

Appendix D - Elliott Engineering Facilities Condition Reports



Building Conditions - Summary Report
For Hydro One / API, Suite 'A'
2 Sackville, Sault Ste. Marie, ON
May 2018

Hydro One Sault Ste. Marie, LP
2 Sackville Road
Sault Ste. Marie, ON
P6B 6J6

EE File No. E18002

Title: Buildings Condition Summary Review General Site Conditions – Phase 1

Project: 2 Sackville Road, ON

Attention, Mr. Kevin Lewis, General Manager, Hydro One Sault Ste. Marie, LP

Please find attached our buildings review report as performed April of 2018. Please contact us with any clarifications or concerns.

Regards,

Pat Giunti,
Project Manager

Stan Elliott, P.Eng.
Design Engineer



Buildings Condition Summary Review

Office & Yards Complex

General Site Conditions

2 Sackville Road

Sault Ste. Marie, ON





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For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
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Buildings Condition Summary Review – Phase 1

Office & Yards Complex

General Site Conditions

2 Sackville Road

Sault Ste. Marie, ON



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Exterior photo



Exterior Photo – Looking North East, viewed from Northern Avenue
Suite 'A'

Exterior photo



Exterior Photo – Looking South East, viewed from Sackville
Suite 'B'

Aerial photo



General Site Photo – Intersection of Northern Avenue & Sackville Road – Looking Northeast



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Introduction

Elliott Engineering Inc. was retained by Hydro One Sault Ste. Marie LP (Hydro One) & Algoma Power Inc. (API), to provide a summary condition review of the buildings and general site, located at 2 Sackville Road, Sault Ste. Marie, ON. For the purpose of this report the property shall be referred to as ***Hydro One***. This report shall be Phase 1 of the deliverable to be provided. Phase 2 shall be options and plans for possible floor layouts, space allocation and user areas for a two-tenant joint facility and property use.

The buildings are presently being used for offices, maintenance services and stores. The site contains, offices, maintenance buildings, parking, pole storage, transformer storage, electrical sub-station as well as overhead transmission lines. The property is owned by Brookfield Renewable Energy Group (Brookfield) with the space being leased to Hydro One Sault Ste. Marie LP (Hydro One) who in turn sub-leases to Algoma Power Inc. (API). It is believed that Brookfield has no active role on the property other than to act as the “Leaser”. All three companies are closely if not solely vested in the production and transmission of electrical power locally, provincially and nationally.

The purpose of the review is to provide a general indication of the type of construction, operation, facilities, size and occupancy of the buildings as well as the condition and description of the site. The review is intended to provide a potential purchaser and or leaser with a general overview of the building, property, systems and ancillary equipment as it exists at the time of the review. The building was observed in its current state to document the general condition and create a report suitable for issue to potential purchasers and or to the commissioners of the report for future economic evaluations. It shall be noted that commissioning of this report was co-supported by Hydro One and API as part of possible future logistics of their services and location and the possible reworking and or renovation of the existing layout to provide more efficient working spaces.

Further to that which is noted above, our office attended the site on 5 separate occasions to gather information, review existing conditions and take photos. Maintenance and management staff were questioned in regard to building history and specifics.

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Limitations

Elliott Engineering Inc. make no warranty, representation, or guarantee of any kind regarding the lifespan or suitability of the building(s) or its ancillary equipment.

Elliott Engineering Inc. will not be responsible for consequential effects of the resulting factual Report, or the discovery of certain conditions and/or taking preventative measures relative to these conditions, on the real or perceived property values, or on the ability to sell, finance or insure the property.

In order to achieve the objectives outlined, we arrived at conclusions based upon the best information presently known to us. No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information; it can only reduce the possibility to an acceptable level. Professional judgment was exercised in gathering and analyzing the information obtained and in the formulation of conclusions. Like all professional persons rendering advice, we do not act as absolute insurers of the conclusions we reach, but commit ourselves to care and competence in reaching those conclusions. In order to properly understand the suggestions, recommendations and opinions expressed in the report, reference must be made to the Report in its entirety.

Very limited attempts have been made to predict the lifespan of some components or systems. Many systems are contained behind finishes and layers of building materials and are therefore inaccessible for review. It is possible and even likely that issues beyond the scope of this review exist within these areas. Due to the complexity and size of the building there are areas that were not either able to be reviewed or were not reviewed.

The client Hydro One & API shall agree that Elliott Engineering Inc.'s employees, officers, directors and agents shall have no personal liability to the client in respect of a claim, whether in contract, tort and/or any other cause of action in law related to this report. Accordingly, the client expressly agrees that it will bring no proceedings and take no action in any court of law against any



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of Elliott Engineering Inc.'s employees, officers, directors, or agents in their personal capacity. Any potential purchasers must perform their own assessment

Elliott Engineering Inc., Hydro One and API will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on information in this document.

No attempt has been made to search for any environmental issues or concerns. However, there is a Designated Substance Survey report attached to this document in the Appendix for reference. This report was commissioned in 2009 by Golder & Associates and falls outside of Elliott Engineering Inc.'s purview. Elliott Engineering Inc. did not investigate any aspect of environmental Engineering (mold, dust, chemical, fume, etc) as it is beyond the scope of our review and Elliott Engineering Inc. have no experience in this area.

It shall be noted that drawings used for this report have been gathered from Hydro One archived files and municipal sources. They represent the buildings and facility in their general layout, design and information. There may arise occasions where the actual may differ from the plans. These differences to our knowledge of those drawings that are most reflective of the actual are small and presently it is our belief do not significantly affect the objectives of this report. Future renovations and additions may require further confirmation on the actual construction.

Objectives

The objective of this report is to provide a general overview only of the construction, operation, facilities, systems, size and occupancy of the building. Our intent was to observe the building in an operating condition and report what we observed. We have noted visible items of concern if any were observed during our review.

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Upon review of this document it is our expectation that the proponents would determine if they are further interested in the property and in its existing condition and as to whether it may fit into future objectives. This review provides limited costs current or future associated with operating, maintaining or replacing any system or component on the property. **A Phase 2 document report shall be issued at a later date, denoting spaces, renovations, order of magnitude costs and client usage.**

Assessor Qualifications

Mr. Stan Elliott, P.Eng – Senior Design Engineer

Mr. Stan Elliott is a senior design Engineer with an extensive background in Engineering and construction.

- Graduated May 1997, Lakehead University, Bachelor of Engineering
- Qualified as Professional Engineer (P.Eng) in July 2001
- Currently licensed in Ontario
- Ontario Ministry of Municipal Affairs and Housing, Large Buildings, Structural, and Legal certificates.

Mr. Elliott has worked on both small and large commercial, institutional and industrial projects for a variety of clients. Prior to entering the engineering field Mr. Elliott served a carpenter apprenticeship. That field experience has proven to be a valuable asset to the firm. Mr. Elliott is design Engineer, he is able to develop new concepts and deliver solutions. The type of engineering experience at Elliott Engineering Inc includes new buildings, additions to existing buildings of all styles, bridge inspection, bridge rehabilitation, shoring design, piling design, foundation design, overhead cranes, wood structure design, concrete structures, mechanical systems, electrical systems design on a variety of industrial, commercial and institutional projects. Mr. Elliott is a specialist in 3D design.



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Mr. Pat Giunti, Senior Designer, Project Manager

Attended Sault College Architectural Technician program, 1987-1989

Mr. Giunti has worked for various Engineers and industrial fabricators. He has gained through his time in the field a wealth of experience. Previous employers include STEM Engineering Group, Kresin Engineering, Superior Industrial Rail, St. Mary's Paper, and Trivers Engineering. He has worked on both large and small projects within various disciplines and with functions as a contract manager, project coordinator and architectural designer. Mr. Giunti also functions as an overseer in the office reviewing drawings that are to be issued for construction on a majority of projects.



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Facility Descriptions

The property and facility contain four primary buildings with one single wide portable and one mobile trailer as well as an electrical transmission station on a 5.5ha lot located within the middle of the City of Sault Ste. Marie, where it abuts industrial and institutional spaces.

Due to the very nature of the portable and mobile trailer their condition shall not be part of this report.

General Site – Exterior Yard and Civil Works

Refer to Appendix ‘A’ items and Appendix ‘B’ (photos).

Aerial Site Plan – A.01
Partial Site Plan, AC-20501 – A.02
Partial Site Plan, AD-32902 – A.03
General Zoning Plan City of SSM 2015-150 - A.04
Medium Industrial Zone M2 Requirements – A.05
City of SSM, Sanitary / Storm / Road Profile, 194-C – A.06
City of SSM, Sanitary / Storm / Road Profile, 194-C – A.07
City of SSM, Sanitary / Storm / Road Profile, 194-C – A.08
City of SSM, Sanitary / Storm / Road Profile, 194-C – A.09
PUC Public Utility Commission, Water Services, B-Sackville-001-X -A.10
SSMRCA City of SSM Conservation Authority, Digital Base Map – A.11
SSMRCA City of SSM Conservation Authority, Email – A.12
Designated Substance Survey Report – A.13

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General Site Description

The properties municipal address is 2 Sackville Road. The property is abutted to the east by the Algoma District School Board Plant department. On the west by Sackville road. On the north by Second Line and on the south by Northern Avenue. The approximate size of the property is 5.5 hectares to which 2.5 hectares is open field and un-utilized space, grass space with transmission lines (pole structures bisecting the property running north to south). Half a hectare (.5ha) is presently used for a lay down pole storage area. The remaining site is taken up by parking lot, office buildings, a maintenance shop, a substation, a concrete deck for truck parking (former *Butler Building*) and miscellaneous gravel drives and parking areas. There is a single wide 60'lg portable and a 20'lg mobile trailer. Several C-Cans are located on the site for storage. The former *Butler Building* shown in the aerial photo of the site was demolished to the concrete slab and concrete knee walls in December of 2017 and January of 2018. Presently this space is being used for pole truck parking. Running along the east of the property (at the fence line) is a 34.5 kV transmission line. There is also two additional 115kV power transmission lines that run from the inner yard substation to the north essentially bisecting the unutilized space.

Parking / Yards, Access & Drives

The buildings share a large dedicated parking lot with 3 primary entrances off of Sackville road for general staff, visitor and client parking in a asphalt parking area. There is an additional entrance off Sackville which is gravel and allows direct access to the fenced compound area as well as an additional entrance / exit to an adjacent westerly property. *For liability purposes a review of public access to the property should be reviewed.* It also appears that the westerly property owner is encroaching on part of the Presently there are approximately 137 spaces for general parking and 4 spaces allocated for barrier free. There are 6 parking spaces available for visitor and drop-off off of Sackville Road for Suite 'B'. Within the compound area (fenced for security) there is an additional 30 spaces (non-delineated) for small or passenger vehicles with enough open area for 10 or more large service vehicles (pole or line trucks). Presently there is ample visitor & staff parking on the site.

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The parking lot is asphalt paved of 2” to 3” nominal thickness. The condition of the asphalt varies. There has been a sealing of cracks and there are depressions in the asphalt. The sealing lines are clearly visible. There have been some asphalt repairs made at the catch basins for what could be assumed the re-setting of the basins and areas of settlement. The asphalt as far as we are aware is the original dating to the time of construction of Suite ‘A’ which took place in or around 1994. During the parking areas lifetime an amount of the asphalt is raised over the storm drain running from the central catch basin to the ditch inlet basin located at the north of the third parking area entrance. The area is presently raised and would appear to be its normal condition. Based on its current condition the parking lot will be a maintenance item that will eventually involve a replacement of the asphalt. The areas where there is settlement would need to be excavated and built up with compacted fill. A time frame for a complete replacement could be anywhere from 5-10 years depending on the tolerance for localized repairs and the rate at which the asphalt degrades. The parking area has three light standards. The

The yard or compound area is gravel with a limited number of catch basins. These areas exhibit small amounts of ponding during rain events and seasonal freeze / thaw. Maintenance requirements are minimal with an ongoing need for grading. The unutilized area of the property requires mowing of the grass and is generally not used. These spaces may be utilized at a future date.

Site Plan Control / Zoning

The property is presently Zoned M2 Medium industrial. This zoning falls with in the existing site use and what may be future expansion. A plan and associated M2 zoning documentation has been attached.

Concrete Curbs and Sidewalks

There is a full city sidewalk abutting Sackville road as well a sidewalk / ramp for access to both Suite ‘A’ and Suite ‘B’. These ramps and walks would have met the requirements of Barrier Free as prescribed in the Ontario Building Code (OBC) in the mid 1990’s, however any future developments or

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renovations may require access to be brought up to the current building codes. These walks are in reasonable condition and require no maintenance at this time. The concrete curbs around the three asphalt drive entrances off Sackville are in reasonable condition. And at this time require little to no maintenance. The sidewalk leads up to a barrier free concrete ramp to the barrier free main exterior door. The concrete was generally found to be in good condition and no immediate action is required.

Drainage

The site appears to be well graded. Several catch basins were noted in the parking lot and compound area. The catch basins are strategically located to capture runoff. There are no reported drainage issues that we are aware of. During a recent inspection during wet and warm winter weather no significant standing water was noted.

Barrier Free Accessibility

The building is generally barrier free with regard to accessing the building. There is a properly sloped ramp at the main entrance as well as dropped curbs on the sidewalk which adhere to the requirements of the OBC when Suite 'A' was constructed. The front main entrance door has a barrier free operator at API as well as the entrance to the link for Hydro One. There are barrier free washrooms within the separate male and female washrooms. From the link to Hydro one is slightly convoluted and does not allow easy access or movement. Future renovations will have to take into account the latest requirements of the OBC and the need for Barrier free movement and access throughout the facility. The other exits from the building are not barrier free as they have steps leading from the exits. The hallways are generally clear once in the specific suites and the barrier free pathway is consistent throughout the buildings. There is passenger elevator in Suite 'A' and a freight elevator in Suite 'B'. Both may facilitate the movement of individuals throughout the facility.

It is unclear as to whether or not current configurations are compliant with the present Ontario Building Code. The OBC is a dynamic document that sees many amendments. Barrier Free access and usage is an important part of the OBC. Confirming compliance would take a full code review and

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surpasses the purview of this document. It is our belief however that Suite 'A' and Suite 'B' were designed, constructed and renovate to the requirements of the OBC at the times of construction.

Municipal Services – Storm Water and Sanitary

Refer to City of SSM Site Services and Profile drawings (attached in appendix). Our investigation shows that presently Suite 'B' is serviced by a 6" dia. Sanitary sewer that runs from the south west corner of the building (basement level) to a 12" dia. Municipal sanitary sewer located within Sackville Road. Suite 'A' is also service by a 12" dia. storm sewer also existing the building at the basement level at the southwest corner of the suite to which is connects to an existing 24" dia. municipal storm sewer. Our investigation also shows that presently Suite 'A' is serviced by a 4" dia. Sanitary sewer that runs from the south west corner of the building (basement level) to a 12" dia. municipal sanitary sewer located within Sackville Road. Suite 'A' is also service by a 6" dia. storm sewer also existing the building at the basement level at the southwest corner of the suite to which is connects to an existing 24" dia. municipal storm sewer. Presently these services are adequate for the existing needs. However future additions and or renovations may require additional utility sizing and or services.

Municipal Services – Water PUC

Refer to PUC GIS drawing denoting locations and sizes of municipal water services. It can be seen that the entire facility is serviced by one 1-4" dia. water line that enters Suite 'B' at the basement level from Sackville. From Suite 'B' the water runs to Suite 'A' and then to the Maintenance and Truck Shop. There is a municipal hydrant located at the northwest corner of Suite 'A'.

From the PUC dwg it shall be noted that the water service ends just beyond the hydrant. This is the end of the municipal water service along Sackville up and to the intersection of White Oak Drive. Presently it is believed that the needs for municipal water are being met with the existing service. However, in the future, further construction and or additions may require an enlarging of the existing service. Also, any new construction not easily accessed thru Suite 'B' will incur significant costs to bring water onto the site.

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Conservation Authority

Refer to Conservation Authority GIS drawing and email from the conservation Authority (briefly) denoting that the property is not regulated and as such would not require permits for any future expansion and alterations to the site.

Gate and Fences

The main compound area is secured via a “Electric Gate”. The gate is located to the north of the compound and is the primary entrance / exit to the compound. Access may be gained from Northern Avenue, however this entrance is secured and rarely used due to traffic along Northern Avenue. The Electric Gate is card controlled or can be activated by visitors thru and intercom system. There is security fencing around the perimeter of the yard / compound area terminating at Suite ‘A’ and Suite ‘B’. Additional entrances to the compound may be accessed via man-gate or vehicle gate at the southernly location of the parking lot. Primarily this entrance is used for pedestrian traffic to access the “link” between Suite ‘A’ and Suite ‘B’.

Emergency Generator

Located within the generation station and secured with a fence is located the Emergency Generator. The generator is housed within a specialty built pre-engineered building, solely for the purpose of housing the generator. The generator is a bi-fuel generator 600V/625kVA 18,000rpm. The system is designed to start with diesel fuel and then switches to natural gas. The power for the site comes from Northern Avenue and then disseminates thru the generator and into Suite ‘B’. Suite ‘B’ then feeds (generally) Suite ‘A’, Maintenance Garage and Stores. The generator is provided with a Automatic Transfer Switch during power failure to maintain stand-by power to the complex.

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Designated Substance Survey - Report

Refer to attached Designated Substance Survey. Elliott Engineering Inc. makes no comments nor interpretation in regard to this document. Environmental engineering does not fall within Elliott Engineering's expertise and as such is beyond the purview of this report. The document has been edited only in providing those locations relating to 2 Sackville so as to shorten the document within this report (ease of reading). The original document covered several former Great Lakes Power sites. Since 2009 some materials have been removed with a "Control Program" being implemented. Items such as lead paint and asbestos may still be located within the buildings. However, these areas have been identified and are "signed" for safety purposes. When these areas are renovated or repaired the hazardous materials are then further identified and removed. Environmental Engineering does not fall within Elliott Engineering's expertise and as such the above noted description is for general reference only.

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Appendix A – General Site

Aerial Site Plan – A.01

Partial Site Plan, AC-20501 – A.02

Partial Site Plan, AD-32902 – A.03

General Zoning Plan City of SSM 2015-150 - A.04

Medium Industrial Zone M2 Requirements – A.05

City of SSM, Sanitary / Storm / Road Profile, 194-C – A.06

City of SSM, Sanitary / Storm / Road Profile, 194-C – A.07

City of SSM, Sanitary / Storm / Road Profile, 194-C – A.08

City of SSM, Sanitary / Storm / Road Profile, 194-C – A.09

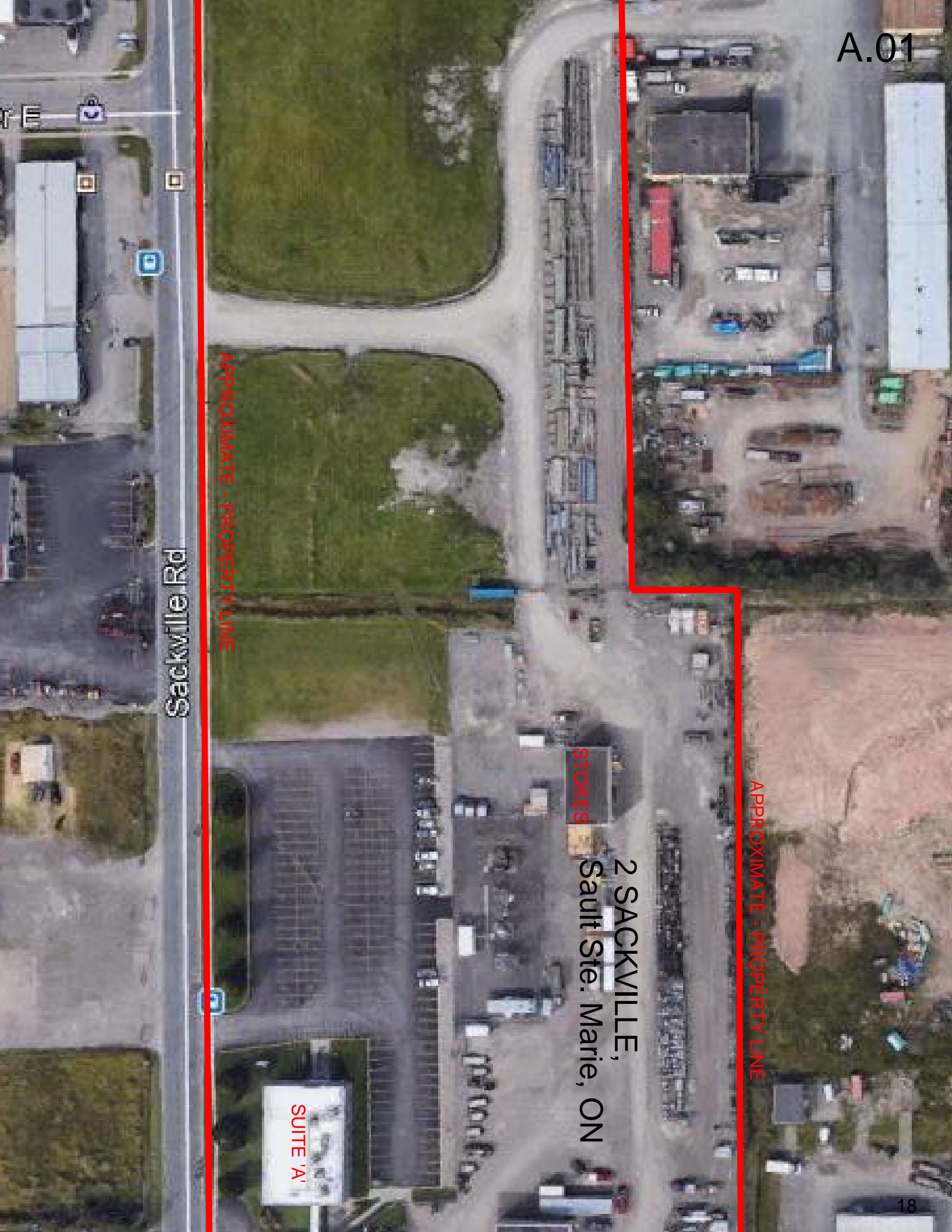
PUC Public Utility Commission, Water Services, B-Sackville-001-X -A.10

SSMRCA City of SSM Conservation Authority, Digital Base Map – A.11

SSMRCA City of SSM Conservation Authority, Email – A.12

Standby Power System (Emergency Generator) Schematic – A.13

Standby Power System (Emergency Generator) Plan – A.14



APPROXIMATE - PROPERTY LINE

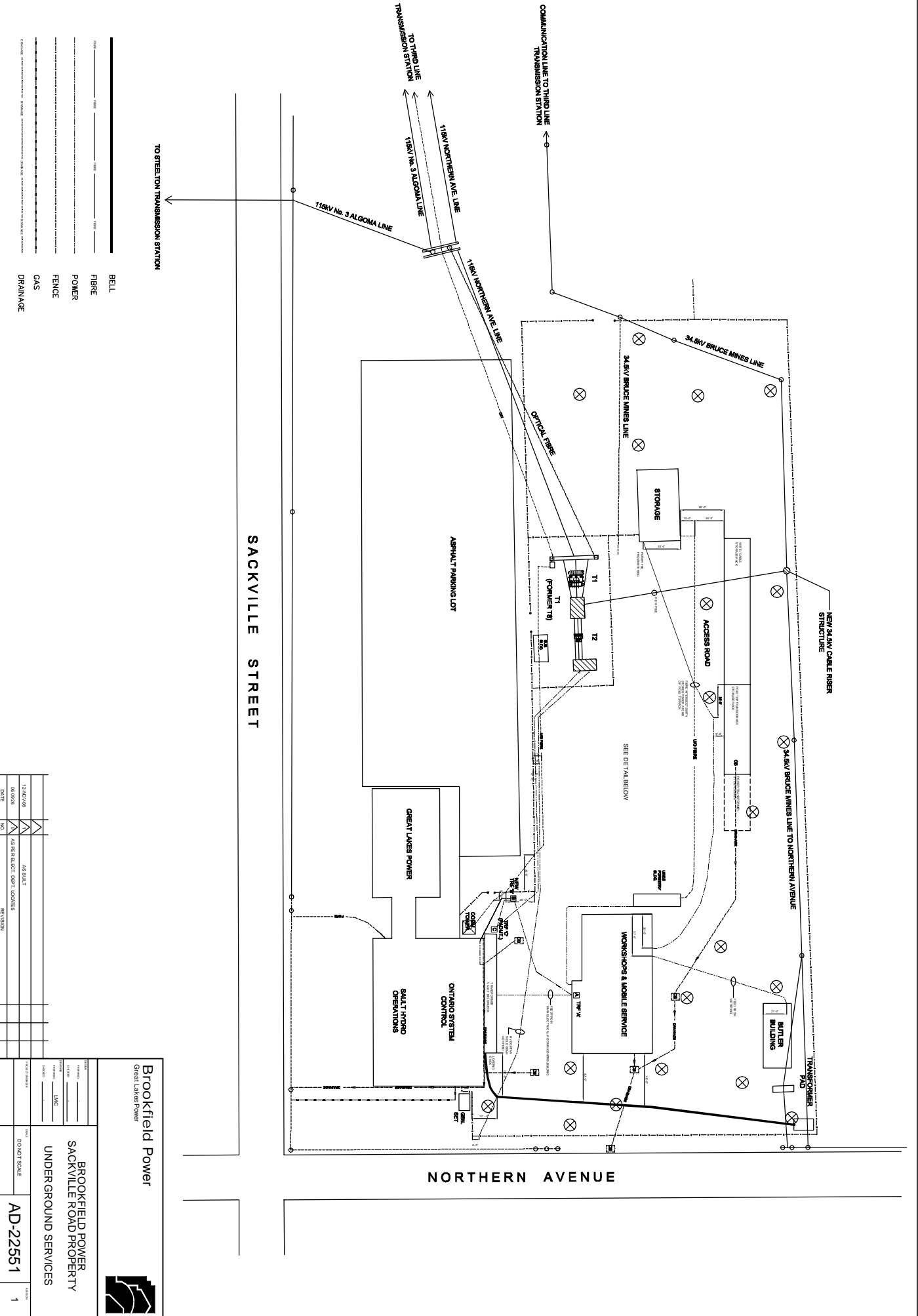
APPROXIMATE - PROPERTY LINE

STORES

2 SACKVILLE,
Sault Ste. Marie, ON

SUITE 'A'

Sackville Rd



A.04

497

465

M2

Grid: 1-75

Property M2 - Medium Industrial -
Existing.

2 SACKVILLE
Sault Ste. Marie

Grid: 1-75

190

M2

2

2

Sackville

M2

9

3

100

104

120

117

113

121

105

15

140

148

134

110

115

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145147

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170

191

21 20



14.2 MEDIUM INDUSTRIAL ZONE (M2)

Introduction

This zone allows more intensive uses than the Light Industrial Zone, however it requires that noise, dust, odors, and vibrations impacting sensitive uses in the area be kept to a minimum.

14.2.1 PERMITTED USES

- All uses permitted in M1 zone
 - *Accessory uses*
 - {2007-105} *Accessory use freight containers*
 - *Accessory use storage trailers*
 - {2006-200} *Accessory use wind turbines* - Refer to Section 4.13 for further regulations
 - *Auto body repair establishments*
 - *Building, hardware, and garden supply stores*
 - *Bulk storage and distribution of fossil fuels*
 - {2006-200} *Commercial wind generating systems*— Refer to Section 4.13 for additional regulations.
 - *Heavy equipment sales maintenance and repair*
 - *Industrial plaza*
 - *Medium manufacturing*
 - *Motor vehicle sales and parts dealers*
 - *Rental and leasing services*
 - *Repair and maintenance services*
 - *Road transportation and warehousing*
 - *Similar uses*
 - *Warehousing, wholesaling and distribution centres* - with 100% visually screened exterior storage
- Exclusion:** *Reload centres for logs and pulpwood*



14.2.2 MEDIUM INDUSTRIAL ZONE (M2) BUILDING REGULATIONS

All Minimums Unless Otherwise Noted

	Metres
<i>Frontage</i>	30m
<i>Front yard</i>	15m
<i>Interior side yard</i> Abutting a residential zone	5m on one side, 10m on the other side 10m
<i>Rear yard</i> Abutting a residential zone	8m 10m
<i>Exterior side yard</i>	15m
<i>Maximum building height</i>	15m
<i>Landscaped open space</i>	A minimum of 75% of <i>required front and exterior side yards</i> must be landscaped.

14.2.3 ADDITIONAL MEDIUM INDUSTRIAL ZONE (M2) REGULATIONS

14.2.3.1 NO OPENINGS LARGER THAN 1.5 BY 2.2M FACING ABUTTING RESIDENTIAL LANDS

Where a Medium Industrial zoned *lot* abuts or is opposite residentially zoned lands, any part of a building façade that faces these residentially zone lots shall not have any openings larger than **1.5m by 2.2m**. For any buildings, or portions thereof, that house office uses, the area occupied by the office use is exempt from this provision.

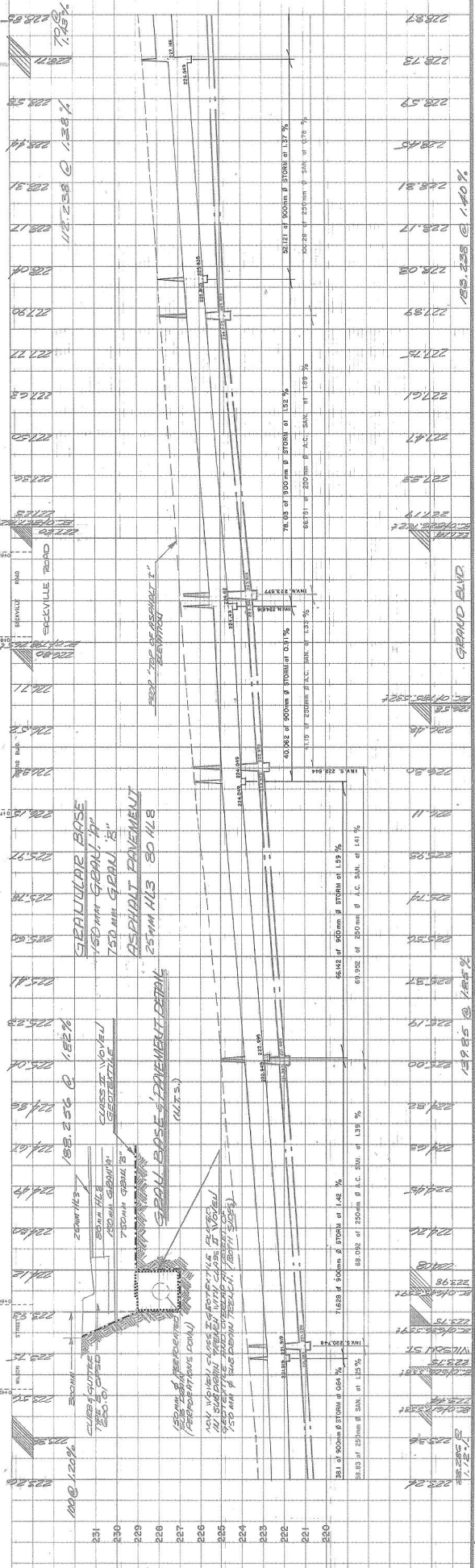
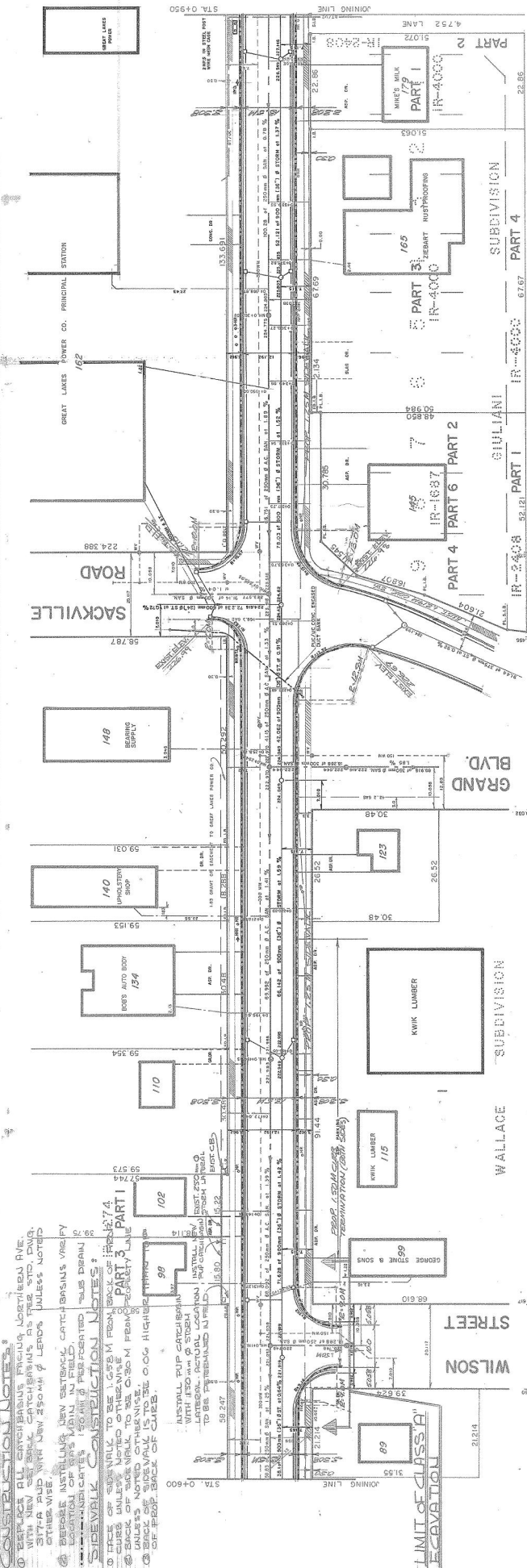
14.2.3.2 WHERE A REAR OR INTERIOR SIDE YARD ABUTS A RAILWAY

If a *rear or interior side yard* abuts a railway, no such *yard* is required if the use requires access to the railway.



Table 34 Medium Industrial Zone (M2) Building Regulations

Medium Industrial Zone (M2) Building Regulations		
Typical Building Envelope	Typical Building Envelope Abutting Residential Zoned Land	NOTE: Illustration Only. All Dimensions are minimum unless otherwise indicated. All measurements in Metric Units.



STA. ELEV.

231
230
229
228
227
226
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222
221
220

PLAN AND PROFILE OF
NORTHERN AVE.
FROM STA. 0+600
TO STA. 0+950

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

SCALE
HORIZONTAL 1:500
VERTICAL 1:100

DATE
DECEMBER 20, 1984

BY
J. M. M. M.

FILE NO.
194-C

NOTES:

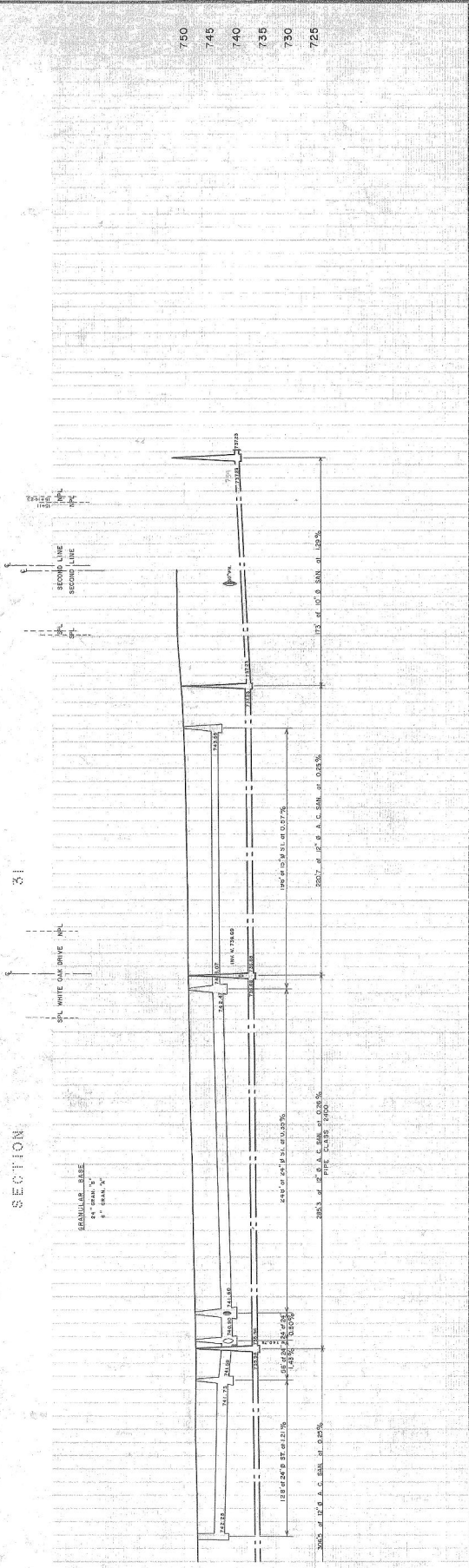
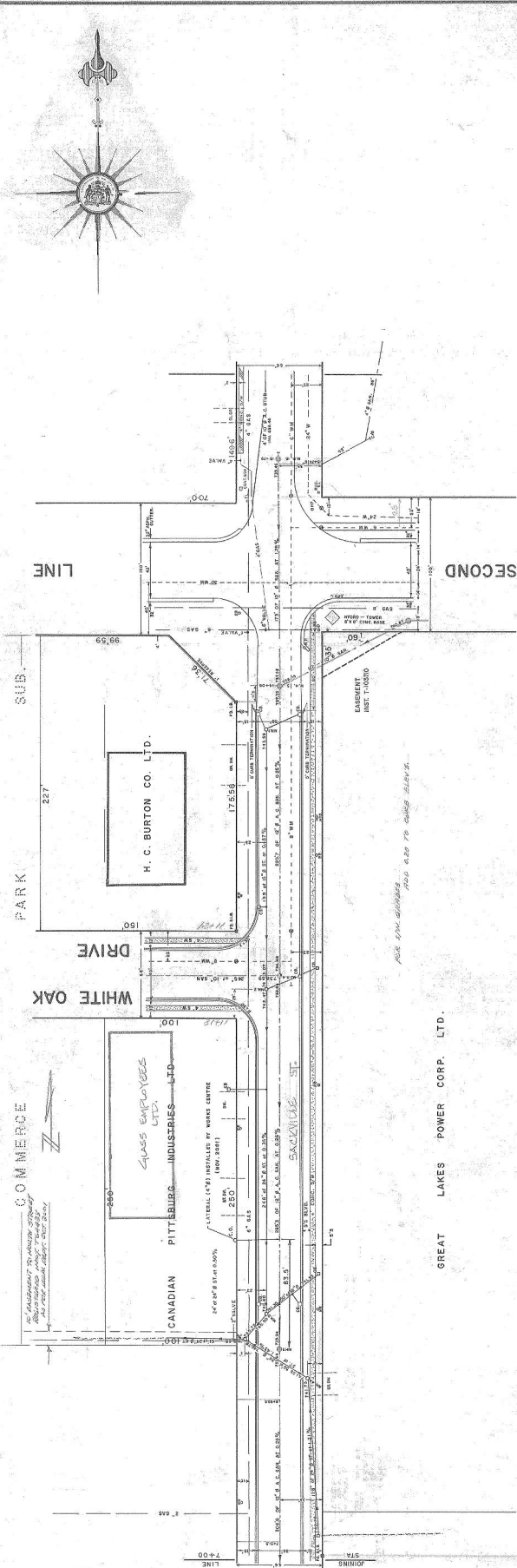
ALL ELEVATIONS ARE TO GEODETIC DATUM

REVISIONS

1. REVISION 1.00
2. REVISION 1.01
3. REVISION 1.02

26





STATION	ROAD CL.	SEWER CL.
7400	747.28	747.28
7350	747.46	747.50
7300	747.63	747.63
7250	747.80	747.80
7200	747.97	747.97
7150	748.14	748.14
7100	748.31	748.31
7050	748.48	748.48
7000	748.65	748.65
6950	748.82	748.82
6900	748.99	748.99
6850	749.16	749.16
6800	749.33	749.33
6750	749.50	749.50
6700	749.67	749.67
6650	749.84	749.84
6600	750.01	750.01
6550	750.18	750.18
6500	750.35	750.35
6450	750.52	750.52
6400	750.69	750.69
6350	750.86	750.86
6300	751.03	751.03

PLAN AND PROFILE OF
SACKVILLE ST.
 FROM STATION 7400
 TO SECOND LINE

CONTRACT NO. **3A-B**
 DRAWING NO. **3A-B**

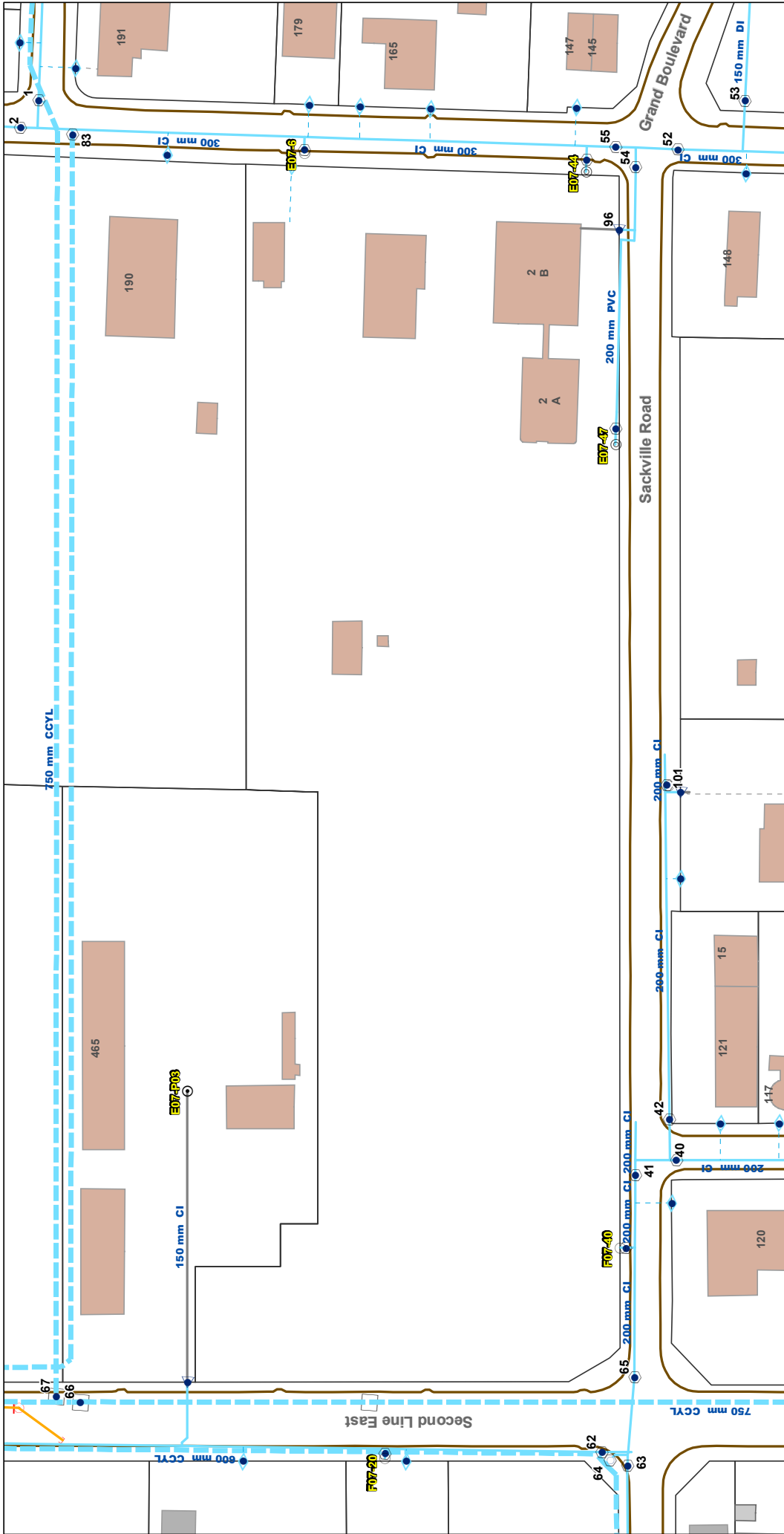
CORPORATION CITY OF
SAULT STE. MARIE, ONTARIO
 ENGINEERING DEPARTMENT

SCALE: HORIZ. 1"=40' VERT. 1"=5'
 DATE: JULY 20, 1988
 DESIGNED BY: R.J.B.
 CHECKED BY: [Signature]
 PROJECT: S.W. 2474-22

REVISIONS
 NO. DESCRIPTION DATE INITIAL

REVISED AS CONSTRUCTED

ALL ELEVATIONS ARE TO GEODETIC DATUM



Notes: This plan is schematic and provided to Elliott Engineering for general information purpose only. Contact PUC Services Inc. Engineering Department for specific servicing needs. <u>Water infrastructure shall be field verified.</u>	REV #	REVISION	DATE	INITIAL	<div><div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div></div><div></div><div></div><div></div><div></div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> 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Legend

- Civic Address
- Municipal Boundary
- ADM_Parcel_2017
- Contour Elevation 1m Interval
- Constructed_Drainage
- Ont. Reg. 176/06
- SSMRCA_Channel_Lines
- Creek_Stream
- Creek_Stream_Indefinite
- Intermittent
- Reservoir
- River
- River_Indefinite
- Street Center Line
- Wetlands

Zoning: M2

Drinking Water Source Protection:
Subject Property is within
Potential
Groundwater Recharge Area.

2 Sackville Road
Sault Ste. Marie





RE: 2 sackville

1 message

Christine Ropeter <cropeter@ssmrca.ca>
To: Pat Giunti <pat@eeng.ca>

Wed, Feb 28, 2018 at 12:27 PM

Good afternoon Pat:

It appears from the attached map that the subject property at 2 Sackville Road is not regulated and a permit would not be required from our office for future development.

Sincerely,

Christine Ropeter
Assistant Manager/Communications
Sault Ste. Marie Region Conservation Authority
705-946-8530
cropeter@ssmrca.ca
www.ssmrca.ca

Like us on Facebook: Sault Ste. Marie Region Conservation Authority
Follow us on Twitter @ssmrca

Go for a walk and something will happen - Cheryl Strayed

-----Original Message-----

From: Pat Giunti [mailto:pat@eeng.ca]
Sent: February-28-18 12:15 PM
To: Christine Ropeter <cropeter@ssmrca.ca>
Subject: 2 sackville

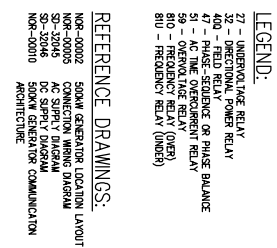
Good day.

Christine our office is doing a property assessment for hydro one at their 2 sackville property. Someday they may want to do work on the property. Truck sheds etc. I just really need to know if the conservation authority would require a permit application submittal if they ever were to look at doing something. Yes a pretty open ended question with little information. Lol.

Thanks

Sent from my iPhone

 DVLP_GISIT_Map_2SackvilleRoad_20180228 (002).pdf
342K

CLASS No.

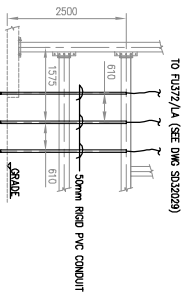
[illegible]

_____ FIBRE _____
 _____ POWER _____
 _____ EXISTING FENCE _____
 _____ NEW FENCE _____
 _____ GAS _____
 _____ PROPOSED POWER CABLE _____
 _____ ROUTING TO GENERATOR _____
 _____ NEW DUCT _____

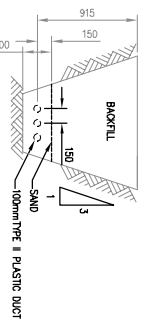
NOR-00001	SINGLE LINE DIAGRAM
NOR-00005	CONNECTION WIRING DIAGRAM
SD-32045	AC SUPPLY DIAGRAM
SD-32046	DC SUPPLY DIAGRAM
NOR-00010	500KW GENERATOR COMMUNICATION ARCHITECTURE

1. MINIMUM VERTICAL DISTANCE BETWEEN EXISTING POWER CABLE AND NEW CONDUIT SHALL BE NO LESS THAN 600mm. SAME FOR NEW POWER CABLE DUCT AND NEW CONDUIT DUCT.
2. ELECTRICAL CONTRACTOR SHALL FIELD OUT HOLES IN EXISTING TIEBARS FOR NEW CONDUIT RUNS. AFTER CONDUITS ARE INSTALLED, THE CONTRACTOR SHALL SEAL AROUND CONDUITS TO STOP MOISTURE AND DIRT FROM ENTERING INTO EXISTING TIEBAR.
3. REFER TO ENCLOSURE AND/OR DRAWINGS FOR LOCATIONS OF OPENINGS IN CONCRETE PAD AND FOR LOCATIONS OF ANCHOR BOLTS FOR ENCLOSURE.

SECTION A-A
SCALE: N.T.S.



SECTION B-B TYPICAL





Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018

APPENDIX ‘B’

PHOTOGRAPHS

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 1 – North Elevation – Looking South – Main Entrance

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 2 – Second Entrance – Main parking – Looking Northwest

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 3 – Main parking area corridor – Looking South

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 4 – Ditch Inlet Catch Basin – This structure is located at north side of the second entrance to the main parking area. The main parking area catch basins drain to this basin. It then is fully entered into the City of SSM storm water system.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 5 – Gravel Drive between Suite 'B' and Work Garage / Truck Shed.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 6 – Second Entrance of Main parking area – Looking South. There is obvious settlement of the soils of the parking area around the main storm drain.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



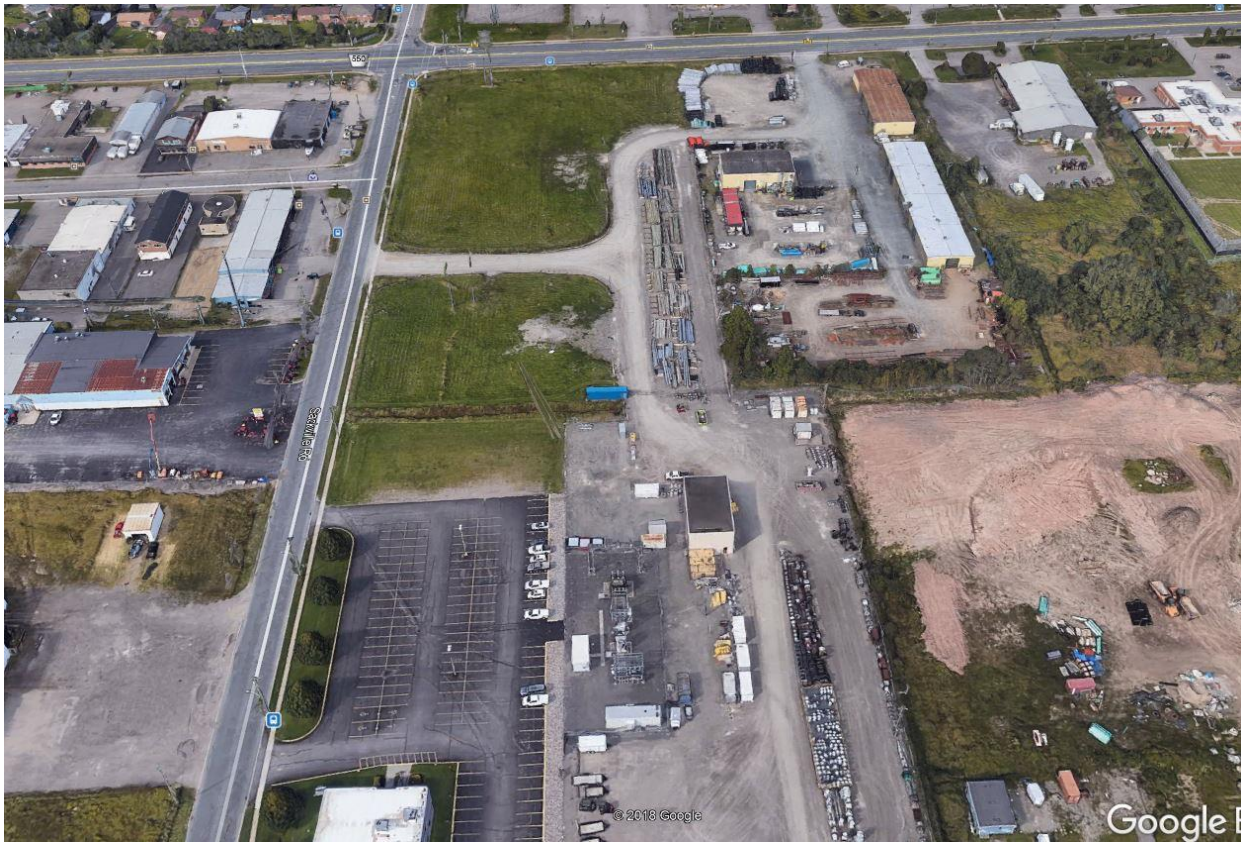
General Site, Photo 7 – Photo of Stores and Sub-station - Looking Northeast.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 8 – partial aerial view of the south half of the site - Looking North.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



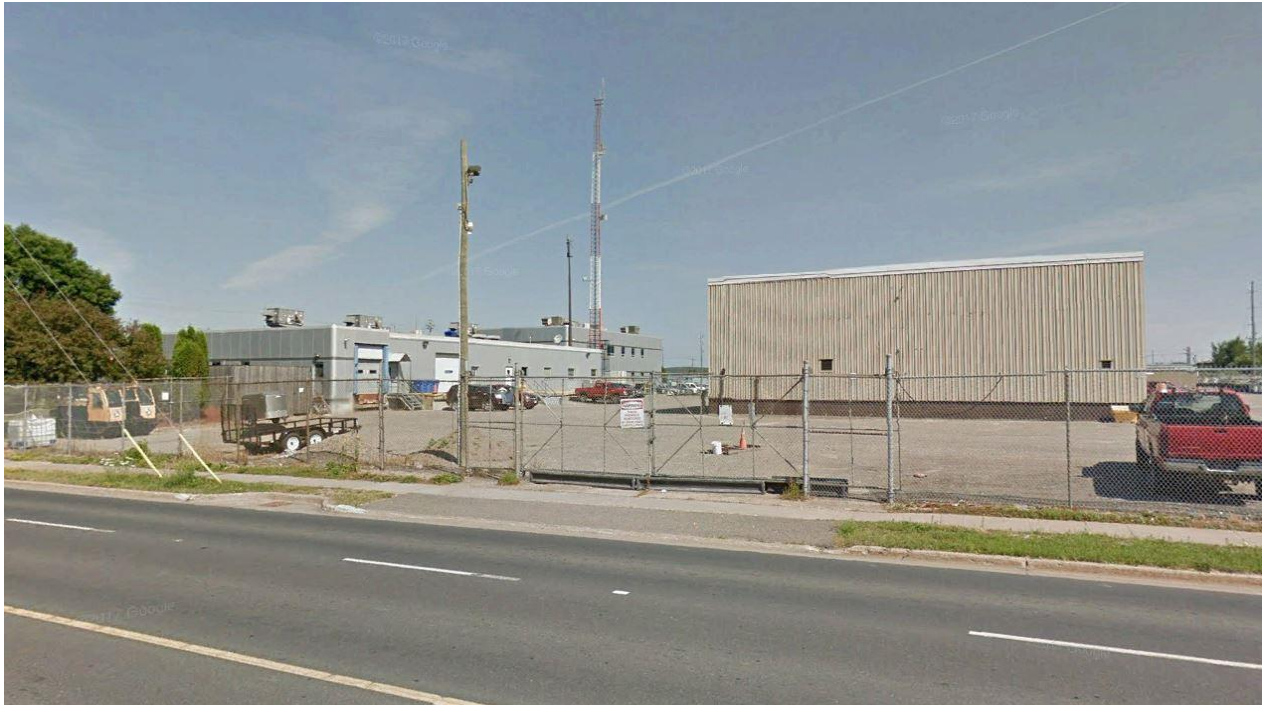
General Site, Photo 9 – Partial aerial view of the north half of the site - Looking North.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 10 – Exterior view of Suite 'B' - Looking North.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 11 – Exterior view of Suite 'B' & Work Garage/Truck Shed - Looking Northwest.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 12 – Work Garage/Truck Shed - Looking Northwest.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 13 – Exterior view of Suite ‘B’ - Looking East.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 14 – Exterior view of Suite 'B' & Suite 'A' - Looking Northeast.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 15 – Exterior view of Maintenance Garage / Truck Shed - Looking West.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 16 – Exterior view of Stand-By power (Generator) - Looking North.

Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018



General Site, Photo 17 – Interior view of Stand-By power (Generator) - Due to the confines of the building, overall photos were not able to be taken..



Building Conditions - Summary Report
For Hydro One and API – General Site Conditions
2 Sackville, Sault Ste. Marie, ON
May 2018

APPENDIX ‘C’

DESIGNATED SUBSTANCE SURVEY
(PARTIAL ONLY – REFLECTIVE OF 2 SACKVILLE)

May 2018

October 30, 2009

GREAT LAKES POWER TRANSMISSION LIMITED PARTNERSHIP

DESIGNATED SUBSTANCE SURVEY

Submitted to:
Dan Richards, CET
Great Lakes Power Transmission Limited Partnership
2 Sackville Road
Sault Ste. Marie, ON
P6B 6J6

REPORT



A world of
capabilities
delivered locally

Report Number: 09-1192-0051

Distribution:

- 1 e-copy - Great Lakes Power Transmission Limited Partnership
- 2 copies - Great Lakes Power Transmission Limited Partnership
- 3 copies - Golder Associates Ltd.



Golder
Associates

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DESIGNATED SUBSTANCE SURVEY

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Site-by-Site Designated Substance Survey Findings

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GLPTLP Sites

APPENDIX C

Laboratory Analytical Results



DESIGNATED SUBSTANCE SURVEY

1.0 INTRODUCTION

Great Lakes Power Transmission Limited Partnership (GLPTLP) retained Golder Associates Ltd. (Golder) to complete Designated Substance Surveys at various sites operated by GLP. The sites fall into four general geographical locations in Northern Ontario: Desbarats; Sault Ste. Marie; Montreal River; and Wawa. Sites and buildings included in our survey are presented in Appendix B, GLPTLP Sites. The surveys were performed as outlined in Golder's *Proposal to Conduct Designated Substance Surveys, Great Lakes Power Limited - Various Sites Throughout Northern Ontario*, dated March 26, 2008.

All buildings and structures, including electrical equipment such as transformers and distribution towers at each Site were included in our survey. Live electrical equipment was only noted to be present and no sampling of this equipment was performed due to health and safety concerns. Moveable equipment and storage facilities, such as storage trailers, if present on a Site were not included in the surveys as per the proposed scope of work. The surveys were conducted between April 6 and April 22, 2009, by Mr. Chris Guy of Golder.

The surveys were performed with the objective of identifying Designated Substances regulated under the Ontario *Occupational Health and Safety Act* (the Act). The Designated Substances Survey included asbestos-containing materials (ACM), lead, mercury, and silica. Remaining Designated Substances, acrylonitrile, arsenic, benzene, Coke Oven Emissions, ethylene oxide, isocyanates, and vinyl chloride, were not expected to be present at the Sites and therefore not included in our assessment.

1.1 Scope of Work

The scope of work for this project was to conduct a survey for Designated Substances detailed below:

- asbestos in building materials;
- lead in paint and other coatings;
- mercury in equipment and fixtures; and
- silica in common construction materials.

The remaining Designated Substances including acrylonitrile, arsenic, benzene, coke oven emissions, ethylene oxide, isocyanates and vinyl chloride are not expected to be present at the Site. The assessment of Site soil and groundwater was beyond the proposed Scope of Work.

2.0 REGULATIONS, GUIDELINES AND STANDARDS

2.1 Occupational Health and Safety Act, R.S.O 1990, c.0.1

The Act, R.R.O. 1990 (as amended) outlines Designated Substances that may be present within buildings and sets forth individual regulations for each Designated Substance. The Designated Substances referred to under Section 30 of the Act are regulated under individual regulations promulgated for each substance which specifies occupational exposure limits and any required assessment and control programs. Section 30 of the Act requires that, prior to beginning a construction project (including building demolition); a document summarizing the presence of these substances must be made available to contractors and subcontractors requesting tenders.

Ontario Regulation (O.Reg.) 278/05 outlines procedures for the identification of ACM and protocols for their removal. Under this regulation, if ACM is suspected to be present or ought reasonably to be suspected, locations of the materials must be re-inspected at reasonable intervals to determine their condition and



DESIGNATED SUBSTANCE SURVEY

documentation updated on an annual basis. Prior to a redevelopment or demolition project, a document summarizing the presence of all asbestos materials must be available to contractors and subcontractors requesting tenders.

Lead is regulated in the Act as per Designated Substance Regulation R.R.O. 1990, Regulation 843, as amended to O.Reg.109/04. This regulation prescribes occupational exposure standards for workers who may become exposed to lead.

In September 2004, the Occupational Health and Safety Branch of the Ontario Ministry of Labour (MOL) published their *Guideline, Lead on Construction Projects*, to raise the awareness of employers and workers in the construction industry of the hazards posed by lead in construction and the measures and procedures that should be taken to control those hazards. Although we understand that there is no legal requirement to follow the Guideline, it is referenced herein, where appropriate, to provide guidance on appropriate handling and exposure control procedures when dealing with lead on construction projects.

Mercury is regulated under the Act as per Designated Substances Regulation R.R.O. 1990, Regulation 844, as amended to O.Reg.110/04. This regulation prescribes occupational exposure standards for workers who may become exposed to mercury.

Silica is regulated under the Act as per Designated Substances Regulation R.R.O. 1990, Regulation 845, as amended to O.Reg.606/05. This regulation prescribes occupational exposure standards for workers who may become exposed to silica.

In September 2004, the Occupational Health and Safety Branch of the MOL published their *Guideline, Silica on Construction Projects*, to raise the awareness of employers and workers in the construction industry of the hazards posed by silica in construction and the measures and procedures that should be taken to control those hazards. Although we understand that there is no legal requirement to follow the Guideline, it is referenced herein, where appropriate, to provide guidance on appropriate handling and exposure control procedures when dealing with silica on construction projects.

2.2 Environmental Protection Act, R.S.O. 1990, c.E.19

The General Waste Management Regulation (O.Reg.347/90, as amended) is intended to provide guidance on general waste management, including disposal of asbestos and ACMs. The Ontario Ministry of the Environment defines "asbestos waste" as "solid or liquid waste that results from the removal of asbestos-containing construction or insulation materials or the manufacture of asbestos-containing products and contains asbestos in more than a trivial amount or proportion".

This regulation requires the disposal of asbestos waste in a double sealed container, properly labelled and free of cuts, tears or punctures. The waste must be disposed of in a licensed waste facility which has been properly notified of the presence of asbestos waste.

Disposal of mercury and lead must be conducted in accordance with the requirements of O.Reg.347/90, as amended, prior to demolition.

3.0 METHODOLOGY

3.1 Review of Existing Survey Reports

Golder was not provided with any existing documentation regarding Designated Substances, as such, no review of existing survey reports was performed.



DESIGNATED SUBSTANCE SURVEY

3.2 Area Identification

Each building at a Site was typically assessed on a room-by-room or area-by-area basis.

3.3 System Classification

Areas were broken down into "systems" to document the materials present. Systems are used to group various building materials, referred to as "components", into easily recognisable categories which indicate where they were located. All components are associated with a system (e.g. wall, floor, piping, mechanical). The systems were broken down for each area as described below:

- Floor:** The floor or lower surface of an area. May not be present in areas such as vertical pipe chases or two-storey areas.
- Wall:** Walls or vertical perimeter of an area. May include the exterior walls for the "exterior" area of a building. May not be present if area is defined as a portion of an area with no vertical perimeter surfaces.
- Ceiling:** An architectural or acoustical upper barrier or surface in an area which is typically suspended from, or attached to, the upper structural element (deck). May not be present in vertical shafts or where structural deck is exposed.
- Structure:** Structural element of the Site which usually refers to the concrete or metal upper deck, beams, columns or joists in an area or the fireproofing material applied to the surface of these materials.
- Ductwork:** Ducts and associated connectors which facilitate air movement between areas.
- Piping Systems:** Pipes which typically transport liquids and are commonly insulated. Does not include conduit for electrical services.
- Mechanical Equipment:** Boilers, generators, chillers, hot water tanks, air handling units and other mechanical equipment typically present in mechanical rooms.
- Miscellaneous:** Other items that don't fit into the above categories including bench and table tops, window sealers or fire doors.

3.4 Identification and Sampling of Suspect ACM

The survey included a visual assessment of areas accessible at the time of the survey in order to determine the type and extent of ACM within each building at each Site.

Golder identified suspect ACM present at each Site and sampled this material as required. The primary purpose of the inspection was to identify any suspect ACM.

The presence of asbestos wire and cable was determined by GLPTLP Site representative Mr. Ken Wrightson. At each Site Mr. Wrightson was asked if asbestos wire or cable was thought to be present on Site and his



DESIGNATED SUBSTANCE SURVEY

response has been recorded in the sub-appendices in Appendix A. These materials were not visually identified by Golder.

Bulk samples of suspect ACM were collected according to the requirements of O.Reg.278/05 (see next section).

As per our understanding of the scope of work, certain non-friable materials were not sampled and will be presumed to contain asbestos. Typical non-friable materials that were not sampled included:

- roofing materials;
- window caulking;
- bell and spigot joints;
- components within switch gears; and
- transite.

Other concealed materials that could not be inspected on an area-by-area basis but that should be presumed to contain asbestos where present on a Site include:

- gaskets;
- cores of fire doors;
- vermiculite;
- concrete levelling compounds below flooring materials; and
- refractory brick.

These materials have not been referenced in Appendix A, but should be presumed to contain asbestos where present.

3.5 Asbestos Sampling Analysis

Bulk samples of each "homogeneous material" or "component" suspected to contain asbestos were collected and submitted for laboratory analysis. The number of samples of each homogeneous material was in accordance with Table 1 - Bulk Material Samples, and O.Reg.278/05. Sample analysis of each homogeneous material was stopped at the first positive result.

Table 1: Bulk Material Samples

Type of material	Size of area of homogeneous material	Minimum # of samples
Surfacing material, including without limitation material that is applied to surfaces by spraying , by troweling or otherwise. Examples include acoustical plaster on ceilings and fireproofing materials on structural members	Less than 90 square metres (969 square feet)	3
	90 or more square metres, but less than 450 square metres (4,844 square feet)	5
	450 or more square metres	7



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Type of material	Size of area of homogeneous material	Minimum # of samples
	(More than 4,844 square feet)	
Thermal insulation, except as described below	any size	3
Thermal insulation patch	Less than 2 linear metres (6.6 feet) or 0.5 square metres (approximately 5.4 square feet)	1
Other material	Any size	3

Sample collection consisted of obtaining a small volume of suspect material, placing it in an individual plastic bag, and submitting it to an independent laboratory [EMSL Analytical Inc of Westmount, N.J. (EMSL)] for asbestos content analysis. EMSL is certified under the NVLAP, AIHA IHLAP and NYS ELAP for Laboratory Proficiency (per NVLAP Lab Code 101048-0, AIHA IHLAP 100194 and NYS ELAP 10872). Samples of materials suspected of containing asbestos were submitted, along with a chain-of-custody, to the lab for asbestos content analysis. The laboratory was instructed to stop once a positive result (0.5% or greater) was obtained for any sample in a homogeneous material group. Some samples may be identified by the laboratory to contain multiple phases or layers which require separation and individual analysis of each separate phase or layer.

Samples were analyzed for asbestos type and percentage content using Polarized Light Microscopy in accordance with U.S. Environmental Protection Agency (USEPA) methodologies and dispersion staining techniques (EPA 600/R-93/116). Samples were analyzed to a minimum detection limit of 0.5% to meet the requirements of O. Reg. 278/05. The identification of asbestos fibres in bulk materials is based on a collective set of parameters dependent on the unique shape and crystallographic properties of each fibre as viewed through the microscope. This method is useful for the qualitative identification of asbestos and the semi-quantitative determination of asbestos content in bulk materials expressed as a percent of projected area. The method identifies types of asbestos and also measures percent of asbestos as perceived by the analyst in comparison to standard area projections and the analyst's experience. Analytical results are reported from trace (less than the limit of detection), to the percentage counted or estimated. Materials reported to contain less than 0.5% asbestos, including those referred to as less than the limit of detection (<LOD), are not considered to be asbestos-containing under current regulations.

3.6 Condition of Material

Each ACM identified as part of this assessment was evaluated based on its condition. The criteria used to assess the condition of a material are summarized in Table 2.



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Table 2: Material Condition

Good	<p>Mechanical Insulation: Insulation is covered in intact jacketing with minor or no damage or deterioration. No ACM is exposed. Includes materials where the covering has minor deterioration but no holes.</p> <p>Spray or Trowel-applied Material: Surface of material shows no evidence of damage or deterioration and no delamination. Includes textured finishes or fireproofing that are not encapsulated or painted and where no delamination or damage is observed. Also includes encapsulated fireproofing or sealed textured finishes.</p> <p>Non-friable Material: Material intact or with minor cracks or breaks but with no loose, friable material and no friable debris is present.</p>
Fair	<p>Mechanical Insulation: Minor damage to jacketed insulation including tears, cuts, or deterioration, or undamaged insulation that is not covered. Insulation is exposed with no surface deterioration. May be minor pieces of insulation missing but may be repaired.</p> <p>Spray or Trowel-applied Material: Includes materials that are not thoroughly sealed but with no evidence of deterioration or delamination. Generally, fireproofing materials should be classified as either good or poor.</p> <p>Non-Friable Materials: Materials that show signs of physical deterioration or significant breakage but remain non-friable. No loose, friable debris is present.</p>
Poor	<p>Mechanical Insulation: Material in a condition such that asbestos fibres may be readily released and may become airborne with disturbance. ACM is exposed and significant damage has occurred.</p> <p>Spray or Trowel-applied Material: Materials show signs of physical damage, delamination or deterioration.</p> <p>Non-friable Material: Material is severely damaged or deteriorated to a state where material is friable. Loose debris may or may not be present.</p>

3.7 Identification and Sampling of other Designated Substances

3.7.1 Lead

Potential building materials suspected of containing lead were visually identified at each Site and were sampled where possible. Analysis of suspected lead-based paint (LBP) was performed using bulk sampling procedures followed by laboratory analysis. Bulk samples of suspected LBPs were collected and submitted to EMSL for lead analysis by Flame Atomic Absorption (US EPA SW 846 Method 3050B and 7420). The condition of LBP was described as good or poor. Paint in good condition appeared to be well adhered to the surface it was present on, while paint in poor condition appeared to be peeling and flaking off.

The presence of paper-impregnated lead cable (PILC) was determined by GLPTLP Site representative Mr. Ken Wrightson. At each Site Mr. Wrightson was asked if PILC cable was thought to be present on Site and his responses have been included in the sub-appendices in Appendix A. This material was not visually identified by Golder.



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3.7.2 Mercury

A review of potential mercury-containing equipment and materials installed at the Site was completed as part of the survey such that any mercury-containing light bulbs, switches, thermostats and pressure-sensing devices were noted where observed.

3.7.3 Silica

A review of potential silica-containing materials, such as common masonry products, was completed as part of the survey. Silica is a naturally-occurring mineral and may be found in common aggregates in concrete, mortar and brick.

3.8 Limitations of Survey

Only accessible areas of the Site were examined during our assessment. An accessible area is defined as an area above a suspended ceiling tile, within a manufactured access hatch or behind a closed door, not impeded by any structure, article or item that could be accessed via a 6' ladder. Ceiling spaces (between suspended ceiling and structural deck) that were not accessible at the time of this assessment should be considered to contain asbestos until proven otherwise. An enclosed area that requires demolition to gain entry or a temporary access hatch that is not readily opened is considered inaccessible. This report reflects the observations of accessed areas, and analytical results of materials sampled during the survey. Other areas that could not be accessed at each Site, if any, have been noted in Appendix A.

Analytical results reflect the sampled materials at the specific sample locations. Materials that were visually similar in colour and texture were referenced to specific analyzed samples and were considered to be of like composition and grouped as one homogeneous material.

4.0 FINDINGS

4.1 Confirmed and Presumed ACM and Designated Substances

The location, approximate quantity and extent of Designated Substances that have been identified at each Site based on the findings of Golder's Site assessment are presented as sub-appendices on a Site-by-Site and building-by-building basis in Appendix A. Each sub-appendix contains a Site's Designated Substances Survey summary report, relevant photographs, detailed ACM findings, detailed LBP findings, and a summary of other Designated Substances identified. Details of bulk sample analytical results (Laboratory Results) are presented in Appendix C.

At the time of project execution, all distribution sites and transmission sites were completed together and were to be reported on under a single report prepared for Great Lakes Power Limited. However, as the transmission and distribution businesses have since been split into two companies (Great Lakes Power Transmission Limited Partnership and Algoma Power Inc.) the analytical results (asbestos and lead) for each company have only been provided in their respective reports. As such, the sample numbering found in this report will not be consecutive and the results of samples obtained from sites owned by Algoma Power Inc. have not been included in this report.



DESIGNATED SUBSTANCE SURVEY

5.0 GENERAL RECOMMENDATIONS

5.1 Asbestos-Containing Material

ACM identified in Appendix A that is in fair or poor condition should be repaired and/or removed in accordance with O.Reg.278/05. ACM that will be disturbed as part of building renovations or future demolition must be removed prior to disturbance. Removal of ACM must be performed in accordance with O.Reg.278/05.

As asbestos was identified at various Sites, GLPTLP should develop and implement an asbestos management plan (AMP) that meets the requirements of Section 8 of O.Reg.278/05. Only Sites where asbestos was suspected or confirmed to be present would need to be included in the AMP.

Workers who work in close proximity to ACM should be trained on the hazards of asbestos exposure; the use, care and disposal of protective equipment and clothing to be used and worn when doing work that may disturb asbestos; personal hygiene to be observed when doing the work; and the measures and procedures prescribed by O.Reg.278/05.

It is possible, that undiscovered ACM may be present within inaccessible locations such as wall cavities or above inaccessible ceilings. Asbestos may also be present in materials that are inaccessible or not visible during a non-invasive assessment. If encountered during future renovations or demolition, suspect materials should be treated as asbestos-containing until proven otherwise.

Materials identified throughout this report as being presumed to contain asbestos, including but not limited to caulking, transite, and roofing, should be sampled prior disturbance (maintenance, renovations or demolition) to determine asbestos content. If these materials are determined to contain asbestos they should be handled in accordance with O.Reg.278/05 and disposed of in accordance with O.Reg.347/90 as amended.

5.2 Lead

Lead was confirmed to be present in various paints throughout the Sites and was also presumed to be present in all paint on energized electrical equipment. The presence of lead in paint was quite common until about the mid 1980s and when in good condition and left undisturbed it poses a very low risk to workers. LBPs were primarily observed to be in good condition, however, in a few locations LBPs were found to be in poor condition (flaking from the surface on which they were applied). Lead paint observed in poor condition should be cleaned up and repaired to prevent further deterioration.

Lead-acid batteries were observed at several sites, either in emergency lighting or in battery banks. Once out of service, these batteries should be extracted and sent to a recycling facility.

Lead was suspected to be present in bell and spigot pipe fittings and in solder on copper plumbing, where present. These materials should be removed and recycled prior to any future renovation or demolition project.

Disturbance of lead-containing materials identified at the Sites should be conducted in accordance with the MOL Guideline: *Lead on Construction Projects*, September 2004.

5.3 Mercury

Mercury was assumed to be present in all light bulbs present at the Sites. Trace amounts of mercury vapour in unbroken fluorescent light bulbs poses minimal risk to workers and is a typical application found throughout North America. Once out of service it is recommended that all mercury-containing bulbs are kept separate from



DESIGNATED SUBSTANCE SURVEY

all other waste to prevent damage to the glass bulb containing the mercury. These bulbs should be handled and recycled or disposed of in accordance with O.Reg.844/90 as amended and O.Reg.347/90 as amended.

5.4 Silica

Silica was assumed to be present in all concrete and masonry products present at the Sites. Silica can be found in concrete products throughout North America and poses minimal risk to workers when left undisturbed. Disturbance of Silica should be in accordance with the MOL Guideline: *Silica on Construction Projects*, September 2004.

6.0 LIMITATIONS AND USE OF REPORT

This report was prepared for the exclusive use of the Great Lakes Power Transmission Limited Partnership. This report is based on data and information collected during the site visits conducted by Golder Associates Ltd. and is based solely on site conditions encountered at the time of the survey, supplemented by limited historical information and data obtained by Golder Associates Ltd. as described in this report.

The conclusions and recommendations contained in this report are based upon professional opinions with regard to the subject matter. These opinions are in accordance with currently accepted environmental assessment standards and practices applicable to these locations and are subject to the following inherent limitations:

The data and findings presented in this report are valid as of the date of the investigation. The passage of time, manifestation of latent conditions or occurrence of future events may warrant further exploration at the Sites, analysis of the data, and re-evaluation of the findings, observations, and conclusions expressed in this report.

The findings, observations and conclusions expressed by Golder Associates Ltd. in this report are not and should not be considered, an opinion concerning compliance of any past or present owner or operator of the Sites with any federal, provincial or local laws or regulations.

Additional hazardous building materials not identified in this report may become evident during renovation or demolition activities. Should additional information become available, Golder Associates Ltd. requests that this information be brought to our attention so that we may re-assess the conclusions presented herein.

Golder Associates Ltd. will not be responsible for any real or perceived decrease in a property value, its saleability or ability to gain financing through the reporting of information in this report.

Golder Associates Ltd.'s assessment reports present professional opinions and findings of a scientific and technical nature. While attempts were made to relate the data and findings to applicable occupational health and safety or environmental laws and regulations, the report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations or policies of federal, provincial, or local governmental agencies. Any use of the assessment report constitutes acceptance of the limits of Golder Associates Ltd.'s liability.



DESIGNATED SUBSTANCE SURVEY

7.0 CLOSURE

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

GOLDER ASSOCIATES LTD.

Bryan Wilson, C. Tech.
Project Manager, EHS

Nancy Wilk, HBSc, MHSc, CIH
Senior Practice Leader, Industrial Hygienist

BCW/NW/lis

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DESIGNATED SUBSTANCE SURVEY

APPENDIX A

Site-by-Site Designated Substance Survey Findings

MAIN OFFICE NORTH**1.0 PRESUMED AND CONFIRMED ASBESTOS-CONTAINING MATERIAL**

Location, condition and an approximate quantity of confirmed and presumed asbestos-containing material (ACM) identified below have been presented on the pages following this summary.

1.1 Summary of ACM Identified

- Parging on pipe;
- Bell and Spigot joints;
- Tar and gravel roofing ;
- Roofing shingles; and
- There was no access to some areas of the Building (Main office North). There may be ACMs in these areas.

1.2 Discussion of Sampled Materials and ACM Identified

Parging containing chrysotile asbestos (Sample S29-a and S28-a) was present on the pipe in the system control corridor on the main floor and the basement corridor. This material is considered friable. Parging on the main floor was observed in fair to poor condition, parging in the basement was observed to be in good condition.

Bell and spigot joints presumed to contain asbestos were present in the basement of the Building. This material is considered non-friable and was observed to be in good condition.

Tar and gravel roofing materials presumed to contain asbestos were present on the roof of the Building. This material is considered non-friable and was observed to be in good condition.

Roofing shingles presumed to contain asbestos were present on the roof of the Building. This material is considered non-friable and was observed to be in good condition.

There was no or limited access to some areas of the Building. Areas with drywall ceilings or sub-ceilings could not be assessed as part of the survey.

2.0 LEAD

Green, grey, blue, dark blue, beige and white on green paint was sampled in the basement and was determined to be lead-based. White and green paint was sampled on the main floor and was determined to be lead-based. All paint on Site was observed to be in good condition.

Lead-acid batteries were observed in emergency lighting throughout the Building.

Bell and spigot joints with lead solder was observed in the basement of the Building.

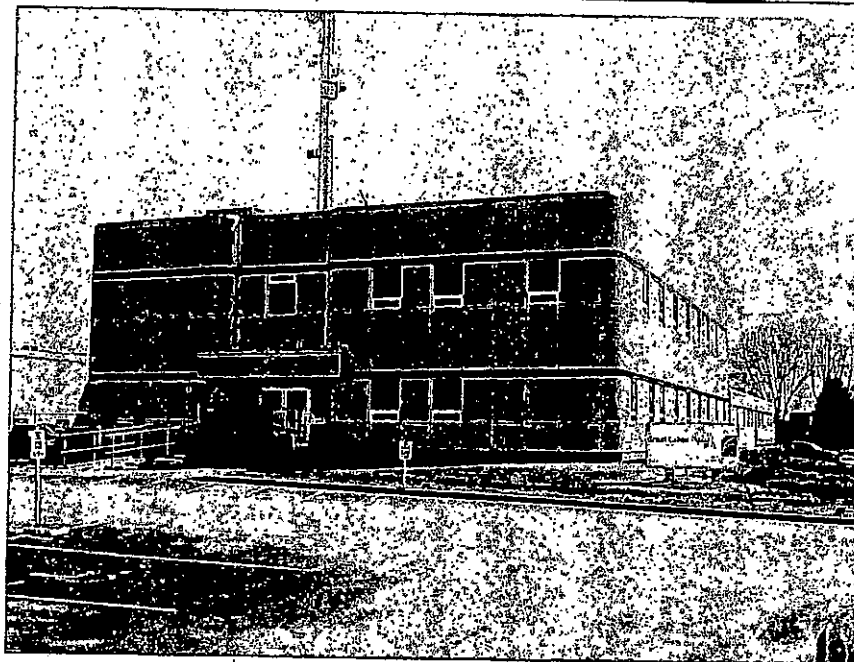
3.0 MERCURY

Mercury was presumed to be present in all light bulbs present on Site.

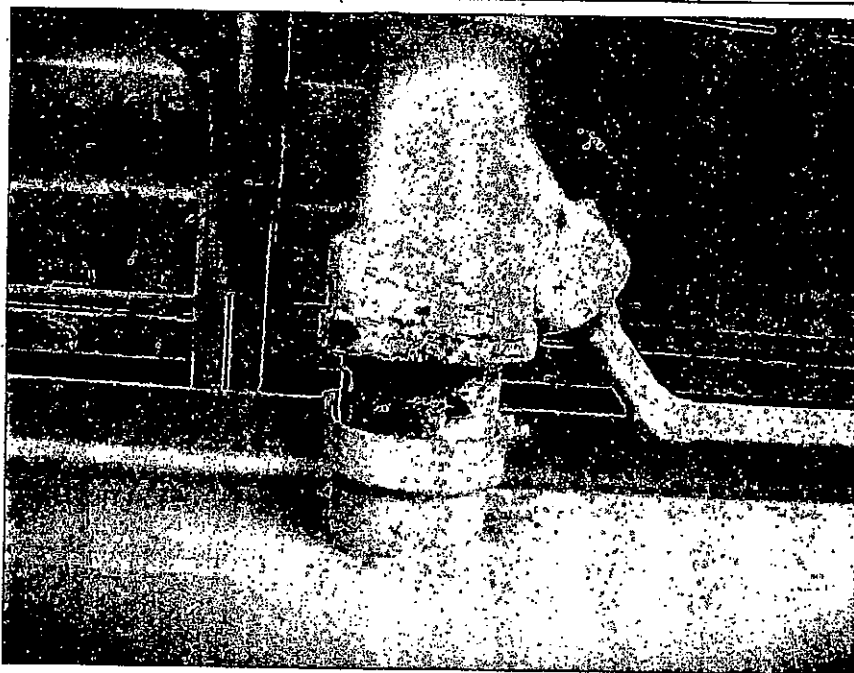
4.0 SILICA

Silica was presumed to be present in all concrete products present on Site.

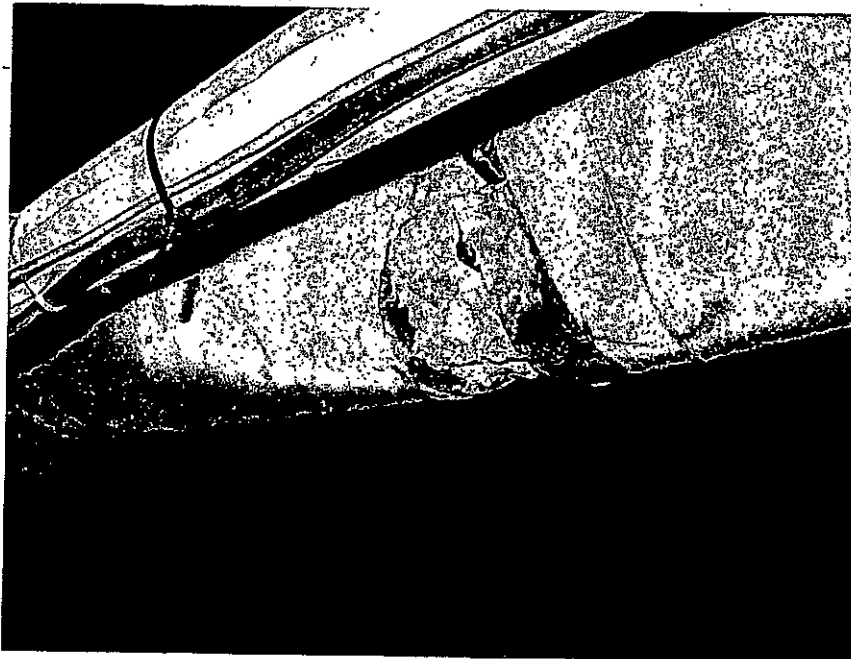
N:\Active\2009\1190 Sudbury\1192\09-1192-0051 OLP DSS Various Locations Sudbury\Reporting\GLPTL DSS Transmission\Appendix A\Main Office North\Report Sheet-
Main office North.doc



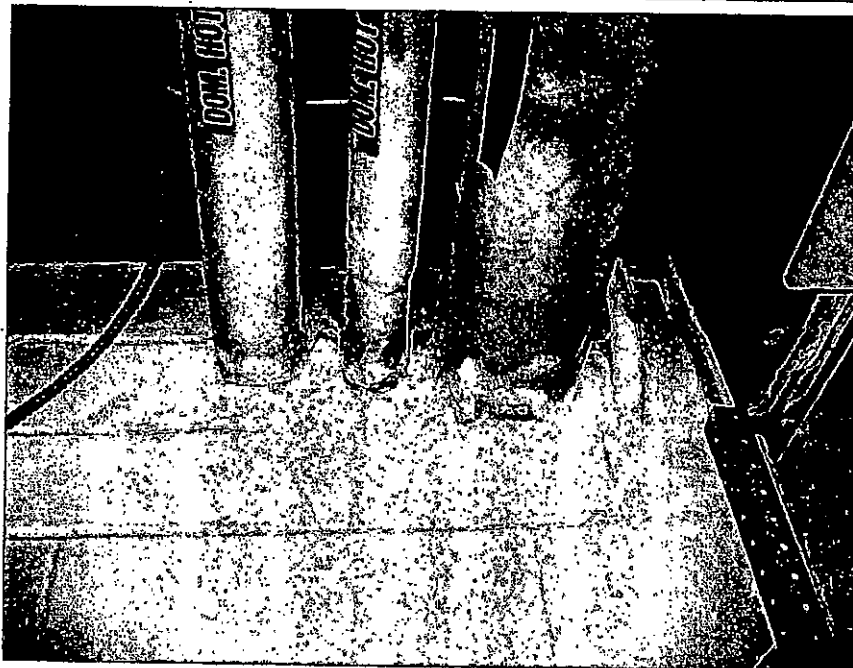
Photograph 1: Main Office North



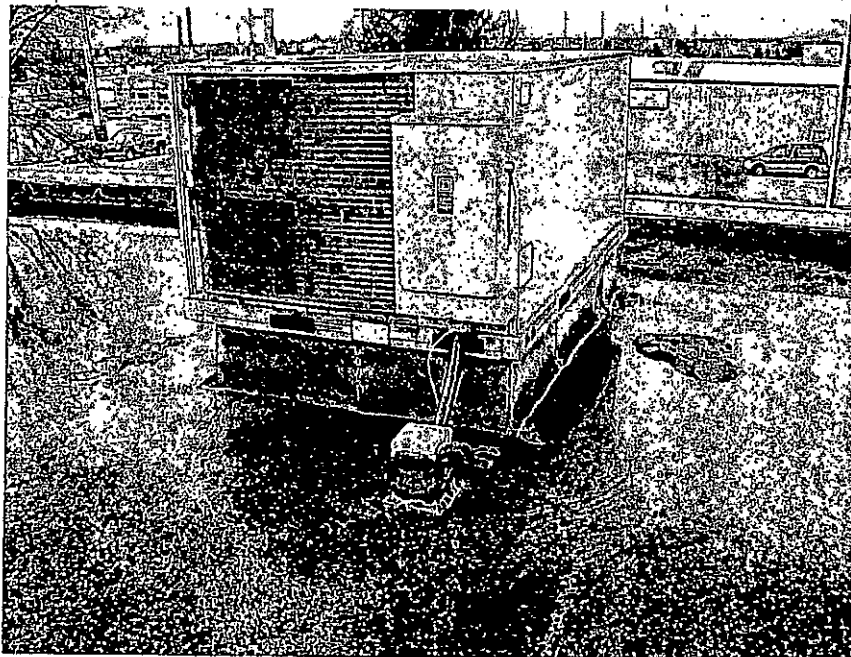
Photograph 2: Bell and spigot pipe joint.



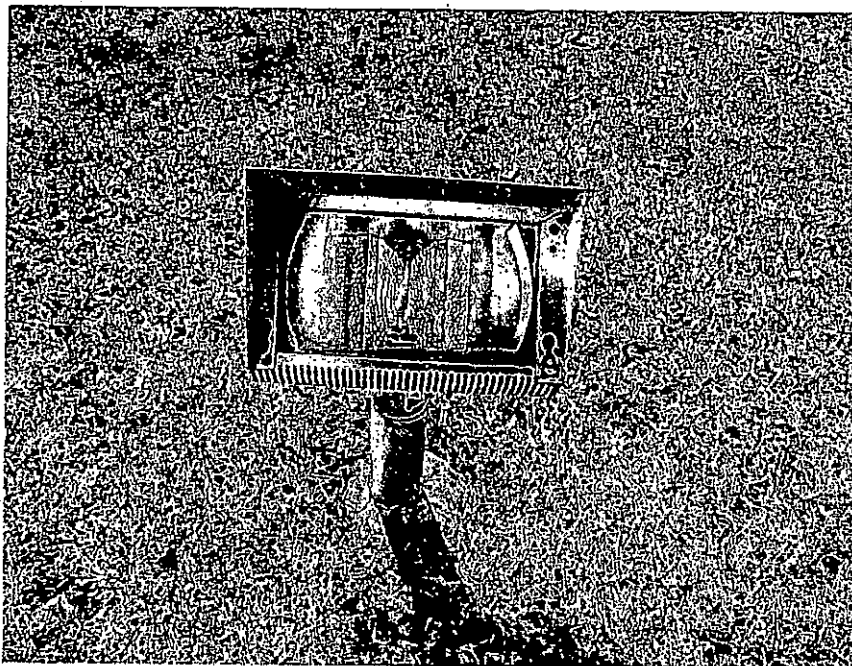
Photograph 3: Asbestos-containing parging on pipe.



Photograph 4: Asbestos-containing parging on pipe ends.



Photograph 5: Roofing materials presumed to contain asbestos.



Photograph 6: A HID bulb on the lawn of the Building.

Number: 09-1192-0051

Office North

Asbestos-Containing Materials

Area	Material	Sampled (Y/N)	Friable (Y/N)	Location / System	Quantity	Condition			Notes (Photo #, specific location, debris, etc)
						G	F	P	
	Tar and gravel	N	N	roof					suspect material, not sampled
	Shingles	N	N	roof					roofing shingles around HVAC equipment
	Drywall	Y	N	wall/ceiling					S06-a,b,c,d,e,f,g
Furnace	Tar pipe wrap	Y	N	pipe					S22-a,b,c
Corridor	Bell and spigot joint	N	N	pipe	each	1			
Corridor	2'x4' ceiling tile	Y	N	ceiling					S23-a,b,c 2'x4' ceiling tile with fissure, flecks, pinholes pattern
Men's	Bell and spigot joint	Y	N	pipe	each	6			
Men's	Firestop	Y	N	other					S30-a,b,c
Storage	Bell and spigot joint	Y	N	pipe	each	4			storage room 007
Locker room	No access								Limited access above drywall ceiling
Room	Bell and spigot joint	N	N	pipe	each	8			
Corridor	Parging	Y	Y	pipe	each	8			S29-a,b,c Parging present where pipe enters, exits concrete wall, limited access in some areas corridor
	Drywall	Y		wall/ceiling					S24-a,b,c,d,e,f,g
Control	2'x4' ceiling tile	Y	N	ceiling					S25-a,b,c 2'x4' ceiling tile with no pattern
Control	Vinyl sheet flooring	Y	N	floor					S26-a,b,c Beige VSF with square pattern
Scada	2'x4' ceiling tile	Y		ceiling					S27-a,b,c 2'x4' ceiling tile with fissures, flecks, holes
System	No access	N							no access above sub-ceiling
System	Parging	Y	Y	pipe	each		1	2	S28-a,b,c in corridor outside system control, c more parging above drywall sub-ceiling

Red- Confirmed ACM
Yellow- Presumed ACM
White- Non-ACM

Site Specific Materials									
a	Material		Present	Quantity	Condition			Notes	
					G	F	P		
	Asbestos Wire	AF, A, AA, AIA	No						
	Asbestos Cable	AVA, AVB, AVL	No						

Red- Confirmed ACM
 Yellow- Presumed ACM
 White- Non-ACM

Number: 09-1192-0051

Office North

Lead-based paint

Area	Colour	Sampled (Y/N)	Location	Quantity	Condition			Notes (Photo #, specific location, etc.)
					G	F	P	
Electrical	Green	Y	wall	ft ²	590			LP-018, LP-108
Throughout	White	Y	wall					LP-019
Throughout	Grey	Y	floor	ft ²	5664			LP-020
Electrical	Blue	Y	floor/wall					LP-021
Room 20	White on green	Y	wall	ft ²	300			LP-109, LP-110
Men's	Blue	Y	wall	ft ²	900			LP-111
Men's	Dark blue	Y	wall/doors	ft ²	200			LP-112
Room 26	Beige	Y	wall/pipe	ft ²	1000			LP-113
Throughout	Blue	Y	floor					LP-114
Throughout	White	Y	wall	ft ²	3550			LP-115
	Red	Y	floor					LP-116
Office Areas	Beige	Y	wall					LP-117
Scada Rm,	Green	Y	wall	ft ²	1000			LP-118
Building	Red	Y	beams					LP-119
	Yellow	Y	wall					LP-130

Site Specific Materials

Area	Material	Present	Quantity	Notes
	PILC Cable	No		

Red- Confirmed Lead-based paint
 Yellow- Presumed Lead-based paint
 White- Not Lead-based paint

Number: 09-1192-0051

Office North

Substances

Material	Y	N	Area	Location / System	Condition			Notes (Photo #, specific location)
					G	F	P	
bulbs	X		throughout		450			fluorescent tubes and compact fluorescent
ty ulbs	X		throughout		40			in exit lighting
rmostat		X						
ry		X						
batteries	X		throughout		30			in emergency lighting
got joints	X		basement		13			in basement, room 007, 026 and storage room
	X		throughout					throughout Site

MAIN OFFICE SOUTH**1.0 PRESUMED AND CONFIRMED ASBESTOS-CONTAINING MATERIAL**

Location, condition and an approximate quantity of confirmed and presumed asbestos-containing material (ACM) identified below have been presented on the pages following this summary.

1.1 Summary of ACM Identified

- No suspect ACMs were identified at the Site (Main Office South).

2.0 LEAD

Grey/blue paint was sampled from the floor of the basement and was determined to be lead-based. All paint on Site was observed to be in good condition.

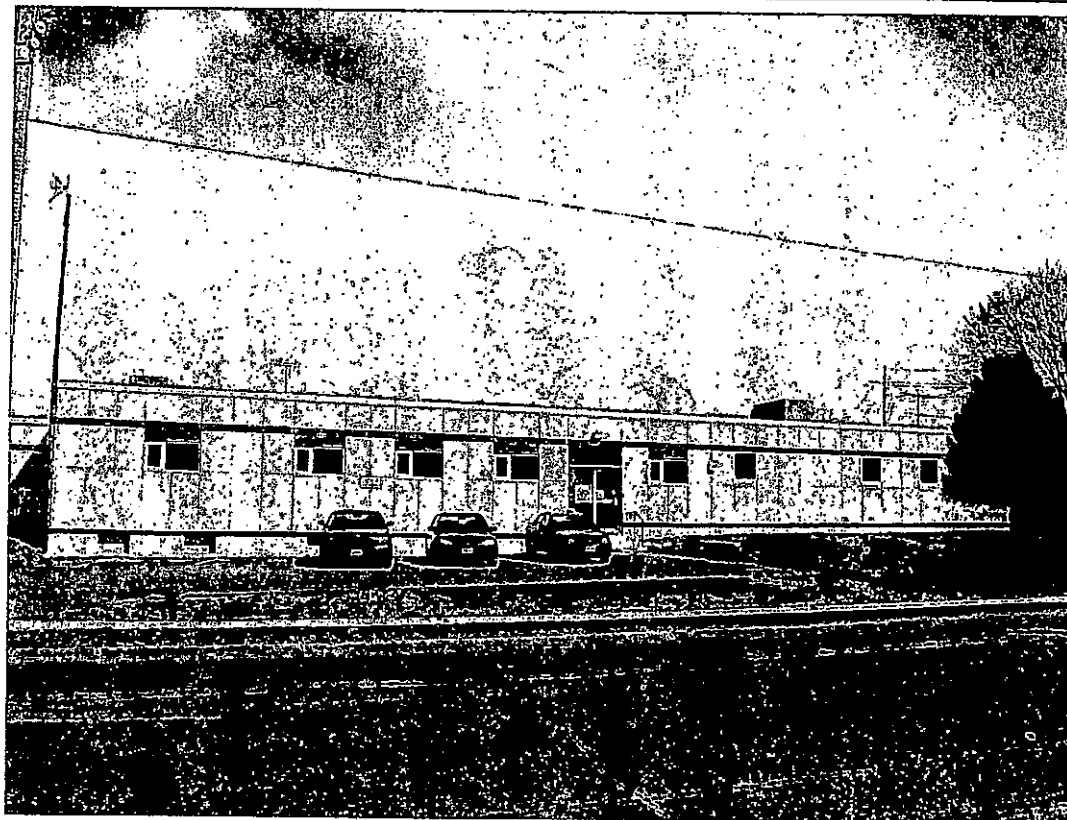
Lead-acid batteries were observed in emergency lighting throughout the Site.

3.0 MERCURY

Mercury was presumed to be present in all light bulbs present on Site.

4.0 SILICA

Silica was presumed to be present in all concrete products present on Site.



Photograph 1: Main Office South

Number: 09-1192-0051

Office South

Asbestos-Containing Materials

a	Material	Sampled (Y/N)	Friable (Y/N)	Location / System	Quantity	Condition			Notes (Photo #, specific location, debris, etc)
						G	F	P	
									No suspect ACM were identified on Site

Site Specific Materials

	Material		Present	Quantity	Condition			Notes
					G	F	P	
	Asbestos Wire	AF, A, AA, AIA	No					
	Asbestos Cable	AVA, AVB, AVL	No					

Red- Confirmed ACM
Yellow- Presumed ACM
White- Non-ACM

ber: 09-1192-0051

Office South

Lead-based paint

Area	Colour	Sampled (Y/N)	Location	Quantity	Condition			Notes (Photo #, specific location, etc.)
					G	F	P	
Area, offices,	Light Blue	Y	wall					LP-121
Painting	Beige	Y	wall					LP-120
Throughout	White	Y	wall					LP-125
Throughout	Purple	Y	doors, frames					LP-122
Throughout	White	Y	wall					LP-124, LP-128
Throughout	Purple	Y	doors, frames					same as LP-122
Throughout	Grey/blue	Y	floor	ft ²	10000			LP-123
Archives	Blue	Y	wall					LP-129
	Grey	Y	miscellaneous					LP-126
	Dark blue	Y	wall/ceiling					LP-127
	Red	Y	wall					LP-133

Site Specific Materials

Material	Present	Quantity	Notes
PILC Cable	No		

Red- Confirmed Lead-based paint
Yellow- Presumed Lead-based paint
White- Not Lead-based paint

Number: 09-1192-0051

Office South

Substances

Material	Y	N	Area	Location / System	Condition			Notes
					G	F	P	(Photo #, specific location)
bulbs	X		throughout		400			fluorescent tubes and compact fluorescent t
ty ulbs	X		exterior		7			on lawn and building exterior
rmostat		X						
ary		X						
batteries	X		throughout		30			in emergency lighting
got joints		X						
	X		throughout					throughout Site

STORES

1.0 PRESUMED AND CONFIRMED ASBESTOS-CONTAINING MATERIAL

Location, condition and an approximate quantity of confirmed and presumed asbestos-containing material (ACM) identified below have been presented on the pages following this summary.

1.1 Summary of ACM Identified

- Suspect pipe;
- Suspect roofing materials.

1.2 Discussion of Sampled Materials and ACM Identified

A suspect drain pipe that could not be accessed was observed in the storage area. The pipe was insulated with fibreglass but is suspected to be made of transite. The pipe was behind shelving units and could not be properly assessed.

Roofing materials on the stores building are presumed to contain asbestos. The roof of the building could not be accessed during this survey.

2.0 LEAD

Blue, red and beige paint sampled in the Stores building were determined to be lead-based. Beige/red paint sampled from the equipment shed was determined to be lead-based. Dark grey paint on de-energized equipment was determined to be lead-based. All paint on Site was observed to be in good condition.

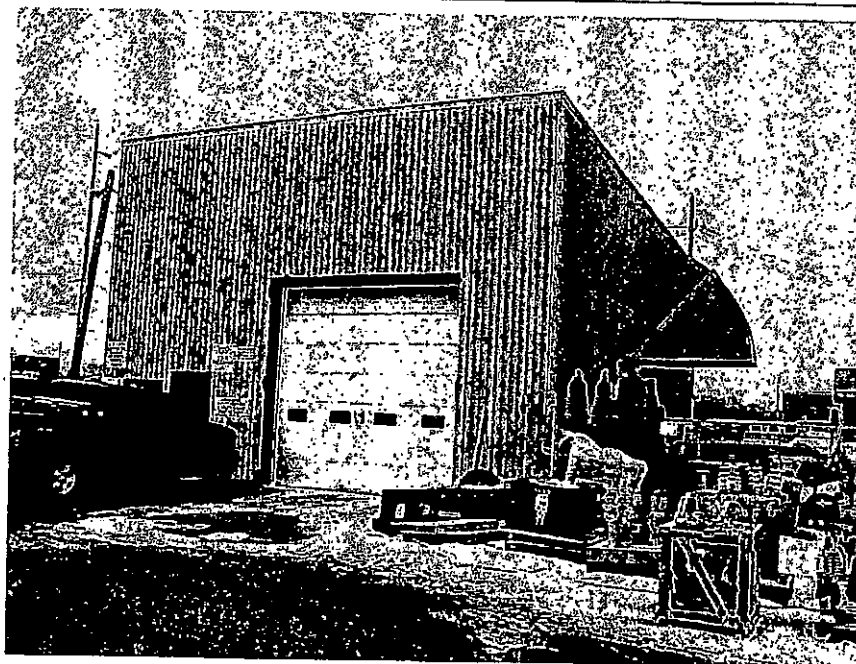
A Lead-acid battery was present on the oil storage shed exterior light.

3.0 MERCURY

Mercury was presumed to be present in all light bulbs present on Site.

4.0 SILICA

Silica was presumed to be present in all concrete products present on Site.



Photograph 1: Stores building



Photograph 2: De-energized electrical equipment stored in the yard.

umber: 09-1192-0051

Asbestos-Containing Materials

	Material	Sampled (Y/N)	Friable (Y/N)	Location / System	Quantity	Condition			Notes (Photo #, specific location, debris, etc.)
						G	F	P	
ea	suspect pipe	N		pipe	linear feet	50			drain pipe with fiberglass insulation, might be trar no access to pipe
	no suspect materials	N							office area built in 2003
ding	roofing materials	N		roof					no access to roof, roofing material are presumed contain asbetsos

Site Specific Materials

	Material		Present	Quantity	Condition			Notes
					G	F	P	
	Asbestos Wire	AF, A, AA, AIA	No					
	Asbestos Cable	AVA, AVB, AVL	No					

Red- Confirmed ACM
Yellow- Presumed ACM
White- Non-ACM

Number: 09-1192-0051

Lead-based paint

Area	Colour	Sampled (Y/N)	Location	Quantity	Condition			Notes (Photo #, specific location, etc.)
					G	F	P	
Basement	Blue	Y	floor	ft ²	1500			LP-030
Basement	Red	Y	beams	ft ²	1200			LP-031
Basement	Yellow/grey	Y	steel beams	ft ²	100			LP-032, on steel beams and guardrails. Grey paint under yellow
Basement	Blue	Y	wall/ceiling	ft ²	600			same as LP-030
Basement	beige	Y	wall	ft ²	2500			LP-033
Basement	Beige/red	Y	W/F	ft ²	1200			LP-034
Basement	Beige/brown	Y	building	ft ²	1000			LP-038
Basement	Grey	N	equipment	ft ²	3000			LP-035, de-energized transformers and energized electrical equipment
Basement	Green	N	equipment	ft ²	1200			LP-036, de-energized transformers and energized electrical equipment
Basement	Dark grey	N	equipment	ft ²	1000			LP-037, de-energized transformers and energized electrical equipment

Site Specific Materials

Area	Material	Present	Quantity	Notes
	PILC Cable	No		

Red- Confirmed Lead-based paint
 Yellow- Presumed Lead-based paint
 White- Not Lead-based paint

Number: 09-1192-0051

Substances

Material	Y	N	Area	Location / System	Condition			Notes
					G	F	P	(Photo #, specific location)
bulbs	X		office area		6			fluorescent tubes
ty ulbs	X		storage area, exterior		8			
rmostat		X						
ury		X						
batteries	X		exterior		1			on oil storage shed exterior light
got joints		X						
	X		throughout					throughout Site

GARAGE**1.0 PRESUMED AND CONFIRMED ASBESTOS-CONTAINING MATERIAL**

Location, condition and an approximate quantity of confirmed and presumed asbestos-containing material (ACM) identified below have been presented on the pages following this summary.

1.1 Summary of ACM Identified

- Transite pipe; and
- Suspect roofing materials.

1.2 Discussion of Sampled Materials and ACM Identified

Transite pipe presumed to contain asbestos was observed in the wash bay, mezzanine and the offices on floor 2. This material was in good condition and is considered non-friable.

Roofing materials on the stores building are presumed to contain asbestos. The roof of the building could not be accessed during this survey.

2.0 LEAD

Red and beige paint sampled in the Garage building were determined to be lead-based. Black and yellow paint sampled on the exterior of the Garage building were determined to be lead-based. All paint on Site was observed to be in good condition.

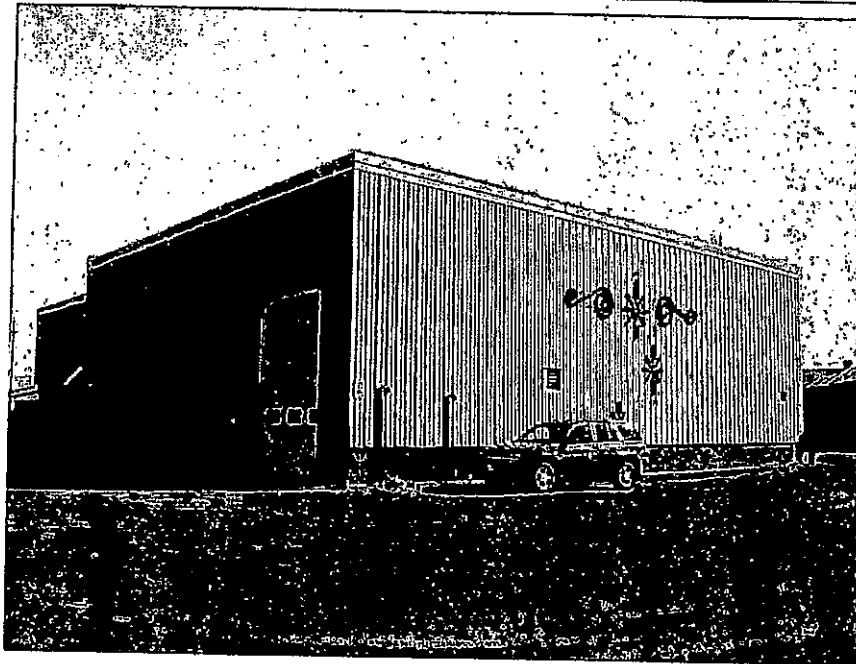
Lead-acid batteries were present in emergency lighting throughout the Site.

3.0 MERCURY

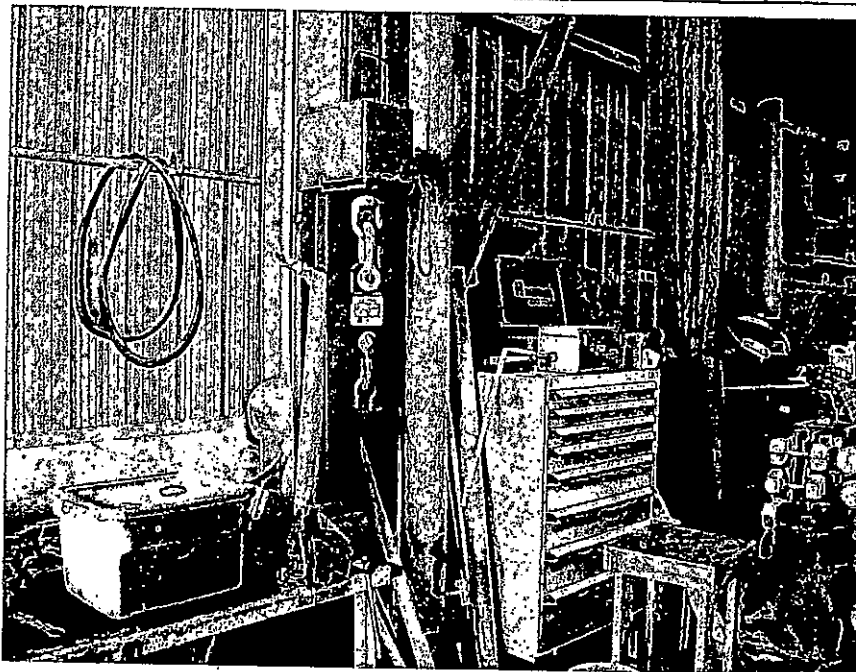
Mercury was presumed to be present in all light bulbs present on Site.

4.0 SILICA

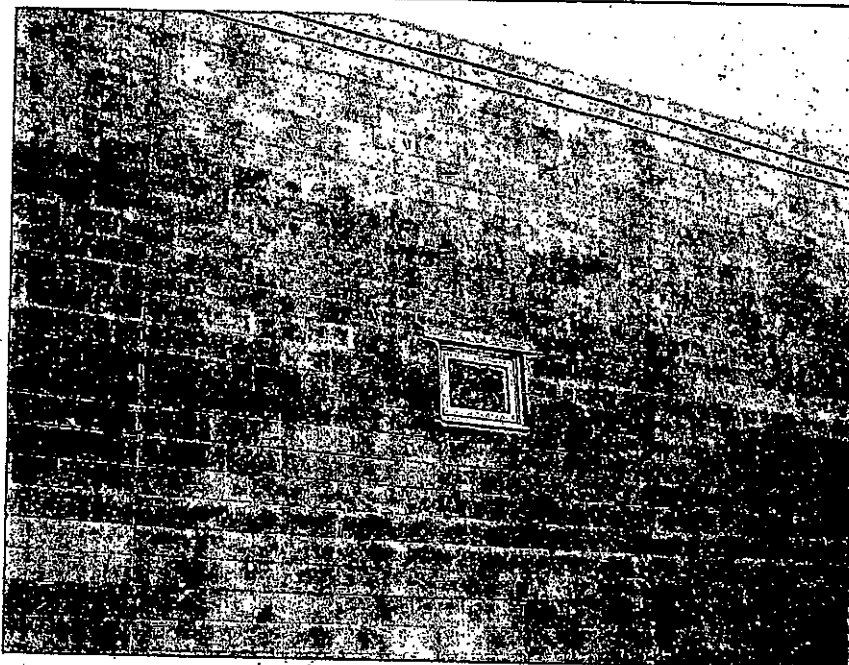
Silica was presumed to be present in all concrete products present on Site.



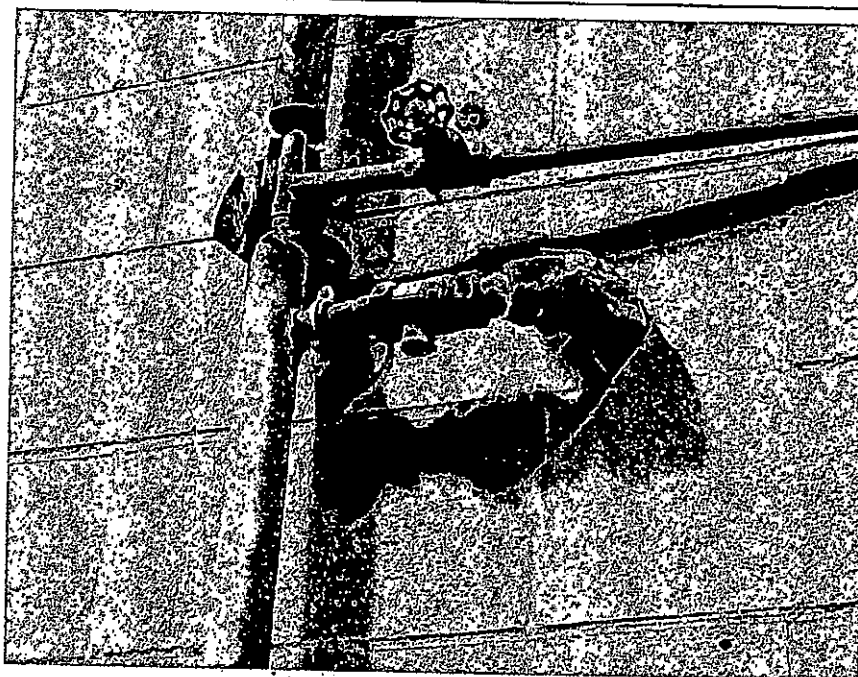
Photograph 1: Garage.



Photograph 2: Transite pipe in the wash bay.



Photograph 3: Window caulking presumed to contain asbestos.



Photograph 4: Non-asbestos pipe parging in the wash bay.

Number: 09-1192-0051

Page

Asbestos-Containing Materials

Area	Material	Sampled (Y/N)	Friable (Y/N)	Location / System	Quantity	Condition			Notes (Photo #, specific location, debris, etc)
						G	F	P	
Floor 2	Transite	N	N	pipe	linear feet	120			transite drain pipe, found in car wash, mezzanine offices on floor 2
Core parts	2'x4' ceiling tile	Y		ceiling					fissures with holes pattern, S01-a,b,c
	drywall	Y		wall/ceiling					Sample S02-a,b,c,d,e,f
Core, m	12"x12" floor tile	Y	N	floor					beige with flecks pattern, Sample S03-a,b,c
	parging	Y		pipe					Sample S04-a,b,c
	roofing materials	N	N	roof					suspect roofing materials, no access to roof
	window caulking	N	N	other	each	1			

Site Specific Materials

Material	Present	Quantity	Condition			Notes
			G	F	P	
Asbestos Wire AF, A, AA, AIA	No					
Asbestos Cable AVA, AVB, AVL	No					

Red- Confirmed ACM
Yellow- Presumed ACM
White- Non-ACM

umber: 09-1192-0051

ge
Lead-based paint

Area	Colour	Sampled (Y/N)	Location	Quantity	Condition			Notes (Photo #, specific location, etc.)
					G	F	P	
t building	Beige	Y	wall	ft ²	1000			LP-002, LP-006
t building	Red	Y	beams	ft ²	3000			LP-003, on beams and railings
torage	Blue	Y	floor/wall	ft ²	2000			LP-004
t building	Grey	Y	various	ft ²	2000			LP-005
torage	White	Y	wall	ft ²	2000			LP-007
	Black	Y	exterior	ft ²	800			LP-015, on steel poles
	Yellow	Y	exterior	ft ²	5000			LP-016 and LP-017, on concrete block
	White	Y	wall	ft ²	1000			same as LP-007

Site Specific Materials

Area	Material	Present	Quantity	Notes
	PILC Cable	No		

Red- Confirmed Lead-based paint
Yellow- Presumed Lead-based paint
White- Not Lead-based paint

Number: 09-1192-0051

ge
d Substances

Material	Y	N	Area	Location / System	Condition			Notes (Photo #, specific location)
					G	F	P	
Light bulbs	X		throughout		126			fluorescent tubes
Light bulbs	X		throughout		24			
Thermostat		X						
Wiring		X						
Batteries	X				12			on emergency lighting
Welded joints		X						
	X		throughout					throughout Site



DESIGNATED SUBSTANCE SURVEY

APPENDIX B

GLPTLP Sites



DESIGNATED SUBSTANCE SURVEY

Location	Building
Sault Ste. Marie	Main Office North
	Main Office South
	Garage
	Truck Shed
	Stores
Sault Area Substations	Clergue Transmission Station (TS)
	Steeltown TS (includes Patrick St.)
	Northern TS
	Third Line TS (includes Third Line Control)
	Echo River TS
	Goulais TS
	Batchawana TS
Montreal River Substations	Mackay TS
	New Gartsshore TS
	Andrews TS
Wawa	Watson TS
	Magpie TS
	Anjigami TS
	Hollingsworth TS
	Hwy. 101 TS



DESIGNATED SUBSTANCE SURVEY

APPENDIX C

Laboratory Analytical Results

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Customer PO:
Received: **04/16/09 10:30 AM**
EMSL Order: **040909403**

EMSL Proj:
Analysis Date: **4/21/2009**
Report Date: **4/21/2009**

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S01-A 040909403-0001	GARAGE, STORE PARTS ROOM	Gray Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	None Detected
S01-B 040909403-0002	GARAGE, STORE PARTS ROOM	Gray Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	None Detected
S01-C 040909403-0003	GARAGE, STORE PARTS ROOM	Gray Fibrous Heterogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (other)	None Detected
S02-A 040909403-0004	GARAGE, OIL STORAGE ROOM	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S02-B 040909403-0005	GARAGE, OIL STORAGE ROOM	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S02-C 040909403-0006	GARAGE, OIL STORAGE ROOM	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S02-D 040909403-0007	GARAGE, OIL STORAGE ROOM	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S02-E 040909403-0008	GARAGE, OIL STORAGE ROOM	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Peter Harrison (29)
Will DiBella (9)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10672

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Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S02-F 040909403-0009	GARAGE, OIL STORAGE ROOM	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S02-G 040909403-0010	GARAGE, OIL STORAGE ROOM	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S03-A TILE 040909403-0011	GARAGE, ELECTRICAL STORAGE ROOM	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S03-A MASTIC 040909403-0011A	GARAGE, ELECTRICAL STORAGE ROOM	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S03-B TILE 040909403-0012	GARAGE, ELECTRICAL STORAGE ROOM	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S03-B MASTIC 040909403-0012A	GARAGE, ELECTRICAL STORAGE ROOM	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S03-C TILE 040909403-0013	GARAGE, ELECTRICAL STORAGE ROOM	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S03-C MASTIC 040909403-0013A	GARAGE, ELECTRICAL STORAGE ROOM	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

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EMSL Proj:
Analysis Date: **4/21/2009**
Report Date: **4/21/2009**

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S04-A 040909403-0014	GARAGE, WASH BAY	Tan/Yellow Fibrous Heterogeneous	30% Cellulose 20% Min. Wool	50% Non-fibrous (other)	None Detected
S04-B 040909403-0015	GARAGE, WASH BAY	Tan/Yellow Fibrous Heterogeneous	30% Cellulose 10% Min. Wool	60% Non-fibrous (other)	None Detected
S04-C 040909403-0016	GARAGE, WASH BAY	Tan/Yellow Fibrous Heterogeneous	30% Cellulose 10% Min. Wool	60% Non-fibrous (other)	None Detected
S05-A 040909403-0017	TRUCK SHED	Brown Non-Fibrous Heterogeneous		98% Non-fibrous (other)	2% Chrysotile
S05-B 040909403-0018	TRUCK SHED				Stop Positive (Not Analyzed)
S05-C 040909403-0019	TRUCK SHED				Stop Positive (Not Analyzed)
S07-A 040909403-0020	3RD LINE TS, EXTERIOR	Gray Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)	None Detected
S07-B 040909403-0021	3RD LINE TS, EXTERIOR	Gray Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	None Detected

Analyst(s)

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Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

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EMSL Proj:
Analysis Date: **4/21/2009**
Report Date: **4/21/2009**

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S07-C 040909403-0022	3RD LINE TS, EXTERIOR	Gray Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	None Detected
S08-A 040909403-0023	STEELTON TS, PNC CONTROL BLDG.	Gray Fibrous Heterogeneous		75% Non-fibrous (other)	25% Chrysotile
S08-B 040909403-0024	STEELTON TS, PNC CONTROL BLDG.				Stop Positive (Not Analyzed)
S08-C 040909403-0025	STEELTON TS, PNC CONTROL BLDG.				Stop Positive (Not Analyzed)
S09-A 040909403-0026	CLERGVE TS, MAIN BLDG.	Gray Fibrous Heterogeneous		80% Non-fibrous (other)	20% Chrysotile
S09-B 040909403-0027	CLERGVE TS, MAIN BLDG.				Stop Positive (Not Analyzed)
S09-C 040909403-0028	CLERGVE TS, MAIN BLDG.				Stop Positive (Not Analyzed)
S10-A 040909403-0029	ECHO RIVER TS, MAIN BLDG.	Yellow/Cream Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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or other approved signatory

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Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

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Report Date: **4/21/2009**

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S10-B 040909403-0030	ECHO RIVER TS, MAIN BLDG.	Yellow/Cream Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
S10-C 040909403-0031	ECHO RIVER TS, MAIN BLDG.	Yellow/Cream Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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Customer PO: 09-1192-0051
Received: 04/29/09 9:00 AM
EMSL Order: 090903112

EMSL Proj:
Analysis Date: 4/30/2009

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S13-A, Drywall 090903112-0001	Anigamy T.S, Main bldg.	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S13-B, Drywall 090903112-0002	Anigamy T.S, Main bldg.	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S13-C, Drywall 090903112-0003	Anigamy T.S, Main bldg.	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S14-A, Panel board 090903112-0004	Anigamy T.S, C- can	Brown Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile
S14-B, Panel board 090903112-0005	Anigamy T.S, C- can				Stop Positive (Not Analyzed)
S14-C, Panel board 090903112-0006	Anigamy T.S, C- can				Stop Positive (Not Analyzed)
S15-A, Concrete. 090903112-0007	Holling Worth T.S, yard	Gray Fibrous Homogeneous	5% Glass	95% Non-fibrous (other)	None Detected

Analyst(s)

Nathee Dummaj (66)

Baojia Ke, Laboratory Manager
or other approved signatory

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**EMSL Analytical, Inc**

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Attn: **Chris Guy**
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Sudbury, ON P3C 3L3

Customer ID: 55GOLD72
Customer PO: 09-1192-0051
Received: 04/29/09 9:00 AM
EMSL Order: 090903112

Fax: Phone: (705) 524-6861
Project: 09-1192-0051, GLP

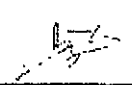
EMSL Proj:
Analysis Date: 4/30/2009

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S15-B, Concrete 090903112-0008	Holling Worth T.S. yard	Gray Fibrous Homogeneous	5% Glass	95% Non-fibrous (other)	None Detected
S15-C, Concrete 090903112-0009	Holling Worth T.S. yard	Gray Fibrous Homogeneous	5% Glass	95% Non-fibrous (other)	None Detected

Analyst(s)

Nathee Dummal (66)


Baojia Ke, Laboratory Manager
or other approved signatory

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
EMSL Proj:
Analysis Date: 4/30/2009

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
S06-A, Drywall 090903112-0032	Main office, South, basement	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S06-B, Drywall 090903112-0033	Main office, South, basement	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S06-C, Drywall 090903112-0034	Main office, South, basement	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S06-D, Drywall 090903112-0035	Main office, South, basement	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Nathae Dummai (66)


Baojia Ke, Laboratory Manager
or other approved signatory

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**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S06-E, Drywall 090903112-0036	Main office, South, basement	White Fibrous Homogeneous	2% Glass	98% Non-fibrous (other)	None Detected
S06-F, Drywall 090903112-0037	Main office, South, basement	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S06-G, Drywall 090903112-0038	Main office, South, basement	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S22-A, Pipe wrap 090903112-0039	Main office, South, basement	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
S22-B, Pipe wrap 090903112-0040	Main office, South, basement	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
S22-C, Pipe wrap 090903112-0041	Main office, South, basement	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
S23-A, 2x4 Ceiling tile 090903112-0042	Main office, South, basement	Brown/White Fibrous Heterogeneous	50% Cellulose 10% Min. Wool	40% Non-fibrous (other)	None Detected

Analyst(s)

Nathee Dummaj (66)


Badjia Ke, Laboratory Manager
or other-approved signatory

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
EMSL Proj:
Analysis Date: 4/30/2009

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S23-B, 2x4 Ceiling tile 090903112-0043	Main office, South, basement	Brown/White Fibrous Heterogeneous	50% Cellulose 10% Min. Wool	40% Non-fibrous (other)	None Detected
S23-C, 2x4 Ceiling tile 090903112-0044	Main office, South, basement	Brown/White Fibrous Heterogeneous	50% Cellulose 10% Min. Wool	40% Non-fibrous (other)	None Detected
S24-A, Drywall 090903112-0045	Main office, South, main floor	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S24-B, Drywall 090903112-0046	Main office, South, main floor	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S24-C, Drywall 090903112-0047	Main office, South, main floor	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S24-D, Drywall 090903112-0048	Main office, South, main floor	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S24-E, Drywall 090903112-0049	Main office, South, main floor	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Nathee Dummrai (66)


Baojia Ke, Laboratory Manager
or other approved signatory

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EMSL Order: 090903112

EMSL Proj:
Analysis Date: 4/30/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S24-F, Drywall 090903112-0050	Main office, South, main floor	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S24-G, Drywall 090903112-0051	Main office, South, main floor	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S25-A, 2x4 Ceiling tile 090903112-0052	Main office, South, main floor	Brown/White Fibrous Heterogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
S25-B, 2x4 Ceiling tile 090903112-0053	Main office, South, main floor	Brown/White Fibrous Heterogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
S25-C, Ceiling tile 090903112-0054	Main office, South, main floor	Brown/White Fibrous Heterogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
S26-A, 2x4 Ceiling tile 090903112-0055	Main office, South, main floor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Sample looks like linoleum

Analyst(s)

Nathee Dummali (66)


Baojia Ke, Laboratory Manager
or other approved signatory

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Analysis Date: 4/30/2009

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S26-A, Adhesive 090903112-0055A	Main office, South, main floor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S26-B, 2x4 Ceiling tile 090903112-0056	Main office, South, main floor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Sample looks like linoleum					
S26-B, Adhesive 090903112-0056A	Main office, South, main floor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S26-C, 2x4 Ceiling tile 090903112-0057	Main office, South, main floor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Sample looks like linoleum					
S26-C, Adhesive 090903112-0057A	Main office, South, main floor	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S27-A, 2x4 Ceiling tile 090903112-0058	Main office, South, main floor	Brown/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (other)	None Detected

Analyst(s)

Nathée Dummai (66)

Baojia Ke, Laboratory Manager
or other approved signatory

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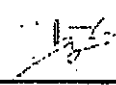
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**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S27-B, 2x4 Ceiling tile 090903112-0059	Main office, South, main floor	Brown/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (other)	None Detected
S27-C, 2x4 Ceiling tile 090903112-0060	Main office, South, main floor	Brown/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (other)	None Detected
S28-A, Parging 090903112-0061	Main office, South, main floor	Gray Fibrous Homogeneous		40% Non-fibrous (other)	60% Chrysotile
S28-B, Parging 090903112-0062	Main office, South, main floor				Stop Positive (Not Analyzed)
S28-C, Parging 090903112-0063	Main office, South, main floor				Stop Positive (Not Analyzed)
S29-A, Parging 090903112-0064	Main office, South, basement	Gray Fibrous Homogeneous		40% Non-fibrous (other)	60% Chrysotile
S29-B, Parging 090903112-0065	Main office, South, basement				Stop Positive (Not Analyzed)

Analyst(s)

Nathee Dummal (66)


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
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**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized
Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
S29-C, Parging 090903112-0066	Main office, South, basement				Stop Positive (Not Analyzed)
S30-A, Firestop 090903112-0067	Main office, South, basement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
S30-B, Firestop 090903112-0068	Main office, South, basement	Gray/White Fibrous Heterogeneous	3% Min. Wool	97% Non-fibrous (other)	None Detected
S30-C, Firestop 090903112-0069	Main office, South, basement	Gray/White Fibrous Heterogeneous	3% Cellulose 2% Min. Wool	95% Non-fibrous (other)	None Detected

Analyst(s)

Nathae Dummai (66)


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107 Haddon Avenue, Westmont, New Jersey 08108

1-800-220-3675

http://www.emsl.com

EMSL ANALYTICAL, Inc.

CHAIN OF CUSTODY

040909403

EMSL Rep:

ELLEN P.

Your Name:

RYAN WILSON

Company:

GOLDER ASSOC. INC.

EMSL Bill to:

Third Party Billing requires written authorization from third party

Street:

1010 LANE STREET

Street:

Box #:

500 FARM LANE

Box #:

City/State:

SULLY, OH

Zip 43089

City/State:

Zip:

Phone:

Phone Results to:

Name:

bryan.wilson@golder.com

Fax Results to:

Telephone #:

Fax #:

Project Name/Number:

09-1192-005-1

Purchase Order #:

TURNAROUND TIME

☐ 3 Hours ☐ 6 Hours ☐ 12 Hours ☐ 24 Hours ☐ 48 Hours ☐ 72 Hours ☐ 4 Days ☐ 5 Days ☐ 6-10 Days

SAMPLE MATRIX

☐ AIR ☐ Bulk ☐ Soil ☐ Wipe ☐ Micro Yr ☐ Drinking Water ☐ Wastewater ☐ Chips ☐ Other

ASBESTOS ANALYSIS

PCM - Air

☐ NIOSH 7400 (A) Issue 2, August 1994☐ OSHA W/PA

TEM/AIR

☐ AHERA 40 CFR Part 763 Subpart E☐ NIOSH 7402 Issue 2☐ EPA Level II

PLM - Bulk

☒ EPA 600/R-93/116☐ NY Stratified Point Count☐ California Air Resource Board (CARB) 435☐ NIOSH 9002☐ PLM NOB (Gravimetric) NYS 198.1☐ EPA Point Count (400 Points)☐ EPA Point Count (1,000 Points)☐ Standard Addition Point Count

SOILS

☐ EPA Protocol Qualitative☐ EPA Protocol Quantitative☐ EMSL MSD 9000 Method fibers/gram☐ Superfund EPA 540-R097-028 (dust generation)

TEM BULK

☐ Drop Mount (Qualitative)☐ Chatfield SOP 1988-02☐ TEM NOB (Gravimetric) NY 198.4

TEM MICROVAC

☐ ASTM D 3753-95 (Qualitative)

TEM WIPE

☐ ASTM D 6480-99☐ Qualitative

TEM WATER

☐ EPA 100.1☐ EPA 100.2☐ NYS 198.2

OTHER:

LEAD ANALYSIS

Flame Atomic Absorption

☐ Wipe, SW846-7420 ☐ ASTM ☐ non ASTM☐ Soil, SW846-7420☐ Air, NIOSH 7082☐ Chips, SW846-7420 or AOAC 5.009 (974-02)☐ Wastewater, SW846-7420☐ TGLP LEAD SW846-1311/7420

Graphite Furnace Atomic Absorption

☐ Air, NIOSH 7105☐ Wastewater, SW846-7421☐ Soil, SW846-7421☐ Drinking Water, EPA 239.2

ICP - Inductively Coupled Plasma

☐ Wipe, SW846-6010 ☐ ASTM ☐ non ASTM☐ Soil, SW846-6010☐ Air, NIOSH 7300

MATERIALS ANALYSIS

☐ Full Particle Identification, EPA☐ Optical Particle Identification, EPA☐ Dust Mines and Tunnel Fragments☐ Particle Size & Distribution☐ Product Comparison☐ Pulverization☐ Failure Analysis☐ Corrosion Analysis☐ Glove Box Containment Study☐ Petrographic Examination of Concrete☐ Portland Cement in Workplace Atmospheres (OSHA ID-143)☐ Man Made Vitreous Fibers - MMVF's☐ Synthetic Fiber Identification☐ Other:

MICROBIAL ANALYSIS

Air Samples

☐ Mold & Fungi by Air O'Cell☐ Mold & Fungi by Agar Plate count & id☐ Bacterial Count and Gram Stain☐ Bacterial Count and Identification

Water Samples

☐ Total Coliforms, Fecal Coliforms☐ Escherichia Coli, Fecal Streptococcus☐ Legionella☐ Salmonella☐ Giardia and Cryptosporidium

Wipe and Bulk Samples

☐ Mold & Fungi - Direct Examination☐ Mold & Fungi - (Culture follow up to direct examination if necessary)☐ Mold & Fungi - Culture (Count & ID)☐ Mold & Fungi - Culture (Count only)☐ Bacterial Count & Gram Stain☐ Bacterial Count & Identification☐ (2 most prominent types)☐ Other:

IAQ ANALYSIS

☐ Nuisance Dust (NIOSH 0200 & 0600)☐ Airborne Dust (PM10, TSP)☐ Silica Analysis by XRD ☐ NIOSH 7500☐ HVAC Efficiency☐ Carbon Black☐ Airborne Oil Mist☐ Other:

Client Sample # (S)

631A-F-512C

Relinquished:

Received:

Relinquished:

Received:

SAMPLES ACCEPTED
FOR ANALYSIS BY
EMSL ANALYTICAL

Date:

Date:

Date:

Date:

Time:

Time:

Time:

Time:

Page 1 of 2



Chain of Custody Asbestos Lab Services

EMSL Analytical, Inc.
107 Haddon Avenue
Westmont, NJ 08108

Phone: (856) 858-4800
Fax: (856) 858-4960
(856) 427-1608
<http://www.emsl.com>

Please print all information legibly.

Client Sample # (s) S01-a - S12-c

Total Samples #: 43

Relinquished: CHRIS Gvy Date: April 13/09

Time: 5:00

Received: _____ Date: _____

Time: _____

Relinquished: _____ Date: _____

Time: _____

Received: _____ Date: _____

Time: _____

040909403

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
S01-a,b,c	Garage, Store Parts Rm - 2x4 Ceiling	tile & fissures and holes
S02-a,b,c	Garage, Oil Storage Rm - Drywall	
S02-d,e,f	Garage, electrical maintenance - Drywall	
S02-g	Garage, loading area - Drywall	
S03-a,b,c	Garage, electrical storage Rm - beige floor	Tile
S04-a,b,c	Garage, Wash Bay - Parging	
S05-a,b,c	Truck Shed - Mastic	
S06-a,b,c	Work Centre (Main Office South) BSMT, electrical shop - Drywall	
S07-a,b,c	3 rd Line TS, Exterior - Fibre impregnated concrete	
S08-a,b,c	Steelton TS, PNC Control Bldg - Transite	
S09-a,b,c	Cleryre TS, Main Bldg - Transite	
S10-a,b,c	Echo River TS - Main Bldg - Fibre stop	

IMPORTANT NOTES:

STOP AT FIRST POSITIVE IN EACH SAMPLE SERIES.

USE 0.5% MDL AS PER O.REG 278/05 - AND NOTE ON THE ANALYTICAL REPORT.

SAMPLES ACCEPTED
FOR ANALYSIS BY
EMSL ANALYTICAL INC.

040910222 -

09093112

Page 2 of 2



Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
107 Haddon Avenue
Westmont, NJ 08108

Phone: (856) 858-4800
Fax: (856) 858-4960
(856) 427-1608
<http://www.emsl.com>

Please print all information legibly.

Client Sample # (s) S06-a S30-cRelinquished: CHRIS GUY Date: April 30/04Received: KN F10 1038 Date: _____

Relinquished: _____ Date: _____

Received: _____ Date: _____

Total Samples #: _____

Time: _____

Time: _____

Time: _____

Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
S13-a,b,c	Drywall / Anisigamy T.S., Main Bldg.	
S14-a,b,c	Panel Board / Anisigamy T.S., C-CAN	
S15-a,b,c	Fibre Impregnated Concrete / Hollingsworth T.S. - Yard	
S06-a,b,c,d,e,f	Drywall / Main office South, B SMNT	
S22-a,b,c	Pipe Wrap / "	"
S23-a,b,c	2x4 Ceiling Tile / "	"
S24-a,b,c,d,e,f	Drywall / " Main Floor	
S25-a,b,c	2x4 Ceiling Tile / "	"

IMPORTANT NOTES:

STOP AT FIRST POSITIVE IN EACH SAMPLE SERIES.

USE 0.5% MDL AS PER O.REG 278/05

NOTE ON THE ANALYTICAL REPORT

SAMPLES ACCEPTED
FOR ANALYSIS BY
EMSL ANALYTICAL INC.

8/2/75
 SAMPLES ACCEPTED
 PORT FOR ANALYSIS BY
 FMS LABORATORY INC.

**EMSL Analytical**

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: westmontleadlab@emsl.com

Attn: **Bryan Wilson**
Golder Associates
1010 Lorne Street
Sudbury, Ontario P3C 3L3

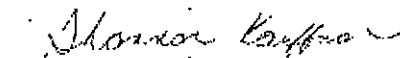
Customer ID: **GOLD72**
Customer PO:
Received: **04/16/09 11:38 AM**
EMSL Order: **200905729**

Fax: Phone: (705) 524-6861
Project: **09-1192-0051**

EMSL Proj:

Report Date: **4/22/2009****Lead in Paint Chips by Flame AAS (SW 846 3050B*17420)**

Client Sample Description	Lab ID	Collected	Analyzed	Lead Concentration
LP-001	0001	4/14/2009	4/22/2009	<0.010 % wt
LP-002	0002	4/14/2009	4/22/2009	0.024 % wt
LP-003	0003	4/14/2009	4/22/2009	0.048 % wt
LP-004	0004	4/14/2009	4/22/2009	<0.010 % wt
LP-005	0005	4/14/2009	4/22/2009	<0.010 % wt
LP-006	0006	4/14/2009	4/22/2009	0.021 % wt
LP-007	0007	4/14/2009	4/22/2009	<0.010 % wt
LP-008	0008	4/14/2009	4/22/2009	0.26 % wt
LP-009	0009	4/14/2009	4/22/2009	0.029 % wt
LP-010	0010	4/14/2009	4/22/2009	2.0 % wt
LP-011	0011	4/14/2009	4/22/2009	<0.024 % wt
LP-012	0012	4/14/2009	4/22/2009	0.27 % wt
LP-013	0013	4/14/2009	4/22/2009	0.22 % wt
LP-014	0014	4/14/2009	4/22/2009	0.039 % wt
LP-015	0015	4/14/2009	4/22/2009	0.029 % wt
LP-016	0016	4/14/2009	4/22/2009	0.019 % wt
LP-017	0017	4/14/2009	4/22/2009	<0.010 % wt
LP-018	0018	4/14/2009	4/22/2009	0.010 % wt
LP-019	0019	4/14/2009	4/22/2009	<0.010 % wt
LP-020	0020	4/14/2009	4/22/2009	0.21 % wt
LP-021	0021	4/14/2009	4/21/2009	0.12 % wt
LP-022	0022	4/14/2009	4/21/2009	0.24 % wt
LP-023	0023	4/14/2009	4/21/2009	<0.011 % wt
LP-024	0024	4/14/2009	4/21/2009	0.20 % wt


Shannon Kauffman, Lead Lab Supervisor
or other approved signatory

Reporting limit is 0.01 % wt. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted

ACCREDITATIONS: NJ-NELAP: 04653, AIHA Environmental Lead Laboratory Approval Program: 100194

Date Printed: 4/22/2009 5:31:50 PM

ChmSnglPrin/nQC

**EMSL Analytical**

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: westmontleadlab@emsl.com

Attn: **Bryan Wilson**
Golder Associates
1010 Lorne Street
Sudbury, Ontario P3C 3L3

Customer ID: GOLD72
Customer PO:
Received: 04/16/09 11:38 AM
EMSL Order: 200905729

Fax:
Project: 09-1192-0051

Phone: (705) 524-6861

EMSL Proj:

Report Date: 4/22/2009

Lead in Paint Chips by Flame AAS (SW 846 3050B*17420)

Client Sample Description	Lab ID	Collected	Analyzed	Lead Concentration
LP-025	0025	4/14/2009	4/21/2009	0.69 % wt
LP-026	0026	4/14/2009	4/21/2009	0.075 % wt
LP-027	0027	4/14/2009	4/21/2009	1.9 % wt
LP-028	0028	4/14/2009	4/21/2009	<0.010 % wt
LP-030	0029	4/14/2009	4/21/2009	0.13 % wt
LP-031	0030	4/14/2009	4/21/2009	0.083 % wt
LP-032	0031	4/14/2009	4/21/2009	<0.018 % wt
LP-033	0032	4/14/2009	4/21/2009	0.14 % wt
LP-034	0033	4/14/2009	4/21/2009	0.052 % wt
LP-035	0034	4/14/2009	4/21/2009	<0.010 % wt
LP-036	0035	4/14/2009	4/21/2009	<0.011 % wt
LP-037	0036	4/14/2009	4/21/2009	2.3 % wt
LP-038	0037	4/14/2009	4/21/2009	<0.022 % wt
LP-039	0038	4/14/2009	4/21/2009	<0.017 % wt
LP-040	0039	4/14/2009	4/21/2009	<0.016 % wt
LP-041	0040	4/14/2009	4/21/2009	1.5 % wt
LP-042	0041	4/14/2009	4/22/2009	1.3 % wt
LP-043	0042	4/14/2009	4/22/2009	0.11 % wt
LP-044	0043	4/14/2009	4/22/2009	<0.042 % wt
LP-045	0044	4/14/2009	4/22/2009	0.026 % wt
LP-046	0045	4/14/2009	4/22/2009	5.7 % wt
LP-047	0046	4/14/2009	4/22/2009	0.10 % wt
LP-048	0047	4/14/2009	4/22/2009	0.26 % wt
LP-049	0048	4/14/2009	4/22/2009	<0.015 % wt

Shannon Kauffman, Lead Lab Supervisor
or other approved signatory

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ACCREDITATIONS: NJ-NELAP: 04653, AIHA Environmental Lead Laboratory Approval Program: 100194

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: westmontleadlab@emsl.com

Attn: **Bryan Wilson**
Goldor Associates
1010 Lorne Street
Sudbury, Ontario P3C 3L3

Fax:
Project: 09-1192-0051

Phone: (705) 524-6861

Customer ID: GOLD72
Customer PO:
Received: 04/16/09 11:38 AM
EMSL Order: 200905729

EMSL Proj:

Report Date: 4/22/2009

Lead in Paint Chips by Flame AAS (SW 846 3050B*/7420)

[illegible]

Shannon Kauffman
Shannon Kauffman, Lead Lab Supervisor
or other approved signatory

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3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: westmontleadlab@emsl.com

Attn: **Bryan Wilson**
Golder Associates
1010 Lorne Street
Sudbury, Ontario P3C 3L3

Customer ID: **GOLD72**
Customer PQ:
Received: **04/24/09 11:32 AM**
EMSL Order: **200906162**

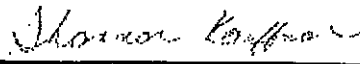
Fax:
Project: **09-1192-0051**

Phone: (705) 524-6861

EMSL Proj:

Lead in Paint Chips by Flame AAS (SW 846 3050B*/7420)

Client Sample Description	Lab ID	Collected	Analyzed	Lead Concentration
LP-065	0001		4/30/2009	0.33 % wt
LP-066	0002		4/30/2009	<0.034 % wt
LP-067	0003		4/30/2009	<0.013 % wt
LP-068	0004		4/30/2009	<0.051 % wt
LP-069	0005		4/30/2009	<0.010 % wt
LP-070	0006		4/30/2009	<0.012 % wt
LP-071	0007		4/30/2009	<0.032 % wt
LP-072	0008		4/30/2009	<0.017 % wt
LP-073	0009		4/30/2009	<0.010 % wt
LP-074	0010		4/30/2009	0.14 % wt
LP-075	0011		4/30/2009	<0.010 % wt
LP-076	0012		4/30/2009	2.1 % wt
LP-077	0013		4/30/2009	3.5 % wt
LP-078	0014		4/30/2009	<0.010 % wt
LP-079	0015		4/30/2009	<0.012 % wt
LP-080	0016		4/30/2009	<0.020 % wt
LP-081	0017		4/30/2009	0.048 % wt
LP-082	0018		4/30/2009	<0.017 % wt
LP-083	0019		4/30/2009	11 % wt
LP-084	0020		4/30/2009	0.029 % wt
LP-085	0021		4/30/2009	<0.016 % wt
LP-086	0022		4/30/2009	0.17 % wt
LP-087	0023		4/30/2009	0.019 % wt
LP-088	0024		4/30/2009	<0.041 % wt


Shannon Kauffman, Lead Lab Supervisor
or other approved signatory

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ACCREDITATIONS: NJ-NELAP: 04653, AHA Environmental Lead Laboratory Approval Program: 100194

EMSL Analytical, Inc.

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: westmontleadlab@emsl.com

Attn: **Bryan Wilson**
Golder Associates
1010 Lorne Street
Sudbury, Ontario P3C 3L3

Fax: _____
Project: **09-1192-0051**

Phone: (705) 524-6861

Customer ID: GOLD72
Customer PO:
Received: 04/24/09 11:32 AM
EMSL Order: 200906162

EMSL Proj:

Lead in Paint Chips by Flame AAS (SW 846 3050B*/7420)

[illegible]

Shannon Kauffman, Lead Lab Supervisor
or other approved signatory

Reporting limit is 0.01 % wt. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

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**EMSL Analytical, Inc.**

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: westmontleadlab@emsl.com

Attn: **Bryan Wilson**
Golder Associates
1010 Lorne Street
Sudbury, Ontario P3C 3L3

Customer ID: **GOLD72**
Customer PO:
Received: **04/24/09 11:32 AM**
EMSL Order: **200906182**

Fax:
Project: **09-1192-0051**

Phone: (705) 524-6861

EMSL Proj:

Lead in Paint Chips by Flame AAS (SW 846 3050B*/7420)

Client Sample Description	Lab ID	Collected	Analyzed	Lead Concentration
LP-111	0049		4/30/2009	0.072 % wt
LP-112	0050		4/30/2009	0.15 % wt
LP-113	0051		4/30/2009	0.081 % wt
LP-114	0052		4/30/2009	<0.011 % wt
LP-115	0053		4/30/2009	0.035 % wt
LP-116	0054		4/30/2009	<0.016 % wt
LP-117	0055		4/30/2009	<0.051 % wt
LP-118	0056		4/30/2009	0.012 % wt
LP-119	0057		4/30/2009	<0.015 % wt
LP-120	0058		4/30/2009	<0.012 % wt
LP-121	0059		4/30/2009	<0.030 % wt
LP-122	0060		4/30/2009	<0.066 % wt
LP-123	0061		4/30/2009	0.026 % wt
LP-124	0062		4/30/2009	<0.062 % wt
LP-125	0063		4/30/2009	<0.042 % wt
LP-126	0064		4/30/2009	<0.015 % wt
LP-127	0065		4/30/2009	<0.014 % wt
LP-128	0066		4/30/2009	<0.025 % wt
LP-129	0067		4/30/2009	<0.035 % wt
LP-130	0068		4/30/2009	<0.010 % wt
LP-133	0069		4/30/2009	<0.010 % wt

Shannon Kauffman, Lead Lab Supervisor
or other approved signatory

Reporting limit is 0.01 % wt. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted.

ACCREDITATIONS: NJ-NELAP: 04653, AIHA Environmental Lead Laboratory Approval Program: 100194

EMSL

107 Haddon Avenue, Westmont, New Jersey 08108

1-800-220-3675

http://www.emsl.com

EMSL ANALYTICAL, Inc.

CHAIN OF CUSTODY

EMSL Rep:

Ellen P.

Third Party Billing requires written
authorization from third party

Your Name:

Bryan Wilson

EMSL-Bill to:

Company:

GOLDER ASSOCIATES

Street:

1010 LORNE STREET

Street:

Box #:

Box #:

City/State:

Sudbury, ON

Zip P3C 4K9

City/State:

Zip

E-MAIL

Phone Results to:

Name:

bryan-wilson@golder.com

Fax Results to:

Telephone #:

Fax #:

Project Name/Number:

09-1192-0051

Purchase Order #:

TURNAROUND TIME

☐ 3 Hours ☐ 6 Hours ☐ 12 Hours ☐ 24 Hours ☐ 48 Hours ☐ 72 Hours ☐ 4 Days ☒ 5 Days ☐ 6-10 Days

SAMPLE MATRIX

☐ Air ☐ Bulk ☐ Soil ☐ Wipe ☐ Micro-Vac ☐ Drinking Water ☐ Wastewater ☒ Chips ☐ Other

ASBESTOS ANALYSIS

PCM - Air

☐ NIOSH 7400 (A) Issue 2: August 1994
☐ OSHA w/TWA

TEM AIR

☐ AHERA 40 CFR, Part 763 Subpart E
☐ NIOSH 7402 Issue 2
☐ EPA Level II

PLM - Bulk

☐ EPA 600/R-93/116
☐ NY Stratified Point Count
☐ California Air Resource Board (CARB) 435
☐ NIOSH 9002

☐ PLM NOB (Gravimetric) NYS 198.1

☐ EPA Point Count (400 Points)
☐ EPA Point Count (1,000 Points)
☐ Standard Addition Point Count

SOILS

☐ EPA Protocol Qualitative
☐ EPA Protocol Quantitative
☐ EMSL MSD 9000 Method (fibers/gram)
☐ Superfund EPA 540-R097.028 (dust generation)

TEM BULK

☐ Drop Mount (Qualitative)
☐ Chatfield SOP-1988-02
☐ TEM NOB (Gravimetric) NYS 198.4

TEM MICROVAC

☐ ASTM D 5755-95 (Quantitative)

TEM WIPE

☐ ASTM D-6480-99
☐ Qualitative

TEM WATER

☐ EPA 100.1
☐ EPA 100.2
☐ NYS 198.2

OTHER

LEAD ANALYSIS

Flame Atomic Absorption

☐ Wipe, SW846-7420 ☐ ASTM ☐ non ASTM
☐ Soil, SW846-7420
☐ Air, NIOSH 7082
☒ Chips, SW846-7420 or AOAC 5.009 (974.02)
☐ Wastewater, SW 846-7420

☐ TCLP LEAD SW846-1311/7420

Graphite Furnace Atomic Absorption

☐ Air, NIOSH 7105
☐ Wastewater, SW846-7421
☐ Soil, SW846-7421
☐ Drinking Water, EPA 239.2

ICP - Inductively Coupled Plasma

☐ Wipe, SW846-6010 ☐ ASTM ☐ non ASTM
☐ Soil, SW846-6010
☐ Air, NIOSH 7300

MATERIALS ANALYSIS

☐ Full Particle Identification
☐ Optical Particle Identification
☐ Dust Mites and Insect Fragments
☐ Particle Size & Distribution
☐ Product Comparison
☐ Paint Characterization
☐ Failure Analysis
☐ Corrosion Analysis
☐ Glove Box Containment Study
☐ Petrographic Examination of Concrete
☐ Portland Cement in Workplace Atmospheres (OSHA ID-1431)
☐ Man Made Vitreous Fibers - MMVF's
☐ Synthetic Fiber Identification
☐ Other

MICROBIAL ANALYSIS

Air Samples

☐ Mold & Fungi by Air O Cell
☐ Mold & Fungi by Agar Plate count & id
☐ Bacterial Count and Gram Stain
☐ Bacterial Count and Identification

Water Samples

☐ Total Coliforms, Fecal Coliforms
☐ Escherichia Coli, Fecal Streptococcus
☐ Legionella
☐ Salmonella
☐ Giardia and Cryptosporidium

Wipe and Bulk Samples

☐ Mold & Fungi - Direct Examination
☐ Mold & Fungi - (Culture follow up to direct examination if necessary)
☐ Mold & Fungi - Culture (Count & ID)
☐ Mold & Fungi - Culture (Count only)
☐ Bacterial Count & Gram Stain
☐ Bacterial Count & Identification, (3 most prominent types)
☐ Other

IAQ ANALYSIS

☐ Nuisance Dust (NIOSH 0500 & 0600)
☐ Airborne Dust (PM10, TSP)
☐ Silica Analysis by XRF ☐ NIOSH 7500
☐ HVAC Efficiency
☐ Carbon Black
☐ Airborne Oil Mist
☐ Other

Client Sample # (S)

LP-001

LP-063

TOTAL SAMPLE #

63

Relinquished:

B. J. Wilson

Date:

APR 14/09

Time:

10:00am

Received:

Date:

4/21/09

Time:

Relinquished:

Date:

Time:

Received:

Date:

Time:



107 Haddon Avenue, Westmont, New Jersey 08108

1-800-220-3675

http://www.emsl.com

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME Air (L)	Area (Inches sq.)
LP-001	Northern TS, Main Bldg, Beige Paint		
LP-002	Garage - Beige Paint		
LP-003	Garage, Mezzanine - Brown/Red Paint		
LP-004	Garage, electrical Storage - Blue Paint		
LP-005	Garage, throughout - Grey paint		
LP-006	Garage, throughout - Beige paint		
LP-007	Garage, electrical Storage - White Paint		
LP-008	Truck Storage, exterior, beige paint		
LP-009	" " Floor, grey paint		
LP-010	Truck Storage, Floor 2 garage door, green paint		
LP-011	" " Main FLR, white paint		
LP-012	" " exterior, beige paint		
LP-013	" " " turquoise paint		
LP-014	" " " pink paint		
LP-015	Garage, exterior, on steel poles, black paint		
LP-016	" " " Yellow Paint		
LP-017	" " "		
LP-018	Main office South, BSMT, Green Paint		
LP-019	" " " White Paint		E2
LP-020	" " " Grey Paint		
LP-021	" " " Blue Paint		
LP-022	Third Line TS, Main Bldg, grey paint		
LP-023	" " " BSMT, White Paint		
LP-024	" " " Red Paint		
LP-025	" " " Main FLR, Grey Paint		
LP-026	" " " ext, Turquoise Paint		
LP-027	" " " Transformer, green paint		
LP-028	" " " grey Paint		

Relinquished:

Received:

Relinquished:

Received:

Date:

Date:

Date:

Date:

Time:

Time:

Time:

Time:



107 Haddon Avenue, Westmont, New Jersey 08108

1-800-220-3675

http://www.emsl.com

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME Air (L)	Area (Inches sq.)
LP-030	Stores, Storage Area, Blue Paint		
LP-031	" " Red Paint		
LP-032	" " Yellow/grey		
LP-033	" " exterior, Beige/green paint		
LP-034	" " Equipment Shed, ext, Beige/Red paint		
LP-035	" " transformer, grey paint		
LP-036	" " green paint		
LP-037	" " dark grey paint		
LP-038	Stores, Oil storage Shed, Beige/Brown Paint		
LP-039	Stallan/Patrick St., Control Bldg, grey paint		
LP-040	" " High Voltage Bldg, grey paint		
LP-041	" " ext, white paint		
LP-042	" " green paint		
LP-043	" " PVC control, grey paint		
LP-044	" " green paint		
LP-045	" " Turquoise paint		
LP-046	Clergye TS, Main Bldg, Blue paint		
LP-047	" " grey paint		
LP-048	" " brown/red paint		
LP-049	Echo River TS, Main Bldg, GREY PAINT on frame		
LP-050	" " BROWN PAINT ON DOOR		
LP-051	" " RED PAINT ON BEAMS		
LP-052	" " GREY PAINT ON WALL		

Relinquished:

Received:

Relinquished:

Received:

Date:

Date:

Date:

Date:

Time:

Time:

Time:

Time:



107 Haddon Avenue, Westmont, New Jersey 08108

1-800-220-3675

http://www.emsl.com

EMSL ANALYTICAL, Inc.

CHAIN OF CUSTODY

200906162

EMSL Rep:

ELLEN P.

Third Party Billing requires written authorization from third party

Your Name:

BRYAN WILSON

EMSL-Bill to:

SAME

Company:

GOLDER ASSOCIATES

Street:

1010 LORNE STREET

Street:

Box #:

Box #:

City/State:

SUDBURY, ONT

Zip P3C 4R9

City/State:

Zip

Phone Results to:

Name:

bryan-wilson@golder.com

Fax Results to:

Telephone #:

Fax #:

Project Name/Number:

09-1192-0051

Purchase Order #:

TURNAROUND TIME

☐ 3 Hours ☐ 6 Hours ☐ 12 Hours ☐ 24 Hours ☐ 48 Hours ☐ 72 Hours ☐ 4 Days ☒ 5 Days ☐ 6-10 Days

SAMPLE MATRIX

☐ Air ☐ Bulk ☐ Soil ☐ Wipe ☐ Micro-Vac ☐ Drinking Water ☐ Wastewater ☒ Chips ☐ Other

ASBESTOS ANALYSIS

PCM - Air

☐ NIOSH 7400 (A) Issue 2 August 1992
☐ OSHA 261 WA

TEM AIR

☐ AHERA 30 CFR Part 763 Subpart I
☐ NIOSH 3203 Issue 2
☐ EPA Level II

M - Bulk

☐ EPA 600/R-93/111
☐ NY State Lead Count
☐ California Air Resource Board (CARB) 435
☐ NIOSH 9602

☐ PCM 8070 (A) Version 1 NYS 1984

☐ EPA Point Count 100 Points

☐ EPA Point Count 11,200 Points

☐ Standard Addition Program

SOILS

☐ EPA Protocol (A) 1992
☐ EPA Protocol (A) 1992
☐ EML MSD 9600 Method 1992
☐ Standard EPA 540, 8207 938 940 941 942 943

TEM BULK

☐ Drop Mount (Qualitative)
☐ X-ray diffraction 1983/02
☐ TEM NIOSH 9602 NY 1984

TEM MICROVAC

☐ ASTM D 5555 02 03 04 05 06 07 08 09 10 11 12

TEM WIPE

☐ ASTM D 6440 06
☐ Qualitative

TEM WATER

☐ EPA 816-1
☐ EPA 816-2
☐ NYS 1984

LEAD ANALYSIS

Flame Atomic Absorption

☒ Wipe, SW846-7420 ☐ ASTM ☐ Non ASTM
☐ Soil, SW846-7420
☐ Air, NIOSH 7903
☐ Chips, SW846-7420 or AOAC 5.001 (97-02)
☐ Wastewater, SW 846-7420
☐ ICP LEAD SW846-1311-7420

Graphite Furnace Atomic Absorption

☐ Air, NIOSH 7105
☐ Wastewater, SW846-742
☐ Soil, SW846-7421
☐ Drinking Water, EPA 319.7

ICP - Inductively Coupled Plasma

☐ Wipe, SW846-6019 ☐ ASTM ☐ Non ASTM
☐ Soil, SW846-7421
☐ Air, NIOSH 7105

MATERIALS ANALYSIS

☐ Cell Particle Identification
☐ General Particle Identification
☐ Large Micro and Insect Fragments
☐ Particle Size & Distribution
☐ Paint Layer Partition
☐ Paint Characterization
☐ Leachate Analysis
☐ Chemical Analysis
☐ Glass, Brick Composition Study
☐ Petrographic Examination of Concrete
☐ Permeability to Water Vapor
☐ ASTM D 1531
☐ Moisture Content by ASTM D 1531
☐ Synthetic Fiber Identification
☐ Date

MICROBIAL ANALYSIS

Air Samples

☐ Mold & Fungi by AOAC
☐ Mold & Fungi by Agar Plate Count & Id
☐ Bacterial Count and Gram Stain
☐ Bacterial Count and Identification

Water Samples

☐ Total Coliforms, Fecal Coliforms
☐ Pseudomonas, E. coli, Fecal Streptococcus
☐ Legionella
☐ Salmonella
☐ Giardia and Cryptosporidium

Wipe and Bulk Samples

☐ Mold & Fungi Direct Examination
☐ Mold & Fungi (If culture follow up to direct examination if necessary)
☐ Mold & Fungi Culture Count & Id
☐ Mold & Fungi Culture Count & Id
☐ Bacterial Count & Gram Stain
☐ Bacterial Count & Identification (Most prevalent types)
☐ Other

IAQ ANALYSIS

☐ Nuisance Dust (NIOSH 1906 & 1907)
☐ Airborne Dust (PM10, TSP)
☐ Spore Analysis by NYS ☐ NIOSH 7400
☐ HVAC Efficiency
☐ Carbon Black
☐ Airborne Oil Mists
☐ Other

Client Sample #

LP-065

LP-133

TOTAL SAMPLE #

68

Requisitioned

Received

Requisitioned

Received

Date:

Date:

Date:

Date:

Time:

Time:

Time:

Time:

Page 1 of 1



107 Hacklton Avenue, Westmont, New Jersey 08108

1-800-220-3675

http://www.emsl.com

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME Air (L)	Area (Inches sq.)
LP-065	Grey, Paint / McKay, Control Bldg		
LP-066	Light grey / McKay, Control Bldg		
LP-067	Grey / "		
LP-068	Blue / McKay, exterior walls		
LP-069	Yellow / " " Yard		
LP-070	Beige / New Garshtre T.S., Main Bldg		
LP-071	Grey / " " exterior walls		
LP-072	Yellow / Watson T.S., Main Bld, ext.		
LP-073	Blue / " " Main Bldg, Main FLR		
LP-074	Grey / " "		
LP-075	Dark Grey / " "		
LP-076	Light green / Watson T.S., transformer		
LP-077	Dark Green / " "		
LP-078	Beige / Watson T.S., ext walls		
LP-079	Blue / Maggie, Main Bldg		
LP-080	Yellow / " "		
LP-081	Grey / " "		
LP-082	Blue / " "		
LP-083	Orange / Maggie, exterior		
LP-084	Yellow / " "		
LP-085	Blue / " "		
LP-086	Grey / Anjigany T.S., Main Bldg		
LP-087	Red / " "		
LP-088	White / " "		
LP-089	White / " "		
LP-090	Grey / " "		
LP-091	Beige / " "		
LP-092	Grey / " " deenergized equipment		

Relinquished:

Received:

Relinquished:

Received:

Date:

Date:

Date:

Date:

Time:

Time:

Time:

Time:

