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November 6, 2015

Ms. Helen Chang Chair Woman GR(CAN) Investment Co., Ltd. 8500 Leslie Street Suite 502 Markham, ON L3T 7M8

Re: DRAFT Land Use Compatibility Assessment between Industrial and Sensitive Land Uses
Thundering Waters Secondary Plan

**RWDI Reference No. 1600158** 

Email: <a href="mailto:changzhiying2008@sina.com">changzhiying2008@sina.com</a>

Dear Ms. Chang,

RWDI AIR Inc. (RWDI) was retained by GR(CAN) Investment Co., Ltd. to conduct a Land Use Compatibility Assessment for the Thundering Waters Secondary Plan development located in Niagara Falls, Ontario. This letter report outlines the review undertaken and summarizes the findings of the assessment.

# INTRODUCTION

The Thundering Waters Secondary Plan was initiated by the City of Niagara Falls, Region of Niagara, and the Niagara Peninsula Conservation Authority to understand the opportunities and constraints for the planning and development of the study area. This study is being undertaken to create a long-term vision for the Thundering Water lands and to provide guidance to manage change in the community that will occur over time.

This letter report has been prepared to provide guidance to the Secondary Plan process and the subsequent development of any policy or zoning by-law amendments. The objective is to ensure compatibility of land uses and flexibility for growth in developing the community.

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# **LOCATION AND EXISTING LAND USES**

The Thundering Waters lands are currently undeveloped and are located in a suburban area within the City of Niagara Falls. The lands are bounded by Oldfield Road to the north, the Stanley Park Industrial Park to the east, the Welland River to the south, and the Hydro Canal to the west. The study area is shown in Figure 1. A rail line runs diagonally through the centre of the subject lands with a spur line heading north just past Dorchester Road on the west side of the parcel. The rail line ends in the

northeast as it approaches the downtown area of the City of Niagara Falls. It is expected that the main rail line still sees some limited use given rail cars at some nearby businesses, although details on the volume of traffic is unknown, while the spur line is no longer in use.

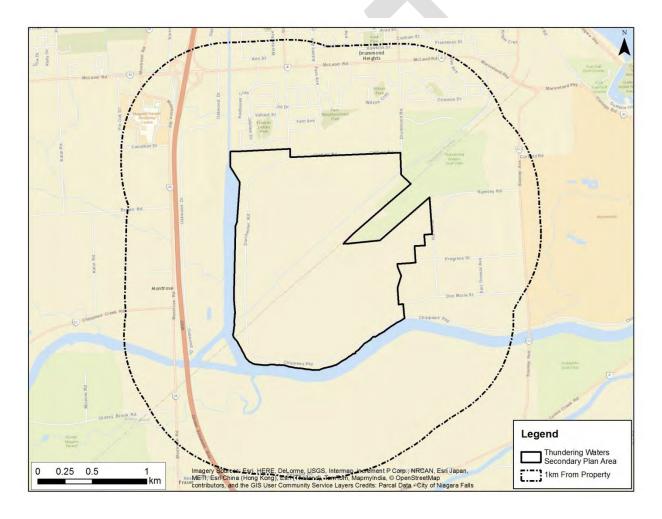


Figure 1: Study Area

CONSULTING ENGINEERS & SCIENTISTS



The Thundering Waters subject lands are approximately 500 acres in size and are identified as *Residential* and *Environmental Protection Area* in the City of Niagara Falls Official Plan. Industry has been operating nearby in this area for many years and historically in close proximity to residential uses. The subject lands are surrounded primarily by residential, commercial, and industrial land uses. Figure 2 shows the current Official Plan designations in the study area and surrounding areas.

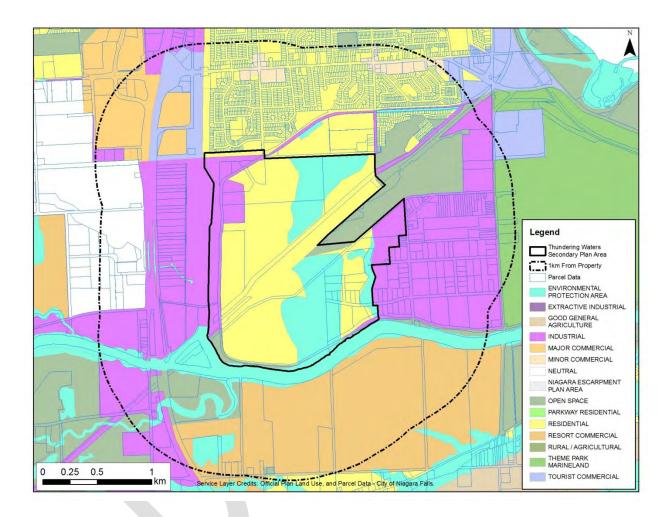


Figure 2: Current Official Plan Designation

# **APPLICABLE GUIDELINES**

A number of guidelines have been reviewed that relate to assessing the potential for adverse impacts from industry on sensitive land uses. Most of the documents reviewed have been produced by the Ontario Ministry of the Environment and Climate Change (MOECC). They are as follows:

- MOECC Guideline D-6: "Compatibility Between Industrial Facilities and Sensitive Land Uses"
- MOECC Environmental Noise Guideline NPC-300 "Stationary and Transportation Sources Approval and Planning"



- MOECC Regulation 419/05 Air Pollution Local Air Quality
- MOECC 4871e Noise Screening Process for s.9 Applications
- Federation of Canadian Municipalities and the Railway Association of Canada "Guidelines for New Development in Proximity to Railway Operations"
- City of Niagara Falls Noise By-Law 2004-105.

#### **D-Series Guidelines**

The MOECC D-series guidelines provide direction for land use planning to maximize compatibility of industrial uses with adjacent land uses. The goal of Guideline D-6 is to minimize encroachment of sensitive land uses on industrial facilities and vice versa, in order to address potential incompatibility due to adverse effects such as noise, odour and dust. Recommended minimum separation distances are provided based on the industry size and operation type.

Guideline D-6 separates industry into three broad categories, depending on the nature of their operations and the types of potential impacts:

- Class I facilities are small scale, self-contained plants or buildings, which produce and/or store
  products in a package, and have low probability of fugitive emissions. They have daytime
  operations only, with infrequent movements of products and/or heavy trucks.
- Class II facilities perform medium scale processing, with some outdoor storage of wastes and materials, frequent movement of products and/or heavy trucks, and shift work.
- Class III facilities conduct large scale manufacturing, and are characterized by their large size, large production volumes, continuous operations and movements of products, and a high probability of fugitive emissions.

The recommended minimum separation distances and areas of potential influence (i.e., distance within which adverse effects could potentially occur) are summarized below.

Table 1: Guideline D-6 Recommended Setback Distances and Area of Influence

Industry Classification	Recommended Minimum Separation Distance (m)	Potential Area of Influence (m)
Class I: Light Industry	20	70
Class II: Medium Industry	70	300
Class III: Heavy Industry	300	1000

Guideline D-6 states that the proponent of a development should provide studies for noise, dust and odour, but in the absence of such studies, the influence areas shown in Table 1 shall be used. Under Section 4.6 of Guide D-6, the noise studies must comply with MOECC Publication LU-131 requirements (N.B. LU-131 was replaced by NPC-300 in 2013).



Appendix A of Guideline D-6 provides criteria for classifying industrial land uses, based on their outputs, scale of operations, processes, schedule and intensity of operations. Table 2 provides the classification criteria and a comparison with anticipated operations.

Table 2: Guideline D-6 Industrial Categorization Criteria

Criteria	Class I	Class II	Class III
Outputs	Sound not audible off property	Sound occasionally audible off property	Sound frequently audible off property
Scale	<ul> <li>No outside storage</li> <li>Small scale plant or scale is irrelevant in relation to all other criteria</li> </ul>	Outside storage permitted     Medium level of production	<ul><li>Outside storage of raw and finished products</li><li>Large production levels</li></ul>
Process	<ul> <li>Self-contained plant or building which produces / stores a packaged product</li> <li>Low probability of fugitive emissions</li> </ul>	<ul> <li>Open process</li> <li>Periodic outputs of minor annoyance</li> <li>Low probability of fugitive emissions</li> </ul>	<ul> <li>Open process</li> <li>Frequent outputs of major annoyances</li> <li>High probability of fugitive emissions</li> </ul>
Operation / Intensity	<ul> <li>Daytime operations only</li> <li>Infrequent movement of products and/or heavy trucks</li> </ul>	<ul> <li>Shift operations permitted</li> <li>Frequent movements of products and/or heavy trucks with the majority of movements during daytime hours</li> </ul>	<ul> <li>Continuous movement of products and employees</li> <li>Daily shift operations permitted</li> </ul>

Often an industry will fall between two Classes and judgment is required to apply the most appropriate classification given the balance of the criteria. Guideline D-6 states that no incompatible development should occur within the recommended minimum separation distance as noted in Table 1. Section 4.10 of the Guideline, however, identifies exceptional circumstances with respect to redevelopment, infill and mixed use areas. In these cases, it suggests that separation distances less than the recommended minimum values may be acceptable if a justifying impact assessment is provided.

#### **Environmental Permitting for Industry**

Section 9 of the Ontario Environmental Protection Act requires industries in Ontario to obtain an Environmental Compliance Approval (ECA) prior to discharging a contaminant into the natural environment. An ECA covers a range of potential contaminants including air quality, noise, vibration, solid waste, and liquid waste.

Generally a number of technical studies are required as part of an ECA application to demonstrate that an industry will not cause an adverse impact on the natural environment. The MOECC has produced a number of guidelines and regulations to deal with different contaminants and how the technical studies should be completed. Relevant guidelines and regulations are described in the following sections.



#### **NPC-300 Noise Guideline**

NPC-300 noise criteria applicable to an industry vary depending on the character of ambient noise in the surrounding area. Class 1 is an urban area with an acoustic environment that is continuously dominated by the sounds of human activity, as would be found in a major urban centre. Class 2 areas are suburban or semi-rural areas where sounds of human activity drop off earlier in the evening. Class 3 areas are rural where the acoustic environment is dominated by natural sounds. The acoustic environment surrounding the study area would be classified as a Class 2 area.

The MOECC sound level criteria for stationary noise in Class 2 areas are shown in Table 3 (i.e., Class 1 and 3 purposely omitted). The sound levels are described in terms of the energy equivalent sound exposure level ( $L_{EQ}$ ) on a one-hour basis. Where the hourly background sound level is higher than the values in Table 3, the background sound level is used as the applicable limit.

Table 3 provides both outdoor point of reception criteria and plane of the window criteria at the receptor. Outdoor points of reception are assessed when associated with dwellings or noise sensitive zoned lots. 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 façade of a building 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.

Table 3: One-hour Sound Level Criteria for Stationary Sources in Class 2 Areas (LEO, 1-hour, dBA)

Time Period	Time of Day	Outdoor Points of Reception	Plane of Window
Daytime	0700-1900h	50	50
Evening	1900-2300h	45	50
Night-time	2300-0700h		45

The MOE NPC-300 criteria for stationary sources apply to cumulative sound from a site.

NPC-300 also includes criteria for sound from road and rail sources. These are summarized in Table 4.



Table 4: Outdoor and Indoor Sound Level Criteria for Road and Rail (LEQ, dBA)

Type of Space	Time Period (16-hr or 8-hr)	Road	Rail
Outdoor Living Areas	0700-2300h	5	5*
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	0700-2300h	45	40
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	2300-0700h	45	40
Sleeping quarters	0700-2300h	45	40
Oleeping quarters	2300-0700h	40	35

<sup>\*</sup> Limit in outdoor living area from both road and rail. All other limits are indoors.

### Regulation 419/05 - Local Air Quality

The regulation framework for industrial air quality emissions in Ontario is outlined in Ontario Regulation 419/05 (O.Reg. 419/05): Local Air Quality. O. Reg. 419/05 applies to all industries in the province and is the regulation against which contaminant concentrations from air emissions are assessed under Section 9 of the Environmental Protection Act.

Demonstration of compliance with this regulation is a requirement as part of the ECA process. Air quality standards are evaluated at a Point of Impingement (POI). "POI" is defined in the regulation to exclude points that are on the same property as the emission source (except in certain circumstances), and to include all off-property points that are at ground level. The term POI also includes off-property points that are above ground, on multi-floor structures. In areas where multi-floor structures are permitted but none currently exist and none are currently planned, above ground POI's are typically not considered. Thus, care is sometimes needed when introducing new multi-floor uses into areas near existing industries, as the permitting process for those industries may not have considered the possibility of above-ground POI's.

Odour is regulated on a case-by-case basis in Ontario. Industries of a type known to be of concern for odours are typically subjected to an odour standard as a condition of their ECA. Odours can be quantified and expressed in terms of Odour Units (OU). Under MOECC guidance, the desired odour limit is 1 OU. The MOECC guidance allows an exceedance of the 1 OU provided it occurs less than 0.5% of the time.

Fugitive dust from industrial operations does not need to be assessed quantitatively under O. Reg. 419/05 (except in specific circumstances), but industries with extensive outdoor handling of bulk materials and/or operations of mobile equipment on unpaved areas are typically required to have a dust management plan in place, consistent with industry best practices.. Sources of fugitive dust typically found from industrial sites within an urban area include stock piles of aggregate and truck traffic on unpaved parking areas.

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#### **Noise Screening Process for ECA Applications**

The MOECC has developed a screening tool for certain types of industries that are in the process of applying for a new ECA. The basis for the tool is that the cumulative noise emissions from a facility will not exceed the MOECC noise guidelines at a point of reception as long as there is sufficient separation distance between the industrial site and the sensitive land use.

The screening process looks at both the type of industry and the type of equipment on the industrial site. A recommended minimum setback distance between the industrial site and the nearest sensitive land use is determined and should the actual separation distance be less than the minimum recommended, the industrial applicant has to prepare a detailed noise impact assessment. The detailed assessment may then lead to requirements for noise mitigation at the industrial site.

#### **Guidelines for New Development in Proximity to Railway Operations**

The guideline was developed in part to assist municipalities and developers in establishing a consistent approach in assessing new developments that are in close proximity to railway operations. New developments must be carefully planned to ensure that railway operations do not expose residents to excessive noise and vibration levels from railway operations, and also new developments do not interfere with railway operations.

In the absence of specific zoning by-law requirements, the document provides specific guidelines and setback distances for safety, noise, and vibration. Tables 5 through 7 provide the suggested guidelines.

Table 5: Standard Recommended Building Setbacks from Railway Operations

Type of Operation	Setback Distance (m)
Freight Rail Yard	300
Principal Main Line	30
Secondary Main Line	30
Principal Branch Line	15
Secondary Branch Line	15
Spur Line	15



Table 6: Recommended Minimum Noise Influence Zone from Railway Operations

Type of Operation	Setback Distance (m)
Freight Rail Yard	1,000
Principal Main Line	300
Secondary Main Line	250
Principal Branch Line	150
Secondary Branch Line	75
Spur Line	75

Table 7: Recommended Minimum Vibration Influence Zone from Railway Operations

Type of Operation	Setback Distance (m)
All operations	75

The guide provides a number of examples for noise and vibration mitigation measures including good design practices that can be implemented for new developments. The guide also recommends that detailed noise and vibration studies are undertaken early in the design process to ensure that new developments are designed appropriately to minimize noise and vibration levels for residents and building safety.

## City of Niagara Noise By-Law 2004-105

The City of Niagara Noise By-Law does not address sounds from industrial uses or rail.

## INDUSTRY MAP INVENTORY

A site visit was completed on September 16, 2015 to review the industrial areas within a 1 km zone around the study area. This distance is consistent with the Guideline D-6 zone of influence of a Class III facility identified in Table 1. Industries identified within this boundary were considered to have the potential for affecting the proposed sensitive land uses on the Thundering Waters subject lands.

Industrial zoned lands identified during the site visit, and from the City of Niagara Official Plan, were categorized according to Guideline D-6 classifications (Class I, II or III) for their potential to influence nearby sensitive land uses. Where the facility's classification was not completely apparent, additional research was conducted to determine the type of operations / products and hours of operation. The resulting classifications are summarized in Appendix A. Figure 3 shows the resulting category for each parcel of land. The land use classifications inherently include some subjectivity. Additional investigation of the critical lands (e.g., Class 3 lands) may indicate a lower classification that produces less restrictions on development.



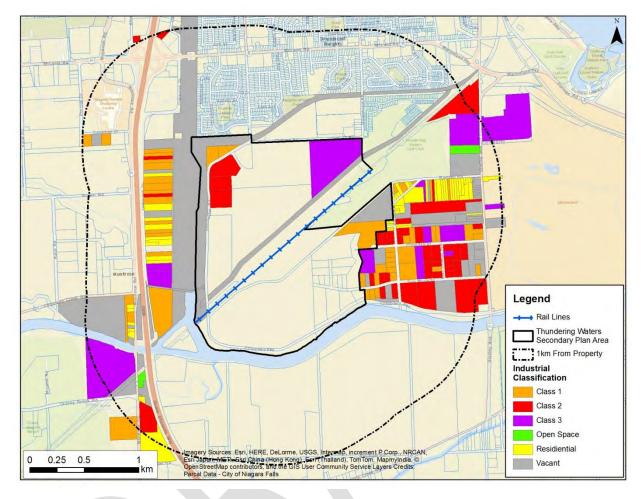


Figure 3: Industrial Land Categorization

A number of properties and buildings were vacant during the study and are indicated as such in Figure 3. Where there are lands that currently do not have an industry identified, they have been classified in Figure 3 as vacant. Some properties are identified as residential in the zoning, but were determined to be industrial based on the site visit and were classified as such for this study.

The potential impacts of the above industries on the proposed development are discussed in the next section.

## **FINDINGS**

The industrial classifications shown in Figure 3 were used to determine the potential areas of influence from each property to sensitive land uses. Where potential areas of influence impose on incoming development, Guideline D-6 states the proponent of a development should provide detailed studies for noise, vibration, dust or odour (as applicable).



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Figure 4 presents the area of potential influence (from Table 1) from industrial lands on the subject lands. These regions indicate area of potential effects from the local industries. A significant portion of the subject lands are affected by the influence of the Class 3 industries.

If development of sensitive land uses were to occur in these areas, detailed studies would be required. Such detailed studies typically require a detailed understanding of each industrial process, specific details of the sources operating at each site, and modelling to predict the actual area of potential impact. The results of the detailed studies may result in mitigation requirements for the incoming development.

Table 1 also presents recommended minimum setback distances for the various land use classifications. Guideline D-6 recommends that development of sensitive land uses be avoided within these regions, subject to the results of detailed studies. Further study may confirm if development is feasible within these setbacks, or if mitigation at the source or receiver or both will be sufficient to address any concerns.

The area of influence from a principle rail branch line is also indicated in Figure 4. The rail line noise and vibration areas of influence were taken from Table 6 and 7, respectively. As detailed information on the rail line was not available, it is conceivable that the railway area of influence may decrease if the line is in less use than what was assumed (i.e., principle branch line). Development in these rail setback areas is only recommended with a detailed assessment of the current and future rail use activities for the line. It is anticipated that mitigation measures for development in this area will be necessary. Further discussion is included in the recommendations.



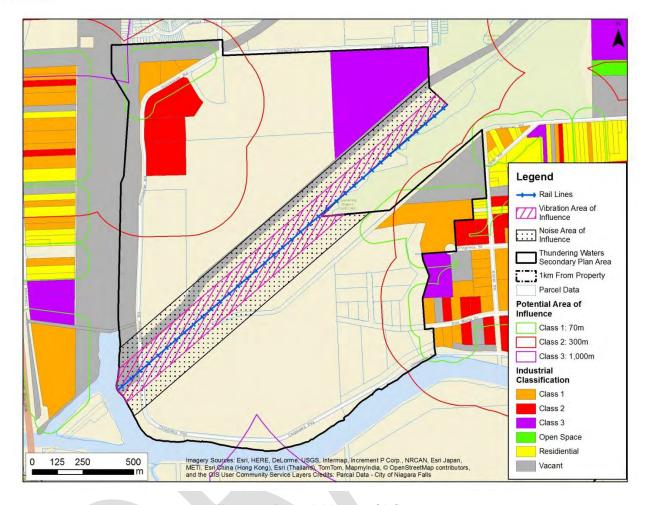


Figure 4: Potential Areas of Influence

# **RECOMMENDATIONS**

The results of our preliminary assessment indicate a significant portion of the proposed development lands are within areas of potential influence from nearby industrial uses, primarily a few Class 3 industries. For the development to proceed in areas where sensitive land uses are proposed, the following recommendations are provided for consideration:

Development of sensitive land uses (e.g., residential, educational, etc.) within the buffer regions identified in Figure 4 are feasible provided the proponent is willing to conduct detailed assessments of air quality, noise and vibration (as applicable). These studies may identify that mitigation measures are required on the incoming development. Only existing industries that have potential for causing adverse impacts (i.e., noise, vibration, dust or odour) in the study area, or proposed industries for which a site plan approval application has been made, need to be assessed. Potential future industrial uses that have not yet been determined need not be considered in the assessment.

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- Prior to undertaking detailed studies, a more detailed review of the identified Class 3 industries could be undertaken and see if a re-classification to Class 2 might be warranted, and the potential area of influence reduced.
- Development of sensitive land use within the minimum recommended separation distances outlined in Table 1 may not be feasible or may be subject to more significant mitigation requirements. This outcome can be confirmed through detailed studies.
- Sensitive land use development in the subject lands that are within the railway influence zones identified in Figure 4 will require a detailed rail and vibration study. This will result in significant mitigation requirement for the incoming development. Classification of the rail line may also be modified based on the use conditions of the line.
- Detailed assessments should follow appropriate MOECC guidelines relevant to the type of study being conducted.

## **Mitigation Recommendations**

There are a number of mitigation measures that could be implemented as part of the planning process. Table 10 provides conceptual mitigation measures for sensitive land uses. GR (CAN) will be required to undertake studies to identify specific mitigation methods required once details of the development are available. Mitigation techniques generally apply to the sensitive land use, however agreements may be struck with adjacent industries to install mitigation at the source, potentially at the expense or partial expense of GR (CAN).

Table 10: Conceptual Mitigation Measures for Proposed Sensitive Land Uses

Mitigation Measure [1]	Limiting Adverse Effect
Barrier	Noise
Enclosed Balconies	Noise
Building Location/Orientation/Room Layout	Noise
Upgraded Façade	Noise
Deep Foundations	Vibration
Vibration Isolation	Vibration
Ventilation (Air Conditioning)	Noise, Odour

**Note:** All mitigation measures are applicable for railway operations. Only Ventilation (Air Conditioning), Building Location/Orientation/Room Layout, and barriers may be required for other land uses and activities.



# **CLOSING**

We trust the information contained within will warrant a conference call to discuss the results of our findings and the next steps. Once you have had a chance to review our letter, please contact us to set up this call.

Yours very truly,

**RWDI AIR Inc.** 

Melissa Annett, d.E.T.

Senior Project Manager, Associate

Melissa Annell

MEA/kta

**CC:** Cynthia Lai – GR (CAN) Investment Co. Ltd.

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Lorelei Jones - Macaulay Shiomi Howson Ltd.

jones@mshplan.ca

Stephen Bedford - Stephen Bedford Consulting Inc.

sbc@stephenbedford.ca

Attach.

# APPENDIX A

mn1 Addr	ress L	Longitudel L	Latitudel	Company Name	Classification	Notes
1 7888	3 OAKWOOD DR	-79.120075	43.061343	Ok Tires; Joe's Place; Niagara Auto Auction	Class 1	
2 DON	MURIE ST	-79.084288	43.052183	Big lot with small building (looks vacant - no signage)	Class 1	Looks like a large lot with a small vacant building. Nothing on Google and no signage.
	3 OAKWOOD DR	-79.12002	43.062623		Class 1	
	PROGRESS ST	-79.097582		Halucha Engineering	Class 1	Previous Washington Mills
	DON MURIE ST	-79.092216		Dynaco Canada Inc.	Class 1	Trevious washington wins
3 0030	DON WORLS	-73.032210		·	Class 1	
				Three companies under this address - Spencerarl-		
				Corporate, Niagara Falls Brewing Co., Dorcy Ashflash		
	PROGRESS ST	-79.092294		Canada Ltd.	Class 1	
7 8676	OAKWOOD DR	-79.120527	43.049326	Jellystone Niagara Camp Resort	Class 1	Part of camp on 8676 OAKWOOD DR
8 7838	3 OAKWOOD DR	-79.120033	43.062323	KIA motors	Class 1	
				Two Brothers Auto; Revelaton Welding; Parckway Towing & Storage; Niagara Tint; JCW; Papetti Auto Repair; Auto		
				Credit Canada; Maximum Performance Motorsports;		
				Debest Pasta Sauce; Niagara Fun Tours; Wild Bills Auto		
0.7060	3 OAKWOOD DR	-79.120056	43.061764		Class 1	
				·		seems to be part of the residental bases on 2020 CAVAVOOD DD
	WOOD DR	-79.120122		Mobile Storage Units	Class 1	seems to be part of the residentail house on 8020 OAKWOOD DR
11 8020	OAKWOOD DR	-79.120146	43.059656	Residential; Mobile Storage Units	Class 1	seems that part on the othe lot is Mobile Storage Units
12 8058	3 OAKWOOD DR	-79.120162		Niagra Falls Art Gallery - Niagara Children's Museum	Class 1	
				St Catharines Truck & Trailer Repair; Volsci Construction		
13 8230	O OAKWOOD DR	-79.120178	43.056712	Co; Chair Experts Refinishing	Class 1	
14 7825	DORCHESTER RD	-79.111591	43.062939	Niagara Moving & Storage	Class 1	
				Residential; Anita's Every Woman Esthetics; Oakwood		
15 8320	OAKWOOD DR	-79.120184	43.055989	Motors Ltd.	Class 1	
16 8354	OAKWOOD DR	-79.120187	43.055697	Residential; Maid Of The Mist Steamboat Co Ltd	Class 1	
	OAKWOOD DR	-79.120198		Residential; Quantech Electric Contractors	Class 1	
	DORCHESTER RD	-79.113946		A&B Self Storage	Class 1	
	B OAKWOOD DR	-79.120166		Niagra Fall Nissan	Class 1	
	DORCHESTER RD	-79.112862		Quantum Niagara Gymnastics & Acro Cats	Class 1	
	MONTROSE RD	-79.124644		Minacs Worldwide Inc ; Cimineili; Warehouse for Lease	Class 1	
	MONTROSE RD	-79.123658	43.048836		Class 1	Current Residential unit (rental) but Zoned Industrial
	MONTROSE RD	-79.1235		Vibrations; Sam's Montrose Hotel	Class 1	current residential and (rental) but 25 rea massival
25 0025	WIONTHOSE NO	73.1233		Four companies under this address - Chevy Lane	Cluss I	
				Fabrications, Niagara Woodworking, Milestone Millwork,		
24 6100	PROGRESS ST	-79.09417		Niagara Waterproofing	Class 1	
24 0100	FROGRESS ST	-73.03417		Two companies under this address - IRC Mechanical and	Class 1	
25 6/11	L KISTER RD	-79.094145		Hodgson T & Co Ltd.	Class 1	
	L KISTER RD	-79.094121		Niagara Bus Wash & RV Cleaning Services	Class 1	
20 0441	ו אוזונוא אט	-75.054121		Four companies under this address - Niagara RV & Trailer	Ciass I	
27 6474	VICTED DD	70.004000		Center, Niagara Vacation Rentals, United Medical Systems	Class 1	
	KISTER RD	-79.094096		Canada, Uni-quatro Industries Canada  Micron Installations Ltd. Probung Doors	Class 1	
	L KISTER RD	-79.09407		Micron Installations Ltd Prehung Doors	Class 1	
	KISTER RD	-79.093867		Hangups Imprinted Sportswear & Promotional Products	Class 1	
	DON MURIE ST	-79.09532		Niagra River Trading Co.	Class 1	
31 6190	DON MURIE ST	-79.095634		International Sew-Right Co.	Class 1	
22 66 12	2 2 4 4 4 5 5 7 2 2	70.00055-		Two companies listed under this address - Duguay	0. 4	
	RAMSEY RD	-79.093525		Haulage Inc. and Hunter Auto Repairs	Class 1	
33 6001	L KISTER RD	-79.092669		Marc's Marine	Class 1	
				Two companies under this address - Pineridge Tree		
	KISTER RD	-79.091302		Service and Advantage Heating & Air Conditioning	Class 1	
	RAMSEY RD	-79.089384		Residential; Provincial Contractors Inc	Class 1	
26 5722	RAMSEY RD	-79.087388	43.058869	Residential; A B C Fire & Safety	Class 1	

nn1	Address	Longitudel I	Latitudel	Company Name	Classification	Notes
				Three companies under this address - Aztec Frames Ltd.,		
37	6025 PROGRESS ST	-79.091623	43.055177	Field of Dreams Gallery, Apple Art & Furniture Company	Class 1	
				Three companies listed under this address - Progressive		
38	5835 PROGRESS ST	-79.089214	43.055233	Mechanical Ltd., Alco Products, Barbisan Allmetal	Class 1	
				Two companies under this address - Niagara Analytical		
				Environmental Laboratories and Niagara Water		
39	5805 PROGRESS ST	-79.088747		Conditioning Ltd.	Class 1	
	8375 STANLEY AV	-79.084856		Marineland Marketing	Class 1	Commerical
		101001000	10.000012	Three companies under this address - Bateman's Tire,		
/11	8407 STANLEY AV	-79.084191	13 05/030	Gilson's Auto Repair, D.I. Roof Seamers	Class 1	DI Roof Seamers 8-5 M-F, No hours listed for Batemans Tire or Gilsons Auto Repair.
	8621 EARL THOMAS AV	-79.088927		Collins Concessions Ltd.	Class 1	5. Noor bearings 5 th 1, 116 hours instea for Batemans fine of Gilbons fracto Repair.
	6045 PROGRESS ST	-79.092285		Garden City Customs Services Inc.	Class 1	
43	0043 FROGRESS 31	-73.032283	43.034828	Family and Children's Services Niagara (FACS); Family	Class 1	
44	7900 CANADIAN DR	-79.128008	12.06261	Counselling Centre Niagara;	Class 1	
					Class 1	
	7770 CANADIAN DR	-79.125857		Roman Cheese Products Ltd		
	6255 DON MURIE ST	-79.097391		Gordon Wright Electric Limited	Class 1	
	6220 DON MURIE ST	-79.096225		Marine Clean Ltd.	Class 1	
	6260 DON MURIE ST	-79.096833		Niagara Commercial Coatings & Insulations	Class 1	
	8100 DORCHESTER RD	-79.113074		Avid Growing Systems	Class 2	turn key medicinal marijuana growing operation
	8040 DORCHESTER RD	-79.113112		Warehouse	Class 2	
	7942 DORCHESTER RD	-79.11262		Palfinger Inc; Trans-Quip Inc	Class 2	not sure if Trans-Quip Inc is still in this building
52	5720 DON MURIE ST	-79.086563		Brunner Manufacturing & Sales Ltd.	Class 2	
53	5770 DON MURIE ST	-79.08749	43.051902	Tecna Div of Brunner Manufacturing & Sales Ltd.	Class 2	
				Hamblet's Roofing Siding Windows & Doors; Alkaron		
54	7130 KINSMEN CT	-79.12217	43.071871	Metals Inc; Niagra Go-Karts and Mini-Putt	Class 2	not sure about Alkaron Metals Inc, can't see it on Google earth
55	7848 OAKWOOD DR	-79.120044	43.062045	Residential; Leonard Malier; A & M Custom	Class 2	maybe class 1?
56	8066 OAKWOOD DR	-79.120165	43.058958	Residential; Ken Warden Construction Ltd	Class 2	
57	8594 EARL THOMAS AV	-79.087548	43.052793	Stelfab Niagara Ltd.	Class 2	
				Two companies under this address - Storage Niagara and		
58	8540 EARL THOMAS AV	-79.087575	43.053204	Ground Aerial Maintenance Service Ltd.	Class 2	
59	8464 EARL THOMAS AV	-79.087627	43.054088	Food Roll Sales (Niagara) Ltd.	Class 2	
60	5720 PROGRESS ST	-79.086652	43.053706	Hoco Limited (Building for Sale)	Class 2	
61	5676 PROGRESS ST	-79.08583	43.053725	Davert Tools Inc.	Class 2	
62	6025 CHIPPAWA PY	-79.092125	43.050255	Niagara Falls Humane Society	Class 2	Potential noise impact from barking dogs
	5955 DON MURIE ST	-79.090183		H&L Tool and Die Ltd.	Class 2	
		101000000		Two companies under this address - Defect-O Canada and		
64	8699 STANLEY AV	-79.085154	43 050131	Oneida Canada Limited	Class 2	Looks vacant and lease signs on lot.
	6095 PROGRESS ST	-79.094045		Niagara Fasteners Inc.	Class 2	200 to total to and leade signs on lot
03		, 5.554045		Two companies under this address - PRW Fabrication and	- 300 L	
66	6129 PROGRESS ST	-79.094736		PRW Excavating Contractors	Class 2	
00	0129 FROGRESS 31	-73.034730		Two companies under this address - Provincial Design &	Class 2	
C7	CAEO DROCRESS ST	70.005271		Fabricating and Supreme Mechanical Contractors	Class 3	
	6159 PROGRESS ST 6135 DON MURIE ST	-79.095371 -79.094558		Niagara Pattern Ltd.	Class 2 Class 2	
				<u> </u>		Pullding for Cala (gurranthy is Phagair Was d Products Corn
69	6167 DON MURIE ST	-79.095175	43.0516/1	Building for Sale	Class 2	Building for Sale (currently is Phoenix Wood Products Corp.)
	DON MUDIE CT	70.00000	40.054.0	MCI Wests Management Com.	01 2	No Buildings, just a couple of storage tanks and some trucks labelled with MCL Waste
	DON MURIE ST	-79.096301		MCL Waste Management Services?	Class 2	Management Services. Likely Class 1, possibly Class 2.
	6090 DON MURIE ST	-79.093685		Air Liquide Canada Inc.	Class 2	
	6150 DON MURIE ST	-79.095033		Building for Lease	Class 2	
	6198 KISTER RD	-79.092582		Storage lot of some sort	Class 2	There is a building of some sort and a bunch of vehicles, other items
	9514 MONTROSE RD	-79.121809		Crown Transportation Group Limited	Class 2	
75	5806 RAMSEY RD	-79.089137	43.058826	Freds Concrete	Class 2	in google earth it looks like there is a sign that says Freds Concrete
76	6065 PROGRESS ST	-79.092997	43.054811	Niagara Fence Supply Inc.	Class 2	
77	6272 KISTER RD	-79.092663	43.055478	Fencast Industries	Class 2	
70	6015 PROGRESS ST	-79.09085	43.055196	Louver-Lite Canada Inc.	Class 2	

Column1 Address	Longitudel	Latitudel	Company Name	Classification	Notes
			Three companies under this address - Shotz Canada,		
79 8345 STANLEY AV	-79.084242	43.055797	Peglow Tool & Die Inc., Applied Strobe Technology	Class 2	Likely Class 1 but could be Class 2 (tool & die) due to unknown hours of operation.
80 5952 PROGRESS ST	-79.090003		Storage lot of some sort	Class 2	There is a building of some sort and a bunch of vehicles, other items
81 8481 EARL THOMAS AV	-79.089012		Factor Forms Niagara Ltd.	Class 2	
82 8591 EARL THOMAS AV	-79.088954		LaurCoat Inc.	Class 2	
83 5850 DON MURIE ST	-79.088902		Falls Contracting Inc.	Class 2	
33 SOSO BOIL MOINE ST	75.000502	43.031073	Tuils contracting inc.	Cluss 2	Large outdoor yard, single building, doesnot appear to be much activity in the yard, more for
84 5920 DON MURIE ST	-79.089913	43 052257	Trimac Transportation System	Class 2	storage
85 8620 EARL THOMAS AV	-79.087521	43.052382		Class 2	storage
86 7071 OAKWOOD DR	-79.119174		Niagara Protective Coatings	Class 2	
87 7527 STANLEY AV	-79.086747		Walter L & Sons Excavating Ltd	Class 2	Outside storage, 36 employees - anticipate to be sound and dust
88 8203 STANLEY AV	-79.080747		AC & First choice vinyl windows LTD.	Class 2	Outside storage, 50 employees anticipate to be sound and dust
89 6224 PROGRESS ST	-79.096817		Quality Ready Mix Ltd.	Class 3	Outdoor storage, high probability of fugitive emissions
90 9127 MONTROSE RD	-79.126873		E S Fox Ltd	Class 3	Fabricated metal product manufacturing, large facility, outdoor storage
90 9127 WONTROSE RD	-79.120873	43.044835	E 3 FOX LLU	Class 3	Unknown - No industry associated with this address, however appears to be outdoor storage
01 8220 CTANLEY AV	-79.082276	43.057409		Class 2	areas. Assumed worst case Class 3.
91 8220 STANLEY AV 92 8550 OAKWOOD DR	-79.082276		Mantagaman, Dres Canstruction / Landscans Matarials	Class 3 Class 3	
			Montgomery Bros Construction / Landscape Materials		Outdoor storage, high probability of fugitive emissions
93 8620 OAKWOOD DR	-79.120188	43.052031	Modern Mosaic Ltd	Class 3	Outdoor storage, high probability of fugitive emissions
			Three companies under this address - Peninsula		
OA OAOO FARI THOMAS AV	70.007604	42.052645	Architectural Detail, Ontario Electrical Construction,	Clara 2	Outdoor store high made hills of facility and six
94 8490 EARL THOMAS AV	-79.087601		Progressive Mechanicals Limited	Class 3	Outdoor storage, high probability of fugitive emissions
95 5868 RAMSEY RD	-79.090208		Tri Cast Bronze	Class 3	Metal Fabricator / Foundry
96 5869 PROGRESS ST	-79.089915		Can Mar Manufacturing Inc.	Class 3	Refractory Manufacturing
97 5725 PROGRESS ST	-79.087578		Mancuso Chemicals Limited	Class 3	Chemical Manufacturing
98 5635 PROGRESS ST	-79.086176		Specialty Cast Metals Ltd.	Class 3	Steel & Cement Industry casting
99 6000 PROGRESS ST	-79.0909		Pumpcrete Corp.	Class 3	Outdoor storage, high probability of fugitive emissions
100 5980 DON MURIE ST	-79.090811		Dufferin Concrete	Class 3	High probability of fugitive emissions
101 7780 STANLEY AV	-79.080807		Washington Mills Electro Minerals Corporation	Class 3	Company makes chemicals - estimated class 3
102 6300 OLDFIELD RD	-79.09996		ChemTrade	Class 3	Company makes chemicals - estimated class 3
103 7771 STANLEY AV	-79.085487	43.063806		Class 3	Large steel facility with a lot of outdoor storage
104 7885 STANLEY AV	-79.085485		Marineland	Open Space	
105 9240 MONTROSE RD	-79.122471		Baden Powell Park	Open Space	
106 5584 RAMSEY RD	-79.084869	43.059631	Residential	Residiential	
107 OAKWOOD DR	-79.120173	43.058002	Residential	Residiential	
108 MONTROSE RD	-79.1238	43.047736		Residiential	
109 6077 KISTER RD	-79.093584	43.058303	Residential	Residiential	
110 5973 KISTER RD	-79.092126	43.059308	Residential	Residiential	
111 8072 STANLEY AV	-79.082449	43.059758	Residential	Residiential	
112 7960 OAKWOOD DR	-79.120104	43.06064	Residential	Residiential	
113 8252 OAKWOOD DR	-79.120179	43.056355	Residential	Residiential	
114 8356-8358 OAKWOOD DR	-79.120189	43.055423	Residential	Residiential	
115 8378 OAKWOOD DR	-79.12019	43.055096	Residential	Residiential	
116 8392 OAKWOOD DR	-79.120956	43.054955	Residential	Residiential	
117 8468 OAKWOOD DR	-79.120202	43.053782	Residential	Residiential	
118 8488 OAKWOOD DR	-79.120205	43.053491	Residential	Residiential	
119 8212 OAKWOOD DR	-79.120176	43.056991	Residential	Residiential	
120 8731 MONTROSE RD	-79.123536	43.049832	Residential	Residiential	
121 8755 MONTROSE RD	-79.123533	43.04952	Residential	Residiential	
122 8841 MONTROSE RD	-79.123525	43.04839	Residential	Residiential	
123 8891 MONTROSE RD	-79.123474	43.047477	Residential	Residiential	
124 8873 MONTROSE RD	-79.123521	43.047891	Residential	Residiential	
125 8279 STANLEY AV	-79.084563	43.056819	Residential	Residiential	Residential (for sale)
126 6120 KISTER RD	-79.092959		Residential	Residiential	
127 6138 KISTER RD	-79.093253		Residential	Residiential	
128 6158 KISTER RD	-79.093241		Residential	Residiential	

Column1 Address	Longitudel Latitude	I. Common Name	Classification	Neter
129 6224 KISTER RD		Company Name  6055 Residential	Classification	Notes
			Residiential	
130 6248 KISTER RD		5895 Residential	Residiential	
131 6061 KISTER RD		Residential	Residiential	
132 6043 KISTER RD		8575 Residential	Residiential	
133 5963 KISTER RD		5937 Residential	Residiential	
134 5955 KISTER RD		9418 Residential	Residiential	
135 9304 MONTROSE RD		2066 Residential	Residiential	
136 7473 REIXINGER RD		8297 Residential (farm)	Residiential	
137 5794 RAMSEY RD		8831 Residential	Residiential	
138 5850 RAMSEY RD		Residential	Residiential	
139 KISTER RD		Residential	Residiential	
140 6050-6110 KISTER RD		Residential	Residiential	
141 5606 RAMSEY RD		Residiential	Residiential	Looks like there is a storage area on the back
142 5618 RAMSEY RD		9546 Residential	Residiential	
143 5634 RAMSEY RD		9082 Residential	Residiential	
144 5650 RAMSEY RD		9074 Residential	Residiential	
145 5672 RAMSEY RD	-79.086401 43.05	Residential	Residiential	
146 5678 RAMSEY RD		Residential	Residiential	
147 5698 RAMSEY RD	-79.086894 43.05	8881 Residential	Residiential	
148 5714 RAMSEY RD		8875 Residential	Residiential	
149 5732-5734 RAMSEY RD	-79.087635 43.05	8862 Residential	Residiential	
150 5746 RAMSEY RD	-79.087882 43.05	8856 Residential	Residiential	
151 5764 RAMSEY RD	-79.088128 43.0	5885 Residential	Residiential	
152 5774 RAMSEY RD	-79.088499 43.05	8841 Residential	Residiential	
153 6259 KISTER RD	-79.094111 43.05	5663 Residential	Residiential	
154 6251 KISTER RD	-79.09412 43.05	5815 Residential	Residiential	
155 6227 KISTER RD	-79.09414 43.05	6134 Residential	Residiential	
156 6199 KISTER RD	-79.094148 43.05	6271 Residential	Residiential	
157 6189 KISTER RD	-79.094156 43.05	6408 Residential	Residiential	
158 6025 KISTER RD	-79.0931 43.05	8998 Residential	Residiential	
159 5594 RAMSEY RD	-79.084943 43.0	5893 Residential	Residiential	
160 OAKWOOD DR	-79.120092 43.06	0921 Empty lot	Vacant	Appears to be an empty lot
161 8529-8559 STANLEY AV	-79.084455 43.05	3073 Vacant Land	Vacant	Lot with small vacant building
162 MONTROSE RD	-79.121845 43.04	2549	Vacant	
163 7170 OAKWOOD DR	-79.116051 43.0	7476 Vacant Land	Vacant	
164 8160 OAKWOOD DR	-79.120169 43.05	7413 Empty lot	Vacant	
165 DORCHESTER RD	-79.118387 43.05	1388	Vacant	
166 QUEEN ELIZABETH WY	-79.122635 43.04	8951 Vacant Land	Vacant	
167 QUEEN ELIZABETH WY	-79.121527 43.0	4952	Vacant	
168 STANLEY AV	-79.082209 43.05	6053 Vacant Land	Vacant	
169 MONTROSE RD	-79.123523 43.04	8128 Empty lot	Vacant	
170 STANLEY AV		3491 Empty lot	Vacant	Empty lot with small vacant building
171 MCCLIVE ST		5961 Empty lot	Vacant	
172 5680 DON MURIE ST		2355 Empty lot	Vacant	Large building (looks vacant - no signage)
173 MONTROSE RD		3422 Vacant Land	Vacant	
174 DRUMMOND RD		5198 Empty lot	Vacant	
175 DORCHESTER RD	-79.119287 43.04		Vacant	
176 MONTROSE RD		6979 Vacant Land	Vacant	
177 MONTROSE RD		3343 Vacant Land	Vacant	
178 MONTROSE RD		3187 Vacant Land	Vacant	
179 CHIPPAWA CREEK RD		8801 Vacant Land	Vacant	<null></null>
180 8223 STANLEY AV		6943 Vacant Land	Vacant	
181 8297 STANLEY AV		6511 Vacant Land	Vacant	
182 8309 STANLEY AV		6306 Vacant Land	Vacant	
183 STANLEY AV		6552 Vacant Land	Vacant	
103 SIMILLI M	75.005225 45.05		• acuit	

Column1 Address	Longitudel L	.atitudel	Company Name	Classification	Notes
184 8323 STANLEY AV	-79.087627	43.056034	Vacant Land	Vacant	
185 8455 STANLEY AV	-79.084137	43.054176	Empty lot	Vacant	Empty lot with small vacant building
186 5795 DON MURIE ST	-79.088024	43.050044	Vacant Land	Vacant	
187 MARINELAND PY	-79.090298	43.067728		Vacant	
188 DON MURIE ST	-79.094388	43.050581	Empty lot	Vacant	Building for Lease (looks like it used to be ES Fox)
189 6178 KISTER RD	-79.092628	43.057215	Vacant Lot	Vacant	
190 MONTROSE RD	-79.122672	43.042462	Empty lot	Vacant	
191 8073 STANLEY AV	-79.084276	43.059491	Vacant Land	Vacant	
192 5836 RAMSEY RD	-79.089631	43.058814	Empty lot with Container	Vacant	
193 5574 RAMSEY RD	-79.084666	43.059637	Vacant Land	Vacant	For Sale
194 CANADIAN DR	-79.126942	43.063631	Empty lot	Vacant	seems like an empty lot
195 OAKWOOD DR	-79.117661	43.072545	Empty lot	Vacant	seems like an empty lot
196 DON MURIE ST	-79.096811	43.051583	Empty lot	Vacant	
197 STANLEY AV	-79.084246	43.058934	Vacant Land	Vacant	
198 8113 STANLEY AV	-79.084255	43.059071	Vacant Land	Vacant	
199 STANLEY AV	-79.084238	43.058797	Vacant Land	Vacant	
200 KISTER RD	-79.096344	43.057823	Vacant Land	Vacant	
201 STANLEY AV	-79.085516	43.060885	Vacant Land	Vacant	
202 MARINELAND PY	-79.100828	43.058621	Vacant Land	Vacant	
203 MONTROSE RD	-79.122893	43.045228	Vacant Land	Vacant	
204 LINCOLN ST	-79.115565	43.048726	Empty lot	Vacant	
205 STANLEY AV	-79.084196	43.058112	Vacant Land	Vacant	
206 STANLEY AV	-79.084204	43.058249	Vacant Land	Vacant	
207 STANLEY AV	-79.084229	43.05866	Vacant Land	Vacant	
208 STANLEY AV	-79.084213	43.058386	Vacant Land	Vacant	
209 STANLEY AV	-79.084221	43.058523	Vacant Land	Vacant	
210 MCLEOD RD	-79.116023	43.060636	Vacant Land	Vacant	
211 DON MURIE ST	-79.097025	43.050728	Empty lot	Vacant	
212 CHIPPAWA PY	-79.094663	43.049923	Vacant Land	Vacant	
213 DORCHESTER RD	-79.115735	43.049829	Empty lot	Vacant	
214 DORCHESTER RD	-79.115375	43.049981	Empty lot	Vacant	
215 PROGRESS ST	-79.095333	43.053514	Vacant Land	Vacant	