as well as held a public information centre (PIC) in 2008. The improvements will also feature auxillary turn lanes to specified intersections including Kerr Street (west of the site), and on-road bike lanes along both sides of Speer Road. The proposed improvement study area and preferred design are shown in Figure 3-1 and Figure 3-2.

Figure 3-1: Speer Road Improvements - Study Area



Source: Speers Road Class Environmental Assessment, 2009

Figure 3-2: Speer Road Improvement - Preferred Design

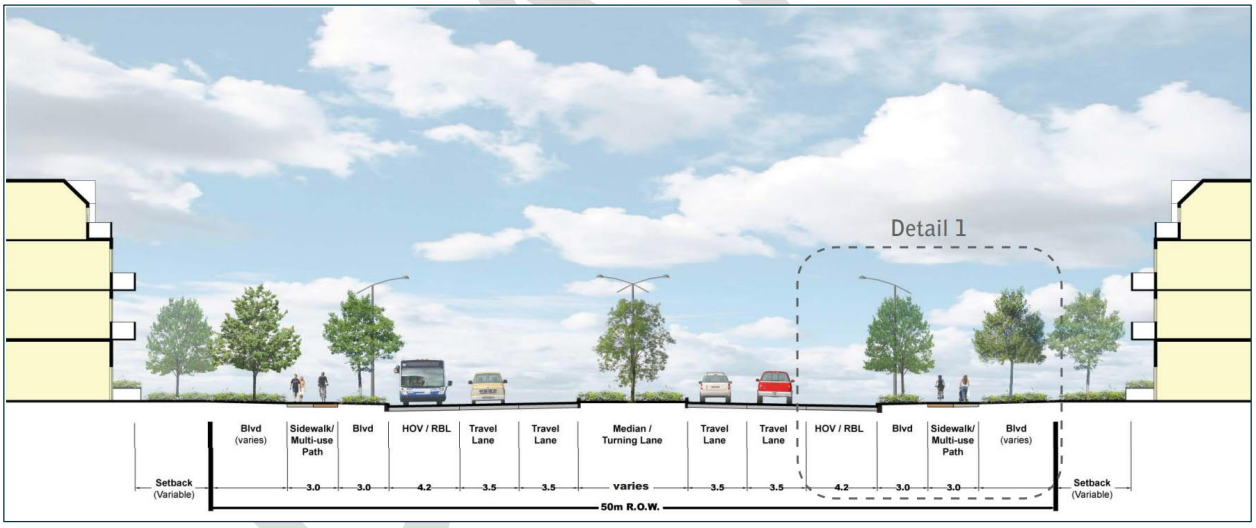


Source: Speers Road Class Environmental Assessment, 2009.

3.1.3 Trafalgar Road Improvements

The Halton Transportation Master Plan (TMP) 2031 has outlined road network improvements for Trafalgar Road which includes the addition of high order vehicle (HOV) lanes as part of the 2021 to 2031 roadway capital cost improvements. As bus rapid transit (BRT) is anticipated for Trafalgar Road, roadway improvements are important for improving improve transit connections to rapid train service at Oakville GO Train Station. The proposed roadway will also feature separate bike tracks along either side of the roadway. Figure 3-3 illustrates the likely road cross section improvements to the Trafalgar Road as noted in the Halton TMP 2031.

Figure 3-3: Trafalgar Road Network Improvements



Source: Halton Region Transportation Master Plan, September 2011

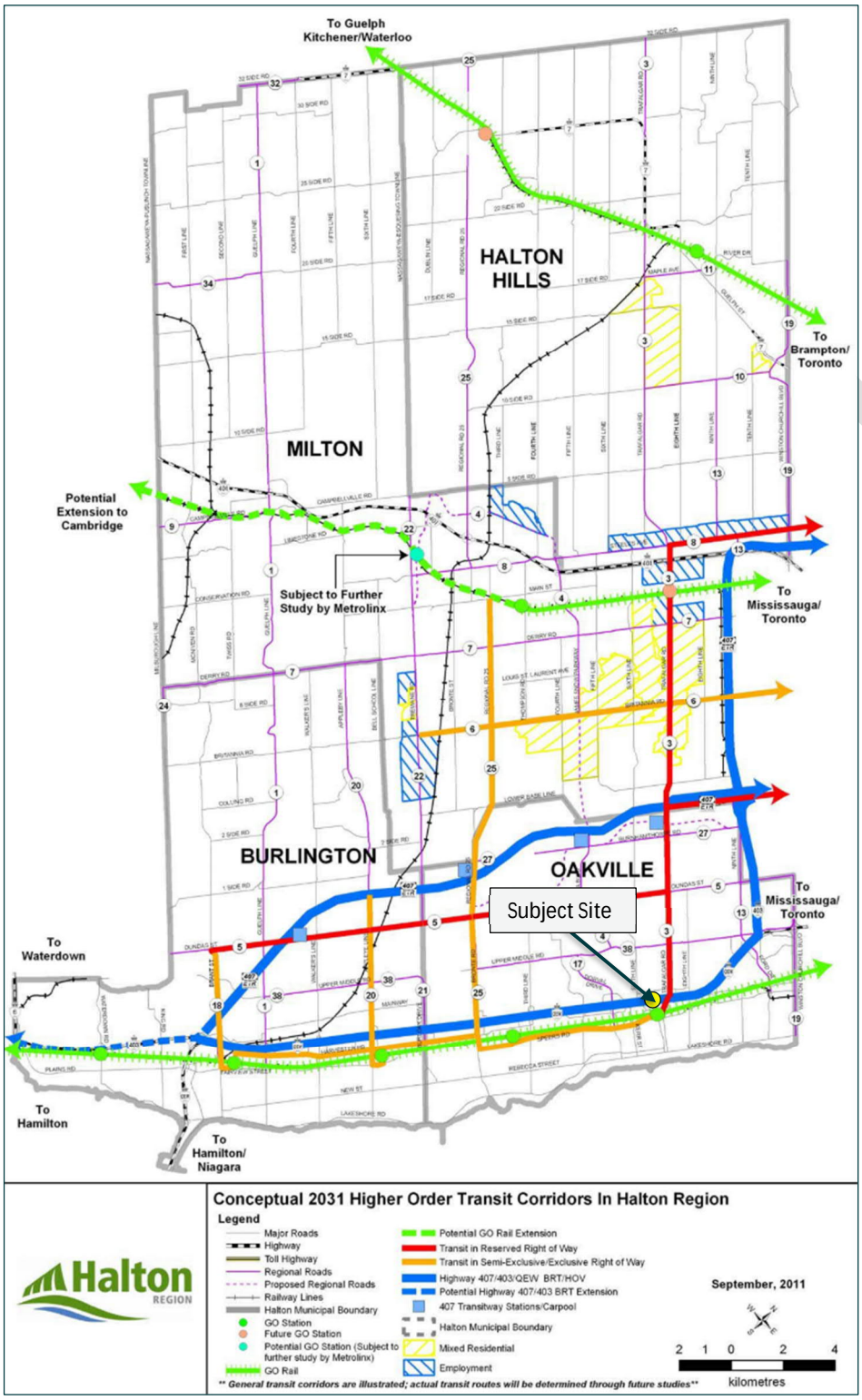
3.2 FUTURE TRANSIT IMPROVEMENTS

3.2.1 Trafalgar Bus Rapid Transit (BRT)

Trafalgar Road has been identified as an important transportation corridor by the Province of Ontario, and both regional and local municipalities. With the Province designating Midtown Oakville (where the subject site is situated) as an *urban growth area* special attention has been given to providing faster, reliable, and more frequent transit options to a growing population who will be commuting to and from Oakville GO Transit Station. With the roadway already serving as a connecting corridor to Oakville GO Station the Regional Official Plan has identified Trafalgar Road as a Special Study area for Rapid Bus Transit (BRT). Providing BRT services along Trafalgar Road also aligns with Halton Region's TMP goal of achieving

a 20% transit modal split by year 2031. As detailed in Section 3.1.3 one (1) HOV lane per direction along Trafalgar Road will be designated for BRT and is proposed to operate between Oakville GO Bus Station and Highway 407. The proposed BRT route is shown in Figure 3-4.

Figure 3-4: Proposed Trafalgar Road BRT Route

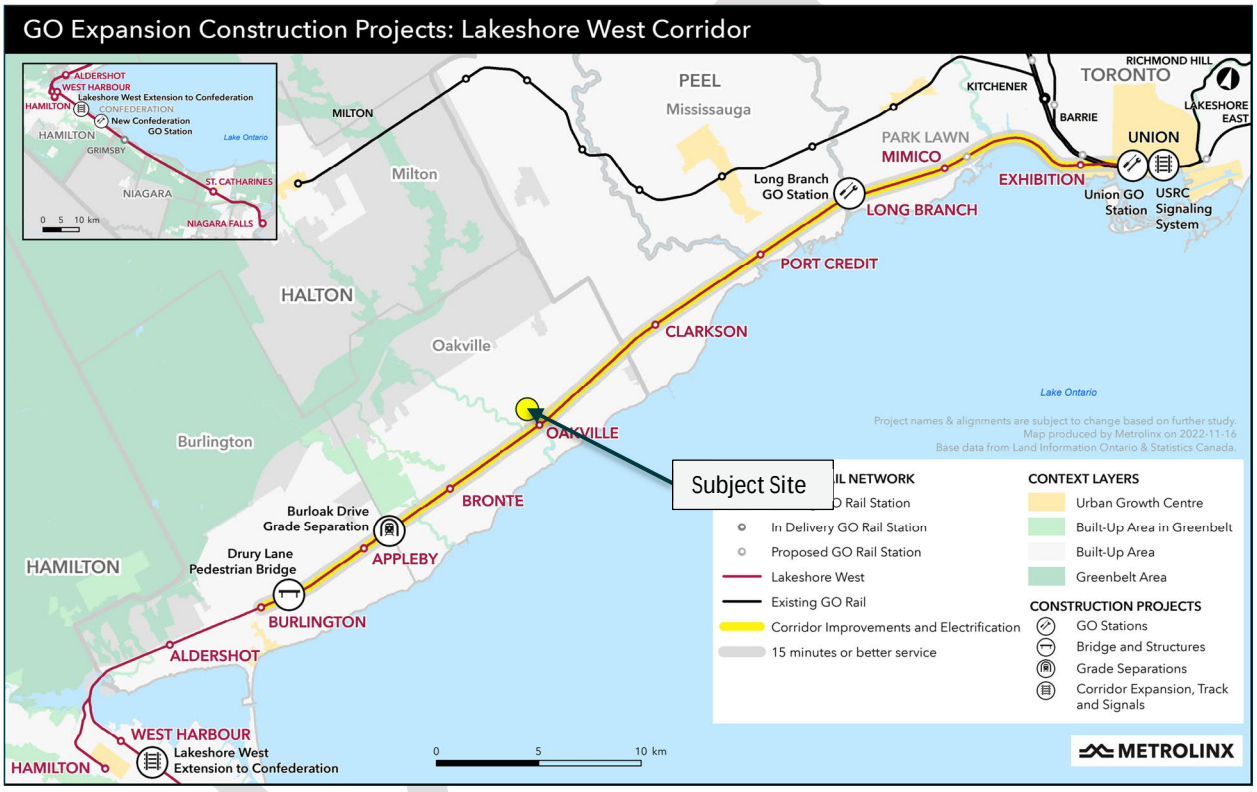


Source: Halton Region Transportation Master Plan, September 2011

3.2.2 Lakeshore West Line GO Expansion (LWLGOE)

The Lakeshore West Line is a GO Transit rail line that offers two-way, all day everyday service between Union Station in Toronto to Aldershot GO Station in Hamilton. Some service is provided to the St. Catharines and Niagara Falls VIA Train Stations. The purpose of the GO expansion project along the Lakeshore West Line (LWLGOE) is to deliver faster more accessible service to commuters within 15-minutes or better between Union Station and Burlington Go Station, along with new hourly service to/from Hamilton seven days a week. This will be accomplished by electrifying a portion of the Lakeshore West line as shown in Figure 3-5. By doing so, it is expected that transit improvements to Oakville GO Station will occur to facilitate the increase in commuters to and from the station.

Figure 3-5: Lakeshore West Line GO Expansion - Network Map



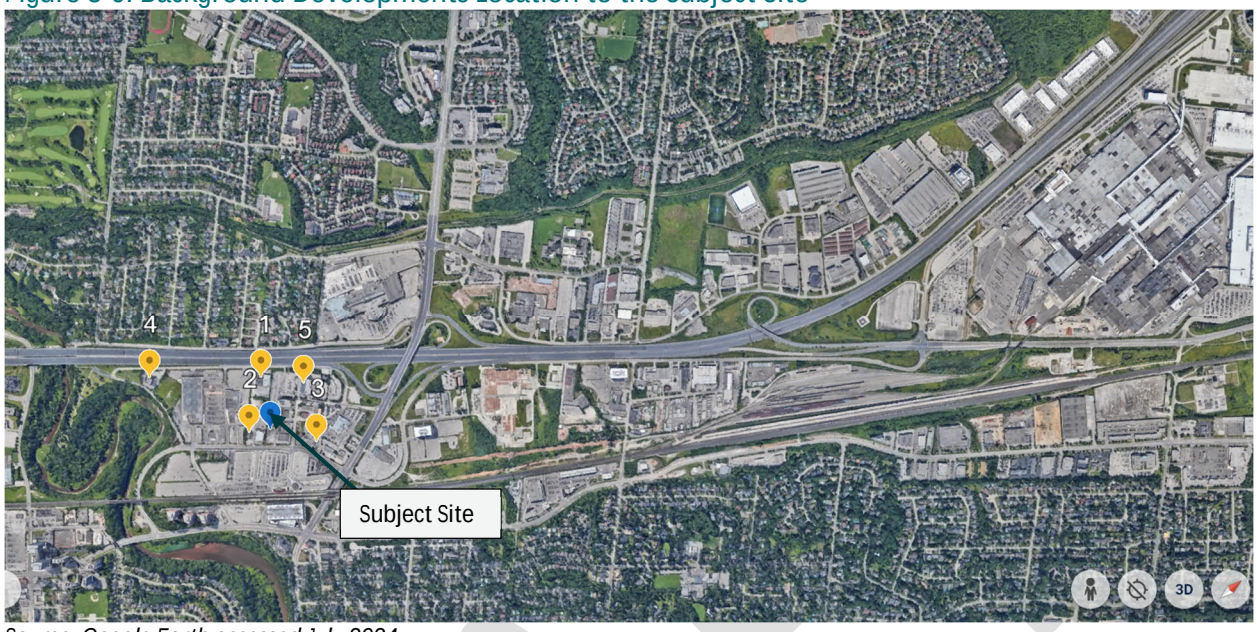
Source: Metrolinx.com, 2022

3.3 BACKGROUND DEVELOPMENTS

Background developments were identified using the Town of Oakville's Development Application database. Traffic volumes for each development were obtained from their respective traffic studies.

Table 3-1 lists the background developments included within the study area road network while Figure 3-6 illustrates the location of each background development in relation to the subject site.; full details are provided in Appendix C.

Figure 3-6: Background Developments Location to the Subject Site



Source: Google Earth accessed July 2024

Table 3-1: Background Development

#	Location	Proposed Development	Source of Traffic Volumes
1	166 South Service Road East	1252m^2 Retail NFA 4602m^2 Commercial NFA 1851 Residential Units	166 South Service Road East, Oakville Transportation Impact & Parking Study (2nd Submission), BA Group/Paradigm Limited
2	157 Cross Avenue	2693m^2 Retail GFA 1027m^2 Office GFA 1198 Residential Units	157 & 167 Cross Avenue, Oakville Transportation Impact Study (2nd Submission), BA Group/Paradigm Limited
3	217-227 Cross Avenue, 571-587 Argus Road	1565m^2 Retail GFA 2694m^2 Office GFA 1938 Residential Units	217-227 Cross Avenue, 571-587 Argus Road, Oakville Transportation Impact Study, BA Group/Paradigm Limited
4	627 Lyons Lane	281 Residential Units	627 Lyons Lane, Oakville Transportation Impact Study (3rd Submission), Paradigm Limited
5	590 Argus Road	1044m^2 Retail GFA 1060m^2 Office GFA 450m^2 Office GFA 1740 Residential Units	590 Argus Road, Oakville Transportation Impact & Parking Study (2nd Submission), BA Group/Paradigm Limited
6	Midtown Oakville EA Study	-	-

DRAFT

3.4 CORRIDOR GROWTH

Per the Town of Oakville's request, a growth rate of 3% per annum was applied to future background conditions. Full growth rate data is provided in Appendix D.

3.5 FUTURE BACKGROUND TRAFFIC

Figure 3-7 and Figure 3-8 illustrates future background traffic for future background years 2027 and 2037.

DRAFT

Figure 3-7: Future Background Traffic Volumes – 2027 Horizon

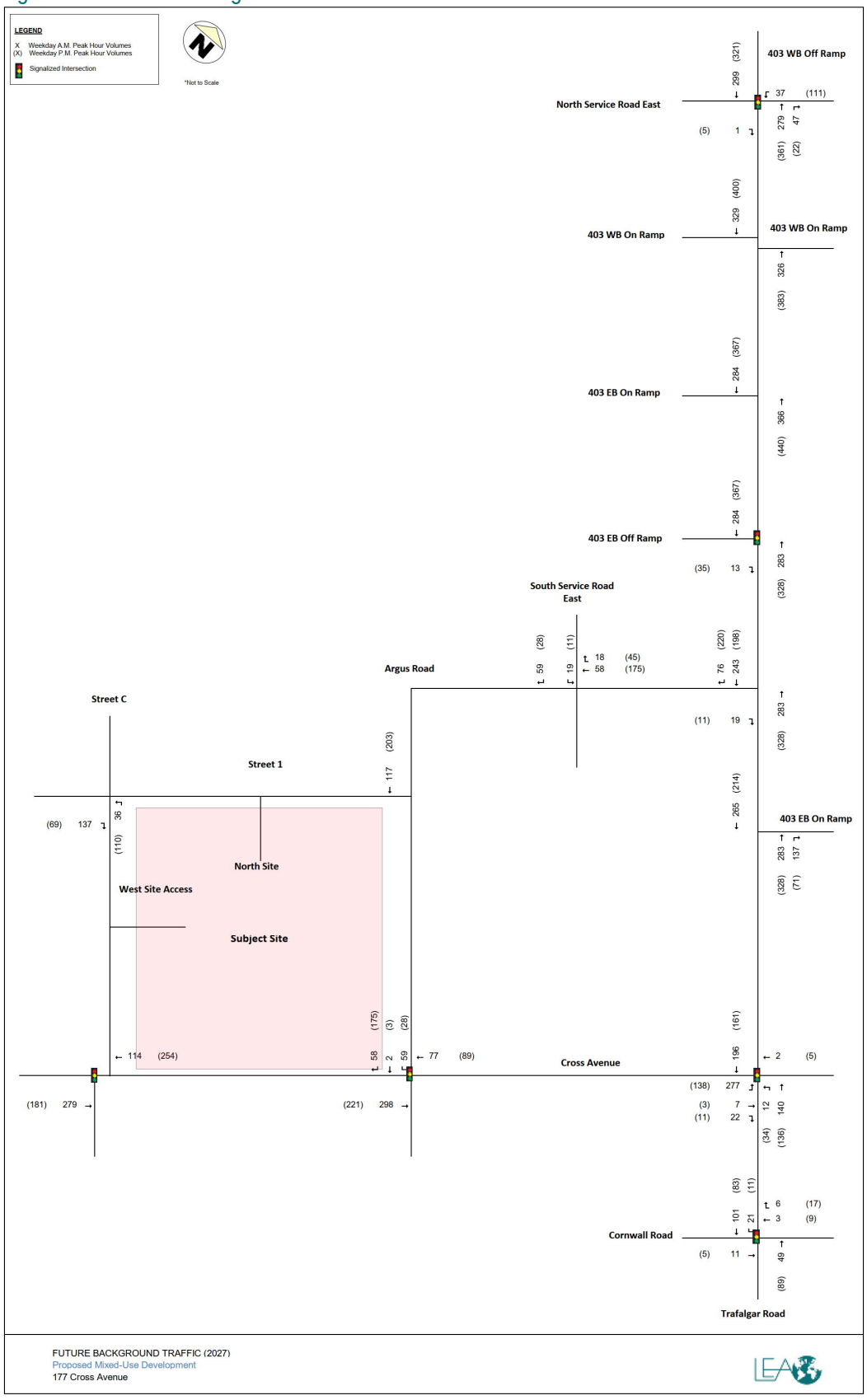
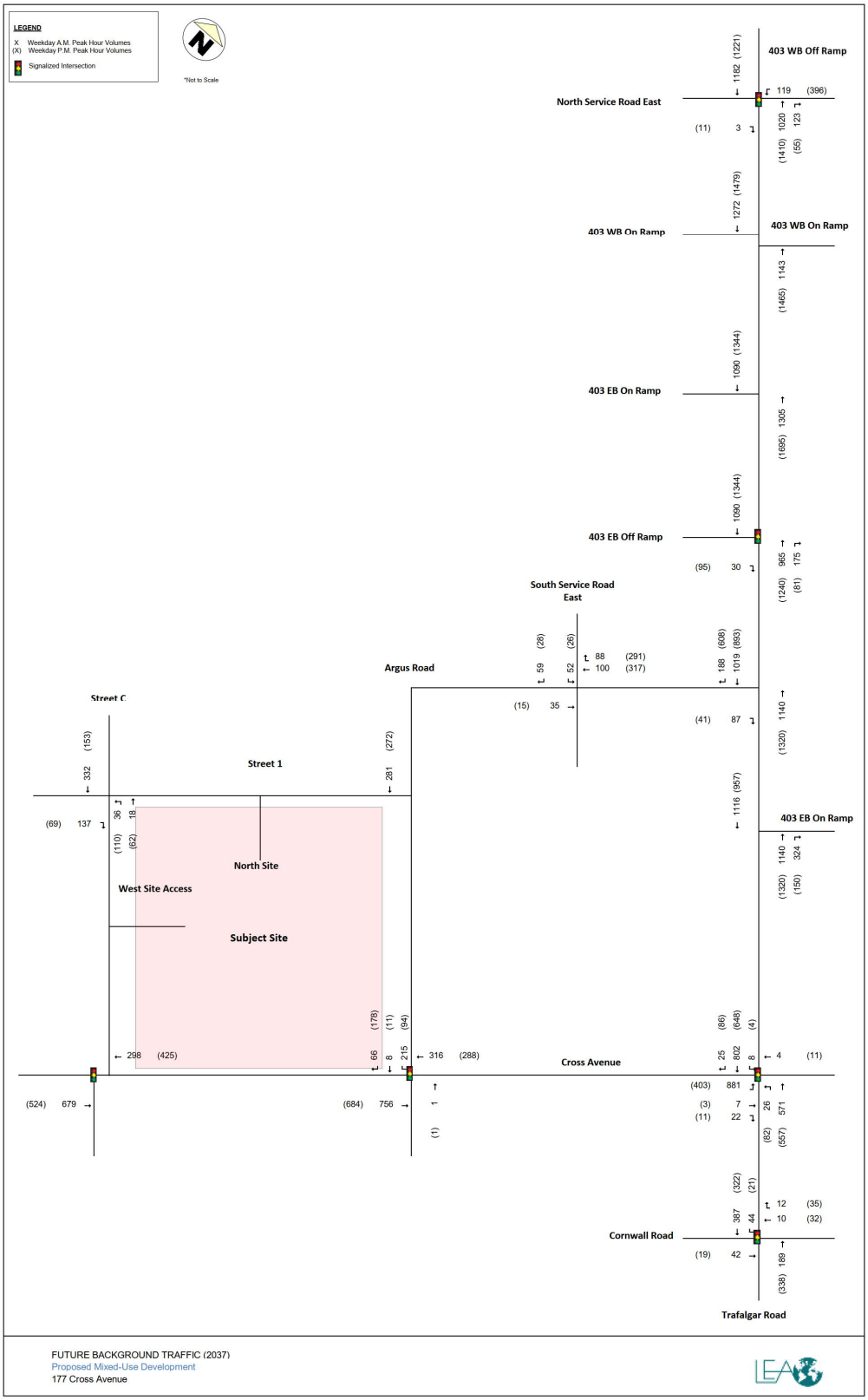


Figure 3-8: Future Background Traffic Volumes 2037 Horizon



4 SITE TRIP GENERATION

The proposed development will consist of four (4) residential towers (6 storeys, 50 storeys, 55 storeys, and 60 storeys). and one mid-rise residential block (7 storeys) consisting of 1895 residential units and 846 m^2 (9106 ft^2) of retail GFA. For the purpose of trip generation, site statistics for the residential component were kept at 1895 residential units and retail GFA was rounded up to 14,000 ft^2 for conservative estimates. Trip generation associated with the proposed development was determined using the standard methodology provided by the ITE Trip Generation Manual 11th Edition.

4.1 MODAL SPLIT

The study area modal split for work trips and retail trips were determined using 2016 Transportation Tomorrow Survey (TTS) data filtered for traffic analysis zones 4012,4013,4015,4016,4018,4019,4022,4028 - 4031 (which contain or surround subject site). The modal split trips during the weekday AM/PM peak periods are provided in Table 4-1Error! Reference source not found.. Full TTS data is available in Appendix E.

Table 4-1: Residential and Retail Study Area Modal Split

Travel Mode	Modal Split	
	Residential	Retail
Auto Driver	58%	78%
Auto Passenger	16%	15%
Transit	9%	3%
Walk/Cycle	17%	4%
Total	**100%**	**100%**

4.2 VEHICLE TRIP GENERATION

The proposed vehicle trip generation rates were calculated based using the following steps outlined in the ITE Trip Generation Manual:

- Baseline Auto Trips:
  - Used ITE Vehicle trips – see below.
- Person Trips:
  - For proposed residential
    - Average Rate, ITE 222 - Multifamily Housing (High Rise), Close to Rail Transit, Dense Multi-Use Urban.
  - For proposed retail
    - Average Rate, ITE LUC 822 - Strip Retail Plaza (<40k), General Urban/Suburban

Residential and retail rip generation for auto trips are provided in Table 4-2. Detailed trip generation survey data is provided in Appendix E.

DRAFT

Table 4-2: Subject Site Vehicle Trip Generation

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
Residential	ITE Trip Rates (/unit)	0.02	0.20	0.22	0.13	0.06	0.19
ITE LUC 222 – Multifamily Housing (High-Rise)	**Total External Trips**	**46**	**371**	**417**	**248**	**112**	**360**
1895 Units	Site Interaction	-1	-3	-4	-12	-5	-17
	External Auto Trips	**45**	**368**	**413**	**236**	**107**	**343**
	ITE Trip Rates	1.416	0.944	2.36	3.295	3.295	6.59
	Baseline Auto Trips	20	13	33	46	46	92
Retail ITE LUC 822 - Strip Retail Plaza <40k	Interaction Trip Reduction	-3	-1	-4	-5	-12	-17
14,000 ft^2	**Total External Trips**	**17**	**12**	**29**	**41**	**34**	**75**
	Pass-By	0	0	0	0	0	0
	Primary External Auto Trips	**17**	**12**	**29**	**41**	**34**	**75**
	Total New Site Auto Trips	**62**	**380**	**442**	**277**	**141**	**418**
	Existing Site Auto Trips	**-14**	**-19**	**-33**	**-44**	**-40**	**-84**
	Net Site Auto Trips	**48**	**361**	**409**	**233**	**101**	**334**

Overall, net site auto trips for the site consists of 409 two-way auto trips (48 inbound, 361 outbound) during the AM peak hour and 334 two-way auto trips (233 inbound, 101 outbound) during the PM peak hour.

4.2.1 Multi-Modal Trip Generation

Table 4-3 summarizes the proposed multi-modal trip generation for the subject site based on the local area mode split and site-generated auto trips as detailed in the sections above.

In total, the proposed multi-modal trip generation for the site will comprise of 442 and 418 Auto Driver trips followed by 119 and 110 passenger trips, 93 and 80 pedestrian trips, and 66 and 58 transit trips during the AM and PM peak hours respectively. The remaining multi-modal trips will comprise of cycling trips.

DRAFT

Table 4-3: Subject Site Multi-Modal Trip Generation

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Residential	**External Person Trips**	**78**	**634**	**712**	**407**	**184**	**591**
	Auto Driver Trips	45	368	413	236	107	343
	Passenger Trip	12	102	114	65	30	95
	Transit Trips	7	57	64	37	17	54
	Pedestrian trips	10	82	92	53	24	77
	Cycling Trips	4	25	29	16	6	22
Proposed Retail	**External Person Trips**	**22**	**15**	**37**	**53**	**44**	**96**
	Auto Driver Trips	17	12	29	41	34	75
	Passenger Trip	3	2	5	8	7	15
	Transit Trips	1	1	2	2	2	4
	Pedestrian trips	1	0	1	2	1	3
	Cycling Trips	0	0	0	0	0	0
Total Proposed	**External Person Trips**	**99**	**650**	**749**	**459**	**228**	**688**
	Auto Driver Trips	62	380	442	277	141	418
	Passenger Trip	15	104	119	73	37	110
	Transit Trips	8	58	66	39	19	58
	Pedestrian trips	11	82	93	55	25	80
	Cycling Trips	4	25	29	16	6	22

4.3 TRIP DISTRIBUTION AND ASSIGNMENT

Vehicle site trip distribution for the subject site was based on TTS 2016 data for traffic zones 4012, 4013, 4015, 4016, 4018, 4019, 4022, 4028 - 4031 (which contain or surround subject site) during the weekday AM and PM peak hours. Trip types during the AM/PM peak period include auto trips originating in/destined to homes for the noted TTS traffic zones and was also based on local road network, turn restrictions, changes in the future network (i.e., assumed none for this analysis), logical routing, and type of access. Detailed trip distribution results are shown in Table 4-4 . Detailed trip distribution are in Appendix E.

DRAFT

Table 4-4: Trip Distribution and Assignment

Origin/ Destination	Assigned Route	Residential		Retail	
		Weekday AM/PM		Weekday AM/PM	
		In	Out	In	Out
North	Trafalgar Road	5%	4%	5%	8%
	WB Off Ramp	40%	0%	19%	0%
	EB On Ramp	0%	36%	0%	14%
	South Service Road	1%	6%	1%	0%
South	Cross Avenue	15%	13%	20%	25%
	WB On Ramp	0%	12%	0%	10%
	EB Off Ramp	9%	0%	2%	0%
East	Trafalgar Road	1%	3%	1%	6%
	Cross Avenue	5%	2%	22%	2%
	South Service Road	5%	1%	3%	0%
	Cornwall Road	1%	3%	0%	0%
West	Trafalgar Road	12%	11%	23%	26%
	WB On Ramp	0%	8%	0%	10%
	WB Off Ramp	3%	0%	1%	0
	EB Off Ramp	4%	0%	5%	0
	WB Cross Avenue	0%	1%	0%	1%
TOTAL		100%	100%	100%	100%

Residential and retail site traffic volumes are illustrated in Figure 4-1 and Figure 4-4 while the net total traffic volumes is illustrated in Figure 4-3.

DRAFT

Figure 4-1: Residential Site Traffic Volumes

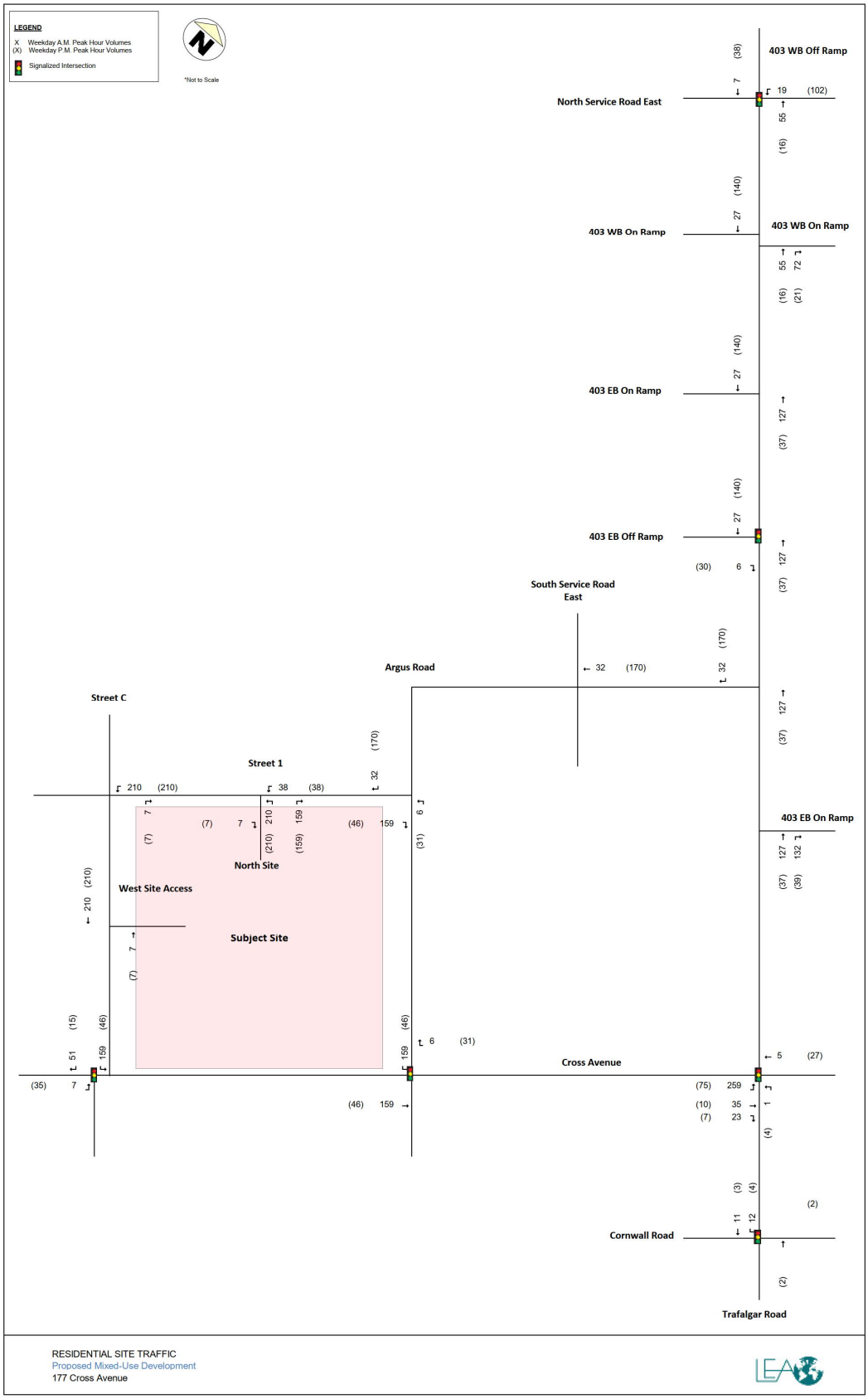


Figure 4-2: Retail Site Traffic Volumes

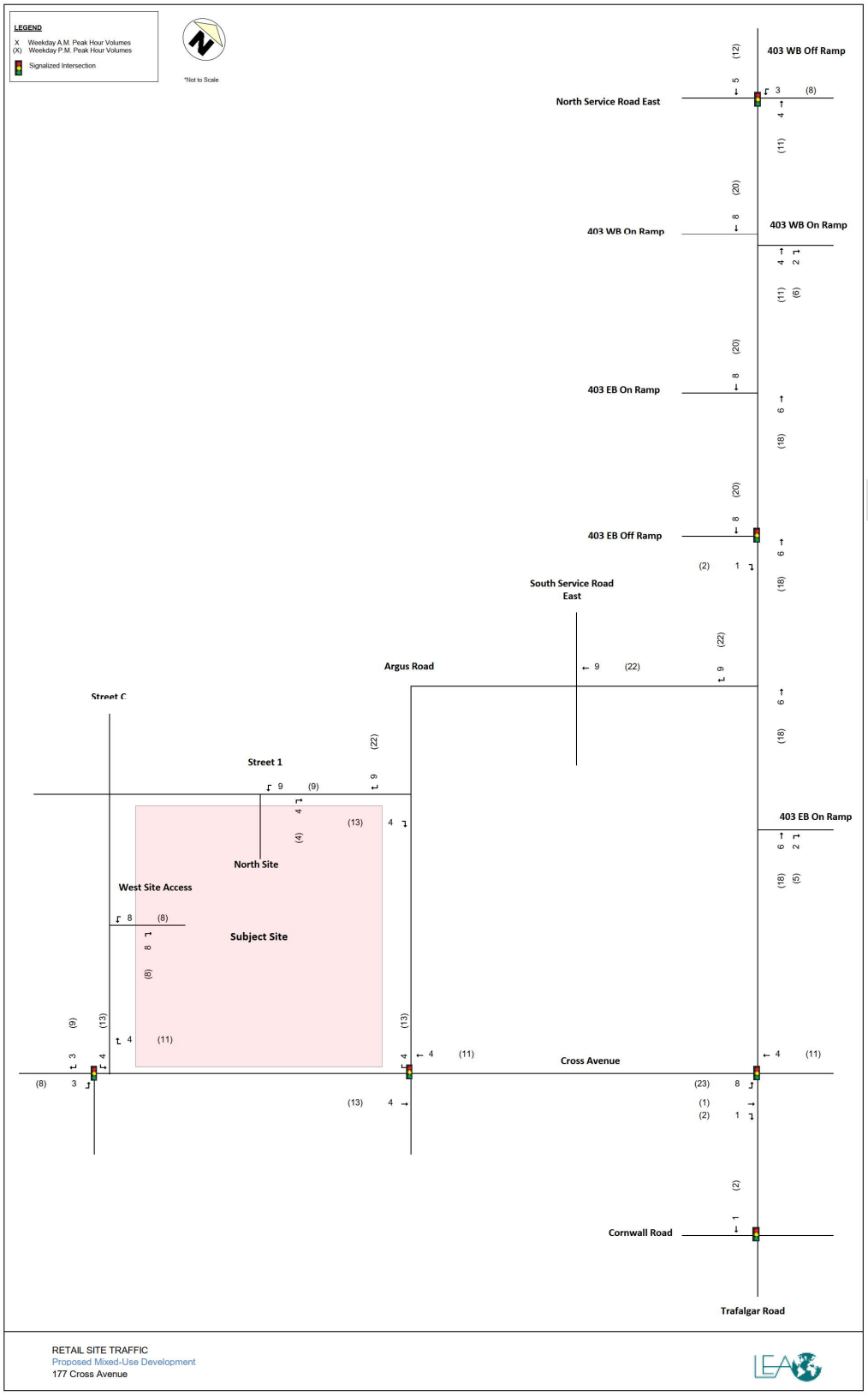
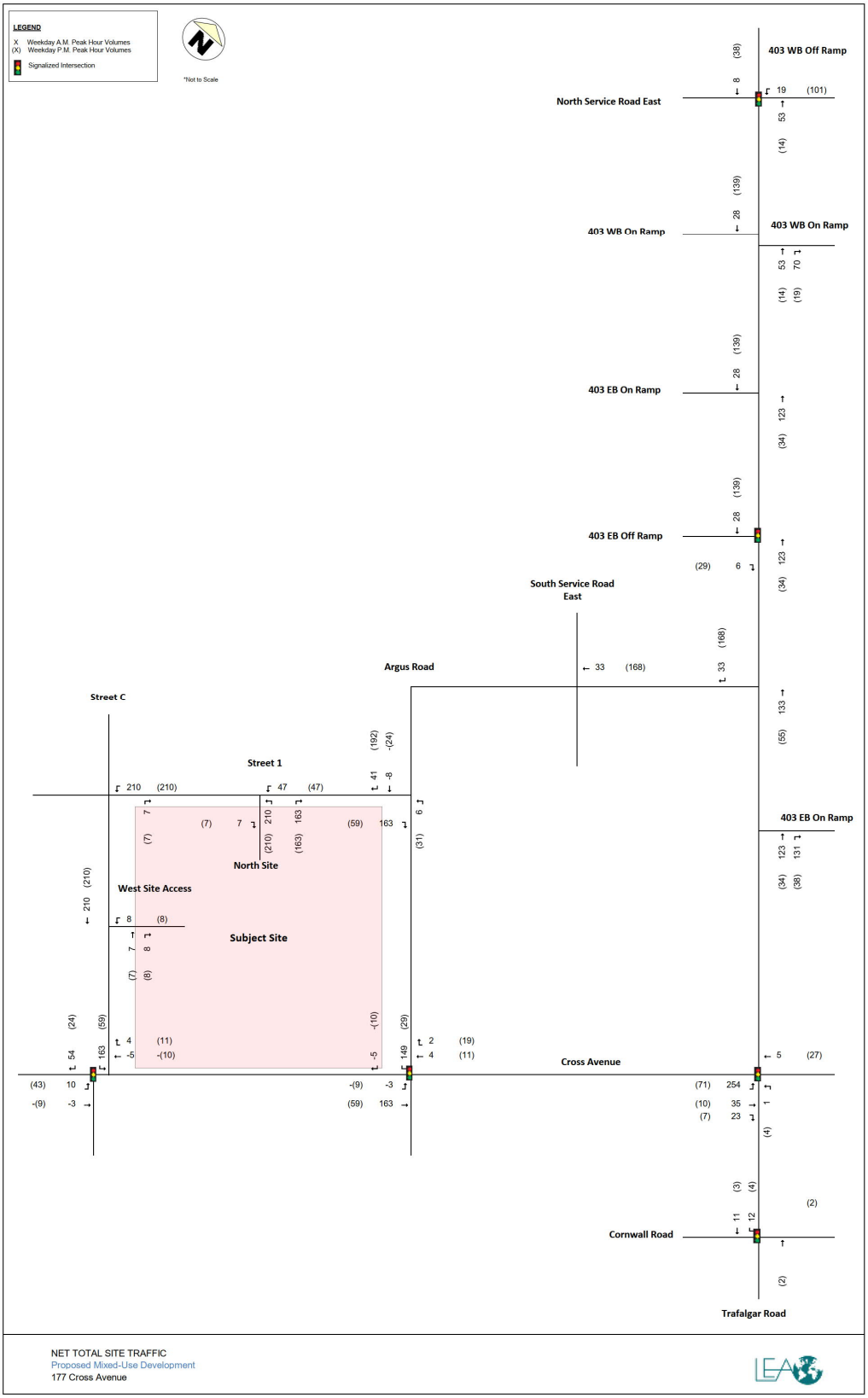


Figure 4-3: Net Total Site Traffic Volumes



4.4 FUTURE TOTAL TRAFFIC VOLUMES

Future total traffic volumes for the 2027 and 2037 horizon years are illustrated in Figure 4-4 and Figure 4-5.

Figure 4-4: Future Total Traffic Volumes – 2027 Horizon

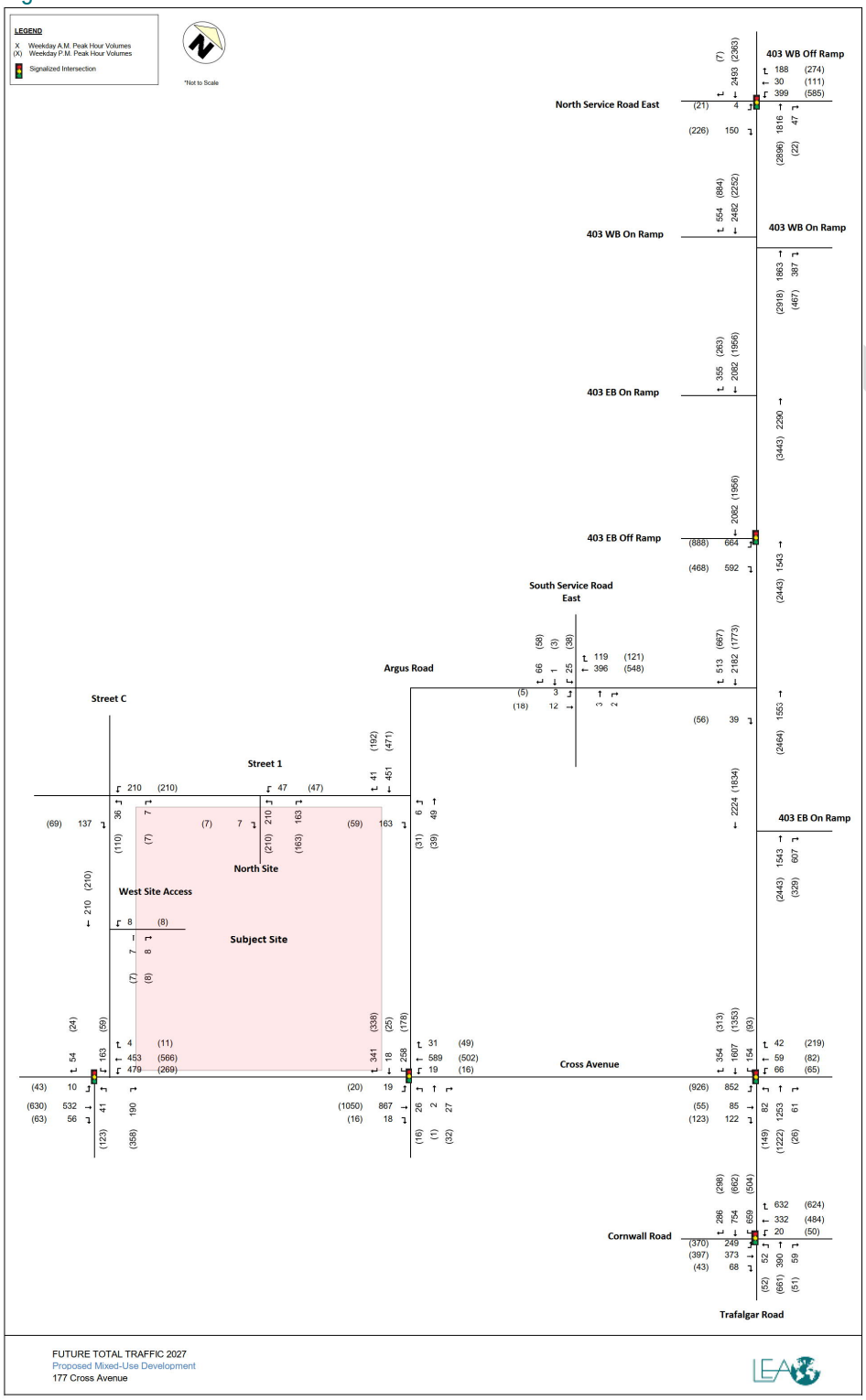
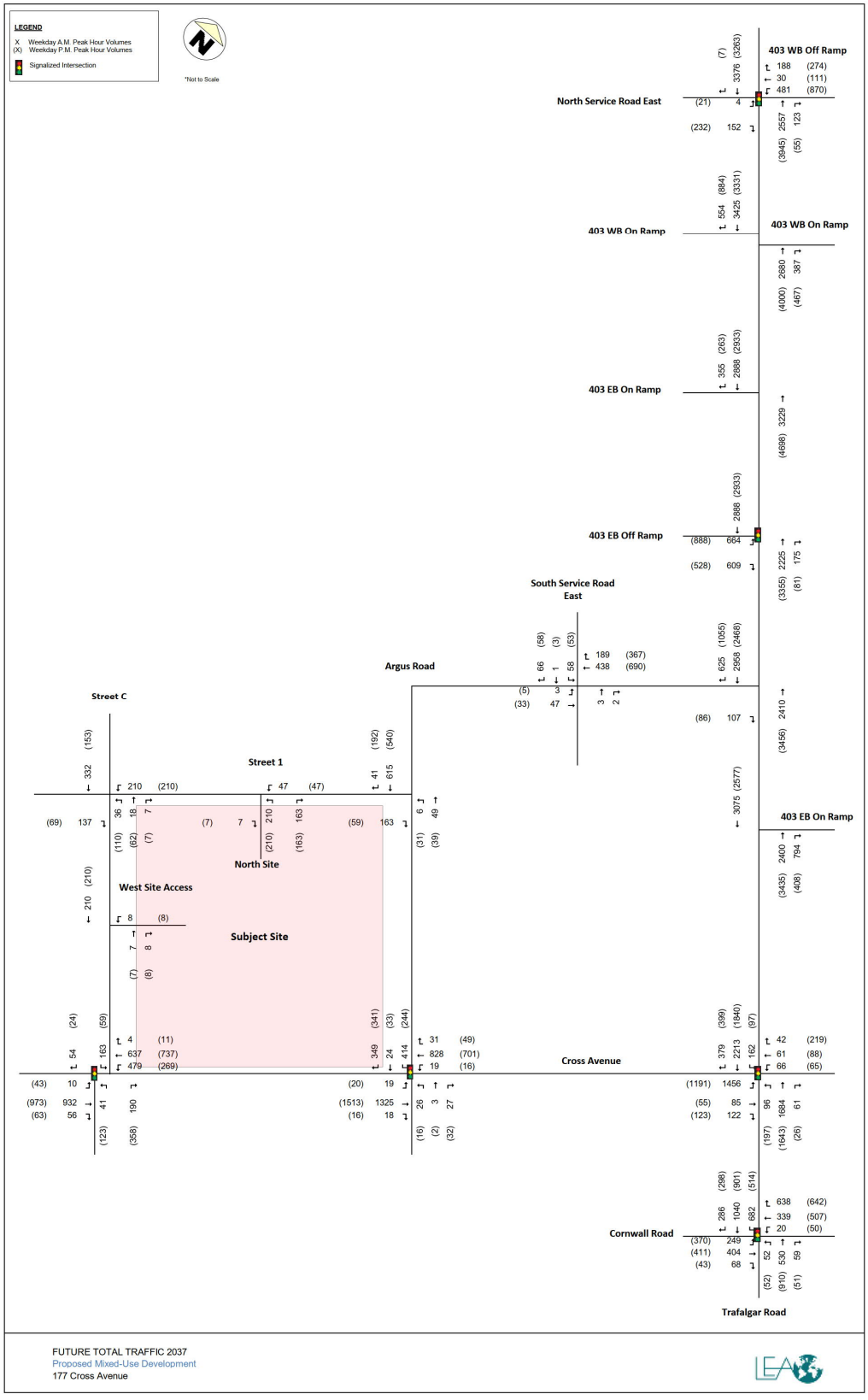


Figure 4-5: Future Total Site Traffic Volumes - 2037 Horizon



5 INTERSECTION CAPACITY ANALYSIS

The intersection capacity analysis was undertaken using Synchro version 11.0, which is based on the Highway Capacity Manual 2000 methodology. Critical movements are defined as movements with level-of-service (LOS) E or worse or a volume-to-capacity (V/C) ratio greater than 0.85 for through and right-turn movements, and a V/C greater than 0.90 for left-turn movements.

5.1 SYNCHRO MODEL INPUTS

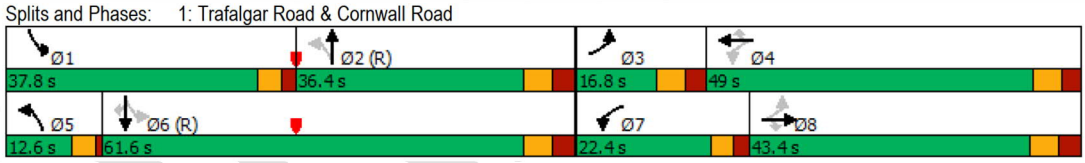
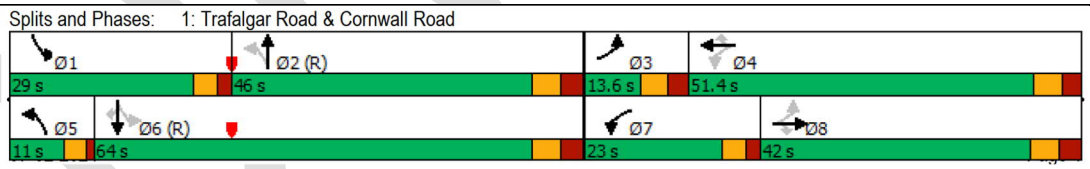
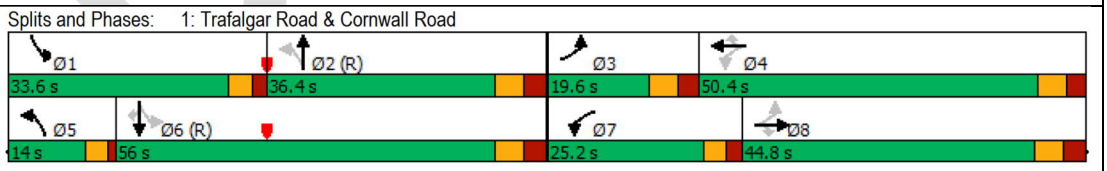
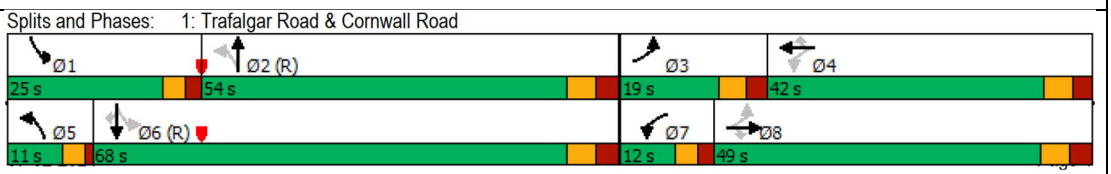
The default analysis parameters were used as per the the Ministry of Transportation Ontario *General Guidelines for the Preparation of Traffic Impact Studies* (February 2021). The following road network assumptions were applied:

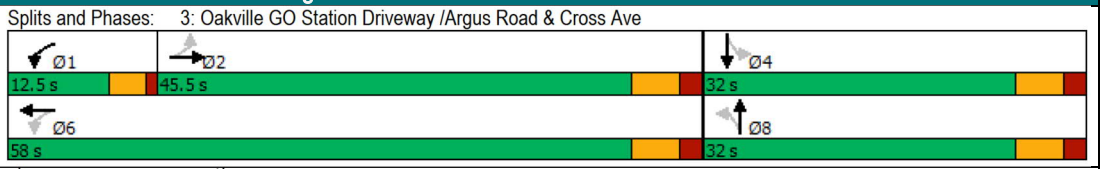
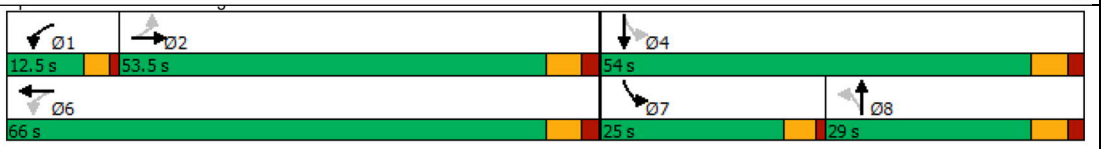
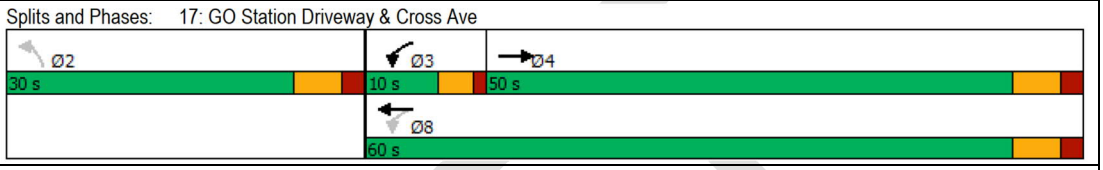
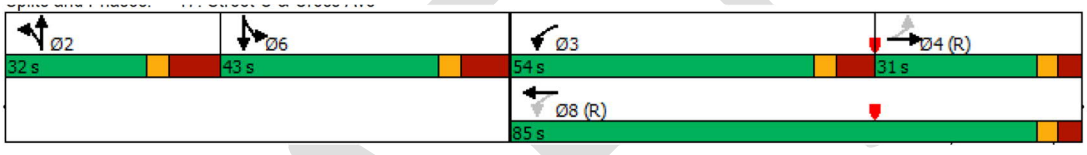
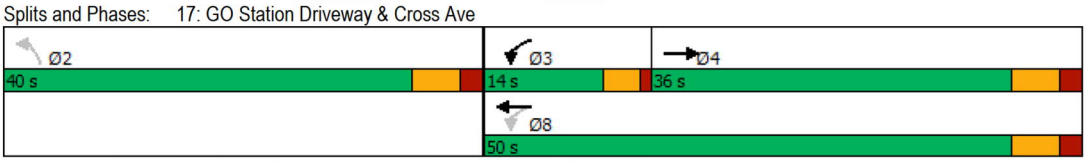
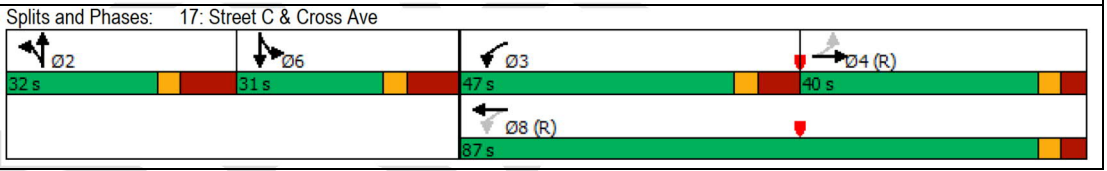
5.1.1 Future Optimization

The Midtown Oakville EA Study acknowledges that the roadway improvements will provide some relief to operational issues. Due to critical movements identified during the AM and PM peak hour in the future scenarios, the following signal timing plan optimization is recommended to mitigate vehicle capacity constraints.

Based on the Midtown Oakville EA Study, a 4-legged intersection is expected. A new north-south local roadway 'Street C', will be connected to the GO Station Driveway (N/S) and Cross Avenue (E/W), as a four-legged offset arrangement with split phasing for the north and south approaches.

Table 5-1: Signal Timing Optimization

Trafalgar Road and Cornwall Road	
Existing – AM Peak Period	
Future Optimized – AM Peak Period	
Existing – PM Peak Period	
Future Optimized – PM Peak Period	

Argus Road and Cross Avenue	
Existing – AM Peak Period	
Future Optimized – AM Peak Period	
Go Station Driveway/Street C & Cross Avenue	
Existing – AM Peak Period	
Future Optimized – AM Peak Period	
Existing – PM Peak Period	
Future Optimized – PM Peak Period	

5.2 INTERSECTION CAPACITY ANALYSIS – 2027 HORIZON

The intersection capacity analysis is summarized by signalized intersection in the tables below. Detailed capacity results are provided in Appendix F.

5.2.1 Signalized Intersection (2027 Horizon)

Under the 2027 future total weekday AM and PM peak hour conditions, most signalized intersections are expected to operate well with acceptable v/c ratios, delay, queue lengths and LOS, except for Trafalgar and Cornwall Road, Trafalgar and South Service Road, and Trafalgar Road and 403 WB Off Ramp intersections. However, these constraints are largely attributed to the projected corridor growth and background developments in the area. Overall, the analysis has determined that the proposed development is expected to have minimal impact on the study

5.2.1.1 Trafalgar Road & Cornwall Road

Table 5-2: Trafalgar Road & Cornwall Road Intersection

AM	Existing Traffic				Future Background 2027				Future Total 2027			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.80	- (0)	-/-	-	0.95	- (0)	-/-	-	0.96	- (0)	-/-
EBL	249	0.47	C (33)	26/34	249	0.43	C (31)	24/34	249	0.43	C (31)	24/34
EBT	362	0.39	D (40)	47/58	373	0.35	D (36)	45/60	373	0.35	D (36)	45/60
EBR	68	0.05	D (36)	0/0	68	0.05	C (32)	0/0	68	0.05	C (32)	0/0
WBL	20	0.08	D (37)	4/9	20	0.07	C (31)	4/9	20	0.07	C (31)	4/9
WBT	329	0.42	D (45)	44/54	332	0.34	D (38)	40/53	332	0.34	D (38)	40/53
WBR	626	0.85	E (69)	54/133	632	0.93	E (73)	89/174	632	0.93	E (73)	89/174
NBL	52	0.28	C (31)	7/16	52	0.48	D (40)	8/15	52	0.48	D (40)	8/15
NBTR	400	0.38	D (37)	48/74	449	0.46	D (41)	58/76	449	0.46	D (41)	58/76
SBL	626	0.66	A (9)	22/12	647	0.79	B (13)	13/19	659	0.80	B (14)	13/18
SBT	642	0.80	C (24)	169/274	743	**1.00**	D (40)	248/300	754	**1.02**	D (41)	256/289
SBR	286	0.30	A (9)	23/20	286	0.34	A (5)	12/15	286	0.34	A (4)	12/14
PM	**Existing Traffic**				**Future Background 2027**				**Future Total 2027**			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.84	- (0)	-/-	-	0.99	- (0)	-/-	-	0.99	- (0)	-/-
EBL	370	0.65	C (31)	35/46	370	0.72	D (35)	39/52	370	0.72	D (35)	39/52
EBT	392	0.36	D (36)	45/61	397	0.38	D (37)	50/65	397	0.38	D (37)	50/65
EBR	43	0.03	C (32)	0/0	43	0.03	C (33)	0/0	43	0.03	C (33)	0/0
WBL	50	0.16	C (32)	8/16	50	0.18	D (36)	9/18	50	0.18	D (36)	9/18
WBT	475	0.51	D (43)	60/77	484	0.56	D (46)	67/85	484	0.56	D (46)	67/85
WBR	605	0.89	E (70)	74/155	622	**1.24**	**F (182)**	157/231	624	**1.25**	**F (185)**	158/232
NBL	52	0.30	C (35)	8/16	52	0.37	C (33)	7/14	52	0.38	C (33)	7/14
NBTR	621	0.68	D (49)	90/129	710	0.64	D (42)	93/116	712	0.65	D (42)	94/116
SBL	489	0.71	D (43)	33/43	500	0.81	D (42)	27/29	504	0.81	D (43)	28/30
SBT	576	0.81	B (15)	25/221	659	0.86	B (15)	110/171	662	0.86	B (16)	125/183
SBR	298	0.32	A (1)	0/0	298	0.30	A (1)	0/0	298	0.30	A (1)	0/0

Existing Conditions: Under existing conditions, all movements are operating within capacity and experiencing LOS E (or better). No major constraints are identified.

Future Background Conditions: Signal timing optimization is recommended under future background conditions to ensure most movements continue to operate under capacity. With the signal timing optimization, the intersection is expected to operate under acceptable conditions, with all movements having a v/c below 1.00 except SBT during the AM Peak, which is at capacity and WBR during the PM peak, which experiences a v/c greater than 1.00. This is a result of high background development traffic and growth. It is recommended that the proposed signal timing plan in Table 5 be implemented under future background conditions.

Future Total Conditions: Signal timing optimization as shown in Table 5 is recommended under future total conditions to ensure most movements continue to operate under capacity. The addition of site traffic

is expected to have a negligible impact on intersection operations, with all movements maintaining available capacity. With the signal timing optimization, the overall intersection is expected to operate under acceptable conditions. Future intersection operations are expected to remain largely consistent with the addition of net site traffic.

5.2.1.2 Trafalgar Road & Cross Avenue /South Service Road East

Table 5-3: Trafalgar Road & Cross Avenue/South Service Road East Intersection

AM	Existing Traffic				Future Background 2027				Future Total 2027			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.70	- (0)	-/-	-	0.89	- (0)	-/-	-	**1.02**	- (0)	-/-
EBL	321	0.59	D (45)	40/50	598	0.74	D (41)	71/88	852	0.97	E (62)	112/146
EBTR	120	0.31	D (54)	16/34	154	0.30	D (44)	22/43	212	0.45	D (43)	41/67
WBL	66	0.41	E (58)	15/25	66	0.45	E (60)	13/23	66	0.46	E (60)	12/23
WBT	52	0.46	E (67)	15/28	61	0.63	E (78)	18/34	66	0.71	**F (88)**	19/36
WBR	42	0.03	E (61)	0/0	42	0.03	E (62)	0/0	42	0.03	E (63)	0/0
NBL	69	0.53	C (21)	8/17	81	0.66	D (40)	14/20	82	0.71	D (47)	14/20
NBTR	1174	0.47	C (26)	103/139	1314	0.63	D (38)	140/154	1314	0.65	D (40)	140/154
SBL	154	0.55	B (20)	17/30	154	0.78	D (46)	24/41	154	0.87	E (59)	25/42
SBTR	1765	0.69	C (25)	112/177	1961	0.93	D (39)	196/243	1961	0.97	D (45)	197/242
PM	**Existing Traffic**				**Future Background 2027**				**Future Total 2027**			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.83	- (0)	-/-	-	0.97	- (0)	-/-	-	**1.01**	- (0)	-/-
EBL	717	0.74	D (36)	88/108	855	0.86	D (41)	112/136	926	0.94	D (51)	126/156
EBTR	147	0.21	D (37)	15/34	166	0.26	D (37)	21/43	183	0.31	D (38)	28/51
WBL	65	0.34	D (54)	12/22	65	0.34	D (54)	12/22	65	0.35	D (54)	12/22
WBT	50	0.34	E (62)	15/29	61	0.42	E (63)	18/34	88	0.61	E (69)	27/51
WBR	219	0.65	E (73)	19/66	219	0.65	E (74)	19/66	219	0.65	E (74)	19/66
NBL	111	0.72	D (42)	26/36	145	0.87	E (58)	30/43	149	0.89	E (62)	32/47
NBTR	1112	0.61	D (48)	125/142	1248	0.70	D (47)	142/144	1248	0.70	D (47)	141/143
SBL	93	0.50	C (26)	9/23	93	0.59	D (42)	13/26	93	0.59	D (41)	12/23
SBTR	1505	0.87	C (25)	62/93	1666	**1.01**	D (53)	114/213	1666	**1.01**	E (56)	133/214

Existing Conditions: Under existing conditions, all movements are operating within capacity and experiencing LOS E (or better). No major constraints are identified.

Future Background Conditions: Under future background conditions, most movements are expected to continue to operate within capacity. The SBTR is expected to experience a v/c greater than 1.00. Signal timings could not be optimized further due to minimums. Overall, the intersection operates within capacity and without significant delay.

Future Total Conditions: Under future total conditions, the addition of site traffic is expected to have a slight impact on intersection operations with the overall intersection experiencing a v/c greater than 1.00 during the AM Peak and PM Peak, however, most movements are expected to maintain available capacity. Although the SBTR movement operates with a v/c greater than 1.00 in the PM Peak, this is largely a result of background growth and background development traffic as this is consistent with the Future Background conditions.

5.2.1.3 Argus Road/Oakville GO Station Driveway & Cross Avenue

Table 5-4: Argus Road/Oakville GO Station Driveway & Cross Avenue Intersection

AM	Existing Traffic				Future Background 2027				Future Total 2027			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.43	- (0)	-/-	-	0.64	- (0)	-/-	-	0.72	- (0)	-/-
EBL	18	0.06	A (8)	1/6	18	0.07	B (13)	2/8	15	0.07	B (15)	2/7
EBTR	431	0.29	A (9)	12/38	730	0.52	B (17)	46/92	893	0.67	C (23)	77/125
WBL	19	0.09	A (5)	1/4	19	0.17	B (11)	2/6	19	0.26	B (16)	2/6
WBTR	540	0.30	A (6)	16/34	617	0.38	B (11)	37/60	623	0.41	B (14)	47/65
NBLTR	55	0.72	E (65)	4/21	55	0.59	D (55)	5/19	55	0.62	E (61)	6/19
SBL	50	0.27	C (26)	6/16	109	0.34	C (27)	16/30	258	0.70	C (33)	44/71
SBTR	306	0.59	C (30)	13/33	364	0.75	D (38)	44/75	359	0.67	C (32)	44/73
PM	**Existing Traffic**				**Future Background 2027**				**Future Total 2027**			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.40	- (0)	-/-	-	0.56	- (0)	-/-	-	0.62	- (0)	-/-
EBL	25	0.06	B (11)	2/7	25	0.07	B (11)	2/7	16	0.05	B (11)	1/6
EBTR	672	0.41	B (14)	32/59	1016	0.61	B (17)	56/101	1075	0.64	B (18)	61/109
WBL	16	0.09	A (8)	1/4	16	0.16	B (10)	1/4	16	0.17	B (11)	1/4
WBTR	449	0.23	A (9)	19/27	541	0.28	A (9)	24/33	571	0.30	A (9)	25/35
NBLTR	50	0.15	C (27)	3/12	50	0.20	C (29)	3/13	50	0.19	C (29)	3/13
SBL	121	0.40	C (31)	19/35	149	0.49	C (34)	24/43	178	0.59	D (37)	29/51
SBTR	202	0.20	C (27)	3/20	377	0.49	C (33)	16/48	367	0.48	C (32)	15/46

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.2.1.4 Trafalgar Road & QEW EB Off-Ramp

Table 5-5: Trafalgar Road & QEW EB Off-Ramp Intersection

AM	Existing Traffic				Future Background 2027				Future Total 2027			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.78	- (0)	-/-	-	0.86	- (0)	-/-	-	0.87	- (0)	-/-
EBL	664	0.65	D (44)	87/108	664	0.65	D (44)	87/108	664	0.65	D (44)	87/108
EBR	573	0.92	E (66)	139/213	586	0.95	E (71)	145/221	592	0.96	E (73)	148/226
NBT	1137	0.43	B (13)	32/36	1420	0.54	B (14)	57/62	1543	0.59	B (16)	75/80
SBT	1770	0.66	B (13)	58/74	2054	0.77	B (17)	84/92	2082	0.78	B (17)	87/95
PM	**Existing Traffic**				**Future Background 2027**				**Future Total 2027**			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.77	- (0)	-/-	-	0.85	- (0)	-/-	-	0.86	- (0)	-/-
EBL	888	0.79	D (46)	116/141	888	0.78	D (45)	116/141	888	0.77	D (45)	116/141
EBR	404	0.61	D (41)	70/106	439	0.66	D (42)	81/121	468	0.71	D (45)	91/134
NBT	2081	0.76	C (22)	107/138	2409	0.89	C (26)	211/206	2443	0.91	C (27)	267/233
SBT	1450	0.53	C (24)	130/142	1817	0.67	C (24)	164/180	1956	0.72	C (26)	175/193

Existing Conditions: The analysis results indicate that the intersection is currently operating under constrained conditions, with several movements experiencing a v/c near 1.00 and/or LOS E. After model calibration, all movement v/cs are reduced to within 1.00. It is noted that all movements have a v/c below 1.00. No further intersection changes are recommended.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.2.1.5 Trafalgar Road & North Service Road East/QEW WB Off-Ramp

Table 5-6: Trafalgar Road & North Service Road East/QEW WB Off-Ramp Intersection

AM	Existing Traffic				Future Background 2027				Future Total 2027			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.65	- (0)	-/-	-	0.76	- (0)	-/-	-	0.78	- (0)	-/-
EBL	4	0.20	E (77)	1/5	4	0.20	E (77)	1/5	4	0.20	E (77)	1/5
EBR	149	0.22	C (25)	23/40	150	0.23	C (25)	24/42	150	0.23	C (25)	24/42
WBL	343	0.33	C (30)	39/69	380	0.38	C (31)	46/81	399	0.40	C (31)	48/85
WBT	30	0.32	C (30)	39/69	30	0.36	C (31)	45/79	30	0.38	C (31)	47/83
WBR	188	0.21	C (29)	12/35	188	0.24	C (29)	15/40	188	0.24	C (29)	15/40
NBL	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0
NBT	1484	0.63	C (21)	69/88	1763	0.78	C (29)	112/155	1816	0.81	C (27)	98/139
SBT	2186	0.87	D (36)	175/193	2485	**1.03**	E (61)	241/271	2493	**1.03**	E (62)	242/281
SBR	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0
PM	**Existing Traffic**				**Future Background 2027**				**Future Total 2027**			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.77	- (0)	-/-	-	0.93	- (0)	-/-	-	0.98	- (0)	-/-
EBL	21	0.06	C (24)	4/9	21	0.08	C (25)	4/9	21	0.09	C (26)	4/9
EBR	221	0.34	C (29)	39/61	226	0.37	C (29)	42/66	226	0.37	C (29)	42/66
WBL	373	0.46	D (36)	60/90	484	0.59	D (39)	83/119	585	0.69	D (42)	101/143
WBT	111	0.43	D (35)	61/90	111	0.55	D (38)	83/118	111	0.65	D (41)	101/142
WBR	274	0.41	C (35)	40/70	274	0.45	D (36)	45/76	274	0.45	D (36)	45/76
NBL	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0
NBT	2521	0.96	D (48)	249/250	2882	**1.15**	**F (109)**	346/362	2896	**1.16**	**F (111)**	349/365
NBR	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0
SBT	2004	0.81	C (34)	160/177	2325	0.98	D (50)	223/244	2363	**1.00**	D (54)	230/267
SBR	7	0.00	B (19)	0/0	7	0.01	B (19)	0/0	7	0.01	B (19)	0/0

Existing Conditions: The analysis results indicate that the intersection is currently operating under constrained conditions, with several movements experiencing a v/c near 1.00 and/or LOS F. After model calibration, all movement v/cs are reduced to within 1.00. It is noted that all movements have a v/c below 1.00. No further intersection changes are recommended.

Future Background Conditions: Background traffic growth is expected to result in an increase in v/c and delay for several movements, with overall intersection operations remaining largely consistent with existing conditions.

Future Total Conditions: Future intersection operations are expected to remain largely consistent with the addition of net site traffic. Several movements experience a v/c at or slightly above 1.00, an indication that they will continue to operate near practical capacity during the weekday peak periods. As this is an MTO intersection, signal timing optimization was not implemented.

5.2.1.6 Oakville GO Station Driveway & Cross Avenue

AM	Existing Traffic				Future Background 2027				Future Total 2027			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.58	- (0)	-/-	-	0.71	- (0)	-/-	-	0.90	- (0)	-/-
EBL	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0	18	0.14	E (59)	5/14
EBTR	312	0.15	A (4)	6/13	591	0.42	C (29)	68/94	345	0.67	E (69)	58/76
WBL	0	0.00	- (0)	0/0	479	0.64	B (10)	37/76	479	0.94	E (59)	126/193
WBLT	823	0.59	A (7)	27/54	458	0.17	A (3)	14/20	457	0.29	C (25)	46/59
WBR	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0	0	0.00	- (0)	0/0
NBL	41	0.34	C (30)	6/26	41	0.44	E (76)	14/27	41	0.44	E (76)	14/27
NBR	190	0.00	- (0)	0/0	190	0.13	E (72)	0/0	190	0.13	E (72)	0/0
SBLTR	-	-	- (-)	-/-	0	0.00	- (0)	0/0	490	0.84	E (68)	116/189
PM	**Existing Traffic**				**Future Background 2027**				**Future Total 2027**			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
Overall	-	0.72	- (0)	-/-	-	0.60	- (0)	-/-	-	0.63	- (0)	-/-
EBL	-	-	- (-)	-/-	0	0.00	- (0)	0/0	67	0.23	C (29)	13/33
EBTR	521	0.31	B (11)	24/41	702	0.39	B (20)	65/96	571	0.42	C (31)	64/106
WBL	-	-	- (-)	-/-	269	0.51	A (8)	23/36	269	0.59	B (17)	39/68
WBLT	591	0.58	B (13)	35/62	576	0.24	A (5)	24/34	577	0.29	B (14)	34/56
NBL	123	0.86	D (41)	53/95	123	0.72	E (77)	38/60	123	0.72	E (77)	38/60
NBR	358	0.00	- (0)	0/0	358	0.25	E (62)	0/0	358	0.25	E (62)	0/0
SBLTR	-	-	- (-)	-/-	0	0.00	- (0)	0/0	220	0.53	E (71)	17/44

Existing Conditions: Under existing conditions, all movements are operating within capacity and experiencing LOS D (or better). No major constraints are identified.

Future Background Conditions: Signal timing optimization is recommended under future background conditions to ensure most movements continue to operate under capacity. With the signal timing optimization, the intersection is expected to operate under acceptable conditions.

Future Total Conditions: Signal timing optimization as shown in Error! Reference source not found. is recommended under future total conditions to ensure movements continue to operate under capacity. The addition of site traffic is expected to have a negligible impact on intersection operations, with all movements maintaining available capacity. No additional constraints were identified with the addition of the site traffic.

5.2.2 Unsignalized Intersections (2027 Horizon)

The intersection capacity analysis is summarized by unsignalized intersection in the tables below. Detailed capacity results are provided in Appendix F.

5.2.2.1 Argus Road & South Service Road

Table 5-7: Argus Road & South Service Road Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	2	-	-	-	-	2	-	-
EBLTR	15	0.00	0	A	0	15	0.00	0	A	0	15	0.00	0	A	0
WBLTR	406	0.00	0	-	0	482	0.00	0	-	0	515	0.00	0	-	0
NBLTR	5	0.01	0	B	0	5	0.01	0	B	0	5	0.01	0	B	0
SBLTR	16	0.03	0	B	1	103	0.21	0	B	6	103	0.22	0	B	6
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	2	-	-	-	-	2	-	-	-	-	2	-	-
EBLTR	16	0.00	0	A	0	26	0.01	0	A	0	26	0.01	0	A	0
WBLTR	281	0.00	0	-	0	501	0.00	0	-	0	669	0.00	0	-	0
NBLTR	0	0.01	0	A	0	0	0.01	0	A	0	0	0.01	0	A	0
SBLTR	66	0.09	0	B	2	109	0.21	0	B	6	109	0.27	0	C	8

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.2.2.2 Trafalgar Road & Argus Road

Table 5-8: Trafalgar Road & Argus Road Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
EBR	23	0.03	0	A	1	42	0.06	0	B	2	42	0.06	0	B	2
NBT	408	0.24	0	-	0	509	0.30	0	-	0	557	0.33	0	-	0
SBT	695	0.41	0	-	0	782	0.46	0	-	0	782	0.46	0	-	0
SBR	434	0.26	0	-	0	516	0.30	0	-	0	552	0.32	0	-	0
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
EBR	47	0.05	0	A	1	58	0.07	0	A	2	58	0.07	0	B	2
NBT	723	0.43	0	-	0	836	0.49	0	-	0	856	0.50	0	-	0
SBT	547	0.32	0	-	0	616	0.36	0	-	0	616	0.36	0	-	0
SBR	291	0.17	0	-	0	520	0.31	0	-	0	695	0.41	0	-	0

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.2.2.3 Argus Road & 580 Argus Road Site Access

Table 5-9: Argus Road & 580 Argus Road Site Access

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
EBLTR	14	0.02	0	B	1	-	-	-	-	-	-	-	-	-	-
WBLTR	4	0.01	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLTR	1	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
SBLTR	16	0.01	0	A	0	-	-	-	-	-	-	-	-	-	-

PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
EBLTR	15	0.02	0	B	1	-	-	-	-	-	-	-	-	-	-
WBLTR	20	0.04	0	B	1	-	-	-	-	-	-	-	-	-	-
NBLTR	2	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
SBLTR	10	0.01	0	A	0	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.2.2.4 177 Cross Avenue Site Access & Cross Avenue

Table 5-10: 177 Cross Avenue Site Access & Cross Avenue Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLT	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
EBT	331	0.19	0	-	0	-	-	-	-	-	-	-	-	-	-
WBT	609	0.36	0	-	0	-	-	-	-	-	-	-	-	-	-
WBTR	309	0.18	0	-	0	-	-	-	-	-	-	-	-	-	-
SBLR	4	0.02	0	C	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLT	4	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
EBT	605	0.36	0	-	0	-	-	-	-	-	-	-	-	-	-
WBT	451	0.27	0	-	0	-	-	-	-	-	-	-	-	-	-
WBTR	234	0.14	0	-	0	-	-	-	-	-	-	-	-	-	-
SBLR	13	0.02	0	B	1	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.2.2.5 Argus Road & 187 Cross Avenue Site Access

Table 5-11: Argus Road & 187 Cross Avenue Site Access Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLTR	1	0.00	0	B	0	-	-	-	-	-	-	-	-	-	-
WBLTR	0	0.01	0	A	0	-	-	-	-	-	-	-	-	-	-
NBLTR	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
SBLTR	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
EBLTR	10	0.01	0	B	0	-	-	-	-	-	-	-	-	-	-
WBLTR	3	0.01	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLTR	7	0.01	0	A	0	-	-	-	-	-	-	-	-	-	-
SBLTR	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.2.2.6 Argus Road & 568-570 Argus Road North Site Access

Table 5-12: Argus Road & 568 -570 Road North Site Access

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLR	1	0.00	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLT	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
SBTR	400	0.24	0	-	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLR	3	0.00	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLT	3	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
SBTR	355	0.21	0	-	0	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.2.2.7 Argus Road & 568-570 Argus Road South Site Access

Table 5-13: Argus Road & 568-570 Argus Road North Site Access Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLR	0	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
NBLT	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
SBTR	399	0.23	0	-	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLR	2	0.00	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLT	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
SBTR	354	0.21	0	-	0	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.2.2.8 Argus Road & Street 1

Table 5-14: Argus Road & Street 1 Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	3	-	-
EBLR	-	-	-	-	-	0	0.00	0	A	0	181	0.33	0	B	11
NBLT	-	-	-	-	-	0	0.00	0	-	0	7	0.01	0	A	0
SBTR	-	-	-	-	-	513	0.30	0	-	0	550	0.32	0	-	0
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	1	-	-
EBLR	-	-	-	-	-	0	0.00	0	A	0	66	0.14	0	B	4
NBLT	-	-	-	-	-	0	0.00	0	-	0	34	0.04	0	A	1
SBTR	-	-	-	-	-	550	0.32	0	-	0	736	0.43	0	-	0

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

DRAFT

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.2.2.9 North Site Access & Street 1

Table 5-15: North Site Access & Street 1 Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	11	-	-
EBTR	-	-	-	-	-	0	0.00	0	-	0	8	0.00	0	-	0
WBLT	-	-	-	-	-	0	0.00	0	-	0	52	0.03	0	A	1
NBLR	-	-	-	-	-	0	0.00	0	A	0	414	0.44	0	B	17
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	11	-	-
EBTR	-	-	-	-	-	0	0.00	0	-	0	8	0.00	0	-	0
WBLT	-	-	-	-	-	0	0.00	0	-	0	52	0.03	0	A	1
NBLR	-	-	-	-	-	0	0.00	0	A	0	414	0.44	0	B	17

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.2.2.10 Street C & West Site Access

Table 5-16: Street C & West Site Access Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	0	-	-
WBLR	-	-	-	-	-	0	0.00	0	A	0	9	0.02	0	B	1
NBTR	-	-	-	-	-	0	0.00	0	-	0	97	0.06	0	-	0
SBLT	-	-	-	-	-	0	0.00	0	-	0	0	0.00	0	-	0
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	0	-	-
WBLR	-	-	-	-	-	0	0.00	0	A	0	9	0.02	0	B	1
NBTR	-	-	-	-	-	0	0.00	0	-	0	260	0.15	0	-	0
SBLT	-	-	-	-	-	0	0.00	0	-	0	0	0.00	0	-	0

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.2.2.11 Street C & Street 1

Table 5-17: Street C & Street 1 Intersection

AM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	0	-	-
EBLTR	-	-	-	-	-	137	0.14	7	-	0	137	0.15	7	-	0
WBLTR	-	-	-	-	-	0	0.00	7	-	0	210	0.28	9	-	0
NBLTR	-	-	-	-	-	36	0.05	8	-	0	43	0.06	8	-	0
SBLTR	-	-	-	-	-	0	0.00	7	-	0	0	0.00	8	-	0
PM	Existing Traffic					Future Background 2027					Future Total 2027				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	0	-	-
EBLTR	-	-	-	-	-	69	0.08	7	-	0	69	0.08	7	-	0
WBLTR	-	-	-	-	-	0	0.00	7	-	0	210	0.29	9	-	0
NBLTR	-	-	-	-	-	110	0.14	8	-	0	117	0.17	9	-	0
SBLTR	-	-	-	-	-	0	0.00	7	-	0	0	0.00	8	-	0

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.3 INTERSECTION CAPACITY ANALYSIS - 2037 HORIZON

5.3.1 Signalized Intersections (2037 Horizon)

The intersection capacity analysis is summarized by signalized intersection in the tables below. Detailed capacity results are provided in Appendix G.

5.3.1.1 Trafalgar Road & Cornwall Road

Table 5-18: Trafalgar Road & Cornwall Road Intersection

AM	Existing Traffic						Future Background 2037						Future Total 2037					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.80	0	-	-	-	-	1.20	0	-	-	-	-	1.21	0	-	-	-
EBL	249	0.47	33	C	26	34	249	0.40	28	C	24	34	249	0.40	28	C	24	34
EBT	362	0.39	40	D	47	58	404	0.35	33	C	49	66	404	0.35	33	C	49	66
EBR	68	0.05	36	D	0	0	68	0.05	30	C	0	0	68	0.05	30	C	0	0
WBL	20	0.08	37	D	4	9	20	0.07	28	C	4	9	20	0.07	28	C	4	9
WBT	329	0.42	45	D	44	54	339	0.32	35	C	41	54	339	0.32	35	C	41	54
WBR	626	0.85	69	E	54	133	638	0.94	73	E	108	194	638	0.94	73	E	108	194
NBL	52	0.28	31	C	7	16	52	0.48	42	D	8	15	52	0.48	42	D	8	15
NBTR	400	0.38	37	D	48	74	589	0.69	50	D	82	103	589	0.69	51	D	82	103
SBL	626	0.66	9	A	22	12	670	0.97	40	D	51	22	682	0.99	44	D	55	24
SBT	642	0.80	24	C	169	274	1029	1.49	235	F	431	290	1040	1.50	243	F	439	299
SBR	286	0.30	9	A	23	20	286	0.39	4	A	14	9	286	0.39	4	A	14	9
PM	**Existing Traffic**						**Future Background 2037**						**Future Total 2037**					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.84	0	-	-	-	-	1.20	0	-	-	-	-	1.20	0	-	-	-
EBL	370	0.65	31	C	35	46	370	0.74	37	D	39	52	370	0.74	37	D	39	52
EBT	392	0.36	36	D	45	61	411	0.39	38	D	52	67	411	0.39	38	D	52	67
EBR	43	0.03	32	C	0	0	43	0.03	33	C	0	0	43	0.03	33	C	0	0
WBL	50	0.16	32	C	8	16	50	0.18	36	D	9	18	50	0.18	36	D	9	18
WBT	475	0.51	43	D	60	77	507	0.59	46	D	70	90	507	0.59	46	D	70	90
WBR	605	0.89	70	E	74	155	640	1.35	225	F	179	254	642	1.35	228	F	181	255
NBL	52	0.30	35	C	8	16	52	0.49	39	D	7	14	52	0.49	39	D	7	14
NBTR	621	0.68	49	D	90	129	959	0.89	55	E	141	169	961	0.90	56	E	141	169
SBL	489	0.71	43	D	33	43	510	0.99	77	E	52	36	514	1.00	79	E	53	37
SBT	576	0.81	15	B	25	221	898	1.17	90	F	327	220	901	1.17	92	F	328	220
SBR	298	0.32	1	A	0	0	298	0.35	1	A	0	0	298	0.35	1	A	0	0

Existing Conditions: Under existing conditions, all movements are operating within capacity and experiencing LOS E (or better). No major constraints are identified.

Future Background Conditions: Signal timing optimization is recommended under future background conditions to ensure most movements continue to operate under capacity. The SBT in the AM and PM Peak periods and the WBR movement in the AM Peak period experiences constraints with a v/c greater

than 1.00. This is a result of high background development traffic and growth. It is recommended that the proposed signal timing plan in Table 5 be implemented under future background conditions.

Future Total Conditions: Signal timing optimization as shown in Table 5 is recommended under future total conditions to ensure most movements continue to operate under capacity. The addition of site traffic is expected to have a negligible impact on intersection operations, with most movements maintaining available capacity. Future intersection operations are expected to remain largely consistent with the addition of net site traffic.

5.3.1.2 Trafalgar Road & Cross Avenue/South Service Road East

Table 5-19: Trafalgar Road & Cross Avenue/South Service Road East Intersection

AM	Existing Traffic						Future Background 2037						Future Total 2037					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.70	0	-	-	-	-	1.38	0	-	-	-	-	1.51	0	-	-	-
EBL	321	0.59	45	D	40	50	1202	1.30	180	F	210	253	1456	1.58	303	F	293	335
EBTR	120	0.31	54	D	16	34	171	0.32	39	D	30	53	229	0.46	41	D	48	76
WBL	66	0.41	58	E	15	25	66	0.39	56	E	12	23	66	0.40	56	E	12	23
WBT	52	0.46	67	E	15	28	83	0.62	72	E	24	50	88	0.67	75	E	26	55
WBR	42	0.03	61	E	0	0	42	0.03	60	E	0	0	42	0.03	60	E	0	0
NBL	69	0.53	21	C	8	17	95	0.82	65	E	17	29	96	0.83	66	E	17	30
NBTR	1174	0.47	26	C	103	139	1745	0.91	56	E	192	204	1745	0.91	56	E	192	205
SBL	154	0.55	20	B	17	30	162	1.13	134	F	39	39	162	1.13	133	F	39	39
SBTR	1765	0.69	25	C	112	177	2592	1.35	198	F	357	334	2592	1.35	198	F	357	328
PM	**Existing Traffic**						**Future Background 2037**						**Future Total 2037**					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.83	0	-	-	-	-	1.29	0	-	-	-	-	1.35	0	-	-	-
EBL	717	0.74	36	D	88	108	1120	1.14	112	F	178	219	1191	1.26	160	F	213	256
EBTR	147	0.21	37	D	15	34	183	0.32	38	D	31	54	200	0.36	39	D	37	62
WBL	65	0.34	54	D	12	22	65	0.35	54	D	12	22	65	0.35	54	D	12	22
WBT	50	0.34	62	E	15	29	87	0.60	68	E	26	50	114	0.77	83	F	35	71
WBR	219	0.65	73	E	19	66	219	0.65	74	E	19	66	219	0.64	73	E	19	66
NBL	111	0.72	42	D	26	36	193	1.13	117	F	54	62	197	1.17	130	F	56	65
NBTR	1112	0.61	48	D	125	142	1669	0.94	57	E	196	193	1669	0.94	58	E	196	193
SBL	93	0.50	26	C	9	23	97	0.67	48	D	18	20	97	0.67	48	D	18	18
SBTR	1505	0.87	25	C	62	93	2239	1.37	215	F	319	313	2239	1.37	215	F	319	295

Existing Conditions: Under existing conditions, all movements are operating within capacity and experiencing LOS E (or better). No major constraints are identified.

Future Background Conditions: Under future background conditions, most movements are expected to continue to operate within capacity. However, the EBL, SBL, SBTR, and NBL are expected to experience a v/c over 1. Signal timings could not be optimized further due to minimums. This is a result of high background development traffic and growth.

Future Total Conditions: Under future total conditions, intersection operations are expected to remain largely consistent with the addition of net site traffic apart from the EBL movement which experiences a higher v/c due to the introduction of site trips.

5.3.1.3 Argus Road/Oakville GO Station Driveway & Cross Avenue

Table 5-20: Argus Road/Oakville GO Station Driveway & Cross Avenue Intersection

AM	Existing Traffic						Future Background 2037						Future Total 2037					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.43	0	-	-	-	-	0.91	0	-	-	-	**-**	**1.10**	**0**	**-**	**-**	**-**
EBL	18	0.06	8	A	1	6	18	0.13	17	B	2	9	15	0.11	17	B	2	8
EBTR	431	0.29	9	A	12	38	1192	0.91	35	C	122	204	**1355**	**1.04**	**61**	**E**	**154**	**251**
WBL	19	0.09	5	A	1	4	19	0.41	25	C	2	6	19	0.41	28	C	2	6
WBTR	540	0.30	6	A	16	34	858	0.58	17	B	72	96	864	0.58	17	B	73	97
NBLTR	55	0.72	65	E	4	21	55	0.63	63	E	6	19	55	0.62	62	E	6	19
SBL	50	0.27	26	C	6	16	265	0.70	32	C	45	73	**414**	**1.08**	**96**	**F**	**83**	**145**
SBTR	306	0.59	30	C	13	33	372	0.79	38	D	63	98	367	0.77	37	D	61	96
PM	**Existing Traffic**						**Future Background 2037**						**Future Total 2037**					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.40	0	-	-	-	-	0.82	0	-	-	-	-	0.87	0	-	-	-
EBL	25	0.06	11	B	2	7	25	0.09	12	B	2	8	16	0.06	11	B	1	6
EBTR	672	0.41	14	B	32	59	1483	0.88	26	C	104	200	1542	0.92	29	C	112	213
WBL	16	0.09	8	A	1	4	16	0.25	18	B	1	4	16	0.25	19	B	1	4
WBTR	449	0.23	9	A	19	27	746	0.39	10	B	36	48	776	0.40	10	B	38	50
NBLTR	50	0.15	27	C	3	12	50	0.20	29	C	3	13	50	0.20	29	C	3	13
SBL	121	0.40	31	C	19	35	215	0.71	43	D	36	67	244	0.80	50	D	43	81
SBTR	202	0.20	27	C	3	20	380	0.72	41	D	39	84	370	0.70	40	D	37	80

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, the EBTR and SBL are expected to operate under constraints in the PM Peak period due to the addition of site trips. A SBL phase was added to the Signal Timing Plan to accommodate for the increase trips for that movement. However, signal timings could not be optimized further due to minimums. Overall, the intersection experiences a v/c of 1.10, but most movements are expected to operate under capacity.

5.3.1.4 Trafalgar Road & QEW EB Off-Ramp

AM	Existing Traffic						Future Background 2037						Future Total 2037					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.78	0	-	-	-	-	1.07	0	-	-	-	-	1.08	0	-	-	-
EBL	664	0.65	44	D	87	108	664	0.65	44	D	87	108	664	0.65	44	D	87	108
EBR	573	0.92	66	E	139	213	603	0.98	77	E	153	232	609	0.99	80	F	156	237
NBT	1137	0.43	13	B	32	36	2102	0.80	18	B	106	108	2225	0.85	21	C	128	114
SBT	1770	0.66	13	B	58	74	2860	1.07	51	D	339	96	2888	1.08	55	E	345	98
PM	**Existing Traffic**						**Future Background 2037**						**Future Total 2037**					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.77	0	-	-	-	-	1.06	0	-	-	-	-	1.08	0	-	-	-
EBL	888	0.79	46	D	116	141	888	0.77	45	D	116	141	888	0.77	44	D	116	141
EBR	404	0.61	41	D	70	106	499	0.77	48	D	102	148	528	0.82	52	D	112	164
NBT	2081	0.76	22	C	107	138	3321	1.23	130	F	437	421	3355	1.24	137	F	445	408
SBT	1450	0.53	24	C	130	142	2794	1.03	53	D	325	228	2933	1.09	75	E	356	242

Existing Conditions: The analysis results indicate that the intersection is currently operating under constrained conditions, with several movements experiencing a v/c near 1.00 and/or LOS E. After model calibration, all movement v/cs are reduced to within 1.00. It is noted that all movements have a v/c below 1.00. No further intersection changes are recommended.

Future Background Conditions: Background traffic growth is expected to result in an increase in v/c and delay for the SBT and NBT movements, with overall intersection operations remaining largely consistent with existing conditions.

Future Total Conditions: Future intersection operations are expected to remain largely consistent with the addition of net site traffic. The SBT and NBT movements experience a v/c above 1.00, causing the movement to experience constraints. As this is an MTO intersection, signal timing optimization was not implemented.

DRAFT

5.3.1.5 Trafalgar Road & North Service Road East/QEW WB Off-Ramp

AM	Existing Traffic						Future Background 2037						Future Total 2037					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.65	0	-	-	-	-	1.01	0	-	-	-	-	1.02	0	-	-	-
EBL	4	0.20	77	E	1	5	4	0.20	77	E	1	5	4	0.20	77	E	1	5
EBR	149	0.22	25	C	23	40	152	0.23	25	C	25	42	152	0.23	25	C	25	42
WBL	343	0.33	30	C	39	69	462	0.46	32	C	56	97	481	0.48	33	C	59	101
WBT	30	0.32	30	C	39	69	30	0.43	32	C	56	96	30	0.45	32	C	59	100
WBR	188	0.21	29	C	12	35	188	0.24	29	C	16	41	188	0.24	29	C	16	41
NBL	0	0.00	0	-	0	0	0	0.00	0	-	0	0	0	0.00	0	-	0	0
NBT	1484	0.63	21	C	69	88	2504	1.11	87	F	278	299	2557	1.14	96	F	289	310
SBT	2186	0.87	36	D	175	193	3368	1.40	216	F	445	461	3376	1.40	218	F	447	463
SBR	0	0.00	0	-	0	0	0	0.00	0	-	0	0	0	0.00	0	-	0	0
PM	**Existing Traffic**						**Future Background 2037**						**Future Total 2037**					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.77	0	-	-	-	-	1.29	0	-	-	-	-	1.34	0	-	-	-
EBL	21	0.06	24	C	4	9	21	0.13	28	C	4	9	21	0.17	31	C	4	9
EBR	221	0.34	29	C	39	61	232	0.38	29	C	44	68	232	0.38	29	C	44	68
WBL	373	0.46	36	D	60	90	769	0.87	57	E	140	217	870	0.97	76	E	176	252
WBT	111	0.43	35	D	61	90	111	0.82	50	D	137	208	111	0.92	63	E	169	245
WBR	274	0.41	35	C	40	70	274	0.46	36	D	47	78	274	0.46	36	D	48	79
NBL	0	0.00	0	-	0	0	0	0.00	0	-	0	0	0	0.00	0	-	0	0
NBT	2521	0.96	48	D	249	250	3931	1.57	295	F	575	468	3945	1.57	297	F	578	464
NBR	0	0.00	0	-	0	0	0	0.00	0	-	0	0	0	0.00	0	-	0	0
SBT	2004	0.81	34	C	160	177	3225	1.36	203	F	427	444	3263	1.38	210	F	435	452
SBR	7	0.00	19	B	0	0	7	0.01	19	B	0	0	7	0.01	19	B	0	0

Existing Conditions: The analysis results indicate that the intersection is currently operating under constrained conditions, with several movements experiencing a v/c near 1.00 and/or LOS F. After model calibration, all movement v/cs are reduced to within 1.00. It is noted that all movements have a v/c below 1.00. No further intersection changes are recommended.

Future Background Conditions: Background traffic growth is expected to result in an increase in v/c and delay for several movements, with overall intersection operations remaining largely consistent with existing conditions. As this is an MTO intersection, signal timing optimization was not implemented.

Future Total Conditions: Future intersection operations are expected to remain largely consistent with the addition of net site traffic. The SBT and NBT movements experience a v/c above 1.00, causing the movement to experience constraints. As this is an MTO intersection, signal timing optimization was not implemented.

DRAFT

5.3.1.6 Oakville GO Station Driveway & Cross Avenue

AM	Existing Traffic						Future Background 2037						Future Total 2037					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.58	0	-	-	-	-	0.86	0	-	-	-	**-**	**1.18**	**0**	**-**	**-**	**-**
EBL	0	0.00	0	-	0	0	0	0.00	0	-	0	0	28	0.29	67	E	9	20
EBTR	312	0.15	4	A	6	13	991	0.70	37	D	138	181	**453**	**0.98**	**104**	**F**	**80**	**118**
WBL	0	0.00	0	-	0	0	479	0.80	40	D	102	147	**479**	**0.99**	**85**	**F**	**148**	**224**
WBLT	823	0.59	7	A	27	54	642	0.24	3	A	21	29	641	0.41	27	C	71	87
WBR	0	0.00	0	-	0	0	0	0.00	0	-	0	0	0	0.00	0	-	0	0
NBL	41	0.34	30	C	6	26	41	0.44	76	E	14	27	41	0.44	76	E	14	27
NBR	190	0.00	0	-	0	0	190	0.13	72	E	0	0	190	0.13	72	E	0	0
SBLTR	-	-	-	-	-	-	0	0.00	0	-	0	0	**822**	**1.58**	**330**	**F**	**342**	**433**
PM	**Existing Traffic**						**Future Background 2037**						**Future Total 2037**					
Mvmt	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue	Vol	V/C	Delay (s)	LOS	50th Queue	95th Queue
Overall	-	0.72	0	-	-	-	-	0.75	0	-	-	-	-	0.83	0	-	-	-
EBL	-	-	-	-	-	-	0	0.00	0	-	0	0	101	0.56	55	E	27	60
EBTR	521	0.31	11	B	24	41	1045	0.59	24	C	112	161	780	0.79	54	D	119	178
WBL	-	-	-	-	-	-	269	0.66	20	B	23	57	269	0.80	47	D	58	88
WBLT	591	0.58	13	B	35	62	747	0.31	6	A	34	46	748	0.44	22	C	67	83
NBL	123	0.86	41	D	53	95	123	0.72	77	E	38	60	123	0.72	77	E	38	60
NBR	358	0.00	0	-	0	0	358	0.25	62	E	0	0	358	0.25	62	E	0	5
SBLTR	-	-	-	-	-	-	0	0.00	0	-	0	0	**372**	**0.88**	**86**	**F**	**69**	**142**

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, most movements in the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. The SBLTR is expected to experience delays and constraints. With the implementation of the 4-legged intersection with split phasing, a cycle length of 160s was determined to be ideal for this intersection.

5.3.2 Unsignalized Intersections (2037 Horizon)

The intersection capacity analysis is summarized by unsignalized intersection in the tables below. Detailed capacity results are provided in Appendix G.

5.3.2.1 Argus Road & South Service Road

Table 5-21: Argus Road & South Service Road Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	3	-	-	-	-	3	-	-
EBLTR	15	0.00	0	A	0	50	0.00	0	A	0	50	0.00	0	A	0
WBLTR	406	0.00	0	-	0	594	0.00	0	-	0	627	0.00	0	-	0
NBLTR	5	0.01	0	B	0	5	0.01	0	B	0	5	0.01	0	B	0
SBLTR	16	0.03	0	B	1	140	0.34	0	C	12	140	0.36	0	C	12
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	2	-	-	-	-	3	-	-	-	-	3	-	-
EBLTR	16	0.00	0	A	0	38	0.01	0	A	0	38	0.01	0	A	0
WBLTR	281	0.00	0	-	0	889	0.00	0	-	0	1057	0.00	0	-	0
NBLTR	0	0.01	0	A	0	0	0.01	0	A	0	0	0.01	0	A	0
SBLTR	66	0.09	0	B	2	126	0.38	0	C	13	126	0.50	0	D	20

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

DRAFT

5.3.2.2 Trafalgar Road & Argus Road

Table 5-22: Trafalgar Road & Argus Road Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
EBR	23	0.03	0	A	1	115	0.26	0	C	8	115	0.26	0	C	8
NBT	408	0.24	0	-	0	816	0.48	0	-	0	864	0.51	0	-	0
SBT	695	0.41	0	-	0	1060	0.62	0	-	0	1060	0.62	0	-	0
SBR	434	0.26	0	-	0	637	0.37	0	-	0	672	0.40	0	-	0
PM	**Existing Traffic**					**Future Background 2037**					**Future Total 2037**				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
EBR	47	0.05	0	A	1	90	0.18	0	B	5	90	0.18	0	B	5
NBT	723	0.43	0	-	0	1181	0.69	0	-	0	1200	0.71	0	-	0
SBT	547	0.32	0	-	0	857	0.50	0	-	0	857	0.50	0	-	0
SBR	291	0.17	0	-	0	924	0.54	0	-	0	1099	0.65	0	-	0

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

DRAFT

5.3.2.3 Argus Road & 580 Argus Road Site Access

Table 5-23: Argus Road & 580 Argus Road Site Access Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
EBLTR	14	0.02	0	B	1	-	-	-	-	-	-	-	-	-	-
WBLTR	4	0.01	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLTR	1	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
SBLTR	16	0.01	0	A	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
EBLTR	15	0.02	0	B	1	-	-	-	-	-	-	-	-	-	-
WBLTR	20	0.04	0	B	1	-	-	-	-	-	-	-	-	-	-
NBLTR	2	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
SBLTR	10	0.01	0	A	0	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.3.2.4 177 Cross Avenue Site Access & Cross Avenue

Table 5-24: 177 Cross Avenue Site Access & Cross Avenue Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLT	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
EBT	331	0.19	0	-	0	-	-	-	-	-	-	-	-	-	-
WBT	609	0.36	0	-	0	-	-	-	-	-	-	-	-	-	-
WBTR	309	0.18	0	-	0	-	-	-	-	-	-	-	-	-	-
SBLR	4	0.02	0	C	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLT	4	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
EBT	605	0.36	0	-	0	-	-	-	-	-	-	-	-	-	-
WBT	451	0.27	0	-	0	-	-	-	-	-	-	-	-	-	-
WBTR	234	0.14	0	-	0	-	-	-	-	-	-	-	-	-	-
SBLR	13	0.02	0	B	1	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.3.2.5 Argus Road & 187 Cross Avenue Site Access

Table 5-25: Argus Road & 187 Cross Avenue Site Access Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLTR	1	0.00	0	B	0	-	-	-	-	-	-	-	-	-	-
WBLTR	0	0.01	0	A	0	-	-	-	-	-	-	-	-	-	-
NBLTR	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
SBLTR	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
EBLTR	10	0.01	0	B	0	-	-	-	-	-	-	-	-	-	-
WBLTR	3	0.01	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLTR	7	0.01	0	A	0	-	-	-	-	-	-	-	-	-	-
SBLTR	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.3.2.6 Argus Road & 568-570 Argus Road North Site Access

Table 5-26; Argus Road & 568-570 Argus Road North Site Access Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLR	1	0.00	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLT	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
SBTR	400	0.24	0	-	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLR	3	0.00	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLT	3	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
SBTR	355	0.21	0	-	0	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.3.2.7 Argus Road & 568-570 Argus Road South Site Access

Table 5-27: Argus Road & 568 -570 Argus Road South Site Access Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLR	0	0.00	0	A	0	-	-	-	-	-	-	-	-	-	-
NBLT	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
SBTR	399	0.23	0	-	0	-	-	-	-	-	-	-	-	-	-
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
EBLR	2	0.00	0	B	0	-	-	-	-	-	-	-	-	-	-
NBLT	0	0.00	0	-	0	-	-	-	-	-	-	-	-	-	-
SBTR	354	0.21	0	-	0	-	-	-	-	-	-	-	-	-	-

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

5.3.2.8 Argus Road & Street 1

Table 5-28: Argus Road & Street 1 Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	4	-	-
EBLR	-	-	-	-	-	0	0.00	0	A	0	181	0.41	0	C	15
NBLT	-	-	-	-	-	0	0.00	0	-	0	7	0.01	0	A	0
SBTR	-	-	-	-	-	696	0.41	0	-	0	733	0.43	0	-	0
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	1	-	-
EBLR	-	-	-	-	-	0	0.00	0	A	0	66	0.15	0	B	4
NBLT	-	-	-	-	-	0	0.00	0	-	0	34	0.04	0	A	1
SBTR	-	-	-	-	-	627	0.37	0	-	0	813	0.48	0	-	0

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

5.3.2.9 North Site Access & Street 1

Table 5-29: North Site Access & Street 1 Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	11	-	-
EBTR	-	-	-	-	-	0	0.00	0	-	0	8	0.00	0	-	0
WBLT	-	-	-	-	-	0	0.00	0	-	0	52	0.03	0	A	1
NBLR	-	-	-	-	-	0	0.00	0	A	0	414	0.44	0	B	17
PM	**Existing Traffic**					**Future Background 2037**					**Future Total 2037**				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	11	-	-
EBTR	-	-	-	-	-	0	0.00	0	-	0	8	0.00	0	-	0
WBLT	-	-	-	-	-	0	0.00	0	-	0	52	0.03	0	A	1
NBLR	-	-	-	-	-	0	0.00	0	A	0	414	0.44	0	B	17

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

DRAFT

5.3.2.10 Street C & West Site Access

Table 5-30: Street C & West Site Access Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	0	-	-
WBLR	-	-	-	-	-	0	0.00	0	A	0	9	0.03	0	C	1
NBTR	-	-	-	-	-	0	0.00	0	-	0	117	0.07	0	-	0
SBLT	-	-	-	-	-	0	0.00	0	-	0	0	0.00	0	-	0
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	0	-	-
WBLR	-	-	-	-	-	0	0.00	0	A	0	9	0.03	0	C	1
NBTR	-	-	-	-	-	0	0.00	0	-	0	329	0.19	0	-	0
SBLT	-	-	-	-	-	0	0.00	0	-	0	0	0.00	0	-	0

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

DRAFT

5.3.2.11 Street C & Street 1

Table 5-31: Street C & Street 1 Intersection

AM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	0	-	-
EBLTR	-	-	-	-	-	137	0.18	8	-	0	137	0.21	9	-	0
WBLTR	-	-	-	-	-	0	0.00	8	-	0	210	0.36	12	-	0
NBLTR	-	-	-	-	-	54	0.08	8	-	0	61	0.11	9	-	0
SBLTR	-	-	-	-	-	332	0.44	11	-	0	332	0.52	13	-	0
PM	Existing Traffic					Future Background 2037					Future Total 2037				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	-	-	-	-	-	0	-	-	-	-	0	-	-
EBLTR	-	-	-	-	-	69	0.09	8	-	0	69	0.10	8	-	0
WBLTR	-	-	-	-	-	0	0.00	8	-	0	210	0.33	11	-	0
NBLTR	-	-	-	-	-	172	0.23	9	-	0	179	0.28	10	-	0
SBLTR	-	-	-	-	-	153	0.20	8	-	0	153	0.24	10	-	0

Existing Conditions: Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity and with no significant delay. The overall v/c ratio for both peak hours is less than 1.00, which indicates the intersection is operating within capacity.

Future Background Conditions: Under future background conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No new constraints have been identified.

Future Total Conditions: Under future total conditions, both the AM and PM peak hours are expected to continue to operate within capacity and without significant delay. No critical movements have been identified as a result of site traffic.

DRAFT

6 PARKING AND LOADING REVIEW

The following section reviews the parking and loading standards for the proposed development based on the current zoning by-law requirements applicable to the subject site.

6.1 VEHICLE PARKING

6.1.1 Town of Oakville Zoning By-law 2014-014

The proposed vehicle parking supply was evaluated against parking requirements contained in Special Provisions 15.369.3 of Zoning By-law 2014-014. The required and proposed vehicle parking supply has been provided in Table 6-1.

Table 6-1: Zoning By-Law 2014-014 Vehicle Parking Standards

Use	Units/GFA	City of Oakville ZBL 2014-014		Proposed Supply
		Parking Rate	Minimum Required Parking	
Residential	1,895 units	1.15 sp./unit	2179	881 (0.46 sp./unit)
Visitor	1,895 units	0 sp./unit	0	132 (0.07 sp./unit)
Retail	846 m^2	1sp/40 m^2	21	0
		TOTAL	**2,200**	**1,013 (0.53 sp./unit)**

Under By-law 2014-014 Special Parking Provision 15.369.3 the development is required to provide a total of 2,200 vehicle parking spaces (1.16 spaces per unit) consisting of 2,179 residential and 21 retail vehicle parking spaces.

The proposed 1,013 vehicle parking supply (0.53 spaces per unit) consisting of 881 residential and 132 visitor/retail parking spaces does not meet By-law 2014-014 Special Parking Provision rates and represents a decrease of 1,187 spaces.

Given that the proposed development is within walking distance to public bus transit routes and the Oakville GO Transit station, the proposed parking supply should be considered reasonable as future residents can access transportation services to local and regional destinations. The following Section 6.1.2 will provide further parking justification for the proposed development.

6.1.2 Parking Justification

This section provides a parking justification for the proposed parking supply. The development proposes supplying a total of 1,013 vehicle parking spaces (0.53 spaces per unit) consisting of 881 residential (0.46 spaces per unit) and 132 visitor/retail (0.07 spaces per unit) spaces. Although this supply does not adhere to By-2014-014 Special Parking Provision rates the supply should be considered acceptable as the subject site is within walking distance of both local and regional transit.

The availability of both local and regional transportation services will provide future residents and visitor alternatives to car transportation for travelling to/from the site to local and regional destinations. This decision to reduce the development's vehicle parking supply also aligns with local, regional, and provincial government planning policy objectives which supports providing residences with accessible, affordable modes of transportation that ultimately decreases car-based carbon emissions and encourages healthier forms of living.

In support of the reduced parking supply the following subsections will review these planning policies, as well as the site's transit and active transportation context that demonstrates that the development is compatible with a car-less transportation lifestyle.

6.1.2.1 Planning Policy

The following sections provides a summary of the applicable planning policies that supports the reduction of the proposed vehicle parking supply and favours multi-modal transportation that encourages healthier communities, is affordable, and reduces car related carbon emissions.

The Ontario Planning Act (1990)

The Planning Act (PA) is provincial legislation that outlines the rules and regulations for land use planning within the Province of Ontario. The purpose of the PA 1990 is to ensure that the planning process is equitable and accessible and can be done in a timely manner as well as promote sustainable economic development, provide a planning system based on provincial policy, integrate provincial interests in order to be consistent and conform with the Provincial Policy Statement, promote inter-disciplinary co-operation and coordination, and to recognize the decision making authority and accountability of the municipality planning.

On June 6, 2024 Bill 185 received royal assent to amend the Ontario Planning Act to add Section 16 subjection 22 to 24 and to further amend Section 34 of The Act which removes minimum vehicular parking rates in protected Major Transit Station Area's (MTSA). The amended sections are as follows:

- *Section 16(22): No official plan may contain any policy that has the effect of requiring an owner or occupant of a building or structure to provide and maintain parking facilities, other than parking facilities for bicycles, on land that is not part of a highway and that is located within,*

  (a) a protected major transit station area identified in accordance with subsection (15) or (16);

  (b) an area delineated in the official plan of the municipality surrounding and including an existing or planned higher order transit station or stop, within which area the official plan policies identify the minimum number of residents and jobs, collectively, per hectare that are planned to be accommodated, but only if those policies are required to be included in the official plan to conform with a provincial plan or be consistent with a policy statement issued under subsection 3 (1); or

  (c) any other area prescribed for the purposes of this clause. 2024, c. 16, Sched. 12, s. 2.

- *Section 16(23): A policy in an official plan is of no effect to the extent that it contravenes subsection (22). 2024, c. 16, Sched. 12, s. 2.*

- *Section (16)24: No official plan may contain any policy that has the effect of requiring an owner or occupant of a building or structure to provide and maintain parking facilities, other than parking facilities for bicycles, containing more than the prescribed number of parking spaces on land that is not part of a highway and that is located within an area prescribed for the purposes of this subsection, and if a policy does so, the official plan is deemed to be amended to be consistent with this subsection. 2024, c. 16, Sched. 12, s. 2.*

- *Section 34(1.1): Despite paragraph 6 of subsection (1), a zoning by-law may not require an owner or occupant of a building or structure to provide and maintain parking facilities, other than parking facilities for bicycles, on land that is not part of a highway and that is located within,*

(a) a protected major transit station identified in accordance with subsection 16 (15) or (16);

(b) an area delineated in the official plan of the municipality surrounding and including an existing or planned higher order transit station or stop, within which area the official plan policies identify the minimum number of residents and jobs, collectively, per hectare that are planned to be accommodated, but only if those policies are required to be included in the official plan to conform with a provincial plan or be consistent with a policy statement issued under subsection 3 (1); or

(c) any other area prescribed for the purposes of clause 16 (22) (c). 2024, c. 16, Sched. 12, s. 5 (2).

- *Section 34(1.3): Despite paragraph 6 of subsection (1), a zoning by-law may not require an owner or occupant of a building or structure to provide and maintain parking facilities, other than parking facilities for bicycles, containing more than the number of parking spaces prescribed for the purposes of subsection 16 (24) on land that is not part of a highway and that is located within an area prescribed for the purposes of that subsection, and if a by-law does so, the by-law is deemed to be amended to be consistent with this subsection. 2024, c. 16, Sched. 12, s. 5 (2).*

As the subject site is located within a MTSA no minimum parking rates apply and the proposed supply of 0.64 vehicle spaces per unit should be considered acceptable.

The Provincial Planning Statement (2020)

The *Provincial Policy Statement* (PPS) is a land-use policy document from the Province of Ontario that provides regional and local municipalities with the legal framework for managing growth and natural resources and sets the direction for land-use planning to ensure that land development aligns with the interest of the Province, which includes the protection of natural resources, public health and safety, and the quality of the natural and built environment.

The Provincial Policy Statement's vision for land-use planning throughout the province is for the development of *strong sustainable and resilient communities of people of all ages, and a clean and healthy environment* (2020 PPS, P.5). As it relates to transportation, this can be achieved through encouraging a combination of transportation choices that increase the use of active transportation and transit (2020 PPS, P. 5). Specifically, policies within the PPS that addresses the Province's vision are the following:

- *Section 1.1.1e) Healthy, liveable and safe communities are sustained by promoting the integration of land use planning, growth management, transit-supportive development, intensification and infrastructure planning to achieve cost-effective development patterns, optimization of transit investments, and standards to minimize land consumption and servicing costs.*
- *Section 1.1.1.3.2e) Land use patterns within settlement areas shall be based on densities and a mix of land uses which support active transportation; and*
    - *f)* are transit-supportive, where transit is planned, exists or may be developed.
- *Section 1.6.7.4: A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and active transportation.*
- *Section 1.8.1b): Promote the use of active transportation and transit in and between residential, employment (including commercial and industrial) and institutional uses and other areas; and*

- *f) encourage transit-supportive development and intensification to improve the mix of employment and housing uses to shorten commute journeys and decrease transportation congestion.*

The proposed development conforms to the Provincial policy outlined in the PPS as it supports the goals of providing future residents with a car-free quality of living in favour of the nearby public transit and active transportation available to the subject site.

A Place to Grow: The Growth Plan for the Greater Golden Horseshoe 2020

A Place to Grow: The Growth Plan for the Greater Golden Horseshoe provides a framework for municipalities within the Greater Golder Horseshoe region to better manage growth to support a high quality of life, environmental protection, as well as economic prosperity which aligns with the vision set out by the Province of Ontario. The support of municipalities in land use choices is vital to achieving the long-term framework outlined by the Growth Plan.

The plan outlines numerous Guiding Principles which are important for the successful realization of the Growth Plan's vision which includes an integrated transportation network to facilitate the ease of travel within and between urban centres (Growth Plan 2020, p.4). Key principles relevant to the development proposal include:

- Supporting the achievement of complete communities that are designed to support healthy and active living and meet people's needs for daily living throughout an entire lifetime.
- Prioritizing intensification and higher densities in strategic growth areas to make efficient use of land and infrastructure and support transit viability.
- Supporting a range and mix of housing options, including additional residential units and affordable housing, to serve all sizes, incomes, and ages of households.
- Integrating climate change considerations into planning and managing growth such as planning for more resilient communities and infrastructure – that are adaptive to the impacts of a changing climate – and moving towards environmentally sustainable communities by incorporating approaches to reduce greenhouse gas emissions.

The proposed development supports the following principles by providing future residents an alternative to car transportation as there are available public transit and active transportation infrastructure within walking distance to the subject site. In doing so, the development is supporting the reduction of greenhouse gas emissions by providing fewer vehicle spaces (0.64 spaces per unit).

Metrolinx 2041 Regional Transportation Plan: For the Greater Toronto and Hamilton Area

The *2041 Regional Transportation Plan: For the Greater Toronto and Hamilton Area* provides a framework for transportation planning within the Greater Toronto and Hamilton Area (GTHA) with the intent of creating strong connections, complete travel experiences, and sustainable and healthy communities which supports the vision of both the PPS and the 2020 Growth plan. The Province of Ontario recognizes the role transportation will have in facilitating the province's vision, especially given the population growth projections which expects a population of 10 million persons by the year 2041. To ensure the best possible use of existing and proposed transportation system the Growth Plan has emphasized some of the following:

- Providing fast, frequent, and reliable transportation for people;
- Designing communities to support transit use and active transportation; and

- Using parking strategies to encourage car-sharing and other car-mode alternatives.

As it relates to land use planning and the role of government, the 2041 Regional Transportation Plan seeks to achieve reductions in greenhouse gas emissions, and increase active transportation as well as promote the integration of local transit systems in the regional transportation area with each other and with the regional transit system, work towards easing congestion and commute times in the regional transportation area, and promote transit-supportive development to increase transit ridership and to support the viability and optimization of transit infrastructure (2041 Regional Transportation Plan, P. 17).

The proposed development aligns with the aspirations of the 2041 Regional Transportation Plan by providing future residents with and encouraging them to use an alternative to single-occupancy cars to travel and commute. By doing so the development is committed to reducing greenhouse gas emissions and the number of vehicles on the road which is noted in the regional plan to help ease congestion in the area surrounding the subject site.

Halton Region Official Plan 2022

The Halton Region Official Plan 2022 is a regional municipal policy document which is to be used as a guide for both short- and long-term land use development within the Region of Halton. Halton Region recognizes its importance as an economic growth area within the Greater Toronto and Hamilton Area (GTHA) and is expected to see increased population growth between now and the year 2051. To facilitate this growth, Halton Region has set out it's vision of sustainable development to meet the current and future population needs which includes protecting the natural environment, preserving prime agricultural areas, enhancing its economic competitiveness, and fostering a healthy, equitable society (Halton Region Official Plan, P.6).

In terms of transportation, the Halton Region Official Plan has provided some of the following framework and objectives to support the Region's vision:

- Section 31(5): Where mobility is provided primarily through an affordable, convenient, safe and efficient public transportation system and non-motorized travel modes;
- Section 72(1)(2): To support a form of growth that is compact and supportive of transit usage and non-motorized modes of travel, reduces the dependence on the automobile, makes efficient use of space and services, promotes live-work relationships and fosters a strong and competitive economy;
- Section 72.1(7): To plan and invest for a balance of jobs and housing in communities across the Region to reduce the need for long distance commuting and to increase the modal share for transit and active transportation;
- Section 77(5)(f)(vi): Promoting active transportation and public transit use;
- Section 79(1): To provide an urban form that is complementary to existing developed areas, uses space more economically, promotes live-work relationships, fosters social interaction, enhances public safety and security, reduces travel by private automobile, promotes active transportation, and is environmentally more sustainable in order to promote the development of complete communities; and
- Section79(8): To support transit and active transportation for everyday activities.

The proposed parking reductions conforms to the Halton Region Official Plan as shown through the policies above, which support active transportation and public transit use for future residents. The area

surrounding the subject site has many car-mode alternatives for residents to travel and commute and should be considered acceptable.

Town of Oakville Official Plan (2009)

The Livable Oakville Plan – Town of Oakville Official Plan 2009 is a municipal policy document which acts as a guide for the long-term development of the City to the year 2031. Long term development of the Town includes the enhancement of the natural, economic, and social environments to ensure environmental sustainability, cultural vibrancy, economic prosperity, and social well-being are factored into the Town's growth and development decisions. The Town of Oakville's guiding principles are therefore to safeguard and create a livable community, provide residents with housing and mobility choices, and achieve sustainability by reducing the Town's ecological footprint.

In terms of transportation the Town of Oakville Official Plan 2009 has provided but is not limited to the following framework and objectives to support the municipality's guiding principles and the overall mission statement.

- Section 3.11: Major transportation corridors including provincial priority transit corridors are to provide connections between the Town's nodes and corridors throughout the region through the delivery of a full range of multi-modal facilities;
- Section 3.12: Regional Transit Priority Corridors and Mobility links are important for connecting residents via transit throughout the region, to local destination including employment areas, and are a key to transit supportive development;
- Section 3.15: Major transit stations and regional transit nodes are important for integrating the Town's transportation system and focusing on transit-supportive development;
- Section 8.1.1(a -d): Provide a variety of safe, efficient, and accessible transportation systems, development a sustainable transportation network, provide a public transit network that can provide an alternative to cars, and provide off and on road active transportation facilities to be used as a car alternative;
- Section 8.1.2a): In developing the transportation system, the Town shall evaluate and provide infrastructure to allow for alternative travel modes based on its capabilities, cost effectiveness, environmental impacts, health effects and energy consumption;
- Section 8.1.2b): The Town's transportation system shall support and maximize the efficient use of land through urban development plans and provide mobility alternatives;
- Section 8.9.2: The Town will encourage transit-supportive development within major transit station areas and around transit terminal facilities;
- Section 8.9.4: Plans for all new growth and new communities shall be designed with specific regard for the safe, convenient, and efficient provision of accessible transit service;
- Section 8.14.3: As an incentive to encourage TDM, the Town may permit reduced parking standards for developments which demonstrate, through a TDM plan and implementation strategy, that a reduction in parking standards is appropriate;
- Section 8.15.2: Reduced off-street parking requirements will be established for specific areas where appropriate, particularly in major transit station areas and within the Growth Areas.

The proposed parking reductions conforms to the Town of Oakville's Official Plan as noted in the above policies by ensuring that the development adheres to the vision of livable communities. The area surrounding the subject site has convenient access to active transportation by way of cycling facilities and the pedestrian network, with a number of services, amenities, retail, employment, and recreational opportunities within walking distance, and public transit use for future residents that facilitates local and

regional connections. The area surrounding the subject site has many car-mode alternatives for residents to travel and commute and should be considered acceptable.

6.1.2.2 Public and Active Transportation Context

The proposed development is situated in an area that does not require a car to travel to local and regional amenities. As noted in Section 2.2, the proposed development is in an area that has access to several public transit routes operated by the Town of Oakville. Within a five (5) minute walk to the site there are several public and regional bus routes as well as regional train service available at the Oakville GO Station. Transit service at Oakvile GO Station is capable of connecting future residents to local and regional destination with peak hour service operating between Hamilton GO Station and Toronto Union Station. At Toronto Union Station the Lakeshore Boulevard West Line transitions to the Lakeshore East line which continues east towards Oshawa GO Station.

Supporting the existing public transportation network is a robust active transportation network consisting of bicycle infrastructure and sidewalks. The existing cycling network noted in Section 2.3.1 consists of bike lanes along Cross Avenue that provides an east-west connection to local amenities including other bike lanes along Trafalgar Road. Bike lanes along Trafalgar Road provide direct access to the GO Transit Station and will permit future residents with a north-south access to amenities along Trafalgar Road. Although the WalkScore measures scored the walkability of the area with a 29/100, sidewalks are available along both sides of Cross Avenue, Trafalgar Road, and Cornwall Road, and along the eastern and southern sides of Argus Road. Signalized pedestrian crosswalks are available at all study area intersections which provide safe pedestrian crossings to the available bus stops and train service at Oakville GO Station.

Future Transportation Context

As noted in Section 3.2 improvements to bus and train transit will help to further reduce car dependency for future residents. Bus Rapid Transit has been proposed along Trafalgar Road which includes dedicated bus lanes. Bus rapid transit along Tralagar Road will connect to the existing GO Transit Station to the future employment areas near the intersection of Highway 401 and Trafalgar Road. As noted in the Halton TMP the proposed bus network will contribute to reducing the Town's overall carbon emissions by 2031.

GO Transit expansion is another notable future transit project that will reduce car travel to/from the subject site. The expansion of the GO rail expansion project will not only expected to increase ridership but will also decrease the amount of carbon emissions. I

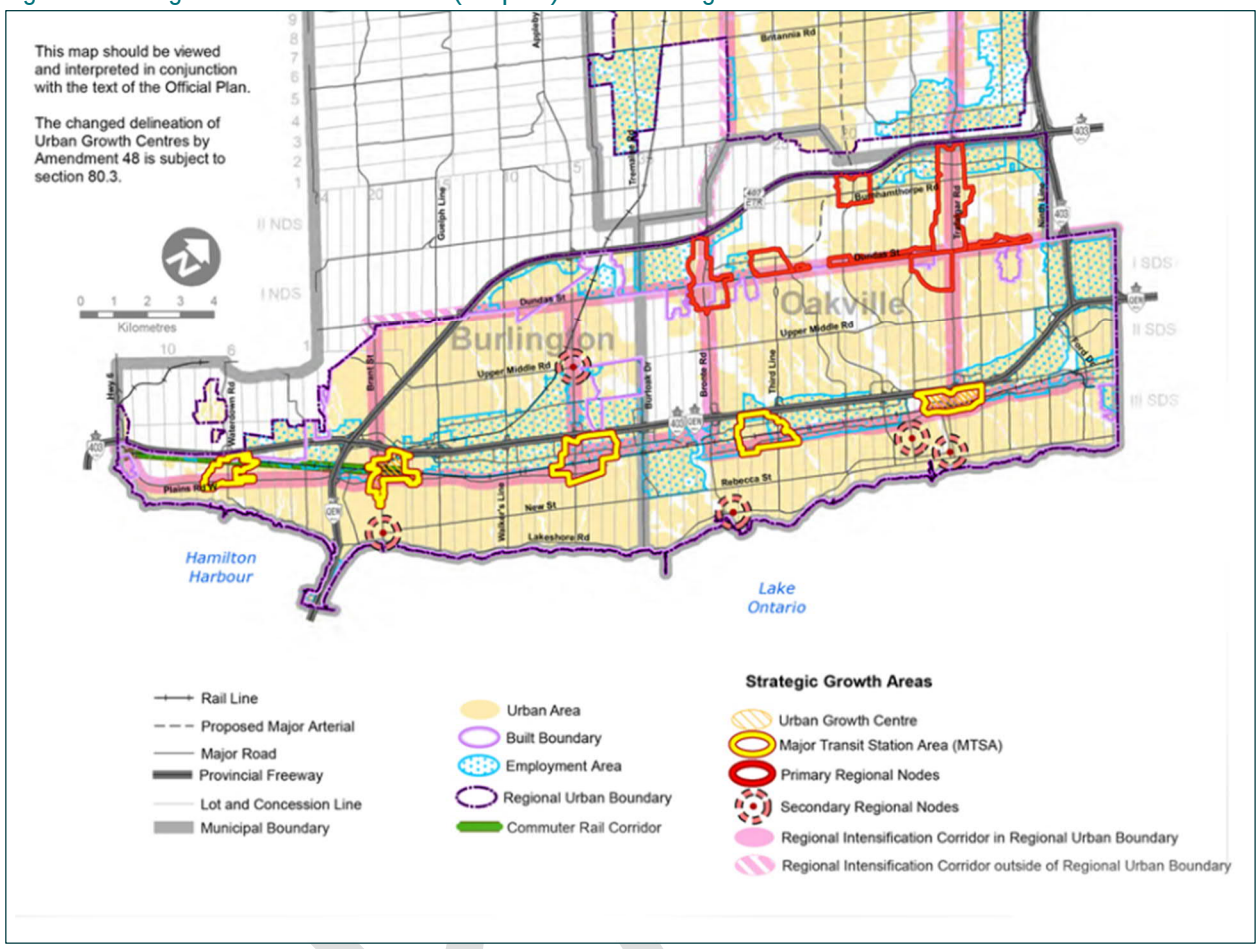
Major Transit Station Area

According to the Growth Plan (2020),a Major Transit Station Area includes the area around any existing or planned higher order transit station or a major bus depot in an urban core with a 500m to 800m radius which equates to a 10-minute walk. As the subject site is within a MTSAs as shown in Figure 6-1 reduced parking for the development is encouraged to reduce parking standards in according to Section 81.2 (4)(h) of Halton's Regional Official Plan:

- Section 81.2(4)(h): Require the Local Municipalities to prepare detailed official plan policies or an Area-Specific Plan for a Major Transit Station Area, in accordance with Sections 48 and 77(5) of this Plan that also encourages alternative development standards, including reduced parking standards in Major Transit Station Areas.

Although the development is required to provide 2,205 vehicle parking spaces a total of 1,219 vehicle parking spaces or 0.64 spaces per unit is being proposed which adheres to reduced parking policies set out in the Regional Official Plan as well as minimum parking within MTSA and should be considered appropriate.

Figure 6-1: Regional Urban Structure (Map1H) - Halton Region



Source: Halton.ca, Accessed June 2024

6.1.3 Accessible Parking Requirements

Accessible vehicle parking spaces are required for the proposed visitor vehicle parking supply and all non-residential uses. The proposed accessible parking supply is provided in Table 6-2 below.

Table 6-2: Accessible Parking Spaces – By-law 2014-014

Uses	Total Number of Parking Spaces in All Parking Areas on the Lot	Minimum Number of Barrier-free Parking Spaces	Required	Provided
Visitor	132	1 plus 3% of total # of Parking Spaces in the Parking Area	5	22
Retail	0	n/a	0	
Total			**5**	**22**

The proposed development is required to provide seven (7) accessible parking spaces given the proposed vehicle parking supply. Of the 7 spaces three (3) are 'Type A' and four (4) are 'Type B' spaces.

6.2 BICYCLE PARKING SPACES

The proposed development is required to provide bicycle parking spaces as outlined in By-law 2014-014. The required and provided bicycle parking supply are provided in Table 6-3.

Table 6-3: Bicycle Parking Supply - Zoning By-law 2014-014

Use	Units/GFA	City of Oakville ZBL 2014-014		Proposed Supply
		Parking Rate	Required	
Residential	1895	1	1895	1,422
Retail	846m^2	The > 2 or 1.0/1000m2	2	474
		TOTAL	**1897**	**1,896**

**25% of the residential parking supply shall be designated as visitors bicycle parking spaces.*

The proposed development is required to supply a total of 1,897 bicycle parking spaces. The development is provided 1,896 parking spaces which meets overall requirements..

6.3 LOADING SPACES

Zoning By-law 2014-014 provides provisions for loading spaces however, there are no minimum number of loading spaces required. Instead two (2) loading bays have been provided on the Ground Floor for large loading vehicles and garbage collection, as well as three (3) smaller loading areas on P1 designed for moving activities by LSU vehicles (small cube vans). The required dimension regulations for the larger spaces are as follows:

a) The minimum dimensions of a loading space are 3.5 metres in width and 12.0 metres in length, with a minimum vertical clearance of 4.2 metres.

DRAFT

7 TRANSPORTATION DEMAND MANAGEMENT (TDM) PLAN

The purpose of Travel Demand Management (TDM) strategies is to encourage travel behaviours by providing incentives towards transit and active transportation whereby reducing reliance on private vehicles during weekday peak periods. TDM strategies are an important part of both Halton Region and the Town of Oakville's respective Transportation Master Plan's (TMP) which aims at increasing mode share use for transit, walking, cycling, and carpooling by the year 2031, as the Halton Region and the Town of Oakville are set to see precedent population growth. Implementing TDM tools and techniques within the proposed development will ensure that individuals accessing the site are aware of the travel options available to them, understand how to use these options, and can help them maximize the use of new or existing sidewalks, trails, bike lanes, rapid bus transit lines, and commuter rail systems. The sections below will detail strategies that can be incorporated into the proposed development.

7.1 VEHICULAR PARKING REDUCTION STRATEGIES

- Marketing
- Car Share
- Priority Parking

7.2 ACTIVE TRANSPORTATION STRATEGIES

The proposed development should encourage the use of the available active transportation networks through a variety of measures that include but are not limited to the integration of the development to the nearby active transportation networks, cohesive urban design, and wayfinding strategies.

7.2.1 Pedestrian

- 8 80 Cities: Is an approach to urban design that promotes healthy sustainable cities for residents to grow up and grow old in. This is attainable by providing accessible public spaces that is safe for active mobility. The "8 80 Cities" approach stems from the idea that communities should be livable for an 8-year-old and an 80-year-old.
- Urban design: The development should incorporate urban design features that encourage pedestrian activity to and from the development. The internal pedestrian network should be designed to be inclusive to all users by being safe, easily accessible, and connect to the broader study area. The following design features could be implemented within the development:
    - Pedestrian Lighting: Lighting along the pedestrian network will allow site users to access the development's amenities at different hours of the day, while also being more visible during darker periods. Lighting can also be used to amplify certain architectural features of the development as well.
    - Public Art and Landscaping: Having a visually appealing public realm can enhance the usability of the pedestrian network whereby decreasing reliance on car transportation. Landscaping can attract non residents to the retail component of the development.

DRAFT

- Wayfinding: Signage can be used to point residents and users to the available public transit options which can be accessed via walking. A pedestrian wayfinding system may consist of the nearby transit options and the walking distance to these options.

7.2.2 Cycling

- Bicycle Wayfinding: In areas where the development is near to a public bike route, a bicycle wayfinding system should be implemented to provide awareness of non-car mode options to commute. The wayfinding system may consist of but is not limited to bike signage, and roadway markers that indicate to potential cyclists the distance and location of a bike route and can direct cyclists in a safe manner to these areas from the development.
- Bicycle Parking: Providing bicycle parking infrastructure in areas within the development that are accessible to residents, employees, and visitors can help to limit car use to/from the subject site. Bicycle parking facilities should be clearly defined and easy to use year-round and should be reflective of the changing weather conditions of southern Ontario.

7.3 TRANSIT BASED STRATEGIES

The site is within walking distance of both local and regional existing transit and proposed transit infrastructure projects that will be used to incentive non car-mode travel. The development should incentivize future residents and site users to use public transit as a way of reducing reliance on cars.

- Transit Information: Given the sites proximity to GO regional transit and local bus service it can be expected that many residents will rely on these available transit routes to commute to and from work. Providing transit information to future residents is one way to encourage non car modal travel. Transit information can consist of the following:
  - Transit based information maps;
  - Live transit information screens;
  - Transit wayfinding signs;
- Financial Incentives: Providing residents with financial incentives to use cars less can encourage future residents to use public transit. This can be done by gifting new owners with pre-paid PRESTO Cards. PRESTO Cards are fast becoming the preferred payment travel option for many municipalities across Ontario which can be used seamlessly between different local and regional transit networks.

DRAFT

8 CONCLUSION

- The proposed mixed-use development will consist of four (4) residential towers (6 storeys, 50 storeys, 55 storeys, and 60 storeys). and one mid-rise residential block (7 storeys) consisting of 1895 residential units and 846 m2 of retail GFA. A total of 1,013 vehicle parking spaces will be provided across a six (6) level underground parking garage. Access to the proposed development will be provided via two (2) full moves accesses at Cross Avenue and Argus Road.
- The subject site is located in an area which is well serviced by many public and active transportation options. Within walking distance to the subject site there are many local transit route options operated by Oakville Transit, as well as GO Transit rail service. These services are accessible via the exiting active transportation networks that will provide safe commutes to future residents.
- Overall, net site auto trips for the site consists of 409 two-way auto trips (48 inbound, 361 outbound) during the AM peak hour and 334 two-way auto trips (233 inbound, 101 outbound) during the PM peak hour.
- Under the 2027 future total weekday AM and PM peak hour conditions, most signalized intersections are expected to operate well with acceptable v/c ratios, delay, queue lengths and LOS, except for Trafalgar and Cornwall Road, Trafalgar and South Service Road, and Trafalgar Road and 403 WB Off Ramp intersections. However, these constraints are largely attributed to the projected corridor growth and background developments in the area. Overall, the analysis has determined that the proposed development is expected to have minimal impact on the study.
- Under the 2037 future total weekday AM and PM peak hour conditions, signal optimization was performed for the intersections of Trafalgar and Cornwall Road, Trafalgar and South Service Road, and Trafalgar Road and 403 WB Off Ramp intersections. Overall, the analysis has determined that the proposed development is expected to have minimal impact on the study area.
- A total of 1,013 vehicle parking spaces will be provided consisting of 881 residential and 132 visitor/retail parking spaces. The proposed parking supply is not consistent with the minimum requirements outlined in By-law 2014-014. However, given the area of the site within a MTSA the proposed supply should be deemed acceptable
- Three (3) loading spaces will be provided in accordance with the Town of Oakville's By-Law 2014-014. Swept path diagrams have been provided demonstrating vehicular and loading functionality.
- Transportation Demand Management measures will be implemented to reduce the proportion of single occupant vehicle (SOV) trips use to and from the subject site.

DRAFT

DRAFT



This is Exhibit "Q" referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

SARA ERSKINE

Alliance United Corporation

NOISE IMPACT STUDY

Proposed Mixed-Use Development

177 Cross Avenue
Town of Oakville

July 2024
24010.01

Distribution List

No. of Copies	Association / Company	Note
1	Alliance United Corporation	PDF

Disclaimer

This Report represents the work of LEA Consulting Ltd ("LEA") solely for the client identified above and is to be used exclusively for the purpose set out in the Report. This Report may not be relied upon for detailed implementation, or any other purpose not specifically identified within this Report. The material in this Report reflects the judgment of LEA based on the information available to them at the time of preparation. Unless manifested incorrectly, LEA assumes information provided by others is accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented. Unless otherwise required by law or regulation, this Report shall not be shared with any third party without the written consent of LEA. This Document is confidential and prepared solely for the use of Alliance United Corporation. Neither LEA, its sub-consultants nor their respective employees assume any liability for any reason, including, but not limited to, negligence, to any party other than Alliance United Corporation for any information or representation herein. This report permits the Town of Oakville and Halton Region to make reliance on the findings and conclusions presented in the report.

DRAFT

CANADA | INDIA | AFRICA | ASIA | MIDDLE EAST

TABLE OF CONTENTS

1 Introduction 2
2 Noise Sources 2
2.1 Transportation Noise Sources 2
2.1.1 Road Traffic 2
2.1.2 Rail Sources 2
2.1.3 Air Traffic 3
2.2 Stationary Noise Sources 3
3 Vibration Sources 3
3.1 Transportation Vibration Sources 3
3.1.1 Rail Sources 3
4 Noise Criteria 3
4.1 Transportation Noise 3
4.1.1 Indoors 3
4.1.2 Outdoors 4
4.2 Stationary Noise 5
5 Noise Impact Assessment 5
5.1 Transportation Noise Assessment 5
5.1.1 Road Traffic Data 5
5.1.2 Rail Traffic Data 6
5.1.3 Transportation Noise Predictions 7
5.2 Stationary Noise Assessment 11
5.2.1 Stationary Noise Data 12
5.2.2 Stationary Noise Predictions 13
6 Noise Abatement Requirements 15
6.1 Indoor Living Areas and AC/Ventilation Requirements 15
6.1.1 Building Façade Constructions 15
6.1.2 Ventilation Requirements 16
6.2 Outdoor Living Areas and Noise Barriers 17
7 Conclusions & Recommendations 18
8 Warning Clauses 20
9 References 21

DRAFT

LIST OF TABLES AND FIGURES

Table 1: MECP Sound Level Limits for Indoor Spaces 4
Table 2: MECP Ventilation Requirements 4
Table 3: MECP Sound Level Limits for Outdoor Living Area 4
Table 4: MECP Sound Level Limits (1-hour Equivalent) for Stationary Noise Sources in Class 1 Area 5
Table 5: Summary of Traffic Data 6
Table 6: Rail Data Inputs Summary for STAMSON Noise Model 7
Table 7: Predicted (Unattenuated) Transportation Sound Levels (Plane of Window and OLA) 7
Table 8: Receptor Details for Stationary Noise Assessment 12
Table 9: HVAC RTUs Octave Band Sound Power Data 13
Table 10: Predicted Stationary Sound Levels at Critical Receptor Locations 14
Table 11: Recommended Noise Control Measures for Indoor Spaces – Initial Estimation 16
Table 12: Recommended Noise Control Measures for Indoor Spaces – Secondary Estimation 16
Table 13: Sample of Predicted Attenuated Sound Levels (OLA) – Initial Estimation 18

Figure 1: Key Plan showing Site Location and Area
Figure 2: Transportation Noise Façade Receptor Locations – Site Plan
Figure 3: Transportation Noise OLA Receptor Locations – Site Plan
Figure 4: Proposed Parapets - Outdoor Amenity Areas
Figure 5: Receptor Locations and Noise Impact Contours at 183.7 m height, Daytime (07:00 – 19:00)

APPENDICES

APPENDIX A COPY OF THE SITE PLAN
APPENDIX B TRAFFIC DATA
APPENDIX C DETAILED STAMSON ANALYSIS
APPENDIX D SOUND TRANSMISSION CLASS (STC) CALCULATION
APPENDIX E SAMPLE CADNA/A ANALYSIS

DRAFT

SUMMARY

LEA Consulting Ltd. (LEA) has been retained by Alliance United Corporation to prepare a Noise Impact Study (NIS) in support of the proposed mixed-use development located at 177 Cross Avenue in the Town of Oakville. This study examined the future noise environment in the development area and evaluated its impact potential on the future noise-sensitive receptors. Transportation noise assessment was accomplished based on the Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT) using the Ontario Ministry of the Environment, Conservation and Parks (MECP) STAMSON noise prediction software. The stationary sound level predictions were modelled using the computer software Cadna/A, which incorporates the MECP-approved ISO 9613-2 method of prediction. Based on the analysis, the noise impact from the environment on the proposed development is not within the applicable MECP limits. Mitigative measures are required to meet the MECP limits.

Transportation Noise Sources– Outdoor Living Area (OLA):

- Noise mitigation measures are required for the outdoor amenity area located on Level 7 of the proposed development. Details of the proposed parapets are mentioned in Section 6.2 of this report. Future occupants must be made aware of the allowed exceedance of the MECP sound level limit through the use of Warning Clause Type 'B' in Agreements of Purchase/Sale or Lease/Rental agreements and/or Condominium declarations.

Transportation Noise Sources – Indoor:

- Exterior wall construction with a minimum of STC 54 are required for living/dining area and bedroom area on all façades of the proposed development;
- Windows with a minimum of STC 46 are required for living/dining area and bedroom area on all façades of Tower A within the proposed development;
- Windows with a minimum of STC 44 are required for living/dining area and bedroom area on all façades of Tower B within the proposed development;
- Windows with a minimum of STC 41 are required for living/dining area and bedroom area on all façades of Tower C within the proposed development;
- Windows with a minimum of STC 42 are required for living/dining area and bedroom area on all façades of Tower D within the proposed development; and
- The residential units on all façades of the proposed development must be provided with a mandatory central air conditioning system and should include Warning Clause Type 'D' in their Agreements of Purchase/Sale or Lease/Rental agreements and/or Condominium declarations. It is anticipated that the proposed development will provide a central air conditioning system; thus, this condition is expected to be met.

Stationary Noise Sources:

- No mitigation measures are required for points of reception affected by stationary noise sources.

DRAFT

1 INTRODUCTION

LEA Consulting Ltd. (LEA) has been retained by Alliance United Corporation to prepare a Noise Impact Study (NIS) in support of the proposed mixed-use development located at 177 Cross Avenue in the Town of Oakville.

The proposed development has an approximate Ground Floor Area (GFA) of 132,978 m^2 and is currently occupied by low-rise commercial buildings. The proposed development consists of four (4) residential towers with ground-floor retail space. Tower A is proposed to be sixty (60) storeys, Tower B is proposed to be fifty-five (55) storeys, Tower C is proposed to be fifty (50) storeys, and Tower D is proposed to be six (6) storeys. Six (6) levels of underground parking are also proposed for the development.

The subject site is located on the northwest corner of the Cross Avenue and Argus Road intersection. Surrounding land uses include commercial buildings to the east, west, and north of the subject site. The Oakville GO Station is located directly south of the subject site.

This study examined the existing and future noise environment in the development area and evaluated its potential impact on the future noise-sensitive receptors. This report investigates the noise control measures that are required for the development to meet the noise guidelines of the Ontario Ministry of the Environment, Conservation and Parks (MECP) and to satisfy the requirements of the Town of Oakville and Halton Region. This noise report is based on the methodology and approach outlined in the MECP guideline NPC-300 *"Stationary and Transportation Sources – Approval and Planning"* (August 2013).

Figure 1 provides a key plan showing the location of the proposed development.

This report is based on the site plan prepared by architects-Alliance, dated February 23, 2024. A copy of the site plan is shown in Figure 2 and Appendix A.

2 NOISE SOURCES

2.1 TRANSPORTATION NOISE SOURCES

2.1.1 Road Traffic

Vehicular traffic along Trafalgar Road, Argus Road, Cornwall Road, Cross Avenue and Highway 403/Queen Elizabeth Way (QEW) are the dominant sources of transportation noise that could impact the subject site.

2.1.2 Rail Sources

According to *"Guidelines for New Development in Proximity to Railway Operations"* developed by the Federation of Canadian Municipalities and the Railway Association of Canada, it is recommended to assess the predicted noise impact on any new proposed development within three hundred (300) metres of the right-of-way of any rail line. The subject site is located approximately two hundred (200) metres to the north of the right-of-way of the Metrolinx GO rail corridor. Therefore, the distance to the rail line corridor is less than three hundred (300) metres, and it may have an adverse noise impact on the sensitive areas at the subject site. No other significant sources of rail noise were identified near the proposed development.

2.1.3 Air Traffic

This development is not impacted by aircraft noise sources.

2.2 STATIONARY NOISE SOURCES

As indicated in the client provided architectural plans, the Heating, Ventilation, and Air Conditioning (HVAC) Rooftop Units (RTUs) systems related to the proposed development will be contained inside a mechanical penthouse/room. Thus, the subject site does not include stationary noise sources that could impact the nearby noise-sensitive areas.

Our preliminary review indicated that the site may be impacted by noise generated from the rooftop HVAC units related to the existing buildings surrounding the subject site. These have been identified as the dominant potential source of stationary noise that could impact the noise-sensitive areas of the proposed development. Accordingly, a stationary noise assessment is required.

3 VIBRATION SOURCES

3.1 TRANSPORTATION VIBRATION SOURCES

3.1.1 Rail Sources

According to *"Guidelines for New Development in Proximity to Railway Operations"* developed by the Federation of Canadian Municipalities and the Railway Association of Canada, it is recommended to assess the predicted vibration impact on any new proposed development within seventy-five (75) metres of the right-of-way of any rail line. The subject site is located approximately two hundred (200) metres to the north of the right-of-way of Metrolinx GO rail line. Therefore, the distance to the rail corridor is more than seventy-five (75) metres, and it is expected that there will be no adverse vibration impact on the sensitive areas at the subject site. Furthermore, no other significant sources of vibration were identified near the proposed development. As such, our proposed study will not include a vibration impact assessment on this basis.

4 NOISE CRITERIA

4.1 TRANSPORTATION NOISE

4.1.1 Indoors

The indoor noise level impact due to road traffic was examined as per the noise criteria outlined in the MECP guidelines. The indoor sound level limit due to road traffic for a living or dining room area during the daytime (07:00-23:00) and nighttime (23:00-07:00) hours are a $L_{eq-16hr}$ and L_{eq-8hr} of 45 dBA, respectively. The indoor sound level limit due to road traffic for a bedroom during daytime is a $L_{eq-16hr}$ of 45 dBA and during the nighttime hours an L_{eq-8hr} of 40 dBA. Moreover, the indoor sound level limit due to rail traffic for a living or dining room area during the daytime and nighttime hours are a $L_{eq-16hr}$ and L_{eq-8hr} of 40 dBA, respectively.

Further, the indoor sound level limit due to rail traffic for a bedroom during the daytime is a $L_{eq-16hr}$ of 40 dBA and during the nighttime hours an L_{eq-8hr} of 35 dBA. To satisfy the limits set out by the MECP guidelines, the MECP has provided a basis for the type of windows, doors, and exterior walls that will be required based on projected outdoor noise levels.

The required limits as per NPC-300 guidelines are summarised in Table 1. Moreover, the ventilation requirements from transportation noise sources as per NPC-300 guideline is presented in Table 2.

Table 1: MECP Sound Level Limits for Indoor Spaces

Type of Space	Time Period	Sound Level Limits	
		Road	Rail
Living/Dining, Den Areas of Residences	07:00 – 23:00	$L_{eq\ (16\ hours)}$: 45 dBA	$L_{eq\ (16\ hours)}$: 40 dBA
	23:00 – 07:00	$L_{eq\ (8\ hours)}$: 45 dBA	$L_{eq\ (8\ hours)}$: 40 dBA
Sleeping quarters	07:00 – 23:00	$L_{eq\ (16\ hours)}$: 45 dBA	$L_{eq\ (16\ hours)}$: 40 dBA
	23:00 – 07:00	$L_{eq\ (8\ hours)}$: 40 dBA	$L_{eq\ (8\ hours)}$: 35 dBA

Table 2: MECP Ventilation Requirements

Plane of Window Sound Level (L_{eq})	Ventilation Requirement	Warning Clause Requirement
Daytime (07:00 to 23:00)		
≤55 dBA	None	None
55 ≤65 dBA	Forced air heating with provisions for the installation of central air conditioning	Recommended
> 65 dBA	Central air conditioning	Required
Nighttime (23:00 to 07:00)		
≤50	None	None
50 ≤60	Forced air heating with provisions for the installation of central air conditioning.	Recommended
> 60	Central air conditioning	Required

4.1.2 Outdoors

Guidelines set out by the MECP recommend that equivalent noise levels (i.e. $L_{eq-16hr}$) in outdoor living areas should not exceed 55 dBA. If the predicted $L_{eq-16hr}$ is greater than 60 dBA, noise control measures should be implemented to reduce the level to 55 dBA. If it is not technically, economically, or administratively feasible to achieve a level of 55 dBA, noise levels between 55 dBA and 60 dBA may be acceptable, provided that the future occupants of the dwellings are made aware of the potential noise problems through a warning clause. The required limits are summarised in Table 3.

Table 3: MECP Sound Level Limits for Outdoor Living Area

Type of Space	Time Period	Sound Level Limits
		Road and Rail
Outdoor Living Area (OLA)	07:00 – 23:00	$L_{eq\ (16\ hours)}$: 55 dBA (may consider noise control measures) $L_{eq\ (16\ hours)}$: 60 dBA (noise control measures are required)

4.2 STATIONARY NOISE

The noise assessment criteria for stationary noise are based on the Ministry of the Environment, Conservation and Parks (MECP) Publication NPC-300 *"Environmental Noise Guideline, Stationary and Transportation Sources - Approval and Planning"* dated 2013.

In accordance with the MECP Guideline NPC-300, the surrounding area is considered to be located in a Class 1 acoustical environment. In a Class 1 area, the background sound levels during the daytime (07:00 to 19:00), evening (19:00 to 23:00) and nighttime (23:00 to 07:00) periods are dominated by the activities of people, usually road traffic, often referred to as *"urban hum"*. The sound level limits for stationary noise sources are summarised in Table 4 below.

Table 4: MECP Sound Level Limits (1-hour Equivalent) for Stationary Noise Sources in Class 1 Area

Time Period	Time of Day	Class 1 Area - Sound Level Limits[1] L_{eq-1hr} (dBA)
Outdoor Points of Reception	07:00 – 19:00 (Daytime)	50
	19:00 – 23:00 (Evening)	50
Plane of Window of Noise Sensitive Spaces	07:00 – 19:00 (Daytime)	50
	19:00 – 23:00 (Evening)	50
	23:00-07:00 (Nighttime)	45

(1) or the minimum existing hourly background level L_{eq}, whichever is higher

5 NOISE IMPACT ASSESSMENT

5.1 TRANSPORTATION NOISE ASSESSMENT

As noted in Section 2.1.1, the study area's dominant transportation traffic noise source is traffic noise generated from Trafalgar Road, Argus Road, Cornwall Road, Cross Avenue and Highway 403/Queen Elizabeth Way (QEW). Trafalgar is located to the east of the subject site and has a posted speed limit of 60 km/h. Argus Road is located immediately to the east of the subject site and has an assumed speed limit of 50 km/h. Cornwall Road is located to the south of the subject site and has a posted speed limit of 60 km/h. Cross Avenue is located immediately to the south of the subject site and has an assumed speed limit of 50 km/h. Highway 403/QEW is located to the north of the subject site and has a posted speed limit of 100 km/h.

Noise level calculations were performed in accordance with the methodology outlined in MECP guidelines, including the Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT).

5.1.1 Road Traffic Data

LEA conducted surveys to obtain turning movement counts at intersections surrounding the subject site on May 4, 2023.

The annual average daily traffic (AADT) and medium/heavy truck percentages were calculated using turning movement counts dated March 4, 2023, for the Trafalgar Road and Argus Road intersection during the weekday AM and PM peak periods for Trafalgar Road and Argus Road. The AADT and medium/heavy truck percentages were calculated using turning movement counts dated March 4, 2023, for the Trafalgar Road and

Cornwall Road intersection during the weekday AM and PM peak periods for Cornwall Road. The average AADT and medium/heavy truck percentages were calculated using turning movement counts dated March 4, 2023, for the Cross Avenue and Argus Road intersection during the weekday AM and PM peak periods for Cross Avenue.

The AADT and the annual average daily truck traffic (AADTT) for Highway 403/QEW within the vicinity of the subject site were obtained from MTO iCorridor data.

This data was escalated to the year 2034 with a yearly growth rate of 2% for Argus Road and Cornwall Avenue.

Using historical data for the intersection of Trafalgar Road and Cross Avenue dated March 10, 2015, and November 6, 2019, the compound annual growth rate was calculated for Trafalgar Road and Cross Avenue. The data for Trafalgar Road and Cross Avenue was escalated to the year 2034 with a calculated yearly growth rate of 1.20% and 0.12%, respectively. Historical MTO iCorridor data from 1988-2019 was used to calculate the compound annual growth rate for Highway 403/QEW. The data for Highway 403/QEW was escalated to the year 2034 with a calculated yearly growth rate of 1.53%

All buses were considered to be medium trucks, while the heavy/medium truck split within the *"trucks"* classification was determined based on the *"Ministry of Transportation Ontario (MTO) Environmental Guide for Noise"*, dated February 2022.

The day/night traffic volume splits were assumed to be 90/10 for Trafalgar Road, Argus Road, Cornwall Road, and Cross Avenue. The day/night traffic volume splits were assumed to be 67/33 for Highway 403/QEW. All roadways were modelled as one (1) segment, with the exception of Highway 403/QEW, which was modelled as two(2) segments (eastbound and westbound) for the purpose of STAMSON transportation analysis. Sound level distance adjustments were applied to receptors wherever applicable.

Road traffic noise predictions were based on the road traffic data outlined in Table 5. Road traffic data is included in Appendix A.

Table 5: Summary of Traffic Data

Traffic Data	Future AADT	Day/Night Ratio	Percentage of Medium Trucks	Percentage of Heavy Trucks	Posted Speed Limit
Trafalgar Road	4,7649	90/10[1]	0.62%	0.99%	60 km/h
Argus Road	5,272	90/10[1]	1.81%	2.90%	50 km/h[1]
Cornwall Road	25,638	90/10[1]	0.41%	0.66%	60 km/h
Cross Avenue	13,679	90/10[1]	1.20%	1.91%	50 km/h[1]
Highway 403/QEW (EB)	133,302	67/33[1]	2.25%	6.75%	100 km/h
Highway 403/QEW (WB)	133,302	67/33[1]	2.25%	6.75%	100 km/h

(1) Assumed

5.1.2 Rail Traffic Data

The subject site is located within three hundred (300) metres of the Metrolinx Oakville Subdivision, which services the Lakeshore West GO Rail services. Rail data was obtained from Metrolinx. Table 6 summarises the rail traffic data used for the noise assessment.

Table 6: Rail Data Inputs Summary for STAMSON Noise Model

Traffic Data	Number of Passenger Cars	Number of Locomotives	Locomotive Type	Daytime Volume	Nighttime Volume	Average Speed
Lakeshore West GO Rail	10	1	Diesel	132	20	129km/h
			Electric	222	34	

5.1.3 Transportation Noise Predictions

Noise impact assessments on the proposed development were performed with consideration of the predicted future volume traffic. Daytime and nighttime impacts from transportation noise were investigated. Distance adjustment corrections were applied wherever applicable.

As noted in Section 0, the proposed development consists of four (4) residential towers with ground-floor retail. Tower A is proposed to be sixty (60) storeys, Tower B is proposed to be fifty-five (55) storeys, Tower C is proposed to be fifty (50) storeys, and Tower D is proposed to be six (6) storeys. Six (6) levels of underground parking are also proposed for the development. The latest site plan identified elevated outdoor amenity areas that can be considered Outdoor Living Areas (OLAs) that may be negatively impacted by road traffic and rail noise. Therefore, OLA receptors were considered for the proposed development.

It should be noted that a balcony/terrace that is less than four (4) meters in depth is not considered an OLA in accordance with the MECP NPC-300 noise guidelines. The locations of the façade and outdoor receptors are shown in Figure 2 and Figure 3, respectively.

Table 7 shows the unattenuated daytime and nighttime predicted L_{eq}'s due to road traffic at the noise-sensitive receptors within the proposed development. Façade receptors are labelled as R01 to R22 in Figure 3. Outdoor receptors are labelled as OLA01 to OLA05 in Figure 4. Detailed sound-level calculations are provided in Appendix C.

Table 7: Predicted (Unattenuated) Transportation Sound Levels (Plane of Window and OLA)

Receptor	Receptor Height (m)	Description	Source	Distance (m)	Overall Leq (dBA) Day	Overall Leq (dBA) Night
R01	183.70[1]	Tower A - Northwesterly Façade at Level 60	Cornwall Road	425	72	71
			Cross Avenue	120		
			Highway 403 (EB)	210		
			Highway 403 (WB)	240		
			GO Train	305		
R02	183.70[1]	Tower A - Southwesterly Façade at Level 60	Cornwall Road	405	72	71
			Cross Avenue	100		
			Highway 403 (EB)	230		
			Highway 403 (WB)	260		
			GO Train	285		
R03	183.70[1]	Tower A - Southerly Façade at Level 60	Trafalgar Road	317	68	63
			Argus Road	65		
			Cornwall Road	403		
			Cross Avenue	98		
			GO Train	278		

Receptor	Receptor Height (m)	Description	Source	Distance (m)	Overall Leq (dBA) Day	Overall Leq (dBA) Night
R04	183.70[1]	Tower A - Southeasterly Façade at Level 60	Trafalgar Road	315	72	71
			Argus Road	63		
			Cornwall Road	405		
			Cross Avenue	100		
			Highway 403 (EB)	230		
			Highway 403 (WB)	260		
			GO Train	280		
R05	183.70[1]	Tower A - Northeasterly Façade at Level 60	Trafalgar Road	325	72	71
			Argus Road	63		
			Cornwall Road	425		
			Cross Avenue	120		
			Highway 403 (EB)	210		
			Highway 403 (WB)	240		
			GO Train	303		
R06	183.70[1]	Tower A - Northerly Façade at Level 60	Trafalgar Road	327	74	74
			Argus Road	65		
			Highway 403 (EB)	208		
			Highway 403 (WB)	238		
R07	168.95[2]	Tower B - Northwesterly Façade at Level 55	Cornwall Road	370	72	71
			Cross Avenue	65		
			Highway 403 (EB)	260		
			Highway 403 (WB)	290		
			GO Train	250		
R08	168.95[2]	Tower B - Southwesterly Façade at Level 55	Cornwall Road	335	72	70
			Cross Avenue	30		
			Highway 403 (EB)	295		
			Highway 403 (WB)	325		
			GO Train	215		
R09	168.95[2]	Tower B - Southerly Façade at Level 55	Trafalgar Road	295	70	64
			Argus Road	72		
			Cornwall Road	333		
			Cross Avenue	28		
			GO Train	213		
R10	168.95[2]	Tower B - Southeasterly Façade at Level 55	Trafalgar Road	293	71	69
			Argus Road	70		
			Cornwall Road	335		
			Cross Avenue	30		
			Highway 403 (EB)	295		
			Highway 403 (WB)	325		

DRAFT

Receptor	Receptor Height (m)	Description	Source	Distance (m)	Overall Leq (dBA) Day	Overall Leq (dBA) Night
			GO Train	215		
R11	168.95[2]	Tower B - Northeasterly Façade at Level 55	Trafalgar Road	313	71	69
			Argus Road	70		
			Cornwall Road	370		
			Cross Avenue	65		
			Highway 403 (EB)	260		
			Highway 403 (WB)	290		
			GO Train	250		
R12	168.95[2]	Tower B - Northerly Façade at Level 55	Trafalgar Road	315	71	71
			Argus Road	72		
			Highway 403 (EB)	258		
			Highway 403 (WB)	288		
R13	154.20[3]	Tower C - Northwesterly Façade at Level 50	Cornwall Road	355	68	66
			Cross Avenue	50		
			Highway 403 (EB)	280		
			Highway 403 (WB)	310		
			GO Train	235		
R14	154.20[3]	Tower C - Southwesterly Façade at Level 50	Cornwall Road	355	66	64
			Cross Avenue	50		
			Highway 403 (EB)	295		
			Highway 403 (WB)	325		
			GO Train	215		
R15	154.20[3]	Tower C - Southerly Façade at Level 50	Trafalgar Road	245	70	64
			Argus Road	15		
			Cornwall Road	337		
			Cross Avenue	32		
			GO Train	213		
R16	154.20[3]	Tower C - Southeasterly Façade at Level 50	Trafalgar Road	243	71	70
			Argus Road	13		
			Cornwall Road	339		
			Cross Avenue	34		
			Highway 403 (EB)	295		
			Highway 403 (WB)	325		
			GO Train	215		
R17	154.20[3]	Tower C - Northeasterly Façade at Level 50	Trafalgar Road	253	71	70
			Argus Road	13		
			Cornwall Road	353		
			Cross Avenue	48		
			Highway 403 (EB)	280		

DRAFT

Receptor	Receptor Height (m)	Description	Source	Distance (m)	Overall Leq (dBA) Day	Overall Leq (dBA) Night
			Highway 403 (WB)	310		
			GO Train	230		
R18	154.20[3]	Tower C - Northerly Façade at Level 50	Trafalgar Road	255	72	71
			Argus Road	15		
			Highway 403 (EB)	278		
			Highway 403 (WB)	308		
R19	21.30[4]	Tower D - Westerly Façade at Level 6	Cornwall Road	435	71	71
			Cross Avenue	125		
			Highway 403 (EB)	205		
			Highway 403 (WB)	235		
			GO Train	308		
R20	21.30[4]	Tower D - Southerly Façade at Level 6	Trafalgar Road	87	66	61
			Argus Road	17		
			Cornwall Road	432		
			Cross Avenue	120		
			GO Train	303		
R21	21.30[4]	Tower D - Easterly Façade at Level 6	Trafalgar Road	285	72	71
			Argus Road	15		
			Cornwall Road	438		
			Cross Avenue	125		
			Highway 403 (EB)	205		
			Highway 403 (WB)	235		
			GO Train	305		
R22	21.30[4]	Tower D - Northerly Façade at Level 6	Trafalgar Road	295	71	71
			Argus Road	20		
			Highway 403 (EB)	200		
			Highway 403 (WB)	230		
OLA01	25.80[5]	Towers A & B Outdoor Amenity Area at Level 7 (Northwest Corner)	Trafalgar Road	340	64[6]	n/a
			Argus Road	90		
			Cornwall Road	400		
			Cross Avenue	95		
			Highway 403 (EB)	230		
			Highway 403 (WB)	260		
			GO Train	285		
OLA02	25.80[5]	Towers A & B Outdoor Amenity Area at Level 7 (Southwest Corner)	Trafalgar Road	330	64[6]	n/a
			Argus Road	90		
			Cornwall Road	382		
			Cross Avenue	72		
			Highway 403 (EB)	255		

DRAFT

Receptor	Receptor Height (m)	Description	Source	Distance (m)	Overall Leq (dBA) Day	Overall Leq (dBA) Night
			Highway 403 (WB)	285		
			GO Train	257		
OLA03	25.80[5]	Towers A & B Outdoor Amenity Area at Level 7 (Southeast Corner)	Trafalgar Road	310	63[6]	n/a
			Argus Road	70		
			Cornwall Road	380		
			Cross Avenue	70		
			Highway 403 (EB)	257		
			Highway 403 (WB)	287		
			GO Train	255		
OLA04	25.80[5]	Tower D Outdoor Amenity Area at Level 7 (Northwest Corner)	Trafalgar Road	320	74[6]	n/a
			Argus Road	50		
			Cornwall Road	445		
			Cross Avenue	130		
			Highway 403 (EB)	200		
			Highway 403 (WB)	230		
			GO Train	315		
OLA05	25.80[5]	Tower D Outdoor Amenity Area at Level 7 (Southeast Corner)	Trafalgar Road	285	68[6]	n/a
			Argus Road	15		
			Cornwall Road	435		
			Cross Avenue	120		
			Highway 403 (EB)	215		
			Highway 403 (WB)	245		
			GO Train	300		

(1) Based on the Level 60 elevation of 182.20 metres plus receptor height of 1.5 metres.
(2) Based on the Level 55 elevation of 167.45 metres plus receptor height of 1.5 metres.
(3) Based on the Level 50 elevation of 152.70 metres plus receptor height of 1.5 metres.
(4) Based on the Level 6 elevation of 19.80 metres plus receptor height of 1.5 metres.
(5) Based on the Level 7 elevation of 24.30 metres plus receptor height of 1.5 metres.
(6) Based on an assumed parapet height of 1.25 metres around the amenity area.

5.2 STATIONARY NOISE ASSESSMENT

The stationary noise assessment is based on the ISO 9613-2 standard: *"Acoustics-Attenuation of sound during propagation outdoors – Part 2: General method of calculation"* (1996). Sound levels due to sources of stationary sound were calculated using the Cadna/A computer software, Version 2020.

As stated before, in Section 2.2, the HVAC RTUs systems related to the proposed development will be contained inside a mechanical penthouse/room. Thus, the subject site does not include stationary noise sources that could impact the nearby noise-sensitive areas as well as itself. However, the noise generated from the rooftop HVAC RTUs related to the existing mixed-use buildings in the proximity of the subject site may have an adverse impact on the noise-sensitive spaces within the site, and a stationary noise assessment is required.

Sound levels were modelled for the worst-case daytime and nighttime hour at the noise-sensitive receptors wherever noise exposure was considered maximum. Locations of the critical noise receptors are shown in Figure 5. The details related to the receptor locations and heights used in the assessment are summarised in Table 8. The directivity of noise emission for applicable noise sources was considered. Sample calculations are available in Appendix E.

Table 8: Receptor Details for Stationary Noise Assessment

Receptor	Description	Receptor Elevation (m)
RP01	Tower A - Westerly Façade at Level 60	183.70[1]
RP02	Tower A - Southerly Façade at Level 60	183.70[1]
RP03	Tower A - Easterly Façade at Level 60	183.70[1]
RP04	Tower A - Northerly Façade at Level 60	183.70[1]
RP05	Tower B - Westerly Façade at Level 55	168.95[2]
RP06	Tower B - Southerly Façade at Level 55	168.95[2]
RP07	Tower B - Easterly Façade at Level 55	168.95[2]
RP08	Tower B - Northerly Façade at Level 55	168.95[2]
RP09	Tower C - Westerly Façade at Level 50	154.20[3]
RP10	Tower C - Southerly Façade at Level 50	154.20[3]
RP11	Tower C - Easterly Façade at Level 50	154.20[3]
RP12	Tower C - Northerly Façade at Level 50	154.20[3]
RP13	Tower D - Westerly Façade at Level 6	21.30[4]
RP14	Tower D - Southwesterly Façade at Level 6	21.30[4]
RP15	Tower D - Westerly Façade at Level 6	21.30[4]
RP16	Tower D - Southeasterly Façade at Level 6	21.30[4]
RP17	Tower D - Easterly Façade at Level 6	21.30[4]
RP18	Tower D - Northeasterly Façade at Level 6	21.30[4]
RP19	Tower D - Northerly Façade at Level 6	21.30[4]
RP20	Towers A & B Outdoor Amenity Area at Level 7	25.80[5]
RP21	Tower D Outdoor Amenity Area at Level 7 (Northwest Corner)	25.80[5]
RP22	Tower D Outdoor Amenity Area at Level 7 (Southeast Corner)	25.80[5]

(1) Based on the Level 60 elevation of 182.20 metres plus receptor height of 1.5 metres.
(2) Based on the Level 55 elevation of 167.45 metres plus receptor height of 1.5 metres.
(3) Based on the Level 50 elevation of 152.70 metres plus receptor height of 1.5 metres.
(4) Based on the Level 6 elevation of 19.80 metres plus receptor height of 1.5 metres.
(5) Based on the Level 7 elevation of 24.30 metres plus receptor height of 1.5 metres.

No additional stationary noise sources were identified. Further details regarding the above-noted stationary noise sources are provided below.

5.2.1 Stationary Noise Data

As mentioned in Section 2.2 of this report, the impact of RTUs mounted on the rooftop of the existing buildings in proximity to the subject site were investigated.

LEA investigated future background developments surrounding the site. There are proposed mixed-use developments being proposed around the site which include the following addresses: 157 & 167 Cross

Avenue, 166 South Service Road, 590 Argus Road, and 217-227 Cross Avenue. It was confirmed through the proposed developments' noise feasibility studies that HVAC units pertaining to the buildings will be contained in mechanical penthouses. As a result, these buildings were modelled with no noise sources but included for future building shielding from the stationary noise sources.

Reference sound power data related to the HVACs mounted on the rooftop of the existing buildings surrounding the subject site were obtained from the manufacturer. As LEA was unable to obtain the exact model number of the existing RTUs related to the buildings surrounding the subject site, the RTU reference data was selected based on the RTUs given the number of observed fans, building use and GFA.. For example, twelve (12) RTUs with one (1) fan were observed on the existing retail building to the west of the proposed development. Thus, twelve (12) five (5) ton RTUs were selected to model sound levels at that building. For the purposes of the noise assessment, conservatively, the duty cycles for all the rooftop mechanical equipment, including HVAC RTUs related to the surrounding buildings, were assumed to be a hundred (100) per cent during daytime hours (07:00-19:00) and evening hours (19:00-23:00) and fifty (50) per cent during the nighttime hours (23:00-07:00). The sound data inputs utilised for this noise modelling assessment are shown Table 9.

Table 9: HVAC RTUs Octave Band Sound Power Data

Source ID	Description	Octave Band Linear Sound Power Level (dB)							
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall Sound Power Level (dBA)
S01-S12, S14-S16, S19, S34-S36, S47-S48	HVAC RTU 5 Tons	86	76	69	71	64	59	54	76
S25, S27, S29, S33, S37-S44	HVAC RTU 7.5 Tons	82	80	76	74	69	64	58	79
S13, S18, S20-S24, S26, S28, S32	HVAC RTU 10 Tons	92	88	87	83	78	72	67	88
S49-S50	HVAC RTU 15 Tons	86	83	84	81	76	72	68	85
S17	HVAC RTU 35 Tons	106	101	90	86	82	78	73	96
S30-S31	4 Fan Chiller	76	81	81	81	73	70	66	84
S46	Cooling Tower	84	79	77	74	76	76	72	83
S45	Make Up Air Unit	84	84	80	76	72	66	60	82

5.2.2 Stationary Noise Predictions

Sound levels were modelled for the worst-case daytime and nighttime hour at the noise-sensitive receptors wherever noise exposure was considered maximum. Locations of the critical noise receptors are shown in Figure 5. The predicted sound levels at the noise-sensitive receptors due to stationary noise emanating from the environment are summarised in Table 10. Detailed Cadna/A analysis printouts are attached in Appendix C.

Table 10: Predicted Stationary Sound Levels at Critical Receptor Locations

Receptor	Period	Sound Level (L_{eq} 1 hour, dBA)	Sound Level Limit (L_{eq} 1 hour, dBA)	Exceeds Sound Level Limits?
RP01	Daytime (07:00-23:00)	45	50	NO
	Nighttime (23:00-07:00)	42	45	NO
RP02	Daytime (07:00-23:00)	42	50	NO
	Nighttime (23:00-07:00)	39	45	NO
RP03	Daytime (07:00-23:00)	37	50	NO
	Nighttime (23:00-07:00)	34	45	NO
RP04	Daytime (07:00-23:00)	39	50	NO
	Nighttime (23:00-07:00)	36	45	NO
RP05	Daytime (07:00-23:00)	42	50	NO
	Nighttime (23:00-07:00)	39	45	NO
RP06	Daytime (07:00-23:00)	32	50	NO
	Nighttime (23:00-07:00)	29	45	NO
RP07	Daytime (07:00-23:00)	25	50	NO
	Nighttime (23:00-07:00)	22	45	NO
RP08	Daytime (07:00-23:00)	35	50	NO
	Nighttime (23:00-07:00)	32	45	NO
RP09	Daytime (07:00-23:00)	32	50	NO
	Nighttime (23:00-07:00)	29	45	NO
RP10	Daytime (07:00-23:00)	23	50	NO
	Nighttime (23:00-07:00)	20	45	NO
RP11	Daytime (07:00-23:00)	30	50	NO
	Nighttime (23:00-07:00)	27	45	NO
RP12	Daytime (07:00-23:00)	35	50	NO
	Nighttime (23:00-07:00)	32	45	NO
RP13	Daytime (07:00-23:00)	40	50	NO
	Nighttime (23:00-07:00)	37	45	NO
RP14	Daytime (07:00-23:00)	24	50	NO
	Nighttime (23:00-07:00)	21	45	NO
RP15	Daytime (07:00-23:00)	18	50	NO
	Nighttime (23:00-07:00)	15	45	NO
RP16	Daytime (07:00-23:00)	24	50	NO
	Nighttime (23:00-07:00)	21	45	NO
RP17	Daytime (07:00-23:00)	24	50	NO
	Nighttime (23:00-07:00)	21	45	NO
RP18	Daytime (07:00-23:00)	29	50	NO
	Nighttime (23:00-07:00)	26	45	NO
RP19	Daytime (07:00-23:00)	38	50	NO
	Nighttime (23:00-07:00)	34	45	NO

DRAFT

Receptor	Period	Sound Level (L_{eq} 1 hour, dBA)	Sound Level Limit (L_{eq} 1 hour, dBA)	Exceeds Sound Level Limits?
RP20	Daytime (07:00-23:00)	34	50	NO
RP21	Daytime (07:00-23:00)	40	50	NO
RP22	Daytime (07:00-23:00)	25	50	NO

Figure 5 illustrates the predicted sound level contours at 182.20 meters in proximity to the subject site's noise-receptors for the daytime period. Based on the figure, stationary sound levels are expected to be below the MECP sound level limits. Thus, mitigation measures are not required for stationary noise sources.

6 NOISE ABATEMENT REQUIREMENTS

6.1 INDOOR LIVING AREAS AND AC/VENTILATION REQUIREMENTS

Indoor sound levels have been examined with respect to MECP Guidelines, as summarised in Section 5.1.3 of this report. The recommendations discussed below should be verified upon the final detailed review of the architectural design of the proposed development.

6.1.1 Building Façade Constructions

According to NPC-300 guideline:

> *"If the nighttime sound level outside the bedroom or living/dining room windows exceeds 60 dBA or the daytime sound level outside the bedroom or living/dining area windows exceeds 65 dBA, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the sound level limits."*

Based on the predicted outdoor façade sound levels shown in Table 7 and the statement above from NPC-300 guideline, window and wall upgrades for all façades are required to meet the MECP indoor sound level limits shown in Table 1.

The required Sound Transmission Class (STC) for upgraded building components was calculated based on the indoor sound level limits shown in Table 1 and the predicted outdoor façade sound levels shown in Table 7. Window-to-floor and wall-to-floor area ratios were assumed to determine the building component requirements for the proposed development dwellings. Once window-to-floor and wall-to-floor area ratios are confirmed at the site plan stage, the recommended STC requirements should be re-assessed by a qualified Acoustic Consultant. Wall construction was assumed to have an STC value of 54; typical concrete wall construction and window STC requirements were ascertained using the method outlined in the "*National Research Council of Canada Building Practice Note 56*" (BPN 56). STC assessments on the proposed development were performed with consideration of the predicted worst-case (highest) noise impact receptor during the daytime and nighttime hours. The STC requirements for the worst-case receptor walls and windows are summarised in Table 11 below. Details related to the STC calculations and values are attached in Appendix D.

Table 11: Recommended Noise Control Measures for Indoor Spaces – Initial Estimation

Receptor	Description	Window STC[1]	Exterior Wall STC
R01	Tower A - Northwesterly Façade at Level 60	46	54
R06	Tower A - Northerly Façade at Level 60	40	54
R07	Tower B - Northwesterly Façade at Level 55	44	54
R17	Tower C - Northeasterly Façade at Level 50	41	54
R21	Tower D - Easterly Façade at Level 6	42	54

(1) Based on a window-to-floor ratio of 50 per cent and a wall-to-floor ratio of 100 per cent.

'--' Exterior window and wall components meeting the minimum requirements of the Ontario Building Code (OBC) will provide adequate acoustical protection for the future indoor daytime and nighttime living spaces

Table 11 shows the STC values for the windows located at all the towers are significant. The window-to-floor ratios were reduced to 40% to decrease the corresponding minimum required window STC values. The newly calculated STC values for these facades are shown in Table 12.

Table 12: Recommended Noise Control Measures for Indoor Spaces – Secondary Estimation

Receptor	Description	Window STC[1]
R01	Tower A - Northwesterly Façade at Level 60	45
R06	Tower A - Northerly Façade at Level 60	39
R07	Tower B - Northwesterly Façade at Level 55	43
R17	Tower C - Northeasterly Façade at Level 50	40
R21	Tower D - Easterly Façade at Level 6	41

(1) Based on a window-to-floor ratio of 50 per cent and a wall-to-floor ratio of 100 per cent.

The exterior wall STC values show that the following are required to mitigate road and rail traffic sound levels to the MECP and City of Toronto indoor sound level criteria:

- Exterior wall construction with a minimum of STC 54 are required for living/dining area and bedroom area on all façades of the proposed development;
- Windows with a minimum of STC 45 are required for living/dining area and bedroom area on all façades of Tower A within the proposed development;
- Windows with a minimum of STC 43 are required for living/dining area and bedroom area on all façades of Tower B within the proposed development;
- Windows with a minimum of STC 40 are required for living/dining area and bedroom area on all façades of Tower C within the proposed development; and
- Windows with a minimum of STC 41 are required for living/dining area and bedroom area on all façades of Tower D within the proposed development.

6.1.2 Ventilation Requirements

Based on the unattenuated noise levels shown in Table 7 and the ventilation requirements in Table 2, the following façades require warning clauses for future purchasers or renters in their Agreements of Purchase/Sale or Lease, as outlined in Section 8 of this report.

DRAFT

- The residential units on all façades of the proposed development must be provided with a mandatory central air conditioning system and should include Warning Clause Type 'D' in their Agreements of Purchase/Sale or Lease/Rental agreements and/or Condominium declarations. It is anticipated that the proposed development will provide a central air conditioning system; thus, this condition is expected to be met.

6.2 OUTDOOR LIVING AREAS AND NOISE BARRIERS

As indicated in Section 5.1.3 of this report, balconies that are less than four (4) meters in depth from the façade are not considered an OLA in accordance with the MECP NPC-300 noise guidelines. Thus, they are excluded from the current assessment.

The transportation noise level predictions in Table 7 indicate that the future impact at the outdoor point of reception, directly exposed to the road and rail traffic, is above the applicable limit at the Level 7 outdoor amenity areas (OLA01 to OLA05). The outdoor amenity areas OLA 01, OLA02, OLA03, OLA04, and OLA05 have unmitigated equivalent sound levels of 64 dBA, 64 dBA, 63 dBA, 74 dBA, and 68 dBA, respectively. Therefore, mitigation would be required at these OLA receptors.

Based on the proposed design drawings, the calculated sound level for the OLA areas assumes that a parapet with a minimum height of 1.25 metres will be provided on the rooftop surrounding the entire OLA area. In order to address the excessive noise level at OLA01, a 3.60-metre-high barrier around the outdoor living area to reduce the noise level to 59 dBA. To address the excessive noise level at OLA02, a 3.60-metre-high barrier around the outdoor living area to reduce the noise level to 60 DBA. To address the excessive noise level at OLA03, a 3.60-metre-high barrier around the outdoor living area to reduce the noise level to 60 dBA. To address the excessive noise level at OLA04, a 3.40-metre-high barrier is required around the outdoor living area to reduce the noise level to 60 dBA. To address the excessive noise level at OLA05, a 3.40-metre-high barrier is required around the outdoor living area to reduce the noise level to 60 dBA.

In order to reduce the noise level to a maximum of 55 dBA for OLA01-OLA03, a 10.70-metre-high barrier around the outdoor living area is required. In order to reduce the noise level to a maximum of 55 dBA for OLA04-OLA05, a 7.20-metre-high barrier around the outdoor living area is required.

All barriers/parapets should be continuous and have a minimum surface density of 20 kg/m^2 with no cracks, gaps or holes. Locations and heights of the assumed and recommended parapets are illustrated in Figure 3 and Figure 4, respectively. The predicated attenuated sound levels at the OLA receptors are shown in Table 13 below.

DRAFT

Table 13: Sample of Predicted Attenuated Sound Levels (OLA) – Initial Estimation

Receptor	Description	Unmitigated Leq (dBA) Day	Mitigated Leq (dBA) Day
OLA01	Towers A & B Outdoor Amenity Area at Level 7 (Northwest Corner)	64[1]	59[2]
OLA02	Towers A & B Outdoor Amenity Area at Level 7 (Southwest Corner)	64[1]	60[2]
OLA03	Towers A & B Outdoor Amenity Area at Level 7 (Southeast Corner)	63[1]	60[2]
OLA04	Tower D Outdoor Amenity Area at Level 7 (Northwest Corner)	74[1]	60[3]
OLA05	Tower D Outdoor Amenity Area at Level 7 (Southeast Corner)	68[1]	60[3]

(1) Based on an assumed parapet height of 1.25 metres around the amenity area.

(2) Based on a parapet height of 3.60 metres around the amenity area.

(3) Based on a parapet height of 3.4 metres around the amenity area.

Based on the attenuated noise levels shown in Table 13 and the sound level limits in Table 3, a warning clause for future purchasers or renters must be made aware of the allowed exceedance of the MECP sound level limits as outlined below and in Section 8 of this report.

- The residential units with access to the outdoor amenity areas of the proposed development must be advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic and rail traffic may on occasion interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits as per Warning Clause Type 'B' in their Agreements of Purchase/Sale or Lease/Rental agreements and/or Condominium declarations.

Should the parapet be removed in future designs, an acoustic barrier will need to be placed.

Appendix C contains sample calculations showing the predicted sound levels.

7 CONCLUSIONS & RECOMMENDATIONS

According to the NPC-300 noise guidelines, the implementation of all required noise control measures should be verified by a qualified Acoustical Consultant. All relevant builder's plans should be certified by an Acoustic Consultant as being in conformance with the recommendations of the approved Noise Impact Study. Further, prior to the final inspection and release for occupancy, the recommended noise control measures within the subject site should be inspected by an Acoustic Consultant. The intent is to ensure that the recommendations and builder's plans are compliant with the approved Noise Impact Study.

Based on the analysis, the impact from the environment on the proposed development is not within the applicable MECP limits. The following mitigative measures are required to meet the MECP limits:

- Exterior wall construction with a minimum of STC 54 are required for living/dining area and bedroom area on all façades of the proposed development;
- Windows with a minimum of STC 46 are required for living/dining area and bedroom area on all façades of Tower A within the proposed development;
- Windows with a minimum of STC 44 are required for living/dining area and bedroom area on all façades of Tower B within the proposed development;

- Windows with a minimum of STC 41 are required for living/dining area and bedroom area on all façades of Tower C within the proposed development;
- Windows with a minimum of STC 42 are required for living/dining area and bedroom area on all façades of Tower D within the proposed development;
- The residential units on all façades of the proposed development must be provided with a mandatory central air conditioning system and should include Warning Clause Type 'D' in their Agreements of Purchase/Sale or Lease/Rental agreements and/or Condominium declarations. It is anticipated that the proposed development will provide a central air conditioning system; thus, this condition is expected to be met;
- Noise mitigation measures are required for the outdoor amenity area located on Level 7 of the proposed development. Details of the proposed parapets are mentioned in Section 6.2 of this report. Future occupants must be made aware of the allowed exceedance of the MECP sound level limit through the use of Warning Clause Type 'B' in Agreements of Purchase/Sale or Lease/Rental agreements and/or Condominium declarations;
- No mitigation measures are required for points of reception affected by stationary noise sources; and
- Appropriate warning clauses have been recommended and are described in detail in Section 8.

Should any of the plans or information used in the completion of this report change, a detailed review should be completed by an Acoustic Consultant to ensure the sound level limits are met.

DRAFT

8 WARNING CLAUSES

The following warning clause should be included in all offers of purchase and sale relating to:

- The residential units with access to the outdoor amenity areas of the proposed development;

Warning Clause Type B:

"Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road and rail traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Town of Oakville and the Ministry of the Environment."

The following warning clause should be included in all offers of purchase and sale relating to:

- The residential units on all façades of the proposed development;

Warning Clause Type D:

"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound levels limits of the Town of Oakville and the Ministry of the Environment, Conservation and Parks."

DRAFT

9 REFERENCES

1. ORNAMENT – "Ontario Road Noise Analysis Method for Environmental and Transportation", Ontario Ministry of the Environment, October 1989.
2. "Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", Ontario Ministry of the Environment, Aug 2013.
3. STEAM – "Sound from Trains Environmental Analysis Method", Ontario Ministry of the Environment, July 1990.
4. International Standard, ISO 9613-2, "Acoustics - Attenuation of Sound During Propagation Outdoors – Part 2: General Method of Calculation", Dec 1996.

DRAFT



LEA Consulting Ltd.

Project ID: 24010.01

Scale: NTS
Drawn by: KTC
Reviewed by: DEA
Date: Jun 24, 2024
Revision: 1

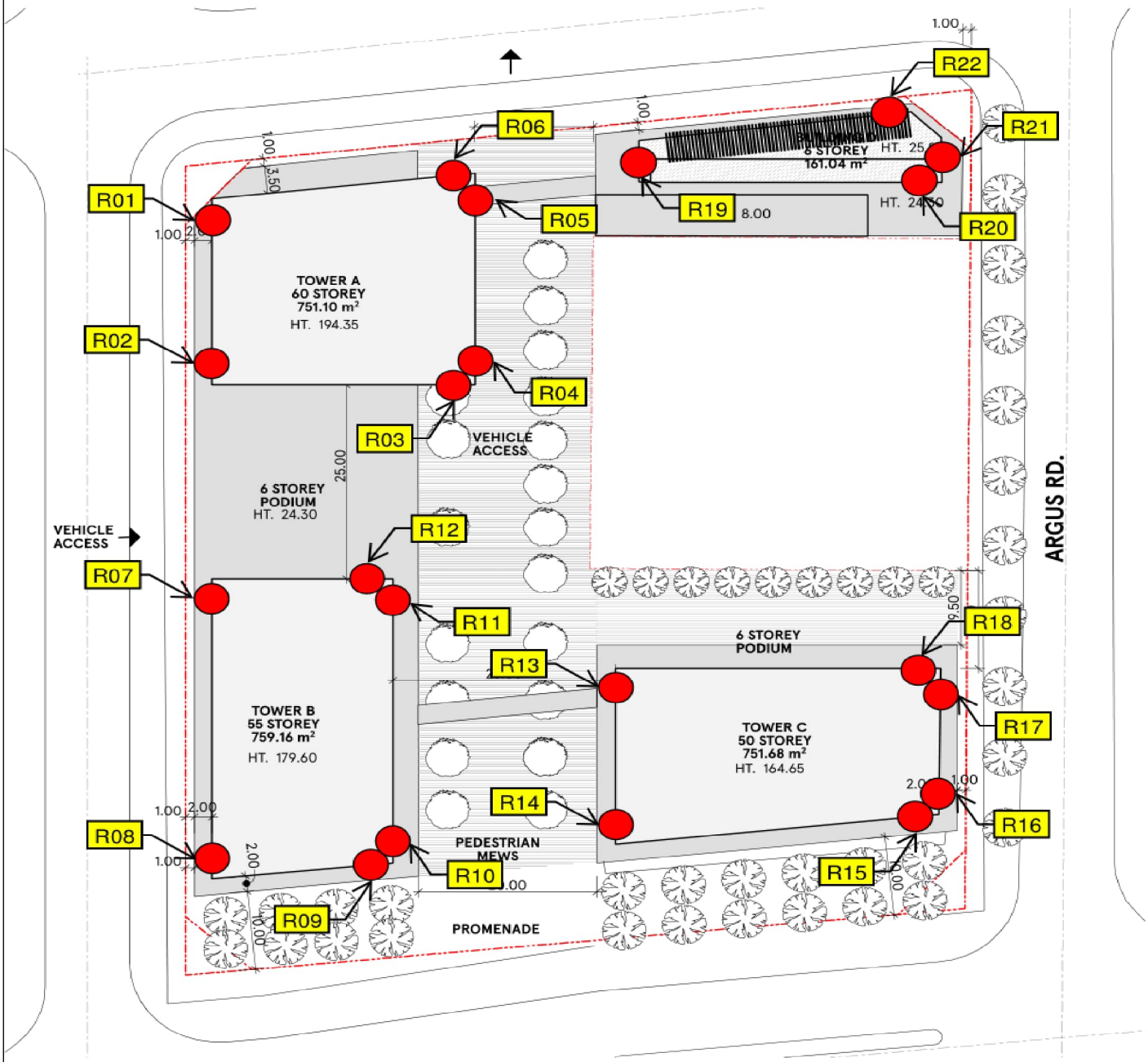
Project Name

177 Cross Avenue, Oakville NIS

Figure Title

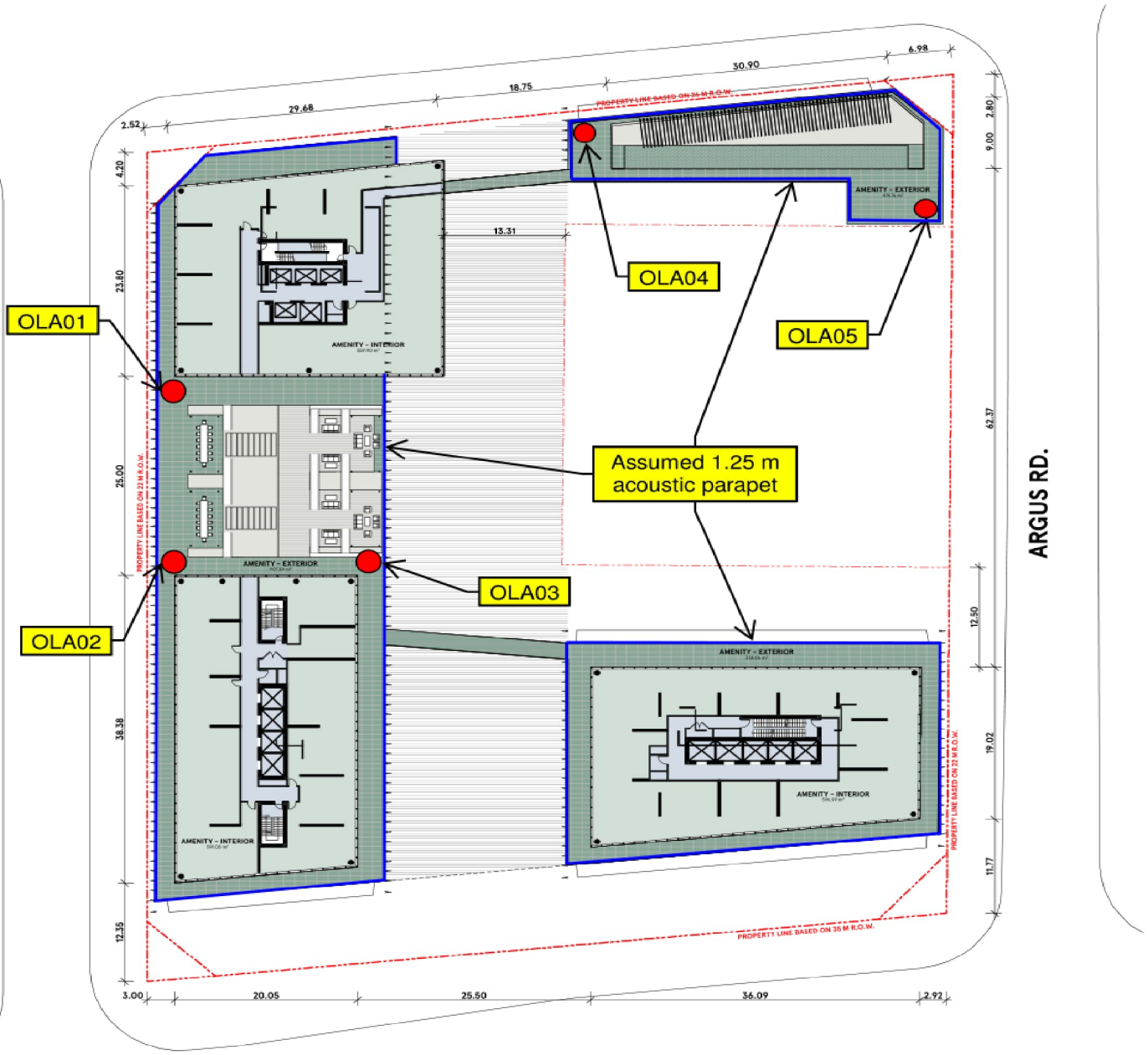
Key Plan Showing Site Location and Area

Figure 1



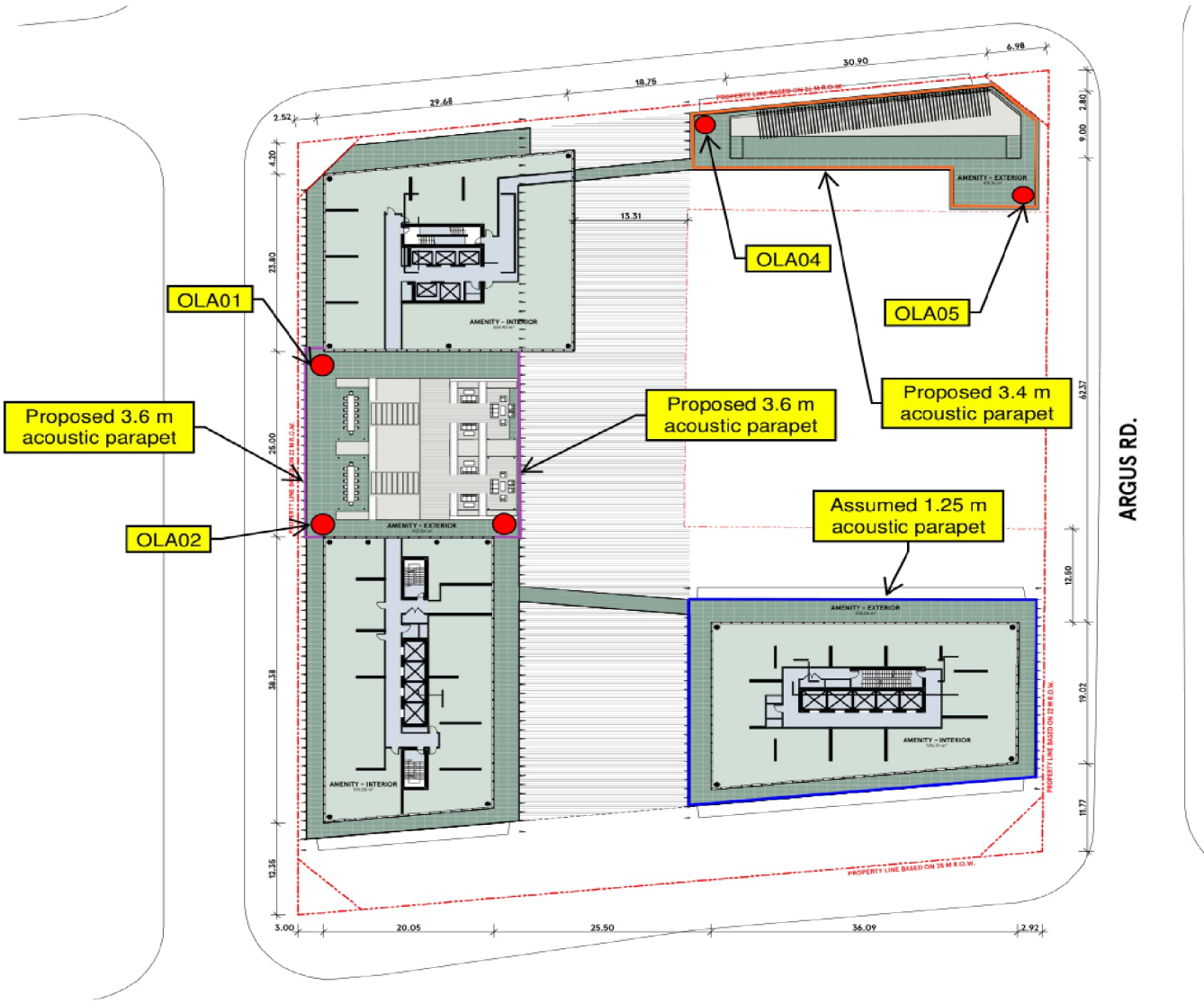
LEA Consulting Ltd.	Project ID: 24010.01 Scale: NTS Drawn by: KTC Reviewed by: DEA Date: Jul 8, 2024 Revision: 1	**Project Name** 177 Cross Avenue, Oakville NIS **Figure Title** Transportation Noise Facade Receptor Locations - Site Plan

Figure 2

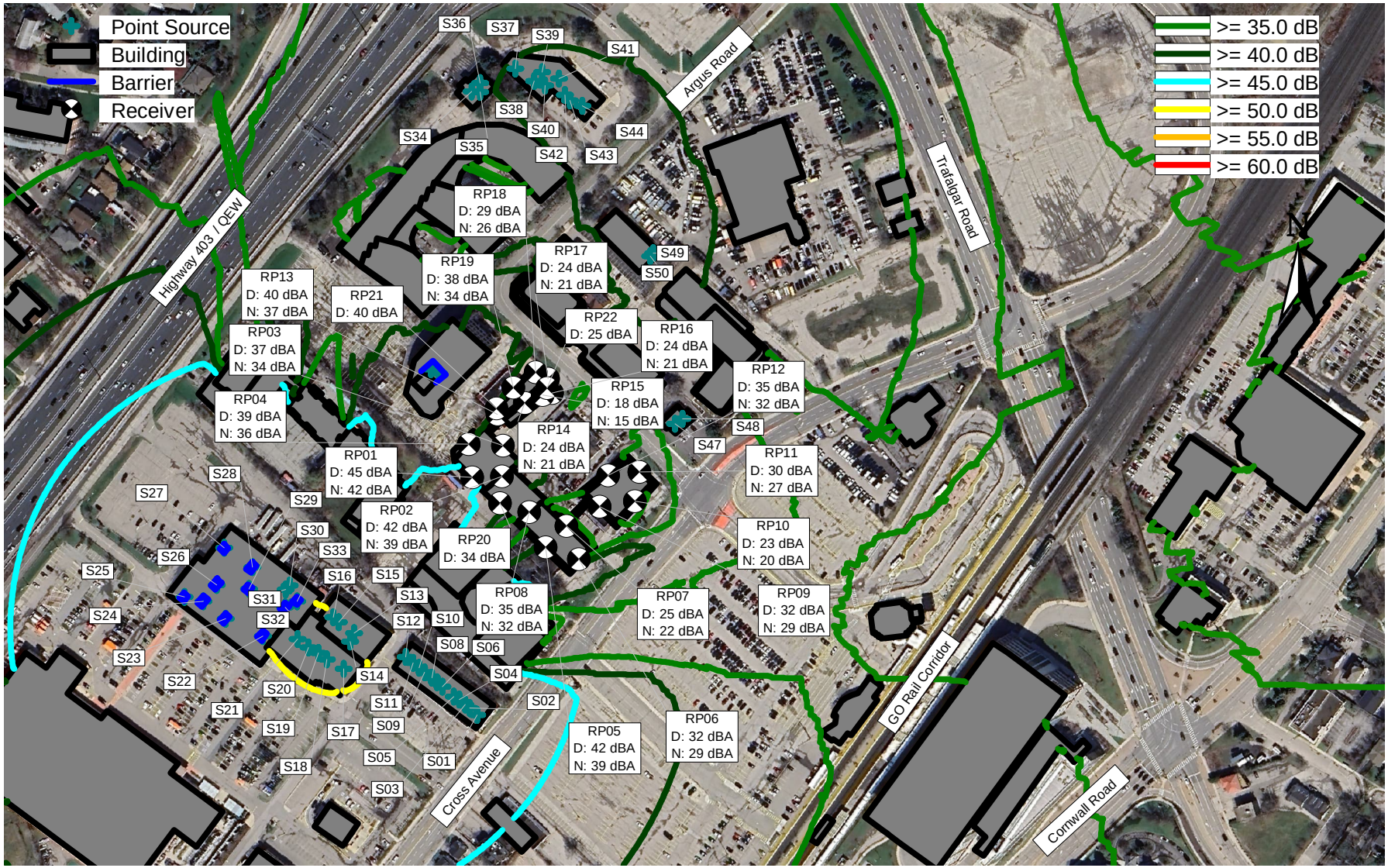


LEA Consulting Ltd.	Project ID: 24010.01 Scale: NTS Drawn by: KTC Reviewed by: DEA Date: Jul 08, 2024 Revision: 1	**Project Name** 177 Cross Avenue, Oakville NIS **Figure Title** Transportation Noise OLA Receptor Locations – Site Plan

Figure 3



LEA Consulting Ltd.	Project ID: 24010.01 Scale: NTS Drawn by: KTC Reviewed by: DEA Date: Jul 08, 2024 Revision: 1	**Project Name** 177 Cross Avenue, Oakville NIS **Figure Title** Proposed Parapets - Outdoor Amenity Areas	**Figure 4**



LEA Consulting Ltd.	Project ID: 24010.01 Scale: NTS Drawn by: KTC Reviewed by: DEA Date: Jul 04, 2024 Revision: 1	**Project Name** 177 Cross Avenue, Oakville NIS **Figure Title** Receptor Locations and Unmitigated Noise Impact Contours at 183.7 m height, Daytime (7:00 – 19:00)

Figure 5

DRAFT

This is Exhibit “R” referred to in
the Affidavit of Sarmad (Sam) Ganni sworn by Sarmad (Sam)
Ganni of the City of Toronto, in the Province of Ontario,
before me at the City of Toronto, in the province of Ontario,
on October 28, 2025, in accordance with O. Reg. 431/20,
Administering Oath or Declaration Remotely.



Commissioner for Taking Affidavits (or as may be)

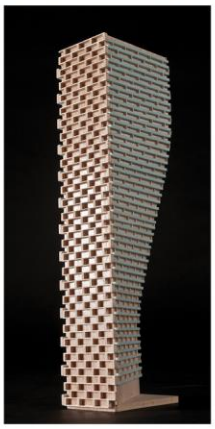
SARA ERSKINE

GRADIENTWIND
ENGINEERS & SCIENTISTS

PEDESTRIAN LEVEL WIND STUDY

177 Cross Avenue
Oakville, Ontario

REPORT: GW23-119-WTPLW







June 10, 2024

DRAFT

PREPARED FOR

Alliance United Corporation
3190 Harvester Road, Suite 201A
Burlington, Ontario
L7N 3T1

PREPARED BY

Angelina Gomes, B.Eng., EIT, Wind Scientist
Nick Petersen, P.Eng., Wind Engineer

127 WALGREEN ROAD, OTTAWA, ON, CANADA K0A 1L0 | 613 836 0934
GRADIENTWIND.COM

EXECUTIVE SUMMARY

This report describes a wind tunnel pedestrian level wind study undertaken to assess wind conditions for a proposed mixed-use development located at 177 Cross Avenue in Oakville, Ontario. Two configurations were studied: (i) *existing scenario*, including all approved, surrounding developments and without the proposed development, and (ii) *proposed scenario* with the proposed development in place. The study involves wind tunnel measurements of pedestrian wind speeds using a physical scale model, combined with meteorological data integration, to assess pedestrian comfort at key areas within and surrounding the study site. Grade-level areas investigated include sidewalks, laneways, walkways, parking areas, nearby transit stops, and building access points. Wind comfort is also evaluated over the Level 7 outdoor amenity terrace. The results and recommendations derived from these considerations are summarized in the following paragraphs and detailed in the subsequent report.

Our work is based on industry standard wind tunnel testing and data analysis procedures, architectural drawings provided by Weston Consulting in May 2024, surrounding street layouts, as well as existing and approved future building massing information obtained from the City of Oakville, and recent site imagery.

A complete summary of the predicted wind conditions is provided in Section 5 of this report, and is also illustrated in Figures 2A-4D, and Tables A1-A3 and B1-B3 in the appendices. Based on wind tunnel test results, meteorological data analysis, and experience with similar developments in the GTA, we conclude that the future wind conditions over many grade-level pedestrian wind-sensitive areas within and surrounding the study site will be acceptable for the intended uses on a seasonal basis. Exceptions include several internal and surrounding pedestrian areas, inclusive of adjacent building entrances, for which mitigation is recommended as described in Section 5.2.

The Level 7 amenity terrace on Building D will be comfortable for sitting or more sedentary activities during the summer, without the need for mitigation. To ensure similarly calm conditions over the Level 7 terrace between Towers A and B, mitigation is recommended as described in Section 5.2.

Within the context of typical weather patterns, which exclude anomalous localized storm events such as tornadoes and downbursts, no areas over the study site, apart from noted areas between Towers A and B, were found to experience conditions that could be considered unsafe.

TABLE OF CONTENTS

1. INTRODUCTION 1

2. TERMS OF REFERENCE 1

3. OBJECTIVES 2

4. METHODOLOGY 2

4.1 Wind Tunnel Context Modelling 2

4.2 Wind Speed Measurements 3

4.3 Meteorological Data Analysis - Pearson International Airport 4

4.4 Pedestrian Comfort and Safety Guidelines 6

5. RESULTS AND DISCUSSION 7

5.1 Pedestrian Comfort Suitability – *Existing Scenario* 8

5.2 Pedestrian Comfort Suitability – *Proposed Scenario* 8

6. CONCLUSIONS AND RECOMMENDATIONS 11

MODEL PHOTOGRAPHS
FIGURES
APPENDICES

Appendix A – Pedestrian Comfort Suitability (Existing Scenario)
Appendix B – Pedestrian Comfort Suitability (Proposed Scenario)
Appendix C – Wind Tunnel Simulation of the Natural Wind
Appendix D – Pedestrian Level Wind Measurement Methodology

1. INTRODUCTION

This report describes a wind tunnel pedestrian level wind (PLW) study undertaken to assess wind conditions for a proposed mixed-use development located at 177 Cross Avenue in Oakville, Ontario. Two configurations were studied: (i) *existing scenario*, including all approved, surrounding developments and without the proposed development, and (ii) *proposed scenario* with the proposed development in place. The study was performed in accordance with industry standard wind tunnel testing techniques, architectural drawings provided by Weston Consulting in May 2024, surrounding street layouts and existing and approved future building massing information, as well as recent site imagery.

2. TERMS OF REFERENCE

The focus of this wind tunnel pedestrian wind study is the proposed mixed-use high-rise development located at 177 Cross Avenue, in Oakville, Ontario. The study site is situated at the northwest corner of the intersection of Cross Avenue and Argus Road.

The study site comprises Tower A (60-storeys) and Tower B (55-storeys) on a shared 6-storey podium along the west perimeter of the site, Tower C (50-storeys) on a 6-storey podium to the southeast, and Building D (6-storeys) at the northeast corner, all above 6 levels of shared below-grade parking. At grade, the residential entrances to Towers A and B are along a covered walkway between the two towers, while the residential entrance to Tower C is along the north elevation. Retail space is located at the east side of Building B, and south ends of Towers C and D. The remainder of each building's ground floor comprises building support services. Levels 2-6 throughout the development are reserved for residential occupancy. At Level 7, all elevations set back to the base of Towers A-C, featuring connected outdoor amenity terraces on Building D and the podium rooftop, and indoor amenities throughout. Above, Towers A-C rise to their respective full heights, each completed by mechanical penthouses.

Regarding wind exposures, the near-field surroundings of the development (defined as an area falling within a 200-metre radius of the site) consist of low-rise commercial buildings and parking areas in all directions. The far-field surroundings (defined as the area beyond the near field and within a two-kilometer radius) are characterized by a mix of low-rise suburban and commercial buildings in all directions, with isolated mid- and high-rise buildings scattered throughout. Sixteen Mile Creek is

approximately 500 metres to the south, Highway 403 is 300 m to the northwest, and Lake Ontario is beyond 2 km to the southeast.

Grade-level areas investigated include sidewalks, laneways, walkways, parking areas, nearby transit stops, and building access points. Wind comfort is also evaluated over the Level 7 outdoor amenity terrace. Figures 1A and 1B illustrates the *existing* and *proposed* study sites and surrounding context, respectively, and Photographs 1 through 6 depict the wind tunnel model used to conduct the study.

3. OBJECTIVES

The principal objectives of this study are to (i) determine pedestrian level wind comfort and safety conditions at key areas within and surrounding the development site; (ii) identify areas where wind conditions may interfere with the intended uses of outdoor spaces; (iii) recommend suitable mitigation measures, where required; and (iv) evaluate the influence of the proposed development on the existing wind conditions.

4. METHODOLOGY

The approach followed to quantify pedestrian wind conditions over the site is based on wind tunnel measurements of wind speeds at selected locations on a reduced-scale physical model, meteorological analysis of the Oakville area wind climate and synthesis of wind tunnel data with industry-accepted guidelines. The following sections describe the analysis procedures, including a discussion of the pedestrian comfort and safety guidelines.

4.1 Wind Tunnel Context Modelling

A detailed PLW study is performed to determine the influence of local winds at the pedestrian level for a proposed development. The physical model of the proposed development and relevant surroundings, illustrated in Photographs 1 through 6 following the main text, was constructed at a scale of 1:400. The wind tunnel model includes all existing buildings and approved future developments within a full-scale diameter of approximately 840 metres. The general concept and approach to wind tunnel modelling is to provide building and topographic detail in the immediate vicinity of the study site on the surrounding model, and to rely on a length of wind tunnel upwind of the model to develop wind properties consistent with known turbulent intensity profiles that represent the surrounding terrain.

An industry standard practice is to omit trees, vegetation, and other existing and planned landscape elements from the wind tunnel model due to the difficulty of providing accurate seasonal representation of vegetation. The omission of trees and other landscaping elements produces slightly more conservative wind speed values.

4.2 Wind Speed Measurements

The PLW study was performed by testing a total of 90 sensor locations on the scale model in Gradient Wind's wind tunnel. Of these 90 sensors, 81 were located at grade and the remaining 9 sensors were located over the Level 7 amenity terrace. Wind speed measurements were performed for each of the 90 sensors for 36 wind directions at 10° intervals. Figures 1A and 1B illustrates the *existing* and *proposed* study sites and surrounding context, respectively, while sensor locations used to investigate wind conditions are illustrated in Figures 2A through 4D.

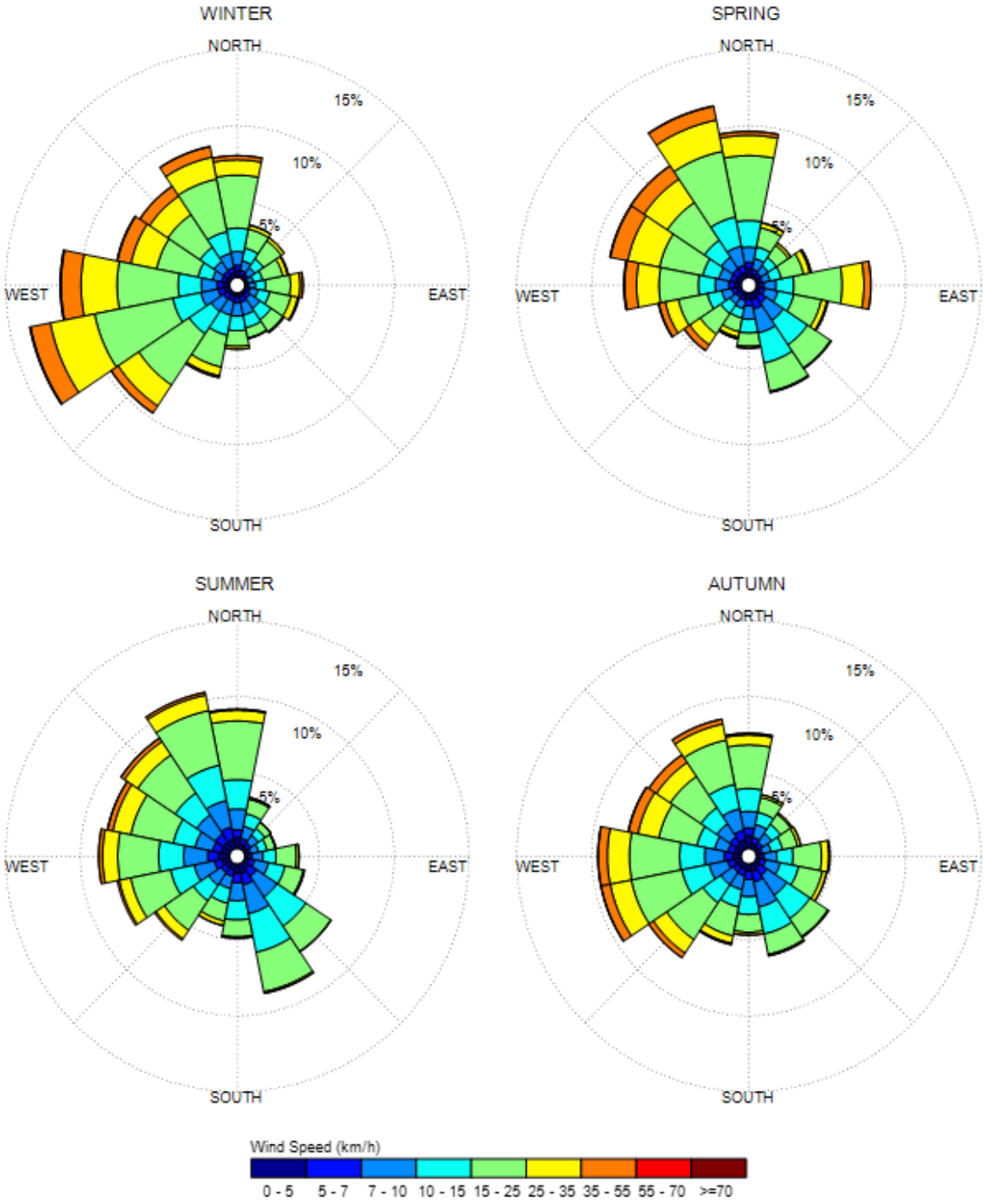
Mean and peak wind speed values for each location and wind direction were calculated from real-time pressure measurements, recorded at a sample rate of 500 samples per second, and taken over a 60-second time period. This period at model-scale corresponds approximately to one hour in full-scale, which matches the time frame of full-scale meteorological observations. Measured mean and gust wind speeds at grade were referenced to the wind speed measured near the ceiling of the wind tunnel to generate mean and peak wind speed ratios. Ceiling height in the wind tunnel represents the depth of the boundary layer of wind flowing over the earth's surface, referred to as the gradient height. Within this boundary layer, mean wind speed increases up to the gradient height and remains constant thereafter. Appendices C and D provide greater detail of the theory behind wind speed measurements. Wind tunnel measurements for this project, conducted in Gradient Wind's wind tunnel facility, meet or exceed guidelines found in the National Building Code of Canada 2015 and of 'Wind Tunnel Studies of Buildings and Structures', ASCE Manual 7 Reports on Engineering Practice No 67.

4.3 Meteorological Data Analysis - Pearson International Airport

A statistical model for winds in Oakville was developed from over 50 years of hourly meteorological wind data recorded at Pearson International Airport. Wind speed and direction data were analyzed for each month of the year in order to determine the statistically prominent wind directions and corresponding speeds, and to characterize similarities between monthly weather patterns. Based on this portion of the analysis, the four seasons are represented by grouping data from consecutive months based on similarity of weather patterns, and not according to the traditional calendar method.

The statistical model of the Oakville area wind climate, which indicates the directional character of local winds on a seasonal basis, is illustrated on the following page. The plots illustrate seasonal distribution of measured wind speeds and directions in km/h. Probabilities of occurrence of different wind speeds are represented as stacked polar bars in sixteen azimuth divisions. The radial direction represents the percentage of time for various wind speed ranges per wind direction during the measurement period. The preferred wind speeds and directions can be identified by the longer length of the bars. For Pearson International Airport, the most common winds concerning pedestrian comfort occur from the southwest clockwise to the north, as well as those from the east. The directional preference and relative magnitude of the wind speed varies somewhat from season to season, with the summer months displaying the calmest winds relative to the remaining seasonal periods.

SEASONAL DISTRIBUTION OF WINDS FOR VARIOUS PROBABILITIES
PEARSON INTERNATIONAL AIRPORT, TORONTO, ONTARIO



Notes:

1. Radial distances indicate percentage of time of wind events.
2. Wind speeds are mean hourly in km/h, measured at 10 m above the ground.

4.4 Pedestrian Comfort and Safety Guidelines

Pedestrian comfort and safety guidelines are based on the mechanical effects of wind without consideration of other meteorological conditions (i.e. temperature, relative humidity). The comfort guidelines assume that pedestrians are appropriately dressed for a specified outdoor activity during any given season. Four pedestrian comfort classes are based on 80% non-exceedance Guest Equivalent Mean (GEM) wind speed ranges, which include (i) Sitting; (ii) Standing; (iii) Walking; and (iv) Uncomfortable. More specifically, the comfort classes and associated GEM wind speed ranges are summarized as follows:

(i) **Sitting** – A wind speed below 10 km/h (i.e. 0 – 10 km/h) would be considered acceptable for sedentary activities, including sitting.

(ii) **Standing** – A wind speed below 15 km/h (i.e. 10 km/h – 15 km/h) is acceptable for activities such as standing or leisurely strolling.

(iii) **Walking** – A wind speed below 20 km/h (i.e. 15 km/h – 20 km/h) is acceptable for walking or more vigorous activities.

(iv) **Uncomfortable** – A wind speed over 20 km/h is classified as uncomfortable from a pedestrian comfort standpoint. Brisk walking and exercise, such as jogging, would be acceptable for moderate excesses of this criterion.

The pedestrian safety wind speed guideline is based on the approximate threshold that would cause a vulnerable member of the population to fall. A 0.1% exceedance gust wind speed of greater than 90 km/h is classified as dangerous.

Experience and research on people's perception of mechanical wind effects has shown that if the wind speed levels are exceeded for more than 20% of the time, the activity level would be judged to be uncomfortable by most people. For instance, if wind speeds of 10 km/h were exceeded for more than 20% of the time most pedestrians would judge that location to be too windy for sitting or more sedentary activities. Similarly, if 20 km/h at a location were exceeded for more than 20% of the time, walking or less vigorous activities would be considered uncomfortable. As most of these criteria are based on subjective reactions of a population to wind forces, their application is partly based on experience and judgment.

Once the pedestrian wind speed predictions have been established at tested locations, the assessment of pedestrian comfort involves determining the suitability of the predicted wind conditions for their

associated spaces. This step involves comparing the predicted comfort class to the desired comfort class, which is dictated by the location type represented by the sensor (i.e. a sidewalk, building entrance, amenity space, or other). An overview of common pedestrian location types and their desired comfort classes are summarized below.

DESIRED PEDESTRIAN COMFORT CLASSES FOR VARIOUS LOCATION TYPES

Location Types	Desired Comfort Classes
Primary Building Entrance	Standing
Secondary Building Access Point	Walking
Public Sidewalks / Pedestrian Walkways	Walking
Outdoor Amenity Spaces	Sitting / Standing
Cafés / Patios / Benches / Gardens	Sitting / Standing
Plazas	Standing / Walking
Transit Stops	Standing
Public Parks	Sitting / Walking
Garage / Service Entrances	Walking
Vehicular Drop-Off Zones	Walking
Laneways / Loading Zones	Walking

5. RESULTS AND DISCUSSION

Tables A1 through A3 in Appendix A provide a summary of seasonal comfort predictions for each sensor location under the *existing* massing scenario. Similarly, Tables B1 through B3 in Appendix B provide the seasonal comfort predictions for under the *proposed* massing scenario. The tables indicate the 80% non-exceedance GEM wind speeds and corresponding comfort classifications as defined in Section 4.4. In other words, a wind speed threshold of 19.1 for the summer season indicates that 80% of the measured data falls at or below 19.1 km/h during the summer months and conditions are therefore suitable for walking, as the 80% threshold value falls within the exceedance range of 15-20 km/h for walking. The tables include the predicted threshold values for each sensor location during each season, accompanied by the corresponding predicted comfort class (i.e. sitting, standing, walking, etc.).

The most significant findings of the PLW study are summarized in Sections 5.1 and 5.2. To assist with understanding and interpretation, predicted conditions for the proposed development are also illustrated in colour-coded format in Figures 2A through 4D. Conditions suitable for sitting are represented by the colour blue, while standing is represented by green, and walking by yellow. Conditions considered uncomfortable for walking are represented by the colour orange. For locations where the wind safety criterion is exceeded, the sensor is highlighted in red.

5.1 Pedestrian Comfort Suitability – *Existing Scenario*

Based on the analysis of the measured data, consideration of local climate data, and the suitability descriptors provided in Tables A1-A3 in Appendix A and illustrated in Figures 2A through 2D, this section summarizes the significant findings of the PLW study with respect to the *existing scenario*, as follows:

1. All public sidewalks, laneways, and parking areas within and surrounding the proposed development currently experiences wind conditions suitable for walking or better during each seasonal period.
2. The nearby building entrances at 165 Cross Avenue (Sensor 25) and 568 Argus Road (Sensor 43) is currently comfortable for sitting throughout the year.
3. The nearby transit stop along Cross Avenue (Sensor 24) is currently suitable for standing or better throughout the year.
4. Within the context of typical weather patterns, which exclude anomalous localized storm events such as tornadoes and downbursts, no areas over the study site were found to experience wind conditions that are considered unsafe.

5.2 Pedestrian Comfort Suitability – *Proposed Scenario*

Based on the analysis of the measured data, consideration of local climate data, and the suitability descriptors provided in Tables B1-B3 in Appendix B and illustrated in Figures 3A through 4D, this section summarizes the significant findings of the PLW study with respect to the *proposed scenario*, as follows:

1. Most public sidewalks, walkways, laneways, and parking areas within and surrounding the proposed development will experience wind conditions suitable for walking or better during each seasonal period, which is acceptable for the intended uses of the spaces. Exceptions include the

sidewalk along Argus Avenue to the northeast (Sensors 9-12), parking areas to the north (Sensor 6), the sidewalk at the northwest corner of Tower A (Sensor 63), sidewalks along Cross Avenue near the southwest corner of Tower B (Sensors 21, 23, and 26) and southeast corner of Tower C (Sensor 16), along the walkway between Towers A and B (Sensor 67-70) and along the central pedestrian mews (Sensors 30-33, 54, and 58), where conditions transition to intermittently uncomfortable for walking during the colder seasons. Further, areas along the walkway between Towers A and B (Sensors 67 and 69) will exceed the annual safety threshold.

For many noted areas along or near Cross Avenue (Sensors 16, 21, 23, and 26) and the isolated parking area to the north (Sensor 6), the exceedance of the walking threshold is generally marginal (< 1 km/h, see Appendix B), limited to one season, and considered safe annually, therefore mitigation is not considered necessary.

For sidewalks near the northeast corner of Building D (Sensors 9-12) and northwest corner of Tower A (Sensor 63), it is recommended to stagger wind barriers at the building corners and along approaching sidewalks, particularly to the west, to buffer salient westerly winds accelerating around the building corners.

For areas along the central pedestrian mews (Sensors 30-33, 54, and 58), the landscaping shown in the plans of trees along the west and east perimeters is expected to improve conditions along the walkways. For the most effective mitigation, it is recommended that these trees be dense coniferous or marcescent plantings, and rise at least 2.0 metres at the time of installation, so their efficacy continues through the winter months.

For the walkway between Towers A and B (Sensors 67-70), the uncomfortable conditions are largely year-round and exceed the annual safety threshold. To improve conditions, it is recommended to install articulated wind barriers throughout the space, particularly adjacent to building entrances and designated seating areas, to buffer salient north and west quadrant winds from channelling through the space.

Barriers may take the form of high-solidity wind screens, dense coniferous/marcescent plantings, raised planters, or a combination thereof, and should rise at least 2.0 metres at the time of installation. The exact composition and configuration of such mitigation can be coordinated at a later date as the design progresses.

2. The primary residential entrance to Tower C (Sensor 78) will be comfortable for standing or better throughout the year, which is appropriate.

   The primary residential entrances to Towers A and B along the covered walkway (Sensor 67-70) will not achieve standing conditions throughout the year. In addition to the mitigation recommended for the area in Item 1 above, it is recommended to either recess these entrances within the building façade, or flank the doorways with vertical wind barriers. Alternatively, the entrances could be relocated to the west elevation of each building (Sensors 65-66, and 72-73) where measured conditions are calmer, or the entrances may be equipped with sliding/revolving doors.

   Concerning potential retail entrances throughout the development, the south elevation of Towers B and C and Building D (Sensors 27-29, 35-37, and 45), north elevation of Tower C (Sensor 41), and central east elevation of Tower C (Sensor 39) will be suitable for standing or better throughout the year, which is ideal for primary entrances. It is recommended to avoid placing retail entrances at the west side of the southwest corner of Tower B (Sensor 26), east side of the southeast corner of Tower B (Sensor 30), and northeast corner of Building D (Sensors 10 and 11). Otherwise, such entrances would need to be equipped with flanking wind barriers, overhead canopies, sliding doors, or be recessed within the façade.

   Most secondary building access points (Such as stairwell exits and vehicle entrances) will be suitable for walking or better throughout the year, which is acceptable. Exceptions include the stairwell exit at the northeast corner of Building D (Sensor 10) which will be uncomfortable for walking during the winter, and the below-grade parking entrance along the north elevation of Tower B (Sensor 69) which will be uncomfortable for walking throughout the year and exceed the annual safety threshold. The mitigation recommended in Item 1 above is expected to improve conditions at these areas to within acceptable levels, therefore no additional mitigation is necessary.

3. The nearby building entrances at 165 Cross Avenue (Sensor 25) and 568 Argus Road (Sensor 43) will largely remain comfortable for standing or better throughout the year, with the 165 Cross Avenue entrance (Sensor 25) experiencing walking conditions during the winter. Since this

entrance is already recessed within the building façade, the noted conditions are acceptable and additional mitigation is not considered necessary.

4. The nearby transit stop along Cross Avenue (Sensor 24) will generally remain suitable for standing or better throughout the warmer seasons, with intermittent walking conditions during the winter. Considering the marginality of the standing exceedance (1 km/h), mitigation is not considered necessary.

5. The Level 7 outdoor amenity terrace serving Building D (Sensors 82-85) will be comfortable for sitting during the summer and a mix of sitting or standing during the spring and autumn, which is suitable for intended uses.

   Without mitigation, the Level 7 terrace between Towers A and B (Sensors 86-90) will experience a mix of standing and walking conditions throughout the summer and autumn. To ensure conditions suitable for sitting or more sedentary activities throughout the summer and into the shoulder seasons, it is recommended to raise the west and east perimeter guards to 2.0 metres above the walking surface, as well as provide localized wind barriers directly north and west of seating areas. Further, it is recommended to install overhead protection, such as canopies or pergolas at designated seating areas, particularly near the base of each tower.

   For the remaining narrow sections of amenity terrace surrounding each tower, these areas are expected to be comfortable for sitting or more sedentary activities during the summer, however, it may be necessary to provide overhead protection for designated seating areas near the northwest corner of Tower A and the southwest corner of Tower B, to protect against downwash flows.

6. Within the context of typical weather patterns, which exclude anomalous localized storm events such as tornadoes and downbursts, no areas over the study site, apart from the noted areas between Towers A and B, were found to experience wind conditions that are considered unsafe.

6. CONCLUSIONS AND RECOMMENDATIONS

This report summarizes the methodology, results, and recommendations related to a pedestrian level wind study for the proposed mixed-use development located at 177 Cross Avenue in Oakville, Ontario.

The study was performed in accordance with industry standard wind tunnel testing and data analysis procedures.

A complete summary of the predicted wind conditions is provided in Section 5 of this report and is also illustrated in Figures 2A through 4D, as well as Tables A1-A3 and B1-B3 in the appendices. Based on wind tunnel test results, meteorological data analysis, and experience with similar developments in Oakville, we conclude that the future wind conditions over many grade-level pedestrian wind-sensitive areas within and surrounding the study site will be acceptable for the intended uses on a seasonal basis. Exceptions include several internal and surrounding pedestrian areas, inclusive of adjacent building entrances, for which mitigation is recommended as described in Section 5.2.

The Level 7 amenity terrace on Building D will be comfortable for sitting or more sedentary activities during the summer, without the need for mitigation. To ensure similarly calm conditions over the Level 7 terrace between Towers A and B, mitigation is recommended as described in Section 5.2.

Within the context of typical weather patterns, which exclude anomalous localized storm events such as tornadoes and downbursts, no areas over the study site, apart from noted areas between Towers A and B, were found to experience conditions that could be considered unsafe.

This concludes our pedestrian level wind study and report. Please advise the undersigned of any questions or comments.

Sincerely,

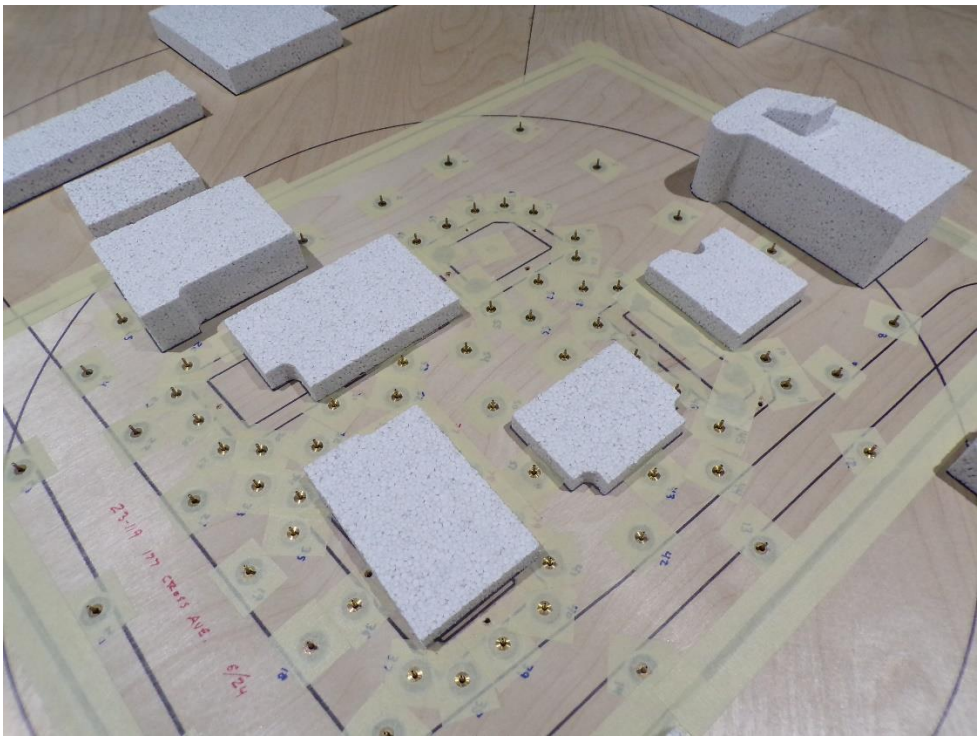
Gradient Wind Engineering Inc.

DRAFT

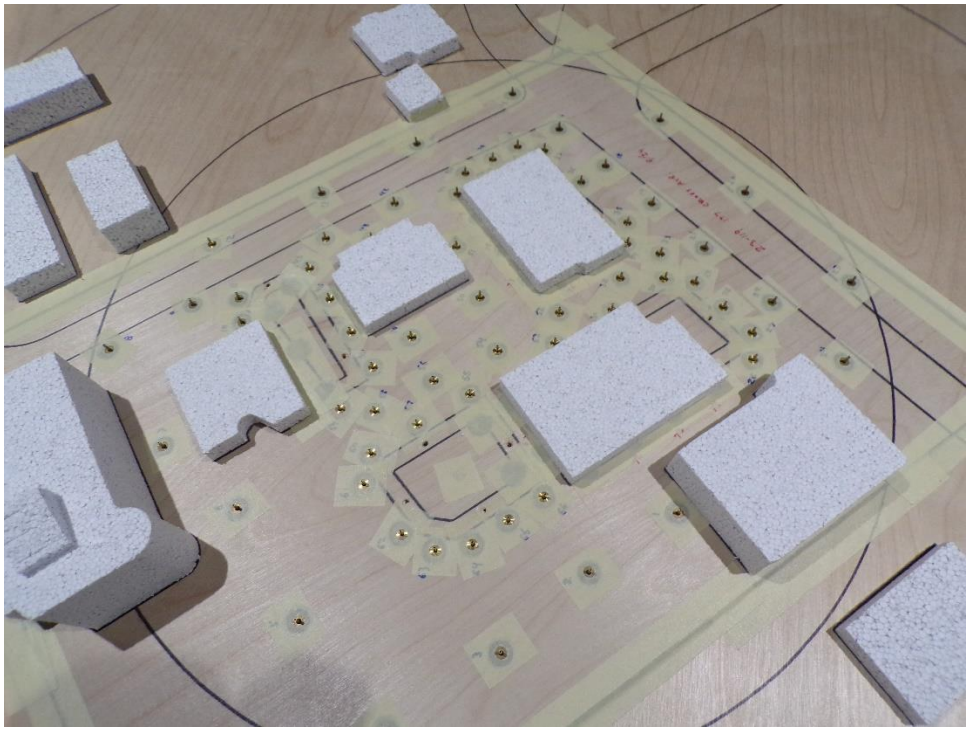
Angelina Gomes, B.Eng., EIT
Junior Wind Scientist

Nick Petersen, P.Eng.,
Wind Engineer

GW23-119-WTPLW



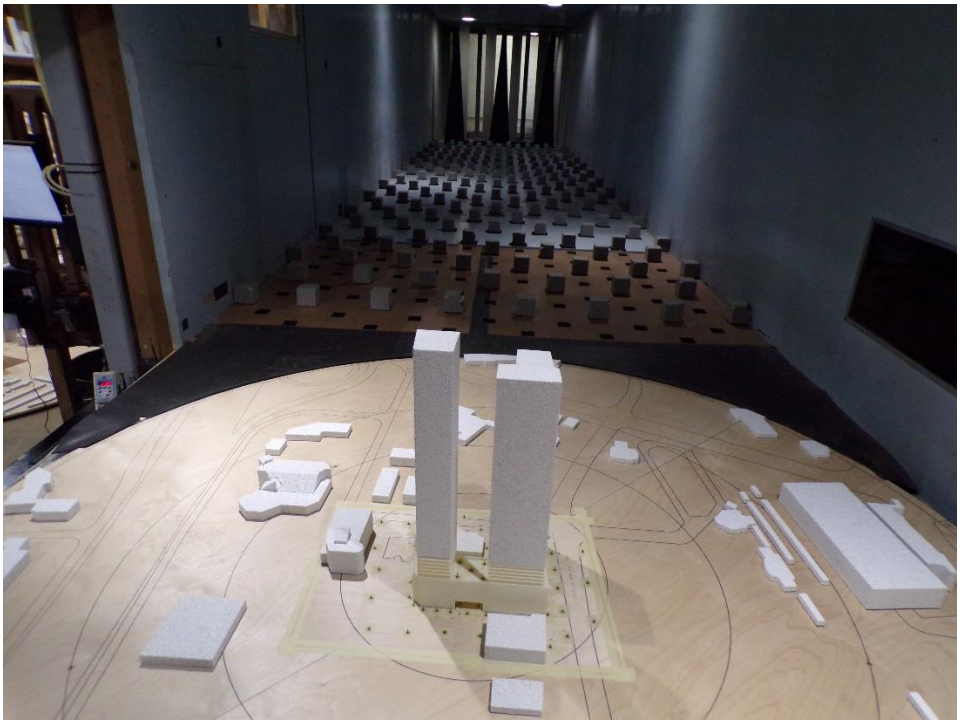
PHOTOGRAPH 1: CLOSE-UP VIEW OF EXISTING CONTEXT MODEL LOOKING NORTHWEST



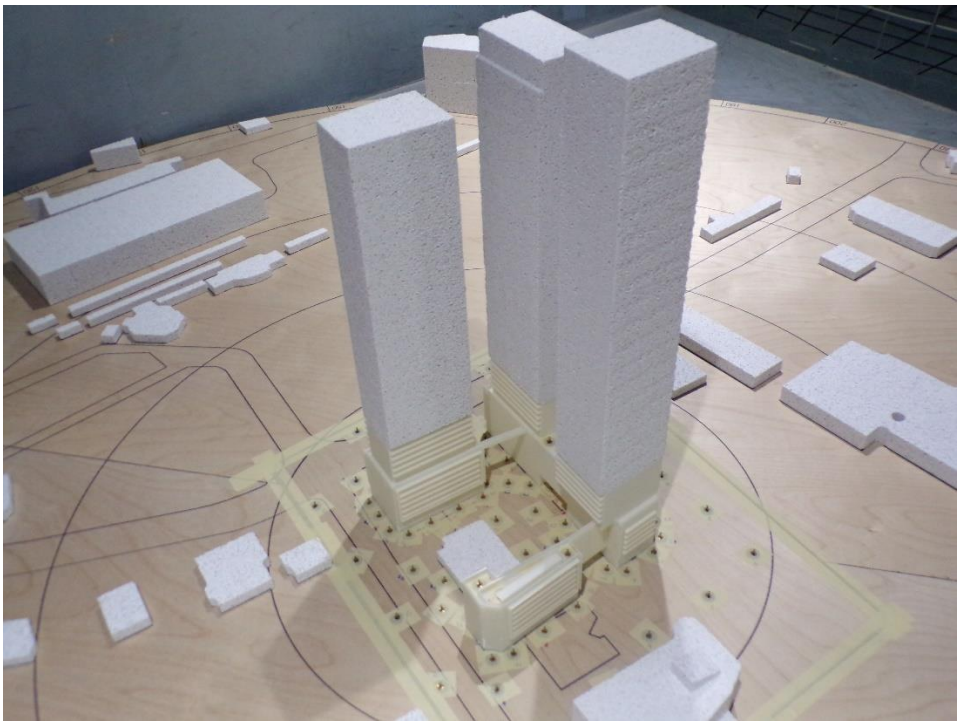
PHOTOGRAPH 2: CLOSE-UP VIEW OF EXISTING CONTEXT MODEL LOOKING SOUTHEAST



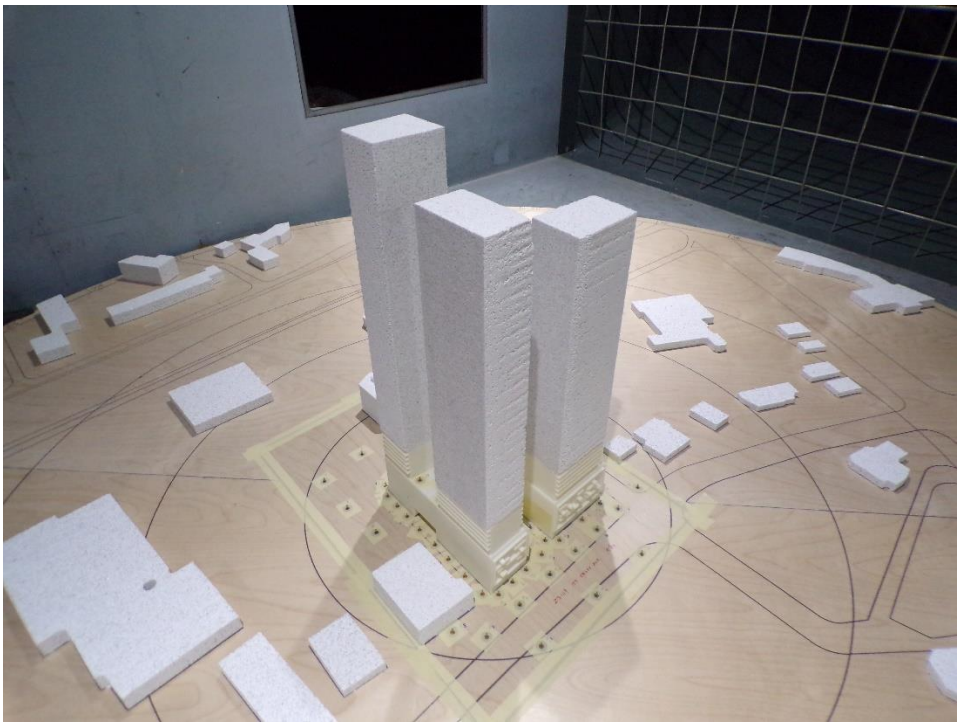
PHOTOGRAPH 3: <u>PROPOSED</u> STUDY MODEL INSIDE THE GWE WIND TUNNEL LOOKING DOWNWIND



PHOTOGRAPH 4: <u>PROPOSED</u> STUDY MODEL INSIDE THE GWE WIND TUNNEL LOOKING UPWIND



PHOTOGRAPH 5: CLOSE-UP VIEW OF PROPOSED STUDY MODEL LOOKING SOUTH



PHOTOGRAPH 6: CLOSE-UP VIEW OF PROPOSED STUDY MODEL LOOKING NORTH

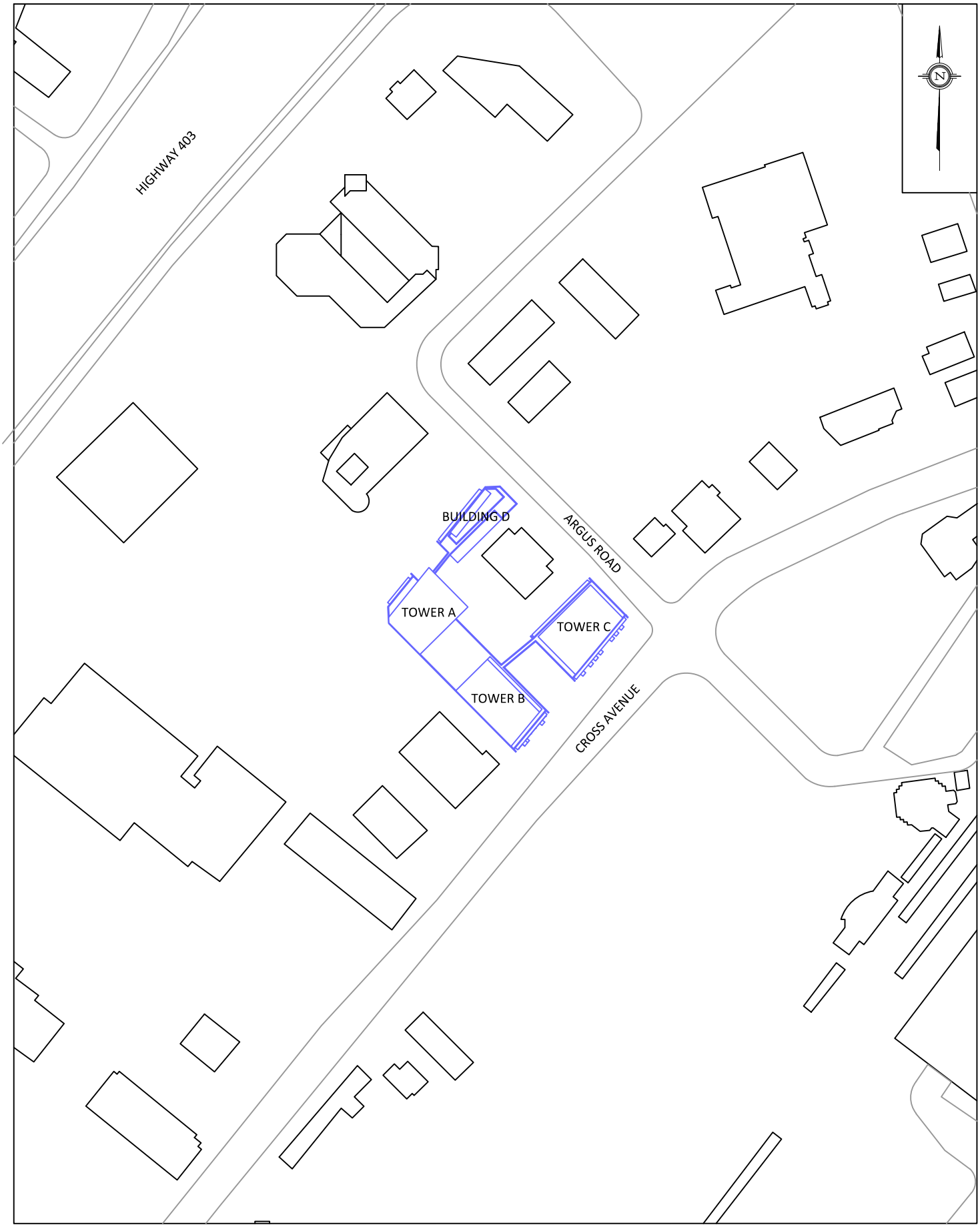


GRADIENTWIND
ENGINEERS & SCIENTISTS

127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY		DESCRIPTION
SCALE	1:2500 (APPROX.)	DRAWING NO.	GW23-119-1A
DATE	JUNE 7, 2024	DRAWN BY	A.G.

FIGURE 1A: EXISTING SCENARIO
SITE PLAN AND SURROUNDING CONTEXT

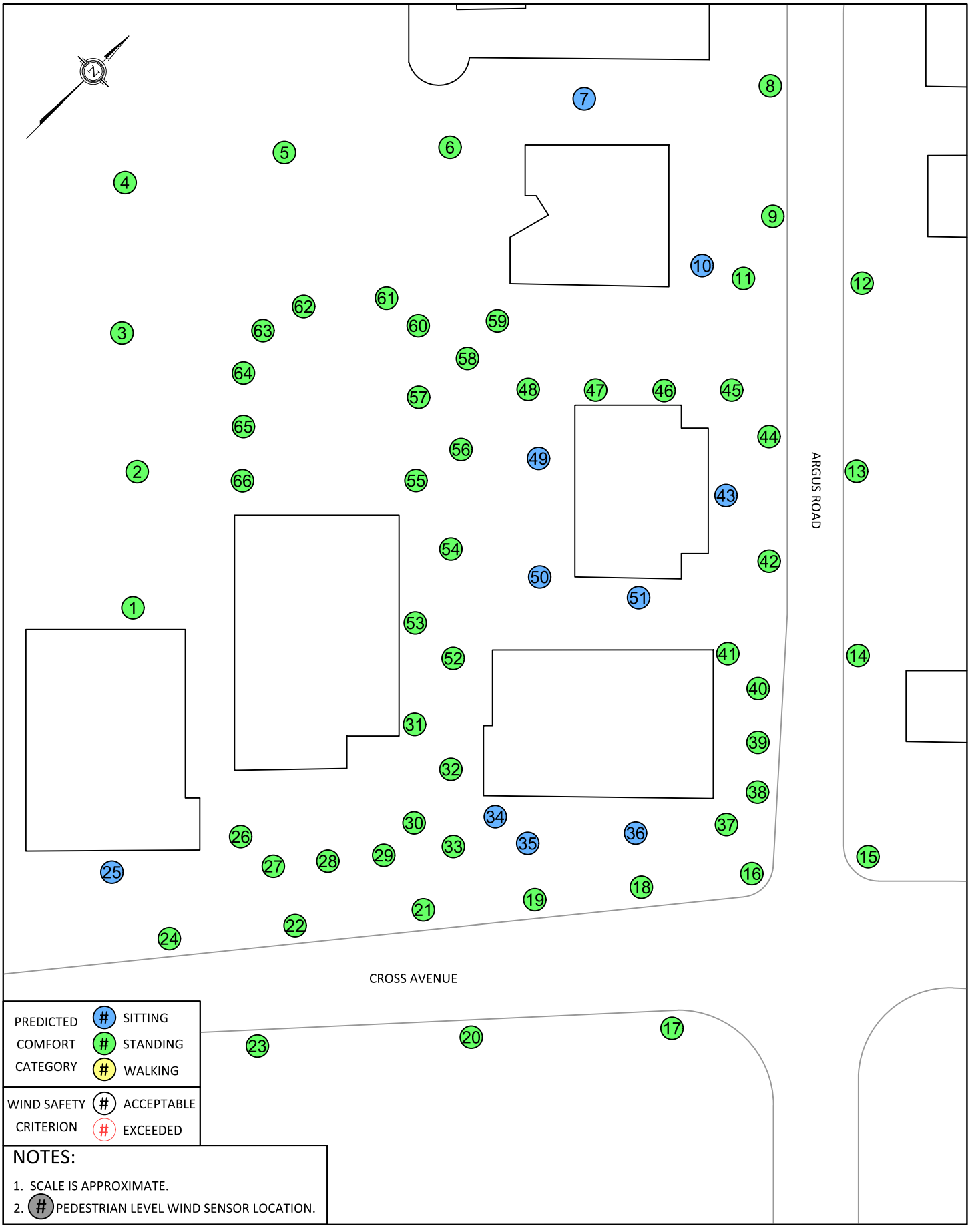


GRADIENTWIND
ENGINEERS & SCIENTISTS

127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY		DESCRIPTION
SCALE	1:2500 (APPROX.)	DRAWING NO.	GW23-119-1B
DATE	JUNE 7, 2024	DRAWN BY	A.G.

FIGURE 1B: PROPOSED SCENARIO
SITE PLAN AND SURROUNDING CONTEXT

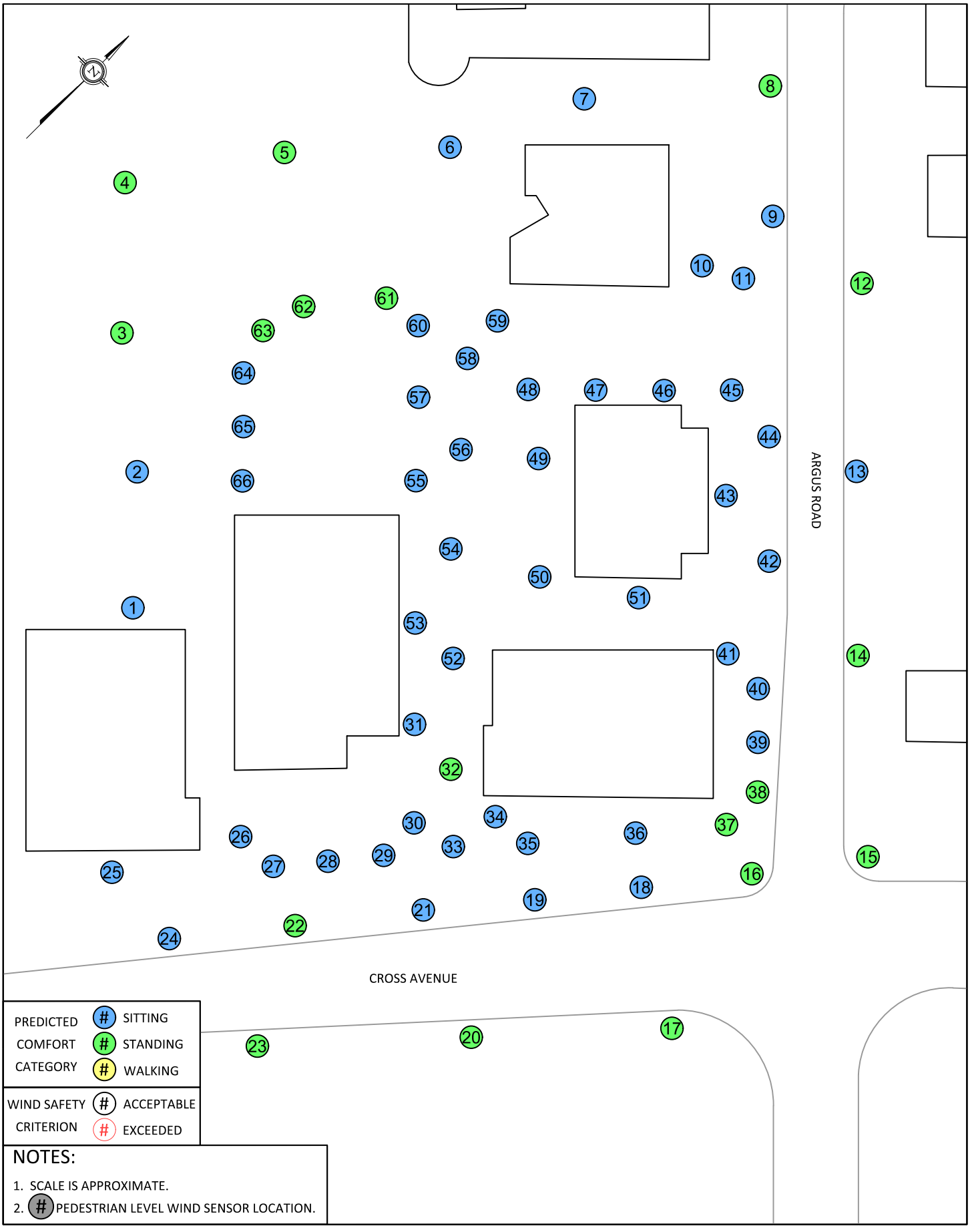


GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:900 (APPROX.)
DRAWING NO.	GW23-119-PLW-2A
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION

FIGURE 2A: SPRING
EXISTING SCENARIO
PEDESTRIAN COMFORT PREDICTIONS

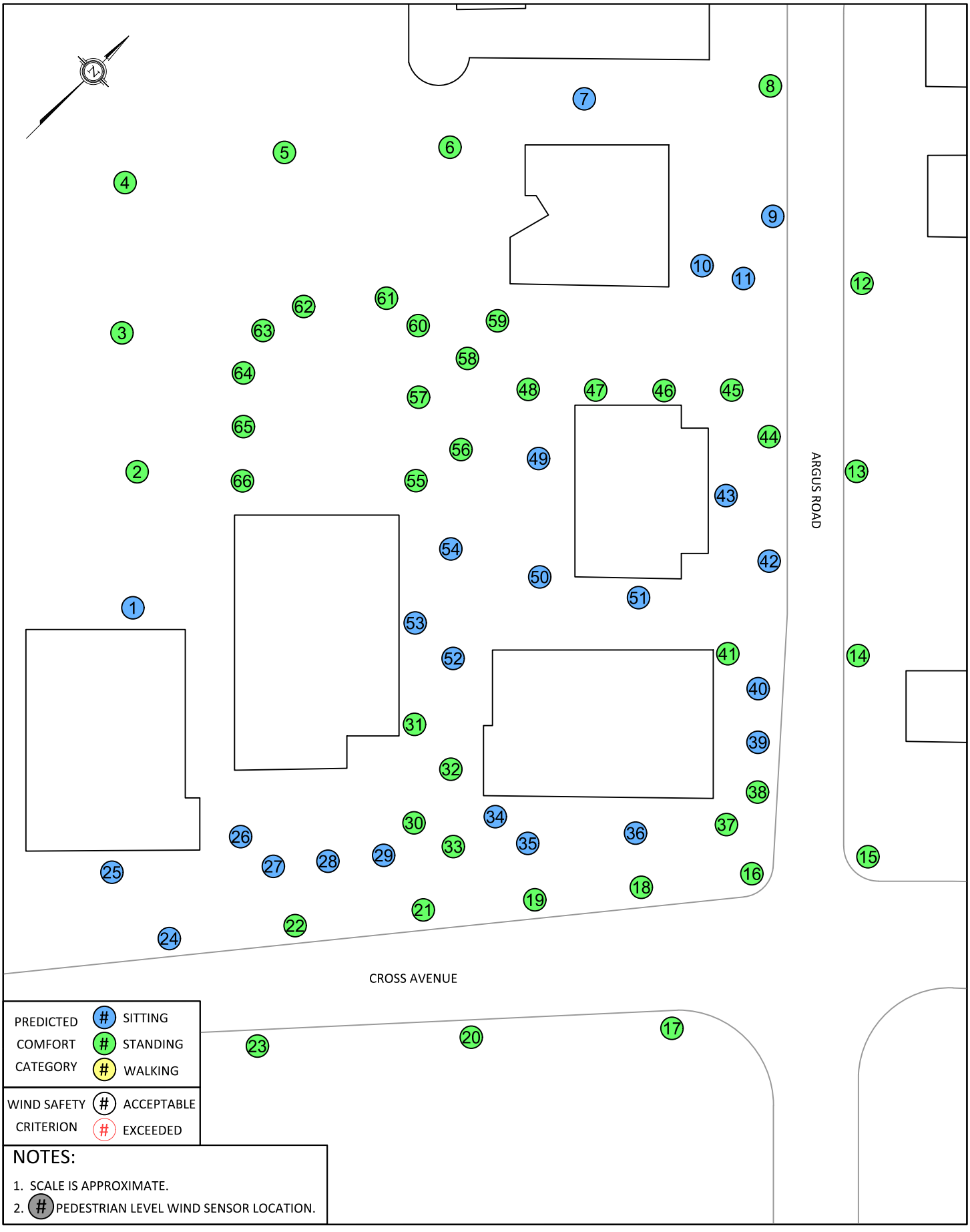


GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:900 (APPROX.)
DRAWING NO.	GW23-119-PLW-2B
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION

FIGURE 2B: SUMMER
EXISTING SCENARIO
PEDESTRIAN COMFORT PREDICTIONS



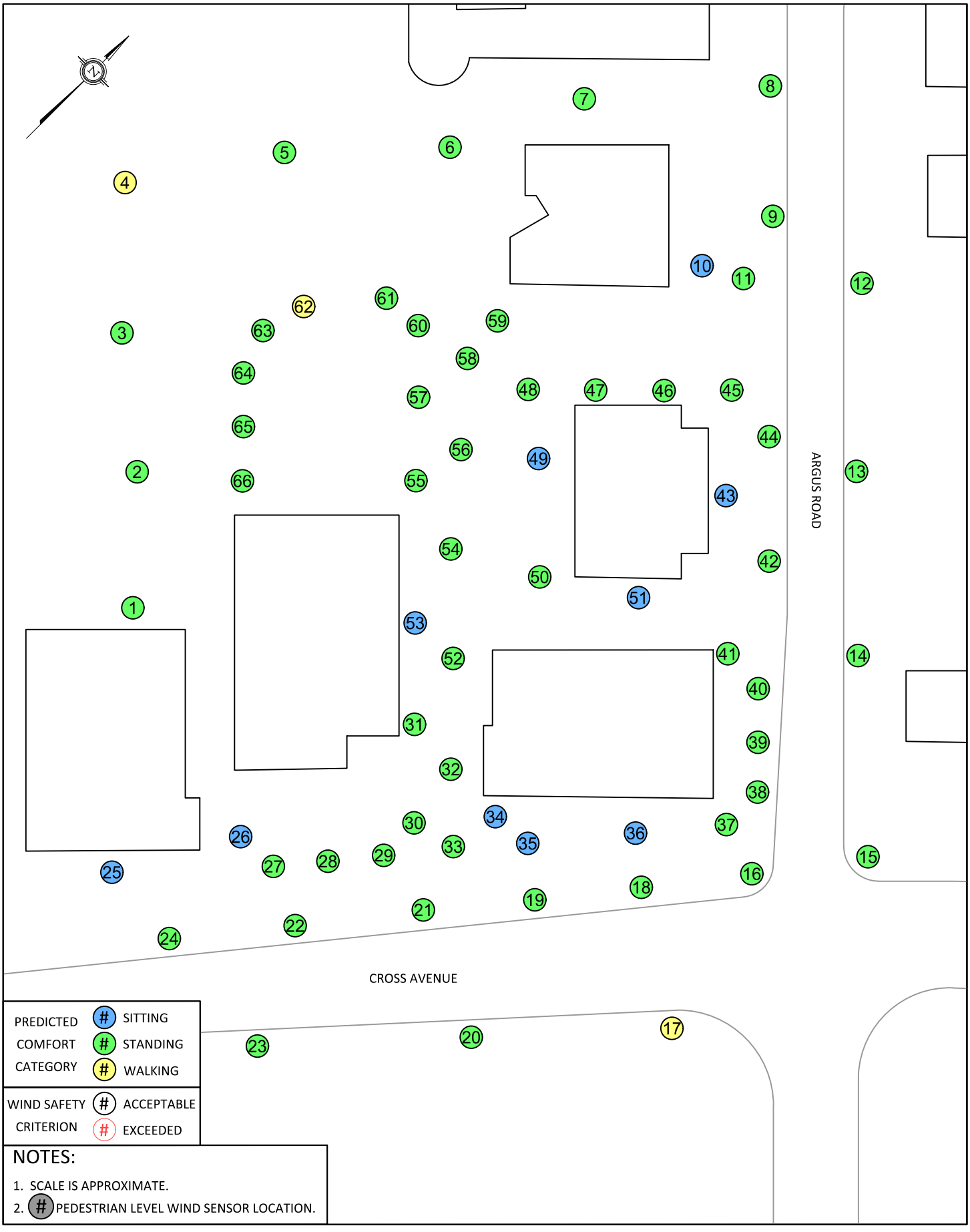
GRADIENTWIND
ENGINEERS & SCIENTISTS

127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:900 (APPROX.)
DRAWING NO.	GW23-119-PLW-2C
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION

FIGURE 2C: AUTUMN
EXISTING SCENARIO
PEDESTRIAN COMFORT PREDICTIONS

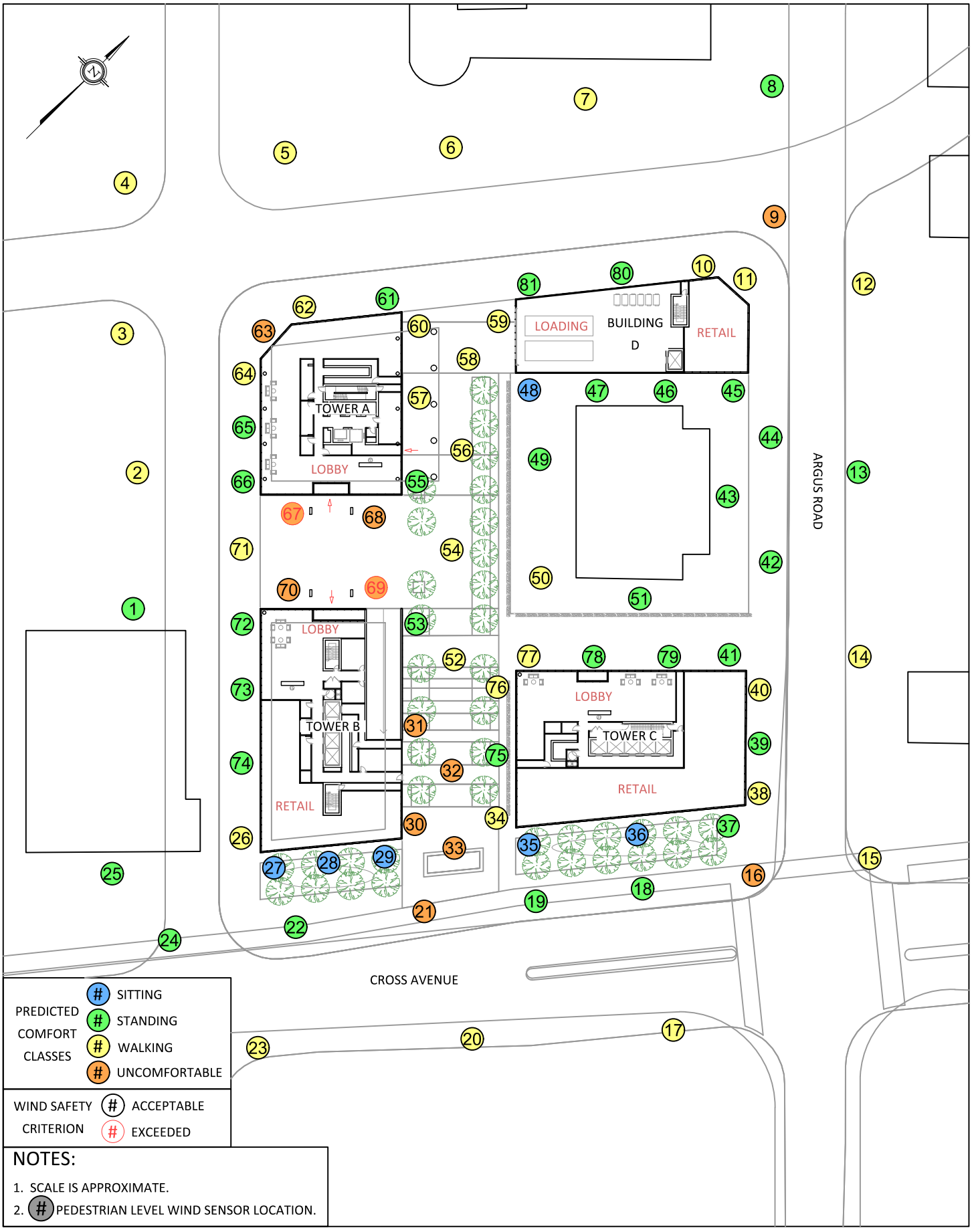


GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:900 (APPROX.)
DRAWING NO.	GW23-119-PLW-2D
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION

FIGURE 2D: WINTER
EXISTING SCENARIO
PEDESTRIAN COMFORT PREDICTIONS



PREDICTED COMFORT CLASSES
- # SITTING
- # STANDING
- # WALKING
- # UNCOMFORTABLE

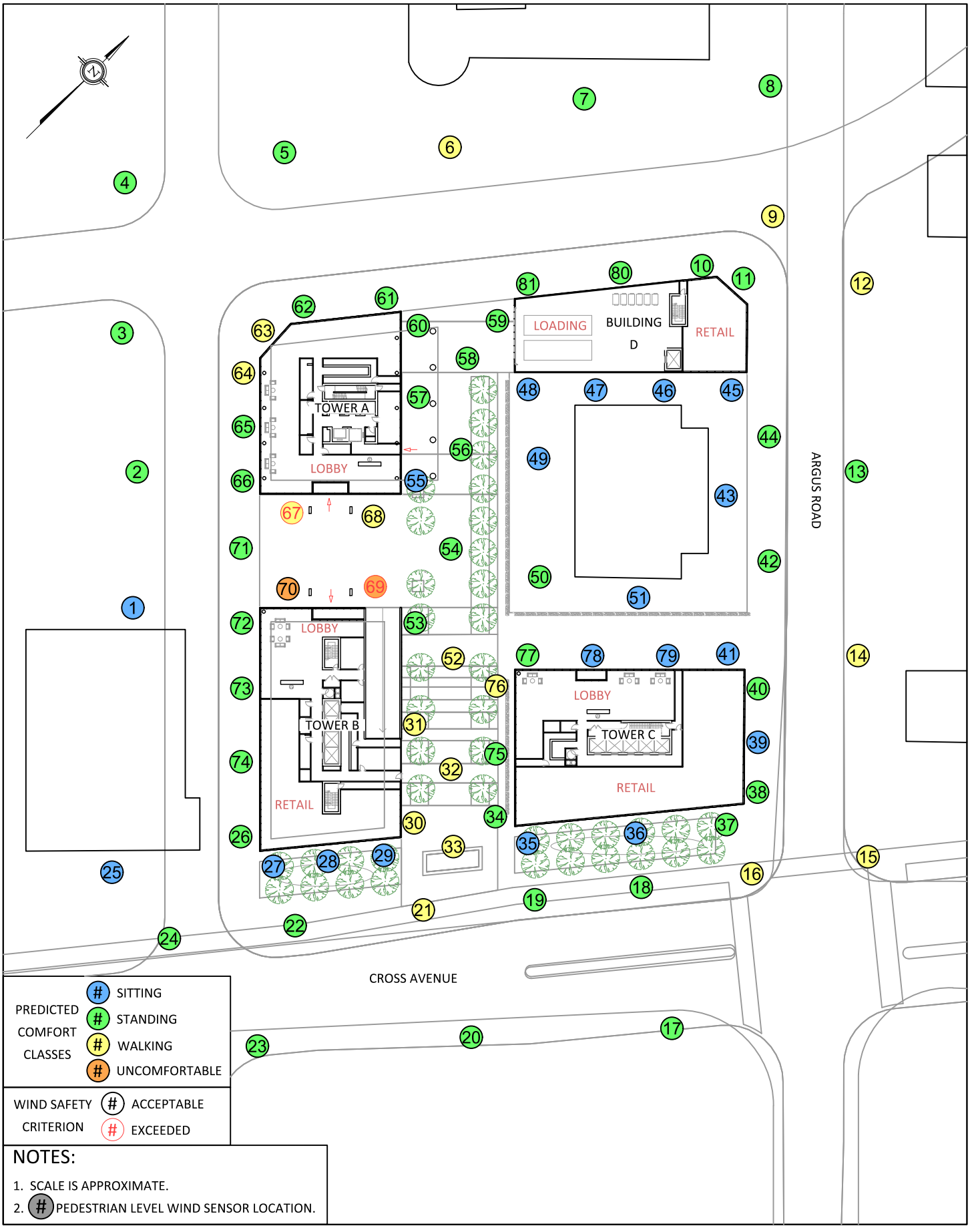
WIND SAFETY CRITERION
- # ACCEPTABLE
- # EXCEEDED

NOTES:
1. SCALE IS APPROXIMATE.
2. # PEDESTRIAN LEVEL WIND SENSOR LOCATION.

GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:900 (APPROX.)
DRAWING NO.	GW23-119-PLW-3A
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION
FIGURE 3A: SPRING
PROPOSED GROUND FLOOR PLAN
PEDESTRIAN COMFORT PREDICTIONS



PREDICTED COMFORT CLASSES
- # SITTING
- # STANDING
- # WALKING
- # UNCOMFORTABLE

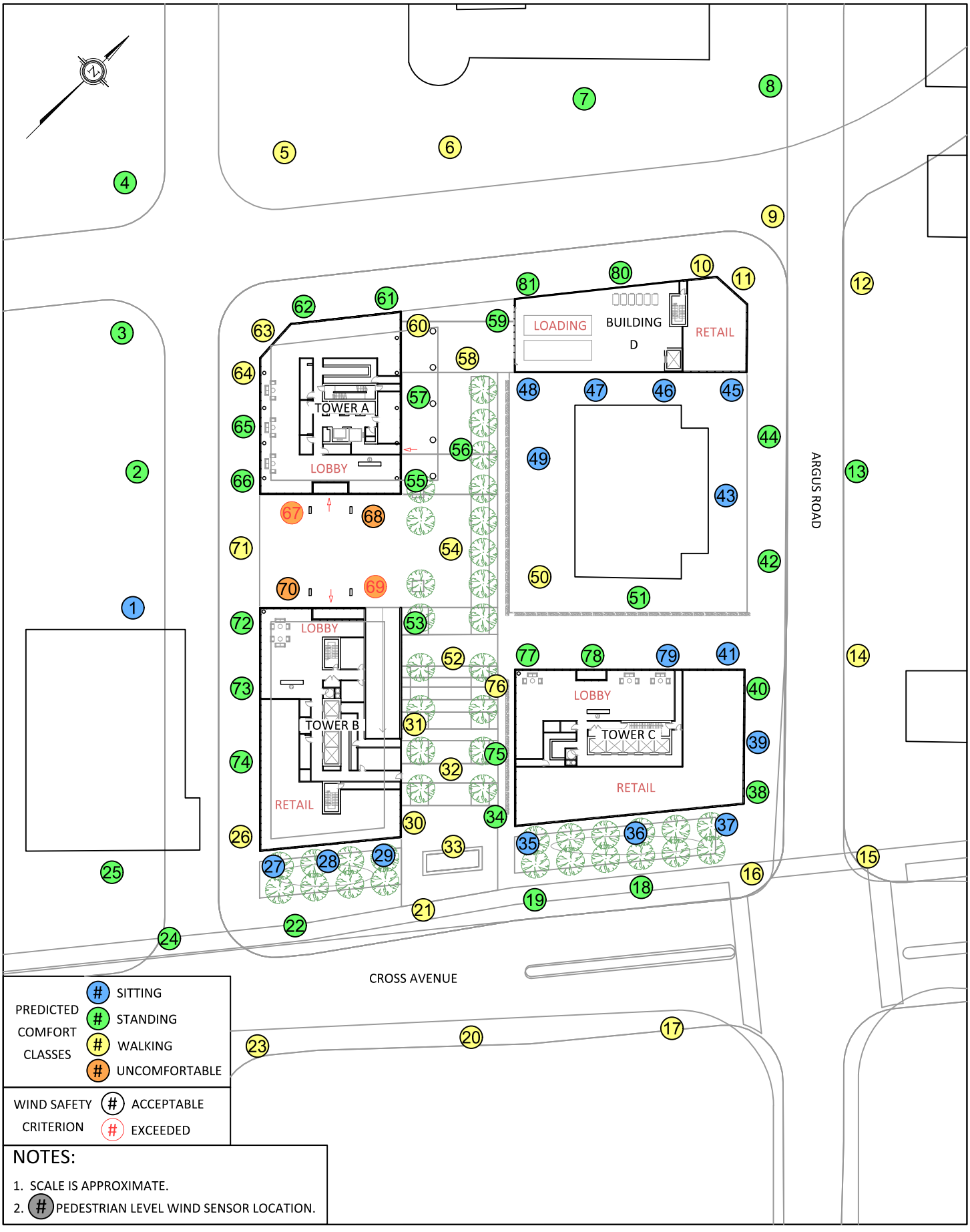
WIND SAFETY CRITERION
- # ACCEPTABLE
- # EXCEEDED

NOTES:
1. SCALE IS APPROXIMATE.
2. # PEDESTRIAN LEVEL WIND SENSOR LOCATION.

GRADIENTWIND ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:900 (APPROX.)
DRAWING NO.	GW23-119-PLW-3B
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION
FIGURE 3B: SUMMER
PROPOSED GROUND FLOOR PLAN
PEDESTRIAN COMFORT PREDICTIONS



PREDICTED COMFORT CLASSES
- # SITTING
- # STANDING
- # WALKING
- # UNCOMFORTABLE

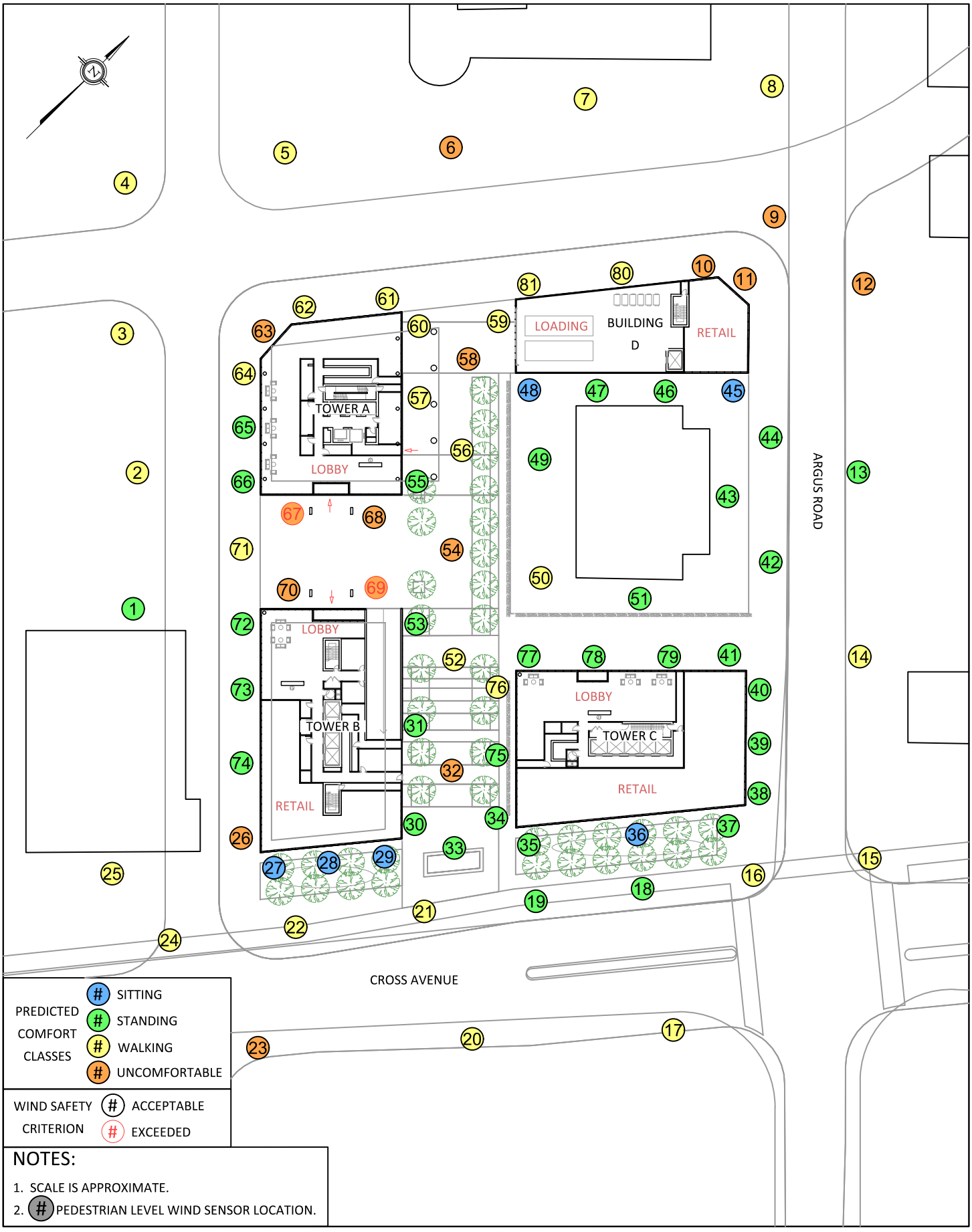
WIND SAFETY CRITERION
- # ACCEPTABLE
- # EXCEEDED

NOTES:
1. SCALE IS APPROXIMATE.
2. # PEDESTRIAN LEVEL WIND SENSOR LOCATION.

GRADIENTWIND ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:900 (APPROX.)
DRAWING NO.	GW23-119-PLW-3C
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION
FIGURE 3C: AUTUMN
PROPOSED GROUND FLOOR PLAN
PEDESTRIAN COMFORT PREDICTIONS



PREDICTED COMFORT CLASSES
- # SITTING
- # STANDING
- # WALKING
- # UNCOMFORTABLE

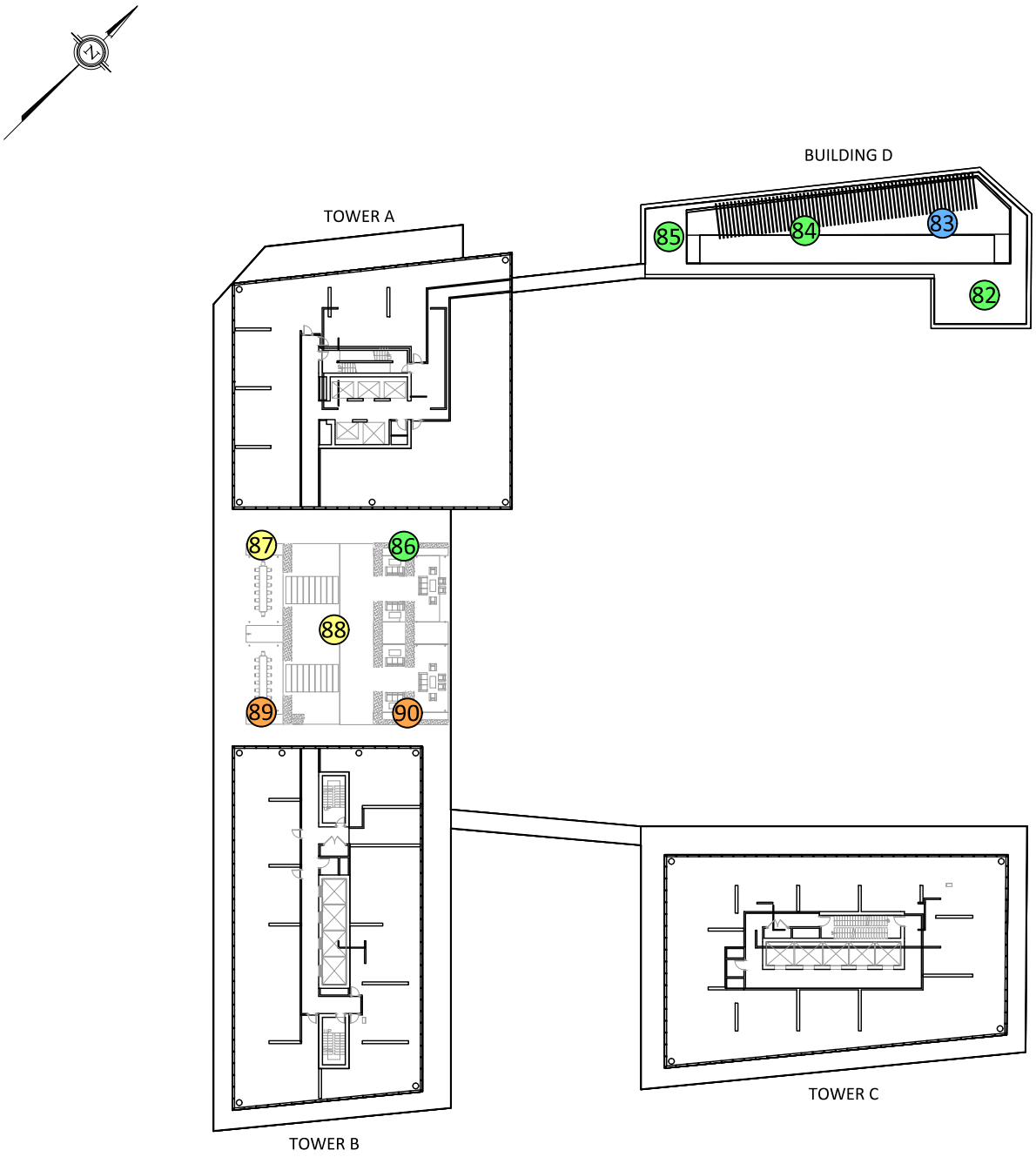
WIND SAFETY CRITERION
- # ACCEPTABLE
- # EXCEEDED

NOTES:
1. SCALE IS APPROXIMATE.
2. # PEDESTRIAN LEVEL WIND SENSOR LOCATION.

GRADIENTWIND ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:900 (APPROX.)
DRAWING NO.	GW23-119-PLW-3D
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION
FIGURE 3D: WINTER
PROPOSED GROUND FLOOR PLAN
PEDESTRIAN COMFORT PREDICTIONS



PREDICTED COMFORT CLASSES

- # SITTING
- # STANDING
- # WALKING
- # UNCOMFORTABLE

WIND SAFETY CRITERION

- # ACCEPTABLE
- # EXCEEDED

NOTES:

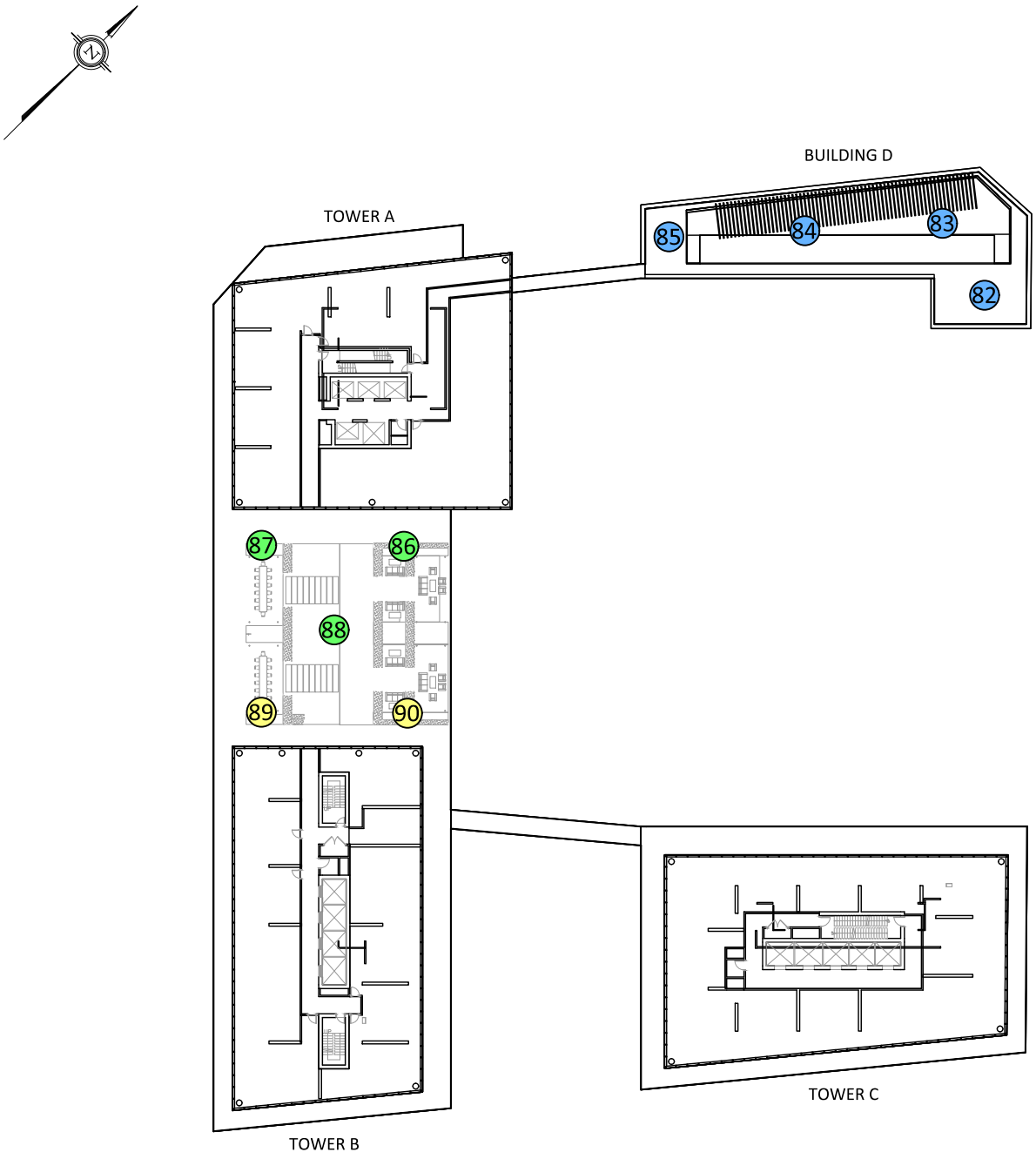
1. SCALE IS APPROXIMATE.
2. # PEDESTRIAN LEVEL WIND SENSOR LOCATION.

GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:700 (APPROX.)
DRAWING NO.	GW23-119-PLW-4A
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION

FIGURE 4A: SPRING
LEVEL 7 AMENITY PLAN
PEDESTRIAN COMFORT PREDICTIONS



PREDICTED COMFORT CLASSES

- # SITTING
- # STANDING
- # WALKING
- # UNCOMFORTABLE

WIND SAFETY CRITERION

- # ACCEPTABLE
- # EXCEEDED

NOTES:

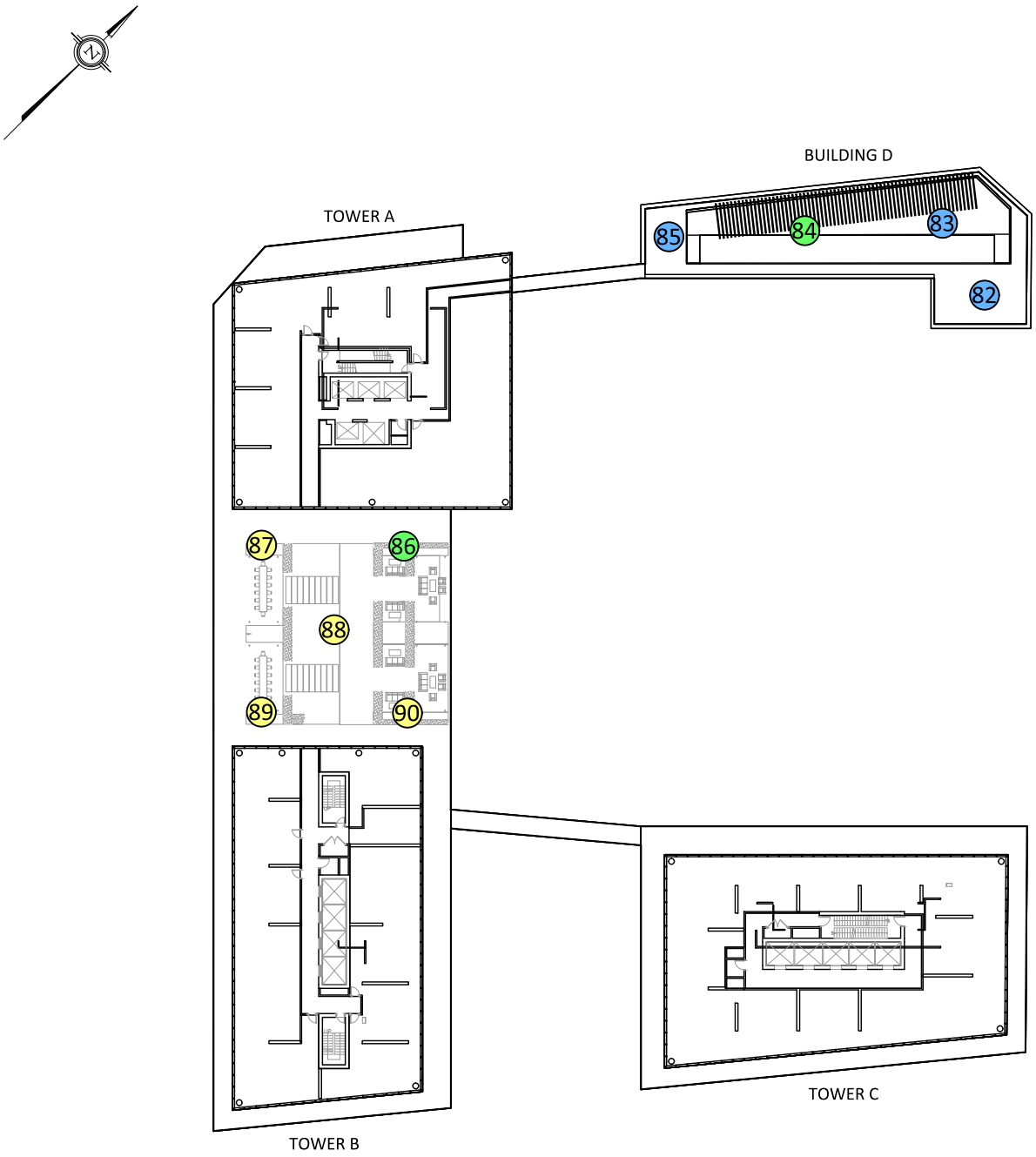
1. SCALE IS APPROXIMATE.
2. # PEDESTRIAN LEVEL WIND SENSOR LOCATION.

GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:700 (APPROX.)
DRAWING NO.	GW23-119-PLW-4B
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION

FIGURE 4B: SUMMER
LEVEL 7 AMENITY PLAN
PEDESTRIAN COMFORT PREDICTIONS



PREDICTED COMFORT CLASSES

- # SITTING
- # STANDING
- # WALKING
- # UNCOMFORTABLE

WIND SAFETY CRITERION

- # ACCEPTABLE
- # EXCEEDED

NOTES:

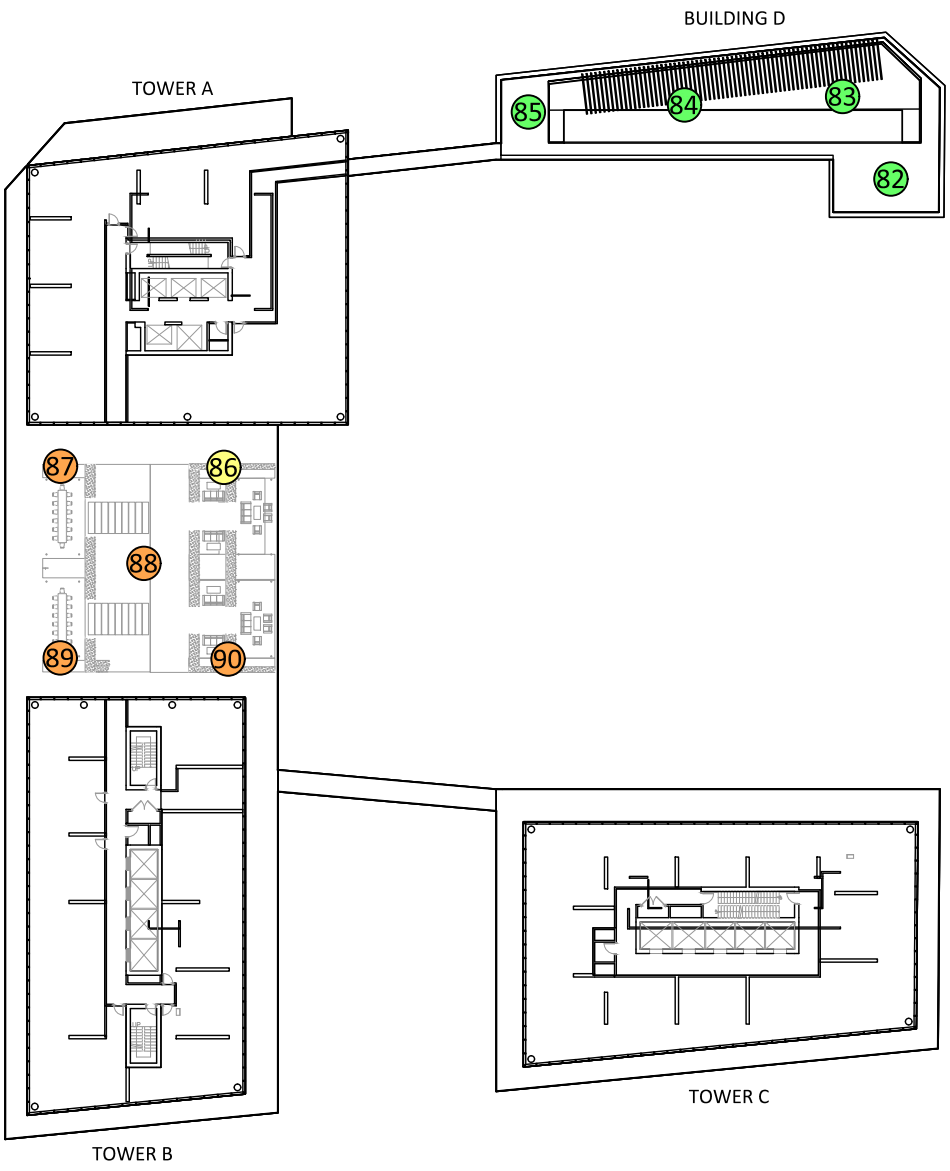
1. SCALE IS APPROXIMATE.
2. # PEDESTRIAN LEVEL WIND SENSOR LOCATION.

GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:700 (APPROX.)
DRAWING NO.	GW23-119-PLW-4C
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION

FIGURE 4C: AUTUMN
LEVEL 7 AMENITY PLAN
PEDESTRIAN COMFORT PREDICTIONS



PREDICTED COMFORT CLASSES	#	SITTING
	#	STANDING
	#	WALKING
	#	UNCOMFORTABLE
WIND SAFETY CRITERION	#	ACCEPTABLE
	#	EXCEEDED

NOTES:

1. SCALE IS APPROXIMATE.
2. # PEDESTRIAN LEVEL WIND SENSOR LOCATION.

GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	177 CROSS AVENUE, OAKVILLE PEDESTRIAN LEVEL WIND STUDY
SCALE	1:700 (APPROX.)
DRAWING NO.	GW23-119-PLW-4D
DATE	JUNE 7, 2024
DRAWN BY	A.G.

DESCRIPTION

FIGURE 4D: WINTER
LEVEL 7 AMENITY PLAN
PEDESTRIAN COMFORT PREDICTIONS



APPENDIX A

PEDESTRIAN COMFORT SUITABILITY, TABLES A1-A3 (EXISTING SCENARIO)

127 WALGREEN ROAD, OTTAWA, ON, CANADA K0A 1L0 | 613 836 0934
GRADIENTWIND.COM

Guidelines	
Pedestrian Comfort	**20% exceedance wind speed** 0-10 km/h = Sitting, 10-15 km/h = Standing, 15-20 km/h = Walking, >20 km/h = Uncomfortable
Pedestrian Safety	**0.1% exceedance wind speed** 0-90 km/h = Safe

TABLE A1: SUMMARY OF PEDESTRIAN COMFORT (EXISTING SCENARIO)

Sensor	Pedestrian Comfort								Pedestrian Safety	
	Spring		Summer		Autumn		Winter		Annual	
	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Safety Class
1	10.4	Standing	8.1	Sitting	9.2	Sitting	11.5	Standing	47.9	Safe
2	12.2	Standing	9.6	Sitting	10.8	Standing	13.2	Standing	45.1	Safe
3	12.9	Standing	10.3	Standing	11.7	Standing	14.5	Standing	50.1	Safe
4	14.3	Standing	11.1	Standing	12.4	Standing	15.1	Walking	51.8	Safe
5	14.7	Standing	10.8	Standing	12.4	Standing	14.9	Standing	52.1	Safe
6	11.4	Standing	9.0	Sitting	11.4	Standing	15.0	Standing	62.9	Safe
7	9.4	Sitting	7.8	Sitting	8.7	Sitting	10.1	Standing	41.8	Safe
8	13.2	Standing	11.1	Standing	11.2	Standing	12.6	Standing	51.3	Safe
9	11.6	Standing	8.6	Sitting	9.3	Sitting	10.9	Standing	48.0	Safe
10	9.7	Sitting	7.4	Sitting	7.8	Sitting	9.3	Sitting	43.0	Safe
11	10.9	Standing	8.4	Sitting	9.0	Sitting	10.3	Standing	45.8	Safe
12	13.4	Standing	10.4	Standing	11.5	Standing	13.5	Standing	48.9	Safe
13	12.1	Standing	9.4	Sitting	10.4	Standing	12.1	Standing	42.3	Safe
14	13.7	Standing	11.2	Standing	11.8	Standing	13.8	Standing	49.2	Safe
15	12.7	Standing	10.2	Standing	11.3	Standing	13.1	Standing	43.9	Safe
16	13.8	Standing	11.1	Standing	12.1	Standing	14.1	Standing	46.4	Safe
17	14.3	Standing	11.7	Standing	12.9	Standing	15.2	Walking	49.1	Safe
18	11.3	Standing	9.4	Sitting	10.7	Standing	12.9	Standing	47.2	Safe
19	10.7	Standing	9.0	Sitting	10.1	Standing	11.8	Standing	41.9	Safe
20	13.9	Standing	11.1	Standing	12.2	Standing	14.3	Standing	46.8	Safe
21	12.3	Standing	9.7	Sitting	10.7	Standing	12.5	Standing	42.7	Safe
22	12.8	Standing	10.2	Standing	10.9	Standing	12.6	Standing	41.9	Safe
23	13.4	Standing	10.5	Standing	11.7	Standing	13.5	Standing	45.4	Safe
24	11.2	Standing	8.8	Sitting	9.7	Sitting	11.3	Standing	43.0	Safe
25	7.6	Sitting	6.2	Sitting	6.9	Sitting	7.8	Sitting	32.7	Safe
26	11.1	Standing	9.2	Sitting	9.2	Sitting	10.0	Sitting	42.6	Safe
27	10.6	Standing	9.0	Sitting	9.5	Sitting	10.5	Standing	38.1	Safe
28	11.1	Standing	9.1	Sitting	9.7	Sitting	11.1	Standing	38.5	Safe
29	11.2	Standing	9.1	Sitting	9.8	Sitting	11.1	Standing	38.4	Safe
30	12.3	Standing	9.8	Sitting	10.4	Standing	11.8	Standing	43.1	Safe
31	12.3	Standing	9.8	Sitting	10.1	Standing	11.3	Standing	45.4	Safe
32	12.9	Standing	10.4	Standing	11.1	Standing	13.1	Standing	49.1	Safe
33	12.2	Standing	9.4	Sitting	10.4	Standing	12.3	Standing	44.4	Safe
34	8.5	Sitting	6.8	Sitting	8.0	Sitting	9.6	Sitting	38.1	Safe
35	9.0	Sitting	7.4	Sitting	8.3	Sitting	9.7	Sitting	36.8	Safe

Guidelines	
Pedestrian Comfort	**20% exceedance wind speed** 0-10 km/h = Sitting, 10-15 km/h = Standing, 15-20 km/h = Walking, >20 km/h = Uncomfortable
Pedestrian Safety	**0.1% exceedance wind speed** 0-90 km/h = Safe

TABLE A2: SUMMARY OF PEDESTRIAN COMFORT (EXISTING SCENARIO)

Sensor	Pedestrian Comfort								Pedestrian Safety	
	Spring		Summer		Autumn		Winter		Annual	
	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Safety Class
36	7.9	Sitting	6.5	Sitting	7.4	Sitting	9.0	Sitting	34.6	Safe
37	12.6	Standing	10.1	Standing	10.7	Standing	12.1	Standing	44.7	Safe
38	12.4	Standing	10.1	Standing	10.2	Standing	11.1	Standing	42.9	Safe
39	12.4	Standing	9.2	Sitting	9.8	Sitting	11.4	Standing	43.8	Safe
40	12.0	Standing	8.8	Sitting	9.3	Sitting	10.8	Standing	44.6	Safe
41	12.5	Standing	9.3	Sitting	10.5	Standing	12.6	Standing	43.8	Safe
42	11.3	Standing	8.6	Sitting	9.3	Sitting	10.8	Standing	39.7	Safe
43	9.9	Sitting	7.5	Sitting	8.1	Sitting	9.6	Sitting	38.9	Safe
44	12.5	Standing	9.4	Sitting	10.3	Standing	12.2	Standing	45.2	Safe
45	11.9	Standing	9.1	Sitting	10.2	Standing	12.3	Standing	42.4	Safe
46	11.0	Standing	8.8	Sitting	10.2	Standing	12.5	Standing	45.0	Safe
47	10.4	Standing	8.8	Sitting	10.2	Standing	12.7	Standing	49.2	Safe
48	11.0	Standing	9.0	Sitting	10.5	Standing	12.9	Standing	46.1	Safe
49	8.9	Sitting	7.1	Sitting	8.1	Sitting	10.0	Sitting	40.0	Safe
50	9.5	Sitting	7.4	Sitting	8.6	Sitting	10.9	Standing	41.7	Safe
51	8.8	Sitting	6.9	Sitting	7.7	Sitting	8.9	Sitting	32.2	Safe
52	11.2	Standing	9.0	Sitting	9.5	Sitting	11.1	Standing	42.7	Safe
53	10.6	Standing	7.7	Sitting	8.4	Sitting	9.9	Sitting	41.3	Safe
54	10.4	Standing	7.6	Sitting	8.5	Sitting	10.6	Standing	49.8	Safe
55	12.5	Standing	9.5	Sitting	11.4	Standing	14.0	Standing	49.1	Safe
56	12.1	Standing	9.3	Sitting	11.2	Standing	13.9	Standing	49.3	Safe
57	12.3	Standing	9.7	Sitting	11.4	Standing	14.4	Standing	52.5	Safe
58	12.1	Standing	9.5	Sitting	11.3	Standing	14.2	Standing	51.6	Safe
59	12.0	Standing	9.4	Sitting	11.5	Standing	14.9	Standing	54.1	Safe
60	12.8	Standing	9.8	Sitting	12.0	Standing	14.5	Standing	51.5	Safe
61	13.1	Standing	10.1	Standing	12.2	Standing	15.0	Standing	53.6	Safe
62	13.6	Standing	10.4	Standing	12.4	Standing	15.2	Walking	52.3	Safe
63	13.0	Standing	10.2	Standing	11.7	Standing	14.4	Standing	49.4	Safe
64	12.6	Standing	9.9	Sitting	11.5	Standing	14.2	Standing	49.6	Safe
65	11.3	Standing	9.0	Sitting	10.5	Standing	13.0	Standing	46.9	Safe
66	10.9	Standing	8.9	Sitting	10.2	Standing	12.5	Standing	45.2	Safe



APPENDIX B

PEDESTRIAN COMFORT SUITABILITY, TABLES B1-B3 (PROPOSED SCENARIO)

127 WALGREEN ROAD, OTTAWA, ON, CANADA K0A 1L0 | 613 836 0934
GRADIENTWIND.COM

Guidelines	
Pedestrian Comfort	**20% exceedance wind speed** 0-10 km/h = Sitting, 10-15 km/h = Standing, 15-20 km/h = Walking, >20 km/h = Uncomfortable
Pedestrian Safety	**0.1% exceedance wind speed** 0-90 km/h = Safe

TABLE B1: SUMMARY OF PEDESTRIAN COMFORT (PROPOSED SCENARIO)

Sensor	Pedestrian Comfort								Pedestrian Safety	
	Spring		Summer		Autumn		Winter		Annual	
	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Safety Class
1	11.3	Standing	8.4	Sitting	9.0	Sitting	10.7	Standing	48.4	Safe
2	17.5	Walking	12.8	Standing	13.0	Standing	15.6	Walking	70.6	Safe
3	16.3	Walking	13.6	Standing	14.0	Standing	15.6	Walking	58.2	Safe
4	17.0	Walking	14.0	Standing	14.5	Standing	16.3	Walking	56.9	Safe
5	18.2	Walking	14.5	Standing	15.6	Walking	17.5	Walking	65.7	Safe
6	19.6	Walking	15.9	Walking	18.4	Walking	22.1	Uncomfortable	69.1	Safe
7	15.1	Walking	12.0	Standing	13.8	Standing	15.8	Walking	58.5	Safe
8	13.3	Standing	10.7	Standing	12.8	Standing	15.1	Walking	55.0	Safe
9	20.5	Uncomfortable	15.6	Walking	19.1	Walking	23.6	Uncomfortable	79.4	Safe
10	16.5	Walking	13.2	Standing	16.5	Walking	21.9	Uncomfortable	79.3	Safe
11	19.0	Walking	13.6	Standing	16.5	Walking	21.8	Uncomfortable	84.6	Safe
12	19.8	Walking	15.2	Walking	18.1	Walking	23.3	Uncomfortable	82.3	Safe
13	13.8	Standing	10.8	Standing	11.7	Standing	13.4	Standing	51.8	Safe
14	19.9	Walking	15.5	Walking	16.6	Walking	19.6	Walking	71.6	Safe
15	20.0	Walking	16.4	Walking	17.2	Walking	19.5	Walking	73.2	Safe
16	21.0	Uncomfortable	16.7	Walking	17.3	Walking	19.7	Walking	79.1	Safe
17	18.0	Walking	14.3	Standing	15.7	Walking	18.6	Walking	72.7	Safe
18	12.0	Standing	10.1	Standing	11.0	Standing	13.0	Standing	53.2	Safe
19	13.8	Standing	10.7	Standing	11.8	Standing	13.7	Standing	64.2	Safe
20	17.6	Walking	14.4	Standing	16.0	Walking	19.7	Walking	77.3	Safe
21	20.9	Uncomfortable	16.1	Walking	16.5	Walking	19.3	Walking	81.2	Safe
22	14.0	Standing	10.6	Standing	13.9	Standing	17.8	Walking	72.0	Safe
23	16.9	Walking	13.3	Standing	16.3	Walking	20.8	Uncomfortable	71.5	Safe
24	14.7	Standing	10.5	Standing	13.1	Standing	16.0	Walking	61.8	Safe
25	13.5	Standing	9.7	Sitting	12.6	Standing	16.6	Walking	67.8	Safe
26	16.5	Walking	14.2	Standing	16.0	Walking	20.5	Uncomfortable	77.6	Safe
27	8.9	Sitting	6.6	Sitting	7.8	Sitting	8.6	Sitting	51.9	Safe
28	8.3	Sitting	6.3	Sitting	7.2	Sitting	8.3	Sitting	43.0	Safe
29	8.9	Sitting	7.5	Sitting	8.4	Sitting	9.4	Sitting	42.8	Safe
30	22.1	Uncomfortable	17.1	Walking	16.6	Walking	19.3	Walking	78.9	Safe
31	22.7	Uncomfortable	16.2	Walking	16.6	Walking	19.6	Walking	75.0	Safe
32	25.9	Uncomfortable	19.8	Walking	19.4	Walking	21.8	Uncomfortable	88.3	Safe
33	21.8	Uncomfortable	16.2	Walking	16.5	Walking	19.2	Walking	86.5	Safe
34	17.8	Walking	13.9	Standing	14.2	Standing	15.7	Walking	80.2	Safe
35	9.8	Sitting	7.5	Sitting	8.7	Sitting	10.2	Standing	46.7	Safe

Guidelines	
Pedestrian Comfort	**20% exceedance wind speed** 0-10 km/h = Sitting, 10-15 km/h = Standing, 15-20 km/h = Walking, >20 km/h = Uncomfortable
Pedestrian Safety	**0.1% exceedance wind speed** 0-90 km/h = Safe

TABLE B2: SUMMARY OF PEDESTRIAN COMFORT (PROPOSED SCENARIO)

Sensor	Pedestrian Comfort								Pedestrian Safety	
	Spring		Summer		Autumn		Winter		Annual	
	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Safety Class
36	8.9	Sitting	7.3	Sitting	8.2	Sitting	9.6	Sitting	41.8	Safe
37	10.1	Standing	8.9	Sitting	9.6	Sitting	10.7	Standing	47.3	Safe
38	16.7	Walking	12.1	Standing	12.8	Standing	15.0	Standing	66.3	Safe
39	11.4	Standing	8.5	Sitting	9.3	Sitting	11.0	Standing	52.5	Safe
40	15.9	Walking	11.2	Standing	11.9	Standing	14.3	Standing	74.6	Safe
41	10.1	Standing	7.8	Sitting	8.9	Sitting	11.0	Standing	45.1	Safe
42	14.1	Standing	10.5	Standing	11.6	Standing	13.3	Standing	56.3	Safe
43	11.6	Standing	9.4	Sitting	10.0	Sitting	11.3	Standing	45.1	Safe
44	12.6	Standing	10.2	Standing	10.8	Standing	12.3	Standing	48.0	Safe
45	10.2	Standing	8.5	Sitting	8.9	Sitting	9.5	Sitting	38.0	Safe
46	11.3	Standing	9.5	Sitting	10.0	Sitting	10.9	Standing	41.2	Safe
47	10.7	Standing	9.1	Sitting	9.7	Sitting	10.6	Standing	39.1	Safe
48	9.2	Sitting	7.5	Sitting	8.0	Sitting	8.8	Sitting	38.4	Safe
49	10.9	Standing	9.0	Sitting	9.7	Sitting	11.0	Standing	46.3	Safe
50	17.3	Walking	14.5	Standing	15.8	Walking	19.0	Walking	69.7	Safe
51	12.9	Standing	9.5	Sitting	10.7	Standing	12.8	Standing	52.3	Safe
52	19.9	Walking	15.5	Walking	15.7	Walking	17.1	Walking	66.6	Safe
53	14.0	Standing	10.3	Standing	10.9	Standing	11.6	Standing	60.1	Safe
54	18.0	Walking	14.3	Standing	16.5	Walking	20.2	Uncomfortable	69.2	Safe
55	13.5	Standing	9.5	Sitting	10.7	Standing	12.8	Standing	60.7	Safe
56	15.4	Walking	11.5	Standing	12.7	Standing	15.2	Walking	79.4	Safe
57	16.9	Walking	11.5	Standing	13.0	Standing	15.7	Walking	74.1	Safe
58	19.5	Walking	14.3	Standing	16.7	Walking	21.6	Uncomfortable	80.5	Safe
59	16.3	Walking	13.2	Standing	14.5	Standing	16.7	Walking	60.2	Safe
60	18.6	Walking	13.9	Standing	16.0	Walking	19.2	Walking	75.0	Safe
61	12.7	Standing	10.7	Standing	12.4	Standing	16.4	Walking	68.2	Safe
62	15.5	Walking	12.6	Standing	14.3	Standing	17.8	Walking	74.7	Safe
63	21.6	Uncomfortable	18.4	Walking	18.8	Walking	21.6	Uncomfortable	80.3	Safe
64	20.0	Walking	16.9	Walking	16.7	Walking	18.7	Walking	78.9	Safe
65	14.1	Standing	11.8	Standing	11.8	Standing	12.8	Standing	65.4	Safe
66	14.4	Standing	11.6	Standing	12.2	Standing	14.6	Standing	61.0	Safe
67	21.6	Uncomfortable	17.7	Walking	20.8	Uncomfortable	26.0	Uncomfortable	98.7	Dangerous
68	23.7	Uncomfortable	19.0	Walking	21.2	Uncomfortable	25.8	Uncomfortable	83.9	Safe
69	27.9	Uncomfortable	22.7	Uncomfortable	25.1	Uncomfortable	30.8	Uncomfortable	91.3	Dangerous
70	25.3	Uncomfortable	20.8	Uncomfortable	23.7	Uncomfortable	28.9	Uncomfortable	90.0	Safe

Guidelines	
Pedestrian Comfort	**20% exceedance wind speed** 0-10 km/h = Sitting, 10-15 km/h = Standing, 15-20 km/h = Walking, >20 km/h = Uncomfortable
Pedestrian Safety	**0.1% exceedance wind speed** 0-90 km/h = Safe

TABLE B3: SUMMARY OF PEDESTRIAN COMFORT (PROPOSED SCENARIO)

Sensor	Pedestrian Comfort								Pedestrian Safety	
	Spring		Summer		Autumn		Winter		Annual	
	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Comfort Class	Wind Speed	Safety Class
71	18.4	Walking	14.4	Standing	15.8	Walking	19.2	Walking	59.1	Safe
72	13.5	Standing	11.1	Standing	11.2	Standing	13.1	Standing	74.4	Safe
73	13.9	Standing	10.9	Standing	11.8	Standing	14.5	Standing	66.5	Safe
74	12.4	Standing	10.1	Standing	11.4	Standing	14.8	Standing	63.3	Safe
75	13.4	Standing	11.3	Standing	11.7	Standing	12.7	Standing	57.4	Safe
76	18.4	Walking	15.3	Walking	15.3	Walking	16.5	Walking	82.4	Safe
77	16.2	Walking	12.2	Standing	12.6	Standing	14.9	Standing	66.4	Safe
78	12.1	Standing	9.1	Sitting	10.2	Standing	12.5	Standing	54.8	Safe
79	11.3	Standing	8.4	Sitting	9.9	Sitting	12.3	Standing	54.0	Safe
80	13.9	Standing	11.3	Standing	13.8	Standing	18.3	Walking	69.9	Safe
81	13.8	Standing	11.0	Standing	13.4	Standing	17.3	Walking	65.5	Safe
82	10.4	Standing	8.4	Sitting	9.7	Sitting	11.9	Standing	51.0	Safe
83	9.6	Sitting	7.4	Sitting	8.8	Sitting	10.6	Standing	45.2	Safe
84	12.2	Standing	9.0	Sitting	11.1	Standing	14.8	Standing	61.6	Safe
85	10.6	Standing	8.4	Sitting	9.6	Sitting	12.0	Standing	49.7	Safe
86	13.4	Standing	11.3	Standing	13.3	Standing	15.8	Walking	63.8	Safe
87	18.6	Walking	14.3	Standing	16.6	Walking	20.4	Uncomfortable	84.3	Safe
88	19.8	Walking	14.8	Standing	17.1	Walking	20.4	Uncomfortable	82.2	Safe
89	20.8	Uncomfortable	16.8	Walking	19.0	Walking	23.5	Uncomfortable	86.6	Safe
90	22.0	Uncomfortable	17.8	Walking	19.7	Walking	24.2	Uncomfortable	79.4	Safe



APPENDIX C

WIND TUNNEL SIMULATION OF THE NATURAL WIND

127 WALGREEN ROAD, OTTAWA, ON, CANADA K0A 1L0 | 613 836 0934
GRADIENTWIND.COM

WIND TUNNEL SIMULATION OF THE NATURAL WIND

Wind flowing over the surface of the earth develops a boundary layer due to the drag produced by surface features such as vegetation and man-made structures. Within this boundary layer, the mean wind speed varies from zero at the surface to the gradient wind speed at the top of the layer. The height of the top of the boundary layer is referred to as the gradient height, above which the velocity remains more-or-less constant for a given synoptic weather system. The mean wind speed is taken to be the average value over one hour. Superimposed on the mean wind speed are fluctuating (or turbulent) components in the longitudinal (i.e. along wind), vertical and lateral directions. Although turbulence varies according to the roughness of the surface, the turbulence level generally increases from nearly zero (smooth flow) at gradient height to maximum values near the ground. While for a calm ocean the maximum could be 20%, the maximum for a very rough surface such as the center of a city could be 100%, or equal to the local mean wind speed. The height of the boundary layer varies in time and over different terrain roughness within the range of 400 metres (m) to 600 m.

Simulating real wind behaviour in a wind tunnel requires simulating the variation of mean wind speed with height, simulating the turbulence intensity, and matching the typical length scales of turbulence. It is the ratio between wind tunnel turbulence length scales and turbulence scales in the atmosphere that determines the geometric scales that models can assume in a wind tunnel. Hence, when a 1:200 scale model is quoted, this implies that the turbulence scales in the wind tunnel and the atmosphere have the same ratios. Some flexibility in this requirement has been shown to produce reasonable wind tunnel predictions compared to full scale. In model scale the mean and turbulence characteristics of the wind are obtained with the use of spires at one end of the tunnel and roughness elements along the floor of the tunnel. The fan is located at the model end and wind is pulled over the spires, roughness elements and model. It has been found that, to a good approximation, the mean wind profile can be represented by a power law relation, shown below, giving height above ground versus wind speed.

$$U = U_g \left(\frac{Z}{Z_g} \right)^{\alpha}$$

Where; ***U*** = mean wind speed, U_g = gradient wind speed, ***Z*** = height above ground, Z_g = depth of the boundary layer (gradient height) and α is the power law exponent.

Figure B1 on the following page plots three velocity profiles for open country, and suburban and urban exposures.

The exponent α varies according to the type of upwind terrain; α ranges from 0.14 for open country to 0.33 for an urban exposure. Figure C2 illustrates the theoretical variation of turbulence for open country, suburban and urban exposures.

The integral length scale of turbulence can be thought of as an average size of gust in the atmosphere. Although it varies with height and ground roughness, it has been found to generally be in the range of 100 m to 200 m in the upper half of the boundary layer. Thus, for a 1:300 scale, the model value should be between 1/3 and 2/3 of a metre. Integral length scales are derived from power spectra, which describe the energy content of wind as a function of frequency. There are several ways of determining integral length scales of turbulence. One way is by comparison of a measured power spectrum in model scale to a non-dimensional theoretical spectrum such as the Davenport spectrum of longitudinal turbulence. Using the Davenport spectrum, which agrees well with full-scale spectra, one can estimate the integral scale by plotting the theoretical spectrum with varying L until it matches as closely as possible the measured spectrum:

$$f \times S(f) = \frac{\frac{4(Lf)^2}{U_{10}{}^2}}{\left[1 + \frac{4(Lf)^2}{U_{10}{}^2}\right]^{\frac{4}{3}}}$$

Where, f is frequency, S(f) is the spectrum value at frequency f, U10 is the wind speed 10 m above ground level, and L is the characteristic length of turbulence.

Once the wind simulation is correct, the model, constructed to a suitable scale, is installed at the center of the working section of the wind tunnel. Different wind directions are represented by rotating the model to align with the wind tunnel center-line axis.

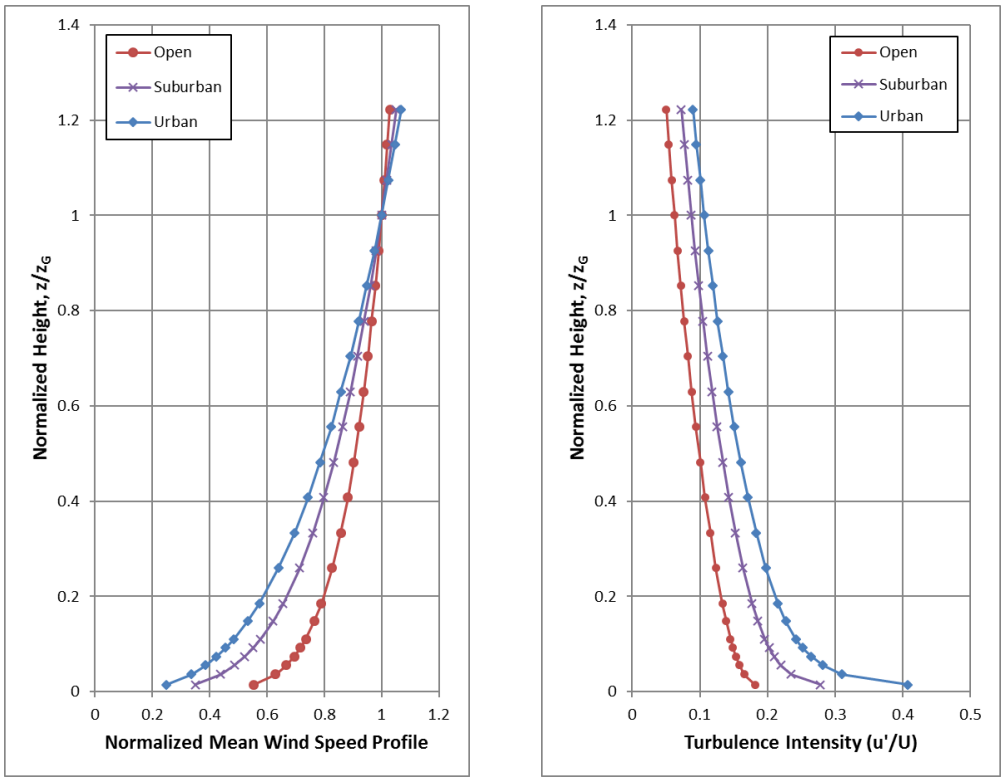


FIGURE C1 (LEFT): MEAN WIND SPEED PROFILES;
FIGURE C2 (RIGHT): TURBULENCE INTENSITY PROFILES

REFERENCES

1. Teunissen, H.W., 'Characteristics of The Mean Wind And Turbulence In The Planetary Boundary Layer', Institute For Aerospace Studies, University Of Toronto, UTIAS # 32, Oct. 1970

2. Flay, R.G., Stevenson, D.C., 'Integral Length Scales in an Atmospheric Boundary Layer Near The Ground', 9th Australian Fluid Mechanics Conference, Auckland, Dec. 1966

3. ESDU, 'Characteristics of Atmospheric Turbulence Near the Ground', 74030

4. Bradley, E.F., Coppin, P.A., Katen, P.C., '*Turbulent Wind Structure Above Very Rugged Terrain*', 9th Australian Fluid Mechanics Conference, Auckland, Dec. 1966



APPENDIX D

PEDESTRIAN LEVEL WIND MEASUREMENT METHODOLOGY

127 WALGREEN ROAD, OTTAWA, ON, CANADA K0A 1L0 | 613 836 0934
GRADIENTWIND.COM

PEDESTRIAN LEVEL WIND MEASUREMENT METHODOLOGY

Pedestrian level wind studies are performed in a wind tunnel on a physical model of the study buildings at a suitable scale. Instantaneous wind speed measurements are recorded at a model height corresponding to 1.5 m full scale using either a hot wire anemometer or a pressure-based transducer. Measurements are performed at any number of locations on the model and usually for 36 wind directions. For each wind direction, the roughness of the upwind terrain is matched in the wind tunnel to generate the correct mean and turbulent wind profiles approaching the model.

The hot wire anemometer is an instrument consisting of a thin metallic wire conducting an electric current. It is an omni-directional device equally sensitive to wind approaching from any direction in the horizontal plane. By compensating for the cooling effect of wind flowing over the wire, the associated electronics produce an analog voltage signal that can be calibrated against velocity of the air stream. For all measurements, the wire is oriented vertically so as to be sensitive to wind approaching from all directions in a horizontal plane.

The pressure sensor is a small cylindrical device that measures instantaneous pressure differences over a small area. The sensor is connected via tubing to a transducer that translates the pressure to a voltage signal that is recorded by computer. With appropriately designed tubing, the sensor is sensitive to a suitable range of fluctuating velocities.

For a given wind direction and location on the model, a time history of the wind speed is recorded for a period of time equal to one hour in full-scale. The analog signal produced by the hot wire or pressure sensor is digitized at a rate of 400 samples per second. A sample recording for several seconds is illustrated in Figure D1. This data is analyzed to extract the mean, root-mean-square (rms) and the peak of the signal. The peak value, or gust wind speed, is formed by averaging a number of peaks obtained from sub-intervals of the sampling period. The mean and gust speeds are then normalized by the wind tunnel gradient wind speed, which is the speed at the top of the model boundary layer, to obtain mean and gust ratios. At each location, the measurements are repeated for 36 wind directions to produce normalized polar plots, which will be provided upon request.

In order to determine the duration of various wind speeds at full scale for a given measurement location the gust ratios are combined with a statistical (mathematical) model of the wind climate for the project site. This mathematical model is based on hourly wind data obtained from one or more meteorological stations (usually airports) close to the project location. The probability model used to represent the data is the Weibull distribution expressed as:

$$P\left(>U_g\right) = A_\theta \bullet \exp\left[\left(-\frac{U_g}{C_\theta}\right)^{K\theta}\right]$$

Where,

P (> U_g) is the probability, fraction of time, that the gradient wind speed ***U_g*** is exceeded; ***θ*** is the wind direction measured clockwise from true north, ***A***, ***C***, ***K*** are the Weibull coefficients, (Units: A - dimensionless, C - wind speed units [km/h] for instance, K - dimensionless). ***A_θ*** is the fraction of time wind blows from a 10° sector centered on ***θ***.

Analysis of the hourly wind data recorded for a length of time, on the order of 10 to 30 years, yields the ***A_θ***, ***C_θ*** and ***K_θ*** values. The probability of exceeding a chosen wind speed level, say 20 km/h, at sensor *N* is given by the following expression:

$$P_N(>20) = \Sigma_\theta P\left[\frac{(>20)}{\left(\frac{U_N}{U_g}\right)}\right]$$

P_N (> 20) = Σ_θ P { > 20/(U_N/Ug) }

Where, ***U_N/U_g*** is the gust velocity ratios, where the summation is taken over all 36 wind directions at 10° intervals.

If there are significant seasonal variations in the weather data, as determined by inspection of the C_θ and K_θ values, then the analysis is performed separately for two or more times corresponding to the groupings of seasonal wind data. Wind speed levels of interest for predicting pedestrian comfort are based on the comfort guidelines chosen to represent various pedestrian activity levels as discussed in the main text.

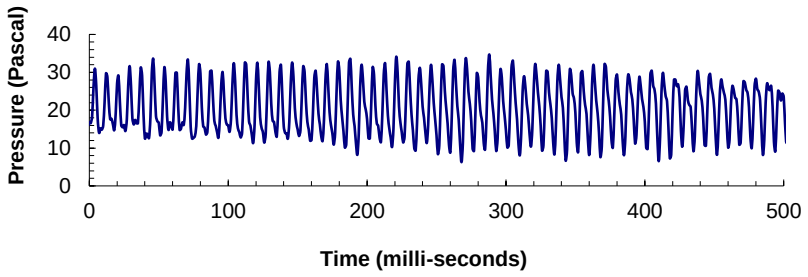


FIGURE D1: TIME VERSUS VELOCITY TRACE FOR A TYPICAL WIND SENSOR

REFERENCES

1. Davenport, A.G., '*The Dependence of Wind Loading on Meteorological Parameters*', Proc. of Int. Res. Seminar, Wind Effects on Buildings & Structures, NRC, Ottawa, 1967, University of Toronto Press.

2. Wu, S., Bose, N., 'An *Extended Power Law Model for the Calibration of Hot-wire/Hot-film Constant Temperature Probes*', Int. J. of Heat Mass Transfer, Vol.17, No.3, pp.437-442, Pergamon Press.

Estate/Court File No. BK-25-03281116-0032

IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE A PROPOSAL OF 177 CROSS ARGUS DEVELOPMENT INC., OF THE CITY OF BURLINGTON, IN THE PROVINCE OF ONTARIO

ONTARIO
SUPERIOR COURT OF JUSTICE
(IN BANKRUPTCY AND INSOLVENCY)
COMMERCIAL LIST

PROCEEDING COMMENCED AT TORONTO

AFFIDAVIT OF SARMAD (SAM) GANNI

BE LAW LLP
Suite 700 - 30 St Patrick Street
Toronto, ON M5T 3A3

Sara J. Erskine (LSO# 46856G)
Email: sara@be-law.ca
Tel: 416-597-5408

Lawyer for the Applicant,
117 Cross Argus Development
Inc.,

TAB 3

Estate / Court File No.: BK-25-03281116-0032

ONTARIO
SUPERIOR COURT OF JUSTICE
(IN BANKRUPTCY AND INSOLVENCY)
COMMERCIAL LIST

THE HONOURABLE	)	FRIDAY, THE 30th
	)	
JUSTICE DIETRICH	)	DAY OF OCTOBER, 2025

IN THE MATTER OF *THE BANKRUPTCY AND INSOLVENCY ACT*, R.S.C. 1985, c. B-3, AS AMENDED

IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE A PROPOSAL OF 177 CROSS ARGUS DEVELOPMENT INC., OF THE CITY OF BURLINGTON, IN THE PROVINCE OF ONTARIO

NOI PROCESS ORDER

THIS MOTION, made by 177 Cross Argus Development Inc. (the "**Company**" or "**177 Cross**"), pursuant to the *Bankruptcy and Insolvency Act* (Canada) R.S.C. 1985, c. C-36, as amended (the "**BIA**") for an order, *inter alia*: (i) abridging the time for service and filing of the Notice of Motion and the Motion Record and dispensing with further service and filing thereof; (ii) approving a super-priority administration charge in the aggregate amount of $250,000 on the current and future assets, undertakings and property ("**Property**") of the Company in favour of the Proposal Trustee; (iii) extending the time for the Company to file a proposal under the BIA and the corresponding stay of proceedings (the "**Stay Extension**") to and including December 16, 2025; (iv) declaring that the Third Mortgagee (as defined below) is subject to the stay under section 69 of the BIA; (v) approving the first report of Albert Gelman Inc., in its capacity as proposal trustee ("**Proposal Trustee**"), and the activities set out therein; (vi) declaring the Notices of Attornment of Rents and Direction to Pay delivered by the Third Mortgagee to tenants null and void and directing the Third Mortgagee to pay rents collected to the Company; and (vii) such further and other relief as this Honorable Court may seem just, was heard this day via video conference.

ON READING the Notice of Motion, the affidavit of Sarmad Ganni affirmed October 28, 2025 (the "**Ganni Affidavit**") and the Exhibits thereto, the First Report filed, and the appendices thereto, and on haring the submissions of counsel for the Company and the Proposal Trustee, no

one else appearing although duly served as appears from the affidavit of service of Kari Fuller affirmed October 28, 2025;

SERVICE

1. **THIS COURT ORDERS** that the time for service of the Notice of Motion, the Motion Record and the First Report is hereby abridged and validated so that this Motion is properly returnable today and hereby dispenses with further service thereof.

ADMINISTRATION CHARGE

2. **THIS COURT ORDERS** that that the Proposal Trustee, the Proposal Trustee's counsel, and the Company's counsel, shall be paid their reasonable fees and disbursements, in each case at their standard rates and charges, by the Company as part of the costs of these proceedings, both before and after the making of this Order. The Company is hereby authorized to pay the accounts of the Proposal Trustee, the Proposal Trustee's counsel and the Company's counsel on a weekly basis, provided that the accounts of the Proposal Trustee and the Proposal Trustee's counsel as paid are passed from time to time, and for this purpose the accounts are hereby referred to a judge of the Ontario Superior Court of Justice (Commercial List) at Toronto, Ontario.

3. **THIS COURT ORDERS** that the Proposal Trustee, the Proposal Trustee's counsel and the Company's counsel shall be entitled to the benefit of and are hereby granted a charge (the "**Administration Charge**") over the current and future assets, undertakings and properties of the Company of every nature and kind whatsoever (including all real and personal property), and wherever situate including all proceeds thereof (collectively, the "**Property**"), which charge shall not exceed an aggregate amount of $250,000, as security for their professional fees and disbursements incurred at their standard rates and charges, both before and after the making of this Order. The Administration Charge shall have the priority set out in paragraphs 5 herein.

VALIDITY AND PRIORITY OF ADMINISTRATION CHARGE

4. **THIS COURT ORDERS** that the filing, registration or perfection of the Administration Charge shall not be required, and that the Administrative Charge shall be valid and enforceable for all purposes, including as against any right, title or interest filed, registered, recorded or perfected subsequent to the Administrative Charge coming into existence, notwithstanding any such failure to file, register, record or perfect.

5. **THIS COURT ORDERS** that the Administration Charge shall constitute a charge on the Property and shall rank in priority to all other security interests, trusts, liens, charges and encumbrances, claims of secured creditors, statutory or otherwise (collectively, "**Encumbrances**"), in favour of any individual, firm, corporation, governmental body or agency, or any other entities (all of the foregoing, collectively being "**Persons**" and each being a "**Person**") notwithstanding the order of perfection or attachment.

6. **THIS COURT ORDERS** that except as otherwise expressly provided for herein, or as may be approved by this Court, the Company shall not grant any Encumbrances over any Property that ranks in priority to, or *pari passu* with, the Administration Charge, unless the Company also obtains the prior written consent of the Proposal Trustee and the chargees entitled to the benefit of the Administrative Charge (collectively, the "**Chargees**"), or further Order of this Court.

7. **THIS COURT ORDERS** that the Administration Charge shall not be rendered invalid or unenforceable and the rights and remedies of the Chargees thereunder shall not otherwise be limited or impaired in any way by: (a) the pendency of these proceedings and the declarations of insolvency made herein; (b) any application(s) for bankruptcy order(s) issued pursuant to the BIA, or any bankruptcy order made pursuant to such applications; (c) the filing of any assignments for the general benefit of creditors made pursuant to the BIA; (d) the provisions of any federal or provincial statutes; or (e) any negative covenants, prohibitions or other similar provisions with respect to borrowings, incurring debt or the creation of Encumbrances, contained in any existing loan documents, lease, sublease, offer to lease or other agreement (collectively, an "**Agreement**") which binds the Company, and notwithstanding any provision

to the contrary in any Agreement:

(a) the creation of the Administrative Charge shall not create or be deemed to constitute a breach by the Company of any Agreement to which it is a party;

(b) none of the Chargees shall have any liability to any Person whatsoever as a result of the creation of the Administrative Charge; and

(c) the payments made by the Company pursuant to this Order and the granting of the Administrative Charge, do not and will not constitute preferences, fraudulent conveyances, transfers at undervalue, oppressive conduct, or other challengeable or voidable transactions under any applicable law.

8. **THIS COURT ORDERS** that the Administrative Charge created by this Order over leases of real property in Canada shall only be a charge in the Company's interest in such real property leases.

EXTENSION OF TIME TO MAKE A PROPOSAL

9. **THIS COURT ORDERS** that the time within which to make a proposal pursuant to section 62(1) of the BIA and the corresponding stay of proceedings provided for in section 69 of the BIA, be and are hereby extended in accordance with section 50.4(9) of the BIA to and including December 15, 2025.

DECLARATION OF THIRD MORTGAGEE

10. **THIS COURT DECLARES** that the Third Mortgagee is subject to the stay under sections 69 and 69.1 of the BIA.

NOTICE OF ATTORNMENT OF RENTS

11. **THIS COURT DECLARES** that the Notices of Attornment of Rents and Direction to Pay dated September 30, 2025 (the "**Rent Notices**") and delivered by the Third Mortgagee to the Company's tenants are hereby null and void.

12. **THIS COURT ORDERS** any rents received by the Third Mortgagee pursuant to the Rent Notices shall be paid to the Company within 10 days from the date of this Order.

APPROVAL OF PAYMENT OF PRE-FILING DEVELOPMENT CHARGES

13. **THIS COURT ORDERS** that the Company is permitted to pay pre-filing development charges and expenses incurred by the Company in accordance with the cash flow statement appended to the First Report of approximately $267,157, subject to Proposal Trustee review and approval.

APPROVAL OF FIRST REPORT

14. **THIS COURT ORDERS** that the First Report and the activities of the Proposal Trustee set out therein are approved. provided that only the Proposal Trustee, in its personal capacity and only with respect to its own personal liability, shall be entitled to rely upon or utilize in any way such approval.

SERVICE AND NOTICE

15. **THIS COURT ORDERS** that the E-Service Protocol of the Commercial List (the "**Protocol**") is approved and adopted by reference herein and, in this proceeding, the service of documents made in accordance with the Protocol (which can be found on the Commercial List website at http://www.ontariocourts.ca/scj/practice/practice-directions/toronto/e-service-protocol/) shall be valid and effective service. Subject to Rule 17.05 this Order shall constitute an order for substituted service pursuant to Rule 16.04 of the Rules of Civil Procedure. Subject to Rule 3.01(d) of the Rules of Civil Procedure and paragraph 21 of the Protocol, service of documents in accordance with the Protocol will be effective on transmission.

16. **THIS COURT ORDERS** that the Company and the Proposal Trustee and each of their counsel are at liberty to serve or distribute this Order, any other materials and orders as may be reasonably required in these proceedings, including any notices, or other correspondence, by forwarding true copies thereof by electronic message to the Company's creditors or other interested parties and their advisors. For greater certainty, any such distribution or service shall be deemed to be in satisfaction of a legal or judicial obligation, and notice requirements within

the meaning of clause 3(c) of the *Electronic Commerce Protection Regulations*, Reg. 81000-2-175 (SOR/DORS).

GENERAL

17. **THIS COURT ORDERS** that the Company or the Proposal Trustee may from time to time apply to this Court to amend, vary or supplement this Order or for advice and directions in the discharge of its powers and duties under this Order or in the interpretation or application of this Order.

18. **THIS COURT ORDERS** that nothing in this Order shall prevent the Proposal Trustee from acting as an interim receiver, receiver, receiver and manager, or trustee in bankruptcy of the Company or the Property or act as monitor if the proceeding is continued under the Companies' Creditors Arrangement Act.

19. **THIS COURT ORDERS** that any interested party may apply to this Court to vary or amend this Order on not less than (7) seven days' notice to the Company, the Proposal Trustee, and any other party or parties likely to be affected by the Order sought or upon such other notice as this Court may order.

20. **THIS COURT ORDERS** that this Order and all of its provisions are effective as of 12:01 a.m. Toronto time on the date of this Order.

IN THE MATTER OF THE BANKRUPTCY AND INSOLVENCY ACT, R.S.C. 1985, c. B-3, AS AMENDED
IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE A PROPOSAL OF 177 CROSS ARGUS DEVELOPMENT INC., OF THE CITY OF BURLINGTON, IN THE PROVINCE OF ONTARIO

Estate / Court File No.: BK-25-03281116-0032

ONTARIO
SUPERIOR COURT OF JUSTICE
(IN BANKRUPTCY AND INSOLVENCY)
COMMERCIAL LIST

PROCEEDINGS COMMENCED IN TORONTO

NOI PROCESS ORDER

BE LAW LLP
30 St. Patrick Street, Suite 700
Toronto, ON M5T 3A3

Sara J. Erskine (LSO# 46856G)
Email: sara@be-law.ca
Tel: 416-597-5408

Adrienne Zaya (LSO# 79215K)
Email: Adrienne.zaya@be-law.ca
Tel: 416-306-8026

Lawyers for the 177 Cross Argus Development Inc.

IN THE MATTER OF THE BANKRUPTCY AND INSOLVENCY ACT, R.S.C. 1985, c. B-3, AS AMENDED
IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE A PROPOSAL OF 177 CROSS ARGUS DEVELOPMENT INC., OF THE CITY OF BURLINGTON, IN THE PROVINCE OF ONTARIO

Court File No.: BK-25-03281116-0032

ONTARIO
SUPERIOR COURT OF JUSTICE
(IN BANKRUPTCY AND INSOLVENCY)
COMMERCIAL LIST

PROCEEDINGS COMMENCED IN TORONTO

MOTION RECORD

BE LAW LLP
30 St. Patrick Street, Suite 700
Toronto, ON M5T 3A3

Sara J. Erskine (LSO# 46856G)
Email: sara@be-law.ca
Tel: 416-597-5408

Adrienne Zaya (LSO# 79215K)
Email: Adrienne.zaya@be-law.ca
Tel: 416-306-8026

Lawyers for 177 Cross Argus Development Inc.