PHASE I ENVIRONMENTAL SITE ASSESSMENT
AGRICULTURAL PROPERTY
237 DUNDAS STREET WEST
OAKVILLE, ONTARIO

Submitted to:

MATTAMY DEVELOPMENT CORPORATION
2360 BRISTOL CIRCLE
OAKVILLE, ONTARIO
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EXECUTIVE SUMMARY

AMEC Earth & Environmental, a division of AMEC Americas Limited ("AMEC"), was retained by Mattamy Development Corporation ("Mattamy") (the "CLIENT") to conduct a Phase I Environmental Site Assessment ("ESA") of a residential / agricultural property located at 237 Dundas Street West, in Oakville, Ontario (the "Site"). The Site is legally described as PT LTS 18 & 19, CON 1 TRAFALGAR, NORTH OF DUNDAS STREET , AS IN 258059, EXCEPT PT 1 & 2, 20R2299; OAKVILLE/TRAFALGAR AMENDED DES. SEPT 29, 97 A.R. and PT LTS 16 & 17, CON 1 TRAFALGAR, NORTH OF DUNDAS STREET, AS IN 263600; OAKVILLE/TRAFALGAR. Currently, the Site is owned by Pendent Developments Limited and Lower Fourth Limited of Mattamy ("OWNER") and at the time of the reconnaissance was occupied by two residential tenants and utilized by Mr. Dave Robinson ("OCCUPANT") for agricultural purposes. This Phase I ESA was carried out in accordance with the Terms of Reference provided in AMEC's proposal / work agreement dated 26 January, 2007

The CLIENT retained AMEC to provide an evaluation of known and possible environmental issues at the Site for internal due diligence purposes.

A Phase I ESA is defined as a systematic qualitative process to assess the environmental condition of a Site based on its historical and current use. This Phase I ESA was conducted in accordance with the Phase I ESA standard as defined by Ontario Regulation 153/04, Records of Site Condition, Part XV.1 of the Environmental Protection Act ('EPA') (O.Reg. 153/04) and the CAN/CSA Z768-01 Phase I Environmental Site Assessment, referenced therein.

Jonathan Wakani and Rachel McLean of AMEC conducted a Site reconnaissance on 28 May and 20 June, 2007, to evaluate possible on-Site issues, and assess whether any surrounding land uses may have and/or are currently impacting the environmental condition of the Site. During the Site reconnaissance, AMEC interviewed Mr. David Robinson, the current occupant utilizing the land for agricultural purposes, (the "Site representative"). The Site representative did not accompany AMEC during the Site reconnaissance. Ground cover conditions at the time of the Site reconnaissance were partially covered with dense vegetation which may have limited AMEC's observations.

Mr. David Robinson currently occupies the Site for agricultural use. Major operations at the Site include the harvesting of soy bean and hay. According to the Site representative, the Robinson family has farmed the Site since approximately 1985. According to the Site representative, the Site previously operated as an agricultural property.

Based on the Phase I ESA completed by AMEC conducted on 28 May and 20 June 2007, there is evidence of potential or actual contamination associated with the following activities related to the Site.

- The Site is currently and has historically been used for agricultural purposes including three historic orchards, which were located east and west of the farmstead as well as the southeast corner of the Site. Significant herbicide and pesticide use was a common practice in orchards, as such, the potential for residual herbicide, pesticide, lead and arsenic impact in the near surface topsoil exists. Additionally, AMEC noted the presence of four pesticide spray tanks in the vicinity of the equipment shed as well as the southeast portion of the property. The orchards in the vicinity of the farmstead are visible in the 1962 aerial photo and the orchard in the southeast portion of the Site is visible in the 1934 aerial photograph;

- A portion of the southeast corner of the Site exhibits discolouration which may potentially represent fill materials, this discolouration was noted in the 1962 and 1988 aerial photos, furthermore, AMEC noted fill materials used in the construction of ramps for both former structures; and

- AMEC observed a fill pipe and gasoline pump during the Site reconnaissance suggesting the presence of at least one UST.

In addition, the following minor environmental issues were noted.

- AMEC observed various abandoned vehicles and farm equipment on Site; and

Based on the age of the residential dwelling (pre-1900s) the potential presence of hazardous materials including but not limited to asbestos containing materials (ACM), lead containing materials (LCM), mercury, PCBs, etc., exist in the building construction. Observations made were limited and did not identify any evidence of these materials.

Based on the findings of the Phase I ESA, a Phase II ESA is recommended as a means of addressing the surficial topsoil material at the Site from any impact by pesticide/herbicide use associated with the agricultural farming practices including the historic orchards. Additionally, AMEC recommends assessing the quality of fill material in the southeast portion of the property as well as from both former structure ramps.

The ASTs located on Site should be decommissioned in accordance with provincial regulations prior to building demolition as part of the future proposed residential development, additionally, the UST and associated gas pump should be removed along with any petroleum impacted soils.

The potable water wells and monitoring wells located on-Site should be decommissioned in accordance with Section 21 of Ontario Regulation 903.

Appropriate management plans should be prepared for ACMs, LBPs and PCBs if future repair, renovation or demolition activities are planned in the areas of the Site building suspected to contain these materials.

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1.0 INTRODUCTION

1.1 Background

AMEC Earth & Environmental, a division of AMEC Americas Limited ("AMEC"), was retained by Mattamy Development Corporation ("Mattamy") (the "CLIENT") to conduct a Phase I Environmental Site Assessment ("ESA") of a residential / agricultural property located at 237 Dundas Street West, in Oakville, Ontario (the "Site"). A key plan showing the location of the Site is provided on Figure 1. The Site is legally described as PT LTS 18 & 19, CON 1 TRAFALGAR, NORTH OF DUNDAS STREET , AS IN 258059, EXCEPT PT 1 & 2, 20R2299; OAKVILLE/TRAFALGAR AMENDED DES. SEPT 29, 97 A.R. and PT LTS 16 & 17, CON 1 TRAFALGAR, NORTH OF DUNDAS STREET, AS IN 263600; OAKVILLE/TRAFALGAR. Figure 2 illustrates the lot and building configuration of the Site. Currently, the Site is owned by Pendent Developments Limited and Lower Fourth Limited of Mattamy ("OWNER") and at the time of the reconnaissance was occupied by two residential tenants and utilized by Mr. Dave Robinson ("OCCUPANT") for agricultural purposes.

The CLIENT retained AMEC to provide an evaluation of known and possible environmental issues at the Site for internal due diligence purposes.

A Phase I ESA is defined as a systematic qualitative process to assess the environmental condition of a Site based on its historical and current use. This Phase I ESA was conducted in accordance with the Phase I ESA standard as defined by Ontario Regulation 153/04, Records of Site Condition, Part XV.1 of the Environmental Protection Act ('EPA') (O.Reg. 153/04) and the CAN/CSA Z768-01 Phase I Environmental Site Assessment, referenced therein.

1.2 Scope of Work

This Phase I ESA was carried out in accordance with the Terms of Reference as provided in AMEC proposal / work agreement dated 26 January 2007. The scope of work for the Phase I ESA consisted of the following tasks:

- Reviewing the historical occupancy of the Site, through the use of available archived and relevant (in AMEC's opinion) municipal and business directories, fire insurance plans ("FIPs"), historical topographical plans (if applicable) and aerial photographs;
- Reviewing the current use of the Site and any land use practices that may have impacted its environmental condition;
- Reviewing the current use of the surrounding properties and any land use practices that may have impacted the environmental condition of the Site;

- Conducting a “walk-through” visual assessment (i.e., Site reconnaissance) of the Site and building facilities in order to identify the presence of actual and / or potential environmental contaminants or concerns of significance;

- Conducting interviews with designated Site representative(s) as a resource for current and historical Site information, as well as to provide AMEC staff with unrestricted access to all areas of the Site and Site buildings (as required by *O. Reg. 153/04*);;

- Contacting municipal and provincial agencies to determine the existence of records of environmental regulatory non-compliance, if any, and reviewing such records where available. It should be noted that responses from these agencies may not be received prior to preparation of the report. The Client would be notified when a response is received and any additional costs to obtain these records;

- Although proposed by AMEC, an EcoLog Environmental Risk Information Services Ltd. (“ERIS”) report was not obtained at the direction of the CLIENT;

- A search of land title and assessment rolls was not conducted as a part of this investigation. A search of land ownership is unlikely to contribute any useful information regarding the environmental condition at the Site as the ownership of the property since the original development is well documented in other historical records; and

- Preparing a report of our findings.

Jonathan Wakani and Rachel McLean of AMEC conducted a Site reconnaissance on 28 May and 20 June, 2007, to evaluate possible on-Site issues, and assess whether any surrounding land uses may have and/or are currently impacting the environmental condition of the Site. During the Site reconnaissance, AMEC interviewed Mr. David Robinson, the current occupant utilizing the land for agricultural purposes, (the “Site representative”). The Site representative did not accompany AMEC during the Site reconnaissance. Ground cover conditions at the time of the Site reconnaissance were partially covered with dense vegetation which may have limited AMEC’s observations.

Furthermore, AMEC did not access/inspect the roofs of any on-Site structures due to safety concerns.

In completing the scope of work, AMEC did not conduct any intrusive investigations including sampling, analyses or monitoring.

Other contacts were made as required to evaluate the existing/historical Site operations including the following:

Name	Agency or Company	Position
Ms. Donna Currie	Ministry of the Environment	FOI Coordinator
Mr. Prem Lal	Technical Standards and Safety Authority	Coordinator, Public Information Services
Mr. John McIntosh	Region of Halton	Water Resources Specialist

These individuals and agencies were contacted as they may have information related to the environmental conditions of the Site. Records of the interviews and/or correspondence are provided in Appendix A.

2.0 SITE DESCRIPTION

2.1 Site Location

The Site is located on the north side of Dundas Street West, approximately 250 metres west of Sixth Line, in Oakville, Ontario (Figure 1). The Site lies in a typical municipal urban / rural setting in an area of mixed residential and agricultural land use.

2.2 Site Occupancy

Mr. David Robinson currently occupies the Site for agricultural use. Major operations at the Site include the harvesting of soy bean and hay. According to the Site representative, the Robinson family has farmed the Site since approximately 1985. According to the Site representative, the Site previously operated as an agricultural property.

2.3 Site Features

The Site is an irregular shaped property, approximately 197 hectares ("ha") (487 acres) in area. The southern portion of the Site is occupied by a farmstead consisting of six (6) structures consisting of one (1) two-storey residential dwelling, one (1) equipment shed, three (3) small storage sheds one (1) pumphouse.

According to the Site representative the residential dwelling was built before 1900 and is approximately 250 square metres ("m^2") (2691 square feet ("ft^2")) in total area. It consists of a stone foundation, with brick exterior walls and a shingled roof. It is finished with a mixture of carpet and hardwood flooring; lath and plaster walls and plaster and stucco ceilings on the first and second levels. The basement contained concrete floor and stone (foundation) walls. Heating is provided by way of heating oil stored in two (2) aboveground storage tanks (AST 1 and AST 2) located in the basement. AMEC observed an abandoned AST (AST 3) directly north of the dwelling, as well as various debris stored outside the dwelling. AMEC observed fruit trees east and west of the dwelling, these trees may have been part of historic orchards

The equipment shed is 185 m^2 (1991 ft^2) in area, and consists of a two-level structure with wooden walls, a metal roof and a concrete floor. The upper level of the structure is used for hay storage, and the lower level for housing various farming machinery. Various other vehicles and equipment was stored directly north of the shed including a school bus, trailer, work truck and various farming equipment. A foundation and remnants of a former structure and silo reported to have burned down in 1988 are visible directly south of the equipment shed.

The three (3) storage sheds measured 77 m^2 (830 ft^2), 12 m^2 (129 ft^2) and 11 m^2 (118 ft^2) in total area. Two (2) sheds were located directly north of the dwelling (Sheds 1 and 2) and one (1) shed is located south east of the dwelling (Shed 3). Shed 1 is constructed with wooden walls and a metal roof, the shed was utilized for the storage of various debris. Shed 2 is a metal shed

and utilized for storing various debris and equipment. Shed 3 was constructed entirely of wood and was vacant at the time of the Site Reconnaissance.

The pumphouse measured approximately 15 m^2 (161 ft^2) and was constructed of wooden walls and a wooden roof. Due to the unstable structural appearance of the pumphouse, AMEC was unable to access the interior portion of the structure.

The Site buildings covered approximately 0.02% of the total Site area. The remainder of the Site is used for agricultural purposes, particularly for crops such as soybean and hay. A woodlot was observed at the northern central portion of the Site. In addition, the southeast portion of the Site contained imported fill material and the remains of a former structure. This fill material was reportedly brought to the Site by a previous owner.

Selected photographs of the Site and surrounding land use are presented in Appendix B.

2.4 Site Services

According to the Site representative, the Site obtains its water from a private well located northeast of Site building 1. Sanitary wastewater is discharged to a septic system via an underground septic tank located south of Site building 1. Stormwater flows overland off-Site and eventually drains into Lake Ontario. Electrical service is supplied to the Site by Oakville Hydro overhead cables located along the driveway. Heating equipment at the Site is fuelled by fuel oil.

2.5 Physical Setting

The Site lies at an approximate elevation of 140 metres above sea level ("m.a.s.l."). The UTM coordinates of the Site are 4814100 and 601640. The topography across the Site is undulating with an overall relief of 20 m. Sixteen Mile Creek is located approximately one (1) kilometre ("km") (0.6 miles) south of the Site and flows southeast into Lake Ontario. In accordance with O. Reg. 153/04, the Site does not include land that is within 30 m of a "water body". However, there are a few small areas of the site where water has ponded and therefore further research would be required to determine if these are potential water bodies or storm water management ponds.

According to the Quaternary Geology of Ontario, Map 2556, published by the Ministry of Northern Development of Mines (MNDM), Map 2556, the geology in the vicinity of the Site is interpreted to consist of silt to silty clay matrix, high in matrix carbonate content and clast poor of the Halton Till (Ontario – Erie Lobe).

Bedrock Geology of Ontario, Map 2544, published by the Ministry of Northern Development and Mines, describes bedrock in the area to be of the Upper Ordovician. The Upper Ordovician consists of shale, limestone, dolostone, and siltstone, of the Queenston Formation.

The local ground water flow direction, based on topographic features and knowledge gained from other sites in the area, is expected to be to the south. Locally, however, the shallow ground water flow may be influenced by underground utility trenches, conduits, and structures, variations in soil type, and minor fluctuations in topography.

3.0 ADJACENT LAND USES

AMEC reviewed the current land uses of neighbouring properties from publicly accessible locations to assess possible environmental impacts to the Site that may arise from off-Site operations. As noted in Section 2.0, properties in the general area surrounding the Site are mixed agricultural and residential land uses.

Properties surrounding the Site are summarized as follows:

North of the Site

North of the Site was residential and agricultural properties. A communications tower is located approximately 180 metres north of the Site at 3270 Sixth Line.

East of the Site

Northeast of the Site was agricultural lands followed by residential properties, and Dundas Street West followed by a residential subdivision to the east and southeast. A Bell Canada station is located adjacent to the Site at 113 Dundas Street West.

South of the Site

Southeast of the Site was Dundas Street West followed by a residential subdivision, and the Dynasi Family Restaurant, Oakville Golf Range Ltd. and agricultural lands to the south and southeast.

West of the Site

West of the Site was agricultural lands and woodlots.

Summary of Findings

Based on observations of these current surrounding properties [from publicly accessible locations], it is AMEC's opinion that there are no significant environmental issues at the Site associated with current surrounding land use activities.

4.0 RECORDS REVIEW

The historical occupancy of the Site and the surrounding properties were reviewed through the use of reasonably available public information consisting of, but not limited to, archived aerial photographs, city directories and FIPs. The historical information reviewed was obtained from the following sources:

- Aerial photographs, available at the National Air Photo Library in Ottawa, Ontario, for the years 1934, 1962, 1979 and 1988 and from the City of Oakville website for 2006;
- City directories, available at the Metro Reference Library in Toronto, Ontario, for the years 2001, 1995, 1990, 1985 and 1979;
- Property Underwriter plans and reports from CGI, formerly the Insurer's Advisory Organization ("IAO"); and
- A search of land title was not conducted as a part of this investigation. A search of land ownership is unlikely to contribute any useful information regarding the environmental condition at the Site as the ownership of the property since the original development is well documented in other historical records.
- Available fire insurance plans did not provide coverage for this area of Oakville.

4.1 Aerial Photographs

The following significant information was inferred from the aerial photographs reviewed concerning the Site and its surrounding properties:

Date Roll No. Scale	Site	Surrounding Properties
1934 (Note - Northern portion of Site not visible on air photo)	The Site appears to consist of agricultural land with at least one (1) permanent structure present in the south central portion of the Site. A possible orchard is visible in the southeast corner of the Site	The properties surrounding the Site consist of residential and agricultural land. Located to the west of the Site, what is inferred to be Neyagawa Road is visible, south of the Site, a road presumed to be Dundas is depicted, and to the east of the Site Sixth line is visible. Farmsteads appear to the west and south of the Site.

Date Roll No. Scale	Site	Surrounding Properties
1962	A pond is visible in the southeast portion of the property. Two possible orchards are visible in the vicinity of the farmstead. A discoloured area in the southeast corner of the Site may potentially be fill materials	The properties surrounding the Site have not changed significantly since the 1934 aerial photograph.
1979	The Site does not appear to have changed significantly since the 1962 aerial photograph with the exception of the pond and discolouration described above no longer visible.	The properties surrounding the Site have not changed significantly since the 1962 aerial photograph.
1988	The Site does not appear to have changed significantly since the 1979 aerial photograph with the exception of a discolouration in the southeast corner of the Site. This discolouration may potentially be fill materials.	The properties surrounding the Site have not changed significantly since the 1979 aerial photograph, with the exception of a residential development being constructed south of the Site.
2006	The Site does not appear to have changed significantly since the 1988 aerial photograph.	The properties surrounding the Site to the north, east and west have not changed significantly since the 1979 aerial photograph. South of the Site has been developed into a residential subdivision

Aerial photographs are presented in Appendix C.

4.2 City Directories

According to the city directories reviewed, the following occupants were listed as being present at the Site:

Site

From	To	Occupant
2001	2001	L. Hang.
1990	2001	Douglas Brown.
1995	1995	Tim Baker.

Surrounding Properties

According to the city directories reviewed, the following occupants were listed at the properties surrounding the Site.

Address: Andover Road		
From 2001	To 2001	Individual names, inferred residential.
Address: Blackcombe Crescent		
From 2001	To 2001	Individual names, inferred residential .
Address: 382 Burnamthorpe Road West, adjacent to north property line		
From 2001	To 2001	4 Comm Integrated Technologies Inc.
From 2001	To 2001	All Care Landscape.
Address: Capilano Crescent		
From 2001	To 2001	Individual names, inferred residential
Address: Castle Hill Crescent		
From 2001	To 2001	Individual names, inferred residential
Address: Devonsley Crescent		
From 2001	To 2001	Individual names, inferred residential
Address: 384 Dundas Street West,		
From 1995	To 1995	Beaudry Landscaping + Maintenance.
From 1995	To 1995	D M Consultants Ltd.
From 1995	To 1995	River Oaks Development Inc.
Address: 399 Dundas Street West, adjacent to south property line		
From 1990	To 2001	Dynasi Family Restaurant.
Address: 471 Dundas Street West, adjacent to west property line		
From 2001	To 2001	Oakville Golf Range Ltd.
Address: Gill Crescent		
From 2001	To 2001	Individual names, inferred residential
Address: Grovehill Road		
From 2001	To 2001	Individual names, inferred residential
Address: Harman Gate		
From 2001	To 2001	Individual names, inferred residential
Address: Ironwood Crescent		
From 2001	To 2001	Individual names, inferred residential
Address: Lexington Road		
From 2001	To 2001	Individual names, inferred residential

Address: Longridge Crescent		
From 2001	To 2001	Individual names, inferred residential
Address: Neyagawa Boulevard		
From 1985	To 2001	No Listings.
Address: Red Maple Lane		
From 2001	To 2001	Individual names, inferred residential
Address: 3042 Sixth Line, 130 metres east of Site		
From 1990	To 1995	R & R Roofing.
From 1995	To 1995	C Ruys Roofing.
Address: Towne Boulevard		
From 1990	To 2001	Individual names, inferred residential
Address: Westchester Road		
From 2001	To 2001	Individual names, inferred residential
Address: Westfield Trail		
From 2001	To 2001	Individual names, inferred residential

4.3 Fire Insurance Plans

FIPs were not available for the Site or surrounding properties from the Library and Archives Canada collection. The unavailability of FIPs for the Site commonly suggests that the area was undeveloped at the time FIPs were in use (i.e., circa 1876 to 1973).

4.4 Property Underwriters Reports and Plans

AMEC contacted CGI (formerly the IAO) to enquire as to the existence of Property Underwriters Reports, Property Underwriters Plans and FIPs for the Site.

CGI had no records on file pertaining to the Site.

4.5 Previous Environmental Site Assessments and Geotechnical Reports

The following geotechnical reports were made available to AMEC

"Preliminary Geotechnical Investigation, Proposed Residential Development, Pendent Property, Dundas Street West between Neyagawa Blvd. and Sixth Line, Oakville, Ontario" AMEC Earth and Environmental, 17 February, 2006.

At the time of this investigation, the Site was previously used as farmland with a total area of approximately 113 ha. Generally, the Site is undulating with a maximum difference in the elevations of about 20 m among the 34 boreholes drilled. Based on the soil conditions

encountered in the boreholes, the soil profile consisted predominantly of topsoil overlying silty clay/clayey silt (disturbed native soil) underlain by clayey silt / silty clay till which in turn was underlain by weathered shale. In some boreholes, a transition zone consisting of till / shale soils was encountered between till and weathered shale.

"Preliminary Geotechnical Investigation, Proposed Residential Development, Lower Fourth Property, Dundas Street West and Sixth Line, Oakville, Ontario" AMEC Earth and Environmental, 24 February, 2006.

At the time of this investigation, the Site was used as farmland with a total area of approximately 205 acres. Generally, the Site was sloping from north to south with a maximum difference in the elevations of about 12 m among the 19 boreholes drilled. Based on the soil conditions encountered in the boreholes, the soil profile consisted predominantly of topsoil overlying silty clay/clayey silt (disturbed native) / fill underlain by clayey silt till which in turn was underlain by transition zone of till / shale soils overlying weathered shale.

Additionally, a Hydrogeological assessment is currently being conducted on the Site by R.J. Burnside & Associates Limited and a portion of the property is reported to have been associated with the North Oakville East Subwatershed Study.

4.6 Summary of Historical Records Review

Site History

Based on a review of the available information sources, it appears that the Site has been utilized for its current agricultural purposes prior to 1934. An orchard appears to be present on the southeast corner of the Site in the 1934 aerial photo, two orchards appear to the east and west of the residential dwelling in the 1962 aerial photo.

Surrounding Land Use History

Based on a review of the available information sources, the residential properties surrounding the Site were generally developed in 2001. Prior to development, these properties appeared to be utilized for agricultural purposes. Current agricultural properties and land uses appear to have been utilized since pre-1934.

Summary

Based on the historical review completed the following significant environmental issues were identified concerning the Site and the surrounding historical land use activities:

- The Site is currently and has historically been used for agricultural purposes; as such, the potential for residual herbicide and pesticide impact in the near surface topsoil exists. The agricultural uses included three orchards, which were located

east and west of the farmstead as well as the south east corner of the Site. Significant herbicide and pesticide use was a common practice in orchards. The orchards in the vicinity of the farmstead are visible in the 1962 aerial photo and the orchard in the southeast portion of the Site is visible in the 1934 aerial photograph; and

- A portion of the southeast corner of the Site exhibits discolouration which may potentially represent fill materials, this discolouration was noted in the 1962 and 1988 aerial photos.

5.0 REGULATORY AGENCY FILES AND DATABASE REVIEW

The following databases and documents were reviewed to further assess the environmental condition of the Site:

5.1 Local Municipal Agency

AMEC contacted Mr. John McIntosh to inquire if the Region of Halton had records of environmental regulatory non-compliance, if any, concerning the Site.

The Region of Halton had no records on file pertaining to the Site.

A copy of the Region of Halton response is provided in Appendix A.

5.2 Technical Standards and Safety Authority

Fuel storage at industrial facilities in Ontario is regulated by the *Technical Standards and Safety Act 2000* ("*TSS Act"*). The *TSS Act* has consolidated the seven acts that the TSSA previously administered, including the *Gasoline Handling Act* and the *Energy Act.* Under the *TSS Act*, the *Liquid Fuel Handling Regulation*, *Liquid Fuel Handling Code* and the *Environmental Management Protocol* (also known as GA1/99) have replaced the *Gasoline Handling Act*, The *Gasoline Handling Code* and *GH13* (1993 Environmental Cleanup Guideline). The *TSS Act* applies to all storage tank systems utilized for the storage and handling of gasoline, diesel and fuel oil. According to discussions with a representative of the Technical Standards and Safety Authority (TSSA) - Fuels Safety Division, underground storage tanks ("USTs") and aboveground storage tanks ("ASTs") installed under the *Liquid Fuel Handling Regulation*, *Liquid Fuel Handling Code* require registration with the TSSA. Fuel oil tanks utilized in residential buildings will also require registration with the TSSA.

The TSSA was contacted by telephone and requested to supply any available information concerning the presence of petroleum storage tanks, fuel spill records, accidents, or fuel-related incidents which may be registered on the subject or surrounding properties. AMEC was verbally informed by Mr. Prem Lal of the TSSA that there are no USTs registered for the Site or surrounding properties. In addition, there are no records of any incidents or spills ever having occurred at the subject Site or adjacent properties.

5.3 Ministry of the Environment

Through the Freedom of Information ("FOI") and Protection of Privacy Office the Ministry of the Environment ("MOE") was requested to identify any outstanding actions, violations, control orders, summons, complaints, spills hazardous waste documents, or certificates of approval for the subject site. The request to the FOI department involved an electronic search of their records since 1985. Information filed with the MOE prior to 1985 is not included in the FOI

records search. Retrieval of such information requires a manual document search by the MOE initiated by a specific request and additional fees.

The MOE had no records on file pertaining to the Site.

A copy of the MOE response is provided in Appendix A.

5.4 Provincial Database / Inventory Records

5.4.1 Waste Disposal Site Inventory

AMEC reviewed the document entitled "*Waste Disposal Site Inventory"*, prepared by the Waste Management Branch of the MOE (dated June 1991). No active or closed waste disposal sites were listed as being present within one kilometre ("km") of the Site.

5.4.2 Inventory of Coal Gasification Plant Waste Sites in Ontario

AMEC reviewed the document entitled "*Inventory of Coal Gasification Plant Waste Sites in Ontario*", prepared for the MOE (dated April 1987) and *Inventory of Industrial Sites Producing or Using Coal Tar and Related Sites in Ontario*, prepared for the MOE (dated November 1988). No coal tar or waste sites were listed as being present within 1 km of the Site.

5.4.3 Registered PCB Waste Storage Sites for the year 2004

AMEC reviewed the MOE computer database on Registered Polychlorinated Biphenyl ("PCB") Waste Storage Sites for the year 2004 (the most current). The Site and surrounding properties were not listed as PCB waste storage sites.

5.4.4 Registered Waste Generators for the year 2004

AMEC reviewed the MOE computer database on Registered Waste Generators for the year 2004 (the most current). The Site and surrounding properties were not listed as industrial waste generators.

5.4.5 Registered Waste Receivers for the year 2004

AMEC reviewed the MOE computer database on Registered Waste Receivers for the year 2004 (the most current). The Site and surrounding properties listed as industrial waste receivers.

5.4.6 Brownfields Environmental Site Registry

The MOE on-line Brownfields Environmental Site Registry was accessed on 25 June, 2007 to determine if any Records of Site Conditions ("RSCs") have been filed under Part XV.1 under the Environmental Protection Act ("EPA") for the Site or any of the surrounding properties. A search

of the registry indicated that no RSCs have been filed for the Site or any of the surrounding properties.

5.5 EcoLog Environmental Risk Information Services Ltd. ("ERIS")

Mattamy elected not to undertake an ERIS search for the Site.

5.6 Summary of Regulatory Database Review

Site

Based on a review of the regulatory database information sources, there was no environmentally significant information on record regarding the Site.

Surrounding Land Use

Based on a review of the regulatory database information sources, there was no environmentally significant information on record regarding the surrounding land uses.

6.0 SITE VISIT AND INTERVIEWS

The findings documented in this section are based on a combination of observations made by AMEC personnel at the time of the Site visit, as well as information provided by the Site representative and other individuals contacted as part of the interview process.

6.1 General Site Conditions and Housekeeping

In general, with the exception of a portion of the property in the vicinity of the farmstead, the Site appeared to be well maintained. AMEC did observe amounts of debris, numerous abandoned vehicles and farm equipment at the time of the reconnaissance.

6.2 Air Emissions

AMEC did not observe the presence of air emission sources at the time of the reconnaissance that could possibly affect the environmental condition of the Site (i.e., building surfaces and / or surficial soils). The only air emission sources observed at the Site by AMEC were exhausts from the Site's general building ventilation, kitchen and washroom vents. No significant environmental issues regarding air emissions at the Site have been identified based on the nature of the emission sources observed during the reconnaissance.

6.3 Chemical Storage and Handling

Small quantities (i.e., 1 to 5 litres ("L")) of janitorial cleaning and maintenance supplies were observed during the Site reconnaissance. The storage areas for these chemicals generally appeared to be tidy and free of significant staining. The floor in the storage areas was observed to be generally in good physical condition (i.e., no cracking or pitting). No open floor drains were observed to be present near the storage areas. Furthermore, no other chemicals or hazardous materials were observed indoors or outdoors at the time of the Site reconnaissance. Based on the previously referenced observations no significant environmental issues regarding chemical storage at the Site were identified.

The Site representative advised AMEC that no chemical spills have occurred at the Site. No evidence of chemical spills, accidental releases or significant staining inside the Site building were observed that would indicate the occurrence of major environmental events (such as spills) that may significantly impact the quality of the subsurface within the building footprint. Furthermore, similar observations were made concerning the outdoor areas of the Site that suggested the environmental quality of the subsurface has not been significantly impacted.

6.4 Designated Substances

Individual designated substance regulations have been developed for eleven chemical contaminants and are enforced by the Ministry of Labour ("MOL") under the Occupational Health and Safety Act ("OHSA"). Special regulations were made to prohibit, regulate, restrict,

limit, or control worker exposure to designated substances due to their toxic nature. The designated substances identified in OHSA include:

Asbestos	Vinyl Chloride
Arsenic	Benzene
Lead	Coke Oven Emissions
Ethylene Oxide	Acrylonitrile
Mercury	Isocyanates
Silica	

Given the nature of the Site building and property use, AMEC has focussed on the following designated substances.

6.4.1 Asbestos

Asbestos is a generic term that refers to a group of naturally occurring fibrous mineral silicates. The ability of asbestos to withstand high temperatures as well as its tensile strength, spinnability, resistance to chemicals, and other properties have resulted in hundreds of applications. Friable asbestos refers to materials which can be readily crumbled using hand pressure, separating asbestos fibres from the binding materials with which they are associated. Non-friable material refers to asbestos which is associated with a binding agent (such as tar or cement), that prevents the ready release of airborne fibres. Friable asbestos is commonly found in boiler and pipe insulation. Non-friable or bound asbestos is typically found in roofing tars, floor and drywall compound, plaster and precast asbestos cement products commonly referred to as “transite”.

AMEC was advised by the Site representative that an asbestos survey has not been conducted at the Site, and that asbestos-containing materials (“ACMs”) are not known to be present at the Site. Based on the date of construction of the Site building (i.e., pre 1900), ACMs may be present at the Site as the use of ACMs was not discontinued until the early 1990s. Potential ACMs were not observed during the Site reconnaissance; however, observations were made only in readily accessible areas of the existing buildings (i.e., not any concealed spaces such as behind walls or above ceilings).

The presence of ACMs can only be verified through multiple samples and analysis of suspect material samples as outlined in Ontario Regulation 278/05 *“Asbestos on Construction Projects and in Buildings and Repair Operations”*. If present at the Site, ACMs must be addressed through the implementation of an appropriate management or abatement plan to protect the health of persons working at the Site, as required under the OHSA and O.Reg. 278/05. Where ACMs are in poor or deteriorated condition and potential human health exposure concerns exist, ACMs may be addressed through repair, encapsulation, enclosure or removal. Appropriate management plans are also required where maintenance, alteration, renovation, or demolition activities undertaken at a Site may disturb these materials.

6.4.2 Lead

Lead is a heavy metal which is typically found in the following three forms:

- Metallic lead used to make water distribution pipes, electrical batteries, lead solder, and electric cable sheathes;
- Inorganic compounds often occurring as components of products, such as insecticides, pigments, paints, and glass; and
- Organic lead compounds, the most commonly known of which are tetramethyl lead and tetraethyl lead, used as antiknock additives to gasoline.

The presence of lead-based paints ("LBPs") in buildings represents the most significant hazard of all the above noted lead containing products where persons, notably small children, may ingest peeling or flaking LBPs. The generation of airborne lead containing dust created during renovation, demolition, or construction activities (i.e., during sanding and grinding), or like actions on deteriorated painted surfaces also comprises a potential health concern.

In 1976, the federal government passed the Hazardous Products (Liquid Coating Materials) Regulations under the Hazardous Products Act limiting the amount of lead for interior paints to 0.5%. Exterior and commercial paints could still contain lead. In 1991, members of the Canadian Paint and Coatings Association agreed to voluntary eliminate all added lead from their products. In April 2005, under the Canadian Hazardous Products Act, the Federal Government issued the Surface Coating Materials Regulations SOR/2005-109, which limits the amount of lead permissible in paints and other surface coating materials to 0.06% lead by dry weight (600 µg/g).

Some of the interior walls of the Site buildings contained painted surfaces. Given the date of construction of the Site building (i.e., pre-1900), it is likely that LBPs are present at the Site given the legislative definition of LBP in Canada was recently revised (2005) to include a much lower acceptable concentration of lead than was previously regulated. Observations made at the time of the Site reconnaissance indicated that the painted surfaces were in good physical condition.

The presence of LBPs can only be verified through sampling and analysis of suspect paint samples. If present at the Site, LBPs may be addressed through the implementation of an appropriate management or abatement plans to protect the health of persons working at the Site, as required under the OHSA. Where LBPs are in poor condition (i.e., peeling or flaking) and potential human health concerns exist, LBPs may be addressed through encapsulation or removal. Appropriate management plans are also required where maintenance, alteration, renovation, or demolition activities undertaken at a Site may disturb these materials.

6.4.3 Mercury

Minor amounts of mercury are commonly found in a variety of building materials including mercury vapour lamps and thermostats and other electrical control switches. Given the potential quantities of mercury present and their intended use, no potential concerns are expected.

6.5 Mechanical Equipment

Mechanical equipment including piston type elevators, vehicle hoists, loading dock lifts, and compactors comprise typical hydraulically operated devices. Such equipment contains hydraulic oils which are operated under high pressures and can be released into the environment as a result of leaks or equipment failure.

No hydraulically driven mechanical equipment was observed by AMEC at the time of the reconnaissance. The absence of such equipment at the Site was confirmed by the Site representative.

6.6 Methane

Methane is a colourless and odourless gas commonly formed by the decomposition of organic material. Methane is a large component of natural gas associated with active and closed waste disposal sites. Natural sources of methane include marshes, swamps, bogs, fens or coal and/or peat deposits. Potential risks associated with methane include explosion hazards where methane enters closed spaces and concentrations exceed the lower explosive limit.

The Site is not near (i.e., within 1 km) to any active or closed landfill sites. Consequently, methane gas is not inferred to be a significant environmental issue at the Site, however, fill was reported to be present in the southeast portion of the Site as well as the former structure locations.

6.7 Mould

Moulds (also known as “fungi”) are present everywhere in the natural environment, indoors and outdoors. Exposure to mould may occur indoors on water damaged building materials during occupancy, building maintenance and / or repair operations. The most common types of moulds are generally not hazardous. However, some moulds may be problematic to some people.

AMEC was advised by the Site representative that a mould survey / assessment has not been conducted at the Site and that mould is not known to be present at the Site.

Evidence of conditions that may promote mould growth (e.g., moist or wet conditions) were observed during the Site reconnaissance. These conditions were observed in the basement of the residential dwelling. Observations were made only in readily accessible areas of the existing buildings (i.e., did not include concealed spaces such as behind walls or above ceilings).

6.8 Odour

During the Site reconnaissance, AMEC did not identify any strong, pungent or noxious odours attributable to the operations of the facility.

6.9 Ozone-Depleting Substances

Ozone depleting substances ("ODSs") include any substances containing chlorofluorocarbon ("CFC"), hydrochlorofluorocarbon ("HCFC"), halon or any other material capable of destroying ozone in the atmosphere. ODSs have been used in rigid polyurethane foam and insulation, laminates, aerosols, air conditioners, fire extinguishers, cleaning solvents and the sterilization of medical equipment. Federal regulations introduced in 1995 required the elimination of production and import of CFCs by January 1, 1996 (subject to certain essential uses) and a freeze on the production and import of HCFC-22 by January 1, 1996. These regulations also require the complete elimination of HCFC-22 by the year 2020.

Apart from the presence of residential-type refrigerator / freezers, no other equipment was observed at the Site that could potentially contain ODSs.

6.10 Pesticides and Herbicides

AMEC was advised by the Site representative that neither pesticides nor herbicides are stored at the Site. The Site representative informed AMEC that pesticides and herbicides are used at the Site with their application being made by a licensed contractor.

6.11 Polychlorinated Biphenyls

PCBs were most commonly used in capacitors, transformers, circuit breakers, switch gears and lamp ballasts as synthetic insulating materials. The use of PCBs in electrical equipment was prohibited on July 1, 1980. However, PCBs may be present in older hydraulic equipment still in use after the July 1, 1980 cut-off date.

6.11.1 Electrical Transformers

As noted in Section 2.0, electrical service is supplied to the Site by Oakville Hydro via overhead cables located along the driveway. Suspect PCB-containing transformers were not observed at the Site.

6.11.2 Light Ballasts

The presence of PCB containing light ballasts were not observed during the Site visit.

6.11.3 PCB Storage Sites

As discussed in Section 5.4, the MOE "*Ontario Inventory of PCB Storage Sites"* did not list the Site as a registered PCB waste storage site.

6.12 Radioactive Materials

The Canadian Nuclear Safety Commission ("CNSC"), formerly the Atomic Energy Control Board, under the Nuclear Safety and Control Act, is responsible for the management and licensing of radioactive materials, to ensure that the use of nuclear energy does not pose undue risk to health, safety, security and the environment. The CNSC achieves regulatory control of nuclear facilities and nuclear materials through a comprehensive licensing system, which is administered through the cooperation of federal and provincial government departments such as health, environment, transport and labour.

Radioactive materials or equipment (labelled as such) were not observed at the Site. No testing for the presence of radioactive material was undertaken.

6.13 Radon

Radon is a naturally occurring gas produced by the decay of Uranium-238 that tends to concentrate in formations of granite, sandstone, coal, phosphate and uranium deposits. Radon is colourless, odourless and tasteless and tends to percolate up through soil where it may enter and accumulate in basements of buildings through foundation cracks and joints. Because the existence of radon is dependent upon geological factors, it is more of a regional concern than site-specific.

The concentration of radon daughters is measured in units of working level ("WL"), which is a measure of the potential alpha particles energy per litre of air. The annual exposure limit for the general public is 0.01 WL with the annular occupational exposure limit being 4.0 WL. In homes and other non-occupational settings, the maximum permissible annual average concentration of radon daughters caused by the operation of a nuclear facility is 0.02 WL. Health Canada recommends 0.1 WL as an upper limit.

The location of the Site was evaluated against the locations of a soil radon gas study published by the Ontario Geological Survey ("OGS") entitled *"Soil Radon Gas Study of Southern Ontario"* (OGS, Open File Report 5847, 1993). The City of Oakville and the location of the Site are not within the four main study areas investigated by the OGS. AMEC is not aware of other records of the presence or emission of radon gas in the immediate area of Oakville, Ontario.

Based on the information obtained from the previously referenced sources, AMEC does not suspect radon gas to be a significant environmental issue at the Site.

6.14 Site In-Filling

Based on discussions with the Site representative at the time of the reconnaissance, the presence of significant amounts of fill material is inferred to be present at the Site. An unknown quantity of fill was placed at the southeast corner of the property by a previous owner. Additionally, AMEC noted ramps constructed of fill still in place for both former structures. The origin and conditions of the described fill is unknown. Consequently, the presence of fill material containing suspect deleterious products may present a significant environmental issue.

6.15 Spills, Surface Staining and Stressed Vegetation

The Site representative advised AMEC that no chemical spills have occurred at the Site. No evidence of chemical spills, accidental releases or significant staining was observed inside the Site buildings. AMEC conducted a walkover of the exterior landscaped areas to identify any areas of significant surface staining and/or stressed vegetation. No areas of significant surface staining or stressed vegetation were observed at the Site, however, such areas may have been obscured by the dense vegetation conditions at the time of the reconnaissance.

6.16 Storage Tanks

6.16.1 Aboveground Storage Tanks

AMEC was advised by the Site representative, and observed the presence of three (3) ASTs at the Site during the reconnaissance. The ASTs currently present at the Site are as follows:

Name	Location	Volume [L]	Type	Date Installed	Contents
AST-1	Basement of Residential Dwelling	1135 L	Steel	1995	Fuel Oil
AST-2	Basement of Residential Dwelling	1135 L	Steel	2001	Fuel Oil
AST-3	Approx. 20 m northwest of Residential Dwelling	1135 L	Steel	Unknown	Empty – Reported to have been used for fuel oil

Note: L - litres

At the time of the reconnaissance, AMEC observed that the ASTs at the Site were not provided with secondary containment and / or vehicle protection.

6.16.2 Underground Storage Tanks

AMEC was advised by the Site representative that USTs may be present on Site. Furthermore, a fill pipe and gasoline pump was observed during the Site reconnaissance suggesting the presence of at least one UST. The site representative had no knowledge of the gasoline pump or associated tanks.

6.17 Urea Formaldehyde Foam Insulation

Urea formaldehyde foam insulation ("UFFI") is a thermal insulation material that is pumped into interstitial spaces between the walls of buildings where it hardens to form a solid layer of insulation. The sale and installation of UFFI was banned for health-related reasons because of the formation of formaldehyde gas, which is released from the UFFI to the building interior.

AMEC was advised by the Site representative that he is not aware of the presence of UFFI at the Site. Visual indicators suggesting the possible presence of UFFI were not observed at the Site. In addition, given the age of the Site building (pre 1900), AMEC suspects that UFFI is not likely present at the Site, since UFFI was only used for a short period in the early 1970s.

6.18 Waste Management

6.18.1 Liquid Waste

The Site representative advised AMEC that, except for sanitary wastewater, the Site does not generate, store or dispose of liquid wastes from general operations. The generation, storage or disposal of liquid industrial wastes was not observed at the Site at the time of the Site reconnaissance.

As mentioned in Section 5.4, the Site is not listed in the 2004 MOE computer database as a registered generator of liquid industrial or hazardous waste.

The Site representative advised AMEC that no spills have occurred at the Site. Evidence of spills, accidental releases or significant staining inside the Site building, or in exterior areas where the ground surface was exposed were not observed at the time of the Site reconnaissance. Consequently, the occurrences of major environmental events (such as spills) that may have significantly impacted the quality of the subsurface at the Site are not suspected.

AMEC was informed by the Site representative that a septic bed is located at the south side of the residential dwelling.

6.18.2 Solid Waste

Based on discussions with the Site representatives, and on observations made by AMEC during the Site reconnaissance, it is AMEC's understanding that the Site generates only non-hazardous solid waste from general farm operations. Non-hazardous solid waste generated at the Site are

stored in a storage bins located within the residential dwelling, and removed for off-Site disposal on a regular basis.

6.19 Wells

Ontario Regulation 903 ("O. Reg. 903") (amended to O. Reg. 128/03) sets the standards for the construction, maintenance and abandonment of water wells and licensing of water well contractors and technicians in the province of Ontario. Under the regulation, any well that is not being used or maintained for future use as a well must be abandoned in accordance with the procedures set forth in the regulation. This regulation also applies to monitoring and test wells such as those routinely installed for environmental and/or geotechnical testing purposes. Artesian or flowing wells must also be abandoned unless a device can be installed to prevent the well from flowing. O. Reg. 903 also applies to dry wells or to wells that permit the movement of natural gas or other contaminants between subsurface formations or between formations and the ground surface. O. Reg. 903 does not apply to oil and gas wells.

6.19.1 Water Wells

The safety of drinking water in the province of Ontario is legislated under the Drinking Water Systems Regulation (known as O. R*eg. 170/03; amended to O. Reg. 165/04)* made under the *Safe Drinking Water Act.* The regulation defines requirements for the following types of systems that supply potable water in the province: "large municipal non-residential systems", "large municipal residential systems", "large non-municipal non-residential systems" "non-municipal seasonal residential systems", "non-municipal year-round residential systems" and "public facilities".

The Site is presently serviced with two water wells. The wells are located west of the residential dwelling. The depth of the wells are unknown. Water from the well is used for domestic purposes. No other wells (i.e., test or disposal) were observed by AMEC or reported at the Site by the Site representative.

6.19.2 Other Wells

The Site is presently serviced with 10 monitoring wells and a number of piezometers. The wells are located across the Site and were installed as part of a hydrogeological investigation currently being conducted on the Site by R.J. Burnside & Associates Limited. An additional well is reported to be associated with the North Oakville East Subwatershed Study conducted in August 2004. The wells are bedrock wells with a reported depth between 4.1 and 6.1 metres.

6.20 Other Observations

Exposure to bird/bat droppings, rodent excreta and raccoon droppings can cause adverse health effects in humans. As a result, accumulation of this material should be kept to the lowest practical level.

Visible bird/bat droppings, evidence of rodent excreta or racoon droppings were not observed during the Site reconnaissance; however, observations were made only in readily accessible areas of the existing buildings (i.e., did not include concealed spaces such as behind walls or above ceilings).

7.0 CONCLUSIONS

Based on the Phase I ESA completed by AMEC conducted on 28 May and 20 June 2007, there is evidence of potential or actual contamination associated with the following activities related to the Site.

- The Site is currently and has historically been used for agricultural purposes including three historic orchards, which were located east and west of the farmstead as well as the southeast corner of the Site. Significant herbicide and pesticide use was a common practice in orchards, as such, the potential for residual herbicide, pesticide lead and arsenic impact in the near surface topsoil exists. Additionally, AMEC noted the presence of four pesticide spray tanks in the vicinity of the equipment shed as well as the southeast portion of the property. The orchards in the vicinity of the farmstead are visible in the 1962 aerial photo and the orchard in the southeast portion of the Site is visible in the 1934 aerial photograph;

- A portion of the southeast corner of the Site exhibits discolouration which may potentially represent fill materials, this discolouration was noted in the 1962 and 1988 aerial photos, furthermore, AMEC noted fill materials used in the construction of ramps for both former structures; and

- AMEC observed a fill pipe and gasoline pump during the Site reconnaissance suggesting the presence of at least one UST.

In addition, the following minor environmental issues were noted.

- AMEC observed various abandoned vehicles and farm equipment on Site; and

- Based on the age of the residential dwelling (pre-1900s) the potential presence of hazardous materials including but not limited to asbestos containing materials (ACM), lead containing materials (LCM), mercury, PCBs, etc., exist in the building construction. Observations made were limited and did not identify any evidence of these materials.

8.0 RECOMMENDATIONS

Based on the findings of the Phase I ESA, a Phase II ESA is recommended as a means of addressing the surficial topsoil material at the Site from any impact by pesticide/herbicide use associated with the agricultural farming practices including the historic orchards. Additionally, AMEC recommends assessing the quality of fill material in the southeast portion of the property as well as from both former structure ramps.

The ASTs located on Site should be decommissioned in accordance with provincial regulations prior to building demolition as part of the future proposed residential development, additionally, the UST and associated gas pump should be removed along with any petroleum impacted soils.

The potable water wells and monitoring wells located on-Site should be decommissioned in accordance with Section 21 of Ontario Regulation 903.

Appropriate management plans should be prepared for ACMs, LBPs and PCBs if future repair, renovation or demolition activities are planned in the areas of the Site building suspected to contain these materials.

9.0 ASSESSOR QUALIFICATIONS

The report was prepared and reviewed by the undersigned, employees of AMEC Earth & Environmental, a division of AMEC Americas Limited. AMEC is one of North America's leading engineering firms, with more than 50 years of experience in the earth and environmental consulting industry. The qualifications of the assessors involved in the preparation of this report are provided in Appendix D.

10.0 CLOSURE

This report was prepared for the exclusive use of Mattamy Development Corporation, and is intended to provide a Phase I Environmental Site Assessment ("ESA") on the Site 237 Dundas Street West, Oakville, Ontario at the time of the Site visit. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from AMEC will be required. With respect to third parties, AMEC has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the Phase I ESA of the property conducted by AMEC. It is based solely on the conditions of the Site encountered at the time of the Site visit on 28 May and 20 June, 2007, supplemented by a review of historical information and data obtained by AMEC as described in this report, and discussion with a representative of the owner/occupant, as reported herein. Except as otherwise maybe specified, AMEC disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to AMEC after the time during which AMEC conducted the Phase I ESA.

In evaluating the property, AMEC has relied in good faith on information provided by other individuals noted in this report. AMEC has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. AMEC accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

AMEC makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

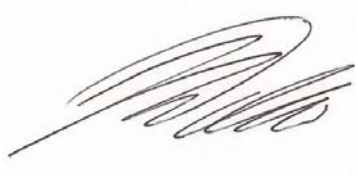
This Report is also subject to the further Standard Limitations contained in Appendix E.

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Respectfully Submitted,

AMEC Earth & Environmental,
a Division of AMEC Americas Limited

Prepared by: Reviewed by:



Jonathan Wakani, B. Sc.
Environmental Site Assessor

Jeff Carson, P. Eng.
Associate Environmental Engineer

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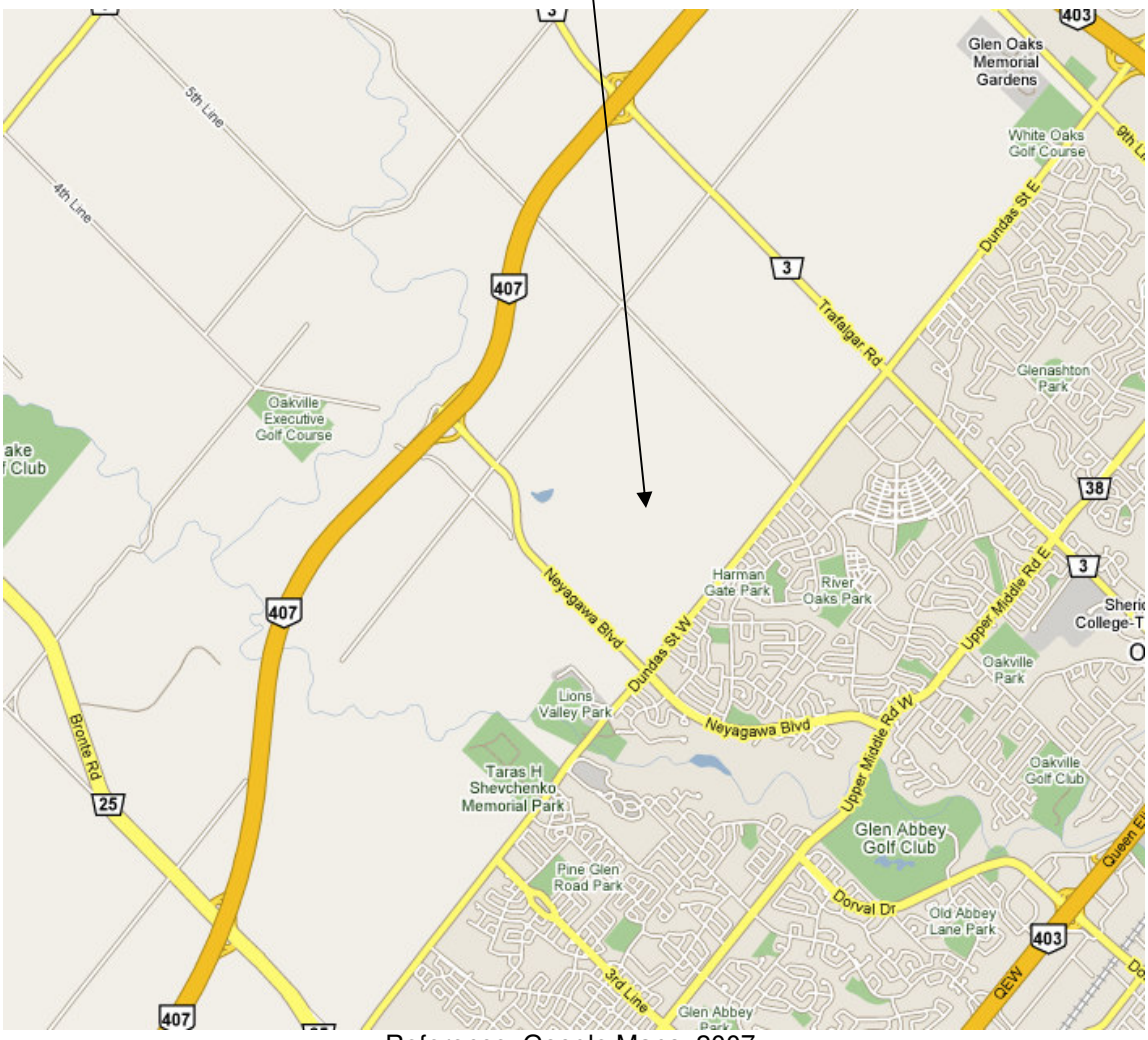
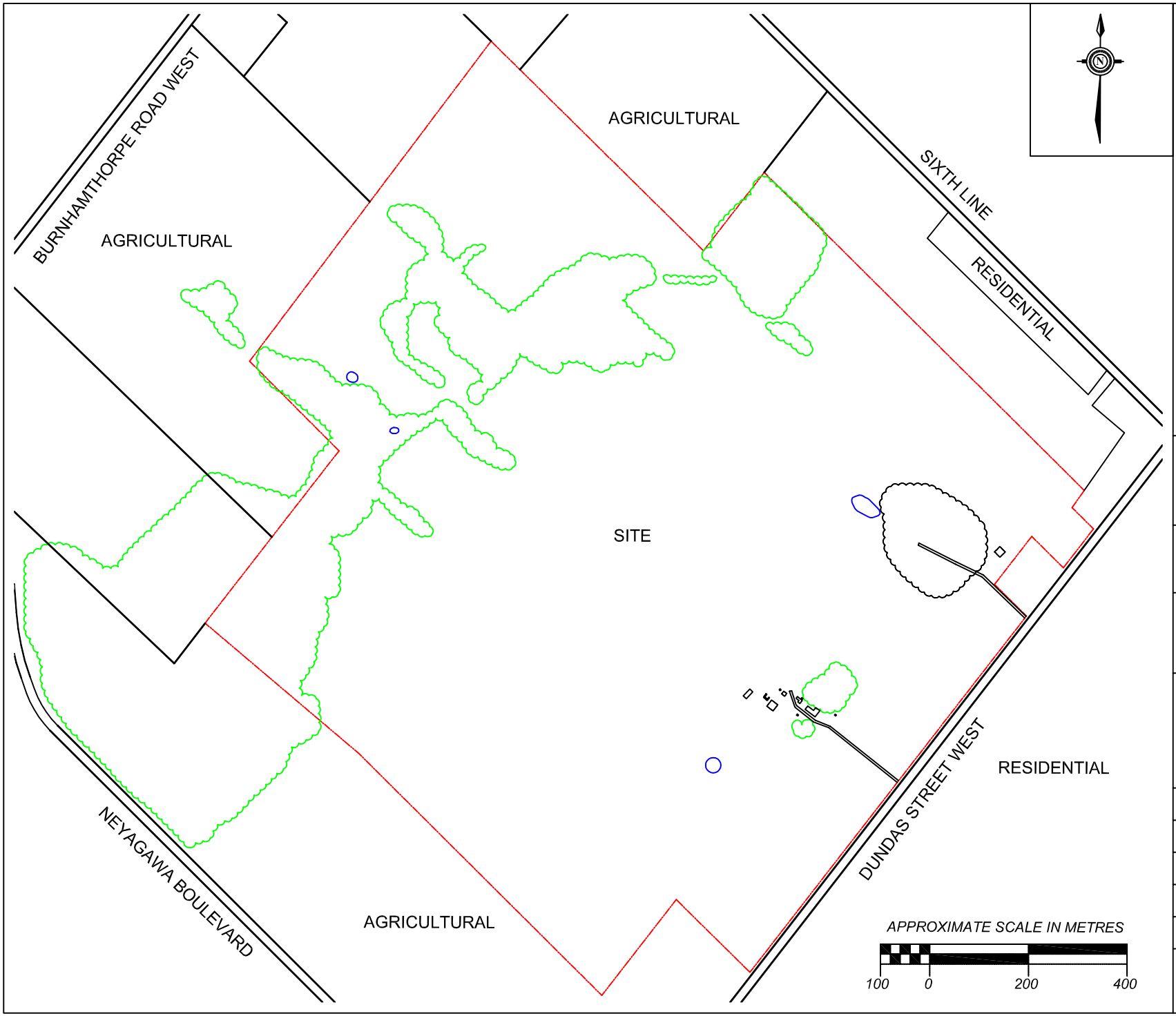
SITE



Reference: Google Maps, 2007.

amec	Date: June 2007	Scale: Not to Scale	Project No.: TT73055
237 Dundas Street West Oakville, Ontario	Drawn by: JW	Approved by: JC	Figure 1 : Site Location Map



LEGEND

- APPROXIMATE SITE BOUNDARY
- WATER
- WOOD LOT
- POTENTIAL FILL LOCATION

NOTE: Locations of features approximate.

Drawing based off the City of Oakville Interactive Mapping website.

amec

TITLE:
SITE LAYOUT PLAN 1

PROJECT:
PHASE I
ENVIRONMENTAL ASSESSMENT
237 Dundas Street West, Oakville, Ontario

CLIENT:
Mattamy Development Corporation

DRAWN BY: JW

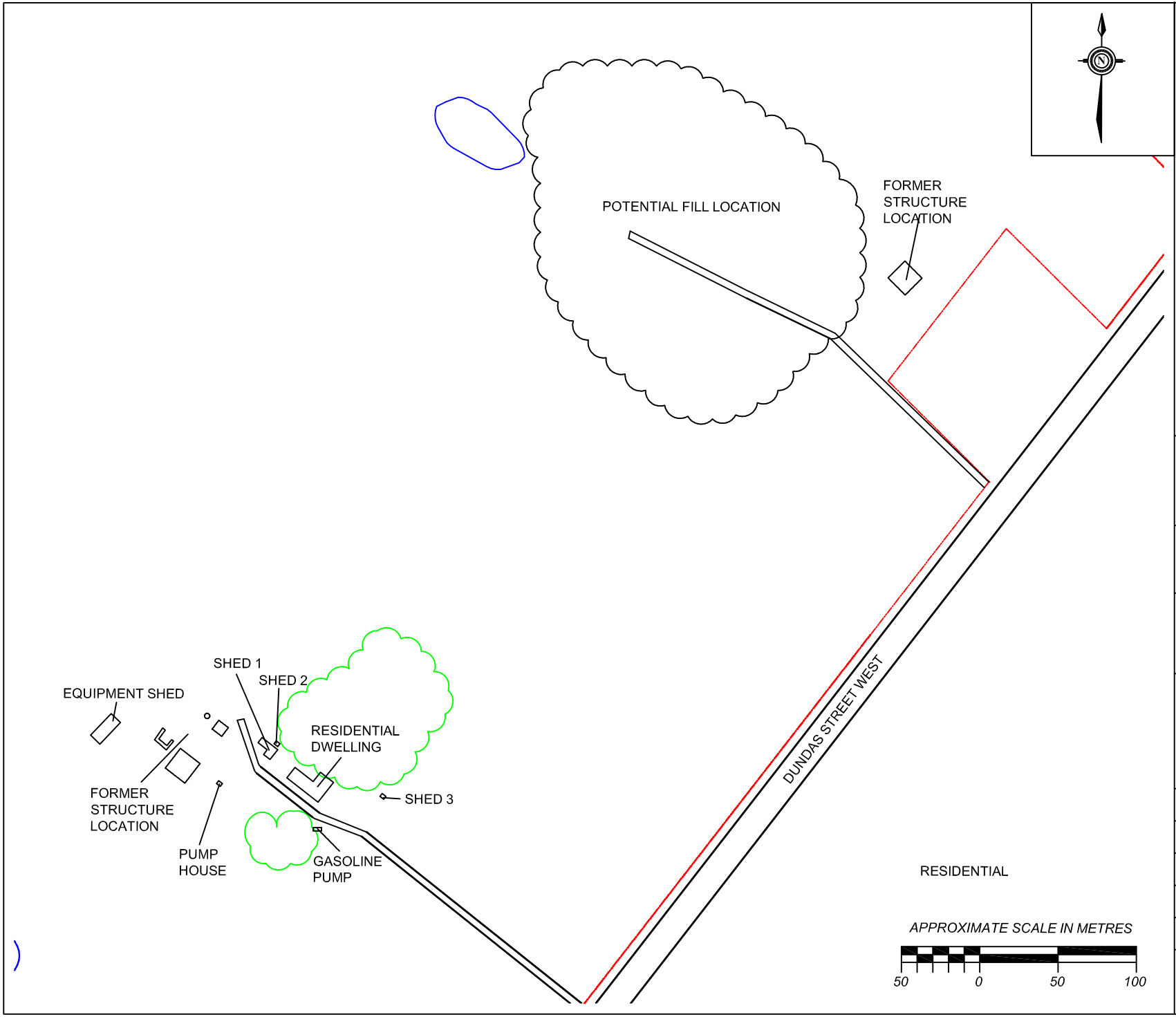
CHECKED BY: JC

DATE: June 2007

PROJECT NO: TT73055

SCALE: As Indicated

FIGURE NO: 2



LEGEND

- APPROXIMATE SITE BOUNDARY
- WATER
- WOOD LOT
- POTENTIAL FILL LOCATION

NOTE: Locations of features approximate.

Drawing based off the City of Oakville Interactive Mapping website.

amec

TITLE:
SITE LAYOUT PLAN 2

PROJECT:
PHASE I
ENVIRONMENTAL ASSESSMENT
237 Dundas Street West, Oakville, Ontario

CLIENT:
Mattamy Development Corporation

DRAWN BY: JW

CHECKED BY: JC

DATE: June 2007

PROJECT NO: TT73055

SCALE: As Indicated

FIGURE NO: 3

APPENDIX A

REGULATORY CORRESPONDENCE AND INTERVIEWS

RECORD OF INTERVIEW – PROJECT # TT73055

Purpose of Interview (PI ESA / Due Diligence ESA)	PI ESA		
Date of Interview	20 June 2007	**Format (phone or meeting)**	Meeting
Site Address	237 Dundas Street West, Oakville, ON		
Interviewee & Affiliation & Contact Number	David Robinson		
AMEC Interviewer / Office Location	Jon Wakani - Hamilton		

SITE INFORMATION

1) Describe land use history. Was the property ever used for industrial use, dry cleaning, a garage or bulk liquid dispensing facility, including a gasoline outlet?

- Always Agricultural

2) Are you aware of any environmental issues associated with the subject property such as waste disposal, landfilling, chemical use and / or storage (including spills), above or underground storage tanks, MOE orders, etc.? (obtain details) Yes No

- Landfilling – Southeast cornera
- 2 ASTs, 2 in basement of residential dwelling, 1 dumped outside (empty)
- Gasoline pump on-Site

3) Are you aware of any environmental building management issues such as asbestos containing materials, PCBs in electrical equipment, odour, mould, indoor air quality, UFFI, ODSs, lead-based paints, etc.? (obtain details) Yes No

- No

4) Are you aware of any site-specific permits, waste generator number(s), certificates of approval, water well records or sewer use / discharge permits? Yes No

- No

5) Are you aware of any current or historical environmental concerns associated with adjacent properties? (obtain details)
Yes No

- No

6) Are you aware of any previous environmental investigations, inspections, audits or reports (e.g., environmental assessment and remediation, tank removals, asbestos or mould surveys) for the subject property or adjacent properties? Yes No

- Geotechnical Drilliing

7) Is there anyone else AMEC should contact for additional environmental information? (name, title, phone no.) Yes No

- No

Ministry of the Environment

Freedom of Information and Protection of Privacy Office

12th Floor
40 St. Clair Avenue West
Toronto ON M4V 1M2
Tel: (416) 314-4075
Fax: (416) 314-4285

Ministère de l'Environnement

Bureau de l'accès à l'information et de la protection de la vie privée

12e étage
40, avenue St. Clair ouest
Toronto ON M4V 1M2
Tél. : (416) 314-4075
Téléc. : (416) 314-4285

Ontario

July 20, 2007

Mr. Jonathan Wakani
AMEC Earth and Environmental
1 - 505 Woodward Avenue
Hamilton ON L8H 6N6

Dear Mr. Wakani:

RE: *Freedom of Information and Protection of Privacy Act* Request
Our File # A-2007-03130, Your Reference TT73055

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 237 Dundas Street West, Oakville.

After a thorough search through the files of the Ministry's Central Region, Environmental Assessment and Approvals Branch, Environmental Monitoring and Reporting Branch, Investigations and Enforcement Branch, Safe Drinking Water Branch, Sector Compliance Branch, Spills Action Centre, no records were located responsive to your request. To provide you with this response and in accordance with Section 57 of the *Freedom of Information and Protection of Privacy Act*, the fee owed is $30.00 for 1 hour of search time @ $30.00 per hour. **We have applied the $30.00 for this request from your initial payment. This file is now closed.**

If you object to any decision I have made, you may request a review by contacting the Information and Privacy Commissioner/Ontario, 2 Bloor Street East, Suite 1400, Toronto, Ontario M4W 1A8 (800-387-0073 or 416-326-3333). Please note that there is a $25.00 fee and you only have 30 days from receipt of this letter to request a review.

If you have any questions regarding this matter, please contact Liz Mico at (416) 212-0559.

Yours truly,

Donna Currie
FOI Coordinator
Information Management and Access Branch

THE REGIONAL MUNICIPALITY OF HALTON
1151 BRONTE ROAD
OAKVILLE, ONTARIO, CANADA L6M 3L1

PLANNING & PUBLIC WORKS DEPARTMENT
PLANNING AND TRANSPORTATION SERVICES
Tel: 905-825-6000 Fax: 905-825-8822
Toll free: 1-866-4HALTON (1-866-442-5866)

July 17, 2007

Jonathan Wakani, B.Sc..
AMEC Earth & Environmental
505 Woodward Avenue, Unit 1
Hamilton, Ontario
L8H 6N6

Dear Mr. Wakani:

Re: Search Results: Halton's Hazardous Land Use and Chemical Occurrence Inventory
237 Dundas Street West, Oakville, Ontario (Property)

In reference to your written request for information dated June 20, 2007 and the signed waiver June 20, 2007, Halton Region staff reviewed the Region's *Hazardous Land Use and Chemical Occurrence Inventory* and have summarized the information found in Table 1, attached.

Please be reminded that this information was obtained from a variety of sources and dates as listed.

Halton Region cannot guarantee or warrant that this information is accurate or complete nor can the Region be held responsible for any claim or liability that can or may arise from the provision of this information.

If you would like to obtain information regarding sewer discharge violations or spills to the sanitary sewer, please contact Victor Vathy, Environmental Services Division, Ext. 7724.

If you have any questions regarding this information, please contact the undersigned at (905) 825-6000 ext. 7512.

Yours truly,

John McIntosh, B.Sc.
Water Resources Specialist

Table 1 Search Results: 237 Dundas Street West, Oakville, Ontario (Property)

Information Source	Available Date of Information Source	Last Updated	Information
Halton Region's Geographic Information System (GIS), Halton View	January 1, 1950 – December 31, 2005	June, 2006	No records found
Regional and Local Planning Files	January 1, 1950 – December 31, 2005	February, 2005	No records found
Halton Region's Business Directories	January 1, 1977 – December 31, 2000	December, 2000	No records found
Chamber of Commerce Business Directories	January 1, 1977 – December 31, 2001	December, 2001	No records found
Technical Standards and Safety Authority's Inventory of Retail Fuel Storage Tanks	January 1, 1950 – June 30, 2006	July, 2006	No records found
Environment Canada's National Pollutant Release Inventory	January 1, 1994 – December 31, 2004	June, 2006	No records found
MOE's Hazardous Waste Information System (Carriers, Generators, and Receivers)	January 1, 1995 – December 31, 2004	June, 2006	No records found
MOE's Certificate of Approvals	January 1, 1990 – March 31, 2006	June, 2006	No records found
MOE's Waste Disposal Site/Landfill Inventory	January 1, 1950 – December 31, 1999	January, 2000	No records found
MOE's Inventory of PCB Storage Sites	January 1, 1986 – June 30, 2004	July, 2006	No records found
MOE's Spills Action Centre Inventory	January 1, 1988 – December 31, 2005	June, 2006	No records found
MOE's Pesticide Licensee Database	January 1, 1986 – May 31, 2006	June, 2006	No records found
MOE's Environmental Bill of Rights	January 1, 1994 – Present	Present	No records found
Fire Insurance Plans	Various dates between 1904 and 1971	December, 2001	No records found

APPENDIX B

PHOTOGRAPHS

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. TT73055

PROJECT Phase I Environmental Site Assessment

LOCATION 237 Dundas Street West, Oakville, Ontario **ENCLOSURE** 1

PHOTOGRAPH	1

Description

On-Site residential dwelling.

PHOTOGRAPH	2

Description

View of neighbouring residential properties to the south.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. TT73055

PROJECT Phase I Environmental Site Assessment

LOCATION 237 Dundas Street West, Oakville, Ontario **ENCLOSURE** 2

PHOTOGRAPH	3

Description
Gasoline pump and fill pipe.

PHOTOGRAPH	4

Description
Pesticide / herbicide spray tanks.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. TT73055

PROJECT Phase I Environmental Site Assessment

LOCATION 237 Dundas Street West, Oakville, Ontario **ENCLOSURE** 3

PHOTOGRAPH	5

Description

Abandoned vehicles near former structure.

PHOTOGRAPH	6

Description

Slope of reported fill area.

APPENDIX C

AERIAL PHOTOGRAPHS

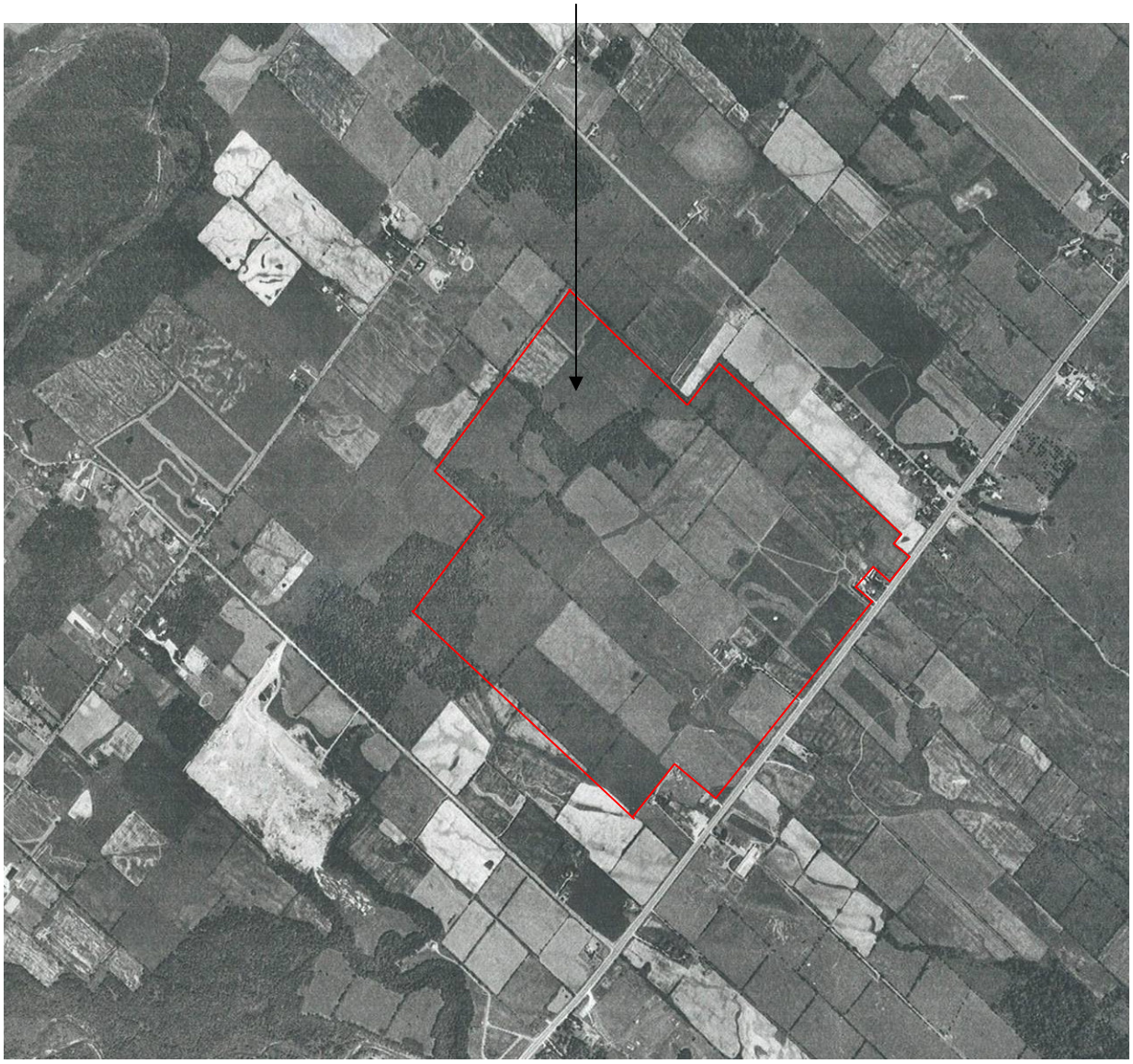
amec	Date: June 2007	Scale: Not to Scale	Project No.: TT73055
Aerial Photograph 1934	Drawn by: SG	Approved by: JC	Aerial Photographs Provided by the National Air Photo Library.

SITE

N

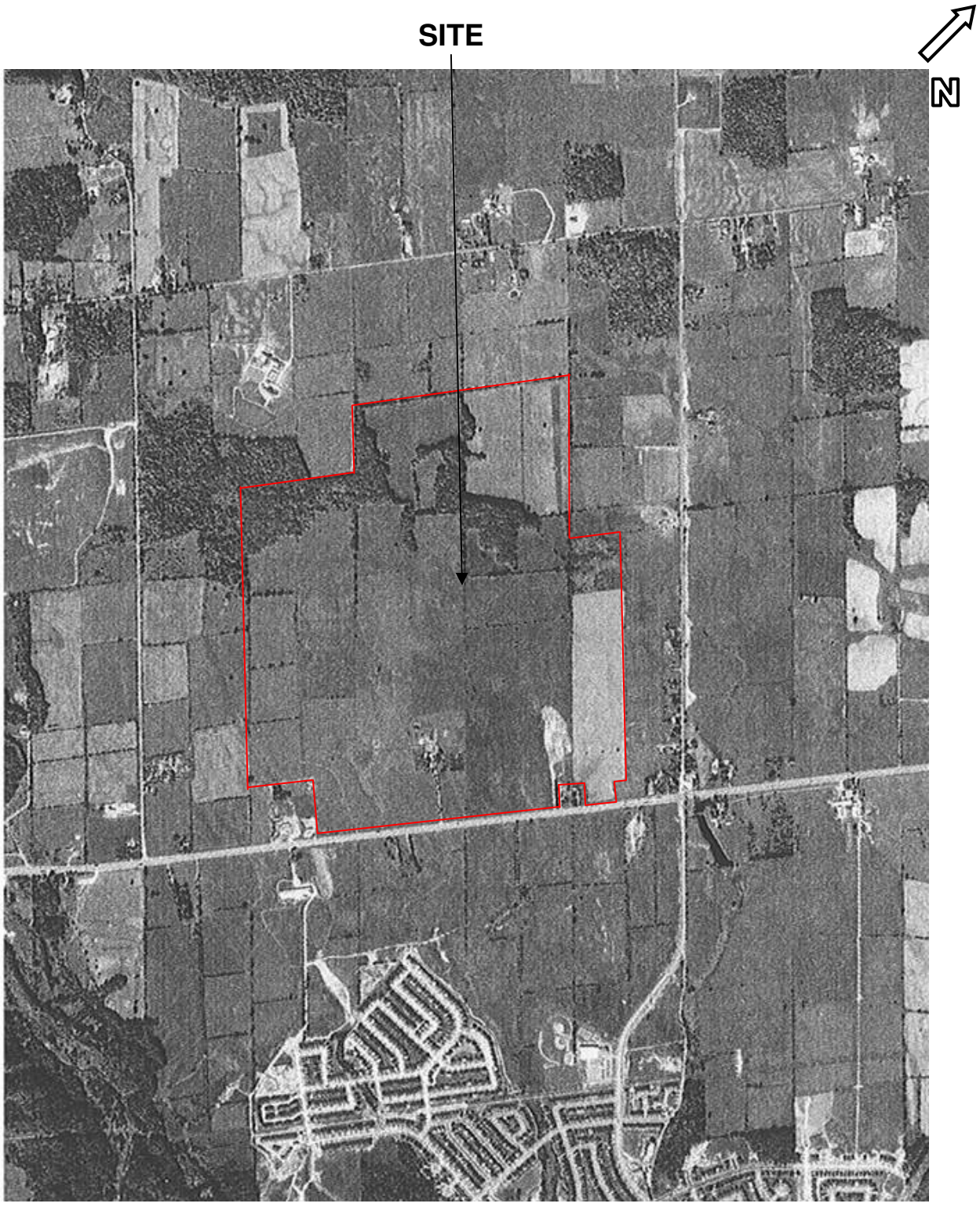
amec	Date: June 2007	Scale: Not to Scale	Project No.: TT73055
Aerial Photograph 1962	Drawn by: SG	Approved by: JC	Aerial Photographs Provided by the National Air Photo Library.

SITE



N

amec	Date: June 2007	Scale: Not to Scale	Project No.: TT73055
Aerial Photograph 1979	Drawn by: SG	Approved by: JC	Aerial Photographs Provided by the National Air Photo Library.



amec	Date: June 2007	Scale: Not to Scale	Project No.: TT73055
Aerial Photograph 1988	Drawn by: SG	Approved by: JC	Aerial Photographs Provided by the National Air Photo Library.

SITE

N

amec	Date: June 2007	Scale: Not to Scale	Project No.: TT73055
Aerial Photograph 2006	Drawn by: JW	Approved by: JC	Aerial Photographs Provided by City of Oakville Interactive Mapping Website.

APPENDIX D

QUALIFICATIONS OF THE ASSESSOR

Jonathan Wakani, B.Sc. – Environmental Site Assessor

Mr. Wakani has been involved in a variety of environmental site assessments for various clients. Mr. Wakani has a Bachelor of Science from Brock University. Mr. Wakani's skills have been applied to several Phase I and II Environmental Site Assessments as well as remediation projects and designated substance surveys throughout Southern Ontario on both developed (residential, commercial and industrial) and undeveloped parcels of land. Mr. Wakani has also conducted field investigations and delineation studies in Labrador. Mr. Wakani also has experience in conducting waste audits. Responsibilities at AMEC have included field investigations, liaison with regulatory agencies, evaluating laboratory test data, and report preparation.

Jeff Carson, P.Eng. – Associate Environmental Engineer

Manager of Hamilton/Niagara Environmental Operations

Jeff Carson is an Associate Environmental Engineer in AMEC's Hamilton Office. Mr. Carson is currently responsible for the overall environmental operations for the Hamilton/Niagara Region and has over twelve years of combined environmental engineering and environmental field experience in both the private and public sectors. Mr. Carson's responsibilities include overall project management, technical review, quality control, budgeting, and client liaison. Mr. Carson's experience includes the completion in excess of 300 Phase I, II and III environmental site assessments throughout the provinces of Ontario, Alberta, and Manitoba. Mr. Carson has managed and completed several environmental compliance audits, designated substance sampling projects and large remediation jobs for numerous commercial/industrial properties and municipalities (including the City of Hamilton) and has served clients in the following sectors: petroleum, automotive, manufacturing, land development, real-estate, finance, education, government (municipal, provincial and federal), chemical production, recycling, pharmaceutical, transportation, aggregate sector, and major retail.

APPENDIX E

LIMITATIONS

Limitations

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:

   (a) The Standard Terms and Conditions which form a part of our 26 January 2007, Professional Services Contract;

   (b) The Scope of Services;

   (c) Time and Budgetary limitations as described in our Contract; and,

   (d) The Limitations stated herein.

2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.

3. The conclusions presented in this report were based, in part, on visual observations of the site and attendant structures. Our conclusions cannot and are not extended to include those portions of the site or structures which were not reasonably available, in AMEC's opinion, for direct observation.

4. The environmental conditions at the site were assessed, within the limitations set out above, having due regard for applicable environmental regulations as of the date of the inspection. A review of compliance by past owners or occupants of the site with any applicable local, provincial or federal by-laws, orders-in-council, legislative enactments and regulations was not performed.

5. The site history research included obtaining information from third parties and employees or agents of the owner. No attempt has been made to verify the accuracy of any information provided, unless specifically noted in our report.

6. Where testing was performed, it was carried out in accordance with the terms of our contract providing for testing. Other substances, or different quantities of substances testing for, may be present on site and may be revealed by different of other testing not provided for in our contract.

7. Because of the limitations referred to above, different environmental conditions from those stated in our report may exist. Should such different conditions be encountered, AMEC must be notified in order that it may determine if modifications to the conclusions in the report are necessary.

8. The utilization of AMEC's services during the implementation of any remedial measures will allow AMEC to observe compliance with the conclusions and recommendations contained in the report. AMEC's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.

9. This report is for the sole use of the party to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or in part, or any reliance thereon, or decisions made based on any information of conclusions in the report, is the sole responsibility of such third party. AMEC accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.

10. This report is not to be given over to any third party for any purpose whatsoever without the written permission of AMEC.

11. Provided that the report is still reliable, and less than 12 months old, AMEC will issue a third-party reliance letter to parties client identifies in writing, upon payment of the then current fee for such letters. All third parties relying on AMEC's report, by such reliance agree to be bound by our proposal and AMEC's standard reliance letter. AMEC's standard reliance letter indicates that in no event shall AMEC be liable for any damages, howsoever arising, relating to third-party reliance on AMEC's report. No reliance by any party is permitted without such agreement.