



December 7, 2010

CELEBRATING
50
YEARS
in 2010

CONTAMINATED PROPERTY AND WASTE MANAGEMENT ASSESSMENT

407 Transitway East of Highway 400 to Kennedy Road Final Report - GWP 252-96-00

Submitted to:

LGL Limited
22 Fisher Street
P.O. Box 280
King City, Ontario
L7B 1G3

REPORT



A world of
capabilities
delivered locally

Report Number: 07-1181-0009

Distribution:

1 electronic copy - LGL Limited
4 copies - LGL Limited
1 copy - Golder Associates Ltd.





Executive Summary

Golder Associates Ltd. ("Golder"), was retained by LGL Limited ("LGL") to carry out a contaminated property and waste management assessment for the 407 Transitway corridor extending from east of Highway 400 to Kennedy Road and 500 m to the north and south of the Highway 407 centre line (i.e. the "study area"). Golder completed an initial assessment in October, 2007, wherein the study area was assessed, in a preliminary fashion, the potential for the presence of property contamination and/or waste materials that could affect the proposed construction work. Subsequent to our initial assessment, a preferred alignment for the transitway was selected. Golder was asked by LGL on August 25, 2009 to complete a follow-up assessment for the preferred alignment to identify any significant changes from those presented in the preliminary assessment report. The preliminary report was not finalized and this report supersedes the original draft report findings as presented in October, 2007.

The objective of the contaminated property and waste management assessment is to identify potential property contamination and/or waste materials that could interfere with the transitway development within the identified transitway study area.

Golder's assessment included a review of available references concerning study area land use history, regulatory records and subsurface conditions, previous reports, a preliminary limited windshield field reconnaissance (completed on September 18, 2007), and a follow-up limited windshield field reconnaissance (completed on December 14, 2010).

Twenty-five properties within the study area may present issues of potential environmental concern. Fill placement was noted at interchanges along the Highway 407 corridor. The origin and quality of the fill used is not known and therefore represents an issue of potential environmental concern. If areas containing fill are to be disturbed during the construction project, the quality of the fill should be confirmed through available background information or by completing subsurface environmental investigations to determine appropriate management and disposal options. No other specific indications of issues of potential environmental concern were observed within the ROW of Highway 407.

Based on the results of the site reconnaissance it is expected that wastes which will be generated by the project would generally consist of:

- Reclaimed asphalt pavement ("RAP") from milling of existing asphalt surfaces;
- Concrete, likely reinforced, from the removal of bridge or pavement structures;
- Manufactured wood waste from guide rails and the like removals; and,
- Scrap metal such as wire, corrugated steel pipe, and bridge guide rails.

RAP can be re-used on site for a variety of purposes as part of the construction activities, including, but not necessarily limited to, shoulder treatments, general fill and sub-grade fill. Non-reinforced concrete can be broken up and re-used within the project limits. Manufactured wood waste will require off-site disposal at licensed receiving facilities. Natural wood waste may be left on site within the right of way. Scrap metal should be collected for recycling at an off-site receiving facility.



407 TRANSITWAY - FINAL REPORT

Based on the preferred alignment, including bridge/overpass structures and some concrete box and steel culverts, the following waste will likely be generated:

- Asphalt;
- Reinforced concrete;
- Paint and concrete residues from hydraulic demolition or abrasive cleaning operations; and,
- Scrap metal.



Table of Contents

1.0 INTRODUCTION.....	1
1.1 Scope of Work	1
2.0 INFORMATION REVIEW AND FIELD SURVEY	1
2.1 Ministry of the Environment ("MOE")	2
2.2 Town of Richmond Hill	2
2.3 Town of Markham	2
2.4 City of Vaughan	2
2.5 Regional Municipality of York	3
2.6 Environmental Database Review.....	3
2.7 MOE Databases	6
2.8 Regional Geological Setting	7
2.9 Aerial Photographs	7
2.10 Previous Reports	8
3.0 FIELD INVESTIGATIONS.....	10
3.1 Preliminary Site Reconnaissance (September 18, 2007)	10
3.2 Follow-up Site Reconnaissance (December 14, 2009).....	10
4.0 SUMMARY OF FINDINGS.....	16
5.0 RECOMMENDATIONS.....	18
6.0 EXCESS MATERIAL MANAGEMENT	19
7.0 LIMITATIONS AND USE OF REPORT	20
8.0 CLOSURE.....	21
9.0 REFERENCES.....	23

TABLES

Table 2.1: Certificates of Approval Summary	4
Table 2.2: National Pollutant Release inventory Summary.....	4
Table 2.3: PCB Storage Sites Summary	5
Table 2.4: ORIS Summary.....	5



407 TRANSITWAY - FINAL REPORT

Table 3.1: Properties Adjacent to Highway 407 from Highway 400 to Kennedy Road.....	11
Table 4.1: Properties Highly Likely to have Contamination or Waste.....	16
Table 4.2: Approximate Location of Reported Spills Within City of Vaughan Rights-of-Way.....	18
Table 5.1: Areas Most Likely Requiring Subsurface Environmental Investigations Prior to Construction.....	18

FIGURES

Figure 1: Key Plan

Figure 2: Notable Adjacent Properties Plan

APPENDICES

APPENDIX A

Regulatory Responses

APPENDIX B

EcoLog ERIS Report

APPENDIX C

Site Photographs



1.0 INTRODUCTION

Golder Associates Ltd. ("Golder"), was retained by LGL Limited ("LGL") to carry out a contaminated property and waste management assessment for the 407 Transitway corridor extending from east of Highway 400 to Kennedy Road and 500 m to the north and south of the Highway 407 centre line (i.e. the "study area") (refer to Figure 1). Golder completed an initial assessment in October, 2007, wherein the study area was assessed, in a preliminary fashion, the potential for the presence of property contamination and/or waste materials that could affect the proposed construction work. Subsequent to our initial assessment, a preferred alignment for the transitway was selected as shown on Figure 2. Golder was asked by LGL on August 25, 2009 to complete a follow-up assessment for the preferred alignment to identify any significant changes from those presented in the preliminary assessment report. The preliminary report was not finalized and this report supersedes the original draft report findings as presented in October, 2007.

The objective of the contaminated property and waste management assessment is to identify potential property contamination and/or waste materials that could interfere with the transitway development within the identified transitway study area.

1.1 Scope of Work

Golder's assessment included a review of available references concerning study area land use history, regulatory records and subsurface conditions, previous reports, a preliminary limited windshield field reconnaissance (completed on September 18, 2007), and a follow-up limited windshield field reconnaissance (completed on December 14, 2010).

The scope of this contaminated property and waste management assessment is sufficient only to identify environmental liabilities which are obvious from our windshield reconnaissance of surface features or from available sources of information. No soil, water, liquid, gas, product or chemical sampling and testing on or in the vicinity of the study area was conducted as part of this assessment. This assessment included a cursory overview of the neighbouring land uses and does not constitute a complete assessment of the adjacent facilities.

2.0 INFORMATION REVIEW AND FIELD SURVEY

Golder's assessment included a review of available references concerning site history and subsurface conditions, and a limited preliminary one day windshield reconnaissance, and a follow-up one day windshield reconnaissance. Details of the information reviewed and findings are provided in the following sections of this report.

In order to assess historical and current land uses and characteristics of the study area, a preliminary review of information from the following sources was conducted:

- Ministry of Environment (MOE);
- Town of Richmond Hill;
- Town of Markham;
- City of Vaughan;
- Regional Municipality of York;



- EcoLog ERIS;
- Aerial Photographs obtained from the National Airphoto Library, Ottawa, Ontario;
- Various MOE databases relating to waste disposal sites, and coal gasification and related facilities;
- Published geological maps and reports;
- Previous reports provided by Delcan; and,
- Field windshield reconnaissance.

2.1 Ministry of the Environment (“MOE”)

The MOE was contacted to determine if the MOE has any information pertaining to the study area. Specifically, the MOE was asked to respond to the following questions:

Has the MOE ever issued any approvals, permits or licenses for the study area?

Has the MOE ever issued any control orders or violation notices with respect to the study area?

The MOE indicated that only municipal addresses can be searched. Based on the number of properties within the study area and the overall scale of this assessment, individual property searches were not completed at this time.

2.2 Town of Richmond Hill

The Town of Richmond Hill (“Richmond Hill”) was contacted and requested to conduct a review of their files for any environmental information relating to the study area including information on spills, complaints, filling activities, sewer by-law infringements, previous environmental reports and landfills.

At the time of preparation of this report, Richmond Hill had not issued a response to Golder. Once a response is received, the information will be reviewed by Golder and if additional information which changes the findings of this investigation is identified, it will be forwarded to LGL and should be attached to Appendix A of this report.

2.3 Town of Markham

The Town of Markham (“Markham”) was contacted and requested to conduct a review of their files for any environmental information relating to the study area including information on spills, complaints, filling activities, sewer by-law infringements, previous environmental reports and landfills.

At the time of preparation of this report, Markham had not issued a response to Golder. Once a response is received, the information will be reviewed by Golder and if additional information which changes the findings of this investigation is identified, it will be forwarded to LGL and should be attached to Appendix A of this report.

2.4 City of Vaughan

The City of Vaughan (the “City”) was contacted and requested to conduct a review of their files for any environmental information relating to the study area including information on spills, complaints, filling activities, sewer by-law infringements, previous environmental reports and landfills.



A written response was issued to Golder on March 2, 2010 indicating that 42 spills have been reported on roads present within the study area; however, only five actual spill locations are within 500 m of the 407 Transitway preferred alignment. These spills include:

- An engine oil/antifreeze spill which occurred in the vicinity of the Jane Street and Highway 407 interchange July 18, 2000;
- An oil spill which occurred on Highway 7, east of Bowes Street, on February 17, 2007;
- An hydraulic spill (sic) which occurred on Racco Parkway (exact location not reported) on July 30, 2009;
- An oil spill which occurred at the intersection of Snidercroft Road and Keele Street on June 21, 2009; and,
- A sunflower oil spill which occurred on Ron Rose Drive on October 5, 2009; however, this is not an issue of potential environmental concern as sunflower oil is not generally harmful to the environment.

Exact locations of these spills are unknown and further assessment costs may be greater than ultimate clean-up costs. Further assessment may still not be able to identify actual spill locations. If impacts are identified during construction in these areas, a consultant should be retained to assess the soil quality and determine appropriate waste management options. A copy of the City's response is provided in Appendix A of this report.

2.5 Regional Municipality of York

The Regional Municipality of York (the "Region") was contacted and requested to conduct a review of their files for any environmental information relating to the study area including information on spills, complaints, filling activities, sewer by-law infringements, previous environmental reports and landfills.

The region indicated that a \$75 fee was required for every address to be searched. Based on the number of properties within the study area and the overall scale of this assessment, individual property searches were not completed at this time. A copy of their response is provided in Appendix A.

2.6 Environmental Database Review

Golder retained EcoLog Environmental Risk Information Services Ltd. ("ERIS report") to provide a summary of databases of environmentally pertinent sites within the vicinity of the study area. The EcoLog ERIS report contains the results of a review of the following databases:

Federal Records: Inventory of PCB Storage Sites, National Pollutant Release Inventory, Certificates of Approval

Ontario Records: Occurrence Reporting Information System

The results of Golder's review of the ERIS report are provided below. A copy of the ERIS report is included in Appendix C.

Certificates of Approval, 1985 – 2002: Twenty-six Certificates of Approval ("C of A") were listed in the ERIS Report. In general, C of A were listed for municipal sewage and water. The following C of A's were noteworthy. A complete list of C of A's is included in Appendix C.



407 TRANSITWAY - FINAL REPORT

Table 2.1: Certificates of Approval Summary

C of A No.	Company	Location	Description	Issues
CA-1	Multirim Inc.	226 Jardin Dr. Vaughan	C of A for industrial air emissions related to exhaust fan.	Multirim Inc. is a manufacturer of urethane and other foam products. The property is located approximately 250 m north of Highway 407 and to the east of Keele Street. The potential chemicals associated with processes on-site represent an issue of potential environmental concern (Site No. 5 on Figure 2).
CA-6 and CA-7	Valley Metal Finishing Ltd.	211 Snidercroft Rd. Vaughan	C of A for industrial air emissions related to paint spray booth.	Valley Metal Finishing Ltd. is a supplier of fluropolymer architectural aluminum spray coatings. The property is located approximately 250 m south of Highway 407 to the west of Keele Street. Spray painting occurs on the property. Storage of paints, solvents and chemicals associated with the processes on-site represent an issue of potential environmental concern. (Site No. 4 on Figure 2)

National Pollutant Release Inventory (“NPRI”) 1993 – 2005: The following noteworthy properties were listed in the NPRI inventory. Refer to Appendix C for a complete listing.

Table 2.2: National Pollutant Release inventory Summary

NPRI No.	Company	Location	Description	Issues
NPRI-1 to NPRI- 3	Multirim Inc.	226 Jardin Dr.	Release of substances to air: 2003, 2004 and 2005.	Multirim Inc. is a manufacturer of urethane and other foam products. The property is located approximately 250 m north of Highway 407 and to the east of Keele Street. The potential chemicals associated with processes on-site represent an issue of potential environmental concern (Site No. 5 on Figure 2).
NPRI-4 to NPRI- 15	Northern Transformer Inc.	163 Jardin Dr.	Release of substances to air: 1994 to 2005.	Northern Transformer is a manufacturer of transformers. The property is located approximately 250 m north of Highway 407 and to the east of Keele Street. The potential chemicals/wastes associated with manufacturing processes on-site represent an issue of potential environmental concern (Site No. 5 on Figure 2).



407 TRANSITWAY - FINAL REPORT

NPRI No.	Company	Location	Description	Issues
NPRI-16 to 27	Valley Metal Finishing	211 Snidercroft Rd.	Release of substances to air: 1994-2005. One reported release to land (no specific details provided): 1994.	Valley Metal Finishing Ltd. is a supplier of fluropolymer architectural aluminum spray coatings. The property is located approximately 250 m south of Highway 407 to the west of Keele Street. Spray painting occurs on the property. Storage of paints, solvents and chemicals associated with the processes on-site represent an issue of potential environmental concern (Site No. 4 on Figure 2).

Inventory of PCB Storage Sites ("OPCB") 1987 – 2004: One property was listed in the ERIS report.

Table 2.3: PCB Storage Sites Summary

OPCB No.	Company	Location	Year	Description	Issues
OPCB-1	Deep Foundations Contractor	26 Ruggles Avenue Markham	1995	Two drums of ballast with high level PCBs (>1000ppm).	The property was listed for one year for the storage of a small quantity (two drums) of PCB ballasts. No anticipated issue of environmental concern.

Occurrence Reporting Information System ("ORIS"), 1988 - 2002: Twenty-six ORIS listings were noted in the ERIS Report. In general, reported spills were less than 150 litres ("L") with the exception of the following. A complete listing of the ORIS search is included in Appendix C.

Table 2.4: ORIS Summary

ORIS No.	Location	Environmental Impact	Cause	Year	Issues
ORIS-1	180 Jardin Dr. Vaughan	Confirmed: water/air	Explosion and unknown amount of chemicals to the sewer.	1990	The property is located approximately 250 m north of Highway 407 to the east of Keele Street. There is a potential for soil contamination related to the explosion and represents an issue of potential environmental concern (Site No. 5 on Figure 2).
ORIS-3 and ORIS 4	163 and 150 Jardin Dr. Vaughan	Possible: land	Leakage of non-PCB containing transformer oil to the ground surface.	1988	The properties are located approximately 250 m north of Highway 407 and represents issues of potential environmental concern (Site No. 5 on Figure 2).



407 TRANSITWAY - FINAL REPORT

ORIS No.	Location	Environmental Impact	Cause	Year	Issues
ORIS-6	Highway 407 eastbound lane east of Keele Street, Vaughan	Possible: land/water	Accident resulting in 780 L of diesel spilled onto Highway 407 and ditch.	1994	Diesel spill represents an issue of potential environmental concern.
ORIS-16	Highway 7 approximately 500 m west of Yonge Street in Vaughan	Confirmed: land	200 L of coating solution to Highway 7 and surrounding land from barrel on a truck	1993	Chemical spill represents an issue of potential environmental concern.
ORIS-22	Highway 7, west of Bayview Rd., Markham	Possible: land	180 L diesel fuel spilled on road and into catchbasin.	1994	Fuel spill represents an issue of potential environmental concern.
ORIS-23	Highway 7, west of Bayview Rd., Richmond Hill	Possible: land	250 L diesel spilled to Highway 7 and storm sewer.	1996	Fuel spill represents an issue of potential environmental concern.
ORIS-26	Highway 407-about 100 m east of Highway 404, Markham	Confirmed: land	900 L of concrete paint spilled onto the road and ditch.	1997	Paint spillage represents an issue of potential environmental concern.

The Occurrence Reporting Information System database indicated that various spills have occurred in areas throughout the study area. Limited information was provided with respect to the type of spill and method of clean-up. There is a potential for subsurface impact related to spills to the ground surface and water.

2.7 MOE Databases

The MOE Publications “Waste Disposal Site Inventory” (June, 1991), “Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario” (November 1988), and “Coal Gasification Plant Waste Sites in Ontario” (April, 1987) were reviewed by Golder. These sources indicated that:

- there are no active or closed waste disposal sites within the study area or within 1 km of the study area;
- the study area is not listed as a site using or producing coal tar and related tars, and there are no sites using or producing coal tar and related tars within 1 km of the study area; and,



- the study area is not listed as a coal gasification plant waste site, and there are no coal gasification plant waste sites within 1 km of the study area.

Based on a review of these MOE databases there are no anticipated issues of potential environmental.

2.8 Regional Geological Setting

Groundwater and subsurface conditions were not directly investigated by Golder as part of this report. Based on the site reconnaissance and information provided on the Surveys and Mapping Branch, Department of Energy, Mines and Resources 30M/14, *Marham*, 9th Edition, dated 1994 and 30M/13, *Bolton*, 7th Edition, dated 2001, Topographic Map, the following watercourses cross the study area (described from west to east): Black Creek, West Don River, Westminster Creek, East Don River, German Mills Creek, Beaver Creek, Rouge River and Bruce Creek. Regional groundwater flow is anticipated to flow in a southerly direction towards Lake Ontario.

According to the Ontario Geological Survey Map *Geology of Ontario, Southern Sheet* (OGS, 1991), and the Geological Survey of Canada, *Regional Geological Mapping of Oak Ridges Moraine, Great Toronto, Southern Ontario* (Open File 3062, 1997) the limits of the study area consist of overburden at ground surface within the study area consisting of the following soil units: glacial till deposits characterized as dense, stony silty sand to dense silt till (Newmarket Till) and clayey silt to silt till with interbedded sand and silt (Halton Till); glacial lake deposits of silt, clay, sand and gravel; and, river deposits primarily along existing surface water courses and generally comprised of gravel, sand, silt and clay. The Upper Ordovician bedrock consists of sedimentary rock that includes shale, siltstone, and interbeds of limestone.

For additional information with respect to subsurface conditions within the study area refer to the Golder report entitled "*Secondary Source Groundwater Investigation 407 Transitway from East of Highway 400 to Kennedy Road*", prepared for LGL, dated February 11, 2010, Report No. 07-1181-0009.

2.9 Aerial Photographs

Aerial photographs of the study area were obtained by LGI Copy Services on behalf of Golder at the National Air Photo Library in Ottawa, Ontario for the years 1960, 1976 and 1988. In addition, a recent aerial photograph was provided by Delcan which is used as the base plan for Figure 2. The general presence and absence of structures within the study area have been summarized below. Highway 407 was constructed in approximately 1997. The study area is described from west to east noting cross streets as reference points. Refer to Figure 2.

1960 (Scale 1:20,000)

Land use in the vicinity of the future location of Highway 407 is primarily farmland and associated farm properties. Between Yonge Street and Bayview Avenue there are residential/commercial/industrial properties in the south portion of the study area. There appears to be an aggregate pit in the southeast corner of the future location of Highway 407 and Woodbine Avenue

1976 (Scale 1: 50,000)

Between Jane Street and Keele Street there are industrial properties located to the north of the future location of Highway 407 the Canadian National Freight Classification Yard has been constructed. A residential subdivision has been constructed between the Keele Street and the Bradford Go Rail Line. Additional residential/commercial/industrial properties have been constructed between Yonge Street and Bayview Avenue.



1988 (Scale 1: 40,000)

Highway 400 has been widened. Highway 7 has been modified and appears as observed during this assessment. There is additional industrial development between Jane Street and Keele Street to the north and new industrial development to the south. Commercial/industrial development is under construction between the Bradford Go Line and Bathurst Street. A residential subdivision has been constructed between Keele Street and Dufferin Street. Richmond Hill Golf Course and a residential subdivision has been constructed between Bathurst Street and Yonge Street to the north of the future location of Highway 407. A residential subdivision has been constructed between Bathurst Street and Yonge Street to the south of the future location of Highway 407. There is additional residential/commercial/industrial development between Yonge Street and Bayview Avenue south of the future location of Highway 407. Residential/commercial development is under construction between Bayview Avenue and Highway 404 (now constructed) to the north of the future location of Highway 407. Commercial/retail businesses have been constructed from Highway 404 to Woodbine Avenue north and south of the future location of Highway 407. Commercial/light industrial development is under construction between Woodbine Avenue and Rodick Road to the south of the future location of Highway 407.

2.10 Previous Reports

The following reports were provided by Delcan to Golder for review:

“Highway 407 Jane Street Easterly 9.5 Miles to Woodbine Avenue and New Highway 7 from West of Dufferin Street Easterly 4.0 Miles to Bayview Avenue, Toronto”, Preliminary Design Report, Book 5, Volume 1, Ministry of Transportation, W.P. 89-78-00.

Summary:

Industrial development was noted between Jane Street and Keele Street and from Keele Street to just west of Langstaff Road on the north side. Industrial development was located between Yonge Street and Bayview Avenue to the north and south of the proposed Highway 407.

The report did not list properties of environmental concern within the proposed Highway 407 corridor.

“Highway 407 Woodbine Avenue Easterly to Highway 48, Town of Markham, Regional Municipality of York”, Preliminary Design Report, Book 12, Volume 1, Highway 407 Central Library, Ministry of Transportation, W.P. 90-78-00.

Summary:

Land use in the vicinity of Highway 407 was generally described as rural/agricultural/residential with a few commercial, industrial and institutional uses.

The report did not list properties of environmental concern within the proposed Highway 407 corridor.

“Highway 404/407 Interchange Including Highway 407 from Leslie Street Easterly 2.6 KM to Woodbine Avenue and Highway 404 from South of John Street Northerly 4.0 KM to North of Highway 7”, Preliminary Design Report, Book 6, Volume 1 and 3, Highway 407 Central Library, Ministry of Transportation, W.P. 617-89-01.



Summary:

The following properties were identified as potential concerns during the preliminary environmental liability survey:

- Woodbine Truck Centre (located at 8240 Woodbine Avenue): fuel underground storage tanks (“USTs”);
- B&M Motors (located at 8150 Woodbine Avenue): fuel USTs, autobody shop, wrecking yard and parking areas;
- Equipment Express (located east side of Woodbine Avenue to the east of Leushner Landscaping): fuel USTs;
- West side of Woodbine Avenue south of Woodbine Truck Centre: soil fill/rubble of unknown origin was present at the vacant site;
- Leushner Landscaping property (located at 8120 Woodbine Avenue): rubble, pesticide containers and other materials were located on the property;
- Green Wrecking Yard (located at 8100 Woodbine Avenue): suspected subsurface contamination associated with wrecking yards;
- Direct Waste Systems (located at 8060 Woodbine Avenue): receiver of waste material from municipal and construction waste; and,
- Regional Municipality of York Works Yard (located on the east side of Woodbine Avenue north east of Woodbine Truck Centre): subsurface impact associated with service yard activities.

Subsurface investigations were recommended on the above sites. No information was available with respect to subsurface investigations.

Based on observations during the limited “windshield” site reconnaissance of the Highway 407 corridor during the preliminary investigation (i.e. September 2007), Leushner Landscaping, Equipment Express and Green Wrecking Yard were no longer present and appear to be in the area of Highway 407. Direct Waste Systems was then Miller Waste, a waste receiving depot for municipal and construction waste. Woodbine Truck Centre with associated fuel USTs was in operation. B&M Motors is a car sales and service property possibly with associated USTs. The area south of Woodbine Truck Sales, in the location of the fill/rubble, was part of Highway 407. The Regional Municipality York Works Yard was not observed.

“Environmental Assessment York Rapid Transit Plan, Highway 7, Route Options, Regional Municipality of York, Ontario”, dated July 2003, prepared by Golder Associates, for Delcan and York Consortium 2002, Report No. 03-1111-001.

Summary:

The 2003 report was completed on land adjacent to Highway 7 which is located north of the study area, with the exception of the portion of Highway 7 that parallels Highway 407 between Keele Street and Bayview Avenue. The lands within the study limits in the 2003 report did not list properties of environmental concern.



3.0 FIELD INVESTIGATIONS

3.1 Preliminary Site Reconnaissance (September 18, 2007)

A limited one day “windshield” site reconnaissance of the length of the 407 Transitway work was conducted in which the Highway 407 corridor and properties directly adjacent within a 500 m distance (i.e. “study area”) were observed from publicly accessible areas for the presence of potential contamination. The preliminary site reconnaissance was conducted by Golder on September 18, 2007. Land use in the vicinity of the study area was observed to be commercial, industrial, office, residential, public use, and vacant land.

Fill placement was noted at interchanges along the Highway 407 corridor. The origin and quality of the fill used is not known and therefore represents an issue of potential environmental concern.

A hydro corridor runs parallel to the south of Highway 407 in the study area.

3.2 Follow-up Site Reconnaissance (December 14, 2009)

A limited follow-up, one day “windshield” site reconnaissance of the length of the technically preferred 407 Transitway alignment was conducted in which the Highway 407 corridor and properties directly adjacent within a 500 m distance (i.e. “study area”) were observed again from publicly accessible areas for the presence of additional properties which exhibit issues of potential environmental concern. The follow-up site reconnaissance was conducted by Golder on December 14, 2009. Land use in the vicinity of the study area was observed to continue to be commercial, industrial, office, residential, public use, and vacant land.

Fill placement was again noted at interchanges along the Highway 407 corridor. The origin and quality of the fill used is not known and therefore represents an issue of potential environmental concern. If areas containing fill are to be disturbed during the construction project, the quality of the fill should be confirmed through available background information or by completing subsurface environmental investigations to determine appropriate management and disposal options.

A hydro corridor is still present running parallel to the south of Highway 407 in the study area.

A summary of the significant findings of the preliminary and follow-up field visits is presented in Table 3.1. Locations of significant observations are shown by designated site numbers on Figure 2 of this report as indicated in the table below.



407 TRANSITWAY - FINAL REPORT

Table 3.1: Properties Adjacent to Highway 407 from Highway 400 to Kennedy Road

Location	Land Use	Comments
500 m West to Highway 400		
North Side (west to east)	Retail/office development.	No obvious issues of potential environmental concern.
South Side (west to east)	Toronto Star printing facility, with a transformer distribution station.	Newspaper manufacturing business. Issues of potential environmental concern with respect to the newspaper manufacturing process (Site No. 1). Potential PCBs within the transformers.
Highway 400 to Jane Street		
North Side (west to east)	Newly developed retail and office development.	No obvious issues of potential environmental concern.
South Side (west to east)	Agricultural land.	No obvious issues of potential environmental concern.
Jane Street to Keele Street		
North Side (west to east)	An industrial development including but not limited to Rochester Aluminum, TAL Metal Recycling, Aluma Systems, and auto repair businesses extend from Jane Street to the Canadian National Railway ("CNR") Corridor.	Potential contamination to the soil and groundwater associated with processes related to the industrial properties represents an issue of potential environmental concern (Site No. 2).
	Commercial/industrial properties extend from the CNR corridor to Keele Street.	
South Side (west to east)	Beechwood Cemetery and SW Aggregates extends from Jane Street to the CNR corridor.	SW Aggregates could have equipment fueling and repair on-site. Represents an issue of potential environmental concern (Site No. 3).
	An industrial/commercial development including but not limited to Crown Metal Manufacturing, Valley Metal Finishing, Scrintex, and Canguard extend from the CNR corridor to Keele Street.	Valley Metal Finishing was listed in the ERIS report (C of A for air and NPRI for pollutant release to air related to a spray paint booth). Potential contamination to the soil and groundwater associated with processes related to the industrial properties represents an issue of potential environmental concern (Site No. 4).



407 TRANSITWAY - FINAL REPORT

Table 3.1: Properties Adjacent to Highway 407 from Highway 400 to Kennedy Road

Keele Street to Dufferin Street		
North Side (west to east)	Residential subdivision and commercial/light industrial businesses extend from Keele Street to the Bradford Go Rail Line.	Commercial/industrial properties in this area are generally one unit businesses in strip plazas. Potential contamination to the soil and groundwater associated with processes related to the industrial properties represents an issue of potential environmental concern (Site No. 5).
	A newly developed Petro-Canada is located on the northwest corner of Highway 7 and Centre Street	Potential contamination to the soil and groundwater associated with petroleum hydrocarbons relating to the Petro-Canada represents an issue of potential environmental concern (Site No. 6).
	A landscaping/greenhouse business, commercial/light industrial development extends from the Bradford Go Rail Line to Dufferin Street.	The commercial/light industrial development is a newer development. Potential contamination to the soil and groundwater associated with processes related to the light industrial properties represents an issue of potential environmental concern (Site No. 7).
South Side (west to east)	Commercial/light industrial businesses extend from Keele Street to the Bradford Go Rail Line.	Potential contamination to the soil and groundwater associated with processes related to the industrial properties represents an issue of potential environmental concern (Site No. 8).
	Vacant land and a residential subdivision extend from the CNR corridor to Centre Street.	No obvious issues of potential environmental concern.
	A hydro transformer station followed by Vaughan East District Storage Yard Extends from Centre Street to Dufferin Street.	The hydro-transformer yard has been constructed since 2000; however, it is unknown whether PCB containing fluids are present on-Site. A salt storage building and possible equipment fuelling facilities could be at the Vaughan East District Storage Yard and represents an issue of potential environmental concern (Site No. 9).
Dufferin Street to Bathurst Street		
North Side (west to east)	Residential subdivision and Sugar Bush Heritage Park with the exception of an Esso service station at the north east corner of the intersection of Thornhill Woods Drive.	The Esso service station has been constructed since 2000. The service station represents an issue of potential environmental concern (Site No. 10).
South Side (west to east)	Commercial/office/retail business park followed by a park and residential subdivision, including Canadian Tire.	Vehicle maintenance at the Canadian Tire represents an issue of potential environmental concern (Site No. 11).



407 TRANSITWAY - FINAL REPORT

Table 3.1: Properties Adjacent to Highway 407 from Highway 400 to Kennedy Road

Bathurst Street to Yonge Street		
North Side (west to east)	Richmond Hill Golf club followed by residential development.	A Shell service station is located directly north of the study area on the southwest corner of the intersection of Garden Avenue and Yonge Street. Based on the location in the anticipated hydraulically up-gradient direction, the off-site service station represents an issue of potential environment concern (Site No. 12).
South Side (west to east)	Residential subdivision and Uplands Golf Club.	No obvious issues of potential environmental concern.
Yonge Street to Bayview Avenue		
North Side (west to east)	Retail shopping centre, hydro transformer station and Sunoco service station.	The hydro transformer station and Sunoco service station have been constructed since 2000. Based on the age of the transformer station, PCB containing materials are not anticipated. The service station represents an issue of potential environmental concern (Site No. 13).
South Side (west to east)	Light industrial, auto repair businesses, metal storage yard, Go Station parking lot, contractor storage yards and residential development.	There are numerous industrial/commercial properties with the potential for chemical/waste storage associated with auto repair, fuelling stations on-site and processes that could result in soil/groundwater contamination and represents an issue of potential environmental concern (Site No. 14).
Bayview Avenue to Leslie Street		
North Side (west to east)	Commercial/retail/office/residential development.	A dry cleaner is located east of Chalmers Road, north of Highway 7. A Shell service station is located to the north of the study area adjacent to the West Beaver Creek Road. The dry cleaners (Site No. 15) and Shell service (Site No. 16) station represent an issue of potential environmental concern.
South Side (west to east)	Residential development and vacant land.	No obvious issues of potential environmental concern.
Leslie Street to Highway 404		



407 TRANSITWAY - FINAL REPORT

Table 3.1: Properties Adjacent to Highway 407 from Highway 400 to Kennedy Road

North Side (west to east)	Commercial/office/retail development.	No obvious issues of potential environmental concern.
South Side (west to east)	School and vacant land.	Potential fuel storage and use on school properties represents an issue of potential environmental concern (Site No. 17).
Highway 404 to Woodbine Avenue		
North Side (west to east)	Commercial/office/retail development with the exception of a Sunoco service station, auto dealership (formerly B&M Motors), Woodbine Truck Centre, and Petro Pass located to the west of Woodbine Avenue between Lanark Rd. and Highway 407.	As indicated in the Preliminary Design Report, Book 6, Volume 1 and 3 previous report, Woodbine Truck Centre and B& M Motors reportedly had historical fuel USTs on-site. A Petro-Pass fuelling station is located to the south of Woodbine Truck Centre. The historical and current fuelling activity on the sites represents an issue of potential environmental concern (Site No. 18).
South Side (west to east)	Miller Waste (formerly Direct Waste Systems)	Miller Waste is a receiving facility for municipal and construction waste. The temporary storage of wastes on-site represents an issue of potential environmental concern. (Site No. 19).
Woodbine Avenue to Rodick Rd.		
North Side (west to east)	Commercial development.	The majority of the properties are newly developed. No issues of potential environmental concern.
South Side (west to east)	Miller Asphalt/Aggregates Yard/Offices/Maintenance followed by the Town of Markham Works Yard.	Fuel pumps and evidence of associated USTs were observed on the Miller and Town of Markham properties. Asphalt production occurs on the Miller site. Groundwater monitoring wells were observed on the Miller property adjacent to Woodbine Avenue. The Miller property (Site No. 20) and Town of Markham (Site No. 21) properties represent issues of potential environmental concern.
Rodick Rd. to Warden Avenue		
North Side (west to east)	A parking lot, vacant land, office building and transformer storage yard.	Pole mounted transformer were observed in the storage yard which could contain PCB materials and represents an issue of potential environmental concern (Site No. 22).
South Side (west to east)	Oak Concrete Products and a transformer station.	Transformer station may contain PCB materials and represents an issue of potential environmental concern (Site No. 23).



407 TRANSITWAY - FINAL REPORT

Table 3.1: Properties Adjacent to Highway 407 from Highway 400 to Kennedy Road

Warden Avenue to Kennedy Rd.		
<i>North Side (west to east)</i>	Commercial/office building and vacant land under construction followed by a Go transit station, YMCA and commercial/distribution business.	No obvious issues of potential environmental concern.
<i>South Side (west to east)</i>	Vacant land, commercial businesses and a transformer station.	Transformer station may contain PCB materials and represents an issue of potential environmental concern (Site No. 24).
Kennedy Rd. to 500 m East		
<i>North Side (west to east)</i>	BMW auto sales and service centre and residential development.	The auto service centre represents an issue of potential environmental concern (Site No. 25).
<i>South Side (west to east)</i>	Vacant land and residential development.	No obvious issues of potential environmental concern.



4.0 SUMMARY OF FINDINGS

Based on the Contaminated Property and Waste Management Assessment conducted in the 407 Transitway, twenty-five properties within the study area may present issues of potential environmental concern. Fill placement was noted at interchanges along the Highway 407 corridor. The origin and quality of the fill used is not known and therefore represents an issue of potential environmental concern. If areas containing fill are to be disturbed during the construction project, the quality of the fill should be confirmed through available background information or by completing subsurface environmental investigations to determine appropriate management and disposal options. No other specific indications of issues of potential environmental concern were observed within the ROW of Highway 407.

The issues of potential environmental concern have been subdivided into properties which are “highly likely” to have waste materials/contamination present. Properties identified as “highly likely” are properties at which there are known or identifiable issues of potential environmental concern which, in our opinion, would require further assessment including intrusive investigation (i.e. Phase II Environmental Site Assessment), to resolve. It should be noted that the study area is located within an area of general commercial/industrial land use. Acquisition of any portion of a commercial/industrial property carries potential environmental risk and therefore follow-up site specific investigation (i.e.: a Phase I ESA) for any acquisition of commercial/industrial property is recommended.

A CNR corridor is located between Keele Street and Dufferin Street. In addition, GO Transit rail lines are located between Keele Street and Dufferin Street and Warden Avenue and Kennedy Road. Railway ballast can contain slag and cinder material.

The Occurrence Reporting Information System database indicated that various spills have occurred in areas throughout the study area. Limited information was provided with respect to the type of spill and method of clean-up. There is a potential for subsurface impact related to spills to the ground surface and water.

The following properties within the study area are highly likely to have contamination or waste (see Figures 2a through 2f):

Table 4.1: Properties Highly Likely to have Contamination or Waste

ID Number (Refer to Figure 2)	Location	Property Description
1	South west of Highway 407 and Highway 400	Toronto Star newspaper printing facility.
2	Between Jane Street and Keele Street north side of Highway 407	Industrial development.
3	Between Jane Street and CNR corridor (south side).	SW Aggregates.
4	Between CNR corridor and Keele Street on the south side of Highway 407.	Industrial development.
5	Between Keele Street to the Bradford Go Rail Line north of Highway 407.	Commercial/industrial properties.
6	Bradford Go Rail Line and Dufferin Street north of Highway 407	Petro-Canada service station.
7	Between Bradford Go Rail Line to Dufferin Street north of Highway 407.	Commercial/light industrial properties.



407 TRANSITWAY - FINAL REPORT

Table 4.1: Properties Highly Likely to have Contamination or Waste

8	Between Keele Street to the Bradford Go Rail Line south of Highway 407.	Commercial/light industrial properties
9	Adjacent to the west of Dufferin Street south of Highway 407.	Transformer station and Vaughan East District Storage Yard.
10	Between Dufferin Street to Bathurst Street located at the north east corner of Highway 7 and Thornhill Woods Dr.	Esso service station.
11	Between Dufferin Street and Bathurst Street south of Highway 407.	Canadian Tire with vehicle maintenance.
12	Bathurst Street to Yonge Street located on the southwest corner of Garden Avenue and Yonge Street north of Highway 407.	Shell service station
13	Between Yonge Street and Bayview Avenue located on Highway 7 south of the shopping centre (north side of Highway 407).	Sunoco service station and a transformer station.
14	Between Yonge Street and Bayview Avenue located on south side of Highway 407.	Commercial and industrial properties.
15	Between Bayview Avenue to Leslie Street located north east corner of Chalmers Road and Highway 7.	Dry cleaner.
16	Between Bayview Avenue to Leslie Street located directly north of the study area on West Beaver Creek Road.	Shell service station.
17	Between Leslie Street and Highway 404 south of Highway 407.	School.
18	Between Highway 404 and Woodbine Avenue north of Highway 407. Located to the west of Woodbine Avenue between Lanark Road and Highway 407.	Sunoco service station, auto dealership (formerly B&M Motors), Woodbine Truck Centre, and Petro Pass.
19	Between Highway 404 and Woodbine Avenue south of Highway 407.	Miller Waste (formerly Direct Waste Systems).
20	Woodbine Avenue to Rodick Rd. located south of Highway 407.	Miller Asphalt/Aggregates/Offices/Maintenance Yard
21	Woodbine Avenue to Rodick Road south of Highway 407. Located west of Rodick Road.	Town of Markham Works Yard.
22	Rodick Road to Warden Avenue north of Highway 407. Located directly northwest of Highway 407/Warden Avenue interchange.	Transformer storage yard.



407 TRANSITWAY - FINAL REPORT

Table 4.1: Properties Highly Likely to have Contamination or Waste

23	Rodick Road to Warden Avenue south of Highway 407.	Transformer station.
24	Warden Avenue to Kennedy Road south of Highway 407.	Transformer station.
25	Kennedy Road and 500 m to the east, north of Highway 407.	BMW sales and service centre.

The City of Vaughan reported spills at the following locations (see Figures 2a and 2b). No information regarding spills, other than within the City of Vaughan rights-of-way, was received during the preparation of this report:

Table 4.2: Approximate Location of Reported Spills Within City of Vaughan Rights-of-Way

ID Number (Refer to Figure 2)	Reported Location	Date	Spill Description	Distance and Direction from 407 Transitway Preferred Alignment
SPL-1	Jane Street and Highway 407	July 18, 2000	Engine oil/antifreeze	220 m north
SPL-2	Snidercroft Road and Keele Street	June 21, 2009	Oil spill	150 m south
SPL-3	Ron Rose Drive	October 5, 2009	Sunflower oil	Between 150 m and 350 m south (exact location unknown)
SPL-4	Highway 7, east of Bowes Road	February 17, 2007	Oil spill	400 m north
SPL-5	Racco Parkway	July 30, 2009	Hydraulic spill	10 m to 100 m north (exact location unknown)

Possible environmental impact may be associated with any spill location. Further assessment costs; however, may be greater than ultimate clean-up costs. Further assessment may not be able to identify actual spill location making confirmation of impacts difficult. Impact, if encountered during construction, should be managed in consultation with a qualified professional.

5.0 RECOMMENDATIONS

As a minimum, properties referenced in Table 4.1 should have site specific Preliminary Site Screening (“PSS”) forms completed to determine whether further environmental site assessments are warranted. For the purposes of initial planning, based on the most recent preferred alignment (i.e. April 2010) and information available at the time of preparation of this report, it is most likely that subsurface environmental investigations will be required at the following locations, as a minimum, prior to commencement of the construction activities relating to the proposed 407 Transitway:

Table 5.1: Areas Most Likely Requiring Subsurface Environmental Investigations Prior to Construction

ID Number (Refer to Figure 2)	Occupant	Potential Contaminants/Issues of Concern*	Comments
3	SW Aggregates	Metals, inorganics, VOCs, PHC	Heavy industrial area



407 TRANSITWAY - FINAL REPORT

ID Number (Refer to Figure 2)	Occupant	Potential Contaminants/Issues of Concern*	Comments
4	Industrial and SPL 2	Metals, inorganics, VOCs, PHC	Industrial area.
SPL-2	Former oil spill	VOC, PHC	Spill SPL 2 is in close proximity to the required tunnel location under Keele Street
13	Sunoco service station and a transformer station	VOCs, PHC, PCBs	A tunnel is proposed in this area
19	Miller Waste (formerly Direct Waste Systems)	Metals, inorganics, VOCs, PHCs, PAHs	Proposed alignment is at or above grade
20	Miller Asphalt/Aggregates/Offices/Maintenance Yard	VOCs, PHC, PAHs	Proposed alignment is at grade
21	Town of Markham Works Yard	Metals, inorganics, including salt, VOCs, PHC	Tunnel is required near this location
23	Transformer Station	VOC, PHC, PCBs	Ponds are being proposed in this location
25	BMW sales and service centre	VOCs, PHC, PAHs	A tunnel is proposed in this location

* Preliminary issues based on the level of study carried out. Additional issues may be identified based on subsequent, more detailed, levels of study (PSS, Phase I ESA)

VOCs = volatile organic compounds

PCBs = polychlorinated biphenyls

PHC = petroleum hydrocarbons

PAHs = polynuclear aromatic hydrocarbons

Impact, if encountered, during construction, should be managed in consultation with a qualified professional. If the preferred alignment is altered, Golder should be allowed to review and reassess the above recommendations.

6.0 EXCESS MATERIAL MANAGEMENT

As per MTO objectives, to the extent possible, this project should strive for zero waste generation. Where recommendations for re-use of materials are made below, it should be noted that these recommendations are made from an environmental perspective only. The geotechnical and structural implications of the re-use of materials should be reviewed by individuals with the appropriate expertise in those areas.

Based on the results of the site reconnaissance it is expected that wastes which will be generated by the project would generally consist of:

- Reclaimed asphalt pavement ("RAP") from milling of existing asphalt surfaces;
- Concrete, likely reinforced, from the removal of bridge or pavement structures;
- Manufactured wood waste from guide rails and the like removals; and,



- Scrap metal such as wire, corrugated steel pipe, and bridge guide rails.

RAP can be re-used on site for a variety of purposes as part of the construction activities, including, but not necessarily limited to, shoulder treatments, general fill and sub-grade fill. Non-reinforced concrete can be broken up and re-used within the project limits. Manufactured wood waste will require off-site disposal at licensed receiving facilities. Natural wood waste may be left on site within the right of way. Scrap metal should be collected for recycling at an off-site receiving facility.

As per MTO's terms of reference, the following waste types were specifically considered during the site reconnaissance portion of the assessment:

- Asbestos waste (generated from the removal of asbestos containing electrical conduit insulation in concrete bridge decks);
- Spent abrasive blast cleaning material from the removal of concrete, bridge structure paint and other coating materials;
- Spent liquid and sludge material from hydraulic blast cleaning operations;
- Slag or asbestos containing asphalt pavement; and,
- PCBs (e.g., in electrical equipment to be removed such as transformers, ballasts and capacitors).

Based on the preferred alignment, including bridge/overpass structures and some concrete box and steel culverts, the following waste will likely be generated:

- Asphalt;
- Reinforced concrete;
- Paint and concrete residues from hydraulic demolition or abrasive cleaning operations; and,
- Scrap metal.

7.0 LIMITATIONS AND USE OF REPORT

This report was prepared for the exclusive use of the LGL Limited, Delcan Corporation, and the Ministry of Transportation. This report is based on data and information collected during the Contaminated Property and Waste Management Assessment of the study area conducted by Golder and is based solely on site conditions encountered at the time of the site visits on September 18, 2007 and December 14, 2009, supplemented by historical information and geological data obtained by Golder, as described in this report. This study was completed on a regional scale through a review of existing available information as noted above. Additional issues of potential environmental concern may be identified upon completion of site specific Phase II Environmental Site Assessments ("ESAs").

This report has been prepared as part of environmental due diligence activities and is not intended to be utilized as supporting documentation for a Record of Site Condition under Ontario Regulation 153/04. If a Record of Site Condition is required for the subject property and this report is to be used as part of the supporting documentation, it must be reviewed and updated by Golder. Additional environmental site assessment activities may be required to comply with Ontario Regulation 153/04.



In evaluating the study area, Golder Associates Ltd. has relied in good faith on information provided by others. We accept no responsibility for any deficiency, misstatements or inaccuracies contained in this report as a result of omission, misinterpretations or fraudulent acts of the persons interviewed. Golder Associates Ltd. accepts no responsibility for any reduction in property value, either real or perceived, as a result of the reporting of factual information herein.

It should be noted that the results of an investigation of this nature should, in no way, be construed as a warranty that the study area is free from any and all contamination from past or current practices. This assessment was carried out using existing historical information as available from various agencies and no assurance is made regarding the accuracy or completeness of this information. No sampling of soil, groundwater, air emissions or gas was conducted.

If new information is discovered during future work, including excavations, borings or other studies, Golder should be requested to re-evaluate the conclusions presented in this report and to provide amendments as required.

8.0 CLOSURE

We trust that this report meets your immediate requirements. If you have any questions regarding the content of this report, please do not hesitate to contact this office.



Report Signature Page

GOLDER ASSOCIATES LTD.

Christi Groves, B.Sc.
Environmental Scientist

Shawn Lytle, P.Geo.
Managing Principal

CLG/SDL/plc

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

n:\active\2007\other offices\07-1181-0009 delcan hwy 407 transitway\2010 environmental update\final report\1012071_407transitway_07-1181-0009_final.docx



9.0 REFERENCES

Golder Associates Ltd., 2007. "Draft Preliminary Report on Contaminated Property and Waste Management Assessment, 407 Transitway East of Highway 400 to Kennedy Road, G.W.P. 252-96-00". Draft report prepared for LGL Limited and dated October, 2007.

Ontario Ministry of the Environment. April 1987. Inventory of Coal Gasification Plant Waste Sites in Ontario, Volumes I & II.

Ontario Ministry of the Environment. November 1988. Inventory of Industrial Sites Producing or using Coal Tar and Related Tars in Ontario, Volumes I & II.

Ontario Ministry of the Environment. June 1991. *Waste Disposal Site Inventory*.

Ontario Geological Survey. 1991. Map 2544, Bedrock Geology of Ontario, Southern Sheet, (Scale 1:1 000 000).

Surveys and Mapping Branch, Department of Energy, Mines and Resources, 1994, Topographic 30M/12, scale 1:50,000.

Sharpe, D.R., Barnett, P.J., Russell, H.A.J., Brennand, T.A., Finley, D., Gorrell, G., and Stacey, P., 1997. Regional geological mapping of the Oak Ridges Moraine, Greater Toronto Area, southern Ontario; Geological Survey of Canada, Open File 3062, Scale 1:200,000.



FIGURES



Base map by Microsoft Streets & Trips 2006
Microsoft Corp. and/or its suppliers, 1988- 2005;
NAVTEQ, 2004; and TeleAtlas North America,
Inc., 2004

NOT TO SCALE

ALL LOCATIONS ARE APPROXIMATE



SCALE	AS SHOWN
DATE	12 FEB 2010
DESIGN	
CAD	J REGIER
CHECK	
REVIEW	

TITLE

KEY PLAN

FILE No. 0711810009BAREG.dwg

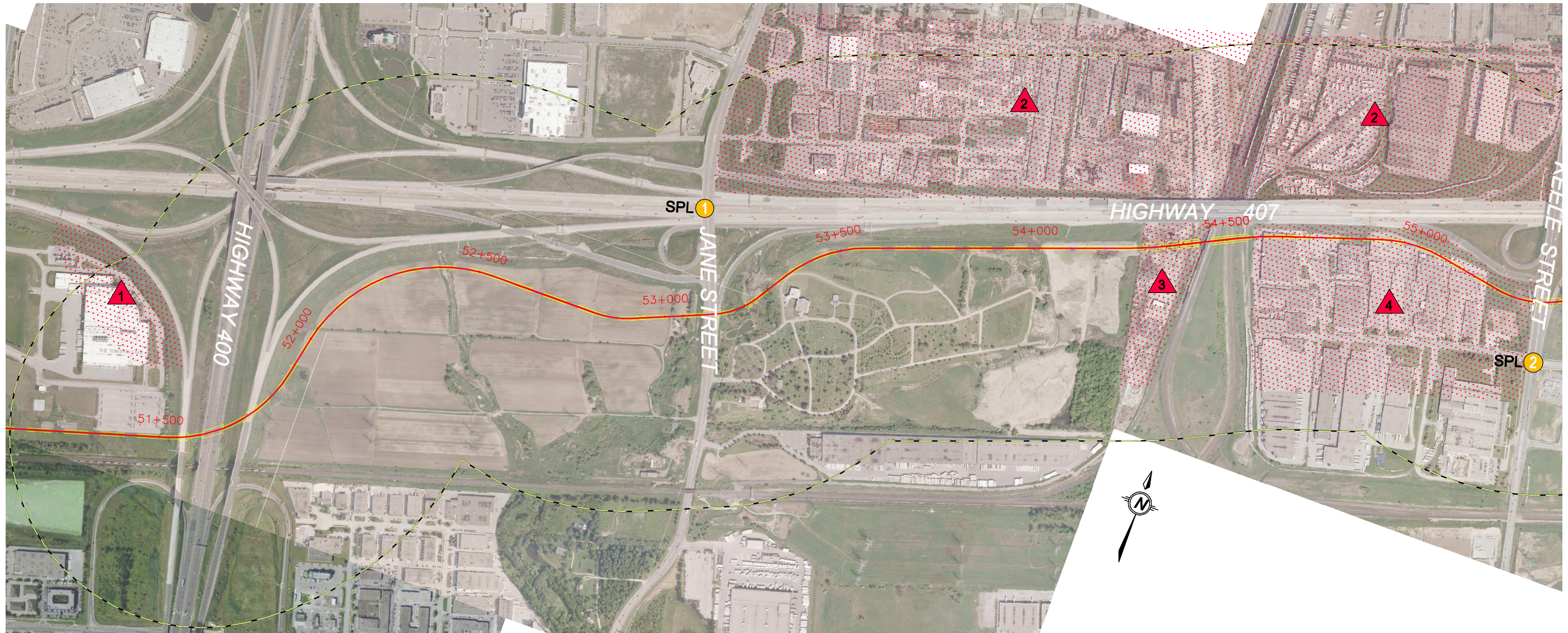
PROJECT No. 07-1181-0009 REV.

HWY 407 TRANSITWAY
CONTAMINATED PROPERTY &
WASTE MANAGEMENT ASSESSMENT

FIGURE

1

PLOT DATE: March 3, 2010
FILENAME: T:\Projects\2007\07-1181-0009 (407, Transitway)\-BA-0711810009BAIMG02A.dwg



REFERENCE: BASE AERIAL PHOTOGRAPHS PROVIDED TO GOLDER ASSOCIATES LTD. BY DELCAN CORPORATION 2009

- Highway 407 Transitway Alignment
- Study Area Boundary
- Properties Highly Likely to have Contamination or Waste
(refer to Table 1 and 2 of the report for site details)
- Approximate Location of Reported Spill
(City of Vaughan)

0 50 100 250 500
SCALE 1:10000 metres
Plotted Tabloid 11x17

FEATURES & LOCATIONS APPROXIMATE



FILE No. 0711810009BAIMG02A.dwg

PROJECT No. 07-1181-0009 REV.

SCALE AS SHOWN

DATE 24 NOV 2009

DESIGN

CAD J REGIER

CHECK

REVIEW

TITLE

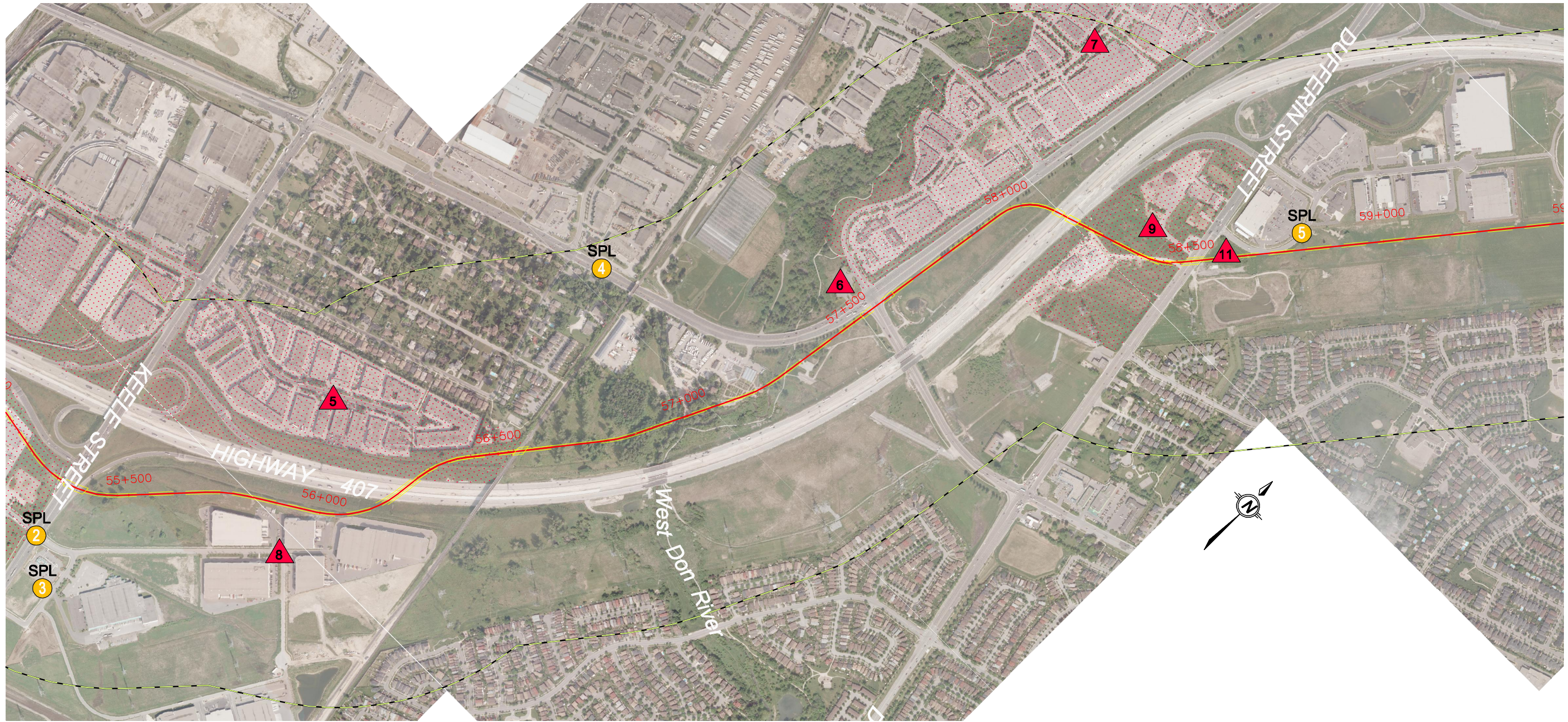
LOCATION MAP 1 STATION 51+500 TO 55+500

HWY 407 TRANSITWAY
CONTAMINATED PROPERTY &
WASTE MANAGEMENT ASSESSMENT

FIGURE

2a

PLOT DATE: March 3, 2010
FILENAME: T:\Projects\2007\07-1181-0009 (407, Transitway)\-BA-0711810009BAMG02B.dwg



REFERENCE: BASE AERIAL PHOTOGRAPHS PROVIDED TO GOLDER ASSOCIATES LTD. BY DELCAN CORPORATION 2009

- Highway 407 Transitway Alignment
- Study Area Boundary
- Properties Highly Likely to have Contamination or Waste
(refer to Table 1 and 2 of the report for site details)
- Approximate Location of Reported Spill
(City of Vaughan)

0 50 100 250 500
SCALE 1:10000
Plotted Tabloid 11x17
metres

FEATURES & LOCATIONS APPROXIMATE



FILE No. 0711810009BAMG02B.dwg

PROJECT No. 07-1181-0009 REV.

SCALE AS SHOWN
DATE 12 FEB 2010
DESIGN
CAD J REGIER

CHECK

REVIEW

TITLE

LOCATION MAP 1 STATION 55+500 TO 59+500

HWY 407 TRANSITWAY
CONTAMINATED PROPERTY &
WASTE MANAGEMENT ASSESSMENT

FIGURE

2b

PLOT DATE: March 2, 2010
FILENAME: T:\Projects\2007\07-1181-0009 (407, Transitway)\-BA-0711810009BIMG02C-D.dwg



REFERENCE: BASE AERIAL PHOTOGRAPHS PROVIDED TO GOLDER ASSOCIATES LTD. BY DELCAN CORPORATION 2009

- Highway 407 Transitway Alignment
- Study Area Boundary
- Properties Highly Likely to have Contamination or Waste
(refer to Table 1 and 2 of the report for site details)

0 50 100 250 500
SCALE 1:10000
Plotted Tabloid 11x17
metres
FEATURES & LOCATIONS APPROXIMATE

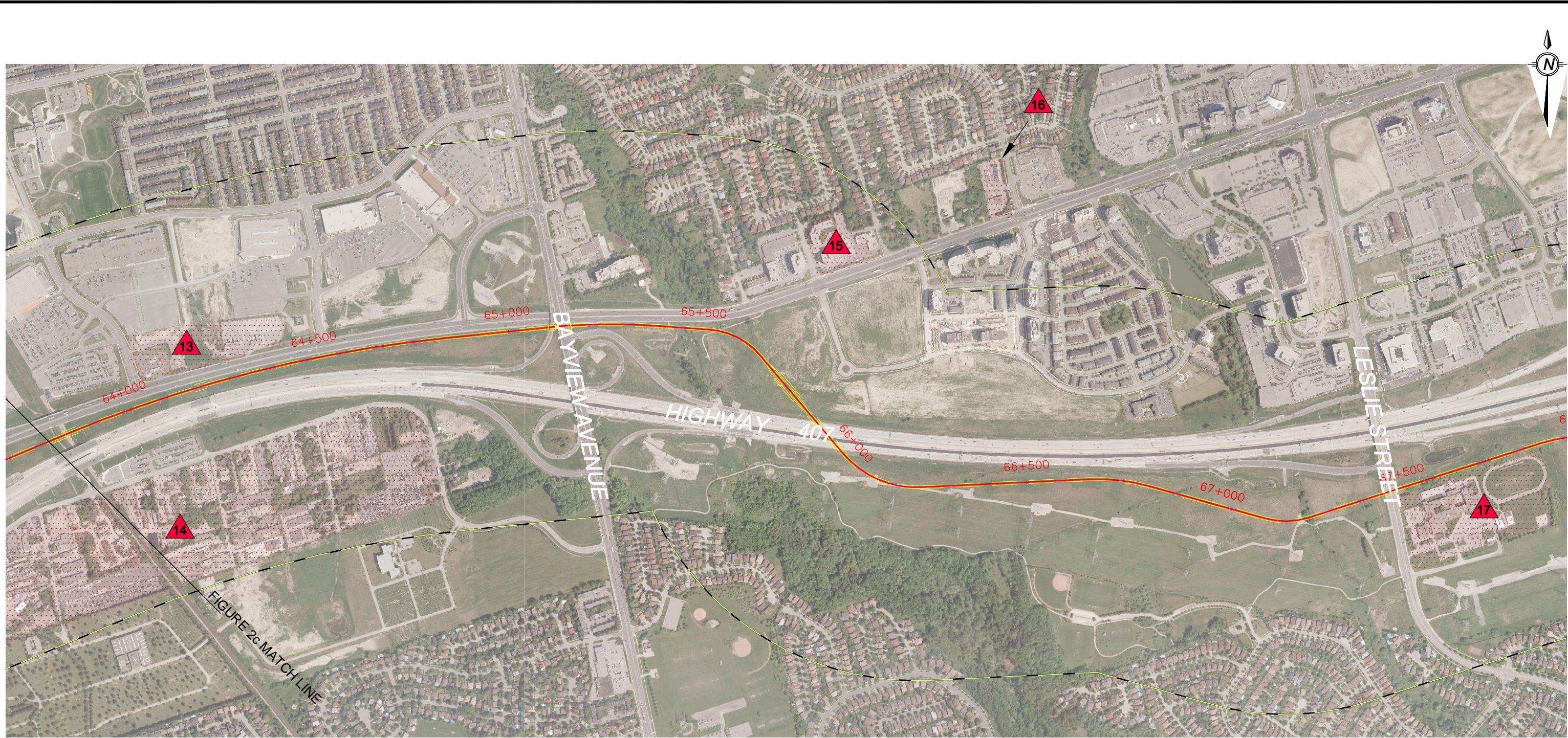


FILE No. 0711810009BIMG02C-D.dwg
PROJECT No. 07-1181-0009 REV.

SCALE AS SHOWN
DATE 12 FEB 2010
DESIGN
CAD J REGIER
CHECK
REVIEW

TITLE
**NOTABLE ADJACENT PROPERTIES PLAN
STATION 59+500 TO 63+500**
HWY 407 TRANSITWAY
CONTAMINATED PROPERTY &
WASTE MANAGEMENT ASSESSMENT
FIGURE
2c

PLOT DATE: March 2, 2010
FILENAME: T:\Projects\2007\07-1181-0009 (407, Transitway)\-BA- (0711810009BAIMG02C-D.dwg



REFERENCE: BASE AERIAL PHOTOGRAPHS PROVIDED TO GOLDER ASSOCIATES LTD. BY DELCAN CORPORATION 2009

- Highway 407 Transitway Alignment
- Study Area Boundary
- Properties Highly Likely to have Contamination or Waste
(refer to Table 1 and 2 of the report for site details)

0 50 100 250 500
SCALE 1:10000
Plotted Tabloid 11x17
metres
FEATURES & LOCATIONS APPROXIMATE



FILE No. 0711810009BAIMG02C-D.dwg
PROJECT No. 07-1181-0009 REV.

SCALE AS SHOWN
DATE 28 AUG 2007
DESIGN
CAD J REGIER
CHECK
REVIEW

TITLE
**NOTABLE ADJACENT PROPERTIES PLAN
STATION 63+500 TO 68+000**
HWY 407 TRANSITWAY
CONTAMINATED PROPERTY &
WASTE MANAGEMENT ASSESSMENT
FIGURE
2d

PLOT DATE: March 2, 2010
FILENAME: T:\Projects\2007\07-1181-0009 (407, Transitway)\-BA-0711810009BAMG02E-F.dwg



REFERENCE: BASE AERIAL PHOTOGRAPHS PROVIDED TO GOLDER ASSOCIATES LTD. BY DELCAN CORPORATION 2009

- Highway 407 Transitway Alignment
- Study Area Boundary
- Properties Highly Likely to have Contamination or Waste
(refer to Table 1 and 2 of the report for site details)

0 50 100 250 500
SCALE 1:10000 metres
Plotted Tabloid 11x17
FEATURES & LOCATIONS APPROXIMATE



FILE No. 0711810009BAMG02E-F.dwg
PROJECT No. 07-1181-0009 REV.

SCALE AS SHOWN
DATE 28 AUG 2007
DESIGN
CAD J REGIER
CHECK
REVIEW

TITLE
**NOTABLE ADJACENT PROPERTIES PLAN
STATION 68+000 TO 72+000**
HWY 407 TRANSITWAY
CONTAMINATED PROPERTY &
WASTE MANAGEMENT ASSESSMENT
FIGURE
2e

PLOT DATE: March 2, 2010
FILENAME: T:\Projects\2007\07-1181-0009 (407, Transitway)\-BA- (0711810009BAIMG02E-F.dwg



REFERENCE: BASE AERIAL PHOTOGRAPHS PROVIDED TO GOLDER ASSOCIATES LTD. BY DELCAN CORPORATION 2009

- Highway 407 Transitway Alignment
- Study Area Boundary
- Properties Highly Likely to have Contamination or Waste
(refer to Table 1 and 2 of the report for site details)

0 50 100 250 500
SCALE 1:10000 metres
Plotted Tabloid 11x17
FEATURES & LOCATIONS APPROXIMATE



FILE No. 0711810009BAIMG02E-F.dwg
PROJECT No. 07-1181-0009 REV.

SCALE AS SHOWN
DATE 28 AUG 2007
DESIGN
CAD J REGIER
CHECK
REVIEW

TITLE
**NOTABLE ADJACENT PROPERTIES PLAN
STATION 72+500 TO 76+500**
HWY 407 TRANSITWAY
CONTAMINATED PROPERTY &
WASTE MANAGEMENT ASSESSMENT
FIGURE 2f



APPENDIX A

Regulatory Responses

From: Siino, Rosa [Rosa.Siino@vaughan.ca] on behalf of Works [Works@vaughan.ca]
Sent: Tuesday, March 02, 2010 11:10 AM
To: Groves, Christi
Subject: RE: Contaminated Property Assessment of the Highway 407 Corridor for the
purposed Highway 407 Transit-way from Highway 400 to Kennedy Road
Attachments: GolderAssRequest.xls

Hi Christi

In response to your request, we can provide the following information:

1. Does your department monitor discharges from any properties located within this study area? If so, how often? - **No. Please address your question to York Region.**
2. Are there any violations on record for properties within the study area and what are the contaminants of concern? - **See attached document with respect to spills located within the City of Vaughan Right of Way. Note: Ones located on the private side are indicated on the table as well as those that are as a result of motor vehicle accidents.**
3. Do any of these properties have a surcharge agreement? **No. Please address your question to York Region.**

With respect to you inquiries on waste disposal violations please contact our Clerks Department(905-832-8504); for filling activities contact our Engineering Department (905-832-8585) and for site contamination violations contact the Ministry of the Environment.

Thanks

Rosa

Rosa Siino
Supervisor of Public Works Administration
City of Vaughan, Public Works Department
Tel: (905) 832-8562 extension 8818
E-Mail: rosa.siino@vaughan.ca



Please consider the environment before printing this email.

From: Groves, Christi [mailto:Christi_Groves@golder.com]
Sent: February 10, 2010 4:43 PM
To: Works
Subject: RE: Contaminated Property Assessment of the Highway 407 Corridor for the purposed Highway 407
Transit-way from Highway 400 to Kennedy Road

Our study area consists of a 500 m buffer from the centre line of Highway 407. I know that this is a large area, but we are doing at a regional scale. It would be great if you could search for addresses on the following roads:

Interchange Way;
 Commerce Street,
 Peelar Road;
 Exchange Avenue;
 Maplecrete Road;
 Creditstone Road;
 Freshway Drive;
 Doney Crescent;
 Snidercroft Road;
 Great Gulf Drive;
 Ron Rose Drive;
 Jardin Drive;
 Ortona Court;
 Rivermede Road;
 N Rivermede Road;
 Bowes Road;
 Racco Parkway;
 Garaway Drive;
 Audia Court;
 Bradwick Drive;
 Connie Crescent;
 Brentwood Crescent;
 Maple Sugar Lane;
 Cober Lane; and,
 Weston Road, Jane Street, Keele Street, Highway 7, Centre Street, Langstaff Road, Dufferin Street, and Bathurst Street within 500 m of Highway 407.

Thanks so much,

Christi

From: Siino, Rosa [mailto:Rosa.Siino@vaughan.ca] **On Behalf Of** Works
Sent: Wednesday, February 10, 2010 3:41 PM
To: Groves, Christi
Subject: RE: Contaminated Property Assessment of the Highway 407 Corridor for the purposed Highway 407 Transit-way from Highway 400 to Kennedy Road

Hi Christi

Further to your email below, please provide us with a specific location/address so that we may better address your questions.

Thanks

Rosa

Rosa Siino
 Supervisor of Public Works Administration
 City of Vaughan, Public Works Department
 Tel: (905) 832-8562 extension 8818
 E-Mail: rosa.siino@vaughan.ca



Please consider the environment before printing this email.

From: Groves, Christi [mailto:Christi_Groves@golder.com]
Sent: February 9, 2010 1:14 PM
To: Works; eng@vaughan.ca
Subject: Contaminated Property Assessment of the Highway 407 Corridor for the purposed Highway 407 Transit-way from Highway 400 to Kennedy Road

Hello,

Golder Associates Ltd. is currently completing a Contaminated Property Assessment within 500 m of the Highway 407 Corridor for the proposed Highway 407 Transit-way from Highway 400 to Kennedy Road in the GTA, Ontario. A portion of the study area is located within the City of Vaughan (i.e. between highway 400 and Bathurst Street).

It would be appreciated if you could issue a brief report for the above-listed study area responding to the following questions:

1. Does your department monitor discharges from any properties located within this study area? If so, how often?
2. Are there any violations on record for properties within the study area and what are the contaminants of concern?
3. Do any of these properties have a surcharge agreement?

It would also be appreciated if you could conduct a review for any environmental information you may have on file pertaining to the site including sewer use discharges/violations, waste disposal, filling activities, spills, site contamination, borehole logs, etc.

Thanks so much,

Christi Groves

Christi Groves (B.Sc. (Hons)) | Environmental Scientist | **Golder Associates Ltd.**
 121 Commerce Park Drive, Unit L, Barrie, Ontario, Canada L4N 8X1
T: +1 (705) 722 4492 | **D:** +1 705 722 4492 ext 2220 | **F:** +1 (705) 722 3786 | **C:** +1 705 718 1446 | **E:**
Christi_Groves@golder.com | www.golder.com

Work Safe, Home Safe

This email transmission is confidential and may contain proprietary information for the exclusive use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

Please consider the environment before printing this email.

Street Name	Comments
Audia Court	Oil Spill in Pond - May 5, 2005
Bathurst Street	Bathurst and Clark - Oil Spill - April 6, 2005
Bowes Road	425 Bowes Road - Honey Spill - August 24, 2009, 435 Bowes Road - Diesel Spill - September 16, 2005 65 Bowes Road - Barrels of Oil- December 5, 2008 50 Bowes Road - Diesel Spill - Septemer 5, 2007 Bowes Road - Oil Spill - September 3, 2008
Bradwick Drive	78 Bradwick Drive - Oil Spill - March 17, 2008
Brentwood Crescent	This street does not exist in Vaughan
Centre Street	Centre Street - Spill as a result of MVA - July 20, 2009 Centre Street & New Westminster - Water/Chemical Spill - March 30, 2000 1465 Centre Street - Oil Spill - June 17, 2005
Commerce Street	-
Connie Crescent	219 Connie Crescent - Hydraulic Spill - September 16, 2009 89 Connie Crescent (Contained to Private Side) - Water/Chemical - December 20, 2006 89 Connie Crescent - Spill - November 23, 2006 219 Connie Crescent - Zylene Spill - tracked to secondary pond on Audia as well (September 27, 2006)
Cober Lane	-
Creditstone Road	391 Creditstone Road - Diesel Spill (private side) - January 2, 2007
Doney Crescent	-
Dufferin Street	Dufferin and Glen Shileds - Spill as a result of MVA - February 1, 2010
Exchange Avenue	-
Freshway Drive	30 Freshway Unit 83 - Gasoline in Sewer - May 30, 2007
Garaway Drive	This street does not exist in Vaughan
Great Gulf Drive	-
Highway 7	3131 Hwy 7 - spill of cleaning substances - May 12, 2004 5875 Hwy 7 - spill - March 31, 2004 Hwy 7 east of Bowes Road - Oil Spill - February 17, 2007
Interchange Way	-

Jane Street	Jane & Rutherford - Gas/Oil Spill - October 29, 2005 Jane & 407 - Engine Oil/Antifreeze - July 18, 2000 Jane & Major MacKenzie - Food Compost (Fortino's) - June 26, 2003 Jane Street - Diesel Spill - February 17, 2007 7601 Jane Street - Spill - December 8, 2009
Street Name	Comments
Jardin Drive	-
Keele Street	8301 Keele Street - Sodium Hydroxide - March 13, 2000 10696 Keele Street - Oil Spill in catch basin at back of building - December 18, 2003 9030 Keele Street - Diesel Fuel - October 19, 2006 8251 Keele Street - Oil Spill - May 7, 2009 Keele Street & Hwy 7 - Spill as a result of MVA - January 19, 2000 8600 Keele Street - Antifreeze and Oil - July 18, 2000
Langstaff Road	2000 Langstaff Road - Hydraulic Oil Spill - March 9, 2001 4630 Langstaff Road - Diesel Spill - April 10, 2002 Langstaff & Pine Valley - Diesel Spill as a result of MVA - January 10, 2002 Lanastaff & Islington - Green Fluid Spill at back end of park (Boyd Conservation) - June 17, 2007 6400 Lanstaff Road - Spill Private Side - October 21, 2007
Maple Sugar Lane	-
Maplecrete Road	-
North Rivermede Road	-
Ortona Court	-
Peelar Road	-
Racco Parkway	Racco Parkway - Hydraulic Spill - July 30, 2009
Rivermede Road	-
Ron Rose Drive	Ron Rose Drive - Sunflower Oil - October 5, 2009
Snidercroft Road	Snidercroft & Keele Street - Oil Spill - June 21, 2009
Weston Road	7777 Weston Road - Hydraulic Spill - October 24, 2000 Weston Road & Teston Road - Oil Spill as a result of MVA - June 20, 2001

From: Ng, Chi-Fai [Chi-Fai.Ng@york.ca]
Sent: Thursday, February 11, 2010 2:15 PM
To: Groves, Christi
Cc: Barlow, Chris
Subject: FW: Contaminated Property Assessment of the Highway 407 Corridor for the
 purposed Highway 407 Transit-way from Highway 400 to Kennedy Road

Hello Christi,

There is a \$75.00 fee per property for this service. You are requesting for information for multiple properties. Depending on the number of properties contained within your specified area, the cost for this request could be substantial. If you want us to proceed with your request, please send us the addresses (either legal description or municipal address would be fine) along with the appropriate payment. Once we have receive the necessary information and payment, we will process your request.

If you require further information or clarification, please contact me.

Regards,

C. Fai Ng
 Sewer Use By-law Enforcement
 Environmental Promotion and Protection
 Environmental Services
 Tel: 905-895-1200 x 5133
 Fax: 905-830-6927

From: Groves, Christi [mailto:Christi_Groves@golder.com]
Sent: Tuesday, February 09, 2010 1:17 PM
To: T&W WebSite Inquiries
Subject: Contaminated Property Assessment of the Highway 407 Corridor for the purposed Highway 407 Transit-way from Highway 400 to Kennedy Road

Hello,

Golder Associates Ltd. is currently completing a Contaminated Property Assessment within 500 m of the Highway 407 Corridor for the proposed Highway 407 Transit-way from Highway 400 to Kennedy Road in the GTA, Ontario. The study area is wholly contained within the Region of York.

It would be appreciated if you could issue a brief report for the above-listed study area responding to the following questions:

1. Does your department monitor discharges from any properties located within this study area? If so, how often?
2. Are there any violations on record for properties within the study area and what are the contaminants of concern?
3. Do any of these properties have a surcharge agreement?

It would also be appreciated if you could conduct a review for any environmental information you may have on file pertaining to the site including sewer use discharges/violations, waste disposal, filling activities, spills, site contamination, borehole logs, etc.

Thanks so much,

Christi Groves

Christi Groves (B.Sc. (Hons)) | Environmental Scientist | **Golder Associates Ltd.**

121 Commerce Park Drive, Unit L, Barrie, Ontario, Canada L4N 8X1

T: +1 (705) 722 4492 | **D:** +1 705 722 4492 ext 2220 | **F:** +1 (705) 722 3786 | **C:** +1 705 718 1446 | **E:**

Christi_Groves@golder.com | www.golder.com

Work Safe, Home Safe

This email transmission is confidential and may contain proprietary information for the exclusive use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

Please consider the environment before printing this email.

Groves, Christi

From: kbaddeley@richmondhill.ca on behalf of epw@richmondhill.ca
Sent: Wednesday, February 10, 2010 9:04 AM
To: Groves, Christi
Subject: Re: Contaminated Property Assessment of the Highway 407 Corridor for the proposed Highway 407 Transit-way from Highway 400 to Kennedy Road
Attachments: pic04041.jpg

Ms. Groves,

This is to acknowledge receipt of your e-mail and to advise that it has been forwarded to our Operations Department for review.

We appreciate you taking the time to notify us.

Regards,
Karen Baddeley
Town of Richmond Hill
Engineering and Public Works
Telephone: 905- 771-5482
Fax: 905- 771-2405
Internet: epw@richmondhill.ca
(Embedded image moved to file: pic04041.jpg)

From: "Groves, Christi" <Christi_Groves@golder.com>
To: "epw@richmondhill.ca" <epw@richmondhill.ca>
Date: 02/09/2010 01:03 PM
Subject: Contaminated Property Assessment of the Highway 407 Corridor for the proposed Highway 407 Transit-way from Highway 400 to Kennedy Road

Hello,
Golder Associates Ltd. is currently completing a Contaminated Property Assessment within 500 m of the Highway 407 Corridor for the proposed Highway 407 Transit-way from Highway 400 to Kennedy Road in the GTA, Ontario. A portion of the study area is located within the Town of Richmond Hill (i.e. between Bathurst Street and Highway 404).
It would be appreciated if you could issue a brief report for the above-listed study area responding to the following questions:

1. Does your department monitor discharges from any properties located within this study area? If so, how often?
2. Are there any violations on record for properties within the study area and what are the contaminants of concern?
3. Do any of these properties have a surcharge agreement?

It would also be appreciated if you could conduct a review for any environmental information you may have on file pertaining to the site including sewer use discharges/violations, waste disposal, filling activities, spills, site contamination, borehole logs, etc.

Thanks so much,

Christi Groves

Christi Groves (B.Sc. (Hons)) | Environmental Scientist | Golder Associates Ltd.
121 Commerce Park Drive, Unit L, Barrie, Ontario, Canada L4N 8X1

T: +1 (705) 722 4492 | D: +1 705 722 4492 ext 2220 | F: +1 (705) 722 3786 |
C: +1 705 718 1446 | E: Christi_Groves@golder.com | www.golder.com

Work Safe, Home Safe

This email transmission is confidential and may contain proprietary information for the exclusive use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

Please consider the environment before printing this email.



APPENDIX B

EcoLog ERIS Report



Pinpointing Your Environmental Risks

Environmental Risk Information Service



Project Site: Highway 407
Highway 407 from Kennedy -Highway 400
Toronto, ON

Client: Joan Majchrowski
CGI Risk Management Services
150 Commerce Valley Dr. W.
Lock Box 200
Thornhill, ON L3T 7Z3

ERIS Project No: 20070821040

Report Type: Custom Report - 0.25km Search Radius

Prepared By: Matt Thompson
mthompson@ecologeris.com

Date: August 30, 2007

DISCLAIMER AND COPYRIGHT NOTICE

The information contained in this report has been produced by EcoLog ERIS Ltd. using various sources of information, including information provided by Federal and Provincial government departments. Although EcoLog ERIS Ltd. has endeavoured to present you with information that is accurate, EcoLog ERIS Ltd. disclaims, except as set out below, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence or otherwise, and for any consequences arising therefrom. Liability on the part of EcoLog ERIS Ltd. is limited to the monetary value paid for this report. The report applies only to the address 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. This report is solely intended to be used to focus further investigation and is not intended to replace a full Phase 1 Environmental Site Assessment. No page of this report should be used without this cover page, this disclaimer and the project property identifier.

The contents of this Service are protected by copyright. Copyright in the Service is owned by EcoLog ERIS Ltd. Copyright in data obtained from private sources is owned by EcoLog ERIS Ltd. or its licensors. The Service and its contents may not be copied or reproduced in whole or in any substantial part without prior written consent of EcoLog ERIS Ltd.

12 Concorde Place, Suite 800 Toronto, Ontario M3C 4J2
Phone: (416) 510-5204 Fax: (416) 510-5133 Toll Free: 1-877-512-5204
www.ecologERIS.com info@ecologERIS.com

Table of Contents

Order Number: 20070821040
Site Name: Highway 407
Site Address: Highway 407 from Kennedy -Highway 400 Toronto, ON
Report Type: Custom Report, 0.25 km Search Radius

	<u>Section</u>
Report Summary <i>This outlines the number of records from each database that fall on the site, and within various distances from the site.</i>	i
Site Diagram <i>The records that were found within a specified distance from the project property (the primary search radius) have been plotted on a diagram to provide you with a visual representation of the information available. Sites will be plotted on the diagram if there is sufficient information from the database source to determine accurate geographic coordinates. Each plotted site is marked with an acronym identifying the database in which the record was found (i.e., WDS for Waste Disposal Sites). These are referred to as "Map Keys". A variety of problems are inherent when attempting to associate various government or private source records with locations. EcoLog ERIS has attempted to make the best fit possible between the available data and their positions on the site diagram.</i>	ii
Site Profile <i>This table describes the records that relate directly to the property that is being researched.</i>	iii
Detail Report <i>This section represents information, by database, for the records found within the primary search radius. Listed at the end of each database are the sites that could not be plotted on the locator diagram because of insufficient address information. These records will not have map keys. They have been included because they may be found to be relevant during a more detailed investigation.</i>	iv
	<u>Page</u>
Certificates of Approval	1
National Pollutant Release Inventory	8
Inventory of PCB Storage Sites	15
Occurrence Reporting Information System	16
Anderson's Storage Tanks	20
Appendix: Database Descriptions	

Report Summary

Order Number: 20070821040
 Site Name: Highway 407
 Site Address: Highway 407 from Kennedy -Highway 400 Toronto, ON
 Report Type: Custom Report, 0.25 km Search Radius

Number of Mappable Records Surrounding the Site

Database		Selected	On-site	Within 0.25	0.25km to 2.00km	Total
AAGR	Abandoned Aggregate Inventory	N	0	0	0	0
AGR	Aggregate Inventory	N	0	0	0	0
AMIS	Abandoned Mine Information System	N	0	0	0	0
ANDR	Anderson's Waste Disposal Sites	N	0	0	0	0
AUWR	Automobile Wrecking & Supplies	N	0	0	0	0
CA	Certificates of Approval	Y	0	26	0	26
CFOT	Commercial Fuel Oil Tanks	N	0	0	0	0
CHEM	Chemical Register	N	0	0	0	0
COAL	Coal Gasification Plants	N	0	0	0	0
CONV	Compliance and Convictions	N	0	0	0	0
DRL	Drill Hole Database	N	0	0	0	0
EBR	Environmental Registry	N	0	0	0	0
EEM	Environmental Effects Monitoring	N	0	0	0	0
EHS	ERIS Historical Searches	N	0	0	0	0
EIIS	Environmental Issues Information System	N	0	0	0	0
FCON	Federal Convictions	N	0	0	0	0
FCS	Contaminated Sites on Federal Land	N	0	0	0	0
FOFT	Fisheries & Oceans Fuel Storage Tanks	N	0	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	N	0	0	0	0
IAFT	Indian & Northern Affairs Fuel Tanks	N	0	0	0	0
MINE	Canadian Mine Locations	N	0	0	0	0
MNR	Mineral Occurrences	N	0	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0	0
NCPL	Non-Compliance Reports	N	0	0	0	0
NDFT	National Defence & Canadian Forces Fuel Storage Tanks	N	0	0	0	0
NDSP	National Defence & Canadian Forces Spills	N	0	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	N	0	0	0	0
NEES	National Environmental Emergencies System (NEES)	N	0	0	0	0
NPCB	National PCB Inventory	N	0	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	27	0	27
OGW	Oil and Gas Wells	N	0	0	0	0
OOGW	Ontario Oil and Gas Wells	N	0	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	1	0	1
ORD	Orders	N	0	0	0	0
ORIS	Occurrence Reporting Information System	Y	0	26	0	26
PAP	Canadian Pulp and Paper	N	0	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	N	0	0	0	0
PES	Pesticide Register	N	0	0	0	0
PRT	Private and Retail Fuel Storage Tanks	N	0	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	N	0	0	0	0
RSC	Record of Site Condition	N	0	0	0	0
RST	Retail Fuel Storage Tanks	N	0	0	0	0

Report Summary

Order Number: 20070821040
Site Name: Highway 407
Site Address: Highway 407 from Kennedy -Highway 400 Toronto, ON
Report Type: Custom Report, 0.25 km Search Radius

Database		Selected	On-site	Within 0.25	0.25km to 2.00km	Total
SCT	Scott's Manufacturing Directory	N	0	0	0	0
SRDS	Wastewater Discharger Registration Database	N	0	0	0	0
TANK	Anderson's Storage Tanks	Y	0	1	0	1
TCFT	Transport Canada Fuel Storage Tanks	N	0	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	N	0	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	N	0	0	0	0
WWIS	Water Well Information System	N	0	0	0	0
TOTAL			0	81	0	81

The databases chosen by the client as per the submitted order form are denoted in the 'Selected' column in the above table. Counts have been provided outside the primary buffer area for cursory examination only. These records have not been examined or verified, therefore, they are subject to change.



Pinpointing Your Environmental Risks

12 Concorde Pl, Suite 800 North York, ON M3C 4J2
416-510-5204

Project Property: Highway 407
Highway 407 from Kennedy -Highway 404
Toronto, ON

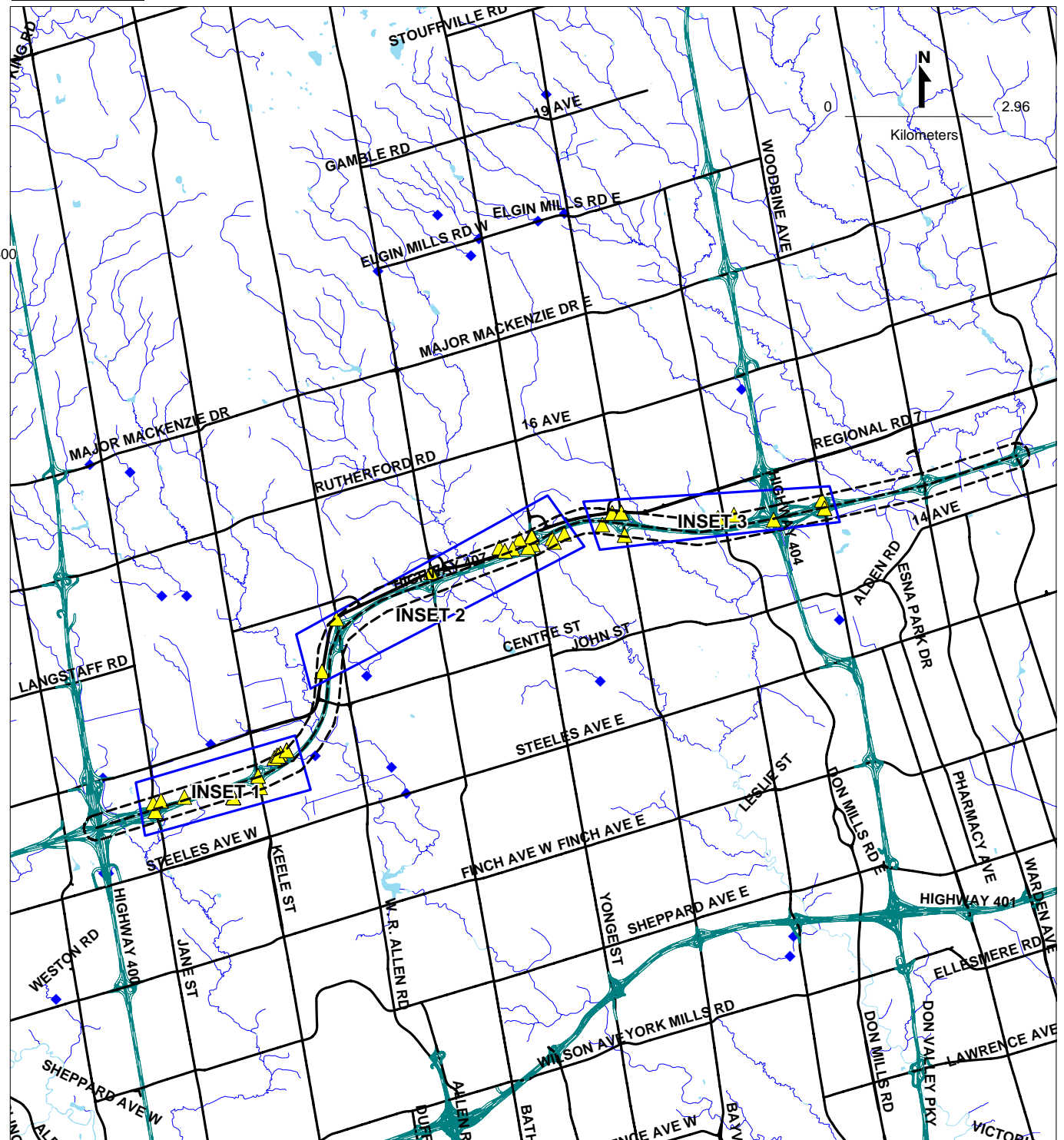
ERIS Project #: 20070821040

Date: AUG-30-2007

LEGEND

Project Property	Landuse Classifications
Database Location	Open Area
Points of Interest	Residential
Chimney	Commercial
Silo	Resource and Industrial
Pipe & Transmission Lines	Government and Institutional
Pipeline	Parks and Recreational
Transmission Line	Waterbody
Transmission Tower	Recreation
Transformer Station	Golf Course/Driving Range
Rail	Park/Sports Field
Railway - Main	Other Recreation Area
Railway - Sidetrack	Sports/Race Track
Railway - Abandoned	Cemetery
Bridge	Campground
Tunnel	Vegetation
Transportation - Other	Wooded Area
Embankment	Orchard
Trail	Vineyard
Runway	Industrial Resources
Hydrographic Features	Conveyor
Permanent Waterway	Crane: Moveable
Intermittent Waterway	Crane: Stationary
Open Reservoir	Tank
Dyke/Levee	Rock Cut
Dam	Auto Wrecker
Breakwall	Lumber Yard
Wetland	Pit

SITE DIAGRAM



This diagram is to be used solely for relative street location purposes.
It may not accurately portray street or site positions.



Pinpointing Your Environmental Risks

12 Concorde Pl, Suite 800 North York, ON M3C 4J2
416-510-5204

Project Property: Highway 407
Highway 407 from Kennedy -Highway 400
Toronto, ON

ERIS Project #: 20070821040

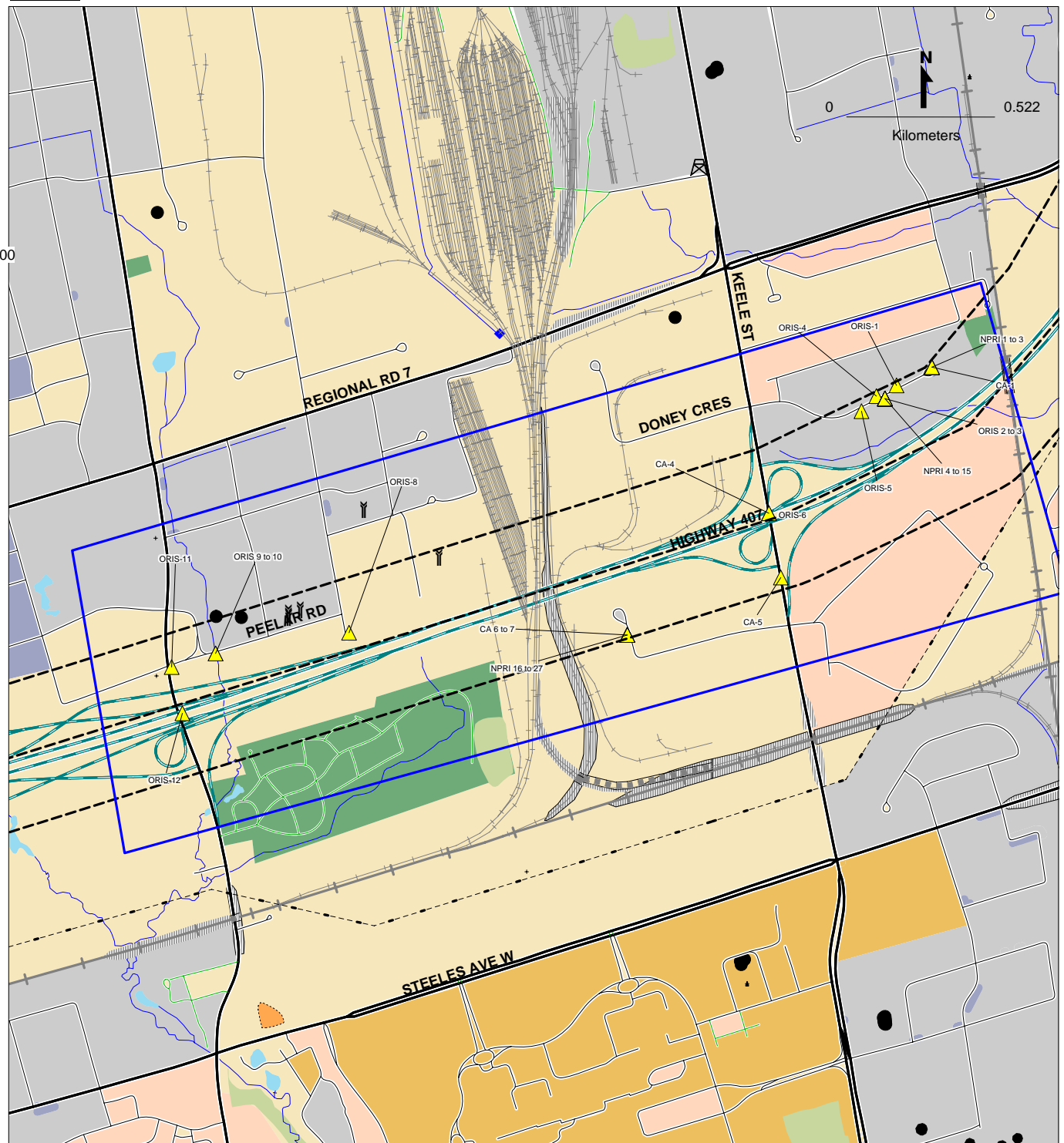
Date: AUG-30-2007

LEGEND

	Project Property	Landuse Classifications
	Database Location	Open Area
Points of Interest		Residential
	Chimney	Commercial
	Silo	Resource and Industrial
Pipe & Transmission Lines		Government and Institutional
	Pipeline	Parks and Recreational
	Transmission Line	Waterbody
	Transmission Tower	Recreation
	Transformer Station	Golf Course/Driving Range
Rail		Park/Sports Field
	Railway - Main	Other Recreation Area
	Railway - Sidetrack	Sports/Race Track
	Railway - Abandoned	Cemetery
	Bridge	Campground
	Tunnel	Vegetation
Transportation - Other		Wooded Area
	Embankment	Orchard
	Trail	Vineyard
	Runway	Industrial Resources
Hydrographic Features		Conveyor
	Permanent Waterway	Crane: Moveable
	Intermittent Waterway	Crane: Stationary
	Open Reservoir	Tank
	Dyke/Levee	Rock Cut
	Dam	Auto Wrecker
	Breakwall	Lumber Yard
	Wetland	Pit

This diagram is to be used solely for relative street location purposes.
It may not accurately portray street or site positions.

INSET 1





Pinpointing Your Environmental Risks

12 Concorde Pl, Suite 800 North York, ON M3C 4J2
416-510-5204

Project Property: Highway 407
Highway 407 from Kennedy -Highway 400
Toronto, ON

ERIS Project #: 20070821040

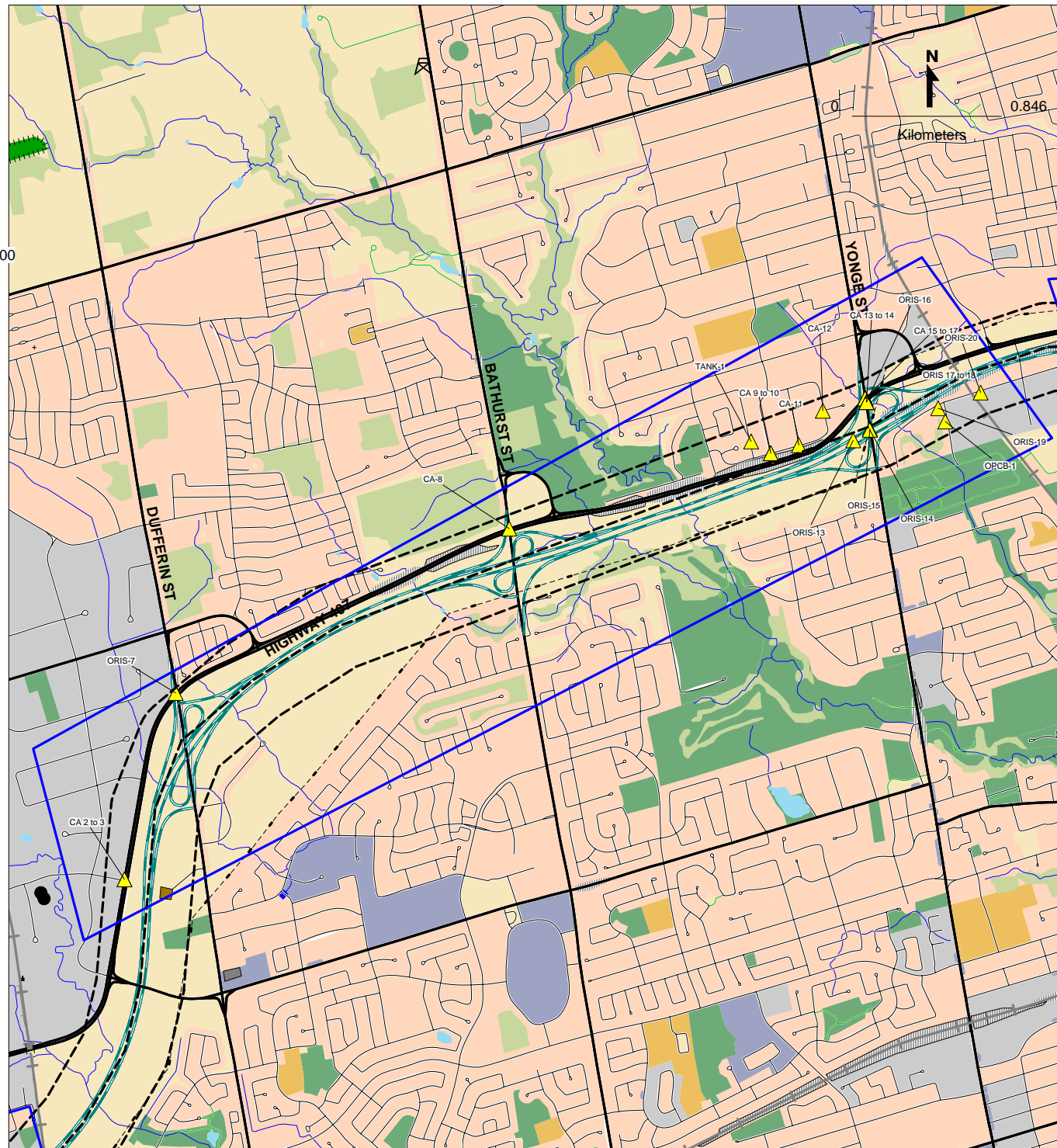
Date: AUG-30-2007

LEGEND

	Project Property	Landuse Classifications
	Database Location	Open Area
Points of Interest		Residential
	Chimney	Commercial
	Silo	Resource and Industrial
Pipe & Transmission Lines		Government and Institutional
	Pipeline	Parks and Recreational
	Transmission Line	Waterbody
	Transmission Tower	Recreation
	Transformer Station	Golf Course/Driving Range
Rail		Park/Sports Field
	Railway - Main	Other Recreation Area
	Railway - Sidetrack	Sports/Race Track
	Railway - Abandoned	Cemetery
	Bridge	Campground
	Tunnel	Vegetation
Transportation - Other		Wooded Area
	Embankment	Orchard
	Trail	Vineyard
	Runway	Industrial Resources
Hydrographic Features		Conveyor
	Permanent Waterway	Crane: Moveable
	Intermittent Waterway	Crane: Stationary
	Open Reservoir	Tank
	Dyke/Levee	Rock Cut
	Dam	Auto Wrecker
	Breakwall	Lumber Yard
	Wetland	Pit

This diagram is to be used solely for relative street location purposes.
It may not accurately portray street or site positions.

INSET 2



INSET 2
















































12 Concorde Pl, Suite 800 North York, ON M3C 4J2
416-510-5204

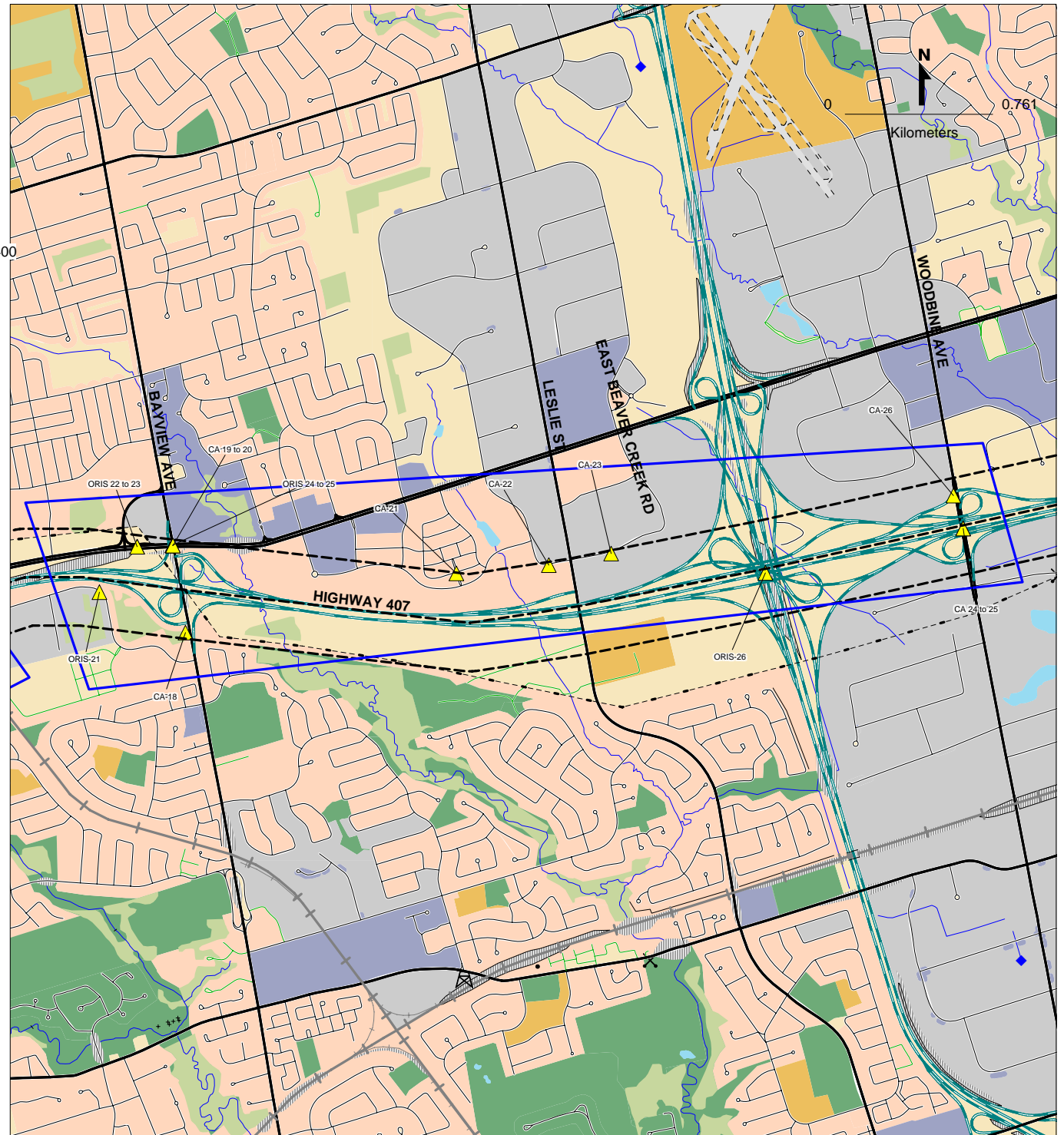
Project Property: Highway 407
Highway 407 from Kennedy -Highway 400
Toronto, ON

ERIS Project #: 20070821040

Date: AUG-30-2007

LEGEND

	Project Property		Database Location
Points of Interest			
	Chimney		Silo
Pipe & Transmission Lines			
	Pipeline		Transmission Line
	Transmission Tower		Transformer Station
Rail			
	Railway - Main		Railway - Sidetrack
	Railway - Abandoned		Bridge
	Tunnel		
Transportation - Other			
	Embankment		Trail
	Runway		
Hydrographic Features			
	Permanent Waterway		Intermittent Waterway
	Open Reservoir		Dyke/Levee
	Dam		Breakwall
	Wetland		
Landuse Classifications			
	Open Area		Residential
	Commercial		Resource and Industrial
	Government and Institutional		Parks and Recreational
	Waterbody		
Recreation			
	Golf Course/Driving Range		Park/Sports Field
	Other Recreation Area		Sports/Race Track
	Cemetery		Campground
Vegetation			
	Wooded Area		Orchard
	Vineyard		
Industrial Resources			
	Conveyor		Crane: Moveable
	Crane: Stationary		Tank
	Rock Cut		Auto Wrecker
	Lumber Yard		Pit



This diagram is to be used solely for relative street location purposes.
It may not accurately portray street or site positions.

Site Report

Order Number: 20070821040

Site Name: Highway 407

Site Address Highway 407 from Kennedy -Highway 400 Toronto, ON

Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

A search has been conducted for this site (address) and company name. No records were found, within the database(s) selected, that meet either of these criteria.

Detail Report

Order Number: 20070821040

Site Name: Highway 407

Site Address: Highway 407 from Kennedy -Highway 400 Toronto ON

Report Type: Custom Report, 0.25 km Search Radius

If information is required for sites located beyond the selected address, please contact your ERIS representative.

Certificates of Approval

National Pollutant Release Inventory

Inventory of PCB Storage Sites

Occurrence Reporting Information System

Anderson's Storage Tanks

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-1	MULTIRIM INC.	226 JARDIN DR., UNIT 9 VAUGHAN CITY L4K 1Y1	8-3010-95-	95	3/21/1995	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: INC. PRODUCTION-USE OF EXHAUST-LEADER FA Contaminants: Methylene Chloride Emission Control: No Controls					
CA-2	METRUS INDUSTRIAL PARKS LTD.	NW. OF HWY. #7 N. RIVERMEDE RD VAUGHAN TOWN	3-1792-88-	88	10/7/1988	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-3	METRUS INDUSTRIAL PARKS LTD.	NORTH RIVERMEDE RD. VAUGHAN TOWN	7-1538-88-	88	10/7/1988	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-4		Keele Street and Highway 407 Vaughan	0600-525PQK	01	9/5/01	Municipal & Private water	Approved	New Certificate of Approval
			Client Name: First Gulf Capital Corporation Client Address: 6860 Century Avenue, Suite 1000 Client City: Mississauga Client Postal Code: L5N 2W5 Project Description: This application is for the construction of watermains on Great Gulf Drive, Ronrose Drive and Easement. Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-5	VAUGHAN CITY	KEELE ST./HWY. #407/RONROSE DR VAUGHAN TOWN	3-0815-93-	93	7/30/1993	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-6	VALLEY METAL FINISHING (1983) LTD.	211 SNIDERCROFT RD., CONCORD VAUGHAN TOWN L4K 2J8	8-3481-93-	93	11/4/1993	Industrial air	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: REL. SPRAY BOOTH (8/300/073/83/836) Contaminants: Emission Control:					
CA-7	VALLEY METAL FINISHING (1983) LTD.	211 SNIDERCROFT RD., CONCORD VAUGHAN L4K 2J8	8-3199-98-	98	7/20/1998	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: 8) NEW PS BOOTHS, MODIFY EXIST. OVEN Contaminants: Suspended Particulate Matter, Trimethyl Benzene(1,2,4-Trimethyl Bezene), Aromatic Hydrocarbon 150, Ethyl Benzene, Xylene, Toluene(Pentyl Methane)(Methyl Benzene), N-Butanol(Butanol), Ethyl Alcohol,Denat,D, Ethylene Glycol Butyl Ether (Butyl Cellosolve), Ethyl Acrylate Emission Control: Absorp. By Dry Collectors, No Controls					
CA-8	R.M. OF YORK	BATHURST ST./HIGHWAY #7 VAUGHAN TOWN	7-0124-94-	94	3/8/1994	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-9	RICHMOND HILL TOWN	FAIRVIEW AVE./LANGSTAFF RD. RICHMOND HILL	3-0631-98-	98	5/29/1998	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-10	RICHMOND HILL TOWN	FAIRVIEW AVE./LANGSTAFF RD. RICHMOND HILL	7-0412-98-	98	5/29/1998	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-11	RICHMOND HILL TOWN	YONGEVIEW AVE./LANGSTAFF RD. RICHMOND HILL TOWN	7-0036-96-	96	1/24/1996	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-12	RICHMOND HILL TOWN	BOYLE RD./LANGSTAFF RD. RICHMOND HILL TOWN	7-1037-93-	93	12/1/1993	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-13	MINISTRY OF THE ENVIR. & ENERGY	FUTURE HWY.7/E.OF YONGE ST. RICHMOND HILL TOWN	7-1068-93-	93	3/28/1994	Municipal water	Underwent 1st revision in 1994	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-14	YONGE BAYVIEW HOLDINGS INC.	HWY. 7/YONGE ST.,BAYVIEW GLEN RICHMOND HILL TOWN	3-1236-97-	97	9/16/1997	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-15	VAUGHAN CITY	HIGHWAY #7/YONGE ST. VAUGHAN CITY	7-0927-93-	93	10/22/1993	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-16	RICHMOND HILL CENTRE LIMITED	YONGE ST/HWY. #7 RICHMOND HILL TOWN	3-1391-93-	93	12/31/1993	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-17	ONTARIO CLEAN WATER AGENCY	YONGE ST./HWY. #7/MARKHAM TOWN RICHMOND HILL TOWN	3-0220-94-	94	3/28/1994	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-18	CATHOLIC CEMETERIES ARCHDIOCESE OF TORON	SW HWY. 407/BAYVIEW AVE., SWM MARKHAM	3-0635-98-	98	5/22/1998	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-19	RICHMOND HILL TOWN 7-1357-88	BAYVIEW AVE. N OF HWY.7 CONT.B RICHMOND HILL TOWN	7-1358-88-	88	11/8/1988	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-20	RICHMOND HILL TOWN	BAYVIEW AVE./HIGHWAY #7 RICHMOND HILL TOWN	7-0742-94-	94	8/3/1994	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-21	1107656 ONTARIO INC.	PARK COMMON BLVD./LEITCHCROFT MARKHAM TOWN	3-0948-99-	99	8/17/1999	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-22	55 and 105 Commerce Valley Drive	55 and 105 Commerce Valley Drive West Markham	1611-4GZQWN	00	3/3/00	Industrial air	Approved	New Certificate of Approval
			Client Name: Kolter Properties Limited Client Address: 2200 Yonge Street, Suite 1600 Client City: Toronto Client Postal Code: Project Description: This application covers the air emissions from the standby generators which will be located at 55 and 105 Commerce Valley Dr. W. A separate application for the heating equipment in these buildings is being submitted by the mechanical contractor. Each of the two buildings will be equipped with a diesel powered standby generator (200 kW capacity). The 200 kW generators are driven by diesel engines, and the dominant contaminant discharged from the generators will be nitrogen oxides (NOx). Other sources of NOx on teh site include 11 items of combustion equipment used for space heating (boilers, make-up air units, and humidifiers). Contaminants: Emission Control:					
CA-23	ATI TECHNOLOGIES INC.	33 COMMERCE VALLEY DRIVE EAST MARKHAM TOWN	8-3303-97-	97	12/2/1997	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: FUMES FROM AUTOMATED WELDING OPERATIONS Contaminants: Nitrogen Oxides, Suspended Particulate Matter, Ethyl Alcohol, Denat,D, Isopropyl Alcohol, Other Organic Compounds, Other Organic Compounds, Methyl Alcohol Emission Control: No Controls					
CA-24	MARKHAM TOWN	HWY.407/WOODBINE AVE/BURNCREST MARKHAM TOWN	7-1068-95-006	95	11/21/95	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-25	MARKHAM TOWN	HWY.407/WOODBINE AVE/BURNCREST MARKHAM TOWN	3-1518-95-006	95	11/21/95	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-26	BARNET INVESTMENTS LIMITED	8100 WOODBINE AVE., LOT 36 MARKHAM L3R 2N8	4-0122-98-	98	11/27/1998	Industrial wastewater	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: STORM WATER MANAGEMENT FACILITY Contaminants: Emission Control:					

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude	
NPRI-1	Multirim Inc.	226 Jardin Drive, Unit 5 Vaughan L4K 1Y1	10666	2003			
							<u>Air</u>
							<u>Water</u>
							<u>Land</u>
							<u>Units</u>
							tonnes
							tonnes
							tonnes
							tonnes
							<u>Substances Released</u>
							Methylenebis(phenylisocyanate)
							Toluene-2,4-diisocyanate
							Polymeric diphenylmethane diisocyanate
							Toluene-2,6-diisocyanate
NPRI-2	MULTIRIM Inc.	226 JARDIN Drive UNIT 5 Vaughan L4K 1Y1	10666	2004	-79.4688	43.8068	
							<u>Air</u>
							<u>Water</u>
							<u>Land</u>
							<u>Units</u>
							tonnes
							tonnes
							tonnes
							tonnes
							<u>Substances Released</u>
							Methylenebis(phenylisocyanate)
							Toluene-2,4-diisocyanate
							Polymeric diphenylmethane diisocyanate
							Toluene-2,6-diisocyanate
NPRI-3	MULTIRIM	226 JARDIN Drive UNIT 5 Vaughan L4K 1Y1	10666	2005	-79.4688	43.8068	
							<u>Air</u>
							<u>Water</u>
							<u>Land</u>
							<u>Units</u>
							tonnes
							tonnes
							tonnes
							tonnes
							<u>Substances Released</u>
							Methylenebis(phenylisocyanate)
							Toluene-2,4-diisocyanate
							Polymeric diphenylmethane diisocyanate
							Toluene-2,6-diisocyanate

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude	
NPRI-4	NORTHERN TRANSFORMER INC.	163 JARDIN DRIVE CONCORD L4K 1X5	4600	1994	792939	434745	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			0.01	0.00	0.00	tonnes	Copper (and its compounds)
NPRI-5	NORTHERN TRANSFORMER INC.	163 JARDIN DRIVE CONCORD L4K 1X5	4600	1995	792939	434745	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			0.01	0.00	0.00	tonnes	Copper (and its compounds)
NPRI-6	Northern Transformer Inc.	163 Jardin Drive Concord L4K 1X5	4600	1996	792939	434745	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			0.01	0.00	0.00	tonnes	Copper (and its compounds)
NPRI-7	NORTHERN TRANSFORMER INC.	163 JARDIN DRIVE CONCORD L4K 1X5	4600	1998	792939	434745	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			0.00	0.00	0.00	tonnes	Copper (and its compounds)
NPRI-8	NORTHERN TRANSFORMER INC.	163 JARDIN DRIVE CONCORD CONCORD L4K 1X5	4600	2000			
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			0.00	0.00	0.00	tonnes	Copper (and its compounds)

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude
NPRI-9	Northern Transformer Inc	163 Jardin Dr. Concord L4K 1X5	4600	2002		
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
			0	0	0	tonnes
						<u>Substances Released</u>
						Copper (and its compounds)
NPRI-10	NorthernTransformer Inc.	163 Jardin Drive Concord L4K 1X5	4600	2005	-79.4942	43.7958
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
						tonnes
						<u>Substances Released</u>
						Copper (and its compounds)
NPRI-11	NorthernTransformer Inc.	163 Jardin Drive Concord L4K 1X5	4600	2004	-79.4942	43.7958
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
						tonnes
						<u>Substances Released</u>
						Copper (and its compounds)
NPRI-12	Norther Transformer Inc.	163 Jardin Drive Concord L4K 1X5	4600	2003		
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
						tonnes
						<u>Substances Released</u>
						Copper (and its compounds)
NPRI-13	NORTHERN TRANSFORMER INC.	163 JARDIN DRIVE CONCORD CONCORD L4K 1X5	4600	2001		
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
			0.00	0.00	0.00	tonnes
						<u>Substances Released</u>
						Copper (and its compounds)

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude
NPRI-14	NORTHERN TRANSFORMER INC.	163 JARDIN DRIVE CONCORD CONCORD L4K 1X5	4600	1999	792939	434745
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
			0.00	0.00	0.00	tonnes
						<u>Substances Released</u>
						Copper (and its compounds)
NPRI-15	Northern Transformer Inc.	163 Jardin Drive Concord L4K 1X5	4600	1997	792939	434745
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
			0.01	0.00	0.00	tonnes
						<u>Substances Released</u>
						Copper (and its compounds)
NPRI-16	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	1994	793000	434720
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
			8.97	0.00	11.76	tonnes
			7.39	0.00	11.76	tonnes
						<u>Substances Released</u>
						Toluene
						Xylene (mixed isomers)
NPRI-17	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	1995	793000	434720
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
			22.00	0.00	0.00	tonnes
			17.73	0.00	0.00	tonnes
						<u>Substances Released</u>
						Toluene
						Xylene (mixed isomers)
NPRI-18	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	1998	793000	434720
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>
			18.82	0.00	0.00	tonnes
			21.80	0.00	0.00	tonnes
						<u>Substances Released</u>
						Toluene
						Xylene (mixed isomers)

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude	
NPRI-19	VALLEY METAL FINISHING (1983) LTD	211 SNIDERCROFT Road Concord L4K 2J8	4707	2005	-79.5	43.7889	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			15.12			tonnes	Toluene
			13.39			tonnes	Xylene (all isomers)
			0.50			kg	Cadmium (and its compounds)
			0.50			kg	Hexavalent chromium compounds
			42.53			tonnes	Volatile Organic Compounds (VOCs)
NPRI-20	VALLEY METAL FINISHING (1983) LTD	211 SNIDERCROFT Road Concord L4K 2J8	4707	2004	-79.5	43.7889	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			19.89			tonnes	Toluene
			6.50			tonnes	2-Butoxyethanol
			14.91			tonnes	Xylene (all isomers)
						kg	Hexavalent chromium compounds
			68.10			tonnes	Volatile Organic Compounds (VOCs)
NPRI-21	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	2003			
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			12.58	0.00	0.00	tonnes	Toluene
			17.87	0.00	0.00	tonnes	Xylene (all isomers)
			30.46	0.00	0.00	tonnes	Volatile Organic Compounds (VOCs)

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude
NPRI-22	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	2002		
					<u>Air</u>	<u>Substances Released</u>
					12.355	Toluene
					18.251	Xylene (mixed isomers)
NPRI-23	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	2001	30.606	Volatile Organic Compounds (VOCs)
					<u>Air</u>	<u>Substances Released</u>
					1.70	Toluene
					12.80	Xylene (mixed isomers)
NPRI-24	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	2000		
					<u>Air</u>	<u>Substances Released</u>
					1.43	Toluene
					14.99	Xylene (mixed isomers)
NPRI-25	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	1999	793000	434720
					<u>Air</u>	<u>Substances Released</u>
					1.67	Toluene
					2.35	Xylene (mixed isomers)

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude	
NPRI-26	VALLEY METAL FINISHING (1983) LTD	211 SNIDERCROFT ROAD CONCORD L4K 2J8	4707	1997	793000	434720	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			13.76	0.00	0.00	tonnes	Toluene
			27.22	0.00	0.00	tonnes	Xylene (mixed isomers)
NPRI-27	Valley Metal Finishing (1983) Ltd.	211 Snidercroft Road Concord L4K 2J8	4707	1996	793000	434720	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			13.88	0.00	0.00	tonnes	Toluene
			18.20	0.00	0.00	tonnes	Xylene (mixed isomers)

Inventory of PCB Storage Sites

Map Key	Company	Address	Year	Site Number	Quantity	Description
OPCB-1	DEEP FOUNDATIONS CONTRACTORS INC.	26 RUGGLES AVENUE MARKHAM L3T 3S4	1995	30491A039	2.00	Number of Drums of Ballasts with High Level PCBs (>1000 ppm)
					400.00	Weight of Drums of Ballasts with High Level PCBs (>1000 ppm) kg

Occurrence Reporting Information System

Map Key	Company	Address	Spill ID	Medium	Environmental Impact	Date of Occurrence	Nature of Impact
ORIS-1	MULTIBLENDS LTD.	180 JARDIN DRIVE VAUGHAN PLANT 180 JARDIN DRIVE VAUGHAN CITY L4K 1X8	33112 Synopsis: Cause:	WATER / AIR	CONFIRMED MULTIBLENDS-EXPLOSION ANDCHEMICALS TO SEWER. PROCESS UPSET FIRE/EXPLOSION	4/11/1990	Human health
ORIS-2	PROVOST BULK CARRIERS INC.	163 JARDIN DR., CONCORD TANK TRUCK (CARGO) VAUGHAN CITY L4K 1X5	10920 Synopsis: Cause:	LAND	PROVOST CARTAGE -OVER- FILL OF LUBE OIL TANK, MAX. 45 L. TO GROUND. CONTAINER OVERFLOW ERROR	10/24/1988	
ORIS-3	VAUGHAN HYDRO	163 JARDIN DRIVE, CONCORD. TRANSFORMER VAUGHAN CITY L4K 1X5	151626 Synopsis: Cause:	LAND	POSSIBLE VAUGHAN HYDRO- 450 L TRANSFORMER OIL ONTO CITYYARD, MVA, CLEANING UP. COOLING SYSTEM LEAK OTHER	1/19/1998	Soil contamination
ORIS-4	VAUGHAN HYDRO	150 JARDIN DRIVE (KEELE SOUTH OF HWY 7). TRANSFORMER VAUGHAN CITY L4K 3P9	115266 Synopsis: Cause:	LAND	POSSIBLE VAUGHAN HYDRO-90-130 L OFNON PCB TRANSFORMER OIL TO LAND, FIRE. COOLING SYSTEM LEAK DAMAGE BY MOVING EQUIPMENT	7/4/1995	Soil contamination
ORIS-5	TRANSPORT TRUCK	127 JARDIN DR. MOTOR VEHICLE (OPERATING FLUID) VAUGHAN CITY L4K 1X5	106019 Synopsis: Cause:	LAND / WATER	POSSIBLE REPUBLIC PACKAGING: 90L DIESEL FUEL SADDLE TANK LEAK TO CATCHBASIN OTHER CONTAINER LEAK MATERIAL FAILURE	10/6/1994	Soil contamination
ORIS-6	PRIVATE OWNER	HWY 407 EASTBOUND E OF KEELE ST STORAGE TANK/BARREL VAUGHAN CITY	195028 Synopsis: Cause:	Land	Possible PRIVATE OWNER: 780 LITREDIESEL TO 407 AND DITCH. 407 CONTRACTOR CLEANING OTHER TRANSPORTATION ACCIDENT OTHER	2001/02/15	Water course or lake
ORIS-7	UNKNOWN	DITCH AT HWY. 7 & DUFFERIN ST. VAUGHAN CITY	155651 Synopsis: Cause:	WATER	CONFIRMED SOURCE UNKNOWN- OIL OTHER CAUSE (N.O.S.) INTENTIONAL/PLANNED	// DUMPED IN DITCH BY	Water course or lake UNKNOWN PARTY.

Occurrence Reporting Information System

Map Key	Company	Address	Spill ID	Medium	Environmental Impact	Date of Occurrence	Nature of Impact
ORIS-8	CANOX - CANADIAN OXYGEN LTD.	11 CREDITSTONE RD, UNIT 1 MOTOR VEHICLE (OPERATING FLUID) VAUGHAN CITY L4K 2P1	157339 Synopsis: Cause:	LAND / WATER	POSSIBLE CANOX: 155L DIESEL UNKNOWN UNKNOWN	12/5/1990 SPILLED TO ASPHALT AND	Multi Media Pollution SEWER.
ORIS-9	UNKNOWN	PEELAR RD., STORMSEWER OUTFALL AT BLACK CREEK VAUGHAN CITY	170822 Synopsis: Cause:	WATER	POSSIBLE UNKNOWN- PURPLE/WINE UNKNOWN UNKNOWN	7/26/1999 COLOURED LIQUID FLOWING	Water course or lake FROM STORMSEWER OUTFALL.
ORIS-10	UNKNOWN	BLACK CREEK, FROM PEELAR RD STORM SEWER OUTFALL VAUGHAN CITY	171473 Synopsis: Cause:	WATER	CONFIRMED UKN SRC-DARK PURPLE UNKNOWN UNKNOWN	8/12/1999 LIQUID NOTED IN STORM OUTFALL TO BLACK CREEK.	Water course or lake
ORIS-11	UNKNOWN	PEELAR & JANE, SOUTH OF 7, EAST OF JANE VAUGHAN CITY	33760 Synopsis: Cause:	WATER	POSSIBLE 25 LTR CUTTING OIL DUMPED IN CREEK UNKNOWN VANDALISM	4/26/1990	Water course or lake
ORIS-12	TRANSPORT TRUCK	JANE ST & HWY # 407 TRANSPORT TRUCK (CARGO) VAUGHAN	183746 Synopsis: Cause:	LAND	CONFIRMED TRANSPORT TRUCK-OVERTURN, 10 L DIESEL/10 L FLAMMA- TRUCK/TRAILER OVERTURN UNKNOWN	7/18/2000	Water course or lake BLE WASTE TO GRND, FD, MOE
ORIS-13	UNKNOWN	HWY 407 WESTBOUND, RIGHT SHOULDER WEST OF YONGE ST. VAUGHAN CITY	154344 Synopsis: Cause:	LAND	POSSIBLE UNKNOWN SOURCE-SMALL AMT MOTOR OIL TO C/B AND OTHER CONTAINER LEAK UNKNOWN	4/8/1998	Soil contamination DITCH.
ORIS-14	TRANSPORT TRUCK	HWY 7 OFF RAMP AT YONGE STREET. MOTOR VEHICLE (OPERATING FLUID) RICHMOND HILL TOWN	177256 Synopsis: Cause:	LAND	NOT ANTICIPATED TRANSPORT TRUCK-UKN QTY DIESEL TO ROADWAY, TRUCK OTHER CONTAINER LEAK ERROR	2/4/2000	STRUCK POLE, CONTAINED, FD.

Occurrence Reporting Information System

Map Key	Company	Address	Spill ID	Medium	Environmental Impact	Date of Occurrence	Nature of Impact
ORIS-15	UNKNOWN	HWY 7 BETWEEN HWY 11 AND BAYVIEW YORK R.M.	14122 Synopsis: Cause:	AIR	VALVE/FITTING LEAK OR FAILURE UNKNOWN	1/25/1989	
ORIS-16	CANADA CARTAGE	ON HWY. 7 ABOUT 500 METRES WEST OF YONGE ST. VAUGHAN CITY	89897 Synopsis: Cause:	LAND	CONFIRMED CANADA CARTAGE - 200 L OF COATING SOLUTION TO HWY.&LAND FROM BARREL ON TRUCK OTHER CONTAINER LEAK NEGLIGENCE (APPARENT)	8/16/1993	Soil contamination
ORIS-17	TANK TRUCK	HWY #7 /YONGE ST TANK TRUCK (CARGO) RICHMOND HILL TOWN	59230 Synopsis: Cause:	LAND	POSSIBLE F.A.W. OIL - APPROX 22L WASTE OIL ONTO GROUND FROM TANKER TRUCK. OTHER CONTAINER LEAK UNKNOWN	10/29/1991	Soil contamination
ORIS-18	GO TRANSIT	YONGE ST. NORTH OF HWY 7 MOTOR VEHICLE (OPERATING FLUID) RICHMOND HILL TOWN	169474 Synopsis: Cause:	LAND / WATER	NOT ANTICIPATED GO TRANSIT-2 L COOLANT TOROAD AND CONTAINED IN C/B-CLEANED BY REGION. COOLING SYSTEM LEAK OVERSTRESS/OVERPRESSURE	6/26/1999	Water course or lake
ORIS-19	ONTARIO REALTY CORPORATION	53 LANGSTAFF RD EAST, THORNHILL. VAUGHAN CITY	119620 Synopsis: Cause:	LAND	CONFIRMED ONTARIO REALTY CORP.-30 L WASTE OIL/WATER TO EXCA- VATION HOLE. CLEANED UP. OTHER CONTAINER LEAK OTHER	10/13/1995	Soil contamination
ORIS-20	UNKNOWN	BEHIND 89 LANGSTAFF RD E THORNHILL VAUGHAN CITY	201266 Synopsis: Cause:	Land	Possible SOURCE UNKNOWN: DIESEL SPILL TO GROUND. QTY UKN.MOE INVESTIGATING. UNKNOWN UNKNOWN		Multi Media Pollution
ORIS-21	PUC	POLE TRANSFORMER LANGSTAFF & SUSSEX MARKHAM TOWN	10563 Synopsis: Cause:	LAND	MARKHAM HYDRO - 5 LTR. PCB TRANSFORMER OIL COOLING SYSTEM LEAK MATERIAL FAILURE	10/18/1988	TO GROUND

Occurrence Reporting Information System

Map Key	Company	Address	Spill ID	Medium	Environmental Impact	Date of Occurrence	Nature of Impact
ORIS-22	TRANSPORT TRUCK	HIGHWAY 7, WEST OF BAYVIEW MOTOR VEHICLE (OPERATING FLUID) MARKHAM TOWN	96922 Synopsis: Cause:	LAND	POSSIBLE SHINA PLASTICS - 180L DIESEL FUEL TO ROAD, CATCHBASIN FROM TRUCK VALVE/FITTING LEAK OR FAILURE UNKNOWN	3/1/1994	Water course or lake
ORIS-23	TRANSPORT TRUCK	HWY 7 WESTBOUND, WEST OF BAYVIEW MOTOR VEHICLE (OPERATING FLUID) RICHMOND HILL TOWN	125856 Synopsis: Cause:	LAND / WATER	POSSIBLE UNIVERSAL AM CAN: 250 L DIESEL TO HWY & STORM SEWER, OPP, WORKS OTHER TRANSPORTATION ACCIDENT UNKNOWN	5/3/1996	Multi Media Pollution
ORIS-24	RICHMOND HILL, TOWN OF	BAYVIEW AVE && HIGHWAY 7 PUC RICHMOND HILL	183489 Synopsis: Cause:	LAND	POSSIBLE TOWN OF RICHMOND HILL: SANI SEWER OVERFLOWING OTHER CONTAINER LEAK OVERSTRESS/OVERPRESSURE	7/12/2000	Multi Media Pollution SEWAGE TO ROAD.WORKS
ORIS-25	PRIVATE OWNER	BAYVIEW AVE && 7 HIGHWAY SANI OR STORM SEWER CONNECTION RICHMOND HILL	183548 Synopsis: Cause:	LAND	POSSIBLE PRIVATE OWNER: SANI SEWERBREAK. SEWAGE TO CITY SEW-ER. CONTAINED. WORKS. OTHER CONTAINER LEAK OVERSTRESS/OVERPRESSURE	7/13/2000	Multi Media Pollution
ORIS-26	CONSTRUCTION SITE	HWY 407 MEDIAN ABOUT 100 M EAST OF HWY 404. (N.O.S.) MARKHAM TOWN	146233 Synopsis: Cause:	LAND	CONFIRMED CANADIAN HIGHWAYS- 900 L CONCRETE PAINT TO ROAD AND DITCH, CONTAINED. OTHER CONTAINER LEAK ERROR	9/9/1997	Soil contamination

Anderson's Storage Tanks

Map Key	Company	Address	Permit Date	Permit Type	User Type
TANK-1	Jeffery D T	11 Dunvegan Rd Toronto	1/11/1946	FHV BP 3915	
			Installation Type:	Install FO tank	
			Installation Size:	200	
			Installation Config.:	Install 1 * 200 gall FO tank	
			No. Tanks Installed:	1	
			Units of Measure:	Imperial gallons	
			Value/Tank (\$):	200	
			Capacity(gal):	200	
			Reference:	FHV BP 3915	
			Location Desc:	11 Dunvegan Rd	

Appendix: Ontario Database Descriptions

EcoLog Environmental Risk Information Services Ltd 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 EcoLog ERIS at the time of update. **Note:** Databases denoted with “*” indicates that the database will no longer be updated. See the individual database descriptions for more information.

Federal Government Source Databases:

Diagram Identifier:

Environmental Effects Monitoring 1992-2004

EEM

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.

Environmental Issues Inventory System 1992-2001

EIIS

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.

Federal Convictions 1988-Jan 2002

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.

Contaminated Sites on Federal Land June 2000-2005

FCS

The Treasury Board of Canada Secretariat maintains an inventory of all known contaminated sites held by various Federal departments and agencies. This inventory does not include properties owned by Crown corporations, but does contain non-federal sites for which the Government of Canada has accepted some or all financial responsibility. All sites have been classified through a system developed by the Canadian Council of Ministers of the Environment. The database provides information on company name, location, site ID #, property use, classification, current status, contaminant type and plan of action for site remediation.

Fisheries & Oceans Fuel Tanks 1964-Sept 2003

FOFT

Fisheries & Oceans Canada maintains an inventory of all 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.

Indian & Northern Affairs Fuel Tanks 1950-Aug 2003

IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all 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.

National Analysis of Trends in Emergencies System (NATES) 1974-1994***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.

National Defence & Canadian Forces Fuel Tanks Up to May 2001**NDFT**

The Department of National Defence 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. Please note that due to the September 2001 terrorist attack, new National Security protocols have prohibited any release of updates to this database.

National Defence & Canadian Forces Spills March 1999-Feb 2005**NDSP**

The Department of National Defence 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.

National Defence & Canadian Forces Waste Disposal Sites 2001, 2003**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.

National Environmental Emergencies System (NEES) 1974-2003**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 all 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.

National PCB Inventory 1988-June 2004**NPCB**

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all 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.

National Pollutant Release Inventory 1993-2005**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 of 178 specified substances.

Parks Canada Fuel Storage Tanks 1920-Jan 2005**PCFT**

Canadian Heritage maintains an inventory of all 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.

Transport Canada Fuel Storage Tanks 1970- May 2003**TCFT**

Within the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

Provincial Government Source Databases:**Abandoned Aggregate Inventory Up to Sept 2002****AAGR**

The MAAP Program maintains a database of all 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.

Aggregate Inventory Up to May 2005**AGR**

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. Please note that the database is only referenced by lot\concession and city/town location. The databases provides information regarding the registered owner/operator, location, status, licence type, and maximum tonnage.

Abandoned Mines Information System 1800- 2005**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.

Certificates of Approval 1985-Sept 2002**CA**

This database contains the following types of approvals: Certificates of Approval (Air) issued under Section 9 of the Ontario EPA; Certificates of Approval (Industrial Wastewater) issued under Section 53 of the Ontario Water Resources Act (“OWRA”); and Certificates of Approval (Municipal/Provincial Sewage and Waterworks) issued under Sections 52 and 53 of the OWRA.

Coal Gasification Plants 1987, 1988***COAL**

This inventory of all known and historical coal gasification plants was collected by the Ministry of Environment. 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, landuse, soil condition, site operators/occupants, site description, and potential environmental impacts. This information is effective to 1988, but the program has since been discontinued.

Compliance and Convictions 1989-2003**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.

Drill Holes 1886-2005**DRL**

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 dependent 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".

Environmental Registry 1994-July 2003***EBR**

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, licence, or certificate of approval to release substances into the air or water; these are notified on the registry.

Ontario Regulation 347 Waste Generators Summary 1986-2005**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. 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.

Mineral Occurrences 1846-Oct 2004**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 planimetric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Non-Compliance Reports 1992(water only), 1994-2005**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.

Ontario Oil and Gas Wells 1800-Oct 2006**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. Information available for all wells in the ERIS database include well owner/operator, location, permit start date, well cap date, licence number, status, depth and the primary target (rock unit) of the well being drilled.

Ontario Inventory of PCB Storage Sites 1987-Oct 2004**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.

Ministry Orders 1995-1996**ORD**

Control Orders/Documents are enforcement actions issued by the Ministry of the Environment to deal with environmental violations. They clarify and allocate individual/joint liability when issuing clean-up orders for contaminated sites.

Occurrence Reporting Information System 1988-2002**ORIS**

This database identifies sources, effects/actions and approximate locations of spills and occurrences within Ontario. The locations identified on the locator diagram refer to the facility responsible for the spill. The actual location of the spill can be derived from the descriptions provided in the detailed report.

Pesticide Register 1988-Oct 2006**PES**

The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

Private and Retail Fuel Storage Tanks 1989-1996***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.

Ontario Regulation 347 Waste Receivers Summary 1986-2005**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. This information is a summary of all years from 1986 including the most currently available data.

Record of Site Condition 1997-Sept 2001**RSC**

The Record of Site Condition (RSC) provides a summary of the final environmental condition of a site, once an environmental site assessment and/or restoration approach has been undertaken. The database provides information on the site restoration approach used (Background, Generic, Site Specific Risk Assessment), location of contaminated site, whether contamination extends past 1.5m from the surface thereby requiring "stratified restoration", soil type, and the date when RSC was submitted/acknowledged/ responded to by the Ministry of the Environment. A site restoration approach involves the use of soil and groundwater quality criteria, which have been developed to provide protection against adverse effects to human/ecological health and the natural environment. These criteria may be applied to agricultural, residential/parkland, industrial/commercial land uses; as well as potable (source of drinking water) and nonpotable groundwater use.

Wastewater Discharger Registration Database 1990-1998**SRDS**

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all 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. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Waste Disposal Sites - MOE CA Inventory 1970-Sept 2002**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.

Waste Disposal Sites - MOE 1991 Historical Approval Inventory Up to Oct 1990***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 date 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.

Water Well Information System 1955-2006**WWIS**

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. Geographic coordinates are reliable according to the given percentage. Wells that are identified with lot and concession only are available upon request and would be provided as a separate report.

Private Source Databases:**Anderson's Waste Disposal Sites 1930-2004****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.*

Automobile Wrecking & Supplies 2001-Feb 2007**AUWR**

This database provides an inventory of all 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.

Commercial Fuel Oil Tanks 1948-Sept 2006**CFOT**

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with TSSA. This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

Chemical Register 1992, 1999-Feb 2007**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.).

ERIS Historical Searches 1999-2006**EHS**

EcoLog 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.

Canadian Mine Locations 1998-2006**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.

Oil and Gas Wells Oct 2001-May 2007

OGW

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 Nickles' database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Canadian Pulp and Paper 1999, 2002, 2004, 2005

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.

Retail Fuel Storage Tanks 2000-Feb 2007

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. Information is provided on company name, location and type of business.

Scott's Manufacturing Directory 1992-Jan 2007

SCT

Scott's Directories is a data bank containing information on over 70,000 manufacturers in Ontario. Even though Scott's listings are voluntary, it is the most comprehensive database of Ontario manufacturers available. Information concerning a company's address, plant size, and main products are included in this database. This database begins with 1992 information and is updated annually.

Anderson's Storage Tanks 1915-1953*

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.*



APPENDIX C

Site Photographs



407 TRANSITWAY - FINAL REPORT



Photo 1 – View of Highway 407 on-ramp at the Highway 400 interchange. Picture view is easterly (2007).



Photo 2 – View of the hydro corridor located to the south of Hwy 407 and Yonge St. looking westerly (2007).



407 TRANSITWAY - FINAL REPORT



Photo 3 – View of Miller Waste (Site No. 19) located southwest of the intersection of Highway 407 and Woodbine Avenue (2007).



Photo 4 – View of Miller Asphalt/Aggregates/Offices/Maintenance Yard (Site No. 20) located on the southeast corner of Highway 407 and Woodbine Avenue (2007).



407 TRANSITWAY - FINAL REPORT



Photo 5 – View of the BMW sales and maintenance business (i.e. Site No. 25) located in the northeast corner of Hwy 407 and Kennedy Road (2007).



Photo 6 – View of Hwy 407 and Kennedy Road looking easterly (2007).



407 TRANSITWAY - FINAL REPORT



Photo 7 – Toronto Star building (Site No. 1) looking west (2007).



Photo 8 – Typical fill placement surrounding the interchanges (2007).



407 TRANSITWAY - FINAL REPORT



Photo 9 –Industrial area (i.e. Site No. 2) on the north side of Highway 407 between Jane Street and Keele Street (2009).



Photo 10 – Rail lines (i.e. Site No. 2) on the north side of Highway 407 between Jane Street and Keele Street (2009).



407 TRANSITWAY - FINAL REPORT



Photo 11 – Transformer storage yard (Site No. 22) between Rodick Road and Warden Avenue looking north (2009).



Photo 12 – Transformer station (Site No. 24) between Warden Avenue and Kennedy Road looking southeast (2009).

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

Golder Associates Ltd.
121 Commerce Park Drive, Unit L
Barrie, Ontario, L4N 8X1
Canada
T: +1 (705) 722 4492

