

FINAL REPORT



580 BURLOAK DRIVE

OAKVILLE, ON

LAND-USE COMPATIBILITY STUDY

RWDI # 2511139

July 28, 2025



SUBMITTED TO

Arlene Beaumont
arlene@weoughtred.ca

W.E. Oughtred and Associates Inc.
2140 Winston Park Drive, Suite 26
Oakville, Ontario L6H 5V5

SUBMITTED BY

Greg Conley
Project Manager | Principal
Greg.Conley@rwdi.com

Matt Costigane, P.Eng.
Technical Director
Matt.Costigane@rwdi.com

Khalid Hussein, P.Eng.
Senior Noise and Vibration Engineer
Khalid.Hussein@rwdi.com

RWDI
600 Southgate Drive,
Guelph, Ontario,
Canada N1G 4P6
Tel: +1.519.823.1311



This document is intended for the sole use of the party to whom it is addressed and may contain information that is privileged and/or confidential. If you have received this in error, please notify us immediately. Accessible document formats provided upon request. © RWDI name and logo are registered trademarks in Canada and the United States of America. ©2025 RWDI AIR Inc. ("RWDI") ALL RIGHTS RESERVED

rwdi.com



TABLE OF CONTENTS

1	INTRODUCTION	1
2	METHODOLOGY	1
2.1	Applicable Guidelines	1
2.2	Ontario Environmental Protection Act and Regulation 419/05.....	1
2.3	Environmental Noise Guideline NPC-300	2
2.4	D-Series Guidelines	3
2.5	Land Use Compatibility - Halton Region	6
3	LAND USE COMPATIBILITY	6
3.1	Industrial Class Designation	6
3.2	Existing Sensitive Land Uses.....	6
3.3	Potential for Incompatibility	7
3.3.1	Proposed Development.....	7
3.3.2	Air Quality, Dust and Odour.....	7
3.3.3	Noise.....	9
4	CONCLUSIONS	10
5	REFERENCES	11
6	STATEMENT OF LIMITATIONS	11



LIST OF TABLES

Table 1:	Summary of Ontario Regulations.....	2
Table 2:	NPC-300 Exclusion Limits for Class 1 area-Stationary Sources (LAeq-1hr)	3
Table 3:	D-6 Industry Classification Scheme	4
Table 4:	D-6 Separation Distances.....	4
Table 5:	Sensitive uses within 300 m of the Proposed Development	7
Table 6:	Stationary Source Sound Power Level Assumptions	9
Table 7:	Stationary Sources Noise Impact Assessment Results.....	10

LIST OF FIGURES

Figure 1:	Site Location
Figure 2:	Zoning Map of Surrounding Area
Figure 3:	Sensitive Land Uses in the Study Area
Figure 4:	Wind Speed and Direction Frequencies for Hamilton RBG Meteorological Station (2000-2020)
Figure 5:	Stationary Noise Sources and Receptors

LIST OF APPENDICES

Appendix A:	Identification of Surrounding Sensitive Land Uses
-------------	---

1 INTRODUCTION

RWDI was retained by W.E. Oughtred and Associates Inc. to undertake a land use compatibility study for the proposed mixed-use retail space, located at 580 Burloak Drive, Oakville, Ontario, (“the proposed development”). The proposed development includes two, 2 storey, retail blocks with a total of 1,820 square metres of retail space with a single loading dock located west of the retail buildings and parking to the south.

The lands are currently zoned for business employment and designated in the official plan as a business employment area. The location of the subject lands is shown in **Figure 1**. Lands surrounding the site are residential to the south and west, commercial to the north, and a place of worship to the east.

The scope of this study was to identify potential impacts of the proposed development related to dust/odour and noise emissions and evaluate potential compatibility issues with neighboring existing sensitive land uses. To investigate this potential, the following tasks were undertaken:

- Review of the official plan and zoning by-laws for the surrounding area;
- Review of published satellite imagery and street-based photography;
- Review relevant guidelines and regulations from Halton Region and the Ministry of the Environment, Conservation and Parks (MECP); and,
- Review of Meteorological data for the study area.

2 METHODOLOGY

2.1 Applicable Guidelines

The guidelines that relate to assessing the potential for adverse air quality and noise impacts from industry, as related to this study, are as follows:

- Ontario Environmental Protection Act (EPA) and Ontario Regulation 419/05;
- Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning (NPC300), (MECP, 2013);
- D-6 Compatibility between Industrial Facilities (MECP, 1995); and,
- Land Use Compatibility Guidelines – Halton Region.

The applicability of each of these guidelines is discussed below.

2.2 Ontario Environmental Protection Act and Regulation 419/05

Industrial air and noise emissions in Ontario are governed by the Environmental Protection Act (EPA) and its regulations. **Table 1** summarizes key sections of the EPA and the relevant MECP regulations.

Table 1: Summary of Ontario Regulations

Ontario Statute	Section	Summary
EPA	9	Prohibits the use, operation, construction, alteration, expansion, or replacement of anything that may discharge a contaminant into the atmosphere, unless following an Environmental Compliance Approval (ECA), issued by MECP. There are exceptions to this requirement for certain minor types of emission sources.
Reg. 419/05	Various sections	Sets out requirements for air quality modelling and reporting that must be completed when applying for an ECA.
EPA	14	Prohibits anyone from discharging a contaminant (including noise and odour) into the environment if it causes or may cause an adverse effect. Adverse effect: impairment of the quality of the natural environment for any use; injury or damage to property or to plant or animal life; harm or material discomfort to any person; an adverse effect on the health of any person; rendering any property or plant or animal life unfit for human use; loss of enjoyment of normal use of property; and/or interference with the normal conduct of business.
Reg. 419/05	45	Prohibits anyone from causing or permitting the emission of any air contaminant to a degree that may cause discomfort to persons, loss of enjoyment of normal use of property, interference with normal conduct of business or damage to property.
Reg. 419/05	46	Prohibits anyone from causing or permitting visible emissions if they obstruct the passage of light by more than 20% for at least 6 minutes.
Reg. 419/05	Schedules 3	Sets out standards for air contaminant concentrations.
Reg. 419/05	20	Prohibits anyone from causing or permitting the standards to be exceeded at points of impingement.

2.3 Environmental Noise Guideline NPC-300

The primary noise and vibration management approach is to have emitters control their emissions to a degree that results in acceptable sound levels at surrounding sensitive receptor locations. This approach is implemented through the Ontario Environment Protection Act, the Environmental Assessment Act, associated regulations, and supporting guidelines.



The NPC-300 Environmental Noise Guideline contains sound level criteria for stationary sources. The NPC-300 sound level criteria for stationary sources are consistent for facilities that are required to submit an Acoustic Assessment Report (AAR) in support of an ECA or Environmental Activity and Sector Registry (EASR) permit with the MECP.

Guidance from the NPC-300 Environmental Noise Guideline is used to assess environmental noise generated by stationary sources, for example, from industrial and commercial facilities. The guideline also supports land use applications made under the Planning Act.

Noise from stationary sources is assessed for the predictable worst-case one-hour average sound level (L_{eq}) for each period of the day. For assessing sound originating from stationary sources, NPC-300 defines sound level criteria for two types of Points of Reception (PORs): outdoor and the plane of window. For dwellings, the outdoor point of reception is on the land use within 30 m of a façade of the building, at a height of 1.5 m above ground, in backyards, front yards, terraces, or patios. Points of reception at the plane of window include windows or openings in the façade leading to noise-sensitive spaces such as bedrooms, living rooms, eat-in kitchens, classrooms, therapy or treatment rooms, and assembly spaces for worship.

The assessment criteria for all PORs are the higher of either the exclusion limit per NPC-300 or the minimum background sound level that occurs or is likely to occur at a POR. The applicable exclusion limit is determined based on the level of urbanization or “Class” of the area. The area adjacent to the development has the characteristics of Class 1. The NPC-300 exclusion limits of a Class 1 area for continuously operating stationary sources are summarized in **Table 2**.

Table 2: NPC-300 Exclusion Limits for Class 1 area–Stationary Sources ($L_{Aeq-1hr}$)

Time Period	Class 1 Area	
	Outdoor	Plane of Window
Daytime 0700-1900h	50 dBA	50 dBA
Evening 1900-2300h	50 dBA	50 dBA
Nighttime 2300-0700h	--	45 dBA

Note: The applicable sound level criterion is the background sound level or the exclusion limit, whichever is higher.

2.4 D-Series Guidelines

The guidance provided in the MECP D-series guidelines was used to define the potential zone of influence for the proposed development. The MECP D-series guidelines deal with land use compatibility in Ontario. The most relevant guideline in the present case is D-6, Compatibility between Industrial Facilities. It provides a classification scheme for industries based on their potential for emissions that could cause adverse effects. The classification scheme is summarized in Table 3.

Table 3: D-6 Industry Classification Scheme

Class	Descriptors
I	<ul style="list-style-type: none"> • Small scale • Self-contained • Packaged product • Low probability of fugitive emissions • Daytime operations only • Infrequent and/or low intensity outputs of noise, odour, dust, vibration
II	<ul style="list-style-type: none"> • Medium scale • Outdoor storage of wastes or materials • Periodic outputs of minor annoyance • Low probability of fugitive emissions • Shift operations • Frequent movement of products and/or heavy trucks during daytime
III	<ul style="list-style-type: none"> • Large scale • Outside storage of raw and finished products • Large production volumes • Continuous movement of products and employees during shift operations • Frequent outputs of major annoyance • High probability of fugitive emissions

For each class of industry, the guideline provides an estimate of the potential influence area and a minimum recommended separation distance, which are set out in **Table 4**.

Table 4: D-6 Separation Distances

Class	Potential Influence Area (m)	Minimum Separation Distance (m)
I	70	20
II	300	70
III	1,000	300

Guideline D-6 (MOE 1995) recommends the following:

1. In Section 4.3,

“No incompatible development other than that identified in Section 4.10, Redevelopment, Infilling and Mixed-Use Areas should occur [within the recommended minimum separation distances].”

2. With respect to how separation distance should be measured:

- a. In Section 4.4.2,

“Measurement shall normally be from the closest existing, committed and proposed property/lot line of the industrial land use to the property/lot line of the closest existing, committed or proposed sensitive land use.”

- b. In Section 4.4.3,

“Where site-specific zoning or site plan control precludes the use of the setback for any activity associated with the industrial use that could create an adverse effect ... then the setback can be included as part of the measurement, rather than measuring from the industrial property line.”

3. In Section 4.4.5,

"Where there is no existing industrial facility within the area designated/zoned for industrial land use, determination of the potential influence area shall be based upon a hypothetical "worst case scenario" for which the zoned area is committed."

4. In Section 4.5.1,

"...no sensitive land uses shall be permitted within the actual or potential influence areas of Class I, II or III industrial land uses, without evidence to substantiate the absence of a problem."

5. In Section 4.10.3,

"When a change in land use is proposed [in an area of urban redevelopment, infilling or transition to mixed use] for either industrial or sensitive land use, less than the minimum separation distance ... may be acceptable subject to either the municipality or the proponent providing a justifying impact assessment (i.e., a use specific evaluation of the industrial processes and the potential for off-site impacts on existing and proposed sensitive land uses). Mitigation is the key to dealing with less than the minimum to the greatest extent possible."

With respect to how the separation distance should be measured, the guideline states that:

"Measurement shall normally be from the closest existing, committed and proposed property/lot line of the industrial land use to the property/lot line of the closest existing, committed or proposed sensitive land use."

However, it does allow the measurement to include areas within the lot lines (on-site buffers) where site-specific zoning or site plan control precludes the use of the area for a sensitive use in the case of the sensitive land use, and for an activity that could create an adverse effect in the case of the industrial land use.

MECP Guideline D-6 defines a sensitive land use as:

"For the purposes of this guideline, (i.e. where industry is concerned) sensitive land use may include:

- *recreational uses which are deemed by the municipality or provincial agency to be sensitive; and/or*
- *any building or associated amenity area (i.e. may be indoor or outdoor space) which is not directly associated with the industrial use, where humans or the natural environment may be adversely affected by emissions generated by the operation of a nearby industrial facility. For example, the building or amenity area may be associated with residences, senior citizen homes, schools, day care facilities, hospitals, churches and other similar institutional uses, or campgrounds.*

See also Section 4.4.4, "Ancillary Land Uses (Sensitive Land Use)" for more information on the types of uses, the land areas and the related activities affected by this guideline.

Note: Residential land use shall be considered sensitive 24 hours/day".

2.5 Land Use Compatibility – Halton Region

The Land Use Compatibility Guidelines for Halton Region were developed to identify compatibility issues between industry and sensitive land uses, and how they may be addressed by municipalities during a development application. The guidelines are applied during the development review process to identify potential adverse effects such as noise, odour, dust, vibration, and air emissions, and to determine whether mitigation measures or separation distances are needed. The guideline outlines when detailed compatibility studies are required and offers direction on the types of mitigation measures that may be necessary to address those impacts.

3 LAND USE COMPATIBILITY

3.1 Industrial Class Designation

The proposed development is a non-industrial use that includes retail, commercial, and/or office space and is not expected to be a source of industrial activity. The parking lot will be paved, substantially reducing the potential for dust emissions. There is no outdoor storage. There is a potential for mild odour emissions from restaurant kitchen exhausts (if applicable); however, these odours are expected to be infrequent and localized to the immediate vicinity of the development. Truck delivery is expected to be infrequent and during daytime hours only. Based on the criteria provided in the D-6 guideline, this facility would be classified as Class I, due to the potential for mild odour emissions. However, based on the low intensity of operations and low probability of odour emissions, the site likely has a smaller zone of influence than that of a typical Class I facility of 70 metres.

As there are sensitive land uses within the potential influence area of a Class I facility, an assessment has been completed to demonstrate that adverse effects from dust, odour, and noise are not anticipated.

3.2 Existing Sensitive Land Uses

The zoning map for the surrounding area is provided in **Figure 2**. North and east of the proposed development is designated as employment land use. Lands to the west and south are designated as residential. There is a small plot of land located between the proposed development and the southern residential lands designated as open space. Based on the surrounding zoning, residential land is already well developed, and it is unlikely that new sensitive land uses will be introduced to the area.

The area surrounding the subject lands is a mix of residential, commercial, and industrial land use. The residential lands in the study area consist of single-family homes. Commercial uses include retail, restaurants, and various small businesses. Industrial uses include mostly light industrial with some medium-sized facilities mixed in with some larger-scale outdoor operations including paving, concrete pipe manufacturing, and an energy sector tank farm. There are several sensitive land uses in the area, including residences, childcare, a place of worship, an elementary school, and a community recreational complex.



One sensitive land use was identified within the potential area of influence of 70 m from the proposed development. One additional sensitive land use was identified within 300 m of the proposed development. Sensitive uses within 300 m are listed in **Table 5** and in Appendix A. The locations of the identified sensitive land uses are presented in **Figure 3**.

Table 5: Sensitive uses within 300 m of the Proposed Development

Sensitive Receptor	Address	Actual Separation Distance
Residential Dwellings – Single Family Homes	Located adjacent to Burloak Drive between Sherwood Forest Park and New Street	15 m
Hope Bible Church	500 Great Lakes Blvd	90 m

The nearest residences are located approximately 15 m from the property boundary, but the parking lot is located between the residences, providing an additional setback of approximately 35 m, which is within the potential zone of influence of 70 m. There were no schools, senior citizen homes, community centres, or hospitals identified within 300 m of the site. The nearest seniors home, Extencicare Burloak is located approximately 375 m east of the proposed development, and the nearest community complex is located 520 m west. The nearest school is Frontenac Public School, located 1,400 m south of the proposed development, and the nearest hospital, Oakville Trafalgar Memorial Hospital, is located 7,200 m north of the site, outside of the study area.

3.3 Potential for Incompatibility

3.3.1 Proposed Development

Activities at the proposed development will depend greatly on the tenants that rent the retail and commercial spaces. The spaces are expected to be used primarily for office and commercial pace. The zoning for this development site permits restaurant establishments and dry cleaning. The proposed site plan includes an outdoor amenities space between the two retail blocks. The proposed development is expected to operate during daytime hours, between 7am and 11pm, with truck activities limited to daytime hours. Individual businesses could operate up to 24 hours per day.

3.3.2 Air Quality, Dust and Odour

Wind Directionality

RWDI reviewed wind data from the Hamilton RBG meteorological station, the nearest meteorological station to the site, to assist in the assessment. A summary of the directional distribution of winds over the period from 2000-2020 is shown in **Figure 4**. The wind directions in the figure refer to the direction from which the wind blows, while the annual frequency of a given wind direction is shown as a distance radially from the centre. The most frequent winds originate from the west southwest to west, with winds from the west northwest and east northeast being less frequent.



Based on the wind rose shown in **Figure 4**, winds blowing towards the residences from the north are expected infrequently, less than 3% of the time, with winds from the northeast 8% of the time.

Hope Bible Church, which is outside the potential zone of influence of 70 m, is located downwind of the predominant westerly winds, which are expected 15-20% of the time.

Dust

The proposed development is planned for retail, restaurant, and/or office spaces, which are not expected to be significant sources of fugitive dust emissions. There will be a medium-sized parking lot located south of the proposed development that will be paved and is not expected to contribute to emissions of fugitive dust. Overall, dust emissions from the proposed development are not expected.

Odour

Depending on the type of business that occupies the space, there is a potential for mild odour from a restaurant kitchen exhaust. Most common odours from restaurant exhausts are associated with deep fryers. Typically, fryer exhausts are equipped with ecologizer units, which filter out fumes that significantly reduce the potential for odour emissions. Other potential uses of the space include retail and office use which are not expected to contribute to odour or the potential for odour emission.

The predominant winds at the proposed development (west southwest to west) are favorable wind directions for minimizing any potential for adverse impacts due to odour at the residences.

The church is located downwind of the predominant wind direction; however, it is outside the potential zone of influence. There is the potential for occasional restaurant-related odours to be discernible at the property. However, considering the small scale of operations and the separation distance of 90 m, the proposed development is expected to be compatible with the existing sensitive land use.

Overall, odour emissions from the proposed development are not expected to be significant. This substantially decreases the likelihood of any odours from a restaurant exhaust. Overall, given the infrequency of northern winds affecting the residential area and the relatively small scale of operations, the proposed development is expected to be compatible with the existing sensitive land uses.

Air Quality

Sources of air quality emissions from commercial spaces are generally limited to combustion by-products from heating and ventilation equipment, which are not expected to result in significant emissions. However, dry-cleaning establishments, which are a permitted use, are known to emit substances that may affect local air quality. Given the potential for adverse effects, a more detailed assessment would be required to evaluate emissions from this type of use. In the absence of such an assessment, it is recommended that dry cleaning not be permitted at this time. Otherwise, the proposed commercial development is expected to be compatible with existing sensitive land uses.

3.3.3 Noise

The noise impact from the proposed development is assessed using the sound atmospheric propagation standard ISO 9613. Noise modelling was carried out using the Cadna/A software package, a commercially available implementation of the ISO 9613 (ISO, 1993 and ISO, 2024) algorithms.

Based on the proposed activities on the site, stationary sources of noise within the site are expected to comprise of rooftop HVAC units, a restaurant kitchen exhaust fan, and truck movement with potential idling at the loading dock. RWDI proxy data were used for the sound power levels of the HVAC units, kitchen exhaust fan, and truck sources. The assumed sound power levels included in the screening level stationary source assessment are presented in **Table 6**.

Table 6: Stationary Source Sound Power Level Assumptions

Source	Proxy Data / Calculation	Number of Units		Sound Power Level (dBA)	Duty Cycle	
		North West block	South East Block		Daytime and Evening (07:00h – 23:00h)	Nighttime (23:00h – 07:00h)
HVAC_1Fan	Proxy Data	2	1	82	Continuous	Continuous
HVAC_2Fan	Proxy Data	3	3	85	Continuous	Continuous
Idling Truck	Proxy Data	N/A		92	Continuous	-
Truck Movement	Proxy Data	N/A		104	1 per hour entering and leaving	-
Kitchen Exhaust Fan	Proxy Data	-	1	78	Continuous	Continuous

The assumed sound power level values, number of units, and duty-cycles for the stationary sources are based on reasonable assumptions for the source type. Continuous operations for stationary equipment represent the worst-case hour for the daytime and nighttime periods. The number of HVAC units is estimated based on the total floor area of each block.

The predicted sound levels during the worst-case 1-hour from the proposed development are presented in **Table 7**. **Figure 5** illustrates the locations of the anticipated noise sources within the development sites and the representative sensitive receptors considered. The assessment includes four residential houses and Hope Bible Church. As a place of worship, the Hope Bible Church can be classified as a noise-sensitive institutional purpose building, provided it is not located in commercially or industrially zoned lands. Hope Bible Church is located on lands zoned E2 – Business Employment, and the church's façade facing the development lacks operable windows and doors. Consequently, it is not considered a point of reception as per NPC-300 guidelines, and further assessment is not required.



Table 7: Stationary Sources Noise Impact Assessment Results

Receptor	Address	Receptor type	Day L _{EQ} , 16hr	Night L _{EQ} , 8hr	Meeting Criteria
R1_o	5656 Evelyn Ln	Outdoor	42	-	Yes
R1_f		Plane of Window	44	42	Yes
R2_o	5677 Evelyn Ln	Outdoor	47	-	Yes
R2_f		Plane of Window	48	44	Yes
R3_o	5658 Stella Ln	Outdoor	47	-	Yes
R3_f		Plane of Window	49	43	Yes
R4_o	5655 Stella Ln	Outdoor	45	-	Yes
R4_f		Plane of Window	46	39	Yes

As shown in **Table 7**, the daytime-evening and nighttime continuous sound levels at the façade of the residences and the outdoor area of the church due to the proposed development are predicted to meet the applicable Class 1 sound level criteria based on the noise modelling analysis.

The assessment demonstrates that the noise emissions from the proposed development are expected to comply with the regulatory noise limits specified in Section 2.3. Therefore, no negative impact on the nearby sensitive receptors is anticipated from the proposed development.

4 CONCLUSIONS

The proposed development is located at 580 Burloak Drive, Oakville will include commercial and office spaces. These spaces will be used by tenants for various businesses that may include restaurants, retail stores, or commercial service offices. Based on the assessment, the proposed development is expected to be compatible with the surrounding sensitive land uses. The proposed development is not expected to be a substantial source of noise, air quality, dust, or odour emissions.

If a restaurant were to occupy space in the proposed development, there is a potential for infrequent odours to be detectable at surrounding residences and the Hope Bible Church. However, these odours are expected to be minimal given the small-scale operations. No mitigation is recommended at this time.

Given the potential for adverse effects from dry cleaning establishments, it is recommended that dry cleaning not be permitted until a detailed assessment is completed to evaluate air quality emissions and to determine compatibility.

The potential for dust and odour emissions could be improved by adopting any of the following best practices:

- Ensure paved parking lot areas are maintained by minimizing silt loading through periodic sweeping or other cleaning methods as needed; and,
- Ensure any restaurant spaces with fryers are equipped with ecologizers to minimize the potential for odours.



5 REFERENCES

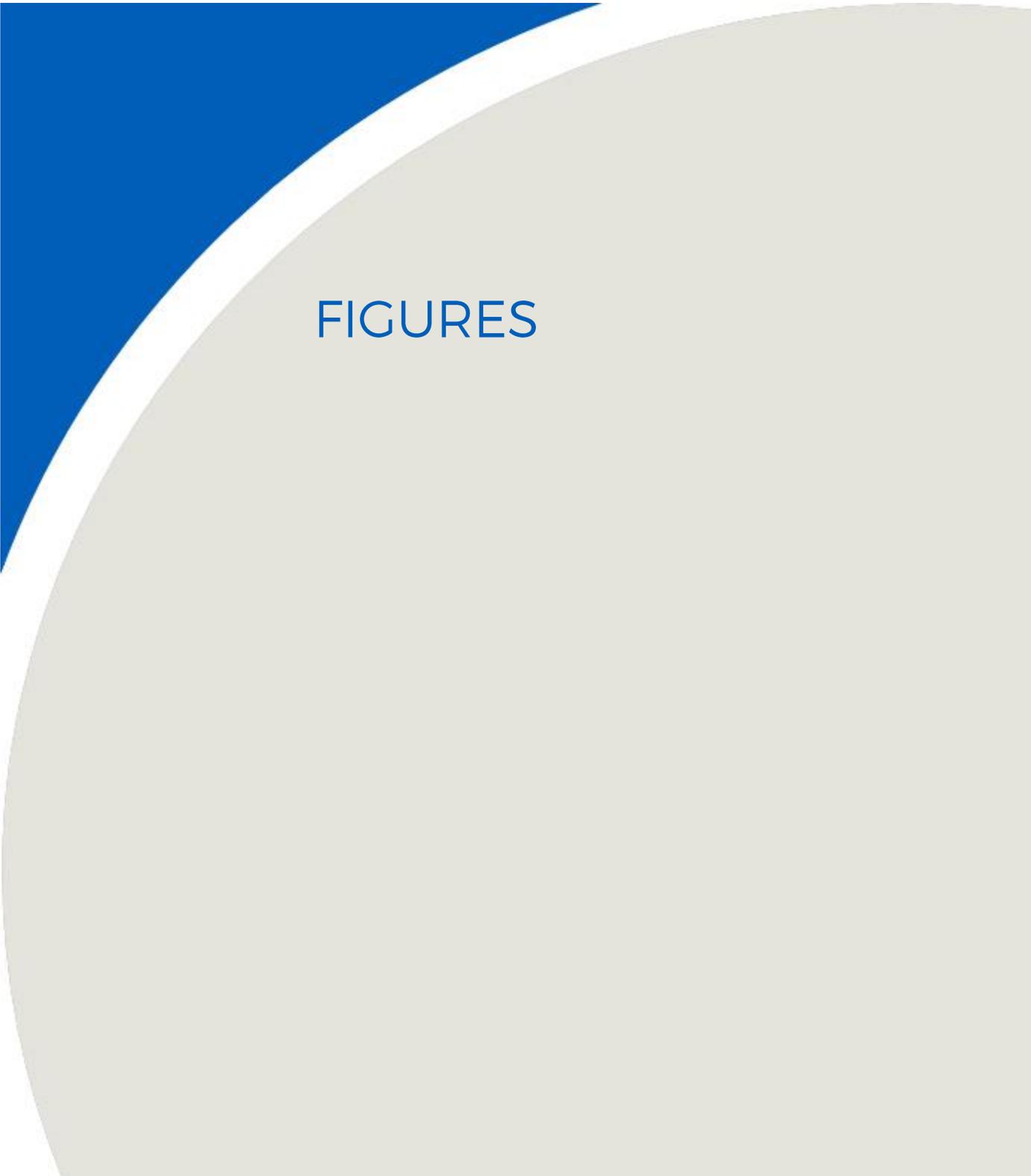
1. Ministry of the Environment 1995, Guideline D-6: Compatibility Between Industrial Facilities and Sensitive Land Uses, Ministry of the Environment, Toronto, viewed April 19, 2024, <<https://www.ontario.ca/page/d-6-compatibility-between-industrial-facilities>>.
2. Ontario Ministry of the Environment and Climate Change (MOECC), August 2013, Publication NPC-300, Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning (MOECC, 2013).
3. International Organization for Standardization (ISO), 1993, International Standard ISO 9613-1:1993, Acoustics – Attenuation of Sound during propagation outdoors. Part 1: Calculation of the absorption of sound by the atmosphere. (ISO, 1993)
4. International Organization for Standardization (ISO), 2024, International Standard ISO 9613-2:2024, Acoustics — Attenuation of sound during propagation outdoors — Part 2: Engineering method for the prediction of sound pressure levels outdoors (ISO, 2024)

6 STATEMENT OF LIMITATIONS

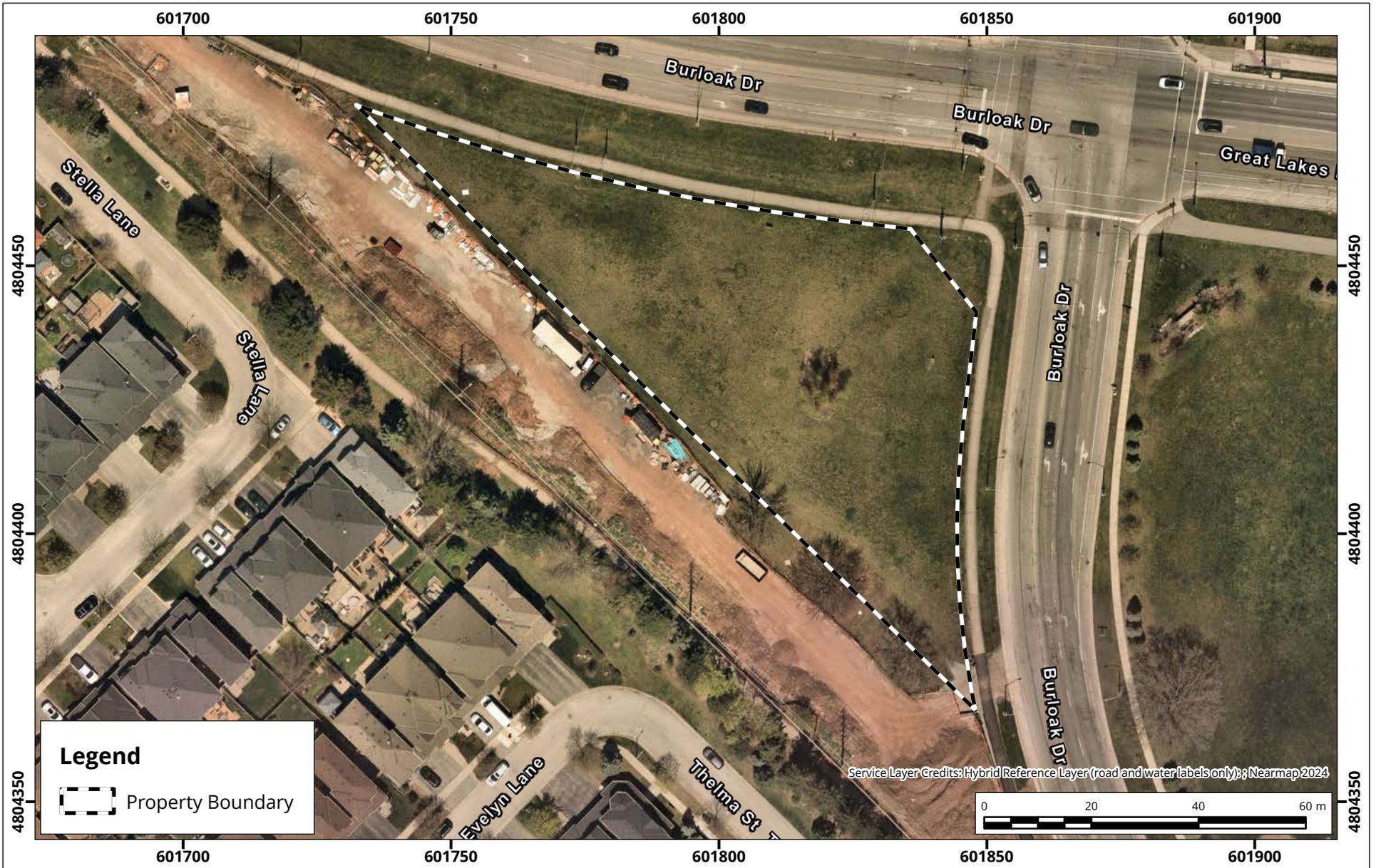
This report entitled **580 Burloak Drive** was prepared by RWDI AIR Inc. (“RWDI”) for **W.E. Oughtred and Associates Inc.** (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared. Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

A large decorative graphic on the left side of the page. It features a blue triangular shape at the top left, which transitions into a large, light grey curved shape that dominates the lower half of the page. The word 'FIGURES' is centered within the grey area.

FIGURES



Site Location

Map Projection: NAD 1983 UTM Zone 17N
 580 Burloak Drive - Oakville, Ontario



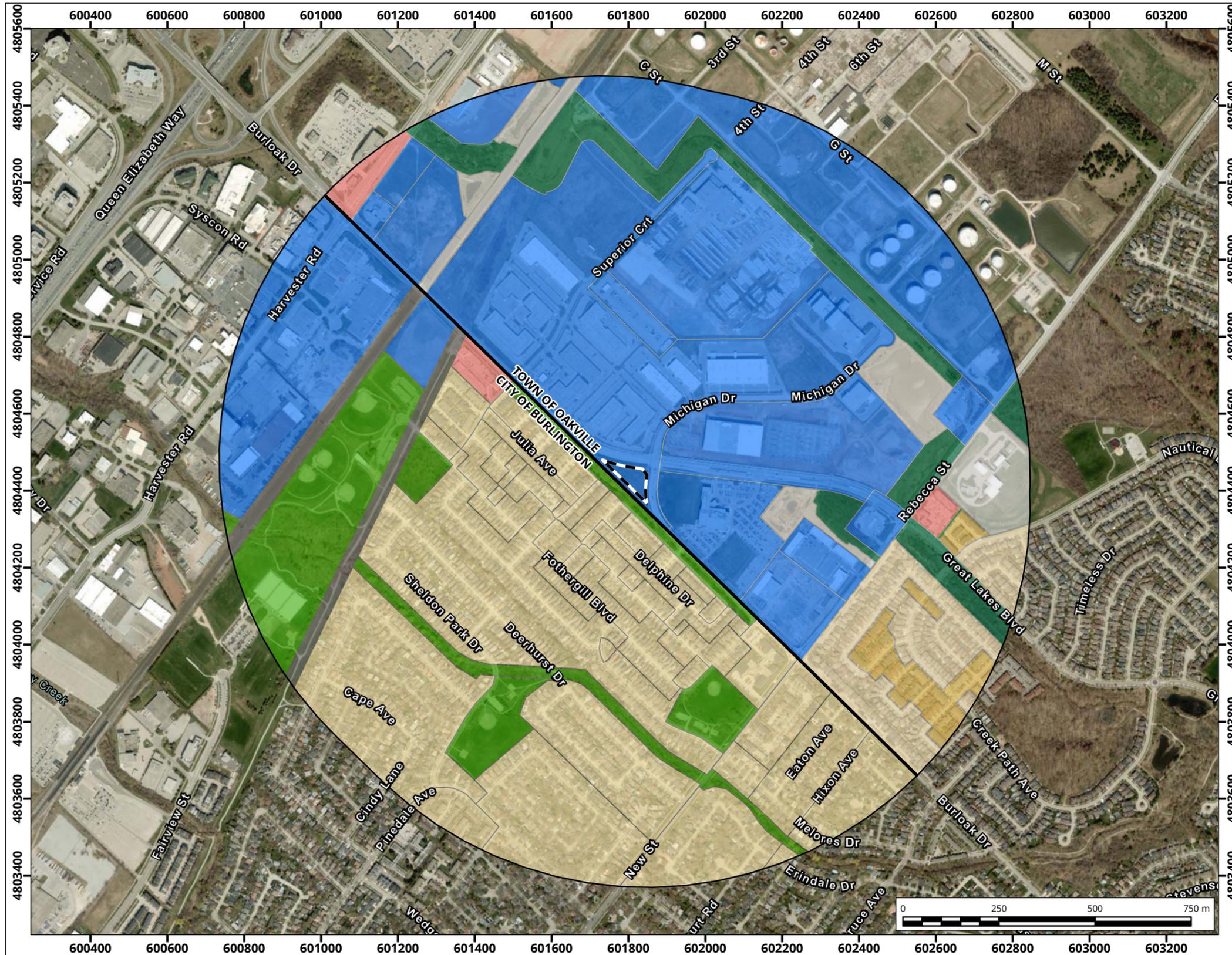
Drawn by: PIP | Figure: 1

Approx. Scale: 1:1,000

Date Revised: Jun 23, 2025

Project #: 2511139





Legend

- Property Boundary
- 1,000m

City of Burlington Zoning Classification

- Commercial
- Development & Utilities
- Employment
- Open Space & Parks
- Residential

City of Oakville Zoning Classification

- Commercial
- Employment
- Natural Area
- Open Space
- Residential Low
- Residential Medium
- Utility

Service Layer Credits: City of Oakville Zoning Classification: ;Hybrid Reference Layer (road and water labels only); World Imagery: Maxar
 Zoning Data from: City of Burlington, City of Oakville

Zoning in the Study Area

Map Projection: NAD 1983 UTM Zone 17N
 580 Burloak Drive - Oakville, Ontario

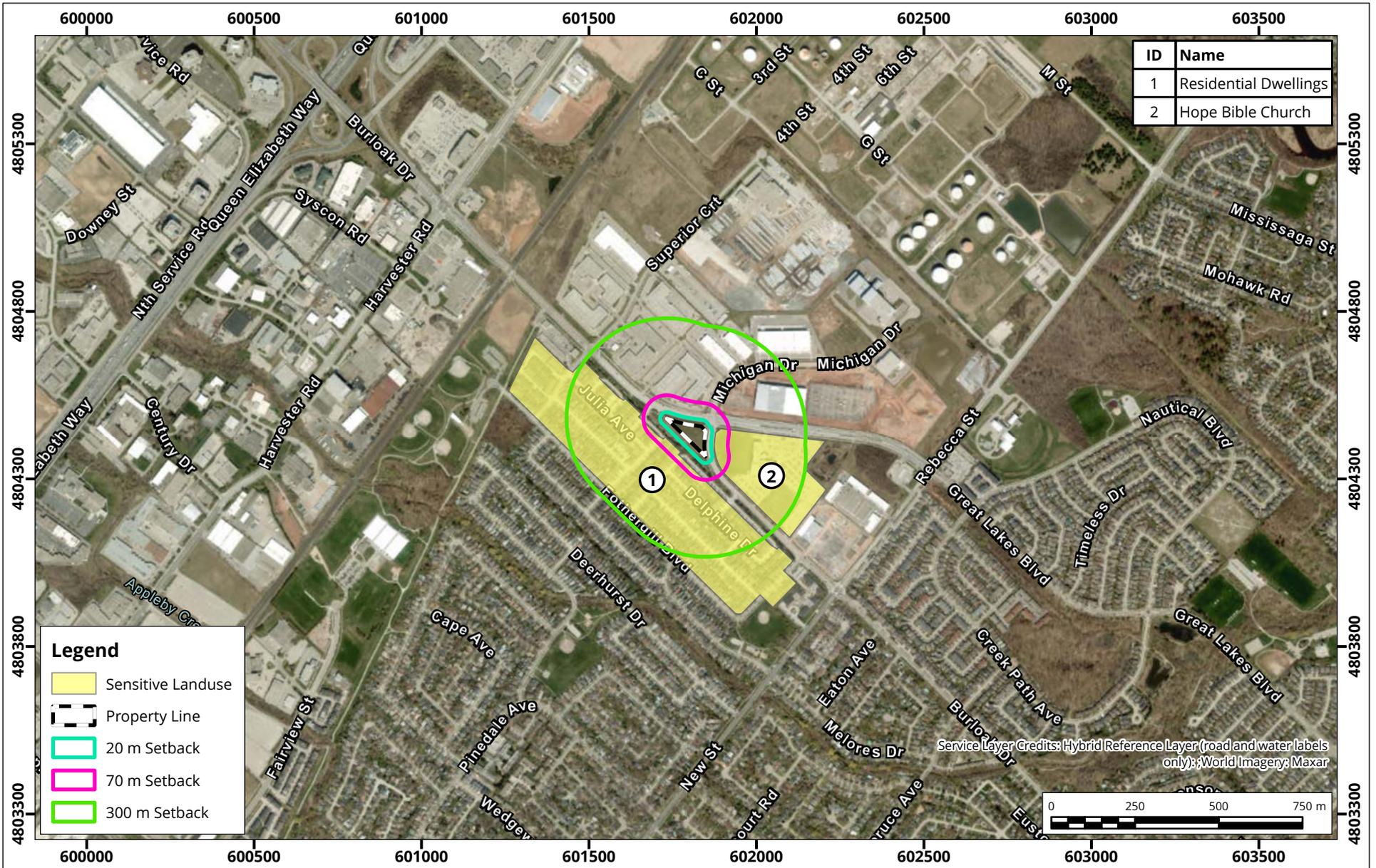


Drawn by: PIP Figure: 2
 Approx. Scale: 1:11,000
 Date Revised: Jun 24, 2025



Project #: 2511139

Map Document: C:\WorkingFolder\Jobs_America\2511139\2511139.aprx



Proposed Development and Surrounding Sensitive Land Uses

Map Projection: NAD 1983 UTM Zone 17N
580 Burloak Drive - Oakville, Ontario

True North



Drawn by: PIP Figure: 3

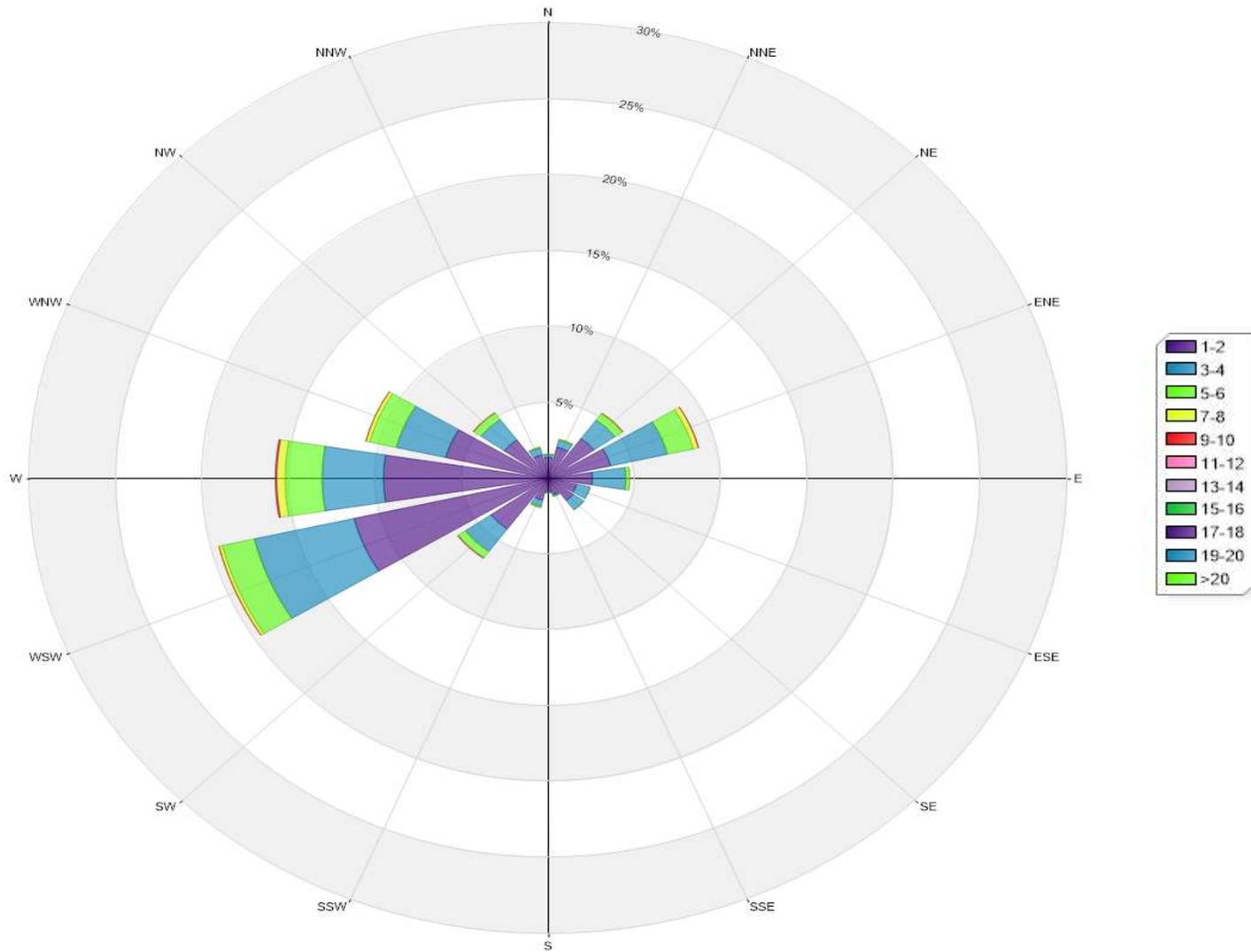
Approx. Scale: 1:16,000

Date Revised: Jul 15, 2025

Project #: 2511139



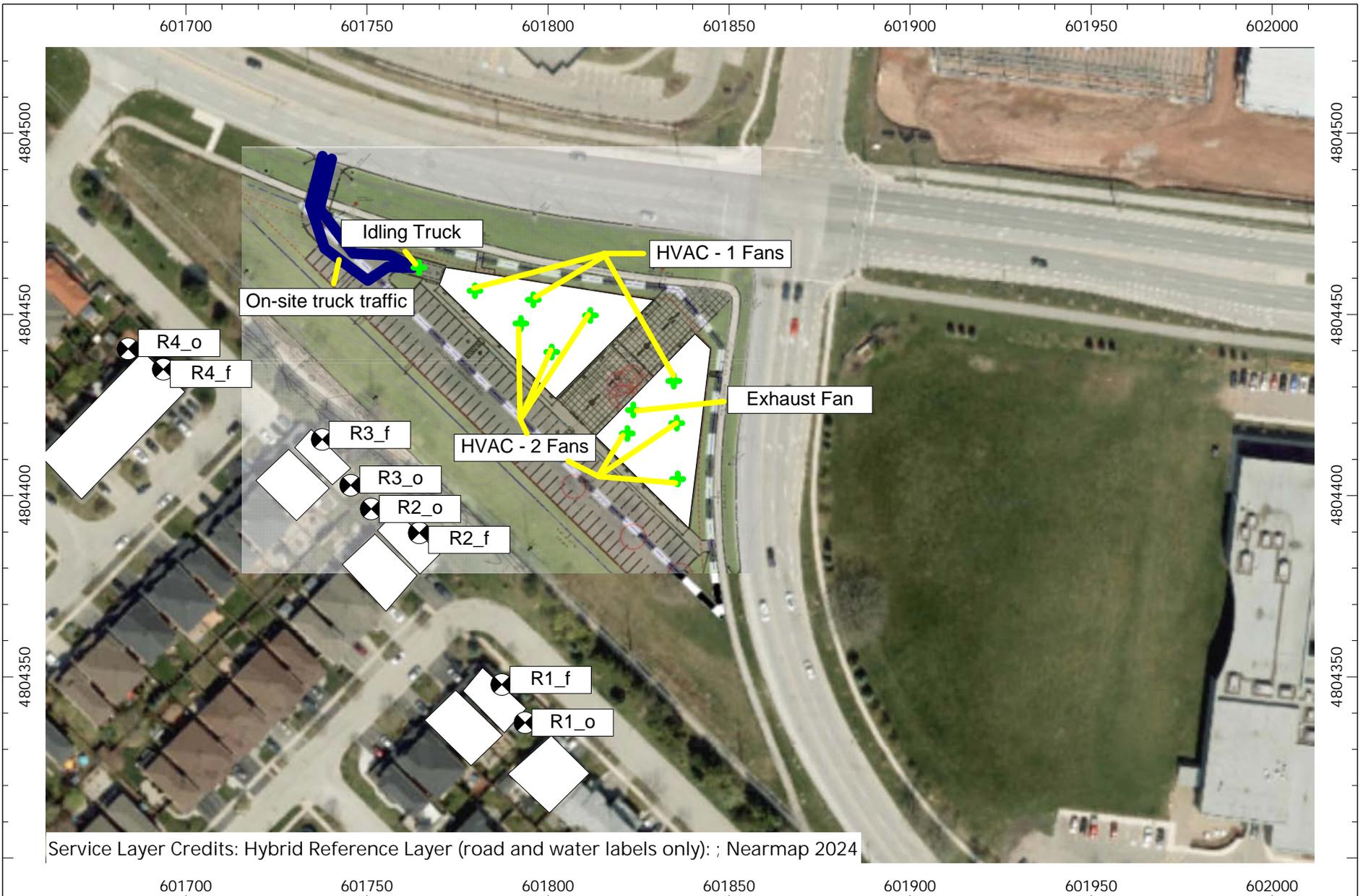
**Directional Distribution (%) of Winds in m/s (Blowing From)
Hamilton RBG Met Station, (2000-2020)**



Directional Distribution (%) of Winds in m/s (Blowing From)
Hamilton RBG Meteorological Station (2000 - 2020)

Drawn by: MDKB	Figure: 4
Approx. Scale: not to scale	
Date Revised:	June 23, 2025

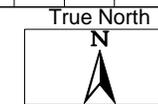




Stationary Noise Sources and Receptors

Location of Stationary Sources and Receptors in Relation to the Proposed Development

580 Burloak Drive - Oakville, Ontario



Project #2511139

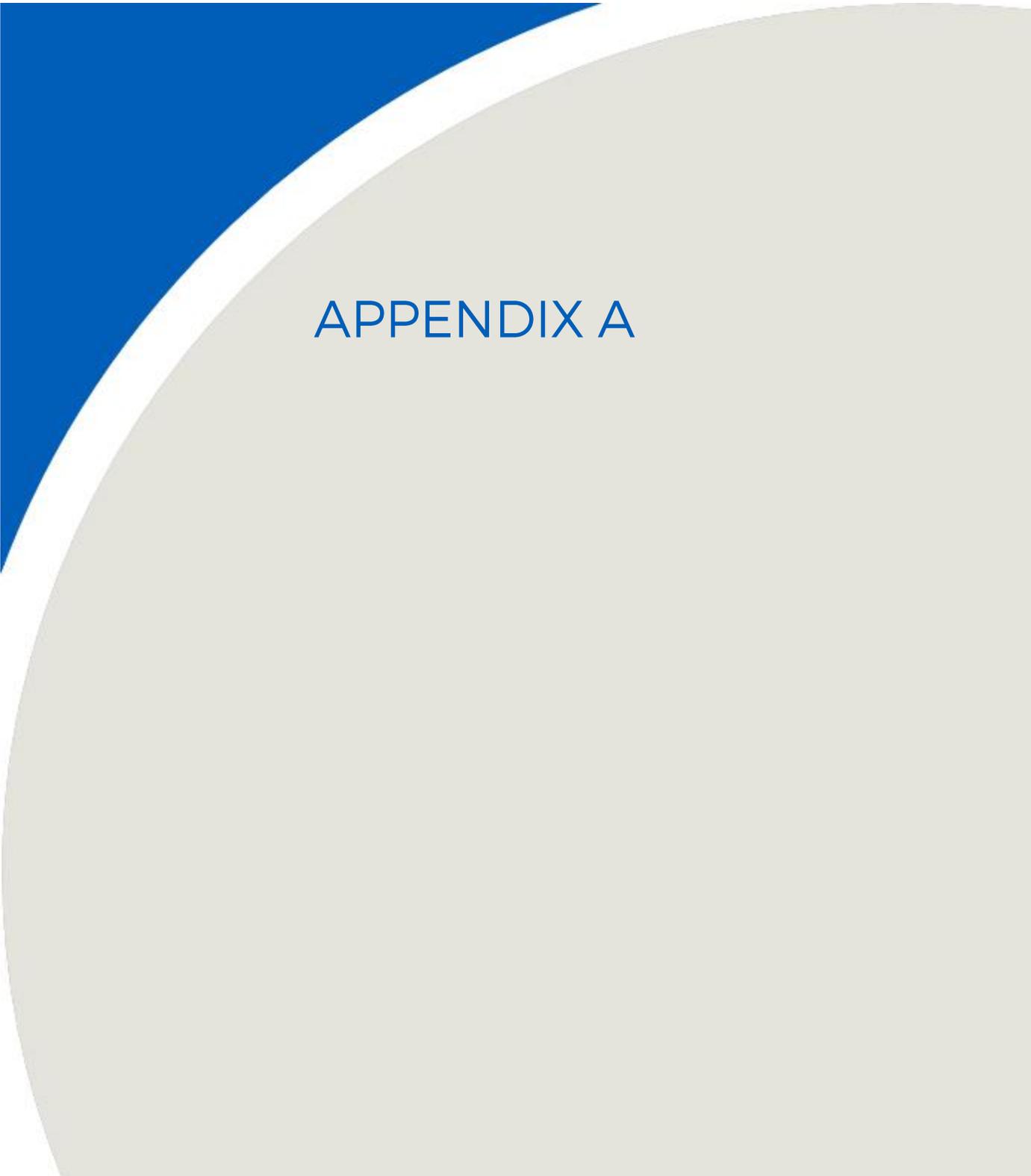
Drawn by: KA

Figure: 5

Scale: 1:1500

Date: July 16, 2025



The page features a decorative background with a large, light gray circular shape on the right side and a blue triangular shape on the top left. A white curved line separates the two shapes.

APPENDIX A

580 Burloak Landuse Compatibility Report
580 Burloak, Oakville

Appendix A: Identification of Surrounding Sensitive Land Uses

RWDI# 2511139

Map Icon Number	Sensitive Receptor Name	ADDRESS	Description	Typical Hours of Operation	Distance from Site (m)	Direction	Within Area of Potential Influence
1	Residential Dwellings	N/A	Single family dwellings located south of the proposed development between Sherwood Forest Park and New Street	24 Hours	15	S	Yes
2	Hope Bible Church	500 Great Lakes Blvd	Place of Worship	Daytime (7am - 7pm)	90	W	No