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**A REPORT TO
YEE HONG CENTRE FOR GERIATRIC CARE
ENVIRONMENTAL SITE ASSESSMENT, PHASE 1
PROPOSED GERIATRIC CARE CENTRE
MAVIS ROAD AND PRESTON MANOR DRIVE
CITY OF MISSISSAUGA**

Reference No. 0003-S19E

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EXECUTIVE SUMMARY

In accordance with our proposal dated March 6, 2000, and written authorization on March 9, 2000, from Florence Wong, C.E.O. of Yee Hong Centre for Geriatric Care, Soil-Eng Limited has carried out a Phase 1 Environmental Site Assessment (ESA) at Mavis Road and Preston Manor Drive, City of Mississauga.

The purpose of the study was to identify any potential areas of environmental liability associated with the subject site. The study consisted of the research of historical records pertaining to the site, an environmental site reconnaissance, observations of adjacent properties, and a review of government records and soil investigation findings. Our findings and assessment are presented in this Report.

Historically, the subject site was always used for agricultural purposes. No issues of environmental concern were identified with regard to the historical or present use of the subject site or surrounding land.

Based on the review of historical records and the findings of the site reconnaissance, field observations, and geotechnical investigation no potential or actual on-site or off-site sources of soil or groundwater contamination associated with the property were identified.

In conclusion, we consider there to be low potential for environmental liability attendant to the subject property associated with past and current activities at the site and on the neighbouring lands. No further environmental investigation is recommended.



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ENCLOSURES

Site Location Plan	Drawing No. 1
Property Survey Plan (Part of Plan 43R-23199, dated November 1998)	Drawing No. 2
Proposed Development Plan	Drawing No. 3
Historical Maps	Drawing No. 4
Ontario Base Maps	Drawing No. 5
1993 Topographical Map	Drawing No. 6



1.0 INTRODUCTION

In accordance with our proposal dated March 6, 2000, and written authorization on March 9, 2000, from Florence Wong, C.E.O. of Yee Hong Centre for Geriatric Care, Soil-Eng Limited has carried out a Phase 1 Environmental Site Assessment (ESA) at Mavis Road and Preston Manor Drive, City of Mississauga.

The purpose of the study was to identify any potential area of environmental concern associated with the subject site, as required for construction and mortgage financing purposes prior to the proposed development for commercial usage.

This study was conducted in general conformance with the current CSA Standard Z768-94, and consists of the following:

- Review of existing historical records to assess past activities that could have had a potential impact on the environmental quality of the subject property.
- Environmental site reconnaissance for identification of potential on-site environmental concerns.
- Observation of adjacent properties and their potential impact on the subject property.
- Review of government records for additional information relating to any environmental concerns.
- Review of findings of our geotechnical soil investigation.
- Preparation of this report containing our findings, all relevant research documents, field data, and our assessment.



2.0 **SITE AND PROJECT DESCRIPTIONS**

The subject site, as shown on the Site Location Plan, Drawing No. 1, is located on the west side of Mavis Road south of Britannia Road West. A Property Survey Plan (43R-23199, dated November, 1998), Drawing No. 2, shows the subject site as being part of Part 1.

The property was originally Part of Lot 4, Concession 2, West of Hurontario Street (WHS), Township of Toronto, County of Peel (now City of Mississauga, Regional Municipality of Peel).

The subject site is rectangular in shape and encompasses an approximate area of 2.17 ha (5.37 ac).

The proposed project, as shown on the Proposed Development Plan, Drawing No. 3, will consist of a 5-storey long-term care building and an 8-storey seniors apartment building. The new development will be provided with municipal services, on-grade parking and access routes from Mavis Road and Father De Sousa Drive (proposed).



3.0 **SITE HISTORY**

We have researched the records pertinent to the history of the subject property at the City of Mississauga Municipal Office, Peel Land Registry, the University of Toronto Map Library, the Metro Toronto Reference Library, and the Ministry of Natural Resources Map and Airphoto Office.

In the early 1800s, the subject land was Part of Lot 4, Concession 2, West of Hurontario Street (WHS), Township of Toronto, County of Peel (now City of Mississauga, Regional Municipality of Peel).

The lot was patented to J. Pickard by the Crown in 1822; the west-half of the lot was subsequently transferred to H. Nelles in 1824, and then to J. Oliver in 1830. The subject land was then purchased by J. Woods Jr. in 1867 and sold to N. Elliot in 1875. The subject land remained in the Elliot Family until 1924 when the property was sold to T. Rogerson. Copies of two Historical Maps drafted in 1860 and 1878 are presented on Drawing No. 4, and show that the subject site belonged to J. Oliver and N. Elliot during those years and was most likely used for agricultural purposes.

In 1965, the property was acquired by G. Genovese, transferred to E. Genovese in 1975, and then to G. Genovese in 1998, the current registered owner of the subject site.



Ontario Base Maps for the years 1970, 1980 and 1982, and A Topographical Map for the year 1993 were available, showing the land features at those dates. Copies of the maps are presented on Drawing Nos. 5 and 6, respectively, indicating that the site was undeveloped during those years with a drainage swale traversing across the northwest corner of the site.

A review of aerial photographs dated 1954, 1972 and 1978, indicates land features at the subject site which are consistent with those shown on the maps. The photographs indicate that the site was undeveloped and consisted of farm fields. No major soil disturbance was observed on the photographs.

During the years which have been researched, the site has always been used for farming. Insurers' Advisory Organization (IAO) Inc. Plans and Fire Insurance Maps are not available for the subject site since it consisted mainly of farmland at that time.

In summary, the site history and record reviews have indicated that the subject property was used for agricultural purposes. No potential environmental impact associated with the past ownership and the current tenants of the subject property is suspected.

Based on the above findings, it is unlikely that the past activities have had any significant environmental impact on the subject property.



4.0 ENVIRONMENTAL SITE RECONNAISSANCE

A visual inspection with respect to the general environmental condition of the subject site was conducted by our representative on March 20, 2000.

The site consists mainly of ploughed farm fields (formerly cornfields) with a shallow drainage swale traversing across the northwest corner of the property. The ground surface of the site is relatively flat with minor undulations and level with the fronting road. The grade of the site generally descends towards the southwest. The subject site is bounded to the north by a church and a residential subdivision currently under construction, to the east by Mavis Road and to the south and west by ploughed farm fields. Construction fencing runs along the east boundary limits. The north, south and west limits are not marked.

The area of the shallow drainage swale at the northwest corner (as shown on the 1993 Topographical Map) was damp at the time of inspection, there was no bulrush growth in the area. Some domestic debris (i.e. paper, cardboard, plastic, tin cans, etc.) was noticed at the northeast corner and along the east limits.

There were no noticeable nuisance odours, stained ground or stressed vegetation within the site. Also, there were no signs of above-ground or underground storage tanks, excavated pits or sumps on the subject property. Our walk-through inspection did not reveal any hazardous materials stored or disposed on-site.



5.0 **HAZARDOUS MATERIALS**

Based on a walk-through/visual inspection of the site, there is no evidence to suggest that polychlorinated biphenyls (PCBs), asbestos-containing materials (ACMs), urea-formaldehyde foam insulation (UFFI), ozone depleting substances (ODSs) or any chemicals or biologically hazardous materials are stored or disposed on the subject site.

Also, there are no signs of above-ground or underground storage tanks on the property.

There were no detectable sources of air emissions that may impact the ambient air quality or produce offensive odours within the subject area.



6.0 **NEIGHBOURING PROPERTIES**

The neighbouring properties consist of a residential subdivision currently under construction and St. Francis Xavier Church (5650 Mavis Road) to the north. To the east, across Mavis Road, is vacant land and a residential subdivision. To the south and west are ploughed farm fields (formerly cornfields).

Inspection of the outside of the premises at the adjacent sites did not reveal any evidence of underground tanks, surface spillage or any other obvious evidence of contamination or cause for concern.

There are no signs of surface contamination on the subject property as a result of the business operations on the adjacent sites. The land usage at the adjacent properties is considered to have low potential for environmental impact on the subject property.



7.0 GOVERNMENT RECORDS

According to the Ministry of the Environment (MOE), formerly Ministry of Environment and Energy (MOEE) "Waste Disposal Site Inventory", dated June 1991, there is no record of either an active or closed waste disposal site in the vicinity (within 500 m) of the subject site and there is no listing in the MOE "Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario", November 1988, or in the "Inventory of Coal Gasification Plant Waste Sites in Ontario", dated April 1987. Also, in the MOE "Ontario Inventory of PCB Storage Sites", dated January 1998, there is no record of any PCBs stored on-site. The site is not registered as a waste generator under Regulation 347 of the Environmental Protection Act.

The Insurers' Advisory Organization (IAO) Inc. was contacted, and Fire Insurance Maps are not available for the subject site or the adjacent properties.



8.0 **REVIEW OF SOIL INVESTIGATION FINDINGS**

Soil-Eng Limited recently conducted a geotechnical investigation at the subject property. The investigation, consisting of 8 boreholes to a depth of 4.6 m, disclosed that the site is generally underlain by a very stiff to hard silty clay till. The exact locations of the boreholes and detailed descriptions of the subsurface conditions will be presented in our forthcoming Geotechnical Report.

This soil investigation did not reveal any obvious signs of soil contamination and negative environmental impacts are not suspected on the subject property, based on a review of the soil study.



9.0 CONCLUSION OF FINDINGS

Our site history research has revealed that the subject property was mainly used for agricultural purposes throughout the years to the present time. No issues of environmental concern were identified with regard to the historical use of the subject site.

Our environmental site reconnaissance did not reveal any hazardous materials stored or disposed on-site, and no potential or actual on-site or off-site sources of soil or groundwater contamination were identified on the property.

Based on our visual observations, nothing of potential environmental concern was noted on the site. No issues of environmental concern associated with the present use of the surrounding land were identified.

Our recently completed soil investigation of the site did not reveal any evidence of soil contamination. The geotechnical considerations relating to the subject property will be presented in our forthcoming geotechnical report.

Based on the above findings, we consider that the past land usage and the current activities on the investigated site and its neighbouring properties have had no particularly significant environmental impact on the subject property. Since there is low potential for environmental liability associated with the subject property, it is our opinion that the site is suitable for the proposed residential and commercial development.



In conclusion, we consider there to be no specific environmental hazards at or near the subject site, and no further environmental study or testing is required. It is recommended that during construction, any deleterious debris found on the surface or buried on site must be removed and disposed of properly.



10.0 CLOSURE

One must understand that Soil-Eng Limited's mandate is to obtain all available past and present information pertinent to the subject site for Phase I environmental assessment only. No other warranty or representation, expressed or implied, as to the accuracy of the information is included or intended by this assessment.

During future construction, any deleterious debris found on the surface or buried on-site must be removed and disposed of properly. It should be noted that the information supplied in this report may not be sufficient to obtain approval for disposal of excess soil or materials generated during construction, and chemical testing of soil samples may be necessary to obtain such approval.

Should adverse environmental conditions become apparent in the future, we request immediate notification in order to provide further assessment and recommendations.



This Report was prepared by Soil-Eng Limited for the account of Yee Hong Centre for Geriatric Care, and for review by its designated consultant and government agencies. The material in it reflects the judgement of John Cortez, B.Eng., and Victor Chan, P.Eng., in light of the information available to it at the time of preparation. Any use which a Third Party makes of this report, or any reliance on decisions to be made based on it, are the responsibility of such Third Parties. Soil-Eng Limited accepts no responsibility for damages, if any, suffered by any Third Party as a result of decisions made or actions based on this report.

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