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**PHASE I - ENVIRONMENTAL SITE ASSESSMENT
VACANT INDUSTRIAL PROPERTY
MISSISSIPPI MILLS BUSINESS PARK
MISSISSIPPI MILLS, ONTARIO**

Prepared For

Novatech Engineering Consultants Limited

September 23, 1999

Report No. E1809-1



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EXECUTIVE SUMMARY

On September 16, 1999, John D. Paterson and Associates conducted a Phase I - Environmental Site Assessment of the vacant industrial property located on the southwestern corner of County Road Nos. 17 and 49, in the Town of Mississippi Mills, Ontario.

A summary of environmental issues identified at this property and recommendations is presented in the following table. Detailed recommendations are provided in Section 6.0 of this report.

Summary of Findings and Recommendations				
Potential Environmental Concern	Level of Concern	Findings	Recommended Plan of Action	Reference Section
Historical Review				
Historical Land Use	low	Agricultural and snow dumping area.	none	5.1
Exterior Assessment				
Electromagnetic Frequencies	none	no significant sources observed	none	5.2
Fuels and Chemicals	none	none observed	none	5.2
Waste Management/ Wastewater Discharges	low	Property vacant-some fill placement	none	5.2
Adjacent Land				
Adjacent Properties	low	Residential, light industrial, commercial, institutional, and vacant.	none	5.3



1.0 INTRODUCTION

At the request of Mr. Edson Donnelly, with Novatech Engineering Consultants Limited, this firm conducted a Phase I - Environmental Site Assessment (ESA) at a vacant property on the southwestern corner of County Road Nos. 17 and 49 in the Town of Mississippi Mills, Ontario. Authorization to proceed with the project was received on September 10, 1999.

A geotechnical investigation was also conducted by our firm on September 16, 1999. The results from the geotechnical investigation were referenced and used to supplement the environmental report. (Refer to Report No. G7448-R1.FTG)

This report has been prepared specifically and solely for the above noted project which is described herein. It contains all of our findings and results of the environmental conditions at this site.

2.0 SITE INFORMATION

Owner:	Town of Mississippi Mills
Address:	Southwest corner of County Road Nos. 17 and 49 Mississippi Mills, Ontario
Location:	Refer to Figure 1- Key Plan in the appendix for the site location.
Legal Description:	Part of Lot 15, Concession 11, County of Lanark, Mississippi Mills
Site Description:	
Configuration:	Irregular
Site Area:	22.26 hectares (approximate).
Zoning:	This site is classified as an industrial and commercial zone.



3.0 SCOPE OF WORK

The scope of work for this Phase I - Environmental Site Assessment was as follows:

- Investigate the existing conditions present at the subject site by carrying out a field study and historical review in accordance with CSA Z768-94.
- Present the results of our findings in a comprehensive report.
- Provide a preliminary environmental site evaluation based on our findings.
- Provide preliminary remediation recommendations and further investigative work if contamination is encountered or suspected.



4.0 METHOD OF INVESTIGATION

4.1 Historical Research

The methodology for the Phase I - Environmental Site Assessment program was carried out in two segments. The first consisted of a historical review which included a brief research of the past use of the site. This portion of the program was carried out by an engineer from our environmental division.

Federal Records

- Maps and photographs, (Geological Survey of Canada surficial and subsurface mapping).
- Air photos at the Energy Mines and Resources Air Photo Library.

Provincial Records

- MOE document titled "Waste Disposal Site Inventory in Ontario".
- Office of Technical Standards and Safety Authority, Fuels Safety Branch.

Municipal Records

- Town of Mississippi Mills.

Local Information Sources

- Personal interviews.
- Plans provided by Novatech Engineering Limited.
- Previous environmental report prepared for neighbouring lands by M.S. Thompson & Associates Limited.



4.2 Field Assessment

The second segment of the assessment consisted of a field investigation which included a walk-through inspection and detailed visual assessment of the environmental conditions of the subject property. The field investigation was carried out on September 16, 1999.

Visual Investigation

As part of the field investigation, the site was carefully inspected for signs of the following:

- Evidence of previous or existing fuel storage tanks.
- On-site use or storage of hazardous materials.
- On-site handling or disposal of liquid or solid waste materials.
- Above-ground piping systems, including pumps, valves and joints.
- Truck or rail loading or unloading areas.
- Electrical conduits, abandoned pipelines or pumping stations.
- Remnants of old buildings.
- Signs of surficial contamination (ie. staining, distressed vegetation).
- Unnaturally discoloured, ponded or flowing waters.
- Surficial drainage, wetlands, natural waterways or watercourses through the property (ie. ditches, creeks, ponds, poor drainage).
- Any evidence of potable water supply wells or groundwater monitoring wells (such as leak detection monitoring wells for underground storage tank systems, or abandoned systems).
- Any abnormal odours associated with the site, whether from on-site or off-site sources.
- The presence of any recent soil disturbances such as soil removal, filling, tilling, grading, etc.
- Asbestos containing materials (ACM).
- Urea formaldehyde foam insulation (UFFI).
- PCB containing products.
- Ozone depletion substances (ODS).
- Lead-containing materials.
- Presence of electromagnetic frequencies or of radon.
- Current use of neighbouring properties.



5.0 FINDINGS OF THE ENVIRONMENTAL ASSESSMENT

5.1 Historical Review

Air Photo Research

Historical air photos of the subject site were reviewed at the National Air Photo Library. Based on the review, the following observations have been made:

- 1946 The subject site was vacant and used for agricultural purposes. Some residential dwellings were located to the west. All surrounding properties were also used for agricultural use.

- 1966 There were no significant changes to the subject property or neighbouring properties, with the exception of a commercial building to the north, across County Road No. 49.

- 1996 A large commercial development was located to the north of the subject site. Commercial buildings were also located to the east and southeast of the site. All other surrounding properties remained vacant at this time.

Laser copies of the aerial photographs taken in the above years are included in the appendix of this report.

Ontario Ministry of Environment (MOE)

The Ontario Ministry of Environment, MOE, document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants, and coal tar distillation plants in the Province of Ontario. Based on the available information, there appears to be no documented evidence of abandoned waste disposal sites within the vicinity of the subject site.



Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto, formerly the Ontario Ministry of Consumer and Commercial Relations was contacted by telephone on September 23, 1999. There are no underground storage tanks recorded in the TSSA registry for the subject property. The subject site is not registered with the TSSA as a private fuel outlet. Surrounding properties were also not registered with the TSSA.

Personal Interviews

Mr. Phil Whalen, Town of Mississippi Mills was interviewed by telephone on September 24, 1999. He stated that the northeastern portion of the site has been used as a snow dumping area. He also mentioned that various contractors have dumped miscellaneous fill materials onto the site. He was not aware of any other environmental issues associated with the property.

5.2 Exterior Assessment

The site was mostly covered with low lying vegetation, grass, and treed areas. There were some areas where the soil had been stripped and fill placement was evident. The site was relatively flat with no ponding of water or any signs of surficial contamination at the time of the investigation.

Potential Environmental Concerns

- ***Electromagnetic Frequencies***

There were no transmission lines or electrical substations identified within the general area of the subject property that could generate significant electromagnetic frequencies.



- ***Fuels and Chemical Storage***

There were no above ground or underground fuel storage tanks observed on the exterior of the subject property at the time of the investigation. There was no evidence of vent or fill pipes indicating the possibility of underground storage tanks. There were no hazardous chemicals observed or spills or stains observed at the time of the investigation.

- ***Waste Management/ Wastewater Discharges***

There are no signs of waste management or waste discharges on site as it was vacant at the time of the investigation. Some fill was observed on site, presumably during the development of the neighbouring properties. A number of test pits were placed through fill materials as part of the geotechnical investigation. The fill was observed to consist predominantly of soil particles with some concrete, wood and asphaltic concrete. No testing was conducted on the fill; however, it did not appear to contain any hazardous substances.

5.3 Adjacent Properties

Land use adjacent to the subject site was a combination of commercial, residential, industrial, institutional, and vacant.

- North - *Commercial businesses, County Road No. 49 and vacant beyond;*
- South - *Residential and light industrial;*
- East - *County Road No. 17, commercial and vacant beyond;*
- West - *Residential and institutional (high school).*

The environmental impact of the neighbouring properties upon the subject site was considered to be low. Land use adjacent to the subject site is illustrated on Drawing No. E1809-1 - Site Plan in the appendix.



6.0 ASSESSMENT AND RECOMMENDATIONS

Assessment

A Phase I - Environmental Site Assessment was carried out at a vacant property on the southwest corner of County Road Nos. 17 and 49 in the Town of Mississippi Mills, Ontario. The purpose of this environmental assessment was to research the past use of the site and identify any potential concerns associated with the site or adjacent properties that could potentially impact the subject property.

The historical data researched for this site showed no past or present areas of environmental concern. The prior use of the northeastern portion of the site as a snow dumping area is not considered to pose a significant environmental concern. The use of a portion of the site as a snow dump may have resulted in the deposition of salt and some metals. However, our previous experiences with such sites has indicated that the residual levels of these elements are generally not high enough to pose a concern.

It is our understanding that the subject site will be serviced by municipal services and the groundwater will not be utilized for potable purposes.

Following the historical research, a site inspection was conducted to assess potential areas of concern. The site inspection was conducted at the same time as the geotechnical investigation during which the previous placement of fill materials on site was confirmed. Based on the field observations, the fill consisted predominantly of soil with no apparent hazardous substances or materials.

The geotechnical investigation consisted of the placement of twenty-two (22) test pits scattered over the entire subject site. The subsurface soil investigation did not reveal any signs of contamination.

Recommendations

Based on the results of this Phase I - Environmental Site Assessment in conjunction with the geotechnical investigation (subsurface soil investigation), a **Phase II - Environmental Site Assessment will not be required for the subject property.**



7.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared in general accordance with the agreed scope-of-work and the requirements of CSA Z768-94. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

Should any conditions be encountered at the subject site that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of Novatech Engineering Consultants Limited. Permission from Novatech Engineering Consultants Limited will be required to release this report to any other party and notification to our firm is required.

JOHN D. PATERSON AND ASSOCIATES LIMITED

Karen Crowell, B. Sc. (Eng.)

Mark S. D'Arcy, P. Eng.
Reviewer

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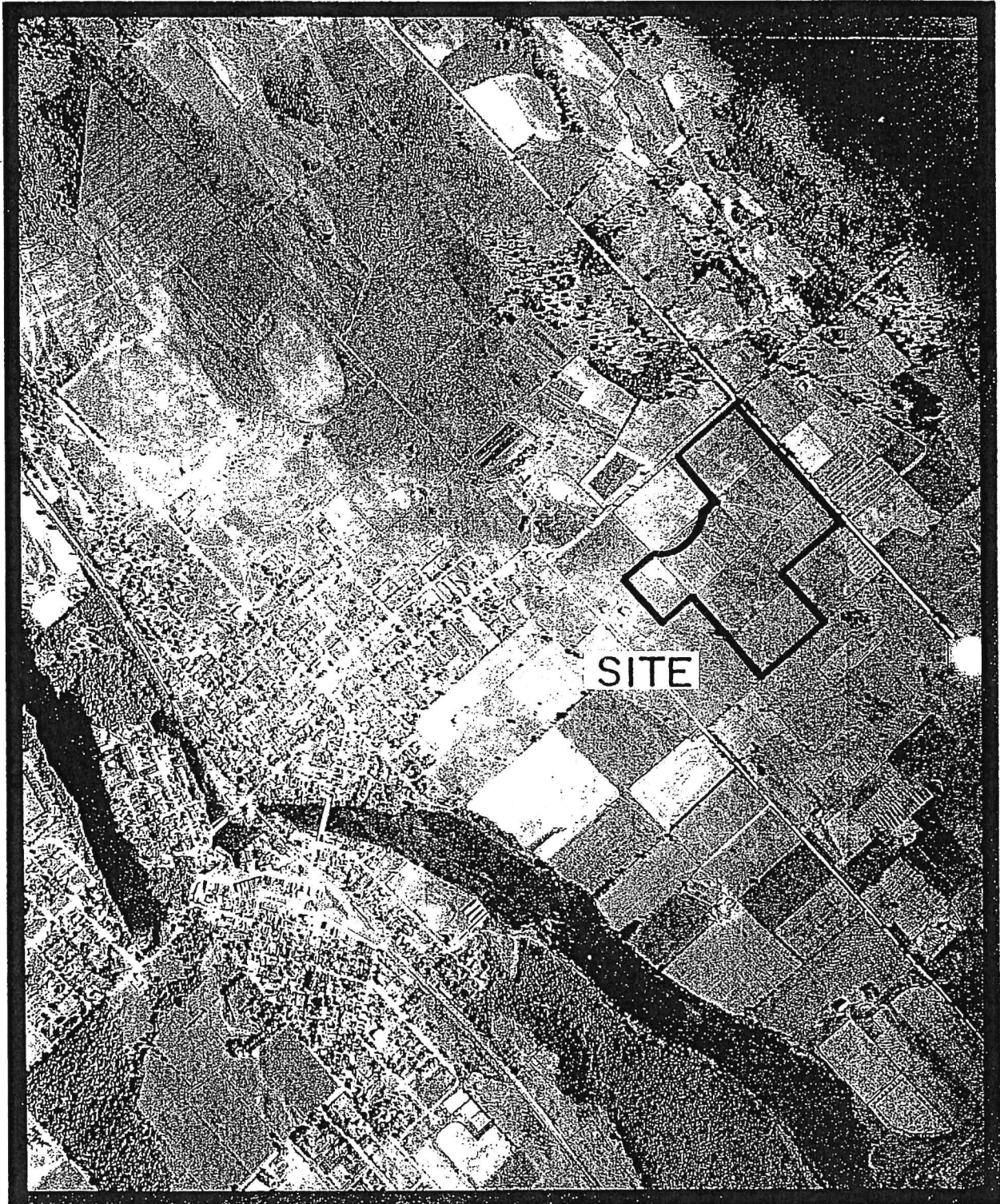
Mr. Edson Donnelly, Novatech Engineering Consultants Limited (3 copies)
John D. Paterson and Associates (1 copy)

APPENDIX

AERIAL PHOTOGRAPHS

FIGURE 1 - KEY PLAN

DRAWING NO. E1809-1 - SITE PLAN



AERIAL PHOTOGRAPH
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