



THE CITY OF WINNIPEG  
**ST JAMES CIVIC CENTRE FACILITY EXPANSION**  
**2055 NESS AVENUE**

RFP NO. 556-2024B

# **APPENDICES**

ISSUED FOR CONSTRUCTION

SEPTEMBER 13, 2024



Quality Engineering | Valued Relationships

City of Winnipeg  
**St. James Civic Centre New Additions and Building  
Geotechnical Investigation**

**Prepared for:**

Kathy Roberts  
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**Project Number:**

0015 024 00

**Date:**

May 9, 2018



Quality Engineering | Valued Relationships

May 9, 2018

Our File No. 0015 024 00

Kathy Roberts  
Project Officer  
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**RE: St. James Civic Centre New Additions and Building, Winnipeg, MB  
Geotechnical Investigation Report**

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TREK Geotechnical Inc. is pleased to submit our Final Report for the Geotechnical Investigation for the above noted project.

Please contact the undersigned if you have any questions. Thank you for the opportunity to serve you on this assignment.

Sincerely,

**TREK Geotechnical Inc.**

**Per:**

A handwritten signature in black ink, appearing to read "N. Ferreira", written over a horizontal line.

Nelson John Ferreira, Ph.D., P.Eng.  
Senior Geotechnical Engineer  
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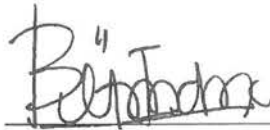
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## Revision History

Revision No.	Author	Issue Date	Description
0	BT	May 9, 2018	Final Report

## Authorization Signatures

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## **1.0 Introduction**

This report summarizes the results of the geotechnical investigation completed by TREK Geotechnical Inc. (TREK) for the proposed additions and standalone buildings at St. James Civic Centre located on 2055 Ness Avenue in Winnipeg, Manitoba. The scope of work includes a sub-surface investigation, laboratory testing and provision of design and construction recommendations for suitable foundation alternatives. Additional recommendations relative to site drainage, structural and grade-supported concrete slabs (interior and exterior), asphalt pavements, and foundation concrete are also included in this report. The terms of reference for the investigation are included in our proposal address to Kathy Roberts at the City of Winnipeg (COW) dated March 7, 2018.

## **2.0 Background**

The St. James Civic center is a multi-purpose public leisure and recreation center which includes an indoor arena, swimming pool, auditorium, and weight room. TREK understands that three additions along the east and south sides of the existing building are currently being planned; Phase 1 at 958 sq. m, Phase 2 at 309 sq. m, and a future phase at about 1000 sq. m (Figure 01). A standalone building to be used as a library and potentially be located either along the west property line along with a new parking area or to the south of the existing building. The additions and standalone building are to be single storey, steel structures.

Based on drawings provided by the COW, the existing building is founded on a combination of straight shaft or belled cast-in-place end bearing piles of various diameters with the majority of the piles being belled. The belled piles were either mechanically cleaned and bearing on the hardpan (clay-silt till contact) or hand-cleaned and keyed into a denser silt till. The straight shaft cast-in-place piles were installed at the depth where auger refusal was observed.

## **3.0 Field Program**

### **3.1 Sub-surface Investigation**

The sub-surface investigation was performed on April 9 to 10, 2018 under the supervision of TREK personnel to determine the soil stratigraphy and groundwater conditions at the site. Nine test holes (TH18-01 to 09) were drilled using a Soilmec STM-20 truck-mounted piling rig equipped with 406 mm auger. Seven test holes were drilled in a landscaped (grassed) area located along east and south sides of the existing buildings (TH18-01, 04 and 05) and along the west property line (TH18-06 to 09). Two test holes were drilled through paved areas; TH18-02 located in the existing public parking lot south of existing building and TH18-03 located south east of staff parking lot.

Test holes TH18-01 to 06 were drilled to a depth of 15.5 m below existing grade or until power auger refusal was encountered. Test holes TH18-07 and 08 were drilled to a depth of 3.0 m below existing grade. Two test bells were performed in TH18-06 a few meters (8.7 m below natural grade) into the silt till and TH18-09 at the silty clay and silt till contact at a depth 6.7 m below natural grade. In paved areas, the test holes (TH18-02 and -03) were backfilled with auger cuttings and

topped with granular materials and cold patch asphalt and the remaining test holes were backfilled with auger cuttings to existing grade.

Sub-surface soils observed during the drilling were visually classified based on the Unified Soil Classification System (USCS). Samples retrieved during drilling were transported to TREK's testing laboratory in Winnipeg, Manitoba for further testing and classification. Laboratory testing consisted of water content determination on all samples, as well as bulk unit weight measurements and unconfined compression testing on undisturbed samples.

Test hole locations were determined based on measuring offsets from the existing building. The test hole elevations were surveyed using a rod and level relative to the main floor at south entrance of existing building (denoted as TBM-01 on Figure 01) which was assigned an arbitrary elevation of 100.0 m. The test hole logs attached which describes the soil units encountered and other pertinent information such as test hole locations, elevations (local), groundwater conditions and a summary of the laboratory testing results.

## **3.2 Sub-surface Conditions**

### **3.2.1 Soil Stratigraphy**

A brief description of the soil units encountered during drilling is provided below. All interpretations of soil stratigraphy for the purposes of design should refer to the detailed information provided on the attached test hole logs.

In general, the soil stratigraphy encountered at the test hole locations in descending order from ground surface consists of organic clay, fill, silt, silty clay and silt till. The soil was generally frozen within the upper 2.1 m below grade at the time of drilling. A thin layer of organic clay (300 mm to 600 mm thick) was observed from existing ground surface in every test hole except in TH18-02 and 03. Fill was present in developed areas and is 0.6 m to 1.2 m thick and consisted of clay in landscaped area (TH18-01, 04 and 05) and sand and gravel followed by clay fill in paved areas (TH18-02 and 03). Fill was not encountered along the west side of the property (TH18-06 to 09) in the proposed library and new parking area.

Silt was observed in a few test holes, beneath either fill (TH18-01 and 04) or organic clay (TH18-07 and 08) and extended to depths ranging from 0.6 m to 2.1 m below existing grade. The silt contains trace clay, trace sand and trace gravel, it was brown, generally frozen, moist to wet and soft when thawed and of low plasticity. Silty clay was encountered in every test hole at depths ranging between 0.3 m to 2.1 m below existing grade. The silty clay contains trace sand and trace gravel, is brown and becoming grey below 2.1 m, moist, stiff becoming softer with depth and of high plasticity.

The underlying silt till was encountered from 6.7 m to 8.2 m below existing grade and extended to maximum depth explored at depths ranging from 13.1 m to 15.5 m. Power auger refusal was encountered in three test holes (TH18-01, 02 and 06) at depths ranging from 13.1 m to 15.5 m. The silt till contains trace clay, trace sand and trace gravel, it was light grey, generally moist to wet and compact, becoming moist and dense with depth. Trace cobbles was encountered in the silt till below 9.1 m in test holes TH18-02, 03 and 04.



Test hole information on the drawings for the existing building provided by COW noted about 7.0 to 7.7 m of clay above hardpan (inferred as silt till) in four test holes which is consistent with the contact elevation observed in TREK's test holes.

### **3.2.2 Seepage and Sloughing**

Seepage was encountered in the silt till or silt in the majority of test holes. Seepage in the silt till typically occurred in the upper portion of the layer (TH18-01, 02, 04 and 05) between depths of 8.2 to 9.1 m. Seepage was also encountered in TH18-03 between 14.0 m and 14.1 m depth from a sand seam in the silt till. Sloughing was observed in the silt till in two test holes (TH18-01 between 9.8 m and 13.7 m, TH18-06 between 8.5 m and 8.7 m). Sloughing was also observed TH18-02 between 0.1 m to 0.9 m in sand and gravel (fill).

These observations are short-term and should not be considered reflective of (static) groundwater levels at the site which would require monitoring over an extended period of time to determine. It is important to recognize that groundwater conditions may vary seasonally, annually, or as a result of construction activities.

## **4.0 Foundation Recommendations**

Based on the subsurface conditions, laboratory testing results and the existing structure foundation systems, Cast-in-place concrete bearing (belled or straight shaft) piles are considered the most suitable foundation alternative for this site. Limit state design and construction recommendations in accordance with the National Building Code of Canada (NBCC 2015) for these pile types are provided below.

### **4.1 Limit States Design**

Limit States Design recommendations for deep foundations in accordance with the National Building Code of Canada (NBCC, 2010) are provided below. Limit states design requires consideration of distinct loading scenarios comparing the structural loads to the foundation bearing capacity using resistance and load factors that are based on reliability criteria. Two general design scenarios are evaluated corresponding to the serviceability and ultimate capacity requirements.

The **Ultimate Limit State (ULS)** is concerned with ensuring that the maximum structural loads do not exceed the nominal (ultimate) capacity of the foundation units. The ULS foundation bearing capacity is obtained by multiplying the nominal (ultimate) bearing capacity by a resistance factor (reduction factor), which is then compared to the factored (increased) structural loads. The ULS bearing capacity must be greater or equal to the maximum factored load to provide an adequate margin of safety. Table 1 summarizes the resistance factors that can be used for the design of deep foundations as per the NBCC (2015) depending upon the method of analysis and verification testing completed during construction.

The **Service Limit State (SLS)** is concerned with limiting deformation or settlement of the foundation under service loading conditions such that the integrity of the structure will not be impacted. The Service Limit State should generally be analysed by calculating the settlement resulting from applied service loads and comparing this to the settlement tolerance of the structure. However, the settlement

tolerance of the structure is typically not yet defined at the preliminary design stage. As such, SLS bearing capacities are often provided that are developed on the basis of limiting settlement to 25 mm or less. A more detailed settlement analysis should be conducted to refine the estimated settlement and/or adjust the SLS capacity if a more stringent settlement tolerance is required or if large groups of piles are used.

**Table 1. ULS Resistance Factors for Deep Foundations (NBCC, 2010)**

Resistance to Axial load for Deep Foundations (Analysis Methods)	Resistance Factor
Semi-empirical analysis using laboratory and <i>in-situ</i> test data	0.4
Analysis using dynamic monitoring results	0.5
Analysis using static loading test results	0.6
Uplift resistance by semi-empirical analysis.	0.3

#### 4.2 Cast-in-Place Concrete End Bearing Caisson

Cast-in-place concrete (CIPC) caissons installed in the compact or dense silt till will derive a majority of their resistance in end bearing with a relatively small contribution from shaft adhesion. Caissons may be designed either as a straight shaft or belled piles which has been successfully implemented for the existing building. Straight shaft caissons will be subjected to frost jacking (exterior piles) and tension loads will derive a majority of their axial-uplift resistance in shaft friction. Belled piles also need to be designed to structurally resist ad-freezing loads, however the majority of the resistance to uplift comes from soil bearing on the top of the bell. Table 2 provides the recommended ULS and SLS end bearing and shaft friction (adhesion) resistance values for loading conditions for caissons bearing on either compact silt till (belled piles) or very dense silt till (straight shaft piles). The SLS capacity of the caissons is settlement-dependent and is based on a maximum settlement of 25 mm. the elastic shortening of the pile should be added to the tip displacement to calculate the pile head settlement.

**Table 2. Recommended End Bearing Resistances for CIPC Caissons**

Foundation Systems	Factored ULS Axial Resistance (kPa)			SLS Axial Resistance (kPa)		
	Compression $\phi = 0.4$		Uplift $\phi = 0.3$	Compression		Uplift
	Shaft Adhesion	Unit End Bearing	Shaft Adhesion	Shaft Adhesion <sup>1</sup>	Unit End Bearing	Shaft Adhesion
CIPC End Bearing Straight Shaft Piles	15	680	11	0	450	12
CIPC End Bearing Belled Piles	15	220	N/A	0	180	N/A

Notes: <sup>1</sup>Shaft adhesion is not applicable for the SLS axial-compression case

Two test bells were performed as part of the investigation. One bell was excavated in TH18-06 at 8.7 m depth, a couple of meters within the silt till. Sloughing was observed with approximately 100 mm of sloughed material accumulating within the bell after about 30 minutes. The other test bell was excavated in TH18-09 at 6.7 m depth in the clay with the base of the bell bearing on the top of the compact silt till layer. The bell was left open for approximately 30 minutes and sloughing was not observed. Based on the observed conditions and historical success of belled piles on this site, TREK considers the site well suited belled piles. To reduce the risk of seepage and sloughing, TREK recommends that when possible piles be designed based on piles being machine cleaned and formed on top of the silt till layer. In the event the bell collapses or sloughs during drilling, a second bell should be attempted at a greater depth, if seepage and sloughing continues to occur replacement with straight shaft piles in may be necessary at some locations. Straight shaft caissons should be installed into very dense till which is anticipated to be several meters or more into the silt till layer.

It should be noted that the silt till encountered at the site may soften when exposed to water, which could lead to disturbance of the caisson base and a reduction in capacity. As such, it is critical that water not be permitted to enter the caisson/pond in the base during drilling. Full length sleeves (to the top of bell) may be required to maintain a dry shaft.

#### Caisson Design Recommendations:

1. The weight of the embedded portion of the pile may be neglected.
2. Shaft adhesion should be neglected within the upper 2.4 m below ground surface.
3. Caisson bases must be founded on compact (belled piles) and very dense silt till (straight shaft piles).
4. Caissons should have a minimum shaft diameter of 406 mm.
5. For belled end bearing caissons, a ratio from 2.7 to 3.0 between the pile bell diameter and shaft diameter should be used.
6. For straight shaft piles, a minimum pile length of 8.0 m below ground surface is recommended to protect against frost jacking. In this regard, uplift forces due to ad-freezing in the upper 2.4 m below ground should be based on an uplift adhesion of 65 kPa.
7. Caissons should have a minimum spacing of 2.5 diameters (shaft diameter for straight shaft piles and bell diameter for belled piles) measured centre to centre. If a closer spacing is required, TREK should be contacted to provide an efficiency (reduction) factor to account for potential group effects.
8. Caissons should be designed by a qualified structural engineer to resist all applied loads induced from the structure as well as tensile forces induced from seasonal movements of the bearing soils.
9. Grade beams and caisson caps should be constructed with a minimum 150 mm void between soils and the underside of the concrete to minimize the effects of soil heave due to swelling or frost action.

#### Caisson Installation Recommendations:

1. Temporary steel casings (*i.e.* sleeves) should be on site and used if sloughing of the caisson hole occurs, to control groundwater seepage if encountered, and/or if down-hole entry is required. Care should be taken in removing sleeves to prevent sloughing (necking) of the shaft walls and a reduction in the cross-sectional area of the pile.

2. The foundation contractor should expect to encounter some seepage and sloughing from the shallow silt layer and/or top of the silt till unit during installation of the caissons.
3. Caisson bases must be free of water, debris, or loose and/or disturbed soil.
4. Concrete should be placed in one continuous operation immediately after the completion of drilling the pile hole to avoid construction problems associated with sloughing or caving of the pile hole and groundwater seepage. Concrete should be poured under dry conditions. If groundwater is encountered, it should be controlled and removed.
5. Concrete placed by free-fall methods should be directed through the middle of the caisson shaft and steel reinforcing cage to prevent striking of the caisson walls to protect against soil contamination of the concrete.
6. The drilling of all caisson shafts should be observed and documented by TREK Geotechnical to verify the soil conditions and proper installation of the caissons.

### **4.3 Lateral Capacity**

Lateral capacity is not expected to be a concern for design; however, limit states design values can be provided if necessary once lateral loads are known.

### **4.4 Ad-freezing Effects**

Concrete piles, pile caps, grade beams, and walls subjected to freezing conditions should be designed to resist ad-freeze and uplift forces related to frost action acting along the vertical face of the member within the depth of frost penetration (2.4 m). In this regard, concrete piles, pile caps, grade beams, and walls may be subject to an ad-freeze bond stress of 65 kPa within the depth of frost penetration.

Ad-freeze forces will be resisted by structural dead loads and uplift resistance provided by the length of the pile below the depth of frost penetration. The following design recommendations apply to piles subject to ad-freeze forces:

1. An ad-freeze bond stress of 65 kPa within the depth of frost penetration (2.4 m).
2. A load factor ( $\alpha$ ) of 1.2 may be used in the calculation of ad-freezing forces.
3. A resistance factor of 0.8 may be used in calculation of the geotechnical resistance for the factored ULS condition with an ultimate (nominal) resistance of 37 kPa. Structural dead loads should be added to the resistance.
4. The calculated geotechnical resistance plus the structural dead loads must be greater than the factored ad-freezing forces.
5. Straight shaft piles subject to ad-freezing forces should be a minimum of 8.0 m or as calculated by the method above, whichever is greater.

Measures such as flat lying rigid polystyrene insulation could be considered to reduce frost penetration depths and thereby ad-freezing and uplift forces.

#### **4.5 Pile Caps and Grade Beams**

A void space should be provided underneath all grade beams and pile caps to avoid uplift pressures from developing on the underside of the pile cap as a result of swelling or frost action. Void forms should be selected such that they can deform a minimum of 150 mm without transferring stresses to the structure. Excavations for grade beams should be backfilled with granular fill compacted to a minimum of 95% of the SPMDD. The excavation should be capped with clay sloped at a gradient of at least 2% to promote runoff away from the structure.

#### **4.6 Foundation Concrete**

All foundation concrete should be designed by a qualified structural engineer for the anticipated axial (compression and uplift), lateral, and bending loads from the structure. Based on local experience gathered through previous work in Winnipeg, the degree of exposure for concrete subjected to sulphate attack is classified as severe according to Table 3, CSA A23.1-14 (Concrete Materials and Methods of Concrete Construction). Accordingly, all concrete in contact with the native soil should be made with high sulphate-resistant cement (HS or HSb). Furthermore, the concrete should have a minimum specified 56-day compressive strength of 32 MPa and have a maximum water to cement ratio of 0.45 in accordance with Table 2, CSA A23.1-14 for concrete with severe sulphate exposure (S2). Concrete that may be exposed to freezing and thawing should be adequately air entrained to improve freeze-thaw durability in accordance with Table 4, CSA A23.1-14.

#### **4.7 Foundation Inspection Requirements**

In accordance with Section 4.2.2.3 *Field Review* of the NBCC (2010), the designer or other suitably qualified person shall carry out a field review on:

1. a continuous basis during:
  - i. the construction of all deep foundation units,
  - ii. the installation and removal of retaining structures and related backfilling operations, and
  - iii. during the placement of engineered fills.
2. on an as-required basis for the construction of shallow foundation units and in excavating, dewatering and other related works.

In consideration of the above and relative to this particular project, we recommend that TREK, as the geotechnical engineer of record, be retained to inspect the installation of any foundation elements. TREK is familiar with the geotechnical conditions and the basis for the foundation recommendations and can provide any design modifications deemed to be necessary should altered subsurface conditions be encountered.

## 5.0 Floor Slabs

### 5.1 Structural Slabs

A minimum void of 150 mm is recommended beneath the structural slab to accommodate volumetric changes in the underlying sub-grade soils. The void can consist of a compressible layer (e.g. low density polystyrene) to permit sub-grade soil movements of 150 mm without engaging the slab. A vapour barrier below the slab is also recommended to minimize long-term moisture changes within the sub-grade soils.

### 5.2 Grade-Supported Concrete Slabs

If some movement can be tolerated, grade supported concrete floor slabs can be used in areas where fill is not present or can be economically removed and replaced with suitable soils (e.g. granular fill). Vertical deformation of grade supported slabs should be expected due to moisture and volume changes of the underlying soils. Measures to reduce the risks of these movements are provided below. Slabs in unheated areas or near the perimeter of the structure will be subject to additional movements from freeze/thaw of the subgrade soils.

The following additional recommendations apply to grade-supported slabs:

1. To reduce the risk of long-term settlements, organics, silts, fill soils and any other deleterious material should be stripped such that the subgrade consists of undisturbed silty clay. It is anticipated that this will not be an economical approach in areas with deeper fills. Provided there is tolerance for increased settlement and maintenance requirements, the existing fill may be left in place. If this option is preferred, the exposed fill soils at subgrade elevation should be moisture conditioned and compacted to 95% of Standard Proctor Maximum Dry Density (SPMDD). Native clays should be left undisturbed.
2. Fill required to raise grades should consist of a well-graded granular base course (e.g. crushed rock or recycled concrete) compacted to 98% SPMDD in lifts not exceeding 150 mm.
3. Excavation should be completed with a backhoe equipped with a smooth bucket operating from the edge of the excavation. Care should be taken to minimize the subgrade disturbance at all times.
4. After excavation, the subgrade should be inspected by TREK.
5. The exposed subgrade surface should be protected from freezing, inundation, drying, or disturbance. If any of these conditions occur, the subgrade should be scarified, moisture conditioned as appropriate, and re-compacted to a minimum of 95% of the SPMDD.
6. In heated areas, the floor slab should be placed on a 150 mm thick layer of 50 mm down crushed granular sub-base underlying a 150 mm thick base consisting of 20 mm down crushed granular base course. In unheated areas (e.g. exterior slabs) the thickness of 50 mm down crushed granular sub-base should be increased to 250 mm. The crushed granular material should be placed in lifts no greater than 150 mm and compacted to 98% of the SPMDD.
7. Floor slabs should be designed to resist all structural loads and to minimize slab cracking associated with movements as a result of swelling, shrinkage, and thermal expansion and contraction of the subgrade soils.

8. To accommodate slab movements, it may be desirable to provide control joints to reduce random cracking and isolation joints to separate the slab from other structure elements. Allowances should be made to accommodate vertical movements of light weight structures (e.g. partitions) bearing on the slab.
9. The granular base course materials should consist of a well graded, durable crushed rock, in accordance with the City of Winnipeg Specification No. CW 3110.

## 6.0 Pavement Design

Recommended pavement sections for parking area and pavement areas subject to heavier vehicular loads are provided in Table 3. These recommendations are comparable to typical sections used for City of Winnipeg road works. Granular base and sub-base materials that are consistent with the City of Winnipeg Specification No. CW 3110 are recommended.

**Table 3. Recommended Pavement Sections for Roads and Parking Areas (Asphalt)**

Material	Layer Thickness		Compaction Requirements
	Car Parking Areas	Heavy Vehicular Loads	
Asphalt	100 mm	100 mm	Mix design and density requirements by others
20 mm down crushed limestone (Base)	75 mm	100 mm	100% of the SPMDD
50 down crushed limestone (Sub-Base)	250 mm	350 mm	98% of the SPMDD
Non-Woven Geotextile (Geotex 801 or equivalent)	Required	Required	Install as per manufacturer's recommendations

### Additional Pavement Recommendations:

1. For best long-term performance, organics, silt, fill soils and any other deleterious material should be stripped such that the subgrade consists of undisturbed native silty clay. Based on test holes drilled in the proposed parking lot area this could result in removal of up to 0.6 m to 1.2 m of soils.
2. Excavation should be completed with an excavator equipped with a smooth-bladed bucket and operating from the edge of the excavation in order to minimize disturbance to the exposed sub-grade.
3. After excavation, the sub-grade should be inspected by TREK personnel to identify unsuitable deleterious material. The sub-grade should also be proof-rolled with a fully loaded tandem axle truck to detect soft areas. Soft and /or deleterious areas should be repaired as per directions provided by TREK. This will likely consist of excavating an additional 150 to 300 mm and placing a non-woven geotextile on the sub-grade and backfilling with a 50 mm down crushed limestone sub-base. The crushed limestone should be placed in lifts no greater than 150 mm and compacted to a minimum of 98% of the SPMDD.
4. The sub-grade should be protected from freezing, drying, inundation with water or disturbance. If any of these conditions occur the sub-grade should be scarified, moisture conditioned as

- appropriate, and re-compacted to a minimum of 95% of the SPMDD.
5. A non-woven geotextile should be placed in accordance with the manufacturers recommendations on the prepared subgrade prior to placement of granular fill. Geotex 801 or equivalent would be appropriate for use.
  6. The granular base course materials should consist of a well graded, durable crushed rock, in accordance with the City of Winnipeg Specification No. CW 3110.
  7. The granular sub-base and base materials should be placed in lifts not exceeding 150 mm and compacted to as per the recommendations in Table 5.

## **7.0 Site Drainage**

Drainage adjacent to structures and exterior slabs should promote runoff away from the structures. A minimum gradient of about 2% should be used for both landscaped and paved areas and maintained throughout the life of the structures. All paved areas should be provided with minimum slopes of 2% to improve long-term drainage. The water discharge from roof leaders and run-off from exposed slabs should be directed away from the structures.

## **8.0 Closure**

The geotechnical information provided in this report is in accordance with current engineering principles and practices (Standard of Practice). The findings of this report were based on information provided (field investigation and laboratory testing). Soil conditions are natural deposits that can be highly variable across a site. If subsurface conditions are different than the conditions previously encountered on-site or those presented here, we should be notified to adjust our findings if necessary.

All information provided in this report is subject to our standard terms and conditions for engineering services, a copy of which is provided to each of our clients with the original scope of work, or a mutually executed standard engineering services agreement. If these conditions are not attached, and you are not already in possession of such terms and conditions, contact our office and you will be promptly provided with a copy.

This report has been prepared by TREK Geotechnical Inc. (the Consultant) for the exclusive use of City of Winnipeg Municipal Accommodations (the Client) and their agents for the work product presented in the report. Any findings or recommendations provided in this report are not to be relied upon by any third parties, except as agreed to in writing by the Client and Consultant prior to use.

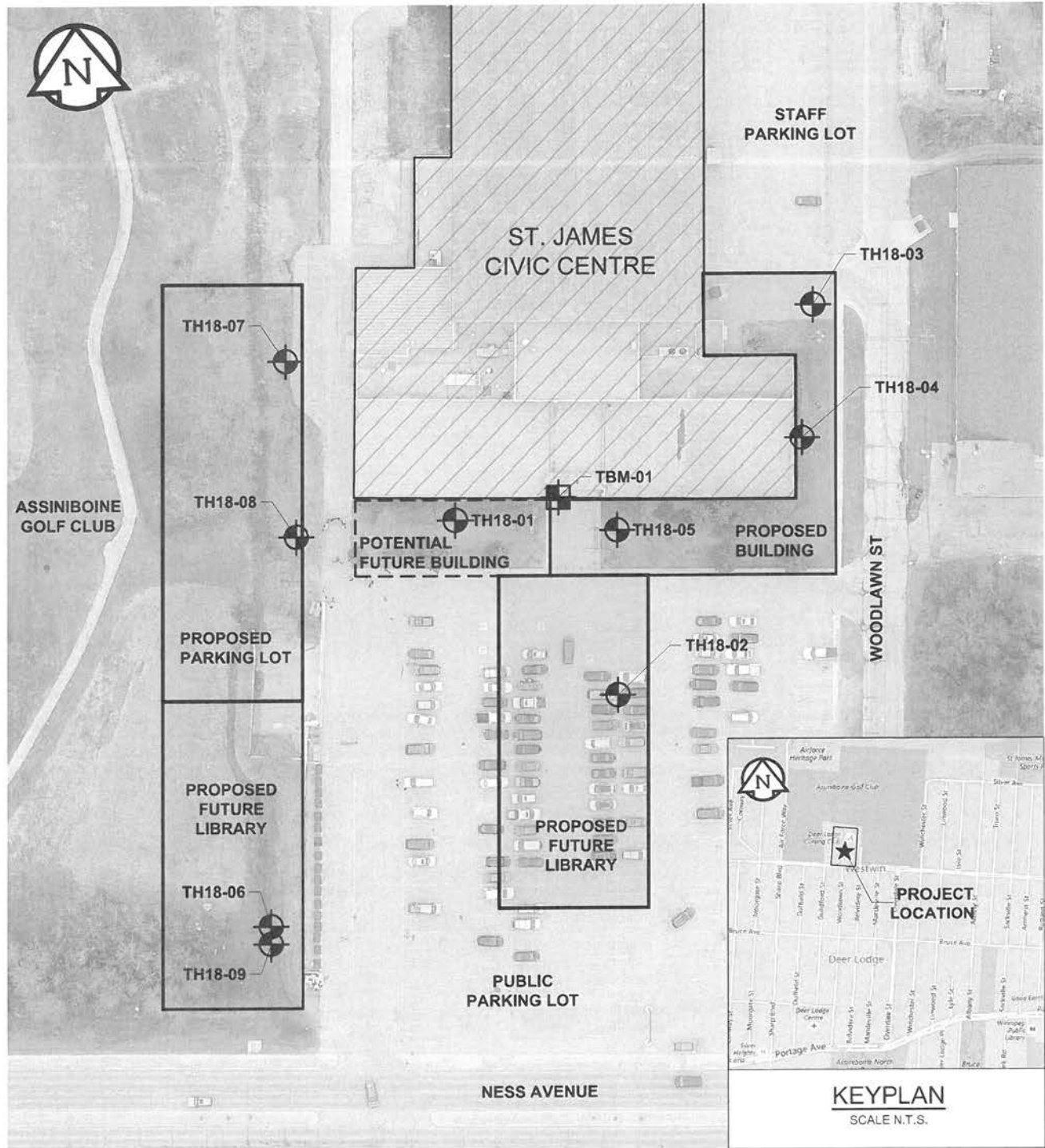


**Figure**



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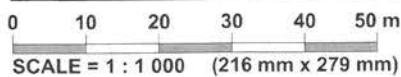


**LEGEND:**

-  TEST HOLE (TEST HOLE APRIL 9-10, 2018)
-  TEMPORARY BENCHMARK TBM-01  
LOCATED ON MAIN FLOOR AT ENTRANCE

**NOTE:**

1. AERIAL IMAGE FROM CITY OF WINNIPEG, FALL 2016



**Figure 01**  
Test Hole Location Plan

## Test Hole Log

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### GENERAL NOTES

- Classifications are based on the United Soil Classification System and include consistency, moisture, and color. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate.
- Descriptions on these test hole logs apply only at the specific test hole locations and at the time the test holes were drilled. Variability of soil and groundwater conditions may exist between test hole locations.
- When the following classification terms are used in this report or test hole logs, the primary and secondary soil fractions may be visually estimated.

Major Divisions	USCS Classification	Symbols	Typical Names	Laboratory Classification Criteria		Particle Size	Material		
Coarse-Grained soils (More than half the material is larger than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than 4.75 mm)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	Determine percentages of sand and gravel from grain size curve, depending on percentage of fines (fraction smaller than No. 200 sieve) coarse-grained soils are classified as follows:  Less than 5 percent..... GW, GP, SW, SP More than 12 percent..... GM, GC, SM, SC 6 to 12 percent..... Borderline cases requiring dual symbols*	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3		ASTM Sieve sizes #10 to #4 #40 to #10 #200 to #40 < #200		
		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines		Not meeting all gradation requirements for GW				
		GM	Silty gravels, gravel-sand-silt mixtures		Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols			
		GC	Clayey gravels, gravel-sand-silt mixtures		Atterberg limits above "A" line or P.I. greater than 7				
	Sands (More than half of coarse fraction is smaller than 4.75 mm)	Clean gravel (Appreciable amount of fines)	SW		Well-graded sands, gravelly sands, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3		mm 2.00 to 4.75 0.425 to 2.00 0.075 to 0.425 < 0.075	
			SP		Poorly-graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW			
		Sands with fines (Appreciable amount of fines)	SM		Silty sands, sand-silt mixtures	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols		
			SC		Clayey sands, sand-clay mixtures	Atterberg limits above "A" line or P.I. greater than 7			
		Fine-Grained soils (More than half the material is smaller than No. 200 sieve size)	Silty and Clays (Liquid limit less than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity			Particle Size ASTM Sieve Sizes mm > 300 75 to 300 19 to 75 4.75 to 19 3 in. to 12 in. 3/4 in. to 3 in. #4 to 3/4 in.
					CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays			
OL	Organic silts and organic silty clays of low plasticity								
Silty and Clays (Liquid limit greater than 50)	MH		Inorganic silts, micaceous or distomaceous fine sandy or silty soils, organic silts	Material Boulders Cobbles Gravel Coarse Fine					
	CH		Inorganic clays of high plasticity, fat clays						
	OH		Organic clays of medium to high plasticity, organic silts						
	Pt		Peat and other highly organic soils						
Highly Organic Soils				Von Post Classification Limit	Strong colour or odour, and often fibrous texture				

\* Borderline classifications used for soils possessing characteristics of two groups are designated by combinations of groups symbols. For example; GW-GC, well-graded gravel-sand mixture with clay binder.

### Other Symbol Types

	Asphalt		Bedrock (undifferentiated)		Cobbles
	Concrete		Limestone Bedrock		Boulders and Cobbles
	Fill		Cemented Shale		Silt Till
			Non-Cemented Shale		Clay Till

## LEGEND OF ABBREVIATIONS AND SYMBOLS

LL - Liquid Limit (%)	▽ Water Level at Time of Drilling
PL - Plastic Limit (%)	▼ Water Level at End of Drilling
PI - Plasticity Index (%)	▽ Water Level After Drilling as Indicated on Test Hole Logs
MC - Moisture Content (%)	
SPT - Standard Penetration Test	
RQD - Rock Quality Designation	
Qu - Unconfined Compression	
Su - Undrained Shear Strength	
VW - Vibrating Wire Piezometer	
SI - Slope Inclinator	

## FRACTION OF SECONDARY SOIL CONSTITUENTS ARE BASED ON THE FOLLOWING TERMINOLOGY

TERM	EXAMPLES	PERCENTAGE
and	and CLAY	35 to 50 percent
"y" or "ey"	clayey, silty	20 to 35 percent
some	some silt	10 to 20 percent
trace	trace gravel	1 to 10 percent

## TERMS DESCRIBING CONSISTENCY OR COMPACTION CONDITION

The Standard Penetration Test blow count (N) of a non-cohesive soil can be related to compactness condition as follows:

<u>Descriptive Terms</u>	<u>SPT (N) (Blows/300 mm)</u>
Very loose	< 4
Loose	4 to 10
Compact	10 to 30
Dense	30 to 50
Very dense	> 50

The Standard Penetration Test blow count (N) of a cohesive soil can be related to its consistency as follows:

<u>Descriptive Terms</u>	<u>SPT (N) (Blows/300 mm)</u>
Very soft	< 2
Soft	2 to 4
Firm	4 to 8
Stiff	8 to 15
Very stiff	15 to 30
Hard	> 30

The undrained shear strength (Su) of a cohesive soil can be related to its consistency as follows:

<u>Descriptive Terms</u>	<u>Undrained Shear Strength (kPa)</u>
Very soft	< 12
Soft	12 to 25
Firm	25 to 50
Stiff	50 to 100
Very stiff	100 to 200
Hard	> 200



# Sub-Surface Log

Test Hole TH18-01

1 of 2

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure 01 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 99.73 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 9, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)

Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )					Undrained Shear Strength (kPa)						
						16	17	18	19	20	21	Test Type					
						Particle Size (%)											
						0	20	40	60	80	100						
						PL MC LL											
						0	20	40	60	80	100	0	40	80	120	160	200
99.4			ORGANIC CLAY - silty, trace to some sand, trace gravel (<10 mm diam.), trace rootlets, black, frozen, moist and stiff when thawed, low to intermediate plasticity		G01												
	0.5		CLAY (FILL) - silty, trace sand, trace gravel (<10 mm diam.), trace organics - dark brown - frozen, moist and firm when thawed - intermediate plasticity		G02												
98.8			SILT - trace clay, trace sand, trace gravel (<5 mm diam.) - brown, frozen, moist and soft when thawed, low plasticity		G03												
98.5			CLAY - silty, trace sand, trace gravel (<5 mm diam.), trace oxidation, trace silt inclusions (<15 mm diam.) - brown - frozen to 2.1 m, moist and stiff when thawed - high plasticity		G04												
	1.5		- grey below 2.1 m		G05												
	2.0		- stiff to very stiff below 2.7 m		G06												
	2.5																
	3.0																
	3.5																
	4.0																
	4.5																
	5.0				T07												
	5.5																
	6.0		- firm below 6.1 m		G08												
	6.5																
	7.0																
	7.5		- trace till inclusions, soft to firm below 7.6 m		G09												

SUB-SURFACE LOG LOGS 2018-04-11 ST JAMES CIVIC CENTRE\_0\_FINAL.0015.024.00.GPJ TREK GEOTECHNICAL.GDT 5/8/18

Logged By: Beta Taryana Reviewed By: Nelson Ferreira Project Engineer: Nelson Ferreira



# Sub-Surface Log

Test Hole TH18-01

2 of 2

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Particle Size (%)		Undrained Shear Strength (kPa)							
						16	17	18	19	20	21	0	20	40	80	120	160
91.5	8.0																
	8.5		SILT (TILL) - trace clay, trace sand, trace gravel (<25 mm diam.) - light grey - wet, compact - no to low plasticity		G10												
	9.0																
	9.5																
	10.0		- moist below 10.1 m		G11												
	10.5																
	11.0																
	11.5																
	12.0																
	12.5																
	13.0																
	13.5																
	14.0		- dense below 13.7 m		G12												
85.1	14.5																

POWER AUGER REFUSAL AT 14.6 m IN SILT (TILL)  
 Notes:  
 1. Seepage observed between 8.2 m depth and 10.1 m depth in SILT (TILL) layer.  
 2. Sloughing observed between 9.8 m depth and 13.7 m depth in SILT (TILL) layer.  
 3. Unable to recover soil sample between 10.7 m and 13.7 m due to slough material.  
 4. Test Hole open to 9.4 m depth and groundwater level at 9.1 m depth fifteen minutes after drilling.  
 5. Test Hole backfilled with auger cuttings.  
 6. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

SUB-SURFACE LOG LOGS 2018-04-11 ST JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL\_GDT 5/8/18

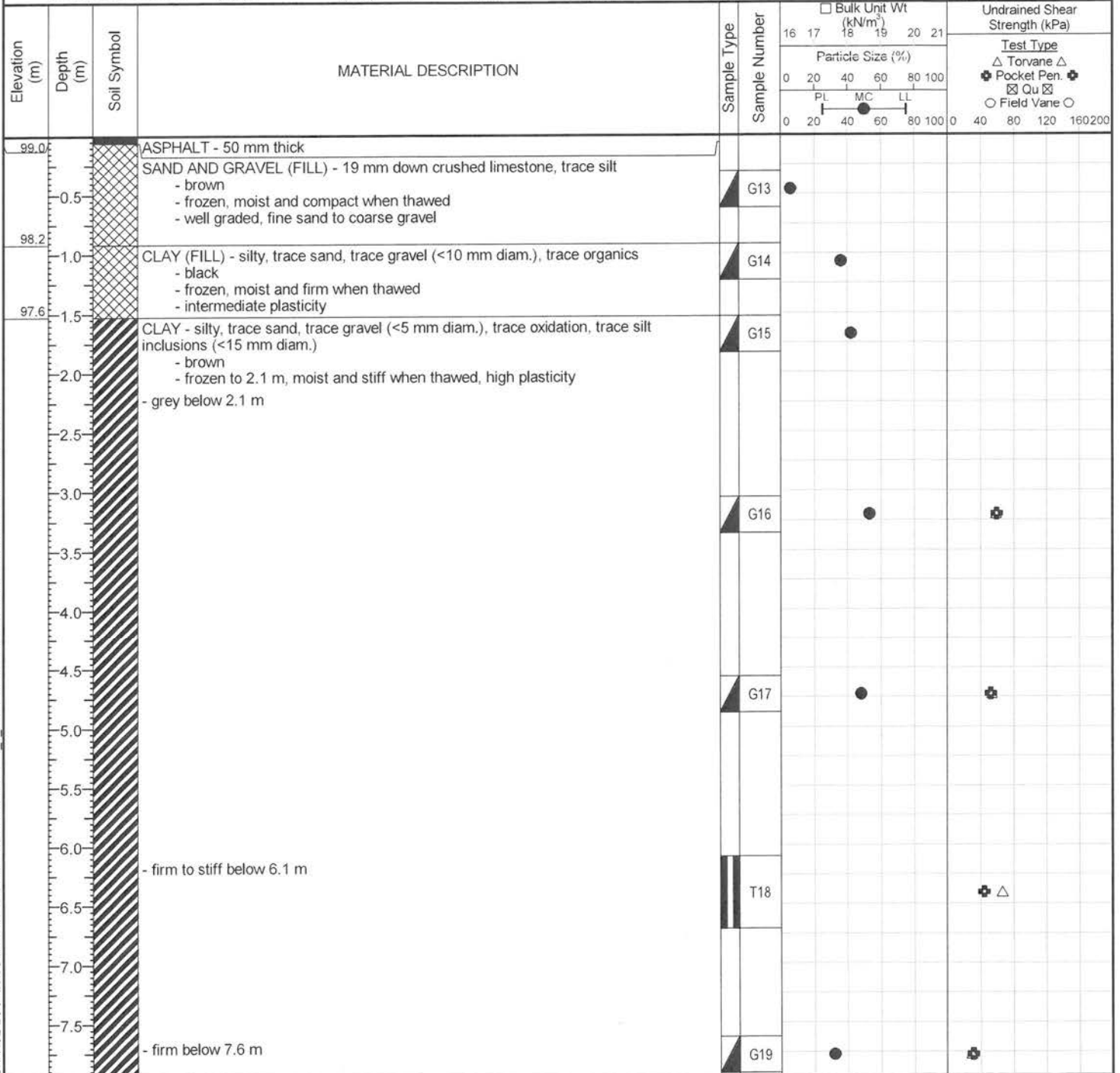


# Sub-Surface Log

Test Hole TH18-02  
1 of 2

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure 01 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 99.10 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 9, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)  
 Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders



SUB-SURFACE LOG LOGS 2018-04-11 ST. JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL\_GDT 6/8/18

Logged By: Beta Taryana Reviewed By: Nelson Ferreira Project Engineer: Nelson Ferreira





# Sub-Surface Log

Test Hole TH18-02

2 of 2

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Particle Size (%)		Undrained Shear Strength (kPa)	
						16	17	18	19	20	21
90.9	8.0		- trace till inclusions, soft to firm below 7.9 m								
	8.5		SILT (TILL) - trace clay, trace sand, trace gravel (<30 mm diam.) - light grey - moist to wet, compact - no to low plasticity		G20						
	9.0		- trace cobbles, moist and dense below 9.1 m		G21						
	9.5										
	10.0										
	10.5				G22						
	11.0										
	11.5				G23						
	12.0		- reddish grey and very dense below 11.9 m								
	12.5										
	13.0										
	13.5										
	14.0				G24						
	14.5										
	15.0				G25						
83.6	15.5		POWER AUGER REFUSAL AT 15.5 m IN SILT (TILL)								

Notes:  
 1. Seepage observed between 8.2 m depth and 9.1 m depth in SILT (TILL) layer.  
 2. Sloughing observed between 0.1 m depth and 0.9 m depth in SAND AND GRAVEL (FILL) layer.  
 3. Test Hole open to 15.5 m depth and dry fifteen minutes after drilling.  
 4. Test Hole backfilled with auger cuttings and topped with granular material and cold patch asphalt.  
 5. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

SUB-SURFACE LOG LOGS 2018-04-11 ST. JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL.GDT 5/8/18



# Sub-Surface Log

Test Hole TH18-03

1 of 2

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure 01 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 99.52 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 9, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)

Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )					Undrained Shear Strength (kPa)					
						16	17	18	19	20	21	Test Type				
						Particle Size (%)										
						0	20	40	60	80	100					
						PL MC LL										
						0	20	40	60	80	100	0	40	80	120	160/200
99.4			ASPHALT - 80 mm thick													
98.9	0.5		SAND AND GRAVEL (FILL) - 19 mm down crushed limestone, trace silt - brown - frozen, moist and compact when thawed, well graded, fine sand to coarse gravel		G26											
	1.0		CLAY (FILL) - silty, trace sand, trace gravel (<20 mm diam.), trace organics - black - frozen, moist and firm when thawed - intermediate plasticity		G27											
	1.5				G28											
97.7	2.0		CLAY - silty, trace sand, trace gravel (<5 mm diam.), trace oxidation, trace silt inclusions (<10 mm diam.) - brown - frozen to 2.1 m, moist and firm to stiff when thawed - high plasticity		G29											
	2.5															
	3.0		- grey below 2.7 m		G30											
	3.5															
	4.0															
	4.5															
	5.0															
	5.5															
	6.0															
	6.5															
	7.0															
	7.5		- trace till inclusions, soft to firm below 7.3 m		T33											

SUB-SURFACE LOG LOGS 2018-04-11 ST. JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL\_GDT 5/8/18

Logged By: Beta Taryana Reviewed By: Nelson Ferreira Project Engineer: Nelson Ferreira



# Sub-Surface Log

Test Hole TH18-03

2 of 2

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Particle Size (%)		Undrained Shear Strength (kPa)							
						16	17	18	19	20	21	0	20	40	80	120	160
91.3	8.0		SILT (TILL) - trace clay, trace sand, trace gravel (<25 mm diam.) - light grey - moist, compact														
	8.5				G34												
	9.0		- trace cobbles, dense below 9.1 m														
	9.5																
	10.0																
	10.5																
	11.0				G35												
	11.5																
	12.0																
	12.5				G36												
	13.0																
	13.5																
	14.0		- 50 mm thick of wet sand seam at 14.0 m		G37												
	14.5																
	15.0																
84.0	15.5				G38												

END OF TEST HOLE AT 15.5 m IN SILT (TILL)  
 Notes:  
 1. Seepage observed between 14.0 m depth and 14.1 m depth in sand seam.  
 2. No sloughing observed.  
 3. Test Hole open to 15.5 m depth and dry fifteen minutes after drilling.  
 4. Test Hole backfilled with auger cuttings and topped with granular material and cold patch asphalt.  
 5. TH18-03 moved 0.7 m north and 0.7 m east from its original location due to auger refusal on suspected concrete pad at 0.6 m below existing grade.  
 6. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

SUB-SURFACE LOG LOGS 2018-04-11 ST JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL.GDT 5/8/18



# Sub-Surface Log

Test Hole TH18-04

1 of 2

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure O1 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 99.77 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 9, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)

Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )					Undrained Shear Strength (kPa)							
						16	17	18	19	20	21	Test Type						
						Particle Size (%)												
						0	20	40	60	80	100							
						PL MC LL												
						0	20	40	60	80	100	0	40	80	120	160	200	
99.2	0.5		ORGANIC CLAY - silty, trace sand, trace gravel (<10 mm diam.), trace rootlets - black - frozen, moist and stiff when thawed - low to intermediate plasticity		G39													
98.2	1.0		CLAY (FILL) - silty, some sand, trace gravel (<15 mm diam.) - brown - frozen, moist and firm when thawed - intermediate plasticity		G40													
97.6	1.5		SILT - trace clay, trace sand, trace gravel (<5 mm diam.) - brown - moist to wet, soft - low plasticity		G41													
	2.0		CLAY - silty, trace sand, trace gravel (<5 mm diam.), trace silt inclusions (<25 mm diam.) - grey - moist, firm to stiff - high plasticity		G42												△ ⊕	
	2.5				G43													△ ⊕
	5.0				T44													⊠ ⊕
	7.0				G45													⊕
	7.5		- firm below 7.6 m		G46													⊕

SUB-SURFACE LOG LOGS 2018-04-11 ST JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL.GDT 5/8/18

Logged By: Beta Taryana Reviewed By: Nelson Ferreira Project Engineer: Nelson Ferreira



# Sub-Surface Log

Test Hole TH18-04

2 of 2

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Particle Size (%)		Undrained Shear Strength (kPa)							
						16	17	18	19	20	21	0	20	40	80	120	160
	8.0		- trace till inclusions, soft to firm below 7.9 m														
91.2	8.5		SILT (TILL) - trace clay, trace sand, trace gravel (<30 mm diam.) - light grey - moist to wet, compact - no to low plasticity		G47	●											
	9.0		- reddish grey to 9.8 m and moist below 9.1 m		G48	●											
	10.5		- trace cobbles, dense below 10.4 m		G49	●											
	12.5				G50	●											
	13.5				G51	●											
	15.0				G52	●											

END OF TEST HOLE AT 15.2 m IN SILT (TILL)  
 Notes:  
 1. Seepage observed between 1.5 m depth and 2.1 m depth in SILT layer and between 8.5 m depth and 9.1 m depth in SILT (TILL) layer.  
 2. No sloughing observed..  
 3. Test Hole open to 15.2 m depth and dry fifteen minutes after drilling.  
 4. Test Hole backfilled with auger cuttings.  
 5. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

SUB-SURFACE LOG LOGS 2018-04-11 ST JAMES CIVIC CENTRE\_0\_FINAL.0015 024 00.GPJ TREK GEOTECHNICAL.GDT 5/8/18



# Sub-Surface Log

Test Hole TH18-05

1 of 2

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure 01 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 99.83 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 9, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)

Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Particle Size (%)		Undrained Shear Strength (kPa)								
						16	17	18	19	20	21	0	40	80	120	160	200	
99.5	0.0		ORGANIC CLAY - silty, trace sand, trace gravel (<15 mm diam.), trace rootlets - black, frozen, moist and stiff when thawed, low to intermediate plasticity		G53													
	0.5		CLAY (FILL) - silty, trace sand, trace gravel (<10 mm diam.), trace organics - mottled brown and black - frozen, moist and firm when thawed - intermediate plasticity		G54													
98.3	1.5		CLAY - silty, trace sand, trace gravel (<5 mm diam.), trace oxidation, trace silt inclusions (<15 mm diam.) - brown - frozen to 2.1 m, moist and stiff when thawed, high plasticity - grey below 2.1 m		G55													
	2.0				G56													
	3.0				G57													
	4.5		- firm to stiff below 4.6 m		G58													
	6.0		- trace till inclusions below 6.7 m		G59													
	7.5		- soft to firm below 7.6 m		G60													

SUB-SURFACE LOG LOGS 2018-04-11 ST. JAMES CIVIC CENTRE\_0\_FINAL\_0015.024.00.GPJ TREK GEOTECHNICAL\_GDT 5/8/18

Logged By: Beta Taryana Reviewed By: Nelson Ferreira Project Engineer: Nelson Ferreira



# Sub-Surface Log

Test Hole TH18-05

2 of 2

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Particle Size (%)		Undrained Shear Strength (kPa)	
						16	17	18	19	20	21
91.3	8.5										
	8.5		SILT (TILL) - trace clay, trace sand, trace gravel (<25 mm diam.) - light grey - wet, compact - no to low plasticity - moist below 9.1 m		G61	●					
	9.0				G62	●					
	9.5										
	10.0										
	10.5										
	11.0				G63	●					
	11.5										
	12.0										
	12.5				G64	●					
	13.0										
	13.5										
	14.0		- dense below 13.7 m		G65	●					
	14.5										
	15.0										
84.3	15.5				G66	●					

END OF TEST HOLE AT 15.5 m IN SILT (TILL)

Notes:

1. Seepage observed between 8.5 m depth and 9.1 m depth in SILT (TILL) layer.
2. No sloughing observed.
3. Test Hole open to 15.5 m depth and dry fifteen minutes after drilling.
4. Test Hole backfilled with auger cuttings.
5. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

SUB-SURFACE LOG LOGS 2018-04-11 ST. JAMES CIVIC CENTRE\_0\_FINAL\_0015 024 00.GPJ TREK GEOTECHNICAL\_GDT 5/8/18

Logged By: Beta Taryana

Reviewed By: Nelson Ferreira

Project Engineer: Nelson Ferreira



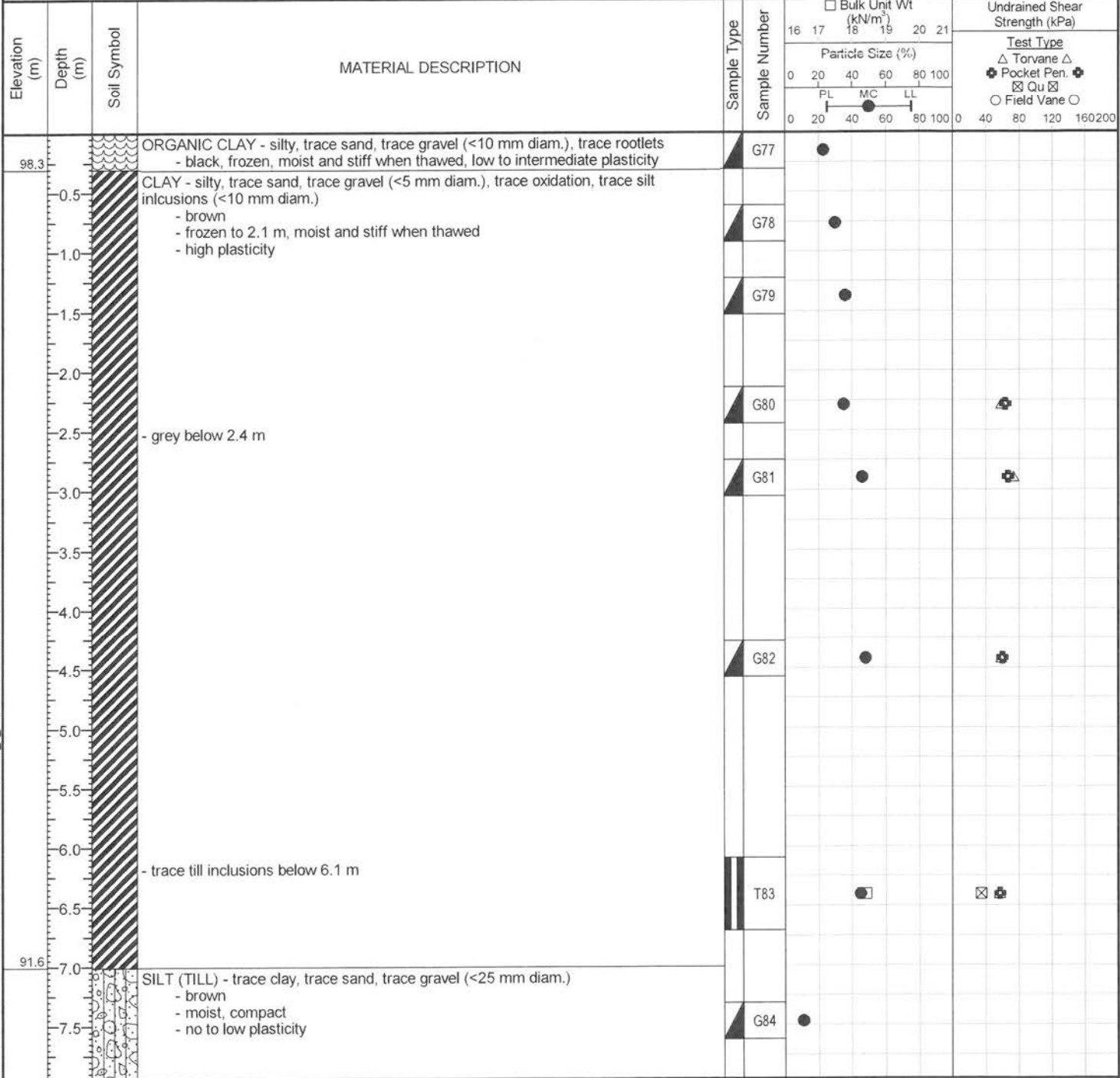
# Sub-Surface Log

Test Hole TH18-06

1 of 2

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure 01 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 98.65 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 10, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)  
 Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders



SUB-SURFACE LOG LOGS 2018-04-11 ST. JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL\_GDT 5/8/18

Logged By: Beta Taryana Reviewed By: Nelson Ferreira Project Engineer: Nelson Ferreira





# Sub-Surface Log

Test Hole TH18-06

2 of 2

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Undrained Shear Strength (kPa)
						16 17 18 19 20 21	0 20 40 60 80 100	
						Particle Size (%)		Test Type
						PL MC LL		△ Torvane △ ⊕ Pocket Pen. ⊕ ⊠ Qu ⊠ ○ Field Vane ○
						0 20 40 60 80 100	0 40 80 120 160 200	
8.0			- reddish grey to 9.1 m below 8.2 m					
8.5				G85	●			
9.0								
9.5								
10.0								
10.5				G86	●			
11.0								
11.5								
12.0				G87	●			
12.5								
13.0				G88	●			

POWER AUGER REFUSAL AT 13.1 m IN SILT (TILL)

Notes:

1. No seepage observed.
2. Sloughing observed between 8.5 m depth and 8.7 m depth in SILT (TILL) layer 30 minutes after belling.
3. Test bell performed at 8.7 m below existing ground in SILT (TILL) layer.
4. Test bell remained open with about 100 mm of slough at the base 30 minutes after belling.
5. Drilling continued to power auger refusal 30 minutes after test bell performed.
6. Test Hole open to 13.1 m depth and dry fifteen minutes after drilling.
7. Test Hole backfilled with auger cuttings.
8. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

SUB-SURFACE LOG LOGS 2018-04-11 ST JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL\_GDT 5/8/18

Logged By: Beta Taryana

Reviewed By: Nelson Ferreira

Project Engineer: Nelson Ferreira



# Sub-Surface Log

Test Hole TH18-07  
1 of 1

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure 01 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 99.21 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 10, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)

Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )					Undrained Shear Strength (kPa)				
						16	17	18	19	20	21	Test Type			
						Particle Size (%)									
						0	20	40	60	80	100				
						PL   MC   LL 0 20 40 60 80 100 0									
											40	80	120	160	200
98.9			ORGANIC CLAY - silty, trace sand, trace gravel (<10 mm diam.), trace rootlets - black, frozen, moist and stiff when thawed, low to intermediate plasticity		G67										
98.6	0.5		SILT - trace clay, trace sand, trace gravel (<5 mm diam.) - brown, frozen, moist and soft when thawed, low plasticity		G68										
	1.0		CLAY - silty, trace sand, trace gravel (<5 mm diam.), trace oxidation, trace silt inclusions (<15 mm diam.) - brown - frozen to 2.1 m, moist and stiff when thawed - high plasticity		G69										
	2.0				G70										
	2.5		- grey below 2.4 m												
	3.0		- soft to firm below 2.7 m		G71										

END OF TEST HOLE AT 3.0 m IN CLAY

Notes:

1. No seepage or sloughing observed.
2. Test Hole open to 3.0 m depth and dry fifteen minutes after drilling.
3. Test Hole backfilled with auger cuttings.
4. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

SUB-SURFACE LOG LOGS 2018-04-11 ST. JAMES CIVIC CENTRE\_0\_FINAL\_0015 024 00.GPJ TREK GEOTECHNICAL.GDT 5/8/18

Logged By: Beta Taryana Reviewed By: Nelson Ferreira Project Engineer: Nelson Ferreira



# Sub-Surface Log

Test Hole TH18-08

1 of 1

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure 01 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 99.12 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 10, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)  
 Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Particle Size (%)		Undrained Shear Strength (kPa)						
						16	17	18	19	20	21	0	40	80	120	160
98.8			ORGANIC CLAY - silty, trace sand, trace gravel (<15 mm diam.), trace rootlets - black, frozen, moist and stiff when thawed, low to intermediate plasticity		G72											
	0.5		SILT - trace clay, trace sand, trace gravel (<5 mm diam.) - brown - wet, soft - low plasticity		G73											
97.9	1.0		CLAY - silty, trace sand, trace gravel (<5 mm diam.), trace oxidation, trace silt inclusions (<15 mm diam.) - brown - moist, stiff - high plasticity		G74											
	1.5				G75											
	2.0				G76											
	2.5		- grey below 2.4 m													
96.1	3.0		END OF TEST HOLE AT 3.0 m IN CLAY													

- Notes:
1. Seepage observed between 0.3 m depth and 1.2 m depth in SILT layer.
  2. No sloughing observed.
  3. Test Hole open to 3.0 m depth and dry fifteen minutes after drilling.
  4. Test Hole backfilled with auger cuttings.
  5. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

SUB-SURFACE LOG LOGS 2018-04-11 ST. JAMES CIVIC CENTRE\_0\_FINAL 0015 024 00.GPJ TREK GEOTECHNICAL\_GDT 5/8/18



# Sub-Surface Log

Test Hole TH18-09

1 of 1

Client: City of Winnipeg Project Number: 0015 024 00  
 Project Name: St. James Civic Centre New Additions and Building, Winnipeg, MB Location: Refer to Figure 01 for Test Hole locations  
 Contractor: Subterranean Ltd. Ground Elevation: 98.66 m  
 Method: 406 mm Auger, Soilmec STM-20 Date Drilled: April 10, 2018

Sample Type:  Grab (G)  Shelby Tube (T)  Split Spoon (SS)  Split Barrel (SB)  Core (C)

Particle Size Legend:  Fines  Clay  Silt  Sand  Gravel  Cobbles  Boulders

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Bulk Unit Wt (kN/m <sup>3</sup> )		Undrained Shear Strength (kPa)
						16	17	
						Particle Size (%)		Test Type <input type="checkbox"/> Torvane <input type="checkbox"/> <input checked="" type="checkbox"/> Pocket Pen <input checked="" type="checkbox"/> <input type="checkbox"/> Qu <input type="checkbox"/> <input type="checkbox"/> Field Vane <input type="checkbox"/>
						0	20	
						0	20	0
98.4	0.0		ORGANIC CLAY - silty, trace sand, trace gravel (<10 mm diam.), trace rootlets - black, frozen, moist and stiff when thawed, low to intermediate plasticity					
	0.5		CLAY - silty, trace sand, trace gravel (<5 mm diam.), trace oxidation, trace silt inclusions (<10 mm diam.) - brown - frozen to 2.1 m, moist and stiff when thawed - high plasticity					
	1.0							
	1.5							
	2.0		- grey below 1.8 m					
	2.5							
	3.0							
	3.5							
	4.0							
	4.5							
	5.0							
	5.5							
	6.0							
	6.5							
92.0	6.7							

END OF TEST HOLE AT 6.7 m IN CLAY (CLAY and SILT (TILL) CONTACT)

Notes:

1. No seepage or sloughing observed.
2. Test bell performed at 6.7 m below existing grade in CLAY layer.
3. Test Hole open to 6.7 m depth and dry 30 minutes after belling.
4. Test Hole backfilled with auger cuttings.
5. Elevation relative to the main floor located at south entrance of existing building, which was assigned a temporary benchmark elevation of 100.00 m.

Logged By: Beta Taryana Reviewed By: Nelson Ferreira Project Engineer: Nelson Ferreira

**Appendix A**  
**Laboratory Testing Results**

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**Moisture Content Report  
 ASTM D2216-10**

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Sample Date** 09-Apr-18  
**Test Date** 12-Apr-18  
**Technician** LI

Test Pit	TH18-01	TH18-01	TH18-01	TH18-01	TH18-01	TH18-01
Depth (m)	0.0 - 0.3	0.6 - 0.9	0.9 - 1.2	1.2 - 1.5	2.1 - 2.4	2.7 - 3.0
Sample #	G01	G02	G03	G04	G05	G06
Tare ID	F40	W07	Z120	K4	E25	Z50
Mass of tare	8.6	8.6	8.6	8.6	8.8	8.6
Mass wet + tare	282.8	274.6	336.4	277.2	304.6	249.0
Mass dry + tare	228.2	223.8	277.2	224.2	224.0	180.2
Mass water	54.6	50.8	59.2	53.0	80.6	68.8
Mass dry soil	219.6	215.2	268.6	215.6	215.2	171.6
Moisture %	24.9%	23.6%	22.0%	24.6%	37.5%	40.1%

Test Pit	TH18-01	TH18-01	TH18-01	TH18-01	TH18-01	TH18-02
Depth (m)	6.1 - 6.4	7.6 - 7.9	8.2 - 8.5	10.1 - 10.4	13.7 - 14.0	0.3 - 0.6
Sample #	G08	G09	G10	G11	G12	G13
Tare ID	N06	C28	W48	K26	W81	D44
Mass of tare	8.4	8.4	8.4	8.4	8.6	8.4
Mass wet + tare	251.2	264	296.8	315.2	335.2	423.2
Mass dry + tare	165.8	174.0	256.2	284.2	301.2	401.6
Mass water	85.4	90.0	40.6	31.0	34.0	21.6
Mass dry soil	157.4	165.6	247.8	275.8	292.6	393.2
Moisture %	54.3%	54.3%	16.4%	11.2%	11.6%	5.5%

Test Pit	TH18-02	TH18-02	TH18-02	TH18-02	TH18-02	TH18-02
Depth (m)	0.9 - 1.2	1.5 - 1.8	3.0 - 3.4	4.6 - 4.9	7.6 - 7.9	8.2 - 8.5
Sample #	G14	G15	G16	G17	G19	G20
Tare ID	K3	P20	F76	E66	F29	E68
Mass of tare	8.6	8.6	8.6	9.0	8.2	8.6
Mass wet + tare	240.0	274.0	245.6	281.4	305.4	417.4
Mass dry + tare	179.4	196.2	163.4	193.6	232.6	380.2
Mass water	60.6	77.8	82.2	87.8	72.8	37.2
Mass dry soil	170.8	187.6	154.8	184.6	224.4	371.6
Moisture %	35.5%	41.5%	53.1%	47.6%	32.4%	10.0%



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**Moisture Content Report  
 ASTM D2216-10**

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Sample Date** 09-Apr-18  
**Test Date** 12-Apr-18  
**Technician** LI

Test Pit	TH18-02	TH18-02	TH18-02	TH18-02	TH18-02	TH18-03
Depth (m)	9.1 - 9.4	10.7 - 11.0	11.6 - 11.9	13.7 - 14.0	14.9 - 15.2	0.3 - 0.6
Sample #	G21	G22	G23	G24	G25	G26
Tare ID	E108	E92	H52	AC07	F41	Z82
Mass of tare	8.6	8.4	8.6	6.8	8.4	8.2
Mass wet + tare	379.2	385.6	372.8	419.8	393.4	315.4
Mass dry + tare	351.6	355.8	341.8	387.4	370.2	303.4
Mass water	27.6	29.8	31.0	32.4	23.2	12.0
Mass dry soil	343.0	347.4	333.2	380.6	361.8	295.2
Moisture %	8.0%	8.6%	9.3%	8.5%	6.4%	4.1%

Test Pit	TH18-03	TH18-03	TH18-03	TH18-03	TH18-03	TH18-03
Depth (m)	0.9 - 1.2	1.5 - 1.8	1.8 - 2.1	2.7 - 3.0	4.6 - 4.9	6.4 - 6.7
Sample #	G27	G28	G29	G30	G31	G32
Tare ID	F114	F50	F110	H56	K13	F81
Mass of tare	8.2	8.8	8.4	8.6	8.8	8.6
Mass wet + tare	273.2	280.4	270.0	219.4	258.6	314.2
Mass dry + tare	209.0	212.6	196.6	143.4	173.0	220.6
Mass water	64.2	67.8	73.4	76.0	85.6	93.6
Mass dry soil	200.8	203.8	188.2	134.8	164.2	212.0
Moisture %	32.0%	33.3%	39.0%	56.4%	52.1%	44.2%

Test Pit	TH18-03	TH18-03	TH18-03	TH18-03	TH18-03	TH18-04
Depth (m)	8.5 - 8.8	10.7 - 11.0	12.2 - 12.5	13.7 - 14.0	15.2 - 15.5	0.0 - 0.3
Sample #	G34	G35	G36	G37	G38	G39
Tare ID	W110	W63	P13	F52	AA08	AB54
Mass of tare	8.4	8.6	8.4	8.4	6.8	6.6
Mass wet + tare	379.0	370.0	396.2	406.6	392.0	248.4
Mass dry + tare	344.6	340.6	364.0	373.0	360.0	180.4
Mass water	34.4	29.4	32.2	33.6	32.0	68.0
Mass dry soil	336.2	332.0	355.6	364.6	353.2	173.8
Moisture %	10.2%	8.9%	9.1%	9.2%	9.1%	39.1%



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## Moisture Content Report ASTM D2216-10

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Sample Date** 09-Apr-18  
**Test Date** 12-Apr-18  
**Technician** LI

Test Pit	TH18-04	TH18-04	TH18-04	TH18-04	TH18-04	TH18-04
Depth (m)	0.6 - 0.9	1.5 - 1.8	2.4 - 2.7	3.0 - 3.4	6.7 - 7.0	7.6 - 7.9
Sample #	G40	G41	G42	G43	G45	G46
Tare ID	A102	N69	N40	K19	AB19	AB80
Mass of tare	8.4	8.9	8.6	8.4	6.6	6.8
Mass wet + tare	335.1	255.8	253.2	291.6	280.6	281.6
Mass dry + tare	266.0	207.6	183.2	204.2	195.6	200.8
Mass water	69.1	48.2	70.0	87.4	85.0	80.8
Mass dry soil	257.6	198.7	174.6	195.8	189.0	194.0
Moisture %	26.8%	24.3%	40.1%	44.6%	45.0%	41.6%

Test Pit	TH18-04	TH18-04	TH18-04	TH18-04	TH18-04	TH18-04
Depth (m)	8.5 - 8.8	9.1 - 9.4	10.4 - 10.7	12.2 - 12.5	13.4 - 13.7	14.9 - 15.2
Sample #	G47	G48	G49	G50	G51	G52
Tare ID	AB40	F20	AA09	E13	F10	C2
Mass of tare	6.6	8.4	6.8	8.8	8.8	8.4
Mass wet + tare	363.0	416.6	365.4	418.8	389.8	447.8
Mass dry + tare	333.6	377.8	334.2	383.6	355.6	408.6
Mass water	29.4	38.8	31.2	35.2	34.2	39.2
Mass dry soil	327.0	369.4	327.4	374.8	346.8	400.2
Moisture %	9.0%	10.5%	9.5%	9.4%	9.9%	9.8%

Test Pit	TH18-05	TH18-05	TH18-05	TH18-05	TH18-05	TH18-05
Depth (m)	0.0 - 0.3	0.6 - 0.9	1.2 - 1.5	1.8 - 2.1	2.7 - 3.0	4.6 - 4.9
Sample #	G53	G54	G55	G56	G57	G58
Tare ID	N24	K35	F19	E128	F105	P28
Mass of tare	8.6	8.6	8.6	8.4	8.4	8.6
Mass wet + tare	278.4	289.4	246.6	284.2	301.0	308.2
Mass dry + tare	222.8	214.4	186.0	219.0	215.6	205.8
Mass water	55.6	75.0	60.6	65.2	85.4	102.4
Mass dry soil	214.2	205.8	177.4	210.6	207.2	197.2
Moisture %	26.0%	36.4%	34.2%	31.0%	41.2%	51.9%





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**Moisture Content Report  
 ASTM D2216-10**

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Sample Date** 09-Apr-18  
**Test Date** 12-Apr-18  
**Technician** LI

Test Pit	TH18-05	TH18-05	TH18-05	TH18-05	TH18-05	TH18-05
Depth (m)	6.1 - 6.4	7.6 - 7.9	8.5 - 8.8	9.1 - 9.4	10.7 - 11.0	12.2 - 12.5
Sample #	G59	G60	G61	G62	G63	G64
Tare ID	P33	A104	F117	F126	C21	F42
Mass of tare	8.4	8.6	8.4	8.4	8.4	8.4
Mass wet + tare	285.8	296.6	359.2	348.8	336.8	305.4
Mass dry + tare	195.4	209.8	319.8	320.2	306.6	274.4
Mass water	90.4	86.8	39.4	28.6	30.2	31.0
Mass dry soil	187.0	201.2	311.4	311.8	298.2	266.0
Moisture %	48.3%	43.1%	12.7%	9.2%	10.1%	11.7%

Test Pit	TH18-05	TH18-05	TH18-07	TH18-07	TH18-07	TH18-07
Depth (m)	13.7 - 14.0	15.2 - 15.5	0.0 - 0.3	0.3 - 0.6	1.2 - 1.5	2.1 - 2.4
Sample #	G65	G66	G67	G68	G69	G70
Tare ID	K16	W74	AB28	H3	C20	D25
Mass of tare	8.6	8.4	6.6	8.4	8.4	8.6
Mass wet + tare	395.4	424.0	255.8	227.6	269.6	309.2
Mass dry + tare	357.8	383.4	184.0	183.0	214.4	222.2
Mass water	37.6	40.6	71.8	44.6	55.2	87.0
Mass dry soil	349.2	375.0	177.4	174.6	206.0	213.6
Moisture %	10.8%	10.8%	40.5%	25.5%	26.8%	40.7%

Test Pit	TH18-07	TH18-08	TH18-08	TH18-08	TH18-08	TH18-08
Depth (m)	2.7 - 3.0	0.0 - 0.3	0.6 - 0.9	1.2 - 1.5	2.1 - 2.4	2.7 - 3.0
Sample #	G71	G72	G73	G74	G75	G76
Tare ID	AB95	Z127	K10	H72	Z63	H33
Mass of tare	6.6	8.4	8.6	8.4	8.6	8.6
Mass wet + tare	336.6	307.2	305.0	278.8	309.6	265.4
Mass dry + tare	221.4	244.6	251.6	202.6	229.4	174.4
Mass water	115.2	62.6	53.4	76.2	80.2	91.0
Mass dry soil	214.8	236.2	243.0	194.2	220.8	165.8
Moisture %	53.6%	26.5%	22.0%	39.2%	36.3%	54.9%



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**Moisture Content Report  
 ASTM D2216-10**

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Sample Date** 09-Apr-18  
**Test Date** 12-Apr-18  
**Technician** LI

Test Pit	TH18-06	TH18-06	TH18-06	TH18-06	TH18-06	TH18-06
Depth (m)	0.0 - 0.3	0.6 - 0.9	1.2 - 1.5	2.1 - 2.4	2.7 - 3.0	4.3 - 4.6
Sample #	G77	G78	G79	G80	G81	G82
Tare ID	H25	H79	Z77	D28	E18	N65
Mass of tare	8.4	8.4	8.4	8.6	8.4	8.8
Mass wet + tare	290.4	257.2	278.0	241.2	241.4	286.2
Mass dry + tare	238.2	199.6	207.0	180.4	167.8	196.2
Mass water	52.2	57.6	71.0	60.8	73.6	90.0
Mass dry soil	229.8	191.2	198.6	171.8	159.4	187.4
Moisture %	22.7%	30.1%	35.8%	35.4%	46.2%	48.0%

Test Pit	TH18-06	TH18-06	TH18-06	TH18-06	TH18-06
Depth (m)	7.3 - 7.6	8.4 - 8.7	10.4 - 10.7	11.9 - 12.2	12.8 - 13.1
Sample #	G84	G85	G86	G87	G88
Tare ID	N02	N105	Z52	E27	A109
Mass of tare	8.4	8.4	8.4	8.6	8.4
Mass wet + tare	378.2	395.4	419.0	331.4	365.4
Mass dry + tare	340.6	357.4	387.0	305.0	338.6
Mass water	37.6	38.0	32.0	26.4	26.8
Mass dry soil	332.2	349.0	378.6	296.4	330.2
Moisture %	11.3%	10.9%	8.5%	8.9%	8.1%

Test Pit					
Depth (m)					
Sample #					
Tare ID					
Mass of tare					
Mass wet + tare					
Mass dry + tare					
Mass water					
Mass dry soil					
Moisture %					



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## Shelby Tube Visual

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Test Hole** TH18-04  
**Sample #** T44  
**Depth (m)** 4.6 - 5.2  
**Sample Date** 09-Apr-18  
**Test Date** 13-Apr-18  
**Technician** LI

### Tube Extraction

**Recovery (mm)** 555

Bottom - 5.2 m	5.00 m	4.86 m	4.70 m	Top - 4.6 m
Keep	Moisture Content  Visual	PP  Tv	Qu  Bulk	Toss
160 mm	140 mm	160 mm	160 mm	95 mm

### Visual Classification

**Material** Clay  
**Composition** silty  
 trace silt inclusions (<15 mm  $\phi$ )  
 trace precipitates (sulphates)  
 trace rootlets

**Color** brown  
**Moisture** moist  
**Consistency** stiff  
**Plasticity** high plasticity  
**Structure** -  
**Gradation** -

**Torvane**  
**Reading** 0.70  
**Vane Size (s,m,l)** m  
**Undrained Shear Strength (kPa)** 68.7

**Pocket Penetrometer**  
**Reading**  
 1 1.30  
 2 1.30  
 3 1.60  
 Average 1.40  
**Undrained Shear Strength (kPa)** 68.6

### Moisture Content

**Tare ID** N22  
**Mass tare (g)** 8.6  
**Mass wet + tare (g)** 295.6  
**Mass dry + tare (g)** 196.5  
**Moisture %** 52.7%

### Unit Weight

**Bulk Weight (g)** 1052.0  
**Length (mm)**  
 1 146.40  
 2 146.79  
 3 147.00  
 4 146.43  
**Average Length (m)** 0.147

**Diam. (mm)**  
 1 72.62  
 2 73.24  
 3 73.12  
 4 72.76  
**Average Diameter (m)** 0.073

**Volume (m<sup>3</sup>)** 6.13E-04  
**Bulk Unit Weight (kN/m<sup>3</sup>)** 16.8  
**Bulk Unit Weight (pcf)** 107.2  
**Dry Unit Weight (kN/m<sup>3</sup>)** 11.0  
**Dry Unit Weight (pcf)** 70.2



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**Unconfined Compressive Strength**  
**ASTM D2166**

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Test Hole** TH18-04  
**Sample #** T44  
**Depth (m)** 4.6 - 5.2  
**Sample Date** 9-Apr-18  
**Test Date** 13-Apr-18  
**Technician** LI

**Unconfined Strength**

	kPa	ksf
<b>Max <math>q_u</math></b>	95.1	2.0
<b>Max <math>S_u</math></b>	47.6	1.0

**Specimen Data**

**Description** Clay - silty, trace silt inclusions (<15 mm Ø), trace precipitates (sulphates), trace rootlets, brown, moist, stiff, high plasticity

**Length** 146.7 (mm)  
**Diameter** 72.9 (mm)  
**L/D Ratio** 2.0  
**Initial Area** 0.00418 (m<sup>2</sup>)  
**Load Rate** 1.00 (%/min)

**Moisture %** 53%  
**Bulk Unit Wt.** 16.8 (kN/m<sup>3</sup>)  
**Dry Unit Wt.** 11.0 (kN/m<sup>3</sup>)  
**Liquid Limit** -  
**Plastic Limit** -  
**Plasticity Index** -

**Undrained Shear Strength Tests**

**Torvane**

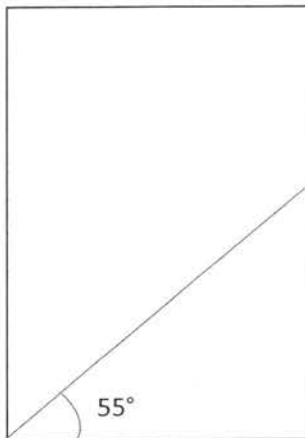
Reading tsf	Undrained Shear Strength	
	kPa	ksf
0.70	68.7	1.43
<b>Vane Size</b> m		

**Pocket Penetrometer**

Reading tsf	Undrained Shear Strength	
	kPa	ksf
1.30	63.8	1.33
1.30	63.8	1.33
1.60	78.5	1.64
<b>Average</b>	<b>1.40</b>	<b>68.7</b>
		<b>1.43</b>

**Failure Geometry**

**Sketch:**



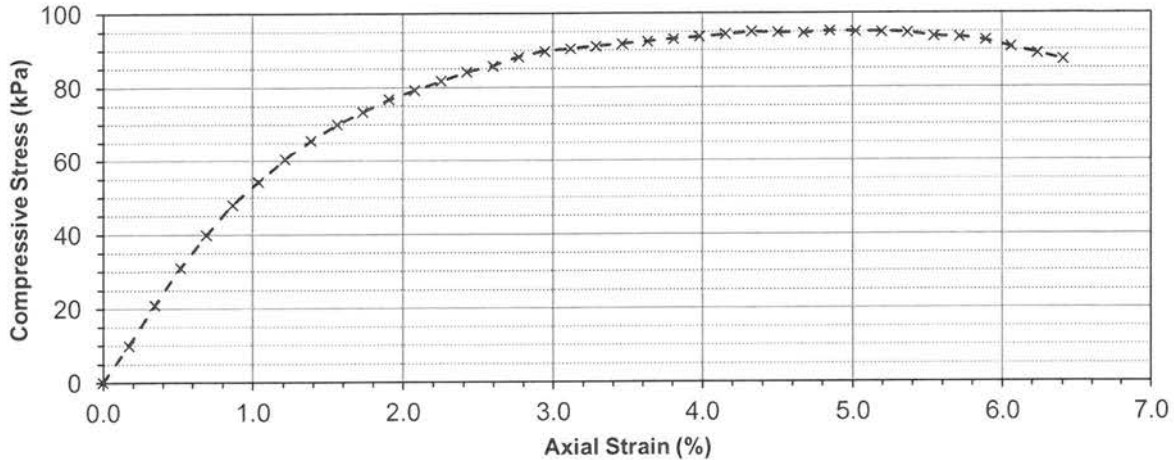
**Photo:**





**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

Unconfined Compression Test Graph



Unconfined Compression Test Data

Deformation Dial Reading	Load Ring Dial Reading	Deflection (mm)	Axial Strain (%)	Corrected Area (m <sup>2</sup> )	Axial Load (N)	Compressive Stress, q <sub>u</sub> (kPa)	Shear Stress, S <sub>u</sub> (kPa)
0	0	0.0000	0.00	0.004178	0.0	0.00	0.00
10	11	0.2540	0.17	0.004185	41.7	9.97	4.98
20	23	0.5080	0.35	0.004192	87.6	20.91	10.45
30	34	0.7620	0.52	0.004200	129.8	30.90	15.45
40	44	1.0160	0.69	0.004207	168.0	39.94	19.97
50	53	1.2700	0.87	0.004214	202.3	48.01	24.00
60	60	1.5240	1.04	0.004222	228.8	54.19	27.09
70	67	1.7780	1.21	0.004229	255.2	60.34	30.17
80	73	2.0320	1.39	0.004237	277.8	65.58	32.79
90	78	2.2860	1.56	0.004244	296.6	69.89	34.95
100	82	2.5400	1.73	0.004252	311.6	73.29	36.64
110	86	2.7940	1.91	0.004259	326.5	76.67	38.33
120	89	3.0480	2.08	0.004267	337.8	79.16	39.58
130	92	3.3020	2.25	0.004274	349.0	81.65	40.82
140	95	3.5560	2.42	0.004282	360.2	84.12	42.06
150	97	3.8100	2.60	0.004289	367.7	85.72	42.86
160	100	4.0640	2.77	0.004297	378.9	88.18	44.09
170	102	4.3180	2.94	0.004305	386.0	89.66	44.83
180	103	4.5720	3.12	0.004312	389.5	90.32	45.16
190	104	4.8260	3.29	0.004320	393.0	90.98	45.49
200	105	5.0800	3.46	0.004328	396.6	91.63	45.81
210	106	5.3340	3.64	0.004336	400.1	92.28	46.14
220	107	5.5880	3.81	0.004343	403.6	92.93	46.46
230	108	5.8420	3.98	0.004351	407.2	93.57	46.79



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**Unconfined Compressive Strength**  
ASTM D2166

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

Unconfined Compression Test Data (cont'd)

Deformation Dial Reading	Load Ring Dial Reading	Deflection (mm)	Axial Strain (%)	Corrected Area (m <sup>2</sup> )	Axial Load (N)	Compressive Stress, $q_u$ (kPa)	Shear Stress, $S_u$ (kPa)
240	109	6.0960	4.16	0.004359	410.7	94.21	47.11
250	110	6.3500	4.33	0.004367	414.2	94.85	47.43
260	110	6.6040	4.50	0.004375	414.2	94.68	47.34
270	110	6.8580	4.68	0.004383	414.2	94.51	47.25
280	111	7.1120	4.85	0.004391	417.8	95.14	47.57
290	111	7.3660	5.02	0.004399	417.8	94.97	47.48
300	111	7.6200	5.20	0.004407	417.8	94.79	47.40
310	111	7.8740	5.37	0.004415	417.8	94.62	47.31
320	110	8.1280	5.54	0.004423	414.2	93.65	46.82
330	110	8.3820	5.72	0.004431	414.2	93.48	46.74
340	109	8.6360	5.89	0.004439	410.7	92.51	46.26
350	107	8.8900	6.06	0.004448	403.6	90.75	45.38
360	105	9.1440	6.24	0.004456	396.6	89.00	44.50
370	103	9.3980	6.41	0.004464	389.5	87.25	43.63



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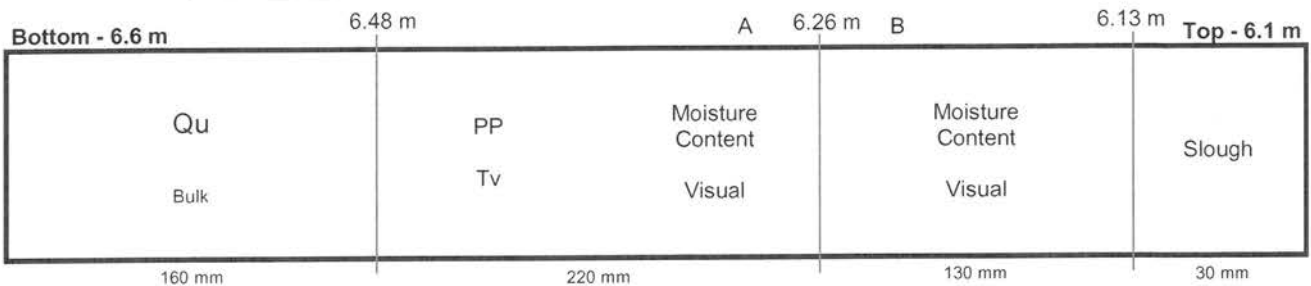
**Shelby Tube Visual**

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Test Hole** TH18-06  
**Sample #** T83  
**Depth (m)** 6.1 - 6.6  
**Sample Date** 10-Apr-18  
**Test Date** 13-Apr-18  
**Technician** LI

**Tube Extraction**

**Recovery (mm)** 540



Visual Classification	A	B
<b>Material</b>	Clay	Silt Till
<b>Composition</b>	silty trace silt inclusions (<10 mm Ø) trace sand trace gravel (<10 mm Ø)	sandy trace clay some gravel (<45 mm Ø)
<b>Color</b>	brown	light brown
<b>Moisture</b>	moist	moist
<b>Consistency</b>	stiff	
<b>Plasticity</b>	high plasticity	low to intermediate plasticity
<b>Structure</b>		
<b>Gradation</b>		
<b>Torvane</b>	<b>A</b>	<b>B</b>
<b>Reading</b>	0.58	
<b>Vane Size (s,m,l)</b>	m	
<b>Undrained Shear Strength</b>	56.9	(kPa)
<b>Pocket Penetrometer</b>	<b>A</b>	<b>B</b>
<b>Reading</b>	1: 1.20 2: 1.10 3: 1.20 Average: 1.17	
<b>Undrained Shear Strength</b>	57.2	(kPa)

Moisture Content	A	B
<b>Tare ID</b>	F14	W14
<b>Mass tare (g)</b>	8.5	8.6
<b>Mass wet + tare (g)</b>	221.1	294.1
<b>Mass dry + tare (g)</b>	155.5	238.6
<b>Moisture %</b>	44.6%	24.1%
<b>Unit Weight</b>		
<b>Bulk Weight (g)</b>	1145.60	
<b>Length (mm)</b>	1: 145.36 2: 145.44 3: 146.01 4: 145.93	
<b>Average Length (m)</b>	0.146	
<b>Diam. (mm)</b>	1: 73.27 2: 72.36 3: 72.67 4: 73.79	
<b>Average Diameter (m)</b>	0.073	
<b>Volume (m<sup>3</sup>)</b>	6.10E-04	
<b>Bulk Unit Weight (kN/m<sup>3</sup>)</b>	18.4	
<b>Bulk Unit Weight (pcf)</b>	117.2	
<b>Dry Unit Weight (kN/m<sup>3</sup>)</b>	12.7	
<b>Dry Unit Weight (pcf)</b>	81.1	



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**Unconfined Compressive Strength**  
 ASTM D2166

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Test Hole** TH18-06  
**Sample #** T83  
**Depth (m)** 6.1 - 6.6  
**Sample Date** 10-Apr-18  
**Test Date** 13-Apr-18  
**Technician** LI

Unconfined Strength

	kPa	ksf
<b>Max <math>q_u</math></b>	69.4	1.4
<b>Max <math>S_u</math></b>	34.7	0.7

Specimen Data

**Description** A: Clay - silty, trace silt inclusions (<10 mm Ø), trace sand, trace gravel (<10 mm Ø), brown, moist, stiff, high plasticity

<b>Length</b>	145.7	(mm)	<b>Moisture %</b>	45%	
<b>Diameter</b>	73.0	(mm)	<b>Bulk Unit Wt.</b>	18.4	(kN/m <sup>3</sup> )
<b>L/D Ratio</b>	2.0		<b>Dry Unit Wt.</b>	12.7	(kN/m <sup>3</sup> )
<b>Initial Area</b>	0.00419	(m <sup>2</sup> )	<b>Liquid Limit</b>	-	
<b>Load Rate</b>	1.00	(%/min)	<b>Plastic Limit</b>	-	
			<b>Plasticity Index</b>	-	

Undrained Shear Strength Tests

Torvane

Reading	Undrained Shear Strength	
	kPa	ksf
tsf		
0.58	56.9	1.19
<b>Vane Size</b>		
m		

Pocket Penetrometer

Reading	Undrained Shear Strength	
	kPa	ksf
tsf		
1.20	58.9	1.23
1.10	54.0	1.13
1.20	58.9	1.23
<b>Average</b>	<b>57.2</b>	<b>1.20</b>

Failure Geometry

Sketch:

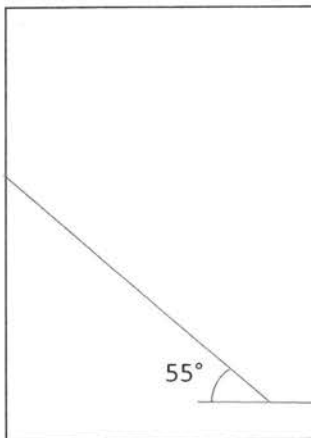
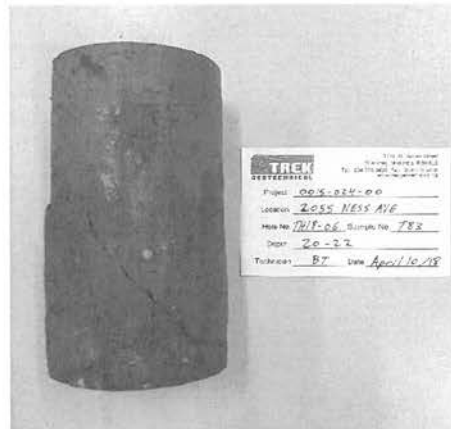


Photo:





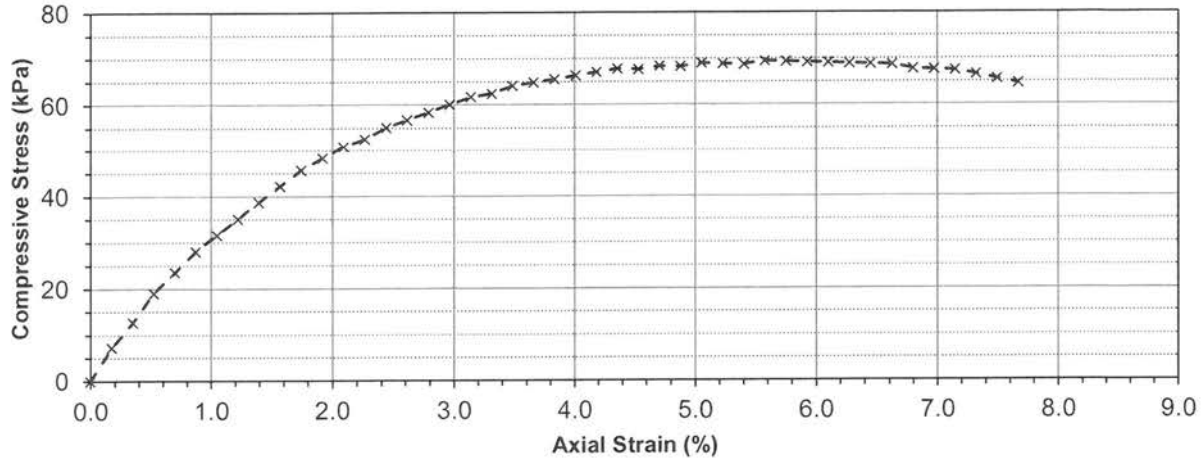


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**Unconfined Compressive Strength**  
 ASTM D2166

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

**Unconfined Compression Test Graph**



**Unconfined Compression Test Data**

Deformation Dial Reading	Load Ring Dial Reading	Deflection (mm)	Axial Strain (%)	Corrected Area (m <sup>2</sup> )	Axial Load (N)	Compressive Stress, q <sub>u</sub> (kPa)	Shear Stress, S <sub>u</sub> (kPa)
0	0	0.0000	0.00	0.004188	0.0	0.00	0.00
10	8	0.2540	0.17	0.004195	30.2	7.20	3.60
20	14	0.5080	0.35	0.004203	53.2	12.66	6.33
30	21	0.7620	0.52	0.004210	80.0	19.00	9.50
40	26	1.0160	0.70	0.004217	99.1	23.50	11.75
50	31	1.2700	0.87	0.004225	118.3	27.99	14.00
60	35	1.5240	1.05	0.004232	133.6	31.56	15.78
70	39	1.7780	1.22	0.004240	148.9	35.12	17.56
80	43	2.0320	1.39	0.004247	164.2	38.66	19.33
90	47	2.2860	1.57	0.004255	179.5	42.19	21.10
100	51	2.5400	1.74	0.004262	194.8	45.70	22.85
110	54	2.7940	1.92	0.004270	206.1	48.27	24.13
120	57	3.0480	2.09	0.004277	217.4	50.83	25.42
130	59	3.3020	2.27	0.004285	225.0	52.50	26.25
140	62	3.5560	2.44	0.004293	236.3	55.05	27.52
150	64	3.8100	2.62	0.004300	243.9	56.71	28.35
160	66	4.0640	2.79	0.004308	251.4	58.36	29.18
170	68	4.3180	2.96	0.004316	259.0	60.00	30.00
180	70	4.5720	3.14	0.004324	266.5	61.64	30.82
190	71	4.8260	3.31	0.004331	270.3	62.40	31.20
200	73	5.0800	3.49	0.004339	277.8	64.03	32.02
210	74	5.3340	3.66	0.004347	281.6	64.78	32.39
220	75	5.5880	3.84	0.004355	285.4	65.53	32.77
230	76	5.8420	4.01	0.004363	289.1	66.27	33.14



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**Unconfined Compressive Strength**  
**ASTM D2166**

**Project No.** 0015-024-00  
**Client** City of Winnipeg  
**Project** St. James Civic Centre

Unconfined Compression Test Data (cont'd)

Deformation Dial Reading	Load Ring Dial Reading	Deflection (mm)	Axial Strain (%)	Corrected Area (m <sup>2</sup> )	Axial Load (N)	Compressive Stress, q <sub>u</sub> (kPa)	Shear Stress, S <sub>u</sub> (kPa)
240	77	6.0960	4.18	0.004371	292.9	67.01	33.50
250	78	6.3500	4.36	0.004379	296.6	67.74	33.87
260	78	6.6040	4.53	0.004387	296.6	67.62	33.81
270	79	6.8580	4.71	0.004395	300.4	68.34	34.17
280	79	7.1120	4.88	0.004403	300.4	68.22	34.11
290	80	7.3660	5.06	0.004411	304.1	68.94	34.47
300	80	7.6200	5.23	0.004419	304.1	68.81	34.41
310	80	7.8740	5.40	0.004427	304.1	68.69	34.34
320	81	8.1280	5.58	0.004435	307.8	69.40	34.70
330	81	8.3820	5.75	0.004444	307.8	69.28	34.64
340	81	8.6360	5.93	0.004452	307.8	69.15	34.57
350	81	8.8900	6.10	0.004460	307.8	69.02	34.51
360	81	9.1440	6.28	0.004468	307.8	68.89	34.45
370	81	9.3980	6.45	0.004477	307.8	68.76	34.38
380	81	9.6520	6.63	0.004485	307.8	68.64	34.32
390	80	9.9060	6.80	0.004494	304.1	67.68	33.84
400	80	10.1600	6.97	0.004502	304.1	67.55	33.77
410	80	10.4140	7.15	0.004510	304.1	67.42	33.71
420	79	10.6680	7.32	0.004519	300.4	66.47	33.23
430	78	10.9220	7.50	0.004527	296.6	65.52	32.76
440	77	11.1760	7.67	0.004536	292.9	64.57	32.28

February 22, 2024

File No. 0015-024-00

Kathy Roberts  
Project Officer  
City of Winnipeg, Municipal Accommodations  
4th Floor, 185 King Street  
Winnipeg, Manitoba  
R3B 1J1

**RE St. James Civic Centre New Additions and Building  
Addendum No. 1 – Seismic Site Class**

---

This letter is an addendum to the geotechnical investigation report issued to the City of Winnipeg on May 9, 2018 and provides a Seismic Site Class for proposed structures at the St. James Civic Centre located at 2055 Ness Avenue in Winnipeg, MB.

**Seismic Site Class**

The site classification for seismic site response was determined in accordance with Table 4.1.8.4.-B in Section 4.1.8 *Earthquake Load and Effects* of the NBCC (2020). Site Class D (stiff soil) applies to this site based on an average undrained shear strength of 54 kPa of the clay and a compact to dense till consistency.

**Closure**

The geotechnical information provided in this report is in accordance with current engineering principles and practices (Standard of Practice). The findings of this report were based on information provided (field investigation and laboratory testing). Soil conditions are natural deposits that can be highly variable across a site. If sub-surface conditions are different than the conditions previously encountered on-site or those presented here, we should be notified to adjust our findings if necessary.

All information provided in this report is subject to our standard terms and conditions for engineering services, a copy of which is provided to each of our clients with the original scope of work or standard engineering services agreement. If these conditions are not attached, and you are not already in possession of such terms and conditions, contact our office and you will be promptly provided with a copy.

This report has been prepared by TREK Geotechnical Inc. (the Consultant) for the exclusive use of City of Winnipeg (the Client) and their agents for the work product presented in the report. Any findings or recommendations provided in this report are not to be used or relied upon by any third parties, except as agreed to in writing by the Client and Consultant prior to use.



We thank you for the opportunity to provide engineering services on this assignment. If you have any questions regarding the findings or recommendations presented, please contact the undersigned at your earliest convenience.

Kind Regards,

**TREK Geotechnical**

**Per:**

**Reviewed By:**

**Ryan Belbas, M.Sc., P.Eng.**  
Geotechnical Engineer  
Attach.



**Nelson John Ferreira Ph.D. P.Eng.**  
Senior Geotechnical Engineer





**REVISION #2**

# **Hazardous Building Materials Assessment**

St. James Civic Centre  
2055 Ness Avenue  
Winnipeg, Manitoba

Prepared for:

**City of Winnipeg**  
185 King Street  
Winnipeg, MB R3B 1J1

Attention: Kathy Roberts, C. Tech, PMP  
Project Officer II

October 4, 2018

Pinchin File: 220300

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**Issued to:** City of Winnipeg  
**Contact:** Kathy Roberts, C. Tech, PMP  
Project Officer II  
**Issued on:** October 4, 2018  
**Pinchin File:** 220300  
**Issuing Office:** 54 Terracon Place, Winnipeg, MB R2J 4G7  
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---

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Operations Manager  
204.452.0983 ext. 2251  
[rlegault@pinchin.com](mailto:rlegault@pinchin.com)



## **EXECUTIVE SUMMARY**

City of Winnipeg (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment of the St. James Civic Centre located at 2055 Ness Avenue, Winnipeg, Manitoba. Pinchin performed the assessment on May 30 and 31, 2018.

The objective of the assessment was to identify specified hazardous building materials in preparation for future building renovations. The results of this assessment are intended for use with a properly developed scope of work and performance specification.

The assessed area consisted of the entire building.

## **SUMMARY OF FINDINGS**

Asbestos: Asbestos-containing materials (ACM) are present as follows:

- Parging cement insulating pipe system fittings;
- Parging cement insulating hot water storage tanks within the pool room;
- Vermiculite within hollow core wall cavities around the arena;
- Exterior stucco;
- Black tar mastic on jacketing of duct insulation;
- Beige high pressure duct sealant on uninsulated ducting;
- 9" x 9", Beige and brown vinyl floor tiles in various locations;
- 12" x 12", Beige and grey vinyl floor tiles within the arena sound room;
- 12" x 12", Beige vinyl floor tiles within the pool corridor;
- 9" x 9", Green vinyl floor tiles within the main floor cloak room;
- 9" x 9", Beige and grey vinyl floor tiles within the auditorium;
- 12" x 12", Beige, brown, and white vinyl floor tiles within the main floor employee lunch room;
- 12" x 12", Vinyl floor tiles under carpeting within the mezzanine board room and storage room; and
- Tar present within the BUR over the arena.

Lead: Lead is present as follows:

- Interior and exterior paint finishes; and
- Batteries of emergency lights and fire alarm systems.



Silica: Crystalline silica is present in concrete, mortar, brick, masonry, ceramics, grout, plaster, stone, asphalt, etc.

Mercury: Mercury vapour is present in fluorescent lamps and liquid mercury is present in thermostat ampules.

Polychlorinated Biphenyls (PCBs): Based on the date of construction, PCBs may be present in light ballasts.

Mould and Water Damage: Visible mould/water staining was observed present on ceiling tiles within the main floor corridor, mezzanine woman's washroom, basement board room and mezzanine men's washroom.

Rodent/Bird Droppings: Mice activity present within the arena area of the building. Rodent/bird dropping were not observed.

Flammable/Toxic Materials: Appropriate controls in place including; Current MSDS sheets, appropriate storage and sensors.

## **SUMMARY OF RECOMMENDATIONS**

The following is a summary of significant recommendations; refer to the body of the report for detailed recommendations:

1. Remove and dispose of asbestos-containing materials if disturbed by the planned renovation work;
2. Remove and properly dispose of PCB ballasts and mercury-containing items if disturbed by the planned renovation work;
3. Follow appropriate safe work procedures when handling or disturbing lead, silica, mould, and flammable and toxic materials; and
4. Remediate the materials as described in Section 4.2.

*This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.*





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## **1.0 INTRODUCTION AND SCOPE**

City of Winnipeg (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment of the St. James Civic Centre located at 2055 Ness Avenue, Winnipeg, Manitoba.

Ken Brydges, C.E.T., LEED GA and Rodney Legault, C.E.T., EP performed the assessment on May 30 and 31, 2018. The surveyors were unaccompanied during the assessment. The building was occupied at the time of the assessment.

The objective of the assessment was to identify specified hazardous building materials in preparation for future building renovations. This assessment is intended to be used for pre-construction purposes only, and may not provide sufficient detail for long term management of hazardous materials as required by Health and Safety regulations. The results of this assessment are intended for use with a properly developed scope of work and performance specification.

### **1.1 Scope of Assessment**

The assessment was performed to establish the location and type of specified hazardous building materials incorporated in the structure(s) and its finishes. The assessed area consisted of all parts of the building.

For the purpose of the assessment and this report, hazardous building materials are defined as follows:

- Asbestos;
- Lead;
- Silica;
- Mercury;
- Polychlorinated Biphenyls (PCBs);
- Mould
- Rodent/Bird Droppings; and
- Flammable or Toxic Materials.

## 2.0 BACKGROUND INFORMATION

### 2.1 Building Description

Building Description Item	Details
Building Use	Recreational Use
Number of Floors/Levels	Single storey with Mezzanine and 1 level below grade
Structure	Structural steel, concrete
Exterior Cladding	Pre-cast concrete, metal, stucco, concrete
HVAC	Rooftop AC, Boiler and hot water heating to radiators
Roof	No Access
Flooring	Vinyl tile, vinyl sheet flooring, wood, carpet, ceramic tiles, asphalt plank
Interior Walls	Drywall, concrete block, plaster
Ceilings	Drywall, acoustic ceiling tiles

### 2.2 Existing Reports

No existing reports were provided for reference.

## 3.0 FINDINGS

The following section summarizes the findings of the assessment and provides a general description of the hazardous materials identified and their locations.

### 3.1 Asbestos

#### 3.1.1 *Suspect Building Materials Not Found*

The following types of building materials may historically contain asbestos but were not observed in the building and are not discussed in the report findings:

- Texture finishes (acoustic/decorative); and
- Asbestos cement products (e.g. Transite).

#### 3.1.2 *Spray-Applied Fireproofing and Thermal Insulation*

Non-asbestos beige/white fireproofing and overspray is present on the structure throughout the main entrance vestibule and pool (Samples 0032A-C).

### 3.1.3 Thermal Systems Insulation (TSI)

#### 3.1.3.1 Pipe Insulation

Parging cement, containing chrysotile asbestos, is present on pipe fittings (elbows, valves, tees, hangers etc.) on the domestic (DW), hot water heating (HWH), steam, and rain water leader systems (Samples 0001A-C, 0002A-C, 0006A-C, 0017A-C, 0021A-C, and 0035A-C). Parging cement is a friable insulation, was jacketed with canvas and observed in good condition.

Straight sections of pipe systems were either non-insulated or insulated with non-asbestos fibreglass and jacketed with either canvas or foil face.

Pipe System, Type	Location Description, Location No.	Asbestos Type	Sample No.	Total Quantity (fittings)
HWH, Parging cement	Basement Boiler room, Loc.1	Chrysotile	0001A-C	23
DW, Parging cement	Basement Boiler room, Loc.1	Chrysotile	0002A-C	10
HWH, Parging cement	Basement Electrical room, Loc.4	Chrysotile	V0001	10
HWH, Parging cement	Basement Fan room, Loc.4	Chrysotile	V0001	31
HWH, Parging cement	South Crawlspace room, Loc.5	Chrysotile	S0006	8
HWH, Parging cement	Basement Storage room, Loc.6	Chrysotile	V0001	13
HWH, Parging cement	Basement Storage room, Loc.7	Chrysotile	V0001	8
HWH, Parging cement	Basement Washroom, Loc.11	Chrysotile	V0001	7
HWH, Parging cement	Basement to main stairwell, Loc.12	Chrysotile	V0001	5
HWH, Parging cement	Basement pool room, Loc.13	Chrysotile	0017A-C	14
DW, Parging cement	Basement pool room, Loc.13	Chrysotile	V0017	6



<b>Pipe System, Type</b>	<b>Location Description, Location No.</b>	<b>Asbestos Type</b>	<b>Sample No.</b>	<b>Total Quantity (fittings)</b>
HWH, Parging cement	Basement corridor, Loc.14	Chrysotile	V0001	20
HWH, Parging cement	Rink, Loc.15	Chrysotile	S0021	40
HWH, Parging cement	Rink maintenance room, Loc.17	Chrysotile	V0021	7
HWH, Parging cement	Rink Locker room 1, Loc.20	Chrysotile	V0021	3
HWH, Parging cement	Rink Referee room, Loc.22	Chrysotile	V0021	4
HWH, Parging cement	Rink Locker room 3, Loc.23	Chrysotile	V0021	1
HWH, Parging cement	Main floor corridor/vestibule, Loc.28	Chrysotile	V0001	21
HWH, Parging cement	Main floor Canteen Loc.31	Chrysotile	V0001	4
DW, Parging cement	Rink storage room, Loc.32	Chrysotile	V0002	6
DW, Parging cement	Basement storage room, Loc.33	Chrysotile	V0002	6
HWH, Parging cement	Basement storage room, Loc.33	Chrysotile	V0001	4
HWH, Parging cement	Men's Change room, Loc.40	Chrysotile	V0001	6
HWH, Parging cement	Main floor Women's Washroom, Loc.41	Chrysotile	V0001	3
Rain Water Leader, Parging cement	Main floor Women's Washroom, Loc.41	Chrysotile	0035A-C	1
HWH, Parging cement	Pool exit, Loc.46	Chrysotile	V0001	5

Pipe System, Type	Location Description, Location No.	Asbestos Type	Sample No.	Total Quantity (fittings)
HWH, Parging cement	Cloak room, Loc.47	Chrysotile	V0001	9
HWH, Parging cement	Main floor corridor, Loc.57	Chrysotile	V0001	4



Photograph No. 1: Asbestos-containing parging cement present on fittings, elbows, valves and tee's of the Domestic, hot water, steam system.



Photograph No. 2: Asbestos-containing parging cement on rain water leader fittings.

### 3.1.3.2 Duct Insulation

Ducting throughout the building is either insulated with fibreglass and jacketed with foil face or glued on paper or not insulated. Asbestos-containing mastics are present on duct insulation see section 3.1.10.

### 3.1.3.3 Mechanical Equipment Insulation

Parging cement, containing chrysotile asbestos, is present as insulation on the hot water tanks (2) within the pool room Loc.13 (Samples 0016A-C). There is approximately 400 square feet of asbestos-containing insulation. Parging cement is friable, was jacketed with canvas and observed in good condition.

Remaining mechanical equipment is either not insulated or insulated with non-asbestos fibreglass.



Photograph No. 3: Asbestos-containing parging cement present as insulation on the hot water holding tanks within the pool room Loc.13.

#### 3.1.4 Vermiculite

Destructive testing was conducted at masonry walls. The masonry block walls were penetrated in various locations. Vermiculite, containing Libby amphibole asbestos, is present as insulation in perimeter masonry block walls around the arena (Sample 0026). Vermiculite is friable and is contained within the block walls.

#### 3.1.5 Acoustic Ceiling Tiles

Asbestos-containing acoustic ceiling tiles are not present. Acoustic ceiling tiles present throughout the assessed areas were determined to be non-asbestos by analysis of Samples 0011A-C, 0013A-C, 0024A-C, 0027A-C, 0028A-C, 0041A-C, 0044A-C, 0045A-C, 0047A-C, 0048A-C, 0051A-C, 0052A-C, and 0054A-C or determined to be non-asbestos by the date code stamped on the back of the ceiling tiles (2007 date of production).

Ceiling tiles which were presumed to be non-asbestos based on the date of manufacture determined from the date stamp applied to the top of the tiles. The tiles were manufactured after asbestos was stopped being used in acoustic ceiling tiles.

#### 3.1.6 Plaster

Plaster present on walls and bulk heads throughout the assessed area does not contain asbestos (Samples 0022A-C, 0029A-C, 0031A-C, 0037A-C, and 0040A-C).

Plaster, containing a small percentage of chrysotile asbestos (Samples 0031A-C) is present in the entrance/vestibule, Loc.35. This small concentration (<0.1%) is not considered an asbestos-containing material by provincial regulations.

### 3.1.7 Drywall Joint Compound

Drywall joint compound present on wall and ceiling finishes throughout the assessed area does not contain asbestos (Samples 0010A-C, 0014A-C, 0025A-C, 0036A-C, 0042A-C, and 0049A-C).

### 3.1.8 Vinyl Sheet Flooring and Skate Matting

6 Styles of non-asbestos vinyl sheet flooring and skate matting were observed present and determined to be non-asbestos by analysis of samples 0018, 0019, 0020, and 0030 or by the lack of paper backing.

Non-asbestos vinyl sheet flooring and skate matting are present as follows:

Pattern, Colour and Photograph No.	Paper Backing (Yes/No)	Locations	Sample No.	Asbestos Type
Skate Matting, Black, Photograph No. 4	No	Rink, Loc.15, Corridor Loc. 24	S0018A-C	Non-asbestos
Skate Matting, Black Rectangles, Photograph No. 5	No	Rink Loc.15, Locker rooms Loc.'s 20, 21, 23, and 24, Men's and Women's Washrooms Loc.s 26 and 27, Corridor Loc. 28	S0019A-C	Non-asbestos
Skate Matting, Black Squares, Photograph No. 6	No	Rink Loc.15, Referee Room Loc.22, Dressing room Loc.37	S0020A-C	Non-asbestos
Skate Matting, Blue, Photograph No. 7	No	Reception Loc.30, Gym Loc.42	S0030A-C	Non-asbestos
Black vinyl sheet, Photograph No. 8	No	Pool Entrance Loc.39	NA	Non-asbestos
Pebbled, Blue vinyl sheet, Photograph No. 9	No	Utility room Loc.53	NA	Non-asbestos

Asbestos if present within vinyl sheet flooring will be present in the paper backing layer only. Vinyl sheet flooring which was presumed to be non-asbestos was done so based on the lack of a paper backing layer (underpad).





Photograph No. 4: Non-asbestos skate matting within the rink  
 Loc.15 (Samples 0018A-C).



Photograph No. 5: Non-asbestos skate matting within the rink  
 Loc.15 (Samples 0019A-C).

Refer to additional photograph Nos. 6-9 in Appendix IV.

### 3.1.9 Vinyl Floor Tile and Mastic

Vinyl floor tiles are present as follows:

Size, Pattern, Colour and Photograph No.	Locations (Quantity)	Sample No.	Asbestos Type (tile)	Asbestos Type (mastic)
12" x 12", Beige and green, Photograph No. 10	Board Room Loc. 9	S0012A-C	Non-asbestos	Non-asbestos
9" x 9", Beige and brown, Photograph No. 11	Stairwell Loc.12 (15 SF), Storage Loc.29 (50 SF), Pool Corridor Loc.38 (300 SF), Corridor Loc.57 (140 SF), Stairs Loc.'s 60 and 65 (100 SF), Daycare Loc.61 (2,000 SF), Utility room Loc.63 (50 SF)	S0015A-C	Chrysotile	Non-asbestos
12" x 12", Beige and grey, Photograph No. 12	Sound room Loc. 19 (160SF)	S0023A-C	Chrysotile	Non-asbestos
12" x 12", Beige, Photograph No. 13	Pool Corridor Loc.38 (100SF), Office Loc. 43 (140 SF)	S0033A-C	Chrysotile	Non-asbestos
12" x 12", Beige, Photograph No. 14	Pool Corridor Loc.38 (100SF), Pool Entrance Loc. 39 (300 SF)	S0034A-C	Non-asbestos	Non-asbestos

Size, Pattern, Colour and Photograph No.	Locations (Quantity)	Sample No.	Asbestos Type (tile)	Asbestos Type (mastic)
9" x 9", Green, Photograph No. 15	Cloak Room Loc.47 (420 SF)	S0038A-C	Chrysotile	Non-asbestos
9" x 9", Beige and Grey, Photograph No. 16	Auditorium Loc.48 (4,800 SF), Women's and Men's Washrooms Loc.'s 49 and 50 (400 SF), Kitchen Loc.51 (165 SF), Storage room Loc.54 (165 SF), Storage room Loc.55 (320 SF), Storage room Loc.56 (165 SF)	S0039A—C	Chrysotile	Non-asbestos
12" x 12", Beige and brown, Photograph No. 17	Corridor Loc.52 (200 SF), Staff corridor Loc.58 (100 SF)	S0043A-C	Non-asbestos	Non-asbestos
12" x 12", Beige/brown/white, Photograph No. 18	Staff room Loc.59 (300 SF)	S0046A-C	Chrysotile	Non-asbestos
12" x 12", Beige and brown, Photograph No. 19	Women's and Men's Washrooms Loc.62 and 64 (400 SF), Offices Loc.'s 68 and 69 (250 SF)	S0050A-C	Non-asbestos	Non-asbestos
12" x 12", Under carpet, Photograph No. 20	Storage room and Board room Loc.'s 66 and 67 (1,200 SF)	S0053A-C	Chrysotile	Non-asbestos

The vinyl floor tiles and mastic are non-friable and are in good condition.



Photograph No.10: Non-asbestos vinyl floor tiles in the basement yoga room Loc. 9 (Samples 0012A-C).



Photograph No.11: Asbestos-containing vinyl floor tiles Various Locations (Samples 0015A-C).

Refer to additional photographs 12-20 in Appendix IV.

### 3.1.10 Sealants, Caulking, and Putty

Red/brown mastic present on uninsulated ducting within the basement does not contain asbestos (Sample 0003A-C).

Grey mastic present on uninsulated ducting within the basement and main floor does not contain asbestos (Samples 0004A-C).

Black/grey mastic present on uninsulated ducting within the south crawlspace and basement does not contain asbestos (Samples 0005A-C).

Black tar mastic present on jacketing of duct insulation within South crawl space contains chrysotile asbestos (Samples 0007A-C and 0009A-C).

Beige mastic present on uninsulated ducting within the South crawlspace, basement board room Loc.9 contains chrysotile asbestos (Samples 0008A-C).



Photograph No. 21: Non-asbestos red/brown mastic on uninsulated ducting within the basement (Samples 0003A-C).



Photograph No. 22: Non-asbestos grey mastic on uninsulated ducting throughout the building.

Refer to additional photographs 23-26 in Appendix IV.

### 3.1.11 Roofing Products

Beige and black caulking materials present all sections of roof do not contain asbestos (Samples 0056A-F and 0057A-C).

Built up roof materials (BUR) are present as follows:

- BUR above kitchen – Does not contain asbestos (Sample 0058A);
- BUR above Entrance adjacent kitchen – Does not contain asbestos (Sample 0058B);
- BUR above Auditorium – Does not contain asbestos (Sample 0058C);
- **BUR above arena – Contains Chrysotile asbestos in the tar layer (Sample 0058D);**

- BUR above pool – Does not contain asbestos (Sample 0058E); and
- Remaining sections of roofing materials were determined to be non-asbestos by date of installation as described by client.

The asbestos-containing BUR present above the arena is non-friable and was observed in good condition.

### 3.1.12 Exterior Finishes

Stucco containing chrysotile asbestos is present as exterior finish on the lower 1' – 4' of the building (Samples 0055A-C).



Photograph No. 27: Asbestos-containing stucco on lower exterior walls (Samples 0055A-C).

### 3.1.13 Presumed Asbestos Materials

A number of materials which might contain asbestos were not sampled during this assessment due to limitations in scope and methodology. Where present, these materials are presumed to contain asbestos until otherwise proven by sampling and analysis.

Materials presumed to contain asbestos include:

- Concrete floor levelling compound;
- Electrical components or wiring within control centers, breakers, motors or lights, insulation on wiring;
- Refractory materials and insulations in boilers;
- Insulation under metal clad boilers;
- Mechanical packing, ropes and gaskets;

- Fire resistant doors or metal clad finishes; and
- Vibration dampers on HVAC equipment.

### 3.2 Lead

#### 3.2.1 Paints and Surface Coatings

The following table summarizes the analytical results for paints sampled and locations. Paints containing 90 PPM of lead or greater should be considered elevated levels of lead.

Sample No.	Colour, Substrate Description	Locations	Lead (PPM)
L0001	Beige paint on plaster and drywall	Throughout	310
L0002	Grey paint on concrete	Basement	2,300
L0003	Blue paint on concrete	Basement	1,100
L0004	Brown paint drywall walls	Cloak room Loc.47	<63
L0005	Light brown paint on doors and frames	Auditorium Loc.48	<61
L0006	Grey paint on doors and frames	Main floor	2,800
L0007	Beige paint on drywall walls	Main floor storage rooms Loc.'s 55 and 56	490
L0008	White paint on drywall walls	Main floor corridor Loc.58	<47
L0009	Blue paint on doors and frames	Main floor corridor Loc.58	8,100
L0010	Green paint on hollow core walls	Stairs Loc.60	130
L0011	Grey paint on doors and frames	Stairs Loc.60	1,900
L0012	Blue/grey paint on drywall walls	Daycare Loc.61	<63
L0013	Brown paint on drywall walls	Storage room Loc.66	62
L0014	Green paint on drywall walls	Board room Loc. 67	<43
L0015	Light green paint drywall walls	Pool corridor Loc.38	80
L0016	White paint on drywall and hollow core walls	Corridor Loc.28	<61
L0017	Grey paint concrete walls	Exterior	<69

Sample No.	Colour, Substrate Description	Locations	Lead (PPM)
L0018	Beige paint on hollow core walls	Exterior	<58
L0019	Dark grey pain on stucco	Exterior	220
L0020	Blue paint on doors and frames	Exterior	1,200
L0021	Pink/brown doors and frames	Exterior	7,100
L0022	Green paint metal cladding and doors and frames	Exterior	<37

### 3.2.2 Lead Products and Applications

Lead-containing batteries are present in emergency lighting and fire alarm control panels.

### 3.2.3 Presumed Lead Materials

Lead may be present in a number of materials which were not assessed and/or sampled. The following materials, where found, should be considered to contain lead:

- Electrical components, including wiring connectors, grounding conductors, and solder;
- Solder on pipe connections; and
- Glazing on ceramic tiles.

## 3.3 Silica

Crystalline silica is a presumed component of the following materials:

- Poured or pre-cast concrete;
- Masonry and mortar;
- Stone;
- Refractory or ceramic materials in high temperature mechanical or production equipment;
- Ceramic tiles, grout;
- Plaster; and
- Asphalt.

## 3.4 Mercury

### 3.4.1 Lamps

Mercury vapour is present in fluorescent lamps where present in the assessed area.

### 3.4.2 *Mercury-Containing Devices*

Mercury is present as a liquid in thermostats ampules.

## 3.5 **Polychlorinated Biphenyls**

### 3.5.1 *Lighting Ballasts*

The building has not been comprehensively re-lamped with new energy efficient light ballasts and lamps, and as such, a percentage of light ballasts may be manufactured prior to 1980 and may contain PCBs.

### 3.5.2 *Transformers*

Transformers were not found during the assessment.

### 3.5.3 *Presumed PCB Materials*

- Oil impregnated cables.
- Caulking.
- High voltage electrical terminals (potheads).
- Voltage regulators and capacitors.
- Hydraulic fluids.
- Paints.
- Lubricants.

## 3.6 **Mould**

Visible mould growth and water staining is present on acoustic ceiling tiles in the following locations and approximate quantity:

- 3 tiles within the basement board room Loc. 9;
- 15 tiles within the main floor corridor Loc. 28;
- 6 tiles within the pool corridor Loc. 38;
- 3 tiles within the main floor corridor Loc. 57;
- 4 tiles within the mezzanine washroom Loc. 62; and
- 4 tiles within the mezzanine washroom Loc. 64.



Photograph No. 28: Mouldy/water stained ceiling tiles in various locations.

### **3.7 Rodent/Bird Droppings**

A visual inspection for the presence of rodent and bird droppings was completed. No rodent or bird droppings were observed present. As reported by maintenance personal an inspection is completed and traps are checked for rodent activity on a monthly basis by a contracted company. The pool and recreation sections of the building have not reported any recent activity however the arena staff have been trapping mice as part of their weekly routine. 7 mice have been trapped within the last 7 days. Efforts are ongoing.

### **3.8 Flammable and Toxic Materials**

#### *3.8.1 Flammable*

Flammable materials are substances that can ignite easily and burn rapidly. They can be common materials that are present at most work sites in gas, liquid and solid forms. Some examples of flammable materials observed present within 2055 Ness include:

- Natural Gas (supplied to building equipment);
- Gasoline for mechanical edger (Stored in cage Outdoors);
- Propane for Zamboni (Stored in independent cage outdoors);
- Chlorine (Oxidizer stored in pool storage room); and
- Various cleaning chemicals stored in storage rooms throughout.

Controls and workplace procedures observed present included:

- Appropriate storage (Gasoline and propane stored outdoors in independent cages);
- Appropriate labeling on chemicals;



- Fire safety plans; and
- Fire extinguishers.

Various fire extinguisher inspection tags present throughout the building were not current (2016).

### 3.8.2 *Toxic*

Hazardous products are any materials that have the potential to cause harm to humans, animals, or the environment. They can be common materials that are present at most work sites. Some examples of hazardous products observed present within 2055 Ness include:

- Various pool additives;
- CO2 for pool water;
- Ammonia for arena ice;
- Paints;
- Cleaning products;
- Gasoline for mechanical edger; and
- Propane for Zamboni.

Controls and workplace procedures observed present included:

- Appropriate storage (Gasoline and propane stored outdoors in independent cages);
- Appropriate labeling on chemicals;
- Eye Wash Stations
- GHS training for staff
- Current SDS
- Fume hood for chlorine;
- Ammonia sensor; and
- Chlorine sensor.

The chlorine sensor does not have an inspection/testing schedule implemented. In addition the sensor is located on the main level in the pool storage room only. The mixing takes place in the Pool mechanical room within the basement.

## 4.0 RECOMMENDATIONS

### 4.1 General

1. Prepare plans and performance specifications for hazardous material removal required for any planned work. The specifications should include the scope of work, safe work practices, personal protective equipment, respiratory protection, and disposal of waste materials.
2. Current mice activity is present within the arena area of the building; as such an investigation should be conducted to determine potential areas of infiltration.
3. A chlorine sensor inspection schedule should be implemented and an additional sensor should be added within the basement pool mechanical room.
4. Provide this report and the detailed plans and specifications to the contractor prior to bidding or commencing work.
5. Retain a qualified consultant to specify, inspect and verify the successful removal of hazardous materials.
6. Update the asbestos inventory upon completion of the abatement and removal of asbestos-containing materials.

### 4.2 Remedial Work

The following remedial work is recommended regardless of the planned construction work due to the condition and location of the material.

Material, Quantity and Condition	Location	Recommended Procedure
Mould-impacted Ceiling tiles, 5 square feet	Location Nos 28, 38, 57, 62, and 64. Photograph No. 28	Remove in accordance with CCA Level 1 mould abatement procedures

### 4.3 Renovation Work

The following recommendations are made regarding renovations involving the hazardous materials identified.



#### 4.3.1 *Asbestos*

Remove asbestos-containing materials (ACM) prior to renovation, alteration, or maintenance if ACM may be disturbed by the work. Remove all asbestos-containing materials (ACM) prior to demolition work.

If the identified ACM will not be removed prior to commencement of the work, disturbance of ACM must follow the appropriate asbestos precautions for the classification of work being performed.

Asbestos-containing materials must be disposed of at a landfill approved to accept asbestos waste.

#### 4.3.2 *Lead*

Construction disturbance of lead in paint and coatings (or other materials) may result in over-exposure to lead dust or fumes. The need for work procedures, engineering controls and personal protective equipment will need to be assessed on a project-by-project basis and must comply with provincial standards or guidelines. Performing an exposure assessment during work that disturbs lead in paints and coatings may be able to alleviate the use of some of the precautions specified by these standards or guidelines.

Items painted with paints containing elevated levels of lead may be a hazardous waste. Test lead-painted materials for leachable lead and other metals prior to disposal.

Dispose of painted non-metallic materials exceeding the criteria for leachable lead as hazardous waste. Well adhered paints containing elevated levels of lead on metal substrates do not require leachable lead analysis as the materials can be recycled with the paint intact.

Lead acid batteries should be recycled when taken out of service or prior to building demolition.

#### 4.3.3 *Silica*

Construction disturbance of silica-containing products may result in excessive exposures to airborne silica, especially if performed indoors and dry. Cutting, grinding, drilling or demolition of materials containing silica should be completed only with proper respiratory protection and other worker safety precautions that comply with provincial standards or guidelines.

#### 4.3.4 *Mercury*

Do not break lamps or separate liquid mercury from components. Recycle and reclaim mercury from fluorescent lamps when taken out of service. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.



#### 4.3.5 PCBs

When light fixtures are removed, examine light ballasts for PCB content. If ballasts are not clearly labelled as “non-PCB”, or are suspected to contain PCBs; package and ship ballasts for destruction at a federally permitted facility.

Remove PCB caulking prior to building demolition or if affected by the renovation work. PCB caulking is a hazardous waste; package and ship for destruction at a federally permitted facility.

#### 4.3.6 Mould

Mould growth was noted in areas affected by the planned work. Use appropriate precautions and protect workers during removal using methods that comply with provincial guidelines.

### 5.0 TERMS AND LIMITATIONS

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

### 6.0 REFERENCES

The following legislation and documents were referenced in completing the assessment and this report:

1. General Regulation – Workplace Safety and Health Act W210;
2. Workplace Health Hazard Regulation (Manitoba Regulation 217/2006 Workplace Safety and Health Regulation), under the Workplace Safety and Health Act;
3. Canadian Environmental Protection Act – SOR/92-507;
4. PCB Regulations, SOR/2008-273, Canadian Environmental Protection Act;
5. Manitoba Regulation MR 474/88, Manitoba PCB Regulation made under The Dangerous Goods Act;
6. Guide for Asbestos Management – Safe Work Manitoba, May 2017;



7. A Guideline for Working with Lead – Workplace Safety and Health Branch – Manitoba labour and Immigration (2002); and
8. Guidelines for the Investigation, Assessment, and Remediation of Mould In Workplaces, Workplace Safety and Health Division, Manitoba Labour, 2001.

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Template: Master Report for Hazardous Materials Assessment Report (Pre-Construction), Haz, March 20, 2018

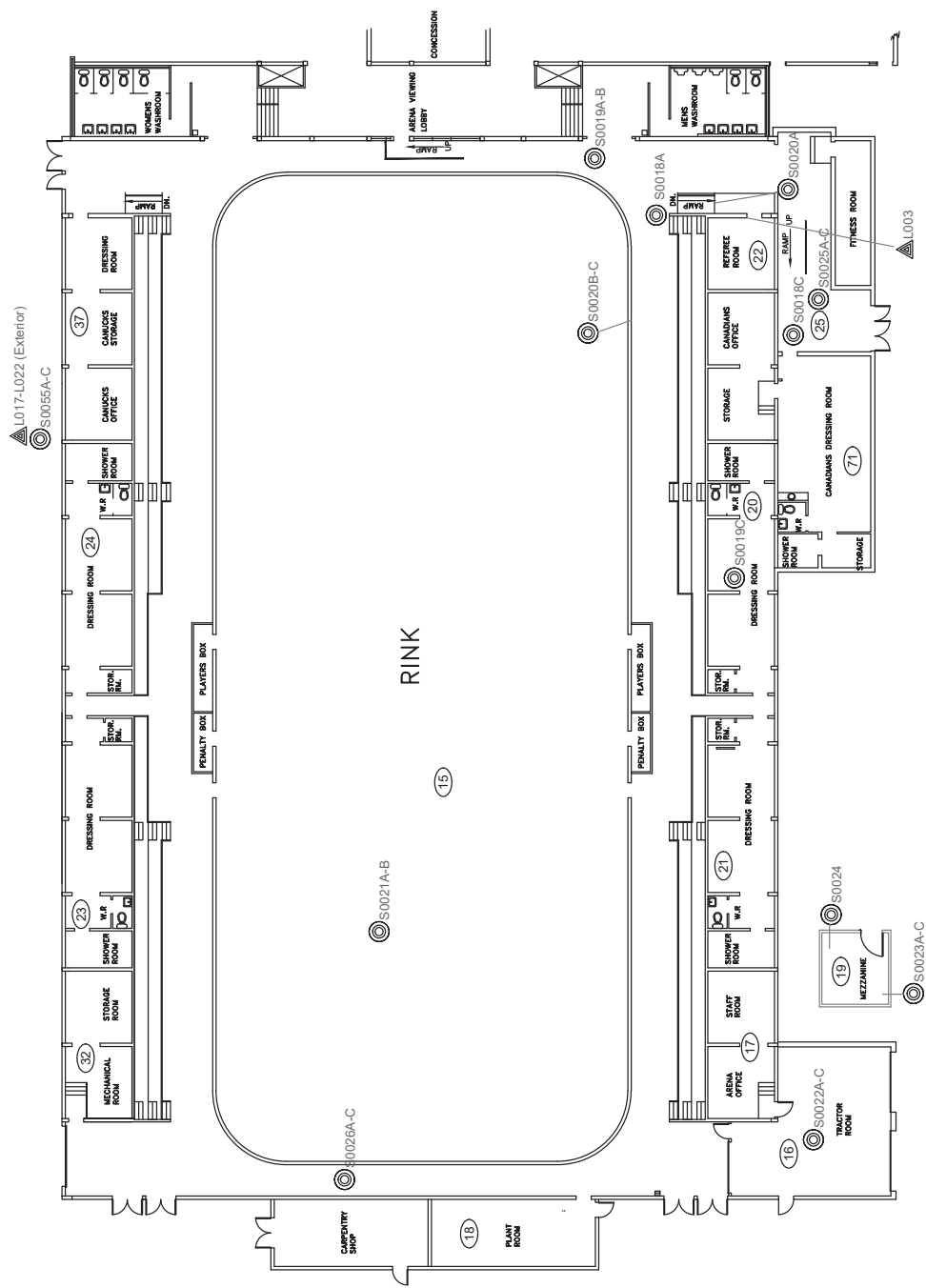
**APPENDIX I**  
**Drawings**



LEGEND:  
 (X) PINCHIN LOCATION NUMBER  
 (C) ASBESTOS BULK SAMPLE  
 (A) LEAD BULK SAMPLE

CLIENT: CITY OF WINNIPEG  
 LOCATION: 2055 NESS AVENUE  
 WINNIPEG, MANITOBA  
 TITLE: ST. JAMES CIVIC CENTRE  
 ARENA

DATE: 2018/06/15  
 PROJECT #: 220300  
 DRAWN BY: REL  
 CHECKED BY:  
 SCALE: NTS



L017-L022 (Exterior)  
 S0055A-C



- LEGEND:
- (X) PINCHIN LOCATION NUMBER
  - (C) ASBESTOS BULK SAMPLE
  - (A) LEAD BULK SAMPLE

CLIENT: CITY OF WINNIPEG

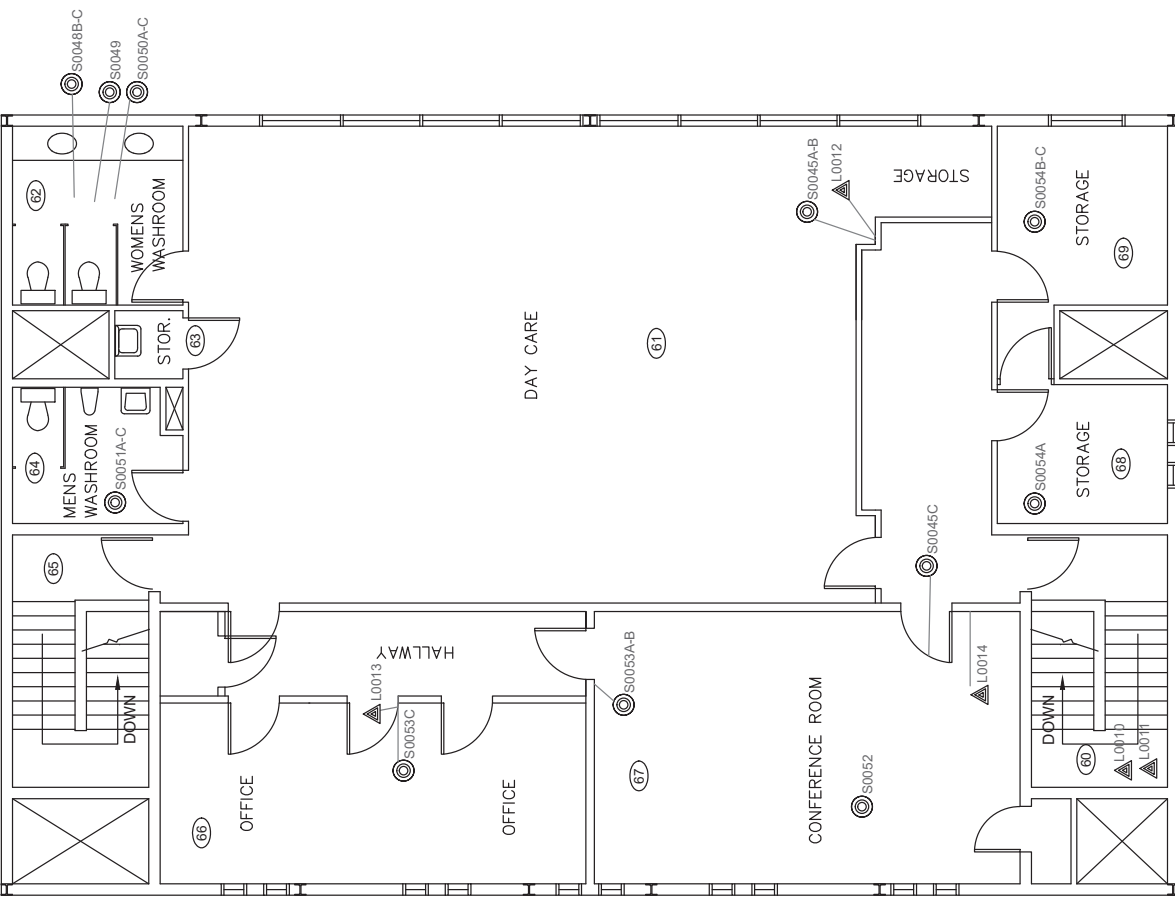
LOCATION: 2055 NESS AVENUE  
WINNIPEG, MANITOBA

TITLE: ST. JAMES CIVIC CENTRE  
MEZZANINE

DATE: 2018/06/15  
PROJECT #: 220300

DRAWN BY: REL  
CHECKED BY:

SCALE: NTS









LEGEND:

- (X) PINCHIN LOCATION NUMBER
- (◎) ASBESTOS BULK SAMPLE
- (▲) LEAD BULK SAMPLE

CLIENT:

CITY OF WINNIPEG

LOCATION:

2055 NESS AVENUE  
WINNIPEG, MANITOBA

TITLE:

ST. JAMES CIVIC CENTRE

POOL

DATE:

2018/06/15

PROJECT #:

220300

DRAWN BY:

REL

DRAWING:

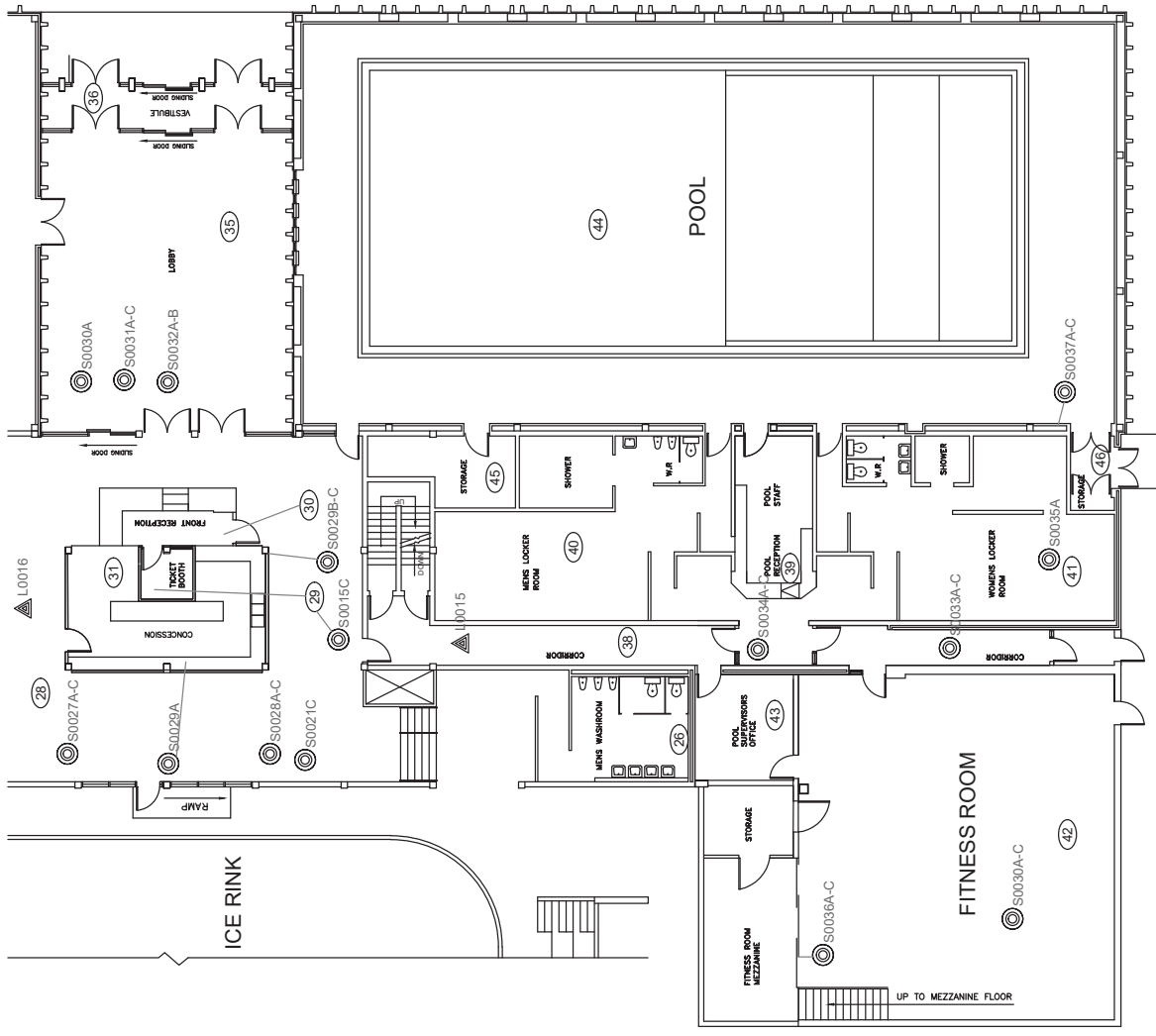
CHECKED BY:

CHECKED BY

SCALE:

NTS

4 OF 5





LEGEND:



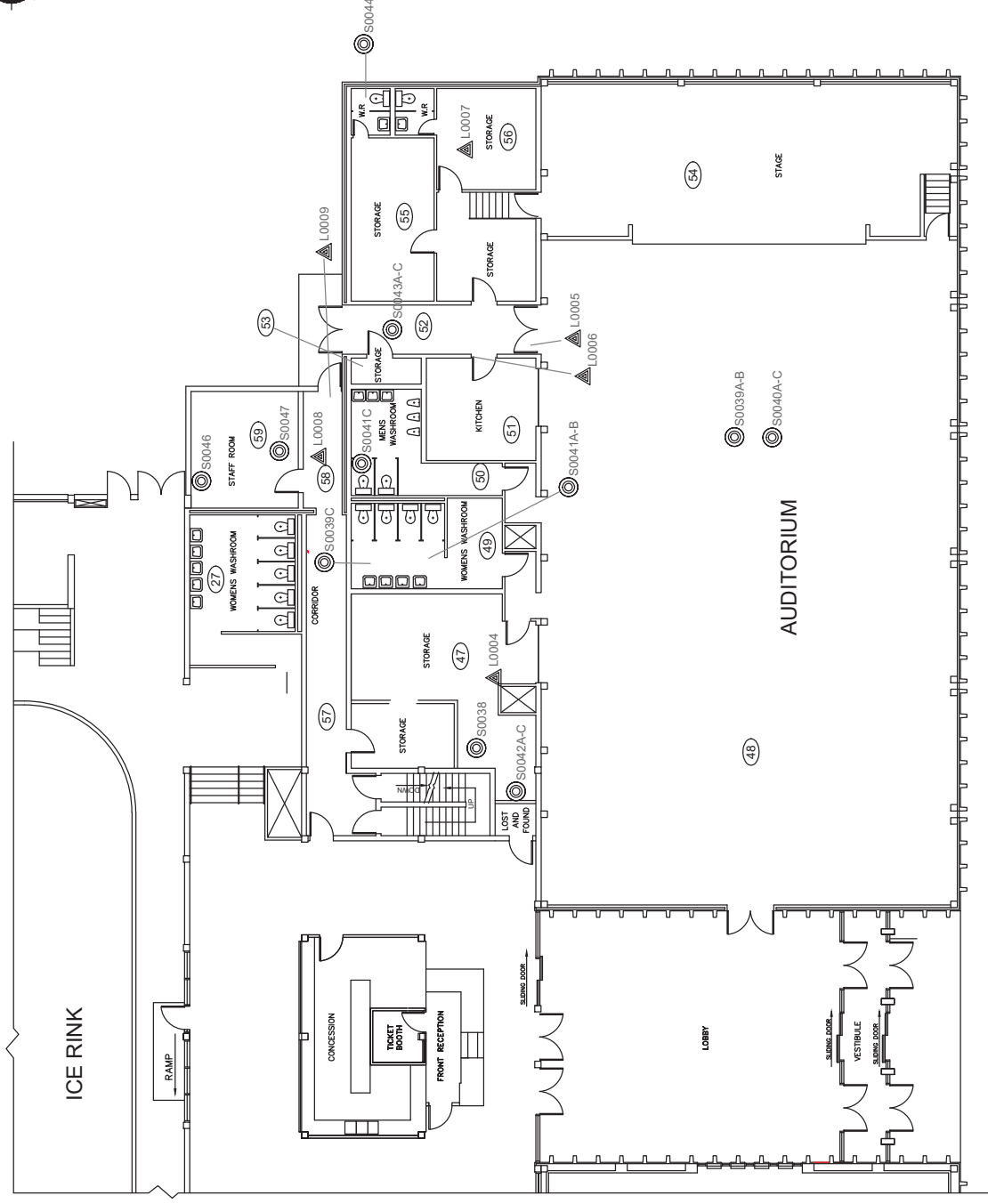
PINCHIN LOCATION NUMBER



ASBESTOS BULK SAMPLE



LEAD BULK SAMPLE



CLIENT:

CITY OF WINNIPEG

LOCATION:

2055 NESS  
WINNIPEG, MANITOBA

TITLE:

ST. JAMES CIVIC CENTRE  
AUDITORIUM

DATE:

2018/06/15

PROJECT #:

220300

DRAWN BY:

REL

DRAWING:

CHECKED BY:

5 OF 5

SCALE:

NTS

**APPENDIX II-An**  
**Asbestos Analytical Certificates**



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



**Customer:** Pinchin Ltd.  
54 Terracon Place  
Winnipeg, MB R2J 4G7

**Attn:** Ken Brydges  
Rodney Legault

**Lab Order ID:** 51813732  
**Analysis ID:** 51813732\_PLM  
**Date Received:** 6/4/2018  
**Date Reported:** 6/8/2018  
**Date Amended:** 6/12/2018

**Project:** 220300,2055 Ness Winnipeg MB, City of Winnipeg, St. James Civic Centre

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0001A	Parging cement - Ftg - HWH - Blr Room - Loc.1	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_1					Teased, Crushed
0001B	Parging cement - Ftg - HWH - Blr Room - Loc.1	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_2					Teased, Crushed
0001C	Parging cement - Ftg - HWH - Blr Room - Loc.1	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_3					Teased, Crushed
0002A	Parging cement - Ftg - DW - Blr Room - Loc.1	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_4					Teased, Crushed
0002B	Parging cement - Ftg - DW - Blr Room - Loc.1	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_5					Teased, Crushed
0002C	Parging cement - Ftg - DW - Fan Room - Loc.4	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_6					Teased, Crushed
0003A	Red/brown Mastic - Blr Breeching - Blr Room Loc.1	None Detected		100% Other	Red Non Fibrous Homogeneous
51813732PLM_7					Ashed
0003B	Red/brown Mastic - Blr Breeching - Blr Room Loc.1	None Detected		100% Other	Red Non Fibrous Homogeneous
51813732PLM_8					Ashed

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Bethany Nichols (206)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0003C	Red/brown Mastic - Blr Breeching - Blr Room Loc.1	None Detected		100% Other	Red Non Fibrous Homogeneous
51813732PLM_9					Ashed
0004A	Grey Mastic - Ducting - electrical room Loc.3	None Detected	2% Synthetic Fibers	98% Other	Gray Non Fibrous Homogeneous
51813732PLM_10					Dissolved
0004B	Grey Mastic - Ducting - electrical room Loc.3	None Detected	2% Synthetic Fibers	98% Other	Gray Non Fibrous Homogeneous
51813732PLM_11					Dissolved
0004C	Grey Mastic - Ducting - electrical room Loc.3	None Detected	2% Synthetic Fibers	98% Other	Gray Non Fibrous Homogeneous
51813732PLM_12					Dissolved
0005A	Black/Grey Mastic - Ducting - South Crawlspace Loc.5	None Detected		100% Other	Gray, Black Non Fibrous Heterogeneous
51813732PLM_13					Dissolved, Ashed
0005B	Black/Grey Mastic - Ducting - South Crawlspace Loc.5	None Detected		100% Other	Gray, Black Non Fibrous Heterogeneous
51813732PLM_14					Dissolved, Ashed
0005C	Black/Grey Mastic - Ducting - South Crawlspace Loc.5	None Detected		100% Other	Gray, Black Non Fibrous Heterogeneous
51813732PLM_15					Dissolved, Ashed
0006A	Parging cement - ftg - HWH - South Crawlspace - Loc.5	3% Chrysotile	40% Fiber Glass	57% Other	Gray Fibrous Homogeneous
51813732PLM_16					Teased, Crushed

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0006B	Parging cement - ftg - HWH - South Crawlspace - Loc.5	3% Chrysotile	40% Fiber Glass	57% Other	Gray Fibrous Homogeneous
51813732PLM_17					Teased, Crushed
0006C	Parging cement - ftg - HWH - South Crawlspace - Loc.5	3% Chrysotile	40% Fiber Glass	57% Other	Gray Fibrous Homogeneous
51813732PLM_18					Teased, Crushed
0007A	Black tar mastic over paper and 028 - Ducting - South crawlspace Loc.5	10% Chrysotile		90% Other	Black Non Fibrous Homogeneous
51813732PLM_19					Dissolved
0007B	Black tar mastic over paper and 028 - Ducting - South crawlspace Loc.5	10% Chrysotile		90% Other	Black Non Fibrous Homogeneous
51813732PLM_20					Dissolved
0007C	Black tar mastic over paper and 028 - Ducting - South crawlspace Loc.5	10% Chrysotile		90% Other	Black Non Fibrous Homogeneous
51813732PLM_21					Dissolved
0008A	Beige mastic - Ducting - South crawlspace - Loc.5	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_22					Dissolved
0008B	Beige mastic - Ducting - South crawlspace - Loc.5	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_23					Dissolved
0008C - A	Beige mastic - Ducting - South crawlspace - Loc.5	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_24	beige layer				Dissolved

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0008C - B	Beige mastic - Ducting - South crawlspace - Loc.5	10% Chrysotile		90% Other	Black Non Fibrous Homogeneous
51813732PLM_163	black layer				Dissolved
0009A	Black tar mastic over foil - ducting - South Crawlspace - Loc.5	7% Chrysotile		93% Other	Black Non Fibrous Homogeneous
51813732PLM_25					Dissolved
0009B	Black tar mastic over foil - ducting - South Crawlspace - Loc.5	7% Chrysotile		93% Other	Black Non Fibrous Homogeneous
51813732PLM_26					Dissolved
0009C	Black tar mastic over foil - ducting - South Crawlspace - Loc.5	7% Chrysotile		93% Other	Black Non Fibrous Homogeneous
51813732PLM_27					Dissolved
0010A	Drywall joint compound - Fan Room Loc.4	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_28					Crushed
0010B	Drywall joint compound - Fan Room Loc.4	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_29					Crushed
0010C	Drywall joint compound - Fan Room Loc.4	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_30					Crushed
0011A	Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Storage room base	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_31					Ashed, Teased

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0011B	Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Storage room base	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_32					Ashed, Teased
0011C	Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Storage room base	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_33					Ashed, Teased
0012A	Vinyl floor tiles - 12" x 12", beige and green - Basement Board room - Loc.9	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_34					Dissolved
0012B	Vinyl floor tiles - 12" x 12", beige and green - Basement Board room - Loc.9	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_35					Dissolved
0012C	Vinyl floor tiles - 12" x 12", beige and green - Basement Board room - Loc.9	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_36					Ashed
0013A	Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes Board room baseme	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_37					Ashed, Teased
0013B	Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes Board room baseme	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_38					Ashed, Teased
0013C	Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes Board room baseme	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_39					Ashed, Teased

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Bethany Nichols (206)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



**Customer:** Pinchin Ltd.  
54 Terracon Place  
Winnipeg, MB R2J 4G7

**Attn:** Ken Brydges  
Rodney Legault

**Lab Order ID:** 51813732  
**Analysis ID:** 51813732\_PLM  
**Date Received:** 6/4/2018  
**Date Reported:** 6/8/2018  
**Date Amended:** 6/12/2018

**Project:** 220300,2055 Ness Winnipeg MB, City of Winnipeg, St. James Civic Centre

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0014A	Drywall joint compound - wall - Basement Board room - Loc.9	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_40					Crushed
0014B	Drywall joint compound - wall - Basement Board room - Loc.9	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_41					Crushed
0014C	Drywall joint compound - wall - Basement Board room - Loc.9	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_42					Crushed
0015A - A	Vinyl floor tiles - 9" x 9", Beige and brown - Stairs M-B - Loc.12	3% Chrysotile		97% Other	Beige Non Fibrous Homogeneous
51813732PLM_43	tile				Dissolved
0015A - B	Vinyl floor tiles - 9" x 9", Beige and brown - Stairs M-B - Loc.12	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_164	mastic - small sample				Dissolved
0015B	Vinyl floor tiles - 9" x 9", Beige and brown - Stairs M-B - Loc.8	3% Chrysotile		97% Other	Beige Non Fibrous Homogeneous
51813732PLM_44	tile only				Dissolved
0015C - A	Vinyl floor tiles - 9" x 9", Beige and brown - Storage room behind reception - Loc.2	3% Chrysotile		97% Other	Beige Non Fibrous Homogeneous
51813732PLM_45	tile				Dissolved
0015C - B	Vinyl floor tiles - 9" x 9", Beige and brown - Storage room behind reception - Loc.2	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_165	mastic				Dissolved

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0016A	Parging cement - Hot water storage tank 1 - Pool Room - Loc.13	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_46					Teased, Crushed
0016B	Parging cement - Hot water storage tank 1 - Pool Room - Loc.13	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_47					Teased, Crushed
0016C	Parging cement - Hot water storage tank 2 - Pool Room - Loc.13	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_48					Teased, Crushed
0017A	Parging cement - HWH - Pool Room - Loc.13	10% Chrysotile	35% Fiber Glass	55% Other	Gray Fibrous Homogeneous
51813732PLM_49					Teased, Crushed
0017B	Parging cement - HWH - Pool Room - Loc.13	10% Chrysotile	35% Fiber Glass	55% Other	Gray Fibrous Homogeneous
51813732PLM_50					Teased, Crushed
0017C	Parging cement - HWH - Basement Corridor - Loc.13	10% Chrysotile	35% Fiber Glass	55% Other	Gray Fibrous Homogeneous
51813732PLM_51					Teased, Crushed
0018A	Black Matting - Solid Black no pattern - Arena - Loc.15	None Detected		100% Other	Tan, Gray Non Fibrous Heterogeneous
51813732PLM_52					Dissolved, Ashed
0018B	Black Matting - Solid Black no pattern - Arena - Loc.15	None Detected		100% Other	Tan, Gray Non Fibrous Heterogeneous
51813732PLM_53					Dissolved, Ashed

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0018C	Black Matting - Solid Black no pattern - Arena - Loc.15	None Detected	30% Synthetic Fibers	70% Other	Black Fibrous Heterogeneous
51813732PLM_54					Dissolved, Teased
0019A	Black Matting - Rectangles - Arena - Loc.15	None Detected	10% Cellulose	90% Other	Black Non Fibrous Homogeneous
51813732PLM_55					Dissolved
0019B	Black Matting - Rectangles - Arena - Loc.15	None Detected	10% Cellulose	90% Other	Black Non Fibrous Homogeneous
51813732PLM_56					Dissolved
0019C	Black Matting - Rectangles - Locker Room - Loc.20	None Detected	10% Cellulose	90% Other	Black Non Fibrous Homogeneous
51813732PLM_57					Dissolved
0020A	Black Matting - Squares - Arena - Loc.15	None Detected	20% Synthetic Fibers	80% Other	Black Non Fibrous Homogeneous
51813732PLM_58					Ashed
0020B	Black Matting - Squares - Arena - Loc.15	None Detected	5% Synthetic Fibers 5% Cellulose	90% Other	Black Non Fibrous Homogeneous
51813732PLM_59			Ashed		
0020C	Black Matting - Squares - Referee Room - Loc.22	None Detected	5% Synthetic Fibers 5% Cellulose	90% Other	Black Non Fibrous Homogeneous
51813732PLM_60			Ashed		
0021A	Parging cement - Ftg - HWH - Arena - Loc.15	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_61					Teased, Crushed

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0021B	Parging cement - Ftg - HWH - Arena - Loc.15	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_62					Teased, Crushed
0021C	Parging cement - Ftg - HWH - Corridor - Loc.28	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_63					Teased, Crushed
0022A	Plaster - Wall finish - Zambonie Room - Loc. 16	None Detected		100% Other	Gray Non Fibrous Homogeneous
51813732PLM_64					Crushed
0022B	Plaster - Wall finish - Zambonie Room - Loc. 16	None Detected		100% Other	Gray Non Fibrous Homogeneous
51813732PLM_65					Crushed
0022C	Plaster - Ceiling finish - Zambonie Room - Loc. 16	None Detected		100% Other	Gray Non Fibrous Homogeneous
51813732PLM_66					Crushed
0023A - A	Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19	2% Chrysotile		98% Other	Beige Non Fibrous Homogeneous
51813732PLM_67	tile				Dissolved
0023A - B	Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19	None Detected		100% Other	Brown, Yellow Non Fibrous Heterogeneous
51813732PLM_166	mixed mastics				Dissolved
0023B - A	Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19	2% Chrysotile		98% Other	Beige Non Fibrous Homogeneous
51813732PLM_68	tile				Dissolved

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Bethany Nichols (206)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



**Customer:** Pinchin Ltd.  
54 Terracon Place  
Winnipeg, MB R2J 4G7

**Attn:** Ken Brydges  
Rodney Legault

**Lab Order ID:** 51813732  
**Analysis ID:** 51813732\_PLM  
**Date Received:** 6/4/2018  
**Date Reported:** 6/8/2018  
**Date Amended:** 6/12/2018

**Project:** 220300,2055 Ness Winnipeg MB, City of Winnipeg, St. James Civic Centre

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0023B - B	Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19	None Detected		100% Other	Yellow Non Fibrous Homogeneous
51813732PLM_167	mastic				Dissolved
0023C - A	Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19	2% Chrysotile		98% Other	Beige Non Fibrous Homogeneous
51813732PLM_69	tile				Dissolved
0023C - B	Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19	None Detected		100% Other	Yellow Non Fibrous Homogeneous
51813732PLM_168	mastic - very small sample				Dissolved
0024A	Acoustic ceiling tiles - 12" x 12" - wood - DJ Room - Loc.19	None Detected	90% Cellulose	10% Other	White, Brown Fibrous Heterogeneous
51813732PLM_70					Dissolved, Teased
0024B	Acoustic ceiling tiles - 12" x 12" - wood - DJ Room - Loc.19	None Detected	90% Cellulose	10% Other	White, Brown Fibrous Heterogeneous
51813732PLM_71					Dissolved, Teased
0024C	Acoustic ceiling tiles - 12" x 12" - wood - DJ Room - Loc.19	None Detected	90% Cellulose	10% Other	White, Brown Fibrous Heterogeneous
51813732PLM_72					Dissolved, Teased
0025A	Drywall joint compound - Ceiling - Corridor - Loc.25	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_73					Crushed
0025B	Drywall joint compound - Ceiling - Corridor - Loc.25	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_74					Crushed

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0025C	Drywall joint compound - Ceiling - Corridor - Loc.25	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_75					Crushed
0027A	Acoustic ceiling tiles - 2'x2', Long fissures and pin holes - Corridor Loc.28	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_76					Ashed, Teased
0027B	Acoustic ceiling tiles - 2'x2', Long fissures and pin holes - Corridor Loc.28	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_77					Ashed, Teased
0027C	Acoustic ceiling tiles - 2'x2', Short fissures and pin holes - Corridor Loc.57	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_78					Ashed, Teased
0028A	Acoustic ceiling tiles - 2'x2', Short fissures and pin holes - Corridor Loc.28	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_79					Ashed, Teased
0028B	Acoustic ceiling tiles - 2'x2', Short fissures and pin holes - Corridor Loc.28	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_80					Ashed, Teased
0028C	Acoustic ceiling tiles - 2'x2', Short fissures and pin holes - Corridor Loc.57	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_81					Ashed, Teased
0029A	Plaster - Bulk Head - Corridor - Loc.28	None Detected		80% Other 20% Quartz	Tan Non Fibrous Homogeneous
51813732PLM_82	single layer plaster				Crushed

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**Project:** 220300,2055 Ness Winnipeg MB, City of Winnipeg, St. James Civic Centre

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0029B - A	Plaster - Bulk Head - Corridor - Loc.28	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_83	finish				Crushed
0029B - B	Plaster - Bulk Head - Corridor - Loc.28	None Detected		80% Other 20% Quartz	Tan Non Fibrous Homogeneous
51813732PLM_169	base				Crushed
0029C - A	Plaster - Bulk Head - Corridor - Loc.28	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_84	finish				Crushed
0029C - B	Plaster - Bulk Head - Corridor - Loc.28	None Detected		80% Other 20% Quartz	Tan Non Fibrous Homogeneous
51813732PLM_170	base				Crushed
0030A	Blue Matting - Reception - Loc.30	None Detected		100% Other	Blue, Gray Non Fibrous Homogeneous
51813732PLM_85					Ashed
0030B	Blue Matting - Gym - Loc.42	None Detected		100% Other	Blue, Gray Non Fibrous Homogeneous
51813732PLM_86					Ashed
0030C	Blue Matting - Gym - Loc.42	None Detected		100% Other	Blue, Gray Non Fibrous Homogeneous
51813732PLM_87					Ashed
0031A - A	Plaster - Over concrete - Entrance - Loc.35	< 0.1% Chrysotile		100% Other	Yellow Non Fibrous Homogeneous
51813732PLM_88	coating				Dissolved

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Lab Sample ID	Lab Notes				Treatment
0031A - B	Plaster - Over concrete - Entrance - Loc.35	None Detected		100% Other	Gray Non Fibrous Homogeneous
51813732PLM_171	single layer plaster				Crushed
0031B - A	Plaster - Over concrete - Entrance - Loc.35	< 0.1% Chrysotile		100% Other	Yellow Non Fibrous Homogeneous
51813732PLM_89	coating				Dissolved
0031B - B	Plaster - Over concrete - Entrance - Loc.35	None Detected		100% Other	Gray Non Fibrous Homogeneous
51813732PLM_172	single layer plaster				Crushed
0031C - A	Plaster - Over concrete - Entrance - Loc.35	< 0.1% Chrysotile		100% Other	Yellow Non Fibrous Homogeneous
51813732PLM_90	coating				Dissolved
0031C - B	Plaster - Over concrete - Entrance - Loc.35	None Detected		100% Other	Gray Non Fibrous Homogeneous
51813732PLM_173	single layer plaster				Crushed
0032A	Sound Proofing - Entrance - Loc.35	None Detected	95% Cellulose	5% Other	White Fibrous Homogeneous
51813732PLM_91					Ashed, Teased
0032B	Sound Proofing - Entrance - Loc.35	None Detected	95% Cellulose	5% Other	White Fibrous Homogeneous
51813732PLM_92					Ashed, Teased
0032C	Sound Proofing - Pool - Loc. 44	None Detected	95% Cellulose	5% Other	White Fibrous Homogeneous
51813732PLM_93					Ashed, Teased

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0033A - A	Vinyl floor tiles - 12" x 12", Beige - Corrdior - Loc.38	2% Chrysotile		98% Other	Beige Non Fibrous Homogeneous
51813732PLM_94	tile				Dissolved
0033A - B	Vinyl floor tiles - 12" x 12", Beige - Corrdior - Loc.38	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_174	mastic				Dissolved
0033B - A	Vinyl floor tiles - 12" x 12", Beige - Corrdior - Loc.38	2% Chrysotile		98% Other	Beige Non Fibrous Homogeneous
51813732PLM_95	tile				Dissolved
0033B - B	Vinyl floor tiles - 12" x 12", Beige - Corrdior - Loc.38	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_175	mastic - very small sample				Dissolved
0033C - A	Vinyl floor tiles - 12" x 12", Beige - Corrdior - Loc.38	2% Chrysotile		98% Other	Beige Non Fibrous Homogeneous
51813732PLM_96	tile				Dissolved
0033C - B	Vinyl floor tiles - 12" x 12", Beige - Corrdior - Loc.38	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_176	mastic - very small sample				Dissolved
0034A - A	Vinyl floor tiles - 12" x 12", Beige and Brown - Corridor - Loc.38	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_97	tile				Dissolved
0034A - B	Vinyl floor tiles - 12" x 12", Beige and Brown - Corridor - Loc.38	None Detected		100% Other	Black, Orange Non Fibrous Heterogeneous
51813732PLM_177	mixed mastics - very small sample				Dissolved

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# Bulk Asbestos Analysis

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EPA Method: 600/R-93/116 and 600/M4-82-020



**Customer:** Pinchin Ltd.  
54 Terracon Place  
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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0034B - A	Vinyl floor tiles - 12" x 12", Beige and Brown - Corridor - Loc.38	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_98	tile				Dissolved
0034B - B	Vinyl floor tiles - 12" x 12", Beige and Brown - Corridor - Loc.38	None Detected		100% Other	Black, Orange, Gray Non Fibrous
51813732PLM_178	mixed mastics/leveling				Crushed, Dissolved
0034C - A	Vinyl floor tiles - 12" x 12", Beige and Brown - Pool Entrance - Loc.39	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_99	tile - ashed				Ashed
0034C - B	Vinyl floor tiles - 12" x 12", Beige and Brown - Pool Entrance - Loc.39	None Detected		100% Other	Black, Orange Non Fibrous Heterogeneous
51813732PLM_179	mixed mastics/leveling				Dissolved
0035A	Parging cement - RWL - Change Room - Loc.41	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_100					Teased, Crushed
0035B	Parging cement - RWL - Change Room - Loc.41	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_101					Teased, Crushed
0035C	Parging cement - RWL - Change Room - Loc.41	5% Chrysotile	35% Fiber Glass	60% Other	Gray Fibrous Homogeneous
51813732PLM_102					Teased, Crushed
0036A	Drywall Joint compound - Wall - Gym - Mez - Loc.42	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_103					Crushed

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0036B	Drywall Joint compound - Wall - Gym - Mez - Loc.42	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_104					Crushed
0036C	Drywall Joint compound - Wall - Gym - Mez - Loc.42	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_105					Crushed
0037A - A	Plaster - Wall - Pool - Loc.44	None Detected	5% Synthetic Fibers	95% Other	Gray Non Fibrous Homogeneous
51813732PLM_106	coating				Dissolved
0037A - B	Plaster - Wall - Pool - Loc.44	None Detected	5% Cellulose	95% Other	Gray Non Fibrous Homogeneous
51813732PLM_180	gypsum				Crushed
0037B - A	Plaster - Wall - Pool - Loc.44	None Detected	5% Synthetic Fibers	95% Other	Gray Non Fibrous Homogeneous
51813732PLM_107	coating				Dissolved
0037B - B	Plaster - Wall - Pool - Loc.44	None Detected	5% Cellulose	95% Other	Gray Non Fibrous Homogeneous
51813732PLM_181	gypsum				Crushed
0037C - A	Plaster - Wall - Pool - Loc.44	None Detected	5% Synthetic Fibers	95% Other	Gray Non Fibrous Homogeneous
51813732PLM_108	coating				Dissolved
0037C - B	Plaster - Wall - Pool - Loc.44	None Detected	5% Cellulose	95% Other	Gray Non Fibrous Homogeneous
51813732PLM_182	gypsum				Crushed

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0038A - A	Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47	3% Chrysotile		97% Other	Green Non Fibrous Homogeneous
51813732PLM_109	tile				Dissolved
0038A - B	Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47	None Detected		100% Other	Black, Gray Non Fibrous Heterogeneous
51813732PLM_183	mastic/leveling				Crushed, Dissolved
0038B - A	Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47	3% Chrysotile		97% Other	Green Non Fibrous Homogeneous
51813732PLM_110	tile				Dissolved
0038B - B	Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_184	mastic/leveling				Dissolved
0038C - A	Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47	3% Chrysotile		97% Other	Green Non Fibrous Homogeneous
51813732PLM_111	tile				Dissolved
0038C - B	Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47	None Detected		100% Other	Black, Gray Non Fibrous Heterogeneous
51813732PLM_185	mastic/leveling				Crushed, Dissolved
0039A - A	Vinyl floor tiles - 9" x 9", Beige and grey - Auditorium - Loc.48	3% Chrysotile		97% Other	Gray Non Fibrous Homogeneous
51813732PLM_112	tile				Dissolved
0039A - B	Vinyl floor tiles - 9" x 9", Beige and grey - Auditorium - Loc.48	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_186	mastic				Dissolved

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0039B - A	Vinyl floor tiles - 9" x 9", Beige and grey - Womens Washroom - Loc.49	3% Chrysotile		97% Other	Gray Non Fibrous Homogeneous
51813732PLM_113	tile				Dissolved
0039B - B	Vinyl floor tiles - 9" x 9", Beige and grey - Womens Washroom - Loc.49	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_187	mastic - very small sample				Dissolved
0039C - A	Vinyl floor tiles - 9" x 9", Beige and grey - Auditorium - Loc.48	3% Chrysotile		97% Other	Gray Non Fibrous Homogeneous
51813732PLM_114	tile				Dissolved
0039C - B	Vinyl floor tiles - 9" x 9", Beige and grey - Auditorium - Loc.48	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_188	mastic				Dissolved
0040A - A	Plaster - Wall - Auditorium - Loc.48	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_115	finish				Crushed
0040A - B	Plaster - Wall - Auditorium - Loc.48	None Detected		80% Other 20% Quartz	Tan Non Fibrous Homogeneous
51813732PLM_189	base				Crushed
0040B - A	Plaster - Wall - Auditorium - Loc.48	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_116	finish				Crushed
0040B - B	Plaster - Wall - Auditorium - Loc.48	None Detected		80% Other 20% Quartz	Tan Non Fibrous Homogeneous
51813732PLM_190	base				Crushed

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By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



**Customer:** Pinchin Ltd.  
54 Terracon Place  
Winnipeg, MB R2J 4G7

**Attn:** Ken Brydges  
Rodney Legault

**Lab Order ID:** 51813732  
**Analysis ID:** 51813732\_PLM  
**Date Received:** 6/4/2018  
**Date Reported:** 6/8/2018  
**Date Amended:** 6/12/2018

**Project:** 220300,2055 Ness Winnipeg MB, City of Winnipeg, St. James Civic Centre

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0040C - A	Plaster - Wall - Auditorium - Loc.48	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_117	finish				Crushed
0040C - B	Plaster - Wall - Auditorium - Loc.48	None Detected		80% Other 20% Quartz	Tan Non Fibrous Homogeneous
51813732PLM_191	base				Crushed
0041A	Acoustic Ceiling tiles - Short fissures and pin holes 2'x2' - Womens Washroom Loc.49	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_118					Ashed, Teased
0041B	Acoustic Ceiling tiles - Short fissures and pin holes 2'x2' - Womens Washroom Loc.49	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_119					Ashed, Teased
0041C	Acoustic Ceiling tiles - Short fissures and pin holes 2'x2' - mens Washroom Loc.50	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_120					Ashed, Teased
0042A	Drywall joint compound - Wall - Cloak Room - Loc.47	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_121					Crushed
0042B	Drywall joint compound - Wall - Cloak Room - Loc.47	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_122					Crushed
0042C	Drywall joint compound - Wall - Cloak Room - Loc.47	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_123					Crushed

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Bethany Nichols (206)

Analyst

Approved Signatory



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0043A - A	Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.52	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_124	tile				Dissolved
0043A - B	Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.52	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_192	mastic				Dissolved
0043B - A	Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.52	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_125	tile				Dissolved
0043B - B	Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.52	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_193	mastic				Dissolved
0043C - A	Vinyl floor tiles - 12" x 12", Beige - Staff Corridor - Loc.57	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_126	tile - ashed				Ashed
0043C - B	Vinyl floor tiles - 12" x 12", Beige - Staff Corridor - Loc.57	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_194	mastic				Dissolved
0044A	Acoustic Ceiling tiles - Long fissures and pinholes - Storage room - Loc.55	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_127					Ashed, Teased
0044B	Acoustic Ceiling tiles - Long fissures and pinholes - Storage room - Loc.55	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_128					Ashed, Teased

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# Bulk Asbestos Analysis

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EPA Method: 600/R-93/116 and 600/M4-82-020



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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0044C	Acoustic Ceiling tiles - Long fissures and pinholes - Storage room - Loc.55	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_129					Ashed, Teased
0045A	Acoustic Ceiling Tiles - 12" x 12", wood cellulose - Staff Corridor - Loc.58	None Detected	90% Cellulose	10% Other	White, Brown Fibrous Heterogeneous
51813732PLM_130					Dissolved, Teased
0045B	Acoustic Ceiling Tiles - 12" x 12", wood cellulose - Staff Corridor - Loc.58	None Detected	90% Cellulose	10% Other	White, Brown Fibrous Heterogeneous
51813732PLM_131					Dissolved, Teased
0045C	Acoustic Ceiling Tiles - 12" x 12", wood cellulose - Staff Corridor - Loc.58	None Detected	90% Cellulose	10% Other	White, Brown Fibrous Heterogeneous
51813732PLM_132					Dissolved, Teased
0046A - A	Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59	5% Chrysotile		95% Other	Beige Non Fibrous Homogeneous
51813732PLM_133	tile				Dissolved
0046A - B	Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_195	mastic - small sample				Dissolved
0046B - A	Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59	5% Chrysotile		95% Other	Beige Non Fibrous Homogeneous
51813732PLM_134	tile				Dissolved
0046B - B	Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_196	mastic - small sample				Dissolved

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# Bulk Asbestos Analysis

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0046C - A	Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59	5% Chrysotile		95% Other	Beige Non Fibrous Homogeneous
51813732PLM_135	tile				Dissolved
0046C - B	Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_197	mastic				Dissolved
0047A	Acoustic Ceiling tiles - 2'x4' - Pinholes - Staff Room - Loc. 59	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_136					Ashed, Teased
0047B	Acoustic Ceiling tiles - 2'x4' - Pinholes - Staff Room - Loc. 59	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_137					Ashed, Teased
0047C	Acoustic Ceiling tiles - 2'x4' - Pinholes - Staff Room - Loc. 59	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_138					Ashed, Teased
0048A	Acoustic Ceiling tiles - 2'x2', Fissures and pinholes - Stairs - Loc.60	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_139					Ashed, Teased
0048B	Acoustic Ceiling tiles - 2'x2', Fissures and pinholes - Womens Washroom - Loc.62	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_140					Ashed, Teased
0048C	Acoustic Ceiling tiles - 2'x2', Fissures and pinholes - Mens Washroom - Loc. 64	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_141					Ashed, Teased

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# Bulk Asbestos Analysis

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0049A	Drywall joint Compound - Wall - Mez - Daycare - Loc.61	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_142					Crushed
0049B	Drywall joint Compound - Wall - Mez - Daycare - Loc.61	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_143					Crushed
0049C	Drywall joint Compound - Wall - Mez - Board Room - Loc.67	None Detected		100% Other	White Non Fibrous Homogeneous
51813732PLM_144					Crushed
0050A - A	Vinyl floor tiles - 12" x 12", Beige and brown - Womens Washroom - Loc.62	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_145	tile				Dissolved
0050A - B	Vinyl floor tiles - 12" x 12", Beige and brown - Womens Washroom - Loc.62	None Detected		100% Other	Black, Yellow Non Fibrous Heterogeneous
51813732PLM_198	mixed mastics				Dissolved
0050B - A	Vinyl floor tiles - 12" x 12", Beige and brown - Womens Washroom - Loc.62	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_146	tile				Dissolved
0050B - B	Vinyl floor tiles - 12" x 12", Beige and brown - Womens Washroom - Loc.62	None Detected		100% Other	Black, Yellow Non Fibrous Heterogeneous
51813732PLM_199	mixed mastics				Dissolved
0050C - A	Vinyl floor tiles - 12" x 12", Beige and brown - Mens Washroom - Loc.64	None Detected		100% Other	Beige Non Fibrous Homogeneous
51813732PLM_147	tile - ashed				Ashed

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0050C - B	Vinyl floor tiles - 12" x 12", Beige and brown - Mens Washroom - Loc.64	None Detected		100% Other	Black, Yellow Non Fibrous Heterogeneous
51813732PLM_200	mixed mastics				Dissolved
0051A	Acoustic Ceiling Tiles - 2x2 - Long Fissures and Pinholes - Mens Washroom Loc.64	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_148					Ashed, Teased
0051B	Acoustic Ceiling Tiles - 2x2 - Long Fissures and Pinholes - Mens Washroom Loc.64	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_149					Ashed, Teased
0051C	Acoustic Ceiling Tiles - 2x2 - Long Fissures and Pinholes - Mens Washroom Loc.64	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_150					Ashed, Teased
0052A	Acoustic Ceiling Tiles - 2x2 - Textured - Board Room - Loc.67	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_151					Ashed, Teased
0052B	Acoustic Ceiling Tiles - 2x2 - Textured - Board Room - Loc.67	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_152					Ashed, Teased
0052C	Acoustic Ceiling Tiles - 2x2 - Textured - Board Room - Loc.67	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_153					Ashed, Teased
0053A - A	Vinyl floor tiles - under Carpet - Board Room - Loc.67	None Detected		100% Other	Yellow Non Fibrous Homogeneous
51813732PLM_154	mastic 1				Dissolved

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0053A - B	Vinyl floor tiles - under Carpet - Board Room - Loc.67	3% Chrysotile		97% Other	Beige Non Fibrous Homogeneous
51813732PLM_201	tile				Dissolved
0053A - C	Vinyl floor tiles - under Carpet - Board Room - Loc.67	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_202	mastic 2				Dissolved
0053B - A	Vinyl floor tiles - under Carpet - Board Room - Loc.67	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_155	mastic 1				Dissolved
0053B - B	Vinyl floor tiles - under Carpet - Board Room - Loc.67	3% Chrysotile		97% Other	Beige Non Fibrous Homogeneous
51813732PLM_203	tile				Dissolved
0053B - C	Vinyl floor tiles - under Carpet - Board Room - Loc.67	None Detected		100% Other	Yellow Non Fibrous Homogeneous
51813732PLM_204	mastic 2				Dissolved
0053C - A	Vinyl floor tiles - under Carpet - Storage Room - Loc.66	None Detected		100% Other	Yellow, Gray Non Fibrous Heterogeneous
51813732PLM_156	mastic 1/leveling				Crushed, Dissolved
0053C - B	Vinyl floor tiles - under Carpet - Storage Room - Loc.66	3% Chrysotile		97% Other	Beige Non Fibrous Homogeneous
51813732PLM_205	tile				Dissolved
0053C - C	Vinyl floor tiles - under Carpet - Storage Room - Loc.66	None Detected		100% Other	Black Non Fibrous Homogeneous
51813732PLM_206	mastic 2				Dissolved

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0054A	Acoustic Ceiling tiles - 2x2 - Fissures and pinholes - Office 2 - Loc.68	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_157					Ashed, Teased
0054B	Acoustic Ceiling tiles - 2x2 - Fissures and pinholes - Office 1 - Loc.69	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_158					Ashed, Teased
0054C	Acoustic Ceiling tiles - 2x2 - Fissures and pinholes - Office 1 - Loc.69	None Detected	40% Cellulose 40% Fiber Glass	10% Perlite 10% Other	White, Gray Fibrous Homogeneous
51813732PLM_159					Ashed, Teased
0055A	Parging/Stucco - Exterior - East	0.5% Chrysotile		99.5% Other	Gray, Black Non Fibrous Heterogeneous
51813732PLM_160	stucco only				Crushed, Dissolved
0055B	Parging/Stucco - Exterior - Back	0.5% Chrysotile		99.5% Other	Gray, Black Non Fibrous Heterogeneous
51813732PLM_161	stucco only				Crushed, Dissolved
0055C	Parging/Stucco - Exterior - West+B183:1184	0.5% Chrysotile		99.5% Other	Gray, Black Non Fibrous Heterogeneous
51813732PLM_162	stucco only				Crushed, Dissolved

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51813732

Version 1-15-2012

<b>Client:</b> <b>Contact:</b> Ken Brydges 54 Terracon Place, Winnipeg, MB R2J 4G7 204 452-0983 <b>Phone:</b> <b>Fax:</b> <b>Email:</b> kbrydges@pinchin.com ideault@pinchin.com 220300, 2055 Ness Winnipeg MB, City Of Winnipeg, St. James Civic Centre	<b>Pinchin Ltd.</b> Ken Brydges 54 Terracon Place, Winnipeg, MB R2J 4G7 204 452-0983 kbrydges@pinchin.com ideault@pinchin.com 220300, 2055 Ness Winnipeg MB, City Of Winnipeg, St. James Civic Centre Special Instructions: Do Not Stop Positive 220300 June 1, 2018 PLM - Stop Positive EXCEPT Do not stop positive on all samples <b>Analyze to 0.1%.</b> 4days	<b>Instructions:</b> Use Column "B" for your contact info To See an Example Click the bottom Example Tab. Enter samples between "<<" and ">>" Begin Samples with a "<<" above the first sample and end with a ">>" below the last sample. Only Enter your data on the first sheet "Sheet1" Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included In the electronic data returned to you to facilitate your reintegration of the report data.	Invoice to: Contact name here Email address here  <b>Scientific Analytical Institute</b> 4604 Dundas Dr. Greensboro, NC 27407 Phone: 336.292.3888 Fax: 336.292.3313 Email: jeb@sailab.com
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**Sample Description**

Sample Number	Data 1 (Lab use only)	Data 2 (Lab use only)
<<		
0001A	Parging cement - Flg - HWH - Blr Room - Loc.1	
0001B	Parging cement - Flg - HWH - Blr Room - Loc.1	
0001C	Parging cement - Flg - HWH - Blr Room - Loc.1	
0002A	Parging cement - Flg - DW - Blr Room - Loc.1	
0002B	Parging cement - Flg - DW - Blr Room - Loc.1	
0002C	Parging cement - Flg - DW - Fan Room - Loc.4	
0003A	Red/brown Mastic - Blr Breaching - Blr Room Loc.1	
0003B	Red/brown Mastic - Blr Breaching - Blr Room Loc.1	
0003C	Red/brown Mastic - Blr Breaching - Blr Room Loc.1	
0004A	Grey Mastic - Ducting - electrical room Loc.3	
0004B	Grey Mastic - Ducting - electrical room Loc.3	
0004C	Grey Mastic - Ducting - electrical room Loc.3	
0005A	Black/Grey Mastic - Ducting - South Crawlspace Loc.5	
0005B	Black/Grey Mastic - Ducting - South Crawlspace Loc.5	
0005C	Black/Grey Mastic - Ducting - South Crawlspace Loc.5	

Accepted

Rejected

f. Hummer 6/14 10:30 AM

5/8/07 34

- 0006A Parging cement - flg - HWH - South Crawlspace - Loc.5
- 0006B Parging cement - flg - HWH - South Crawlspace - Loc.5
- 0006C Parging cement - flg - HWH - South Crawlspace - Loc.5
- 0007A Black tar mastic over paper and 028 - Ducting - South Crawlspace Loc.5
- 0007B Black tar mastic over paper and 028 - Ducting - South Crawlspace Loc.5
- 0007C Black tar mastic over paper and 028 - Ducting - South Crawlspace Loc.5
- 0008A Beige mastic - Ducting - South crawlspace - Loc.5
- 0008B Beige mastic - Ducting - South crawlspace - Loc.5
- 0008C Beige mastic - Ducting - South crawlspace - Loc.5
- 0009A Black tar mastic over foil - ducting - South Crawlspace - Loc.5
- 0009B Black tar mastic over foil - ducting - South Crawlspace - Loc.5
- 0009C Black tar mastic over foil - ducting - South Crawlspace - Loc.5
- 0010A Drywall joint compound - Fan Room Loc.4
- 0010B Drywall joint compound - Fan Room Loc.4
- 0010C Drywall joint compound - Fan Room Loc.4
- 0011A Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Storage room basement - Loc.9
- 0011B Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Storage room basement - Loc.9
- 0011C Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Storage room basement - Loc.9
- 0012A Vinyl floor tiles - 12" x 12", beige and green - Basement Board room - Loc.9
- 0012B Vinyl floor tiles - 12" x 12", beige and green - Basement Board room - Loc.9
- 0012C Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Board room basement - Loc.9
- 0013A Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Board room basement - Loc.9
- 0013B Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Board room basement - Loc.9
- 0013C Acoustic ceiling tiles - 2'x4', Lay in - Short fissures and pinholes - Board room basement - Loc.9
- 0014A Drywall joint compound - wall - Basement Board room - Loc.9
- 0014B Drywall joint compound - wall - Basement Board room - Loc.9
- 0014C Drywall joint compound - wall - Basement Board room - Loc.9
- 0015A Vinyl floor tiles - 9" x 9", Beige and brown - Stairs M-B - Loc.8
- 0015B Vinyl floor tiles - 9" x 9", Beige and brown - Stairs M-B - Loc.8
- 0015C Vinyl floor tiles - 9" x 9", Beige and brown - Storage room behind reception - Loc.29
- 0016A Parging cement - Hot water storage tank 1 - Pool Room - Loc.13
- 0016B Parging cement - Hot water storage tank 1 - Pool Room - Loc.13
- 0016C Parging cement - Hot water storage tank 2 - Pool Room - Loc.13
- 0017A Parging cement - HWH - Pool Room - Loc.13
- 0017B Parging cement - HWH - Pool Room - Loc.13
- 0017C Parging cement - HWH - Basement Corridor - Loc.13
- 0018A Black Matting - Solid Black no pattern - Arena - Loc.15
- 0018B Black Matting - Solid Black no pattern - Arena - Loc.15
- 0018C Black Matting - Solid Black no pattern - Arena - Loc.15
- 0019A Black Matting - Rectangles - Arena - Loc.15
- 0019B Black Matting - Rectangles - Arena - Loc.15
- 0019C Black Matting - Rectangles - Locker Room - Loc.20



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- 0020A Black Matting - Squares - Arena - Loc.15
- 0020B Black Matting - Squares - Arena - Loc.15
- 0020C Black Matting - Squares - Refereo Room - Loc.22
- 0021A Parging cement - Flg - HWH - Arena - Loc.15
- 0021B Parging cement - Flg - HWH - Arena - Loc.15
- 0021C Parging cement - Flg - HWH - Corridor - Loc.28
- 0022A Plaster - Wall finish - Zambonie Room - Loc. 16
- 0022B Plaster - Wall finish - Zambonie Room - Loc. 16
- 0022C Plaster - Ceiling finish - Zambonie Room - Loc. 16
- 0023A Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19
- 0023B Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19
- 0023C Vinyl floor tiles - 12" x 12", Beige and grey - DJ room - Loc.19
- 0024A Vinyl floor tiles - 12" x 12" - wood - DJ Room - Loc.19
- 0024B Acoustic ceiling tiles - 12" x 12" - wood - DJ Room - Loc.19
- 0024C Acoustic ceiling tiles - 12" x 12" - wood - DJ Room - Loc.19
- 0025A Drywall joint compound - Ceiling - Corridor - Loc.25
- 0025B Drywall joint compound - Ceiling - Corridor - Loc.25
- 0025C Drywall joint compound - Ceiling - Corridor - Loc.25
- 0027A Acoustic ceiling tiles - 2'x2', Long fissures and pin holes - Corridor Loc.28
- 0027B Acoustic ceiling tiles - 2'x2', Long fissures and pin holes - Corridor Loc.28
- 0027C Acoustic ceiling tiles - 2'x2', Short fissures and pin holes - Corridor Loc.57
- 0028A Acoustic ceiling tiles - 2'x2', Short fissures and pin holes - Corridor Loc.28
- 0028B Acoustic ceiling tiles - 2'x2', Short fissures and pin holes - Corridor Loc.28
- 0028C Acoustic ceiling tiles - 2'x2', Short fissures and pin holes - Corridor Loc.57
- 0029A Plaster - Bulk Head - Corridor - Loc.28
- 0029B Plaster - Bulk Head - Corridor - Loc.28
- 0029C Plaster - Bulk Head - Corridor - Loc.28
- 0030A Blue Matting - Reception - Loc.30
- 0030B Blue Matting - Gym - Loc.42
- 0030C Blue Matting - Gym - Loc.42
- 0031A Plaster - Over concrete - Entrance - Loc.35
- 0031B Plaster - Over concrete - Entrance - Loc.35
- 0031C Plaster - Over concrete - Entrance - Loc.35
- 0032A Sound Proofing - Entrance - Loc.35
- 0032B Sound Proofing - Entrance - Loc.35
- 0032C Sound Proofing - Pool - Loc. 44
- 0033A Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.38
- 0033B Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.38
- 0033C Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.38
- 0034A Vinyl floor tiles - 12" x 12", Beige and Brown - Corridor - Loc.38
- 0034B Vinyl floor tiles - 12" x 12", Beige and Brown - Corridor - Loc.38
- 0034C Vinyl floor tiles - 12" x 12", Beige and Brown - Pool Entrance - Loc.31

- 0035A Parping cement - RWL - Change Room - Loc.41
- 0035B Parping cement - RWL - Change Room - Loc.41
- 0035C Parping cement - RWL - Change Room - Loc.41
- 0035A Drywall Joint compound - Wall - Gym - Mez - Loc.42
- 0036B Drywall Joint compound - Wall - Gym - Mez - Loc.42
- 0036C Drywall Joint compound - Wall - Gym - Mez - Loc.42
- 0037A Plaster - Wall - Pool - Loc.41
- 0037B Plaster - Wall - Pool - Loc.41
- 0037C Plaster - Wall - Pool - Loc.44
- 0038A Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47
- 0038B Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47
- 0038C Vinyl floor tiles - 9" x 9", Green - Cloak Room - Loc.47
- 0039A Vinyl floor tiles - 9" x 9", Beige and grey - Auditorium - Loc.48
- 0039B Vinyl floor tiles - 9" x 9", Beige and grey - Womens Washroom - Loc.48
- 0039C Vinyl floor tiles - 9" x 9", Beige and grey - Auditorium - Loc.48
- 0040A Plaster - Wall - Auditorium - Loc.48
- 0040B Plaster - Wall - Auditorium - Loc.48
- 0040C Plaster - Wall - Auditorium - Loc.48
- 0041A Acoustic Ceiling tiles - Short fissures and pin holes 2'x2' - Womens Washroom Loc.49
- 0041B Acoustic Ceiling tiles - Short fissures and pin holes 2'x2' - Womens Washroom Loc.49
- 0041C Acoustic Ceiling tiles - Short fissures and pin holes 2'x2' - mens Washroom Loc.50
- 0042A Drywall joint compound - Wall - Cloak Room - Loc.47

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- 0042B Drywall joint compound - Wall - Cloak Room - Loc.47
- 0042C Drywall joint compound - Wall - Cloak Room - Loc.47
- 0043A Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.52
- 0043B Vinyl floor tiles - 12" x 12", Beige - Corridor - Loc.52
- 0043C Vinyl floor tiles - 12" x 12", Beige - Staff Corridor - Loc.57
- 0044A Acoustic Ceiling tiles - Long fissures and pinholes - Storage room - Loc.55
- 0044B Acoustic Ceiling tiles - Long fissures and pinholes - Storage room - Loc.55
- 0044C Acoustic Ceiling tiles - Long fissures and pinholes - Staff Corridor - Loc.58
- 0045A Acoustic Ceiling Tiles - 12" x 12", wood cellulose - Staff Corridor - Loc.58
- 0045B Acoustic Ceiling Tiles - 12" x 12", wood cellulose - Staff Corridor - Loc.58
- 0045C Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59
- 0046A Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59
- 0046B Vinyl floor tiles - 12" Beige, Brown, White - Staff Room - Loc.59
- 0046C Acoustic Ceiling tiles - 2'x4', Pinholes - Staff Room - Loc. 59
- 0047A Acoustic Ceiling tiles - 2'x4', Pinholes - Staff Room - Loc. 59
- 0047B Acoustic Ceiling tiles - 2'x4', Pinholes - Staff Room - Loc. 59
- 0047C Acoustic Ceiling tiles - 2'x4', Pinholes - Staff Room - Loc. 59
- 0048A Acoustic Ceiling tiles - 2x2', Fissures and pinholes - Stairs - Loc.60
- 0048B Acoustic Ceiling tiles - 2x2', Fissures and pinholes - Womens Washroom - Loc.62
- 0048C Acoustic Ceiling tiles - 2x2', Fissures and pinholes - Mens Washroom - Loc. 64
- 0049A Drywall joint Compound - Wall - Mez - Daycare - Loc.61
- 0049B Drywall joint Compound - Wall - Mez - Daycare - Loc.61
- 0049C Drywall joint Compound - Wall - Mez - Board Room - Loc.67
- 0050A Vinyl floor tiles - 12" x 12", Beige and brown - Womens Washroom - Loc.62
- 0050B Vinyl floor tiles - 12" x 12", Beige and brown - Womens Washroom - Loc.62
- 0050C Vinyl floor tiles - 12" x 12", Beige and brown - Mens Washroom - Loc.64
- 0051A Acoustic Ceiling Tiles - 2x2 - Long Fissures and Pinholes - Mens Washroom Loc.64
- 0051B Acoustic Ceiling Tiles - 2x2 - Long Fissures and Pinholes - Mens Washroom Loc.64
- 0051C Acoustic Ceiling Tiles - 2x2 - Long Fissures and Pinholes - Mens Washroom Loc.64
- 0052A Acoustic Ceiling Tiles - 2x2 - Textured - Board Room - Loc.67
- 0052B Acoustic Ceiling Tiles - 2x2 - Textured - Board Room - Loc.67
- 0052C Vinyl floor tiles - under Carpet - Board Room - Loc.67
- 0053A Vinyl floor tiles - under Carpet - Board Room - Loc.67
- 0053B Vinyl floor tiles - under Carpet - Storage Room - Loc.66
- 0053C Acoustic Ceiling tiles - 2x2 - Fissures and pinholes - Office 2 - Loc.68
- 0054A Acoustic Ceiling tiles - 2x2 - Fissures and pinholes - Office 1 - Loc.69
- 0054B Acoustic Ceiling tiles - 2x2 - Fissures and pinholes - Office 1 - Loc.69
- 0054C Parging/Stucco - Exterior - East
- 0055A Parging/Stucco - Exterior - Back
- 0055B Parging/Stucco - Exterior - West-B1B3:11B4
- 0055C



## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project Name:** City Of Winnipeg, St. James Civic Centre, 2055 Ness, Winnipeg, MB  
**Project No.:** 0220300.000  
**Prepared For:** K. Brydges / R. Legault  
**Lab Reference No.:** b190574  
**Analyst(s):** J. Raisch-Berkoff  
**Date Received:** June 1, 2018      **# Samples submitted:** 1  
**Date Analyzed:** June 7, 2018      **# Phases analyzed:** 1

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**Method of Analysis:**

**EPA 600/R-93/116 - Method for the Determination of Asbestos in Bulk Building Materials dated July, 1993**

Bulk samples are checked visually and scanned under a stereomicroscope. Slides are prepared and observed under a Polarized Light Microscope (PLM) at magnifications of 40X, 100X or 400X as appropriate. Asbestos fibres are identified by a combination of morphology, colour, refractive index, extinction, sign of elongation, birefringence and dispersion staining colours. A visual estimate is made of the percentage of asbestos present. A reported concentration of less than (<) the regulatory threshold (see chart below) indicates the presence of confirmed asbestos in trace quantities, limited to only a few fibres or fibre bundles in an entire sample. This method complies with provincial regulatory requirements where applicable. Multiple phases within a sample are analyzed and reported separately.

Provincial Jurisdiction	Regulatory Threshold	Provincial Jurisdiction	Regulatory Threshold
Ontario, British Columbia, Nova Scotia	0.5%	Manitoba	0.1% friable 1% non-friable
Quebec	0.1%	Saskatchewan	0.5% friable 1% non-friable
Alberta, NWT, Yukon, Nunavut	1%	Newfoundland and Labrador, PEI and New Brunswick	1%

All bulk samples submitted to this laboratory for asbestos analysis are retained for a minimum of three months. Samples may be retrieved, upon request, for re-examination at any time during that period.

Pinchin Ltd. is accredited by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NVLAP Lab Code 101270-0) for the 'EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples,' and the 'EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials'; and meets all requirements of ISO/IEC 17025:2005.

This report relates only to the items tested.

**NOTE:** *This test report may not be reproduced, except in full, without the written approval of the laboratory. The client may not use this report to claim product endorsement by NVLAP or any agency of the U.S. Government. This report is valid only when signed in blue ink by the analyst. Vinyl asbestos floor tiles contain very fine fibres of asbestos and may be missed by some laboratories using the PLM method. Internal verification studies performed by Pinchin indicate that the chance of missing asbestos in floor tiles is no higher than about 2%. The vinyl tile study and laboratory documentation on measurement uncertainty is available upon request. The analysis of dust samples by PLM cannot be used as an indicator of past or present airborne asbestos fibre levels.*



**Pinchin Ltd. Asbestos Laboratory  
Certificate of Analysis**


**Project Name:** City Of Winnipeg, St. James Civic Centre, 2055 Ness, Winnipeg, MB  
**Project No.:** 220300  
**Prepared For:** K. Brydges / R. Legault

**Lab Reference No.:** b190574  
**Date Analyzed:** June 7, 2018


**BULK SAMPLE ANALYSIS**

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
0026A Vermiculite - Mechanical room - Loc.18	Homogeneous, grey, beige, and brown, loose particulate, micaceous material.	Libby Amphibole Asbestos	Confirmed Vermiculite > 75%
Comments:	This sample originated from Libby Montana (a mine known to be contaminated with amphibole asbestos and is sold under the brand name Zonolite) and was confirmed in our laboratory to contain asbestos fibres. The laboratory does not report a percentage due to the variable asbestos content of the vermiculite from bag to bag or even between sampling locations in the same installation. The overall percentage of asbestos in Libby Vermiculite has been shown to range up to 6% (Atkinson et al. 1982; Amandus et al. 1987). Pinchin recommends that once the material is confirmed to be Libby Zonolite, it be treated as an asbestos containing material (>0.1% asbestos).		

**Reviewed by:**

 Digitally signed  
by Eileen  
Luong  
Date:  
2018.06.08  
09:26:10 -04'00'

**Reporting Analyst:**

 Digitally signed  
by Eileen Luong  
Date:  
2018.06.08  
09:26:27 -04'00'

SPH # sent to SLL.



Analyzed by: JRB

Reviewed by: KB

Report Sent by: EL

**Special Instructions:**

**Pinchin Ltd. - Asbestos Laboratory  
Internal Asbestos Bulk Sample Chain of Custody**

<b>Client Name:</b>	City Of Winnipeg	<b>Project Address:</b>	2055 Ness Winnipeg MB
<b>Portfolio/Building No:</b>	St. James Civic Centre	<b>Pinchin File:</b>	220300
<b>Submitted by:</b>	Ken Brydges	<b>Email:</b>	kbrydges@pinchin.com
<b>CC Results to:</b>	Rodney Legault	<b>CC Email:</b>	rlegault@pinchin.com
<b>Invoice to:</b>		<b>Invoice Email:</b>	
<b>Date Submitted:</b>	May 31 2018	<b>Required by:</b>	June 8 2018
<b># of Samples:</b>		<b>Priority:</b>	5 Day Turnaround
<b>Year of Building Construction (Mandatory Field):</b>			
<b>Do NOT Stop on Positive (Sample Numbers):</b>		Do not stop positive on all samples	
<b>Pinchin Group Company (Mandatory Field):</b>		Pinchin	

<b>To be Completed by Lab Personnel Only:</b>			
<b>Lab Reference #:</b>	b190 574	<b>Time:</b>	24 hour clock
<b>Received by:</b>	JUN 01 2018 JL	<b>Date:</b>	Month   Day   Year
<b>Name(s) of Analyst(s):</b>	JRB	June 7/18	
Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
	0026	A	Vermiculite - Mechanical room - Loc.18 <i>Libby confirmed</i>



## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

<b>Project Name:</b>	COW, St James Civic Centre, 2055 Ness Avenue, Winnipeg, MB		
<b>Project No.:</b>	0220300.000		
<b>Prepared For:</b>	K. Brydges/ R. Legault	<b>Date Received:</b>	September 24, 2018
<b>Lab Reference No.:</b>	b197491	<b>Date Analyzed:</b>	September 28, 2018
<b>Analyst(s):</b>	T. Ly	<b># Samples submitted:</b>	9
		<b># Phases analyzed:</b>	11

**Method of Analysis:**

**EPA 600/R-93/116 - Method for the Determination of Asbestos in Bulk Building Materials dated July, 1993**

Bulk samples are checked visually and scanned under a stereomicroscope. Slides are prepared and observed under a Polarized Light Microscope (PLM) at magnifications of 40X, 100X or 400X as appropriate. Asbestos fibres are identified by a combination of morphology, colour, refractive index, extinction, sign of elongation, birefringence and dispersion staining colours. A visual estimate is made of the percentage of asbestos present. A reported concentration of less than (<) the regulatory threshold (see chart below) indicates the presence of confirmed asbestos in trace quantities, limited to only a few fibres or fibre bundles in an entire sample. This method complies with provincial regulatory requirements where applicable. Multiple phases within a sample are analyzed and reported separately.

Provincial Jurisdiction	Regulatory Threshold	Provincial Jurisdiction	Regulatory Threshold
Ontario, British Columbia, Nova Scotia	0.5%	Alberta	Undefined
Quebec	0.1%	Saskatchewan	0.5% friable 1% non-friable
PEI, NWT, Yukon, Nunavut, Newfoundland and Labrador, and New Brunswick	1%	Manitoba	0.1% friable 1% non-friable

All bulk samples submitted to this laboratory for asbestos analysis are retained for a minimum of three months. Samples may be retrieved, upon request, for re-examination at any time during that period.

Pinchin Ltd. is accredited by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NVLAP Lab Code 101270-0) for the 'EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples,' and the 'EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials'; and meets all requirements of ISO/IEC 17025:2005.

This report relates only to the items tested.

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## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project Name:** COW, St James Civic Centre, 2055 Ness Avenue, Winnipeg, MB  
**Project No.:** 0220300.000  
**Prepared For:** K. Brydges/ R. Legault  
**Lab Reference No.:** b197491  
**Date Analyzed:** September 28, 2018

### BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
0056A Caulking on Roof Flashing Above Kitchen	Homogeneous, beige, caulking material.	None Detected	Cellulose 5-10% Non-Fibrous Material > 75%
0056B Caulking on Roof Flashing Above Entrance adjacent kitchen	Homogeneous, beige, caulking material.	None Detected	Cellulose 5-10% Non-Fibrous Material > 75%
0056C Caulking on Roof Flashing Above Auditorium	Homogeneous, beige, caulking material.	None Detected	Cellulose 5-10% Non-Fibrous Material > 75%
0056D Caulking on Roof Flashing Above Auditorium	Homogeneous, white, caulking material.	None Detected	Non-Fibrous Material > 75%
0056E Caulking on Roof Flashing Above Pool	Homogeneous, off-white, caulking material.	None Detected	Non-Fibrous Material > 75%
0056F Caulking on Roof Flashing Above Pool	Homogeneous, light grey, caulking material.	None Detected	Non-Fibrous Material > 75%
0057A Black tar/mastic - on venting - Above Pool	2 Phases: a) Homogeneous, black, tar material. b) Homogeneous, tar impregnated, compressed fibrous material.	None Detected None Detected	Tar and other non-fibrous > 75% Cellulose 50-75% Tar and other non-fibrous 25-50%
0057B Black tar/mastic - on venting - Above Auditorium	Homogeneous, black, tar material.	None Detected	Tar and other non-fibrous > 75%
0057C Black tar/mastic - on venting - Above entrance	2 Phases: a) Homogeneous, black, tar material. b) Homogeneous, tar impregnated, compressed fibrous material.	None Detected None Detected	Tar and other non-fibrous > 75% Cellulose 50-75% Tar and other non-fibrous 25-50%

Reviewed by:

Digitally signed by  
Eileen Luong  
Date: 2018.10.01  
08:44:40 -04'00'

Reporting Analyst:

Digitally signed by  
Eileen Luong  
Date: 2018.10.01  
08:44:58 -04'00'





Analyzed by: RL  
 Reviewed by: KB  
 Report Sent by: EL

**Special Instructions:**

**Pinchin Ltd. - Asbestos Laboratory  
 Internal Asbestos Bulk Sample Chain of Custody**

Client Name:	COW	Project Address:	2055 Ness Avenue Winnipeg MB
Portfolio/Building No:	St James Civic Centre	Pinchin File:	220300
Submitted by:	Ken Brydges	Email:	kbrydges@pinchin.com
CC Results to:	Rodney legault	CC Email:	rlegault@pinchin.com
Invoice to:		Invoice Email:	
Date Submitted:	September 21 2018	Required by:	October 1 2018
# of Samples:	109	Priority:	5 Day Turnaround
Year of Building Construction (Mandatory Field):			
Do NOT Stop on Positive (Sample Numbers):			
Pinchin Group Company (Mandatory Field):			Pinchin

**To be Completed by Lab Personnel Only:**

Lab Reference #:	0197 491	Time:	24 hour clock		
Received by:	SEP 24 2018	Date:	Month	Day	Year
Name(s) of Analyst(s):	RL		9	28	18

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
	0056	A	Caulking on Roof Flashing - Above Kitchen ND
	0056	B	Caulking on Roof Flashing - Above Entrance adjacent kitchen ND
	0056	C	Caulking on Roof Flashing - Above Auditorium ND
	0056	D	Caulking on Roof Flashing - Above Auditorium ND
	0056	E	Caulking on Roof Flashing - Above Pool ND
	0056	F	Caulking on Roof Flashing - Above Pool ND

bts = 11

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
	0057	A	Black tar/mastic - on venting - Above Pool a)ND b)ND
	0057	B	Black tar/mastic - on venting - Above Auditorium ND
	0057	C	Black tar/mastic - on venting - Above entrance a)ND b)ND
	0058	A	BUR - Above Kitchen
	0058	B	BUR - Above Entrnace adj Kitchen
	0058	C	BUR - Above Auditorium
	0058	D	BUR - Above Arena
	0058	E	BUR - Above Pool

9

5



## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

<b>Project Name:</b>	COW, St James Civic Centre, 2055 Ness Avenue Winnipeg MB		
<b>Project No.:</b>	0220300.000		
<b>Prepared For:</b>	K. Brydges / R. Legault	<b>Date Received:</b>	September 24, 2018
<b>Lab Reference No.:</b>	b197492	<b>Date Analyzed:</b>	October 1, 2018
<b>Analyst(s):</b>	A. Wells	<b># Samples submitted:</b>	5
		<b># Phases analyzed:</b>	18

**Method of Analysis:**

**EPA 600/R-93/116 - Method for the Determination of Asbestos in Bulk Building Materials dated July, 1993**

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## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project Name:** COW, St James Civic Centre, 2055 Ness Avenue Winnipeg MB  
**Project No.:** 0220300.000  
**Prepared For:** K. Brydges / R. Legault

**Lab Reference No.:** b197492  
**Date Analyzed:** October 1, 2018

### BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
0058A BUR - Above Kitchen	4 Phases:		
	a) Homogeneous, black, layered tar material.	None Detected	Tar and other non-fibrous > 75%
	b) Homogeneous, black, layered tar impregnated, compressed fibrous material.	None Detected	Cellulose 50-75% Tar and other non-fibrous 25-50%
	c) Homogeneous, black, tar material on foam.	None Detected	Tar and other non-fibrous > 75%
	d) Homogeneous, black, thick tar material with rocks.	None Detected	Tar and other non-fibrous > 75%
Comments:	Cellulose, drywall and foam are present on the surface of this sample.		
0058B BUR - Above Entrnace adj Kitchen	3 Phases:		
	a) Homogeneous, black, layered tar material.	None Detected	Tar and other non-fibrous > 75%
	b) Homogeneous, black, layered tar impregnated, compressed fibrous material.	None Detected	Cellulose 50-75% Tar and other non-fibrous 25-50%
	c) Homogeneous, black, tar material on foam.	None Detected	Tar and other non-fibrous > 75%
Comments:	Cellulose, drywall and foam are present on the surface of this sample.		



## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project Name:** COW, St James Civic Centre, 2055 Ness Avenue Winnipeg MB  
**Project No.:** 0220300.000  
**Prepared For:** K. Brydges / R. Legault

**Lab Reference No.:** b197492  
**Date Analyzed:** October 1, 2018

### BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
0058C BUR - Above Auditorium	3 Phases: a) Homogeneous, black, layered tar material.	None Detected	Tar and other non-fibrous > 75%
	b) Homogeneous, black, layered tar impregnated, compressed fibrous material.	None Detected	Cellulose 50-75% Tar and other non-fibrous 25-50%
	c) Homogeneous, black, tar material on foam.	None Detected	Tar and other non-fibrous > 75%
Comments:	Cellulose, drywall and foam are present on the surface of this sample.		
0058D BUR - Above Arena	a) Homogeneous, black, tar material and paper.	None Detected	Tar and other non-fibrous > 75%
	b) Non-homogeneous, beige and black layered paper and tar material.	None Detected	Cellulose 50-75% Tar and other non-fibrous 25-50%
	c) Homogeneous, black, layered tar material.	None Detected	Tar and other non-fibrous > 75%
	d) Homogeneous, black, layered, tar impregnated, compressed fibrous material.	None Detected	Cellulose 50-75% Tar and other non-fibrous 25-50%
	e) Homogeneous, black, tar material with rocks.	Chrysotile 1-5%	Tar and other non-fibrous > 75%
Comments:	Cellulose is present on the surface of this sample.		



**Pinchin Ltd. Asbestos Laboratory  
Certificate of Analysis**

**Project Name:** COW, St James Civic Centre, 2055 Ness Avenue Winnipeg MB  
**Project No.:** 0220300.000  
**Prepared For:** K. Brydges / R. Legault


**Lab Reference No.:** b197492  
**Date Analyzed:** October 1, 2018

**BULK SAMPLE ANALYSIS**

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
0058E BUR - Above Pool	3 Phases: a) Homogeneous, black, layered tar material.	None Detected	Tar and other non-fibrous > 75%
	b) Homogeneous, black, layered tar impregnated, compressed fibrous material.	None Detected	Cellulose 50-75% Tar and other non-fibrous 25-50%
	c) Homogeneous, black, tar material on foam.	None Detected	Tar and other non-fibrous > 75%
Comments:	Cellulose is present on the surface of this sample.		

**Reviewed by:**

**Reporting Analyst:**

 Digitally signed by  
Julieth Oran  
Date: 2018.10.01  
16:35:02 -04'00'

 Digitally signed by  
Julieth Oran  
Date: 2018.10.01  
16:34:49 -04'00'



Analyzed by: AW  
 Reviewed by: [Signature]  
 Report Sent by: [Signature]

**Special Instructions:**

**Pinchin Ltd. - Asbestos Laboratory  
 Internal Asbestos Bulk Sample Chain of Custody**

<b>Client Name:</b>	COW	<b>Project Address:</b>	2055 Ness Avenue Winnipeg MB
<b>Portfolio/Building No:</b>	St James Civic Centre	<b>Pinchin File:</b>	220300
<b>Submitted by:</b>	Ken Brydges	<b>Email:</b>	<a href="mailto:kbrydges@pinchin.com">kbrydges@pinchin.com</a>
<b>CC Results to:</b>	Rodney legault	<b>CC Email:</b>	<a href="mailto:rlegault@pinchin.com">rlegault@pinchin.com</a>
<b>Invoice to:</b>		<b>Invoice Email:</b>	
<b>Date Submitted:</b>	September 21 2018	<b>Required by:</b>	October 1 2018
<b># of Samples:</b>		<b>Priority:</b>	5 Day Turnaround
<b>Year of Building Construction (Mandatory Field):</b>			
<b>Do NOT Stop on Positive (Sample Numbers):</b>			
<b>Pinchin Group Company (Mandatory Field):</b>	Pinchin		

**To be Completed by Lab Personnel Only:**

<b>Lab Reference #:</b>	b197492	<b>Time:</b>	24 hour clock
<b>Received by:</b>	sept 24, 2018 JR	<b>Date:</b>	Month   Day   Year
<b>Name(s) of Analyst(s):</b>	AW 18-1001		

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
	0058	A	BUR - Above Kitchen <i>AW 18-1001</i>
<i>bag labeled 59B</i>	0058	B	BUR - Above Entrnace adj Kitchen <i>AW 18-1001</i>
<i>bag labeled 59C</i>	0058	C	BUR - Above Auditorium <i>AW 18-1001</i>
	0058	D	BUR - Above Arena <i>AW 18-1001</i>
	0058	E	BUR - Above Pool <i>AW 18-1001</i>

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**APPENDIX II-B**  
**Lead Analytical Certificates**





# Analysis for Lead Concentration in Paint Chips

by Flame Atomic Absorption Spectroscopy  
EPA SW-846 3050B/6010C/7000B



**Customer:** Pinchin Ltd.  
54 Terracon Place  
Winnipeg, MB R2J 4G7

**Attn:** Ken Brydges

**Lab Order ID:** 51813621  
**Analysis ID:** 51813621\_PBP  
**Date Received:** 6/1/2018  
**Date Reported:** 6/8/2018

**Project:** 2055 Ness Winnipeg MB Hazardous Material Assessment

Sample ID	Description	Mass	Concentration	Concentration
Lab Sample ID	Lab Notes	(g)	(ppm)	(% by weight)
L-0001	Paint Chip - Beige Paint - Wall - Location 13	0.0795	310	0.031%
51813621PBP_1				
L-0002	Paint Chip - Grey Paint - Basement - Location 14	0.0794	2300	0.23%
51813621PBP_2				
L-0003	Paint Chip - Blue - Basement Corridor - Loc.14	0.0572	1100	0.11%
51813621PBP_3				
L-0004	Paint Chip - Brown Paint - Cloak Room - Loc.47	0.0638	< 63	< 0.0063%
51813621PBP_4				
L-0005	Paint Chip - Light Brown - Auditorium - Loc.48	0.0654	< 61	< 0.0061%
51813621PBP_5				
L-0006	Paint Chip - Grey paint - Kitchen - Loc.48	0.0682	2800	0.28%
51813621PBP_6				
L-0007	Paint Chip - Beige paint - Wall - Location 56	0.0545	490	0.049%
51813621PBP_7				
L-0008	Paint Chip - White paint - Staff Corridor - Loc.58	0.0852	< 47	< 0.0047%
51813621PBP_8				
L-0009	Paint Chip - Blue - Main floor - Staff room - Loc.59	0.0939	8100	0.81%
51813621PBP_9				
L-0010	Paint Chip - Green - Hollow core - Stairs - Loc.60	0.0571	130	0.013%
51813621PBP_10				

Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA ELPAT program. ELPAT Laboratory ID: 173190. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request. The quality control samples run with the samples in this report have passed all EPA required specifications unless otherwise noted. RL: (Report Limit for an undiluted 50ml sample is 4µg Total Pb).

Melissa Ferrell (22)

Analyst

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Laboratory Director



# Analysis for Lead Concentration in Paint Chips

by Flame Atomic Absorption Spectroscopy  
EPA SW-846 3050B/6010C/7000B



**Customer:** Pinchin Ltd.  
54 Terracon Place  
Winnipeg, MB R2J 4G7

**Attn:** Ken Brydges

**Lab Order ID:** 51813621  
**Analysis ID:** 51813621\_PBP  
**Date Received:** 6/1/2018  
**Date Reported:** 6/8/2018

**Project:** 2055 Ness Winnipeg MB Hazardous Material Assessment

Sample ID	Description	Mass	Concentration	Concentration
Lab Sample ID	Lab Notes	(g)	(ppm)	(% by weight)
L-0011	Paint Chip - Grey -- Stairs - Loc.60	0.0308	1900	<b>0.19%</b>
51813621PBP_11				
L-0012	Paint Chip - Blue - Daycare - Loc. 61	0.0637	< 63	< <b>0.0063%</b>
51813621PBP_12				
L-0013	Paint Chip - Brown Paint - Storage room - Loc.66	0.0819	62	<b>0.0062%</b>
51813621PBP_13				
L-0014	Paint Chip - Green - Board room - Loc.67	0.0374	< 43	< <b>0.0043%</b>
51813621PBP_14				
L-0015	Paint Chip - Light Green - Pool Corridor	0.0364	80.	<b>0.0080%</b>
51813621PBP_15				
L-0016	Paint Chip - White - Corridor - Loc.28	0.0263	< 61	< <b>0.0061%</b>
51813621PBP_16				
L-0017	Paint Chip Grey - Concrete	0.0578	< 69	< <b>0.0069%</b>
51813621PBP_17				
L-0018	Paint Chip - Beige - Hollow core	0.0691	< 58	< <b>0.0058%</b>
51813621PBP_18				
L-0019	Paint Chip - Dark Grey - exterior parging	0.0540	220	<b>0.022%</b>
51813621PBP_19				
L-0020	Paint Chip - Blue Paint Exterior Door	0.0765	1200	<b>0.12%</b>
51813621PBP_20				

Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA ELPAT program. ELPAT Laboratory ID: 173190. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request. The quality control samples run with the samples in this report have passed all EPA required specifications unless otherwise noted. RL: (Report Limit for an undiluted 50ml sample is 4µg Total Pb).

Melissa Ferrell (22)

Analyst

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Laboratory Director



# Analysis for Lead Concentration in Paint Chips

by Flame Atomic Absorption Spectroscopy  
EPA SW-846 3050B/6010C/7000B



**Customer:** Pinchin Ltd.  
54 Terracon Place  
Winnipeg, MB R2J 4G7

**Attn:** Ken Brydges

**Lab Order ID:** 51813621  
**Analysis ID:** 51813621\_PBP  
**Date Received:** 6/1/2018  
**Date Reported:** 6/8/2018

**Project:** 2055 Ness Winnipeg MB Hazardous Material Assessment

Sample ID	Description	Mass (g)	Concentration (ppm)	Concentration (% by weight)
Lab Sample ID	Lab Notes			
L-0021	Paint Chip - Pink/Brown Paint - Exterior Door	0.0542	7100	0.71%
51813621PBP_21				
L-0022	Paint Chip - Green Paint - Exterior metal cladding	0.0437	< 37	< 0.0037%
51813621PBP_22				

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Melissa Ferrell (22)

Analyst

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Laboratory Director

581362H

**Contact:**  
Ken Brydges  
54 Terracon Place Winnipeg MB  
204-792-6580  
204-453-0788  
kbrydges@pinchin.com

**Project:**  
2055 Ness Winnipeg MB  
Hazardous Material Assessment

**Client Notes:**  
  
**P.O. #.** 220300

**Date Submitted:**  
  
**Analysis:** LEAD  
**TurnAroundTime:** Regular

Use Column "B" for your contact info

To See an Example Click the  
bottom Example Tab.

Enter samples between "<<" and ">>"  
Begin Samples with a "<<" above the first sample  
and end with a ">>" below the last sample.  
Only Enter your data on the first sheet "Sheet1"

Note: Data 1 and Data 2 are optional  
fields that do not show up on the official  
report, however they will be included  
in the electronic data returned to you  
to facilitate your reintegration of the report data.



302-L Pomona Dr.  
Greensboro, NC 27407  
Phone: 336.292.3888  
Fax: 336.292.3313  
Email: lab@sailab.com

**Sample Number**      **Data 1**      **Sample Description**      **Data 2**

Sample Number	Data 1	Sample Description	Data 2
L-0001	Wall Finish	Paint Chip - Beige Paint - Wall - Location 13	
L-0002	Walls	Paint Chip - Grey Paint - Basement - Location 14	
L-0003	Door Frames	Paint Chip - Blue - Basement Corridor - Loc.14	
L-0004	Wall Finish	Paint Chip - Brown Paint - Cloak Room - Loc.47	
L-0005	Doors and frames	Paint Chip - Light Brown - Auditorium - Loc.48	
L-0006	Doors and frames	Paint Chip - Grey paint - Kitchen - Loc.48	
L-0007	Walls	Paint Chip - Beige paint - Wall - Location 56	
L-0008	Walls	Paint Chip - White paint - Staff Corridor - Loc.58	
L-0009	Metal Door and frames	Paint Chip - Blue - Main floor - Staff room - Loc.59	
L-0010	Walls	Paint Chip - Green - Hollow core - Stairs - Loc.60	
L-0011	Rails	Paint Chip - Grey -- Stairs - Loc.60	
L-0012	Walls -	Paint Chip - Blue - Daycare - Loc. 61	
L-0013	Walls -	Paint Chip - Brown Paint - Storage room - Loc.66	
L-0014	Doors and frames	Paint Chip - Green - Board room - Loc.67	
L-0015	Walls	Paint Chip - Light Green - Pool Corridor	
L-0016	Walls	Paint Chip - White - Corridor - Loc.28	
L-0017	Exterior Wall	Paint Chip Grey - Concrete	
L-0018	Exterior Wall	Paint Chip - Beige - Hollow core	
L-0019	Exterior parging	Paint Chip - Dark Grey - exterior parging	

Accepted  Rejected   
Brydges

L-0020  
L-0021  
L-0022

Exterior Doors  
Exterior Doors  
Exterior Metal and door

Paint Chip - Blue Paint Exterior Door  
Paint Chip - Pink/Brown Paint - Exterior Door  
Paint Chip - Green Paint - Exterior metal cladding

**APPENDIX III**  
**Methodology**

## 1.0 GENERAL

Pinchin conducts a room-by-room survey (rooms, corridors, service areas, exterior, etc.) to identify the hazardous building materials as defined by the scope of work. All work is conducted in accordance with our own internal Standard Operating Procedures.

Information regarding the location and condition of hazardous building materials encountered and visually estimated quantities are recorded. The locations of any samples collected are recorded on small-scale plans.

As-built drawings and previous reports are referenced where provided.

### 1.1 Limitations on Scope

The assessment excludes the following:

- Articles belonging to the owner, tenant or occupant (e.g. stored items, furniture, appliances, etc.);
- Underground materials or equipment (e.g. vessels, drums, underground storage tanks, pipes, etc.);
- Building envelope, structural components, inaccessible or concealed materials or other items where sampling may cause consequential damage to the property;
- Energized systems (e.g. internal boiler components, elevators, mechanical or electrical components);
- Controlled products (e.g. stored chemicals, operational or process-related substances); and
- Materials not typically associated with construction (e.g. settled dust, spills, residual contamination from prior spills, etc.).

The assessment includes limited demolition of wall and ceiling finishes (drywall or plaster) to view concealed conditions at representative areas as permitted by the current building use. Limited destructive testing of flooring is conducted where possible (under carpets or multiple layers of flooring). Demolition of exterior building finishes, masonry walls (chases, shafts etc.), and structural items is not conducted.

## 1.2 Asbestos

An inspection is conducted for the presence of friable and non-friable asbestos-containing materials (ACM). A friable material is a material that when dry can be crumbled, pulverized or powdered by hand pressure.

A separate set of samples is collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA as material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type or formulation of material. The homogeneous materials are determined by visual examination and available information on the phases of construction and prior renovations.

Samples are collected at a rate that is in compliance with the requirements of local regulations and guidelines. The sampling strategy is also based on known ban dates and phase out dates of the use of asbestos; sampling of certain building materials is not conducted after specific construction dates. In addition, to be conservative, several years past these dates are added to account for some uncertainty in the exact start / finish date of construction and associated usage of ACM.

In some cases, manufactured products such as asbestos cement pipe are visually identified without sample confirmation.

Drywall joint compound is sampled at exterior walls, columns or other locations that are unlikely to have been renovated in an attempt to determine the presence of asbestos in the original drywall compound. Delineation of asbestos-containing drywall compound from newer, non-asbestos drywall compound is not conducted.

Flooring mastic or adhesive is sampled and analyzed if present on the underside of flooring samples (vinyl floor tile and vinyl sheet flooring).

Limited demolition of masonry block walls (core holes) is conducted to investigate for loose fill vermiculite insulation.

The following materials (if present) are not sampled and will be presumed to contain asbestos.

- Roofing, felts and tar
- Concrete floor levelling compound
- Electrical components or wiring within control centers, breakers, motors or lights, insulation on wiring
- Refractory materials and insulations in boilers



- Insulation under metal clad boilers
- Mechanical packing, ropes and gaskets
- Fire resistant doors or metal clad finishes
- Vibration dampers on HVAC equipment

The bulk samples are submitted to a NVLAP accredited laboratory for analysis. The analysis is performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

Analytical results are compared to the following criteria.

<b>Jurisdiction</b>	<b>Friable</b>	<b>Non-Friable</b>
BC	0.5% <sup>1</sup>	0.5%
Alberta	Undefined <sup>2</sup>	Undefined <sup>2</sup>
Saskatchewan	>0.5% <sup>1</sup>	>1%
Manitoba	0.1% <sup>1</sup>	1%
Ontario	0.5%	0.5%
Yukon, Nunavut, Northwest Territories	1%	1%
Federal	1%	1%

The asbestos analysis is completed using a stop positive approach. Only one result meeting the above regulated criteria is required to determine that a material is asbestos-containing, but all samples must be analyzed to conclusively determine that a material is non-asbestos. The laboratory stops analyzing samples from a homogeneous material once a result equal to or greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material are analyzed if no asbestos is detected. In some cases, all samples are analyzed in the sample set regardless of result.

Where building materials are described in the report as “non-asbestos” or “does not contain asbestos”, this means that either no asbestos was detected by the analytical method utilized in any of the multiple

<sup>1</sup> Or any amount if vermiculite

<sup>2</sup> There is no criteria established for defining an asbestos-containing material by Alberta OHS Regulations. Historically, the accepted threshold was 1%, however materials that contain any asbestos will now need to be assessed before disturbance to determine the potential for fibre release based on the planned work activity.

samples or, if detected, it is below the lower limit of an asbestos-containing material in the applicable regulation.

Asbestos materials are evaluated in order to make recommendations regarding remedial work. The priority for remedial action is based on several factors:

- Friability (friable or non-friable);
- Condition (good, fair, poor, debris);
- Accessibility (ranking from accessible to all building users to inaccessible);
- Efficiency of the work (for example, if damaged ACM is being removed in an area, it may be most practical to remove all ACM in the area even if it is in good condition).

### **1.3 Lead**

Samples of distinctive paint finishes and surface coatings present in more than a limited application, where removal of the paint is possible is collected. The samples are collected by scraping the painted finish to include base and covering applications. Drawings included show sample locations.

Analysis for lead in paints or surface coatings is performed at an accredited laboratory in accordance with EPA Method No. 3050B/Method No. 7420; flame atomic absorption.

For this report, all paints containing lead at a concentration of 0.009% (90 ppm) or greater are discussed. Paint and surface coatings are evaluated for condition such as flaking, chipping or chalking.

Other lead building products (e.g. batteries, lead sheeting, flashing) are identified by visual observation only.

### **1.4 Silica**

Building materials known to contain crystalline silica (e.g. concrete, cement, tile, brick, masonry, mortar) is identified by visual inspection only. Pinchin does not perform sampling of these materials for laboratory analysis of crystalline silica content.

### **1.5 Mercury**

Building materials/products/equipment (e.g. thermostats, barometers, pressure gauges, light tubes), suspected to contain mercury are identified by visually inspection only. Dismantling of equipment suspected of containing mercury is not performed. Sampling of these materials for laboratory analysis of mercury content is not performed.

## **1.6 Polychlorinated Biphenyls**

The potential for light ballast and wet transformers to contain PCBs is based on the age of the building, a review of maintenance records and examination of labels or nameplates on equipment, where present and accessible. The information is compared to known ban dates of PCBs and Environment Canada publications.

Dry type transformers are presumed to be free of dielectric fluids and hence non-PCB.

Fluids (mineral oil, hydraulic, Aroclor or Askarel) in transformers or other equipment are not sampled for PCB content.

Non-liquid forms of PCBs (i.e. sealants or caulking) are not sampled for PCB content.

## **1.7 Visible Mould**

The presence of mould is determined by visual inspection of exposed building surfaces. If any mould growth is concealed within building cavities it is not addressed in this assessment.

Master Template: Methodology Document for Hazardous Building Materials Management, HAZ, December 1, 2017

**APPENDIX IV**  
**Additional Photographs**



Photograph No. 6: Non-asbestos skate matting within the rink Loc.15 (Samples 0020A-C).



Photograph No. : Non-asbestos blue matting within the Reception area and Gym Loc.'s 30 and 42 (Samples 0030A-C).



Photograph No. 8: Non-asbestos vinyl sheet flooring within the pool entrance Loc.39 (Rubber).



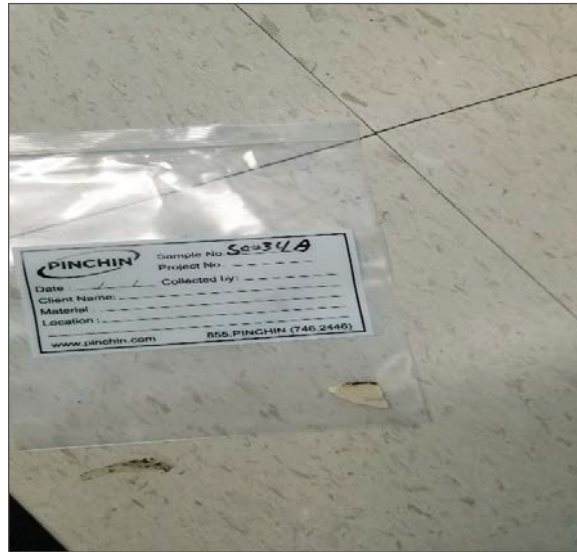
Photograph No. 9: Non-asbestos vinyl sheet flooring within the utility room Loc.53 (Rubber).



Photograph No. 12: Asbestos-containing vinyl floor tiles within the rink sound room Loc.15 (Samples 0023A-C).



Photograph No. 13: Asbestos-containing vinyl floor tiles within pool corridor and office Loc.'s 38 and 43 (Samples 0033A-C).



Photograph No. 14: Non-asbestos vinyl floor tiles within the pool corridor Loc.38 (Samples 0034A-C).



Photograph No. 15: Asbestos-containing vinyl floor tiles within the cloak room Loc.47 (Samples 0038A-C).





Photograph No. 16: Asbestos-containing vinyl floor tiles within the auditorium and adjacent rooms Loc.48 (Samples 0039A-C).



Photograph No. 17: Non-asbestos vinyl floor tiles within the corridors Loc.'s 52 and 58 (Samples 0038A-C).



Photograph No. 18: Asbestos-containing vinyl floor tiles within the staff room Loc.59 (Samples 0046A-C).



Photograph No. 19: Non-asbestos vinyl floor tiles within the mezzanine washrooms and offices (Samples 0050A-CA-C).



Photograph No. 20: Asbestos-containing vinyl floor tiles within the mezzanine board room and storage room under carpeting Loc.'s 66 and 67 (Samples 0053A-C).



Photograph No. 23: Non-asbestos black/grey mastic present on uninsulated ducting within the south crawlspace and basement (Samples 0005A-C).



Photograph No. 24: Asbestos-containing black tar mastic on ducting within the south crawlspace (Samples 0007A-C).



Photograph No. 25: Asbestos-containing black tar mastic on ducting within the south crawlspace (Samples 0009A-C).



Photograph No. 26: Asbestos-containing beige mastic present on uninsulated ducting within the south crawlspace and basement board room (Samples 0008A-C).

\\pinchin.com\wpg\Job\220000s\0220300.000 CofW,2500NESS,HAZ,ASSMT\Deliverables\220300 CofW 2055 Ness Photo Appendix for Hazardous Building Materials Assessment Oct 4 2018.docx

Template: Master Photo Appendix, HazMat, July 21, 2017



## **Hazardous Building Materials Assessment (Pre-construction)**

Expansion Project  
St. James Civic Centre  
2055 Ness Avenue,  
Winnipeg, Manitoba

Prepared for:

**City of Winnipeg**  
185 King Street, Floor 4  
Winnipeg, MB, R3B 1J1

May 23, 2023

Pinchin File: 234838.408



**Issued to:** City of Winnipeg  
**Issued on:** May 23, 2023  
**Pinchin File:** 234838.408  
**Issuing Office:** Winnipeg, MB

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Author: 

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Reviewer: 

---

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Technical Manager and Regional Practice Leader  
204.452.0983  
[ewooster@pinchin.com](mailto:ewooster@pinchin.com)



## EXECUTIVE SUMMARY

City of Winnipeg (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment at St. James Civic Centre located at 2055 Ness Avenue, Winnipeg, Manitoba. Pinchin performed the assessment on May 3, 2023.

The objective of the assessment was to identify specified hazardous building materials in preparation for building renovation activities. The proposed work as identified by the Client includes a building expansion and roof replacement.

The results of this assessment are intended for use with a properly developed scope of work or performance specifications and safe work procedures.

## SUMMARY OF FINDINGS

The following is a summary of significant findings; refer to the body of the report for detailed findings:

### Asbestos:

- Parging cement insulation on pipe fittings.
- Beige and grey 9" vinyl floor tiles.
- Terrazzo is presumed to contain asbestos.
- Black mastic on jacketing of duct insulation in the Crawlspace below the Auditorium.
- Beige mastic on ducts in the Crawlspace below the Auditorium.

### Lead:

- Lead is present in paints and coatings.
- Other application such as solder, flashings, glazing or presumed items.

Silica: Crystalline silica is present in concrete and other materials such as masonry, drywall, ceiling tiles, plaster, ceramic tiles, grout and asphalt.

Mercury: Mercury vapour is present in lamp tubes.

Polychlorinated Biphenyls (PCBs): Based on the date of construction, PCBs may be present in light ballasts. Grey caulking present at the building exterior is considered a PCB solid.

Mould and Water Damage: Visible mould and water damage was not observed.





## SUMMARY OF RECOMMENDATIONS

The following is a summary of significant recommendations; refer to the body of the report for detailed recommendations:

1. Conduct further investigation of the following items, which was not completed during this assessment:
  - a. Terrazzo, prior to disturbance; and
  - b. Any items listed as exclusions in this report, prior to disturbance.
2. Prepare a scope of work or specifications and safe work procedures for the hazardous materials removal required for the planned work.
3. Do not disturb suspected hazardous building materials discovered during the planned work, which have not been identified in this report and arrange for further evaluation and testing.
4. Remove and properly dispose of asbestos-containing materials prior to demolition or renovation activities.
5. Remove and properly dispose of PCB ballasts when fixtures are decommissioned. All PCB lamp ballasts must be removed from service and properly disposed of by December 31, 2025.
6. Remove and properly dispose of PCB caulking.
7. Recycle mercury-containing lamp tubes and thermostats when removed from service.
8. Follow appropriate safe work procedures when handling or disturbing asbestos, lead, silica, and mould.

*This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.*



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## APPENDICES

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## 1.0 INTRODUCTION AND SCOPE

City of Winnipeg (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment at St. James Civic Centre located at 2055 Ness Avenue, Winnipeg, Manitoba.

Pinchin performed the assessment on May 3, 2023. The surveyor was unaccompanied during the assessment. The assessed area was occupied at the time of the assessment.

The objective of the assessment was to identify specified hazardous building materials in preparation for building renovation activities.

The proposed work as identified by the Client includes a building expansion and roof replacement at the south wings of the building, including the Auditorium and Pool Area.

The results of this assessment are intended for use with a properly developed scope of work or performance specification.

### 1.1 Scope of Assessment

The **assessed area** is limited to the portion(s) of the building to be renovated, as described by the Client, and identified in the drawings in Appendix I.

The assessment was performed to establish the type of specified hazardous building materials, locations and approximate quantities incorporated in the structure(s) and its finishes.

For the purpose of the assessment and this report, hazardous building materials are defined as follows:

- Asbestos;
- Lead;
- Silica;
- Mercury;
- Polychlorinated Biphenyls (PCBs); and
- Mould.

## 2.0 METHODOLOGY

Pinchin conducted a room-by-room assessment to identify the hazardous building materials as defined in the scope.



The assessment included limited demolition of wall and ceiling finishes (drywall or plaster) to view concealed conditions at representative areas as permitted by the current building use. Limited destructive testing of flooring was conducted where possible (under ceramic tiles, carpets, or multiple layers of flooring). Demolition of exterior building finishes, masonry walls (chases, shafts etc.), and structural surrounds was not conducted.

Limited demolition of masonry block walls (core holes) was conducted to investigate for loose fill vermiculite insulation. Sampling of roofing materials was not conducted.

For further details on the methodology including test methods, refer to Appendix III.

### 3.0 BACKGROUND INFORMATION

#### 3.1 Building Description

Description Item	Details
Use	Recreation centre.
Number of Floors	The building is two storeys plus one level below grade.
Total Area	The assessed area is approximately 6,500 square feet.
Structure	Structural steel and concrete.
Exterior Cladding	Concrete, metal, masonry.
HVAC	Rooftop AC, boiler and hot water heating to radiators.
Roof	Flat built-up roofing.
Flooring	Vinyl floor tiles, vinyl sheet flooring, terrazzo, ceramic tile.
Interior Walls	Drywall, plaster, masonry, ceramic tile.
Ceilings	Acoustic ceiling tiles.

#### 3.2 Existing Reports

Pinchin previously prepared the following reports, which have been reviewed as part of this assessment:

- “Revision #2, Hazardous Building Materials Assessment, St. James Civic Centre, 2055 Ness Avenue, Winnipeg, Manitoba”, October 4, 2018, Prepared by Pinchin Ltd., File No. 220300.

## 4.0 FINDINGS

The following section summarizes the findings of the assessment and provides a general description of the hazardous building materials identified. For details on approximate quantities, condition, friability, accessibility, and locations of hazardous building materials; refer to the Hazardous Material Summary / Sample Log and All Data Report in Appendices V and VI.

Any quantities listed in this report or data tables are estimated based on visual approximations only and are subject to variation.

### 4.1 Asbestos

#### 4.1.1 Spray-Applied Insulation

Spray-applied insulation present on the structure throughout the pool area (Location 16) does not contain asbestos (2018 analysis).

New non-asbestos spray-applied insulation is present on the structure in the Auditorium.



V0000 (None), Structure, Beam, Deck, Acoustic spray, Auditorium (Location #: 1)



V0000 (None), Structure, Fireproofing, Pool Exterior Walls (Location #: 16)

#### 4.1.2 Texture Finishes (Decorative)

Texture finish wall in the Pool Area (Location 16) does not contain asbestos (samples S0011A-B and 2018 analysis).



S0011A (None), Wall, Texture Coat, Pool Exterior Walls  
(Location #: 16)

#### 4.1.3 Pipe Insulation

Parging cement, containing asbestos, is present on pipe fittings (elbows, valves, tees, hangers etc.), in the assessed area (2018 analysis).

Remaining pipes in the assessed area are either uninsulated or insulated with non-asbestos fiberglass.

Pipes insulated with asbestos-containing insulations may be present in inaccessible spaces such as above solid ceilings, in chases, in column enclosures and within shafts.



V9000 (Confirmed Asbestos), Piping, Parging Cement, Stage  
(Location #: 2)

#### 4.1.4 Duct Insulation and Mastic

Ducts are either uninsulated or insulated with non-asbestos fiberglass (foil-faced).

Grey and black duct mastic present at seams / joints on the exterior of ducts throughout the assessed area does not contain asbestos (2018 analysis).



V0000 (None), Duct, Mastic, Grey,  
Storage Room (Location #: 3)



V0000, (None), Duct, blackish grey mastic,  
Crawlspace (Location # 20)

#### 4.1.5 Mechanical Equipment Insulation

Mechanical equipment (tank) is uninsulated.

#### 4.1.6 Vermiculite

Destructive testing was conducted of a representative selection of masonry block walls, including creating penetrations at 12 locations. The locations of destructive testing have been indicated on the drawings in Appendix I.

Loose fill vermiculite was not observed within the cavities.

#### 4.1.7 Acoustic Ceiling Tiles

Ceiling tiles were determined to be non-asbestos by analysis (2018 analysis) or presumed to be non-asbestos based on the date of manufacture determined from the date stamp applied to the top of the tiles or by the composition of the tiles (gypsum). The tiles with date codes were manufactured after asbestos stopped being used in acoustic ceiling tiles.



V0000 (None), Ceiling, Ceiling Tiles (lay-in), Men's Washroom  
(Location #: 10)



V0000 (None), Ceiling, Ceiling Tiles (lay-in),  
Kitchen (Location #: 9)

#### 4.1.8 Plaster

Plaster present on walls throughout the assessed area does not contain asbestos (samples S0002A-B and 2018 analysis).



S0002A (None), Wall, Plaster, Stage (Location #: 2)

#### 4.1.9 Drywall Joint Compound

Drywall joint compound present on wall finishes throughout the assessed area does not contain asbestos (samples S0006A-B and 2018 analysis).

#### 4.1.10 Vinyl Sheet Flooring and Skate Matting

Vinyl sheet flooring and skate matting throughout the assessed area does not contain asbestos (2018 analysis or has been newly installed since the 2018 survey).





V0000 (None), Floor, Vinyl Sheet Flooring, Stairway To Stage  
(Location #: 5)



V0000 (None), Floor, Matt Flooring,  
Foyer (Location #: 15)

#### 4.1.11 Vinyl Floor Tiles and Baseboards

Beige and grey 9" vinyl floor tiles, in the assessed area contain asbestos (2018 analysis).

Beige 12" vinyl floor tiles do not contain asbestos (2018 analysis).

Adhesive behind tan, beige and black baseboards does not contain asbestos (Samples S0001A-C, S0004A-C and S0005A-C).



V9000 (Confirmed Asbestos), Floor, Vinyl Floor Tile and  
Mastic, Auditorium (Location #: 1)



S0001B (None), Wall, Base, Adhesive/mastic, Auditorium  
(Location #: 1)

#### 4.1.12 Caulking

Grey, beige and black caulking at window frames, on the building exterior and roof does not contain asbestos (samples S0009A-C, S0012A-C and 2018 analysis).



S0012A (None), Wall, Caulking,  
Exterior Of Building (Location #: 19)



S0009C (None), Other, Caulking,  
Foyer (Location #: 15)

#### 4.1.13 Roofing Products

Built-up roofing materials does not contain asbestos (2018 analysis).

#### 4.1.14 Other Building Materials

Tar paper located above the metal deck found at a pipe penetration does not contain asbestos (samples S0003A-C).

Thin-set under ceramic tiles does not contain asbestos (samples S0007A-C and S0010A-C).

Butyl tape at window frames does not contain asbestos (samples S0008A-C).

Terrazzo located at the Main Lobby is presumed to contain asbestos.



S0003C (None), Other, Tar Paper,  
Storage Room (Location #: 3)



S0007C (None), Wall, Base,  
Thin-Set Behind, Foyer (Location #: 15)

#### 4.1.15 Excluded Materials

The following is a list of materials which may contain asbestos and was excluded from the assessment. These materials are presumed to contain asbestos until otherwise proven by sampling and analysis:


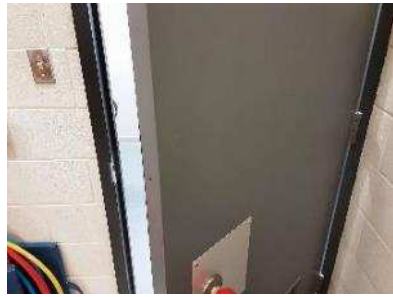
- Floor levelling compound;
- Electrical components; and
- Sealants on pipe threads.

## 4.2 Lead

### 4.2.1 Paints and Surface Coatings

The following table summarizes the analytical results of paints sampled.

Sample Number	Colour, Substrate Description	Sample Location	Lead (%)	Photo
L0001	Light grey, plater	Auditorium (Loc. 1)	0.0047	
L0002	Brown, plaster	Stage (Loc. 2)	0.32	
L0003	Grey, drywall	Kitchen (Loc. 12)	0.0072	

Sample Number	Colour, Substrate Description	Sample Location	Lead (%)	Photo
2018 Analysis	White, drywall	Stairway to Stage	<0.0047	
2018 Analysis	Grey, wood door, black paint has been applied over the door in several locations since the 2018 survey	Storage Room (Loc. 3)	<b>0.28</b>	

Results above 0.009% (90 mg/kg) are considered lead-containing.

#### 4.2.2 Lead Products and Applications

Lead products were not found during the assessment.

#### 4.2.3 Excluded Lead Materials

Lead is known to be present in several materials which were not assessed or sampled. The following materials, where found, should be presumed to contain lead:

- Electrical components, including wiring connectors, grounding conductors, and solder;
- Solder on pipe connections; and
- Glazing on ceramic tiles.

### 4.3 Silica

Crystalline silica is assumed to be a component of the following materials where present in the building.

- Concrete;
- Masonry and mortar;
- Ceramic tiles and grout;
- Plaster;

- Drywall;
- Ceiling tiles; and
- Asphalt.

#### **4.4 Mercury**

##### *4.4.1 Lamps*

Mercury vapour is present in fluorescent lamp tubes.

##### *4.4.2 Mercury-Containing Devices*

Mercury-containing devices were not found during the assessment.

#### **4.5 Polychlorinated Biphenyls**

##### *4.5.1 Caulking and Sealants*

Black caulking is present at window and door frames at the Main Entrance (sample P0001) and contains <0.2 mg/kg PCBs. The material is a non-PCB solid based on the threshold (50 mg/kg).

Grey caulking is present at the building exterior (sample P0002) and contains 58 mg/kg PCBs. The material is considered a PCB solid based on the threshold (50 mg/kg).



P0001 (PCB), Wall, Grey Caulking, Exterior Of Building  
(Location #: 19)



P0002 (None), Caulking, Foyer  
(Location #: 15)

##### *4.5.2 Lighting Ballasts*

The building has not been comprehensively re-lamped with energy efficient light fixtures (evidence of T-12 fixtures, and as such, a percentage of light ballasts may be manufactured prior to 1980 and may contain PCBs.



#### 4.5.3 Transformers

Transformers were not found during the assessment.

#### 4.5.4 Excluded PCB Materials

PCBs are known to be present in several materials and equipment which were not assessed or sampled. The following materials, where found, should be presumed to contain PCBs until sampling proves otherwise:

- Capacitors within or associated with electrical equipment;
- Oil impregnated cables;
- High voltage electrical terminals (potheads) and bushings;
- Voltage regulators and capacitors; and
- Paints.

### 4.6 Mould and Water Damage

Visible mould growth and water damage was not found during the assessment.

## 5.0 RECOMMENDATIONS

### 5.1 General

1. Prepare scope of work or performance specifications for hazardous material removal required for the planned work. The specifications should include safe work practices, personal protective equipment, respiratory protection, and disposal of waste materials.
2. If suspected hazardous building materials are discovered during the planned work, which are not identified in this report, do not disturb, and arrange for further testing and evaluation.
3. Conduct further investigation of the following items, areas, or locations, which were not completed during this assessment:
  - a. Terrazzo, prior to disturbance.
  - b. Any items listed as exclusions in this report, prior to disturbance.
4. Provide this report and the detailed plans and specifications to the contractor prior to bidding or commencing work.



5. Retain a qualified consultant to specify, observe and document the successful removal of hazardous materials.
6. Update the asbestos inventory upon completion of the abatement and removal of asbestos-containing materials and any other relevant findings.

## **5.2 Building Renovation Work**

The following recommendations are made regarding renovation involving the hazardous materials identified.

### *5.2.1 Asbestos*

Remove asbestos-containing materials (ACM) prior to renovation, alteration, or maintenance if ACM may be disturbed by the work. If the identified ACM will not be removed prior to commencement of the work, any potential disturbance of ACM must follow asbestos precautions appropriate for the type of work being performed.

Asbestos-containing materials must be disposed of at a landfill approved to accept asbestos waste.

### *5.2.2 Lead*

Construction disturbance of lead in paint and coatings (or other materials) may result in exposure to lead dust or fumes and safe work procedures are required. Project specific work procedures, engineering controls and personal protective equipment will need to be assessed and developed as per applicable regulations and guidelines.

Items painted with paints containing elevated levels of lead may be a hazardous waste. Test lead-painted materials for leachable lead and other metals prior to disposal. Metallic components coated with lead paint do not require leachate testing and can be disposed of as non-hazardous construction and demolition (C&D) waste.

Lead-containing items should be recycled when taken out of service.

### *5.2.3 Silica*

Construction disturbance of silica-containing products may result in excessive exposures to airborne silica, especially if performed indoors and dry. Cutting, grinding, drilling or demolition of materials containing silica should be completed only with proper respiratory protection and other worker safety precautions that comply with applicable regulations and guidelines.



#### 5.2.4 Mercury

Do not break lamps. Recycle and reclaim mercury from fluorescent lamps when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with applicable regulations.

#### 5.2.5 PCBs

As light fixtures are removed from service, examine light ballasts for PCB content. If ballasts are not clearly labelled as “non-PCB” or are suspected to contain PCBs, package, and ship ballasts for destruction at a federally permitted facility. As per the PCB Regulation (SOR/2008-273), all PCB light ballasts must be removed from service and properly disposed of by December 31, 2025.

Remove PCB caulking prior to building demolition. PCB caulking is a hazardous waste, package, and ship for destruction at a federally permitted facility.

## 6.0 TERMS AND LIMITATIONS

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

## 7.0 REFERENCES

The following legislation and documents were referenced in completing the assessment and this report:

1. Workplace Safety and Health Hazard Regulation (Manitoba Regulation 217/2006), under the Workplace Safety and Health Act.
2. Manitoba Regulation MR 474/88, Manitoba PCB Storage Site Regulation made under The Dangerous Goods Handling and Transportation Act.
3. Guide for Asbestos Management – Safe Work Manitoba.
4. Guideline Managing Demolition Debris Containing Hazardous Materials – Environmental Enforcement and Compliance Branch – Manitoba Conservation and Climate
5. Guidelines for the Investigation, Assessment, & Remediation of Mould In Workplaces, Safe Work Manitoba.



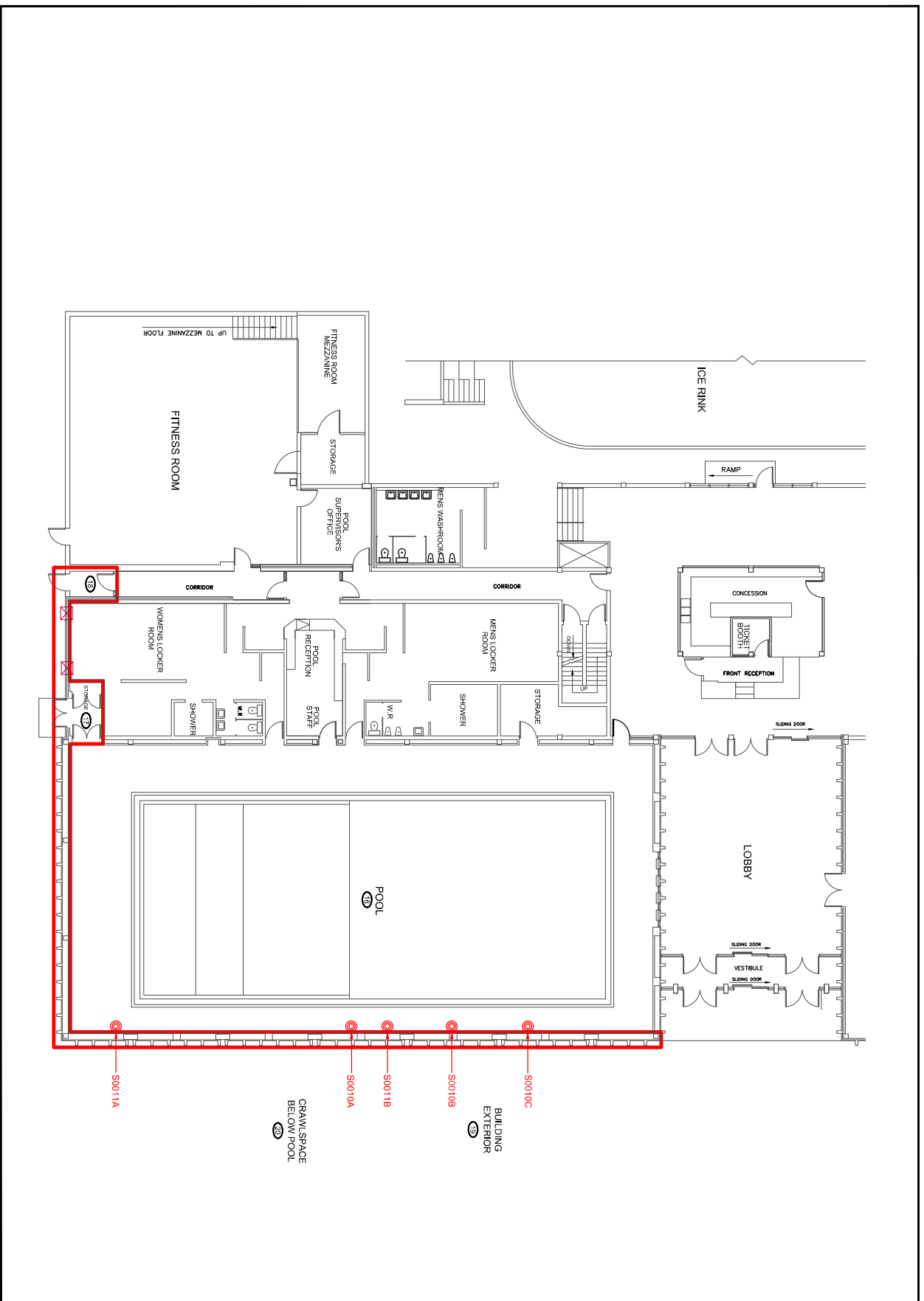


6. PCB Regulations, SOR/2008-273, Canadian Environmental Protection Act.
7. Surface Coating Materials Regulations, SOR/2016-193, Canada Consumer Product Safety Act.
8. Consolidated Transportation of Dangerous Goods Regulations, including Amendment SOR/2019-101, Transportation of Dangerous Goods Act.
9. Mould Guidelines for the Canadian Construction Industry, Standard Construction Document CCA 82 – 2004 (Revised 2018), Canadian Construction Association.

\\pinchin.com\wpg\Job\234000s\0234838.000 COW,2019AnnualServices,HAZ,Consult\0234838.408 COW,2055Ness,HAZ,ASMT\Deliverables\234838.408 HBMA Report, St. James Civic Centre, 2055 Ness Ave, Wpg, MB, COW, May 23, 2023.docx

Template: Master Report for Hazardous Materials Assessment (Pre-Construction), HAZ, October 31, 2022

**APPENDIX I**  
**Drawings**

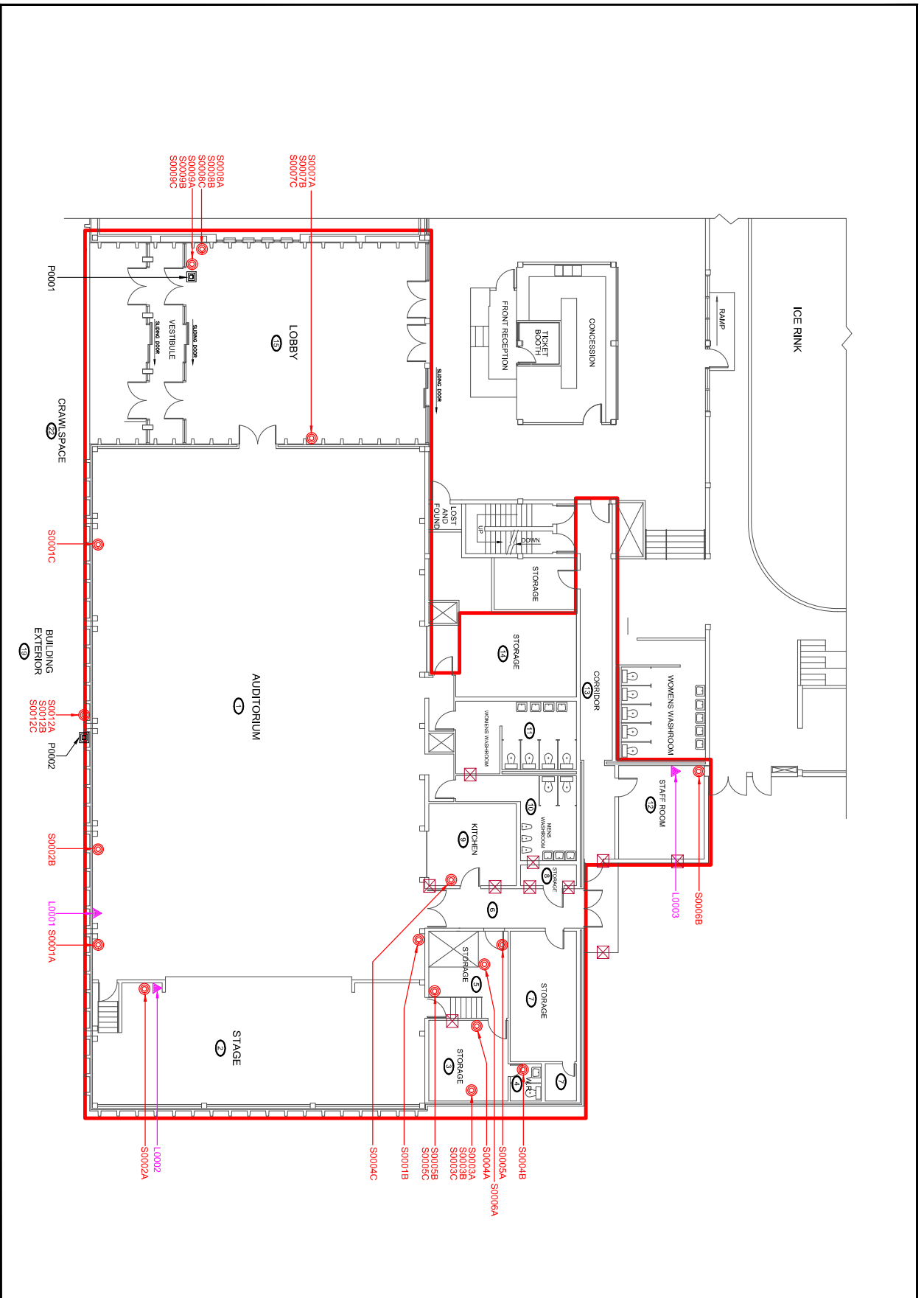


- LEGEND**
- ① PINCHIN LOCATION NUMBER
  - ⊙ ASBESTOS BULK SAMPLE
  - ⊗ BLOCK/WALL INSPECTION OPENINGS
  - ASSESSED AREA

NOT ALL KNOWN OR SUSPECTED ASBESTOS MAY BE IDENTIFIED ON THIS DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE HAZARDOUS BUILDING MATERIALS LEGEND IS COLOUR DEPENDENT. THIS DRAWING IS NOT TO SCALE. INTERPRETATION: BASE PLAN PROVIDED BY CLIENT.



PROJECT NAME:	HAZARDOUS BUILDING MATERIALS ASSESSMENT
CLIENT NAME:	CITY OF WINNIPEG
PROJECT LOCATION:	ST. JAMES CIVIC CENTRE 2055 NESS AVENUE, WINNIPEG, MANITOBA
FIGURE NAME:	POOL
PROJECT NUMBER:	234638.408
DRAWN BY:	BPC
DATE:	MAY 18/23
REVIEWED BY:	CS
FIGURE NUMBER:	1 OF 2
SCALE:	NOT TO SCALE



<b>PROJECT NAME:</b> HAZARDOUS BUILDING MATERIALS ASSESSMENT CITY OF WINNIPEG	
<b>CLIENT NAME:</b> ST. JAMES CIVIC CENTRE 2055 NESS AVENUE, WINNIPEG, MANITOBA	
<b>PROJECT LOCATION:</b> AUDITORIUM	
<b>FIGURE NAME:</b> AUDITORIUM	
<b>PROJECT NUMBER:</b> 234638.408	<b>SCALE:</b> NOT TO SCALE
<b>DRAWN BY:</b> BPC	<b>REVIEWED BY:</b> CS
<b>DATE:</b> MAY 18/23	<b>FIGURE NUMBER:</b> Z OF Z

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE IDENTIFIED IN THIS ASSESSMENT. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF IDENTIFIED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. INTERPRETATION MAY VARY. INTERPRETATION BASE PLAN PROVIDED BY CLIENT.

**APPENDIX II-A**  
**Asbestos Analytical Certificates**



## Pinchin Ltd. Asbestos Laboratory *Certificate of Analysis*

**Project No.:** 0234838.408  
**Prepared For:** C. Smithson

**Lab Reference No.:** b291076  
**Analyst(s):** Y. Yan

<b>Date Received:</b>	<b>May 5, 2023</b>	<b>Samples Submitted:</b>	<b>33</b>
<b>Date Analyzed:</b>	<b>May 10, 2023</b>	<b>Phases Analyzed:</b>	<b>44</b>

---

The Pinchin Ltd. Dartmouth asbestos laboratory is accredited by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NVLAP Lab Code 201032-0) for the 'EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, ' and the 'EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials'; and meets all requirements of ISO/IEC 17025:2017. The Pinchin asbestos laboratory uses the aforementioned methods of analysis.

Bulk samples are checked visually and scanned under a stereomicroscope. Slides are prepared and observed under a Polarized Light Microscope (PLM) at magnifications of 40X, 100X or 400X as appropriate. Asbestos fibres are identified by a combination of morphology, colour, refractive index, extinction, sign of elongation, birefringence and dispersion staining colours. A visual estimate is made of the percentage of asbestos present. A reported concentration of less than (<) the regulatory threshold indicates the presence of confirmed asbestos in trace quantities, limited to only a few fibres or fibre bundles in an entire sample. This method complies with provincial regulatory requirements where applicable. Multiple phases within a sample are analyzed and reported separately.

All bulk samples submitted to this laboratory for asbestos analysis are retained for a minimum of three months. Samples may be retrieved, upon request, for re-examination at any time during that period.

This report relates only to the items tested.

*This report relates only to the items tested and is valid only when signed with a protected, authorized, electronic signature. This report may not be reproduced, except in full, without the written approval of Pinchin Ltd. The client may not use this report to claim product endorsement by NVLAP or any agency of the U.S. Government. Internal verification studies, quality assurance / control data and laboratory documentation on measurement uncertainty are available upon request.*



## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project No.:** 0234838.408  
**Prepared For:** C. Smithson

**Lab Reference No.:** b291076  
**Date Analyzed:** May 10, 2023

### BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0001A Wall, Base, Adhesive/mastic, Tan Baseboard, Loc:1, Auditorium	Homogeneous, off-white, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample.		
S0001B Wall, Base, Adhesive/mastic, Tan Baseboard, Loc:1, Auditorium	Homogeneous, off-white, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample.		
S0001C Wall, Base, Adhesive/mastic, Tan Baseboard, Loc:1, Auditorium	Homogeneous, off-white, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample.		
S0002A Wall, Plaster, Loc:2, Stage	2 Phases: a) Homogeneous, peach, hard, cementitious, plaster base coat. b) Homogeneous, white, hard, cementitious, plaster top coat.	None Detected  None Detected	Non-Fibrous Material > 75%  Non-Fibrous Material > 75%
S0002B Wall, Plaster, Loc:1, Auditorium	2 Phases: a) Homogeneous, peach, hard, cementitious, plaster base coat debris. b) Homogeneous, white, hard, cementitious, plaster top coat.	None Detected  None Detected	Hair 1-5% Non-Fibrous Material > 75%  Non-Fibrous Material > 75%
Comments:	Phase a) of this sample is small in size. For more reliable results, a larger sample is required.		



**Pinchin Ltd. Asbestos Laboratory  
Certificate of Analysis**

**Project No.:** 0234838.408  
**Prepared For:** C. Smithson

**Lab Reference No.:** b291076  
**Date Analyzed:** May 10, 2023

**BULK SAMPLE ANALYSIS**

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0003A Tar Paper, Tar Paper Found At Pipe Penetration Through Deck, Loc:3, Storage Room	3 Phases: a) Homogeneous, black, tar material.	None Detected	Tar and other Non- Fibrous Material > 75%
	b) Homogeneous, black, tar-impregnated, compressed, fibrous material.	None Detected	Cellulose 50-75% Tar and other Non- Fibrous Material 25-50%
	c) Homogeneous, black, tar material.	None Detected	Tar and other Non- Fibrous Material > 75%
Comments:	Drywall and paper backing are present on the surface of this sample.		
S0003B Tar Paper, Tar Paper Found At Pipe Penetration Through Deck, Loc:3, Storage Room	3 Phases: a) Homogeneous, black, tar material.	None Detected	Tar and other Non- Fibrous Material > 75%
	b) Homogeneous, tar- impregnated, compressed, fibrous material.	None Detected	Cellulose 50-75% Tar and other Non- Fibrous Material 25-50%
	c) Homogeneous, black, tar material.	None Detected	Tar and other Non- Fibrous Material > 75%





## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project No.:** 0234838.408  
**Prepared For:** C. Smithson

**Lab Reference No.:** b291076  
**Date Analyzed:** May 10, 2023

### BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0003C Tar Paper, Tar Paper Found At Pipe Penetration Through Deck, Loc:3, Storage Room	4 Phases:		
	a) Homogeneous, black, tar-impregnated, compressed, fibrous material.	None Detected	Cellulose 25-50% Tar and other Non-Fibrous Material 50-75%
	b) Homogeneous, black, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
	c) Homogeneous, black, tar-impregnated, compressed, fibrous material.	None Detected	Cellulose 50-75% Tar and other Non-Fibrous Material 25-50%
	d) Homogeneous, black, tar material.	None Detected	Tar and other Non-Fibrous Material > 75%
S0004A Wall, Base, Adhesive/mastic, Black Baseboard, Loc:3, Storage Room	Homogeneous, brown, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample.		
S0004B Wall, Base, Adhesive/mastic, Loc:4, Washroom	Homogeneous, brown, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample.		
S0004C Wall, Base, Adhesive/mastic, Loc:9, Kitchen	Homogeneous, yellow, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample.		



## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project No.:** 0234838.408  
**Prepared For:** C. Smithson

**Lab Reference No.:** b291076  
**Date Analyzed:** May 10, 2023

### BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0005A Wall, Base, Adhesive/mastic, Loc:5, Stairway To Stage	Homogeneous, yellow, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample.		
S0005B Wall, Base, Adhesive/mastic, Loc:5, Stairway To Stage	Homogeneous, yellow, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample. Another phase is present but there was insufficient material submitted to analyze.		
S0005C Wall, Base, Adhesive/mastic, Loc:5, Stairway To Stage	Homogeneous, yellow, adhesive material.	None Detected	Non-Fibrous Material > 75%
Comments:	Rubber baseboard is present on the surface of this sample.		
S0006A Wall, Drywall And Joint Compound, Loc:5, Stairway To Stage	Homogeneous, white, drywall joint compound.	None Detected	Non-Fibrous Material > 75%
S0006B Wall, Drywall And Joint Compound, Loc:12, Kitchen	Homogeneous, white, drywall joint compound.	None Detected	Non-Fibrous Material > 75%
Comments:	This sample is small in size. For more reliable results, a larger sample is required.		
S0007A Wall, Base, Cement Product, Setting Compound, Loc:15, Foyer	Homogeneous, dark grey, hard, cementitious material.	None Detected	Non-Fibrous Material > 75%
S0007B Wall, Base, Cement Product, Setting Compound, Loc:15, Foyer	Homogeneous, dark grey, hard, cementitious material.	None Detected	Non-Fibrous Material > 75%



## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project No.:** 0234838.408  
**Prepared For:** C. Smithson

**Lab Reference No.:** b291076  
**Date Analyzed:** May 10, 2023

### BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0007C Wall, Base, Cement Product, Setting Compound, Loc:15, Foyer	Homogeneous, dark grey, hard, cementitious material.	None Detected	Non-Fibrous Material > 75%
S0008A Window, Tape, Butyl Tape, Loc:15, Foyer	Homogeneous, black, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0008B Window, Tape, Butyl Tape, Loc:15, Foyer	Homogeneous, black, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0008C Window, Tape, Butyl Tape, Loc:15, Foyer	Homogeneous, black, rubbery, caulking material.	None Detected	Non-Fibrous Material > 75%
S0009A Caulking, Loc:15, Foyer	Homogeneous, black, soft, sticky, caulking material.	None Detected	Non-Fibrous Material > 75%
S0009B Caulking, Loc:15, Foyer	Homogeneous, black, soft, sticky, caulking material.	None Detected	Non-Fibrous Material > 75%
S0009C Caulking, Loc:15, Foyer	Homogeneous, black, soft, sticky, caulking material.	None Detected	Non-Fibrous Material > 75%
S0010A Wall, Ceramic Tiles, Setting Compound, Loc:16, Pool Exterior Walls	Homogeneous, grey, granular, cementitious material.	None Detected	Non-Fibrous Material > 75%
Comments:	This sample is small in size. For more reliable results, a larger sample is required. Ceramic tile is present on the surface of this sample.		
S0010B Wall, Ceramic Tiles, Setting Compound, Loc:16, Pool Exterior Walls	Homogeneous, grey, granular, cementitious material.	None Detected	Non-Fibrous Material > 75%
Comments:	This sample is small in size. For more reliable results, a larger sample is required. Ceramic tile is present on the surface of this sample.		



## Pinchin Ltd. Asbestos Laboratory Certificate of Analysis

**Project No.:** 0234838.408  
**Prepared For:** C. Smithson

**Lab Reference No.:** b291076  
**Date Analyzed:** May 10, 2023

### BULK SAMPLE ANALYSIS

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0010C Wall, Ceramic Tiles, Setting Compound, Loc:16, Pool Exterior Walls	Homogeneous, grey, granular, cementitious material.	None Detected	Non-Fibrous Material > 75%
Comments:	This sample is small in size. For more reliable results, a larger sample is required. Ceramic tile is present on the surface of this sample.		
S0011A Wall, Texture Coat, Loc:16, Pool Exterior Walls	2 Phases: a) Homogeneous, grey, consolidated material.  b) Homogeneous, white, hard, cementitious material.	None Detected  None Detected	Man-Made Vitreous Fibres 1-5% Non-Fibrous Material > 75%  Non-Fibrous Material > 75%
Comments:	Man-made vitreous fibres are present on the back of this sample.		
S0011B Wall, Texture Coat, Loc:16, Pool Exterior Walls	2 Phases: a) Homogeneous, grey, consolidated material.  b) Homogeneous, white, hard, cementitious material.	None Detected  None Detected	Man-Made Vitreous Fibres 1-5% Non-Fibrous Material > 75%  Non-Fibrous Material > 75%
Comments:	Man-made vitreous fibres are present on the surface of this sample.		
S0012A Wall, Caulking, Grey, Loc:19, Exterior Of Building	Homogeneous, light grey, caulking material.	None Detected	Non-Fibrous Material > 75%
Comments:	Foam is present on the surface of this sample.		
S0012B Wall, Caulking, Grey, Loc:19, Exterior Of Building	Homogeneous, light grey, caulking material.	None Detected	Non-Fibrous Material > 75%
Comments:	Foam is present on the surface of this sample.		



**Pinchin Ltd. Asbestos Laboratory**  
***Certificate of Analysis***

**Project No.:** 0234838.408  
**Prepared For:** C. Smithson

**Lab Reference No.:** b291076  
**Date Analyzed:** May 10, 2023

**BULK SAMPLE ANALYSIS**

SAMPLE IDENTIFICATION	SAMPLE DESCRIPTION	% COMPOSITION (VISUAL ESTIMATE)	
		ASBESTOS	OTHER
S0012C Wall, Caulking, Grey, Loc:19, Exterior Of Building	Homogeneous, light grey, caulking material.	None Detected	Non-Fibrous Material > 75%

**Reviewed by:**

Jason Stapleton  
2023.05.10 15:38:29-03'00'

**Reporting Analyst:**

Yewen Yan  
2023.05.10 14:57:59-03'00'

Analyzed by: xy  
 Reviewed by: js  
 Report Sent by: \_\_\_\_\_

**Pinchin Ltd. - Asbestos Laboratory  
 Internal Asbestos Bulk Sample Chain of Custody**

<b>Client Name:</b>		<b>Project Address:</b>	Winnipeg, Manitoba
<b>Portfolio/Building No:</b>		<b>Pinchin File:</b>	0234838.408
<b>Submitted by:</b>	Chris Smithson	<b>Email:</b>	csmithson@pinchin.com
<b>CC Results to:</b>		<b>CC Email:</b>	
<b>Date Submitted:</b>	May 04 2023	<b>Required by:</b>	Month Day
<b># of Samples:</b>	33	<b>Priority:</b>	5 Day Turnaround
<b>Year of Building Construction (Mandatory, Years ONLY):</b>			
<b>Do NOT Stop on Positive (Sample Numbers):</b>			
<b>Pinchin Group Company (Mandatory Field):</b> Pinchin			
<b>HMIS2 Building Reference #:</b> 119663/20234318598436			

<b>To be Completed by Lab Personnel Only:</b>			
<b>Lab Reference #:</b>	b291076	<b>Time:</b>	24 hour clock
<b>Received by:</b>	NGermow MAY 05 2023	<b>Date:</b>	Month Day Year
<b>Name(s) of Analyst(s):</b> Y. Yan			

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
S	0001	A	Wall,Base,Adhesive/mastic,Tan Baseboard,Loc:1,Auditorium ND
S	0001	B	Wall,Base,Adhesive/mastic,Tan Baseboard,Loc:1,Auditorium ND
S	0001	C	Wall,Base,Adhesive/mastic,Tan Baseboard,Loc:1,Auditorium ND
S	0002	A	Wall,Plaster,Loc:2,Stage a)ND b)ND
S	0002	B	Wall,Plaster,Loc:1,Auditorium a)ND b)ND
S	0003	A	Tar Paper,Tar Paper Found At Pipe Penetration Through Deck,Loc:3,Storage Room a)ND b)ND c)ND
S	0003	B	Tar Paper,Tar Paper Found At Pipe Penetration Through Deck,Loc:3,Storage Room a)ND b)ND c)ND
S	0003	C	Tar Paper,Tar Paper Found At Pipe Penetration Through Deck,Loc:3,Storage Room a)ND b)ND c)ND d)ND

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Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)	
S	0004	A	Wall,Base,Adhesive/mastic,Black Baseboard,Loc:3,Storage Room	ND
S	0004	B	Wall,Base,Adhesive/mastic,Loc:4,Washroom	ND
S	0004	C	Wall,Base,Adhesive/mastic,Loc:9,Kitchen	ND
S	0005	A	Wall,Base,Adhesive/mastic,Loc:5,Stairway To Stage	ND
S	0005	B	Wall,Base,Adhesive/mastic,Loc:5,Stairway To Stage	ND
S	0005	C	Wall,Base,Adhesive/mastic,Loc:5,Stairway To Stage	ND
S	0006	A	Wall,Drywall And Joint Compound,Loc:5,Stairway To Stage	ND
S	0006	B	Wall,Drywall And Joint Compound,Loc:12,Kitchen	ND
S	0007	A	Wall,Base,Cement Product,Setting Compound,Loc:15,Foyer	ND
S	0007	B	Wall,Base,Cement Product,Setting Compound,Loc:15,Foyer	ND
S	0007	C	Wall,Base,Cement Product,Setting Compound,Loc:15,Foyer	ND
S	0008	A	Window,Tape,Butyl Tape,Loc:15,Foyer	ND
S	0008	B	Window,Tape,Butyl Tape,Loc:15,Foyer	ND
S	0008	C	Window,Tape,Butyl Tape,Loc:15,Foyer	ND
S	0009	A	Caulking,Loc:15,Foyer	ND
S	0009	B	Caulking,Loc:15,Foyer	ND

Sample Prefix	Sample No.	Sample Suffix	Sample Description/Location (Mandatory)
S	0009	C	Caulking, Loc:15, Foyer ND
S	0010	A	Wall, Ceramic Tiles, Setting Compound, Loc:16, Pool Exterior Walls ND
S	0010	B	Wall, Ceramic Tiles, Setting Compound, Loc:16, Pool Exterior Walls ND
S	0010	C	Wall, Ceramic Tiles, Setting Compound, Loc:16, Pool Exterior Walls ND
S	0011	A	Wall, Texture Coat, Loc:16, Pool Exterior Walls a) ND b) ND
S	0011	B	Wall, Texture Coat, Loc:16, Pool Exterior Walls a) ND b) ND
S	0012	A	Wall, Caulking, Grey, Loc:19, Exterior Of Building ND
S	0012	B	Wall, Caulking, Grey, Loc:19, Exterior Of Building ND
S	0012	C	Wall, Caulking, Grey, Loc:19, Exterior Of Building ND



**APPENDIX II-B**  
**Lead Analytical Certificates**



# Analysis for Lead Concentration in Paint Chips

by Flame Atomic Absorption Spectroscopy  
EPA SW-846 3050B/6010C/7000B



**Customer:** Pinchin Ltd.  
54 Terracon Place  
Winnipeg, MB R2J 4G7

**Attn:** Chris Smithson

**Lab Order ID:** 10023090

**Analysis:** PBP

**Date Received:** 05/10/2023

**Date Reported:** 05/16/2023

**Project:** 234838.408

Sample ID	Description	Mass (g)	Concentration (ppm)	Concentration (% by weight)
Lab Sample ID	Lab Notes			
L0001	Wall, Plaster, Light Grey, Loc:1, Auditorium	0.1265	47	0.0047%
10023090_0001				
L0002	Wall, Plaster, Brown Paint, Loc:2, Stage	0.0628	3200	0.32%
10023090_0002				
L0003	Wall, Drywall And Joint Compound, Grey, Loc:12, Kitchen	0.0554	<72	<0.0072%
10023090_0003				

Disclaimer: Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA ELPAT program. ELPAT Laboratory ID: 173190. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request. The quality control samples run with the samples in this report have passed all EPA required specifications unless otherwise noted. RL: (Report Limit for an undiluted 50ml sample is 4µg Total Pb).

Matthew Caffey (3)

Analyst

Approved Signatory

16023090

Version 1-15-2012

<b>Client:</b>	Pinchin Ltd.	<b>Instructions:</b> Use Column "B" for your contact info  To See an Example Click the bottom Example Tab.  <b>3</b> Begin Samples with a "<<" above the first sample and end with a ">>" below the last sample. Only Enter your data on the first sheet "Sheet1"  Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.
<b>Contact:</b>	Chris Smithson	
<b>Address:</b>	Winnipeg, MB	
<b>Phone:</b>	204.452.0983	
<b>Email:</b>	<a href="mailto:csmithson@pinchin.com">csmithson@pinchin.com</a>	
<b>Project:</b>	234838.408	
<b>Client Notes:</b>		
<b>P.O. #:</b>	0234838.408	
<b>Date Submitted:</b>	05-04-2023	
<b>Analysis:</b>	Paint Chips Flame AA	
<b>TurnAroundTime:</b>	4 Day	

**Scientific Analytical Institute**



4604 Dundas Dr.  
Greensboro, NC 27407  
Phone: 336.292.3888  
Fax: 336.292.3313  
Email: [lab@saiiab.com](mailto:lab@saiiab.com)



<<	L0001	Wall, Plaster, Light Grey, Loc:1, Auditorium
	L0002	Wall, Plaster, Brown Paint, Loc:2, Stage
	L0003	Wall, Drywall And Joint Compound, Grey, Loc:12, Kitchen
>>		

*Jgr 5/10*  
*10:30 a*

Accepted

Rejected

**APPENDIX II-C**  
**PCB Analytical Certificates**

## Certificate of Analysis

Chris Smithson

Pinchin Ltd. (Winnipeg)  
54 Terracon Place, Winnipeg, MB R2J 4G7

Date of Issue: May 12, 2023

**Report Description:** 2 solid samples were submitted for the following chemical analysis

**Project Name:** Haz Assessment  
**Project No.:** 234838.408  
**Site Location:**

**Date Sampled:** May 01, 2023  
**Date Tested:** May 11, 2023  
**Sampled by:** Chris S

### Report Number: 23-0612

No.	Analyte	Result	Units	MDL	Comments	Technique / Test Method
1	<u>Sample ID.:</u> P0001 Black, Loc:15, Foyer PCBs in Solid	<0.2	mg/kg	0.2		LAB-M06 (EPA 3550C/8082A modified)
2	<u>Sample ID.:</u> P0002 Grey, Loc:19, Exterior Of Building PCBs in Solid	58	mg/kg	0.2		LAB-M06 (EPA 3550C/8082A modified)

Results relate only to the samples tested above, as received.

Approved By:

**Son C.H. Le, (Chem.)**  
Lab Manager  
Phone: (519) 740-1333 Ext.: 1030  
Fax: (519) 740-2320  
Email: SonLe@aevitas.ca

The Analytical Chemistry Laboratory of Aevitas Inc. (Ayr) is accredited for specific tests in accordance with the recognized International Standard ISO/IEC 17025:2017, by the Canadian Association for Laboratory Accreditation (CALA) Inc. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017). The laboratory quality management system of Aevitas Inc. (Ayr) also operates in accordance with the principles of ISO 9001.

All Analytical data is subject to uncertainty which, may vary with sample matrices, sample preparation techniques and instrumental parameters. As a general guideline, uncertainty may be expressed as approximately +/- 50% of the reported value at or near the Method Detection Limit (MDL) and +/-10% or less, of the reported result that is greater than 10 times the MDL. Method Detection Limits are defined as approximately 3 times the standard deviation value (at 99% confidence level), which is obtained from replicate analysis of a low-level standard as per the Ontario MOE - MISA Protocol for the Sampling and Analysis of Industrial / Municipal Wastewater (2016). MDL determination is based on undiluted samples with relatively low matrix interferences. Where dilutions are required, the reported MDL value will be scaled proportionally.

All testing procedures follow strict guidelines and quality assurance / quality control (QA/QC) protocols. QA/QC data is available for review at any time upon client's request.

**APPENDIX III**  
**Methodology**



## **1.0 GENERAL**

An inspection was conducted to identify the type of Hazardous Building Materials incorporated in the structure and its finishes.

Information regarding the location and condition of hazardous building materials encountered and visually estimated quantities were recorded. The locations of any samples collected were recorded on small-scale plans. As-built drawings and previous reports were referenced where provided.

Sample collection was conducted in accordance with our Standard Operating Procedures.

### **1.1 Asbestos**

The inspection for asbestos included friable and non-friable asbestos-containing materials (ACM). A friable material is a material that when dry can be crumbled, pulverized or powdered by hand pressure.

A separate set of samples was collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA as material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type or formulation of material. The homogeneous materials were determined by visual examination and available information on the phases of construction and prior renovations.

Samples were collected at a rate that is in compliance with the requirements of local regulations and guidelines. The sampling strategy was also based on known ban dates and phase out dates of the use of asbestos; sampling of certain building materials is not conducted after specific construction dates. In addition, to be conservative, several years past these dates are added to account for some uncertainty in the exact start / finish date of construction and associated usage of ACM. In some cases, manufactured products such as asbestos cement pipe were visually identified without sample confirmation.

The asbestos analysis was completed using a stop-positive approach. Only one result meeting the regulated criteria was required to determine that a material is asbestos-containing, but all samples must be analyzed to conclusively determine that a material is non-asbestos. The laboratory stopped analyzing samples from a homogeneous material once a result equal to or greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material were analyzed if no asbestos is detected. In some cases, all samples were analyzed in the sample set regardless of result.

The analysis was performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

Analytical results were compared to the following criteria:

Jurisdiction*	Friable	Non-Friable
Manitoba	0.1% <sup>1</sup>	1%

Where building materials are described in the report as “non-asbestos” or “does not contain asbestos”, this means that either no asbestos was detected by the analytical method utilized in any of the multiple samples or, if detected, it is below the lower limit of an asbestos-containing material in the applicable regulation. Additionally, these terms are used for materials which historically are known to not include asbestos in their manufacturing.

Asbestos materials were evaluated in order to make recommendations regarding any remedial work. The priority for remedial action was based on several factors:

- Friability (friable or non-friable);
- Condition (good, fair, poor, debris);
- Accessibility (ranking from accessible to all building users to inaccessible);
- Visibility (whether the material is obscured by other building components); and
- Efficiency of the work (for example, if damaged ACM is being removed in an area, it may be most practical to remove all ACM in the area even if it is in good condition).

## 1.2 Lead

Samples of distinctive paint finishes, and surface coatings present in more than a limited application, where removal of the paint is possible was collected. The samples were collected by scraping the painted finish to include base and covering applications.

Analysis for lead in paints or surface coatings was performed in accordance with EPA Method No. 3050B/Method No. 7420; flame atomic absorption.

Analytical results were compared to the following criteria:

Jurisdiction*	Units (%)	Units (ppm) / (mg/kg)
Manitoba	0.009	90

Other lead building products (e.g. batteries, lead sheeting, flashing) were identified by visual observation only.



### **1.3 Silica**

Building materials known to contain crystalline silica (e.g. concrete, cement, tile, brick, masonry, mortar) were identified by visual inspection only. Pinchin did not perform sampling of these materials for laboratory analysis of crystalline silica content.

### **1.4 Mercury**

Building materials, products or equipment (e.g. thermostats, barometers, pressure gauges, lamp tubes), suspected to contain mercury was identified by visual inspection only. Dismantling of equipment suspected of containing mercury was not performed. Sampling of these materials for laboratory analysis of mercury content was not performed.

### **1.5 Polychlorinated Biphenyls**

The potential for light ballast and oil filled transformers to contain PCBs was based on the age of the building, a review of maintenance records and examination of labels or nameplates on equipment, where present and accessible. The information was compared to known ban dates of PCBs and Environment Canada publications.

Dry type transformers were presumed to be free of dielectric fluids and hence non-PCB.

Fluids (mineral oil, hydraulic, Aroclor or Askarel) in transformers or other equipment were not sampled for PCB content.

Caulking, sealants, or paints were sampled and submitted for PCB analysis following EPA 3550C/8082A.

Sample results are compared to the criteria of 50 mg/kg for solids as stated in the PCB Regulation, SOR/2008-273.

### **1.6 Visible Mould**

The presence of mould or water damage was determined by visual inspection of exposed building surfaces. If any mould growth or water damage was concealed within building cavities it was not addressed in this assessment.

Template: Methodology for Hazardous Building Materials Assessment, HAZ, January 26, 2023

**APPENDIX IV**  
**Location Summary Report**

**Client:** City Of Winnipeg  
**Building Name:** 2055 Ness Avenue  
**Survey Date:** 2023-05-04  
**Building Phases:** A:

**Site:** 2055 Ness Avenue, Winnipeg, MB

**Last Re-Assessment:**

Location No.	Name or Description	Area ft <sup>2</sup>	Floor No.	Bldg. Phase	Notes
1	Auditorium	3000	1	A	
2	Stage	0	1	A	
3	Storage Room	100	1	A	
4	Washroom	25	1	A	
5	Stairway To Stage	0	1	A	
6	Corridor	0	1	A	
7	Cleaning Storage Room	0	1	A	
8	Custodian	20	1	A	
9	Kitchen	160	1	A	
10	Men's Washroom	140	1	A	
11	Women's Washroom	140	1	A	
12	Kitchen	210	1	A	
13	Corridor	225	1	A	
14	Classroom	400	1	A	
15	Foyer	0	1	A	
16	Pool Exterior Walls	0		A	
17	Vestibule	40	1	A	
18	Vestibule	0	1	A	
19	Exterior Of Building	0		A	
20	Crawspace Area Below Pool	0	B	A	
21	Roof	0		A	
22	Crawspace Below Auditorium	0		A	

**APPENDIX V**

**Hazardous Materials Summary Report / Sample Log**

## HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

Client: City Of Winnipeg

Site: 2055 Ness Avenue, Winnipeg, MB

Building Name: 2055 Ness Avenue

Survey Date: 2023-05-04

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	S0001 ABC	Wall   Base   Adhesive/mastic   Tan Baseboard	1,10,11	A	0	0	0	100	None Detected	No	
Asbestos	S0002 AB	Wall, Ceiling, Wall   Plaster	1,2,13,14	A	0	225	0	100	None Detected	No	
Asbestos	S0003 ABC	Other   Tar Paper   Tar Paper Found At Pipe Penetration Through Deck	3	A	0	0	0	100	None Detected	No	
Asbestos	S0004 ABC	Wall   Base   Adhesive/mastic   Black Baseboard	3,4,9,10,11,12,14	A	0	0	0	100	None Detected	No	
Asbestos	S0005 ABC	Wall   Base   Adhesive/mastic	5	A	0	0	0	100	None Detected	No	
Asbestos	S0006 AB	Wall   Drywall And Joint Compound	5,6,7,12,13	A	0	0	0	100	None Detected	No	
Asbestos	S0007 ABC	Wall   Base   Cement Product   Setting Compound	15	A	0	0	0	100	None Detected	No	
Asbestos	S0008 ABC	Other   Window   Tape   Butyl Tape	15	A	0	0	0	100	None Detected	No	
Asbestos	S0009 ABC	Other   Caulking	15	A	0	0	0	100	None Detected	No	
Asbestos	S0010 ABC	Wall   Ceramic Tiles   Setting Compound	16	A	0	0	0	100	None Detected	No	
Asbestos	S0011 AB	Wall   Texture Coat	16	A	0	0	0	100	None Detected	No	
Asbestos	S0012 ABC	Wall   Caulking   Grey	19	A	0	0	0	100	None Detected	No	
Asbestos	V9000	Duct   Foil Face   Mastic Over Foil Jacketing	22	A	0	600	0	0	Confirmed Asbestos	Yes	NF
Asbestos	V9000	Duct   Mastic   Beige Mastic. Mastic Over Paper Jacketing	22	A	0	800	0	0	Confirmed Asbestos	Yes	NF
Asbestos	V9000	Floor   Vinyl Floor Tile And Mastic   9 X 9 Beige And Grey, Confirmed Asbestos From Previous Testing	1,3,4,9,10,11,12	A	0	3775	0	0	Confirmed Asbestos	Yes	NF
Asbestos	V9000	Piping   Parging Cement   Confirmed Asbestos From Previous Testing	2	A	0	0	1	0	Confirmed Asbestos	Yes	F
Asbestos	V9500	Floor   Terrazzo	15	A	0	900	0	0	Presumed Asbestos	Yes	NF
Asbestos	V0000	Ceiling   Ceiling Tiles (4x-1in)	18	A	0	40	0	0	Non Asbestos	No	
Asbestos	V0000	Ceiling   Ceiling Tiles (4x-1in)   2 X 2 . Newly Installed, Plain White	14	A	0	210	0	0	Non Asbestos	No	
Asbestos	V0000	Ceiling   Ceiling Tiles (4x-1in)   2 X 2 F8ssure And Pinhole, Nonasbestos Based On Previous Testing	10	A	0	140	0	0	Non Asbestos	No	
Asbestos	V0000	Ceiling   Ceiling Tiles (4x-1in)   2 X 2 Gypsum	9	A	0	160	0	0	Non Asbestos	No	

2023-05-18

Quantities shown above are based on visual approximations only and may be subject to variation. Copyright Pinchin Ltd. 2023

## HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	V0000	Ceiling      Ceiling Tiles (lay-in)   2 X 2 Pinholes, Nonasbestos Based On Previous Testing	11	A	0	140	0	0	Asbestos	No	-
Asbestos	V0000	Ceiling      Ceiling Tiles (lay-in)   2 X 4 Pinholes, Nonasbestos Based On Previous Testing	12	A	0	210	0	0	Asbestos	No	-
Asbestos	V0000	Duct      Mastic, Black	20,22	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Duct      Mastic, Grey	9,10,11,20,22	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Duct      Mastic, Grey   Nonasbestos From Previous Testing	3,4	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Floor      Rubber   Blue Rubber Matting Nonasbestos From Previous Testing	15	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Floor      Vinyl Floor Tile And Mastic   12 X 12 Beige With Tan Streaks	2	A	0	30	0	0	Asbestos	No	-
Asbestos	V0000	Floor      Vinyl Sheet Flooring	8,14	A	0	420	0	0	Asbestos	No	-
Asbestos	V0000	Floor      Vinyl Sheet Flooring   New Blue Flooring	5,6,7,13,18	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Other      Caulking   Previously Tested	21	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Other      Unidentified Material   Built-up Roofing Felts, Previously Tested	21	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Structure   Beam, Deck   Acoustic Spray	1	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Structure      Concrete (poured)	16	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Wall      Drywall And Joint Compound	15	A	0	0	0	0	Asbestos	No	-
Asbestos	V0000	Wall      Plaster   Parging Previously Tested	19	A	0	0	0	0	Asbestos	No	-
Paint	L0001	Wall   Plaster   Light Grey	1	A	0	0	0	100	Lead	Yes	-
Paint	L0002	Wall   Plaster   Brown Paint	2	A	0	0	0	100	Lead	Yes	-
Paint	L0003	Wall   Drywall And Joint Compound   Grey	12	A	0	0	0	100		No	-
Paint	V0000	Wall   Concrete (poured)   White	15	A	0	0	0	100		No	-
Paint	V0000	Wall   Drywall And Joint Compound   White paint nontraditional from previous testin, White	5,6,7,13,14,18	A	0	0	0	100		No	-
Paint	V0000	Wall   Masonry	3,9,10,11,17	A	0	0	0	100	-	No	-
Paint	V9000	Other   Metal   Grey on door	17	A	0	0	0	100	Lead	Yes	-
Paint	V9000	Other   Wood   Grey on doors, black paint has been applied over the grey paint, Black over grey on doors, Door	3,5,6,7,9,10,11,12,13,14,18	A	0	0	0	104	Lead	Yes	-
Paint	V9000	Wall   Masonry   Beige, confirmed lead from previous testing	4	A	0	0	0	100	Lead	Yes	-

## HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
PCB	P0001	Caulking   Black	15	A	0	0	0	100	-	No	-
PCB	P0002	Caulking   Grey	19	A	1000	0	0	0	-	Yes	-
PCB	V9000	Light Ballasts	9,10,11	A	0	0	0	100	PCB	Yes	-
PCB	V0000	Light Ballasts	1,2,3,4	A	0	0	0	100	-	No	-
Hg	V9000	Fluorescent Light Tube	1,2,3,4,9,10,11	A	0	0	0	101	Hg	Yes	-

## Legend:

Sample number	Units	
S####	SF	Asbestos sample collected
L####	LF	Paint sample collected
P####	EA	PCB sample collected
M####	%	Mould sample collected
V####		Material visually similar to numbered sample collected
V0000		Known non Hazardous Material
V9000		Material is visually identified as Hazardous Material
V9500		Material is presumed to be Hazardous Material
[Loc. No.]		Abated Material

Units	
NF	Non Friable material.
F	Friable material
PF	Potentially Friable material



**APPENDIX VI**  
**HMIS All Data Report**

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #1 : Auditorium  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:  
 Last Re-Assessment: 0000-00-00

Area (sqft): 3000

System	Component	Material	Item	Covering	A*	V*	AP*	ASBESTOS	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiabie
Ceiling	Not Found																
Duct	Not Found																
Floor		Vinyl Floor Tile and Mastic, 9 x 9 beige and grey, confirmed asbestos from previous testing	Surface		A	Y		3000				SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Mechanical Equipment	Not Found																
Piping		Not Insulated															
Structure	Beam, Deck	Acoustic spray	Surface		A	Y		100				%	V0000	Non-Asbestos		None	
Wall		Dywall and joint compound	Surface		A	Y		100				%	V				
Wall		Plaster	Surface		A	Y		100				%	S0002B	None Detected		N/D.	None
Wall	Base	Adhesive/mastic, Tan baseboard	Surface		A	Y		100				%	S0001ABC	None Detected		N/D.	None

Client: City Of Winnipeg  
 Location: #1 : Auditorium  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:  
 Last Re-Assessment: 0000-00-00

Area (sqft): 3000

System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall	Plaster	100		%	L0001	Light grey	Pb: 0.0047 %	No

Client: City Of Winnipeg  
 Location: #1 : Auditorium  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:  
 Last Re-Assessment: 0000-00-00

Area (sqft): 3000

Component	Quantity	Unit	MERCURY	Sample	Sample Description	Unit	Sample	Hazard
Fluorescent Light Tube	108			L0001	Light grey	%	V9000	Yes

Client: City Of Winnipeg  
 Location: #1 : Auditorium  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:  
 Last Re-Assessment: 0000-00-00

Area (sqft): 3000

Component	Quantity	Unit	PCB	Sample	Sample Description	Amount	PCB
Light Ballasts	100	%		V0000	New T8		No

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #2 : Stage  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 0

System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiabile
Ceiling	Not Found															
Duct	Not Found															
Floor		Wood														
Floor		Vinyl Floor Tile and Mastic, 12 x 12 beige with tan streaks	Surface		A	Y		30			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found															
Piping		Fibreglass	Straight		A	Y										
Piping		Parging Cement, Confirmed asbestos from previous testing	Fitting		A	Y		1			EA	V9000	Confirmed Asbestos		Confirmed Asbestos	F
Structure		Concrete (poured)														
Wall		Plaster	Surface		A	Y		100			%	S0002A	None Detected	N.I.D.	None	
Wall		Masonry														

Client: City Of Winnipeg  
 Location: #2 : Stage  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 0

System	Component	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Wall		Plaster	100		%	L0002	Brown paint	Pb: 0.32 %	Hazard Lead

Client: City Of Winnipeg  
 Location: #2 : Stage  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 0

Component	Quantity	Unit	Sample	Sample Description	Amount	Hazard
Fluorescent Light Tube	100				V9000	Yes

Client: City Of Winnipeg  
 Location: #2 : Stage  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 0

Component	Quantity	Unit	Sample	Sample Description	Amount	PCB
Light Ballasts	100	%	V0000			No

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #3 : Storage Room  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 100

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Flable
Ceiling	Not Found															
Duct		Not Insulated														
Duct		Mastic Grey, Nomastbestos from previous testing	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Floor		Vinyl Floor Tile and Mastic	Surface		A	Y		100			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Mechanical Equipment	Not Found															
Other		Tar Paper, Tar paper found at pipe penetration through deck	Surface		C	Y		100			%	S0003ABC	None Detected	N.I.D.	None	
Piping		Fibreglass	Fitting		C	Y										
Piping		Not Insulated														
Piping	All	Fibreglass														
Structure	All	Steel	Straight		C	Y										
Wall		Masonry														
Wall	Base	Adhesive/mastic, Black baseboard	Surface		A	Y		100			%	S0004A	None Detected	N.I.D.	None	

Client: City Of Winnipeg  
 Location: #3 : Storage Room  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 100

PAINT												
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard				
Wall	Masonry	100		%	V0000			No				
Other	Wood	100		%	V9000	Grey on doors, black paint has been applied over the grey paint		Confirmed Lead				

Client: City Of Winnipeg  
 Location: #3 : Storage Room  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 100

MERCURY												
Component	Quantity	Unit	Sample	Sample Description	Amount	Hazard						
Fluorescent Light Tube	100	%	V0000			Yes						

Client: City Of Winnipeg  
 Location: #3 : Storage Room  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 100

PCB												
Component	Quantity	Unit	Sample	Sample Description	Amount	PCB						
Light Ballasts	100	%	V0000			No						

ALL DATA REPORT

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #4 : Washroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1  
 Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 25

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiable
Ceiling	Not Found															
Duct		Not Insulated														
Duct		Mastic Grey, Nomasbestos from previous testing	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Floor		Vinyl Floor Tile and Mastic	Surface		A	Y		25			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Mechanical Equipment	Not Found															
Piping		Not Insulated														
Structure	All	Steel														
Wall		Masonry														
Wall	Base	Adhesive/mastic	Surface		A	Y		100			%	S0004B	None Detected	N.D.	None	

Client: City Of Winnipeg  
 Location: #4 : Washroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1  
 Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 25

PAINT												
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard				
Wall	Masonry	100		%	V9000	Beige, confirmed lead from previous testing		Confirmed Lead				

Client: City Of Winnipeg  
 Location: #4 : Washroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1  
 Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 25

MERCURY												
Component	Quantity	Unit	Sample	Sample Description	Unit	Sample	Hazard					
Fluorescent Light Tube	100				%	V9000	Yes					

Client: City Of Winnipeg  
 Location: #4 : Washroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1  
 Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 25

PCB												
Component	Quantity	Unit	Sample	Sample Description	Amount	PCB						
Light Ballasts	100	%	V0000			No						

## ALL DATA REPORT

**Client:** City Of Winnipeg  
**Location:** #5 : Stairway To Stage  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 0

ASBESTOS																	
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Frable	
Ceiling	Not Found																
Duct	Not Found																
Floor		Vinyl Sheet Flooring, New blue flooring	Surface		A	Y		100			%	V0000	Non-Asbestos			None	
Mechanical Equipment	Not Found																
Piping		Not Insulated															
Structure		Steel															
Wall		Drywall and joint compound	Surface		A	Y		100			%	S0006A	None Detected	N.I.D.	None		
Wall		Masonry															
Wall	Base	Adhesive/mastic	Surface		B	Y		100			%	S0005ABC	None Detected	N.I.D.	None		

**Client:** City Of Winnipeg  
**Location:** #5 : Stairway To Stage  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 0

PAINT											
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard			
Wall	Drywall and joint compound	100		%	V0000	White paint nontraditional from previous testin		No			
Other	Wood	108		%	V9000	Black over grey on doors		Confirmed Lead			

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #6 : Corridor  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiabie
Ceiling	Not Found															
Duct		Not Insulated														
Floor		Vinyl Sheet Flooring, New blue flooring	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found															
Piping		Fibreglass	Straight		C	Y										
Piping		Fibreglass	Fitting		C	Y										
Piping		Not Insulated														
Piping Structure		Steel														
Wall		Drywall and joint compound	Surface		A	Y		100			%	V0006	None Detected	N/D.	None	
Wall		Masonry														

Client: City Of Winnipeg  
 Location: #6 : Corridor  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

PAINT												
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard				
Wall	Drywall and joint compound	100		%	V0000	White paint nontraditional from previous testin		No				
Other	Wood	108		%	V9000	Black over grey on doors		Confirmed Lead				



## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #7 : Cleaning Storage Room  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Frable
Ceiling	Not Found															
Duct		Not Insulated														
Floor		Vinyl Sheet Flooring, New blue flooring	Surface		A	Y		100			%	V0000	Non-Asbestos			None
Mechanical Equipment	Not Found															
Piping		Not Insulated														
Structure		Steel														
Wall		Drywall and joint compound	Surface		A	Y		100			%	V0006	None Detected	N.I.D.	None	
Wall		Masonry														

Client: City Of Winnipeg  
 Location: #7 : Cleaning Storage Room  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

PAINT												
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard				
Wall	Drywall and joint compound	100		%	V0000	White paint nontraditional from previous testin		No				
Other	Wood	108		%	V9000	Black over grey on doors		Confirmed Lead				

## ALL DATA REPORT

**Client:** City Of Winnipeg  
**Location:** #8 : Custodian  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 20

System	Component	Material	Item	Covering	A*	V*	AP*	ASBESTOS	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiable
Ceiling	Not Found																
Duct	Not Found																
Floor		Vinyl Sheet Flooring	Surface		B	Y		20				SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found																
Piping		Not Insulated															
Structure		Steel															
Wall		Masonry															

**Client:** City Of Winnipeg  
**Location:** #9 : Kitchen  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 160

System	Component	Material	Item	Covering	A*	V*	AP*	ASBESTOS	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiable
Ceiling		Ceiling Tiles (dry-in), 2 x 2 gypsum	Surface		C	Y		160				SF	V0000	Non-Asbestos		None	
Duct		Fibreglass	Surface	Foil Face	C	N											
Duct		Not Insulated															
Duct		Mastic, Grey	Surface		A	Y		100				%	V0000	Non-Asbestos		None	
Floor		Vinyl Floor Tile and Mastic	Surface		A	Y		160				SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Piping		Fibreglass	Straight	Foil Face	C	N											
Piping Structure		Not Insulated															
Structure		Steel															
Wall		Wood															
Wall		Masonry															
Wall	Base	Adhesive/mastic	Surface		A	Y		100				%	S0004C	None Detected	N.I.D.	None	

**Client:** City Of Winnipeg  
**Location:** #9 : Kitchen  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 160

System	Component	Material	Item	Good	Poor	Unit	Sample	PAINT	Sample Description	Amount	Hazard
Wall		Masonry		100		%	V0000				No
Other		Wood		100		%	V9000		Door		Confirmed Lead

**Client:** City Of Winnipeg  
**Location:** #9 : Kitchen  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 160

ALL DATA REPORT

Component		MERCURY		Sample	Hazard
Fluorescent Light Tube	Quantity	100	Unit	V9000	Yes

Client: City Of Winnipeg  
 Location: #9 - Kitchen  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 160

Component		Quantity	Unit	Sample	Sample Description	Amount	PCB
Light Ballasts	100	%	V9000				Yes

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #10 : Men's Washroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 140

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Flable
Ceiling		Ceiling Tiles (lay-in), 2 x 2 (Bssure and pinhole, nonasbestos based on previous testing	Surface		C	Y		140			SF	V0000	Non-Asbestos		None	
Duct		Not Insulated	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Floor		Vinyl Floor Tile and Mastic	Surface		A	Y		140			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Piping		Not Insulated														
Structure		Steel														
Wall		Masonry														
Wall		Adhesive/mastic	Surface		A	Y		100			%	V0004	None Detected		N/D.	None
Wall		Adhesive/mastic	Surface		A	Y		100			%	V0001	None Detected		N/D.	None

Client: City Of Winnipeg  
 Location: #10 : Men's Washroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 140

PAINT										
System	Component	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard	
Wall		Masonry	100		%	V0000			No	
Other		Wood	100		%	V9000	Door		Confirmed Lead	

Client: City Of Winnipeg  
 Location: #10 : Men's Washroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 140

MERCURY										
Component	Quantity	Unit	Sample	Hazard						
Fluorescent Light Tube	100	%	V9000	Yes						

Client: City Of Winnipeg  
 Location: #10 : Men's Washroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #: Last Re-Assessment: 0000-00-00

Area (sqft): 140

PCB										
Component	Quantity	Unit	Sample	Sample Description	Amount	PCB				
Light Ballasts	100	%	V9000			Yes				

## ALL DATA REPORT

**Client:** City Of Winnipeg  
**Location:** #11 : Women's Washroom  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 140

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiabile
Ceiling		Ceiling Tiles (lay-in), 2 x 2 pinholes, nonasbestos based on previous testing	Surface		C	Y		140			SF	V0000	Non-Asbestos		None	
Duct		Not Insulated	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Floor		Vinyl Floor Tile and Mastic	Surface		A	Y		140			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Piping Structure		Not Insulated														
Wall		Steel														
Wall		Masonry														
Wall	Base	Adhesive/mastic	Surface		A	Y		100			%	V0004	None Detected		N.D.	None
Wall	Base	Adhesive/mastic	Surface		A	Y		100			%	V0001	None Detected		N.D.	None

**Client:** City Of Winnipeg  
**Location:** #11 : Women's Washroom  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 140

PAINT										
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard		
Wall	Masonry	100		%	V0000			No		
Other	Wood	100		%	V9000	Door		Confirmed Lead		

**Client:** City Of Winnipeg  
**Location:** #11 : Women's Washroom  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 140

MERCURY										
Component	Quantity	Unit	Sample	Hazard						
Fluorescent Light Tube	100	%	V9000	Yes						

**Client:** City Of Winnipeg  
**Location:** #11 : Women's Washroom  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 140

PCB										
Component	Quantity	Unit	Sample	Sample Description	Amount	PCB				
Light Ballasts	100	%	V9000			Yes				

## ALL DATA REPORT

**Client:** City Of Winnipeg  
**Location:** #12 : Kitchen  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 210

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Frable
Ceiling		Ceiling Tiles (lay-in), 2 x 4 pinholes, nonasbestos based on previous testing	Surface		C	Y		210			SF	V0000	Non-Asbestos		None	
Duct	Not Found															
Floor		Vinyl Floor Tile and Mastic	Surface		A	Y		210			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Piping		Not Insulated														
Structure		Wood									%	S0006B	None Detected	N/D.	None	
Wall		Drywall and joint compound			A	Y		100			%	V0004	None Detected	N/D.	None	
Wall	Base	Adhesive/mastic	Surface		A	Y		100			%		None Detected	N/D.	None	

**Client:** City Of Winnipeg  
**Location:** #12 : Kitchen  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 210

PAINT												
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard				
Wall	Drywall and joint compound	100		%	L0003	Grey	Pp: <0.0072 %	No				
Other	Wood	100		%	V9000	Door		Confirmed Lead				

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #13 : Corridor  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 225

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiabile
Ceiling	Not	Drywall and joint compound	Surface		A	Y		225			SF	V0002	None Detected	N.D.	None	
Duct	Accessible															
Floor	Not Found	Vinyl Sheet Flooring, New blue flooring	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found															
Piping	Not Accessible															
Structure	Accessible	Steel														
Wall		Drywall and joint compound	Surface		A	Y		100			%	V0006	None Detected	N.D.	None	
Wall		Drywall and joint compound	Surface		A	Y		100			%	V0002	None Detected	N.D.	None	
Wall		Masonry	Surface													

Client: City Of Winnipeg  
 Location: #13 : Corridor  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 225

PAINT												
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard				
Wall	Drywall and joint compound	100		%	V0000	White paint nontraditional from previous testin		No				
Other	Wood	108		%	V9000	Black over grey on doors		Confirmed Lead				

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #14 : Classroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 400

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiabile
Ceiling		Ceiling Tiles (lay-in), 2 x 2, newly installed, plain white	Surface		C	Y		210			SF	V0000	Non-Asbestos		None	
Duct		Fibreglass	Surface	Foil Face	C	N										
Floor		Vinyl Sheet Flooring	Surface		A	Y		400			SF	V0000	Non-Asbestos		None	
Piping		Fibreglass	Straight	Polyvinyl chloride (PVC)	A	Y										
Piping		Fibreglass	Fitting	Polyvinyl chloride (PVC)	A	Y										
Piping Structure		Not Insulated														
Wall		Steel														
Wall		Drywall and joint compound			A	Y		100			%	V0002	None Detected		N.D.	None
Wall		Masonry														
Wall	Base	Adhesive/rustic	Surface		A	Y		100			%	V0004	None Detected		N.D.	None

Client: City Of Winnipeg  
 Location: #14 : Classroom  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 400

PAINT												
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard				
Wall	Drywall and joint compound	100		%	V0000	White		No				
Other	Wood	100		%	V9000	Door		Confirmed Lead				



## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #15 : Foyer  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Fiabie
Ceiling	Not Found															
Duct		Not Insulated														
Floor		Carpet														
Floor		Terrazzo	Surface		A	Y		900			SF	V9500	Presumed Asbestos		Presumed Asbestos	NF
Floor		Rubber, Blue rubber matting nonasbestos from previous testing	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found															
Other		Caulking	Surface		A	Y		100			%	S0009ABC	None Detected	N/D.	None	
Piping	Window	Tape, Butyl tape	Surface		A	Y		100			%	S0008ABC	None Detected	N/D.	None	
Structure		Not Insulated														
Wall		Concrete (poured)														
Wall		Concrete (poured)	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Wall	Base	Drywall and joint compound	Surface		A	Y		100			%	S0007ABC	None Detected	N/D.	None	
Wall		Cement Product; Setting compound	Surface		A	Y		100			%	S0007ABC	None Detected	N/D.	None	

Client: City Of Winnipeg  
 Location: #15 : Foyer  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

PAINT											
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard			
Wall	Concrete (poured)	100		%	V0000	White		No			

Client: City Of Winnipeg  
 Location: #15 : Foyer  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: 1

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

PCB											
Component	Quantity	Unit	Sample	Sample Description	Amount	PCB					
Caulking	100	%	P0001	Black	<0.2 mg/kg	No					

## ALL DATA REPORT

**Client:** City Of Winnipeg  
**Location:** #16 : Pool Exterior Walls  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** Basement (0)

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 0

System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Structure		Concrete (poured)	Surface		C	N		100			%	V0000	Non-Asbestos	N/D.	None	
Wall		Ceramic Tiles, Setting compound	Surface		A	Y		100			%	S0010ABC	None Detected	N/D.	None	
Wall		Texture Coat	Surface		C	Y		100			%	S0011AB	None Detected	N/D.	None	

**Client:** City Of Winnipeg  
**Location:** #17 : Vestibule  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 40

System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found															
Duct		Fibreglass	Surface	Foil Face	C	Y										
Duct		Not Insulated														
Floor		Concrete (poured)														
Mechanical Equipment	Tank	Not Insulated														
Piping		Fibreglass	Straight		A	Y										
Piping		Fibreglass	Fitting		A	Y										
Structure		Steel														
Wall		Masonry														

**Client:** City Of Winnipeg  
**Location:** #17 : Vestibule  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 40

System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard
Other	Metal	100		%	V9000	Grey on door		Confirmed Lead
Wall	Masonry	100		%	V0000			No

## ALL DATA REPORT

**Client:** City Of Winnipeg  
**Location:** #18 : Vestibule  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 0

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Frable
Ceiling	Not Found	Ceiling Tiles (4x-1ft)	Surface		A	Y		40			SF	V0000	Non-Asbestos		None	
Duct	Not Found															
Duct	Accessible															
Floor	Not Found	Vinyl Sheet Flooring, New blue flooring	Surface		A	Y		100			%	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found															
Piping		Not Insulated														
Structure		Steel														
Wall		Masonry														

**Client:** City Of Winnipeg  
**Location:** #18 : Vestibule  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** 1

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 0

PAINT										
System	Item	Good	Poor	Unit	Sample	Sample Description	Amount	Hazard		
Wall	Drywall and joint compound	100		%	V0000	White paint nontraditional from previous testin		No		
Other	Wood	108		%	V9000	Black over grey on doors		Confirmed Lead		

## ALL DATA REPORT

Client: City Of Winnipeg  
 Location: #19 : Exterior Of Building  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: Basement (0)

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Wall		Concrete (poured)														
Wall		Plaster, Parqing previously tested	Surface									V0000	Non-Asbestos			None
Wall		Caulking, Grey	Surface		A	Y		100			%	S0012ABC	None Detected	N.D.		None

Client: City Of Winnipeg  
 Location: #19 : Exterior Of Building  
 Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
 Floor: Basement (0)

Building Name: 2055 Ness Avenue  
 Room #:   
 Last Re-Assessment: 0000-00-00

Area (sqft): 0

Component	Quantity	Unit	Sample	Sample Description	Amount	PCB
Caulking	1000	LF	P0002	Grey	58 mg/kg	Yes

ALL DATA REPORT

Client: City Of Winnipeg  
Location: #20 : Crawlspace Area Below Pool  
Survey Date: 2023-05-04

Site: 2055 Ness Avenue, Winnipeg, MB  
Floor: B

Building Name: 2055 Ness Avenue  
Room #:  
Last Re-Assessment: 0000-00-00

Area (sqft): 0

System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
ASBESTOS																
Ceiling		Concrete (poured)														
Duct		Mastic, Black	Surface		B	Y		100			%	V0000	Non-Asbestos			None
Duct		Not Insulated														
Duct		Mastic, Grey	Surface		B	Y		100			%	V0000	Non-Asbestos			None
Floor		Dirt														
Mechanical Equipment	Not Found															
Piping		Fibreglass	Straight	Polyvinyl chloride (PVC)	B	Y										
Piping		Fibreglass	Fitting	Polyvinyl chloride (PVC)	B	Y										
Structure		Concrete (poured)														
Wall		Concrete (poured)														

## ALL DATA REPORT

**Client:** City Of Winnipeg  
**Location:** #21 : Roof  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** Basement (0)

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 0

System	Component	Material	Item	Covering	A*	V*	AP*	ASBESTOS	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Frable
Other		Unidentified Material, Built-up Roofing	Surface		A	Y		100				%	V0000	Non-Asbestos		None	
Other		Felts, previously tested	Surface		A	Y		100				%	V0000	Non-Asbestos		None	
Other		Caulking, Previously tested	Surface		A	Y		100				%	V0000	Non-Asbestos		None	

**Client:** City Of Winnipeg  
**Location:** #22 : Crawlspace Below Auditorium  
**Survey Date:** 2023-05-04

**Site:** 2055 Ness Avenue, Winnipeg, MB  
**Floor:** Basement (0)

**Building Name:** 2055 Ness Avenue  
**Room #:**  
**Last Re-Assessment:** 0000-00-00

**Area (sqft):** 0

System	Component	Material	Item	Covering	A*	V*	AP*	ASBESTOS	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Frable
Ceiling		Concrete (poured)															
Ceiling		Concrete (poured)															
Duct		Fibreglass	Surface	Paper	B	Y											
Duct		Fibreglass	Surface	Foil Face	B	Y											
Duct		Foil Face, Mastic over foil jacketing	Surface		B	Y		600				SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Duct		Foil Face	Surface	Mastic	B	Y											
Duct		Paper	Surface	Mastic	B	Y											
Duct		Mastic, Black	Surface		B	Y		100				%	V0000	Non-Asbestos		None	
Duct		Not Insulated															
Duct		Not Insulated															
Duct		Mastic, Beige mastic	Surface		B	Y		300				SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Duct		Mastic over paper jacketing	Surface		B	Y		500				SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Duct		Mastic, Grey	Surface		B	Y		100				%	V0000	Non-Asbestos		None	
Floor		Dirt															
Mechanical Equipment		Not Found															
Piping		Not Insulated															
Structure		Concrete (poured)															
Wall		Concrete (poured)															
Wall		Masonry															

## Legend:

Sample number	Units	Other
S####	SF	A Access
L####	LF	V Visible
P####	EA	AP Air Plenum
M####	%	F Friable material
V####	LF	NE Non Friable material
V0000		PF Potentially Friable material
V9000		Pb Lead
V9500		Hg Mercury
		As Arsenic
		Cr Chromium

Access	Condition
A Accessible to all building occupants	Good No visible damage or deterioration
B Accessible to maintenance and operations staff without a ladder	Fair Minor, repairable damage, cracking, delamination or deterioration
C Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas	Poor Irreparable damage or deterioration with exposed and missing material
D Not normally accessible	

Visible	Air Plenum
Y The material is visible when standing on the floor of the room, without the removal or opening of other building components (e.g. ceiling tiles or access panels).	Yes The material is in a return air plenum or in a direct airstream or there is evidence of air erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This field is only completed where Air Plenum consideration is required by regulation.
N The material is not visible to view when standing on the floor of the room and requires the removal of a building component (e.g. ceilings tiles or access panels) to view and access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.	No

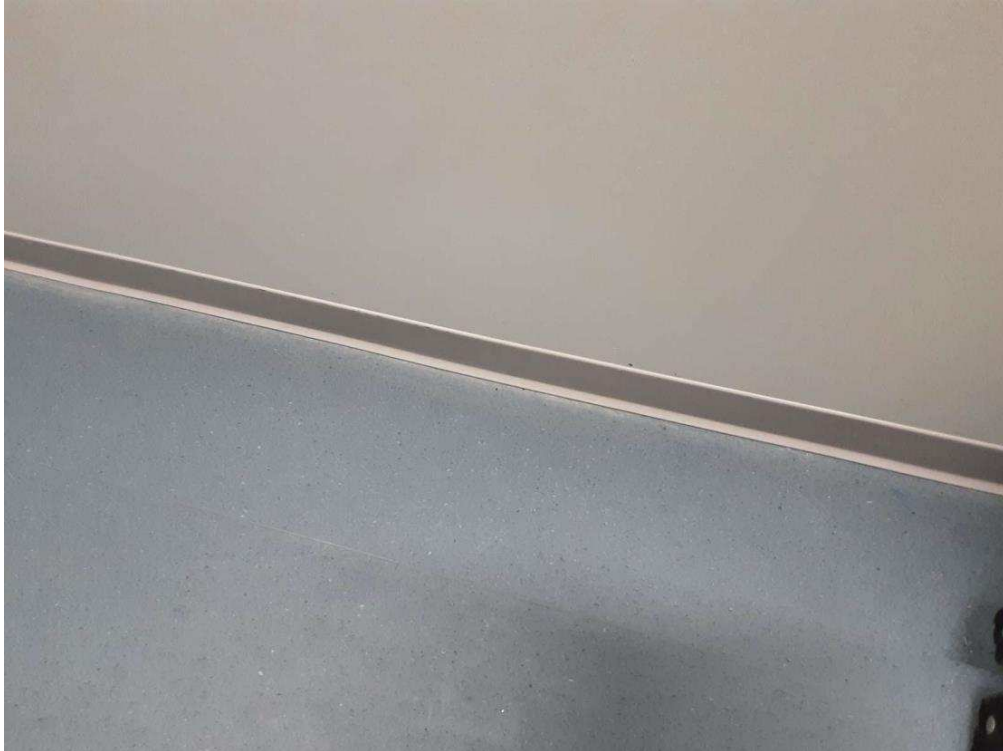
Colour Coding
<span style="background-color: #FFC0CB; padding: 2px;"> </span> The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code).
<span style="background-color: #FFFF00; padding: 2px;"> </span> The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.

**APPENDIX VII**  
**Additional Photographs**





S0004A (None), Wall, Base, Adhesive/mastic, Storage Room (Location #: 3)



S0005A (None), Wall, Base, Adhesive/mastic, Stairway To Stage (Location #: 5)



S0008C (None), Other, Window, Butyl Tape, Foyer (Location #: 15)



S0010A (None), Wall, Ceramic Tile Thin-Set, Pool Exterior Walls (Location #: 16)



V9500 (Presumed Asbestos), Floor, Terrazzo, Foyer (Location #: 15)



V0000 (None), Ceiling, Ceiling Tiles (lay-in), Classroom (Location #: 14)



V0000 (None), Floor, Vinyl Floor Tile and Mastic, Stage (Location #: 2)



V9000, (Asbestos), Duct, beige mastic, Crawlspace (Location # 22)



V9000, (Asbestos), Duct, black mastic, Crawlspace (Location # 22)



V9000, (Asbestos), Duct, black mastic, Crawlspace (Location # 22)

CITY OF WINNIPEG  
PROJECT NUMBER: CA0000644.3039

# PHASE I ENVIRONMENTAL SITE ASSESSMENT

## ST. JAMES CIVIC CENTRE, WINNIPEG, MB

MAY 29, 2023

CONFIDENTIAL









PHASE I  
ENVIRONMENTAL  
SITE ASSESSMENT  
ST. JAMES CIVIC  
CENTRE, WINNIPEG, MB  
CITY OF WINNIPEG

CONFIDENTIAL

PROJECT NO.: CA0000644.3039  
DATE: MAY 29, 2023

WSP  
1600 BUFFALO PLACE  
WINNIPEG, MB  
CANADA R3T 6B8

T: +1 204 477-6650  
F: +1 204 474-2864  
WSP.COM



May 29, 2023

CONFIDENTIAL

City of Winnipeg  
4th Floor 185 King Street  
Winnipeg, Manitoba R3B 1J1

**Attention: Ms. Kathy Roberts**

Ms. Roberts,

**Subject: Phase I Environmental Site Assessment – St. James Civic Centre, Winnipeg, MB**

Please find attached the results of the Phase I Environmental Site Assessment for the property with the civic address of 2055 Ness Avenue, Winnipeg, Manitoba.

The Phase I ESA was completed in general accordance with the Canadian Standards Association's Phase I Environmental Site Assessment Standard CZ768-01 (R2016).

Should you have any questions regarding the information presented in this report, please contact the undersigned at your convenience.

Yours sincerely,

Cassie Bujan, B.Env.Sc.,  
Project Scientist, Earth & Environment

Alfred Chan, B.Sc.Geol., P.Geo., PMP  
Project Manager, Earth & Environment

CB/ac

WSP ref.: CA0000644.3039

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# REVISION HISTORY

## FIRST ISSUE

April 28, 2023	DRAFT			
Prepared by	Reviewed by	Approved by		
Cassie Bujan	Alfred Chan	Alfred Chan		
REVISION 1				
May 8, 2023	FINAL			
Prepared by	Reviewed by	Approved by		
Cassie Bujan	Alfred Chan	Alfred Chan		

## FINAL REV.2

May 29, 2023	Revision 2 with additional documents from the oil spill clean up provided by the Client.			
Prepared by	Reviewed by	Approved by		
Cassie Bujan	Alfred Chan	Alfred Chan		

---

# SIGNATURES

PREPARED BY



May 29, 2023

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Cassie Bujan, B.Env.Sc.  
Project Scientist

---

Date

APPROVED<sup>1</sup> BY



May 29, 2023

---

Alfred Chan, B.Sc.Geol., P.Geo., PMP  
Project Scientist

---

Date

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<sup>1</sup> Approval of this document is an administrative function indicating readiness for release and does not impart legal liability on to the Approver for any technical content contained herein. Technical accuracy and fit-for-purpose of this content is obtained through the review process. The Approver shall ensure the applicable review process has occurred prior to signing the document.

# EXECUTIVE SUMMARY

WSP Canada Inc. (WSP) was retained by the City of Winnipeg (Client) to conduct a Phase I Environmental Site Assessment (ESA) of a property consisting of a large two-storey on-site building with a basement and a mezzanine and an adjacent asphalt-paved parking lot with the legal land description Part Lot 1 and Lots 2 to 15, both inclusive, Block 13, and Lots 3 to 6, both inclusive, Block 14, Plan No. 1617; Part Lot 27 and Lots 29 to 42, both inclusive, Block 22, and Part Lot 1 and Lots 2 to 15, both inclusive, Block 23, Plan No. 1693 and Part Guildford Street, Closed by Instrument No. G47980 and the civic address of 2055 Ness Avenue, herein referred to as the 'Site'.

The Phase I ESA was conducted for the City of Winnipeg in support of a new building addition proposed at the south elevation of the existing main Site building. The site visit was conducted by WSP Project Scientist, Ms. Cassie Bujan on April 11, 2023. The Site and readily visible and publicly accessible portions of adjoining and neighbouring properties were observed for the presence of potential sources of environmental concern. WSP was escorted during the site visit by Ms. Kathy Roberts, the Client representative at the time of the site visit.

A Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water or building materials. The Phase I ESA was visually inspected only from readily accessible areas of the Site. An intrusive sampling investigation was not conducted. For this Phase I ESA, no additions to the CSA standards were made.

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## ENVIRONMENTAL DATABASE/RECORDS REVIEW

A records review of the Site was completed using a variety of information sources and summarized as follows:

- A total of 17 title certificates (2302345/1, 2423973/1, 2459204/1, 2392235/1, 2549013/1, 2421830/1, 355326, 401746, 359435, 398399, 402865, 430215, 416051, 450804, 524985, 409327 and 413069) were reviewed for the Site. Six of the title certificates are registered to the City of Winnipeg and eleven are registered to the Rural Municipality of St. James. There are no caveats or liens in the land titles that appear to indicate an environmental concern to the Site.
- Historic aerial photographs indicated the Site was previously a cleared, maintained area with patches of forest and a gravel parking lot to the east since 1948 with little to no change until the 1968 aerial photograph. Post-1968, the adjacent Assiniboine Golf Course and associated site building has been established, along with the current day St. James Civic Centre site building and parking lot to the south.
- Six ERIS Ecolog listings were found for the Site and surrounding properties within 250 m. Two of the on-site listings are identical and referenced the Site as a registered waste generator site with registration number MBG07509. The other three off-site waste generator listings are identical and reference Assiniboine Golf Club (2045 Ness Avenue) under registration number MBG10294. One off-site listing in Scott's Manufacturing Directory references Weatherwise Tent Rentals on 382 Belvidere Street located approximately 200 m southeast of Site.
- A request was made to MEC on March 16, 2023, for a search of their databases for any reported information regarding spills, environmental infractions, hazardous wastes, listing on the Contaminated Sites registry and/or any remediation actions pertaining to the Site. A response from MEC received on March 31, 2023 (File Search No. 6582) indicated that the Site is listed as an operating Registered Hazardous Waste Generator (operational ID 29965) with associated registration number MBG10294..
- Personal communication with Mr. Larry Santucci (Arena Foreman for the City of Winnipeg) during the site visit revealed that an oil spill of approximately 454 litres had occurred at the northwest corner of the Site building. Email communication with Ms. Kathy Roberts further clarified that upon discovery of the oil spill, City of Winnipeg staff laid down a large quantity of absorb-all, and Miller Environmental was retained to remove the oil-impacted debris in drums. An additional drum of oil rags was also removed by Miller Environmental. Movement documents from Miller Environmental are included in Appendix E-3.
- A water well database search was conducted through the MEC GWDrill (2018) database for the Site on March 16, 2023. The search as conducted using the Site's legal land Parish of St. James, by plotting all the well logs

from the data file on Google Earth and acquiring the Well PID's of all well logs within 250 m of the Site. No well logs were registered within 250 m of the Site.

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## SUMMARY OF FINDINGS

Based on the results of the Phase I ESA, a highlight of findings for the Site is as follows:

- Land parcels within the Site are registered to the client (the City of Winnipeg) and to the Rural Municipality of St. James. There are no caveats or liens in the land titles that appear to indicate an environmental concern to the Site.
  - Historic aerial photographs indicate the Site was primarily vacant land prior to 1968 before being developed with a large on-site building similar to the present-day St. James Civic Centre. No ASTs nor stockpiles were observed to be present on-site and adjacent properties for each of the historical aerial photographs reviewed.
  - Results from the ERIS Ecolog search referenced the Site and the north adjacent Assiniboine Golf Club as registered Waste Generators. None of the off-site listings are anticipated to pose an environmental concern to the Site. The Site likely generates used lubricating oil for the compressors servicing the Arena and functions as a transfer depot for recyclable wastes. On-site waste generation is not anticipated to be a significant environmental concern with proper housekeeping and storage.
  - An MEC File Search response received on March 31 (File Search No. 6582) indicate that the Site is not listed as having any outstanding environmental orders, nor is it registered as having a file under the MEC Contaminated or Impacted Sites Program. The Site is not listed as a registered petroleum storage site.
  - Based on personal communication with Mr. Larry Santucci, the Arena Foreman, during the interview with Client representatives on-site, an oil spill of approximately 454 litres had previously occurred at the northwest corner of the Site building with surficial clean-up with absorb-all completed by City of Winnipeg staff and oil-impacted debris removed by Miller Environmental on October 12, 2022. As there may be residual petroleum hydrocarbons impacts in the subsurface from seepage between the oil spill and the clean-up attempt, the northwest corner of the Site building exterior is identified as an Area of Potential Environmental Concern (APEC).
  - Based on the age of the Site building construction (1965), asbestos-containing materials, lead paint, ODS, mercury-containing equipment, and PCB-containing equipment may be present on-site.
- 

## RECOMMENDATIONS

Based on the findings of the Phase I ESA, WSP recommends the following:

- Continued good housekeeping of lubricating oil, cleaning and chemical supplies on-site; ensure that the liquid ammonia storage area is inaccessible to the public and is well ventilated at all times.
- Prior to any renovation or demolition work, it is recommended to conduct a Hazardous Materials Assessment as the original building structure was constructed in 1965. There may be additional unconfirmed locations with asbestos-containing materials, lead paint, mercury-containing equipment, and polychlorinated biphenyl (PCB)-containing equipment present on-site.
- Due to excessive moisture reported under the crawlspace of the arena, an odour of stagnant water present in the boiler room, water-stained ceiling tiles and the age of the building, it is recommended that an Indoor Air Quality and Fungal Assessment be conducted should there be reports from building occupants regarding respiratory irritations or musty odours indoors.
- A Limited Phase II ESA is recommended based on the identified APEC located at the northwest Site building corner associated with an oil spill in 2022. As a large quantity of absorb-all was used in the contaminant source removal at ground surface, the main objective of the Limited Phase II ESA would be to determine the presence or absence of residual impacts in the subsurface associated with the oil spill. Based on the results of the limited Phase II ESA, several outcomes are possible:

- Ideal Scenario: If soil contaminant parameters are below applicable guidelines for all soil samples, it is likely that impacts were limited to near surface, mostly removed by absorbent pads, and residual concentrations do not pose a threat to human and ecological health. No further environmental work may be necessary.
- Realistic Scenario: If soil contaminant parameters exceed guidelines for certain soil samples but are limited to a confirmed depth and lateral extent, i.e. soil samples have no exceedances below a certain depth or past a certain lateral distance from spill, then the soil impact plume can be considered delineated and an estimated volume of soil requiring remediation can be provided to the Province for approval to conduct remedial activities.
- Undesirable Scenario: If soil contaminant parameters exceed guidelines for certain soil samples, but cannot be delineated with a defined soil impact plume boundary during the limited Phase II ESA (i.e. the deepest soil samples from the Limited Phase II ESA exceeds guidelines, and deeper soil samples could not be obtained for vertical delineation that they do not exceed guidelines), then a Phase II ESA involving a drill rig and the installation of monitoring wells for the assessment of groundwater impacts may be required to determine the estimated volume of soil and groundwater impacts at depth.

The statements made in this Executive Summary are subject to WSP Canada Inc's Standard Limitations found in **Appendix F** of this report and should be read in its entirety with the remainder of this report.





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# 1 GENERAL INFORMATION

## SITE LOCATION

### Legal Land Description:

Part Lot 1 and Lots 2 to 15, both inclusive, Block 13, and Lots 3 to 6, both inclusive, Block 14, Plan No. 1617; Part Lot 27 and Lots 29 to 42, both inclusive, Block 22, and Part Lot 1 and Lots 2 to 15, both inclusive, Block 23, Plan No. 1693 and Part Guildford Street, Closed by Instrument No. G47980 (Roll No. 7051908000)

### Civic Address:

2055 Ness Avenue, Winnipeg, Manitoba

## SITE REPRESENTATIVE

Ms. Kathy Roberts, Project Officer for the City of Winnipeg

Mr. Larry Santucci, Arena Foreman for the City of Winnipeg

## CLIENT

City of Winnipeg

## CONSULTANT

WSP Canada Inc.  
1600 Buffalo Place  
Winnipeg, MB R3T 6B8  
PH: 204-477-6650  
Website: [wsp.com](http://wsp.com)

**SITE VISIT DATE:** April 11, 2023

**REPORT DATE:** May 29, 2023

# 2 INTRODUCTION

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## 2.1 OBJECTIVES

WSP Canada Inc. (WSP) was retained by the City of Winnipeg to conduct a Phase I Environmental Site Assessment (ESA) of a property consisting of a large on-site building and an adjacent parking lot with the legal land description Part Lot 1 and Lots 2 to 15, both inclusive, Block 13, and Lots 3 to 6, both inclusive, Block 14, Plan No. 1617; Part Lot 27 and Lots 29 to 42, both inclusive, Block 22, and Part Lot 1 and Lots 2 to 15, both inclusive, Block 23, Plan No. 1693 and Part Guildford Street, Closed by Instrument No. G47980 (Roll No. 7051908000) and the civic address of 2055 Ness Avenue, herein referred to as the 'Site'.

The Phase I ESA was conducted for the City of Winnipeg in support of a new building addition proposed at the south elevation of the existing main Site building. The objective of the Phase I ESA was to evaluate the current and historical conditions of the Site and neighbouring properties and to identify any issues of potential environmental concerns that may exist in connection with the Site and surrounding properties.

A site plan is included in **Appendix A** and selected photographs of the Site are included in **Appendix B**.

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## 2.2 SCOPE OF WORK

The Phase I ESA carried out at the Site by WSP was conducted in general accordance with the Canadian Standards Association's (CSA) Phase I Environmental Site Assessment Standard CZ768-01 (R2016) and included the following:

- Records review, including but not limited to, publicly available land titles, aerial photographs, and groundwater well reports, geological and topographic maps.
- Provincial government regulatory search.
- Review of Environmental Risk Information Service (ERIS) Ecolog Report.
- A site visit of the property and publicly accessible neighbouring properties.
- Review of previous environmental reports if any are available; and
- Evaluation of information and preparation of this report.

A Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water or building materials. The Phase I ESA was visually assessed from readily accessible areas of the Site. An intrusive sampling investigation was not conducted. For this Phase I ESA, no additions to the CSA standards were made.

The site visit was conducted by WSP Project Scientist, Ms. Cassie Bujan on April 11, 2023. The Site and readily visible and publicly accessible portions of adjoining and neighboring properties were observed for the presence of potential sources of environmental concern. WSP was escorted during the Site visit and conducted an interview with Ms. Kathy Roberts, Project Officer and Mr. Larry Santucci, Arena Foreman.

# 3 REGULATORY FRAMEWORK

A Phase I ESA investigation involves the evaluation and reporting of existing information for the site property and associated buildings collected through records review, a site visit, and interviews with person(s) knowledgeable of the current and former site activities. This includes an assessment for the potential presence of hazardous materials associated with site activities and/or building structures. Federal and provincial regulations, guidelines and codes of practice exist for hazardous materials and where applicable, are considered during the Phase I ESA investigation to determine appropriate conclusions and recommendations.

A Phase I ESA does not comprise a Hazardous Materials Survey or Designated Substances Survey, nor does it include a systematic review or audit of operational compliance issues, or of any environmental management systems which may exist for the Site.

# 4 SITE DESCRIPTION

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## 4.1 PROPERTY INFORMATION

The Site is approximately 6.3 acres (2.5 hectares) and is zoned as “PR2-PRKS&REC-ACTIVE” on the City of Winnipeg Online Map of Assessment Parcels. The Site consists of a large commercial building and an adjacent asphalt-paved parking lot to the south. The Site is surrounded by open land (designated as a golf course) to the north and west, with residential housing to the south and east.

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## 4.2 ON-SITE BUILDINGS AND STRUCTURES

Ms. Kathy Roberts, Project Officer for the City of Winnipeg, provided WSP with existing building plans and the proposed building expansion plan for the St. James Civic Centre. The St. James Civic Centre can be described as a two-storey building containing an Arena (north section), fitness centre, pool, lobby and auditorium, (west to east in the main section) on the main floor, electrical, mechanical and boiler rooms on the second floor, and a basement under the middle section of the building with two separate crawlspaces under the Arena and southern portion of the building.



**Table 1. Building and Structure Descriptions**

Structure Identification (Year of Construction)	Area and Use	Construction Details
<p><b>Existing Site Building – Arena, Pool, Auditorium (1965), Fitness Room Expansion (1982).</b></p>	<p>The total area of the Site building footprint is approximately 5,337 m<sup>2</sup>. The middle portion of the Site building has a full basement with a crawlspace present under the entire arena to the north. It is located within a 2.3-acre lot in the northern portion of the Site and occupies approximately 32% of the lot. The remaining 68% of the lot area consist of paved parking areas, drive isles, landscaped areas, and outdoor courtyards.</p> <p>Exterior parking at the Site building can be accessed from the south and east through Ness Avenue and Woodlawn Street, respectively. The main entrance of the building is located at the south elevation of the St. James Civic Centre.</p>	<p>The exterior parking areas are asphalt paved with slight slopes towards catch basins connected to stormwater sewers.</p> <p>Asphalt pavement and graded gravel surround the building to the north, west and east sides. The south, front of the building is vegetated with grass and few large trees.</p> <p>The Site building exterior consists predominantly of cement soffits or brick veneer over insulated sheathing. Zonolite is the reported insulation used in construction for the main building.</p> <p>Roofing material consists of metal sheeting with the downspouts draining precipitation run-off from the roof into water catch basins connected to the site drainage system along the west side of the building.</p> <p>The structure of the Site building consists of wood beams and steel columns built upon a ground floor concrete slab supported by concrete piles and grade beam foundation. A crawlspace exists under the main floor of the Arena section of the building.</p> <p>Interior finishing includes drywalls, concrete blocks, floor tiles, vinyl floor tiles, carpet, sheet vinyl flooring, wall tiles, wood molding sound proofing coding (pool roof).</p> <p>According to engineered drawings provided by the Client, the snow dumping pit and associated plumbing for the Arena was last renovated in 1976, the refrigeration system in the Arena was at the north portion of the Site building was upgraded in 1978, and the Zamboni Room was renovated in 1993. The Auditorium was renovated in 1989 with partition walls, paint and exterior finishes.</p> <p>The Fitness Room was added onto the west portion of the Site building as an expansion in 1982. The entire building envelope was retrofitted and renovated in 1996.</p>

Several rooms could not be accessed as they were locked, and a key was not available during the Site visit:

- The St. James Canucks dressing room;
- The Water treatment room in the fitness room mezzanine;
- An office in the west corridor;
- The Electrical room in the basement; and
- The Pool mechanical room.

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## 4.3 PHYSICAL SETTING

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### 4.3.1 SURFACE WATER DRAINAGE

The Site is generally level with general slopes from west to east towards city ditches along roadways. At the time of the site visit there was snow covering the entire Site.

A review of the Natural Resources Canada interactive map indicates agricultural drains and ditches located on-site and in the local vicinity generally flow southeast towards the Assiniboine River.

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### 4.3.2 SOIL AND SURFICIAL GEOLOGY

The soil on-site is anticipated to consist predominantly of fine textured sediments of Fort Garry clay, that generally identifies as clay over light grey to pale yellow sandy clay calcareous subsoil. Fort Garry clay consists of blackearth soils developed on lacustrine fine clay deposits in the central basin of glacial Lake Agassiz. Due to differences in drainage or moisture regime, different soil types with varying morphological features can develop on the same fine textured clay parent material (Ehrlich, Poyser, Pratt and Ellis, 1953). According to Agriculture and Agri-Food Canada's Soils of Canada Interactive Map, the dominant soils in the Site prior to development are Vertisolic (98%) and Regosolic (2%).

The surficial geology in the area consists of offshore glaciolacustrine sediments and alluvial sediments. Glaciolacustrine sediments consists of clay, silt and minor sand and are 1-20 metres (m) thick. These sediments were deposited from suspension in offshore, deep water of the glacial Lake Agassiz and were commonly scoured by icebergs. Alluvial sediments consist of sand and gravel, sand, silt, clay and organic detritus. They are also 1-20 m in thickness and are deposited as channel and overbank sediments and reworked by existing rivers and deposited as bars (Matile and Keller, 2004).

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### 4.3.3 TOPOGRAPHY, GROUNDWATER AND REGIONAL DRAINAGE

The Site topography is primarily level with surface flows infiltrating directly into the ground or into the city sewage waterway system through ditches adjacent to the roadways.

A review of the topographic map for the area (Natural Resources Canada, 2021) indicates the Site is located at approximately between 235 to 240 m above sea level (masl) with an anticipated local down gradient flow (shallow groundwater flow direction) to the southeast.

Regional groundwater flow is anticipated to be primarily southeast, downgradient towards the Truro Creek approximately 300 m east, that further drains south to the Assiniboine River which is approximately 940 m south of the southernmost site boundary.

It is important to note that local shallow groundwater flow direction can be affected by the presence of underground utility corridors and fill materials and may not necessarily reflect the regional or local groundwater flow or area topography.

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#### **4.3.4 BEDROCK GEOLOGY**

According to a geological map of Manitoba, the bedrock geology at the Site mainly consists of the Gunton Member of the Stony Mountain Formation from the Ordovician period. The Gunton member is the lower portion of the formation and consists of nodular dense dolomite (Manitoba Energy and Mines, 1990). The northeastern corner of the Site consists of the Fort Garry Member of the Red River Formation also from the Ordovician period. The Fort Garry member consists of massive to laminated dolomite, minor argillaceous dolomite and high-calcium limestone (Manitoba Energy and Mines, 1990).

# 5 SUMMARY OF RECORDS REVIEWED

A summary of the records reviewed in support of the Phase I ESA is outlined in Table 2.

**Table 2. Summary of Historical Record Resources**

PARAMETER	REFERENCE
Aerial Photographs	Canada Map Sales. Dates: 1948, 1959, 1968, 1979, and 1988.
	Google Earth™ Satellite Review: 2010, 2020.
Land Titles	Teranet Manitoba, The Property Registry, Titles Online.
ECOLOG ERIS Environmental Database Search	ERIS EcoLog Database Report. Standard Report. Order 23031600501.
Fire Insurance Plans	None accessed.
City Directories	None accessed.
Previous Environmental Reports	N/A
Geological and Geotechnical Reports	<ol style="list-style-type: none"> <li>1. Ehrlich, W.A., Poyser, E.A., Pratt, L.E., Ellis, J.H., 1953. Report of reconnaissance soil survey of Winnipeg and Morris map sheet areas. Soils Report No. 5. Manitoba Soil Survey, Manitoba Department of Agriculture, Winnipeg, Manitoba.</li> <li>2. Manitoba Energy and Mines. 1990. Bedrock Geology Compilation Map Series, Winnipeg, NTS 62H, 1:250,000.</li> <li>3. Matile, G.L.D. and Keller, G.R. 2004: Surficial geology of the Winnipeg map sheet (NTS 62H), Manitoba; Manitoba Industry, Economic Development and Mines, Manitoba Geological Survey, Surficial Geology Compilation Map Series, SG-62H, scale 1:250 000.</li> <li>4. Natural Resources Canada. 2021. Geogratis: Toporama. Accessed March 2023.</li> <li>5. Natural Resources Canada. 2021. Open Maps Viewer: National Hydrographic Network. Accessed October 2021.</li> </ol>
Environmental Infractions and Orders	Manitoba Environment and Climate file searches. File No. 6582.
Reportable Spill/Release Occurrences	Manitoba Environment and Climate file searches. File No. 6582.
Contaminated Sites	Manitoba Environment and Climate file searches. File No. 6582.
Environmental Approvals, Licenses, Registrations, and Permits	Manitoba Environment and Climate file searches. File No. 6582.
Underground and Aboveground Storage Tanks	Manitoba Environment and Climate file searches. File No. 6582.
Water Well Records	<ol style="list-style-type: none"> <li>1. GWD Drill Well Search Database. 2018. Manitoba Environment and Climate.</li> <li>2. ERIS EcoLog Database Report. Standard Report. Order 23031600501.</li> </ol>

# 6 DISCUSSION OF FINDINGS

## 6.1 RECORDS REVIEW

- A total of 17 title certificates (2302345/1, 2423973/1, 2459204/1, 2392235/1, 2549013/1, 2421830/1, 355326, 401746, 359435, 398399, 402865, 430215, 416051, 450804, 524985, 409327 and 413069) were reviewed for the Site. Six of the title certificates are registered to the City of Winnipeg and eleven are registered to the Rural Municipality of St. James. There are no caveats or liens in the land titles that appear to indicate an environmental concern to the Site.
- Aerial photographs indicated the Site was previously a cleared, maintained area with patches of forest and a gravel parking lot to the east since 1948 with little to no change until the 1968 aerial photograph. Post-1968, the adjacent Assiniboine Golf Course and associated site building has been established, along with the current day St. James Civic Centre site building and parking lot to the south.
- Six ERIS Ecolog listings were found for the Site and surrounding properties within 250 m. Two of the on-site listings are identical and referenced the Site as a registered waste generator site with registration number MBG07509. The other three off-site waste generator listings are identical and reference Assiniboine Golf Club (2045 Ness Avenue) under registration number MBG10294. One off-site listing in Scott’s Manufacturing Directory references Weatherwise Tent Rentals on 382 Belvidere Street located approximately 200 m southeast of Site.
- A request was made to MEC on March 16, 2023, for a search of their databases for any reported information regarding spills, environmental infractions, hazardous wastes, listing on the Contaminated Sites registry and/or any remediation actions pertaining to the Site. A response from MEC received on March 31, 2023 (File Search No. 6582) indicated that the Site is listed as an operating Registered Hazardous Waste Generator (operational ID 29965) with associated registration number MBG10294.
- A water well database search was conducted through the MEC GWDDrill (2018) database for the Site on March 16, 2023. The search as conducted using the Site’s legal land Parish of St. James, by plotting all the well logs from the data file on Google Earth and acquiring the Well PID’s of all well logs within 250 m of the Site. No well logs were registered within 250 m of the Site.

Based on the records review, the Site does not have subject properties that are designated impacted, nor contaminated.

### 6.1.1 LAND TITLES

Land titles for the Site were requested from The Property Registry, Teranet Manitoba. Details of the current titles are below (**Table 3**), and copies of the titles can be found in **Appendix C**.

**Table 3. Land Title Certificates Summary**

LEGAL DESCRIPTION	OWNERS	DATE OF REGISTRATION	TITLE NUMBER	ORIGINATING TITLE NUMBER
Lot 4, Block 13, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The City of Winnipeg	October 4, 2010	2421830/1	3989018/1
Lots 13, 14 and 17 to 21, Block 13 and Lot 2, Block 19, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The City of Winnipeg	April 20, 2011	2549013/1	4062121/1
Lot 4, Block 14, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The City of Winnipeg	August 18, 2010	2392235/1	3968025/1

Lots 1, 2 and 3, Block 13, Plan 1617 WLTO except out of said Lot 1 the Sly feet in RL 22 to 25 Parish of St. James	The City of Winnipeg	January 6, 2011	2459204/1	4025592/1
Lots 5 and 6, Block 14, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The City of Winnipeg	October 22, 2010	2423973/1	3997456/1
Lots 1 to 7 inclusive and Lots 16 to 17 inclusive, Block 23, Plan 1693 WLTO except out of Lot 1 Ness Ave, Plan 1940 WLTO in RL 20 and 21 Parish of St. James	The City of Winnipeg	May 28, 2008	2302345/1	3619746/1
Lots 8, 14 and 15, Block 23, Plan 1693 WLTO in RL 20 and 21 Parish of St. James	The Rural Municipality of St. James	July 16, 1923	355326	172438
Lots 8, 11, 12, 25 and 26, Block 13, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The Rural Municipality of St. James	April 9, 1927	401746	241344
Lots 7 to 10, 20 to 24, 27 to 32, 35 to 38, 40 to 54 all inclusive, Block 22, Plan 1693 WLTO in RL 20 and 21 Parish of St. James.	The Rural Municipality of St. James	November 7, 1923	359435	172440
Lot 5, Block 13, Plan 1617 WLTO in RL 22 to 25 in Parish of St. James	The Rural Municipality of St. James	January 4, 1907	398399	311813
Lot 39, Block 22, Plan 1693 WLTO in RL 20 and 21 Parish of St. James	The Rural Municipality of St. James	May 3, 1927	402865	285763
Lots 15 and 16, Block 13, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The Rural Municipality of St. James	April 27, 1929	430215	383450
Lot 10, Block 13, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The Rural Municipality of St. James	April 2, 1928	416051	313049
Lots 33 and 34, Block 22, Plan 1693 WLTO in RL 20 and 21 Parish of St. James	The Rural Municipality of St. James	January 3, 1931	450804	314323
Lots 9 to 13 inclusive, Block 23, Plan 1693 WLTO in RL 20 and 21 Parish of St. James	The Rural Municipality of St. James	February 28, 1939	524985	485290
Lot 9, Block 13, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The Rural Municipality of St. James	October 10, 1927	409327	395061
Lot 6, Block 13, Plan 1617 WLTO in RL 22 to 25 Parish of St. James	The Rural Municipality of St. James	January 12, 1928	413069	333234

There are no caveats or liens in the land titles that appear to indicate an environmental concern to the Site.

### 6.1.2 AERIAL PHOTOGRAPHS

Selected aerial photographs obtained from Canada Map Sales included the dates 1948, 1959, 1968, 1979, and 1988 and were reviewed to determine former land use at the Site (**Appendix D**). A satellite image acquired from Google Earth™ was also reviewed but not reproduced for the report for the year 2010 and 2020. A summary of the aerial photography and satellite imagery observations for the Site is provided in Table 4.

**Table 4. Historical Aerial Photograph Summary**

DATE	SOURCE	THE SITE	NORTH ADJACENT PROPERTY	SOUTH ADJACENT PROPERTY	EAST ADJACENT PROPERTY	WEST ADJACENT PROPERTY
1948	Canada Map Sales	A long driveway runs from the road along the south boundary of the Site, up to a large, gravelled cleared area. A small building is present near the north boundary of the Site with some potential outbuildings. Patches of mature trees and shrubs are present throughout the Site to the east and south. The western portion of the Site appears to be cleared and nicely maintained.	Most of the north adjacent property is cleared and nicely maintained, with patches of forest that appear to contain mature trees and shrubbery. Further north appears to be large commercial and industrial buildings with associated parking lots.	The southeastern adjacent properties have developed into an established residential community with what appears to be single-family houses. The southwestern adjacent property still contains mature forested areas but cleared areas have been established for future development into roadways and houses.	A farmstead is located just east of the Site near the southeast corner with a mature forested area surrounding the building. Most of the east adjacent property is cleared and nicely maintained with small patches of mature forest. Further east are several other small homesteads off the main road, Ness Avenue.	The west adjacent property is cleared and nicely maintained land with small patches of trees and shrubbery. Further west is Air Force Way, that runs north to south giving access to the commercial and industrial buildings to the north.
00/1959	Canada Map Sales	The gravelled area appears to be a parking lot for a building located in the east adjacent property. Small outbuildings are observed to the north and southwest within the Site boundaries.	The land remains cleared and well maintained with patches of forested area. It appears the land has been developed into a golf course.	The southwestern adjacent properties have been fully developed into a single-family home community.	A large building has been built immediately east of the Site with a parking lot. Further development has occurred at the homestead locations with cleared areas and small outbuildings. The cleared, maintained land to the east appears to be a part of the new golf course.	It appears a golf course has been established with the land immediately west of the Site. Adjacent to Air Force Way, a residential community with single-family houses has been developed.
1968	Canada Map Sales	The northern half of the Site has been developed into the St. James Civic Centre building. Gravel parking areas run along the east and west of the buildings. The southern half of the Site has been established as a large asphalt parking pad. The small area of the Site to the east is covered by large, mature trees.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.
1979	Canada Map Sales	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.

DATE	SOURCE	THE SITE	NORTH ADJACENT PROPERTY	SOUTH ADJACENT PROPERTY	EAST ADJACENT PROPERTY	WEST ADJACENT PROPERTY
1988	Canada Map Sales	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.
2010	Google Earth™	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.
2020	Google Earth™	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.	No substantial changes were apparent.



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### 6.1.3 ECOLOG ERIS DATABASE SEARCH

An ERIS EcoLog database search (**Appendix E-1**) of the Site and surrounding properties (0.25 kilometres) was conducted and revealed that the Site contains the following listings:

- Five listings were identified under the Waste Generators Summary, with two identical listings referring to the Site at 2055 Ness Avenue (the St. James Civic Centre) and the other three identical listings are referencing the north adjacent property at 2045 Ness Avenue (Assiniboine Golf Club).
- One off-site listing was identified under Scott's Manufacturing Directory approximately 217 m from the center of the Site at Weatherwise Tent Rentals.

Additional databases requested included Chemical Manufacturers, Contaminated/Impacted Sites, Enforcement Actions, Fuel Storage Tanks, Bulk Fuel Distributors, Manure Storage Facilities, Inventory of PCB Storage Sites, Waste Receivers Summary, and Retail Fuel Storage Tanks. No results were received pertaining to the above databases for the Site and surrounding properties.

Three unplotable summaries were identified with one of the sites listed as a Bulk Fuel Distributor and the other two sites were listed under the Sustainable Development Public Registry. According to the location description of these three sites, they are located far from the Site and not anticipated to pose an environmental concern to the Site.

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### 6.1.4 REGULATORY AGENCY FILES AND DATABASES

A request was made to MEC on March 16, 2023, for a search of their databases for any reported information regarding spills, environmental infractions, hazardous wastes, listing on the Contaminated Sites registry and/or any remediation actions pertaining to the Site. A response from MEC received on March 31, 2023 (File Search No. 6582) indicated that the Site is listed as an operating Registered Hazardous Waste Generator (operational ID 29965) with associated registration number MBG10294. Copies of the MEC file search results can be found in **Appendix E-2**.

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### 6.1.5 WATER WELL DATABASE SEARCH

A water well database search was conducted through the MEC GWDriII (2018) database for the Site on March 16, 2023. The search was conducted using the Site's legal land Parish of St. James. Based on the Universal Traverse Mercator (UTM) coordinates provided in the GWDriII database, no well logs were registered within 250 m of the Site boundary.

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## 6.2 SITE VISIT AND INTERVIEWS

The site visit was conducted by WSP Project Scientist, Ms. Cassie Bujan on April 11, 2023. The Site and readily visible and publicly accessible portions of adjoining and neighboring properties were observed for the presence of potential sources of environmental concern. WSP interviewed and was escorted by Kathy Roberts, Project Officer and Larry Santucci, the Arena Foreman from the City of Winnipeg.

At the time of the site visit, the ground was snow-covered, the weather consisted of sunny, clear skies and the temperature was approximately 11°C.

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## 6.3 CURRENT SITE OPERATIONS

The northern half of the Site is currently a large recreational building including an arena, pool, fitness centre and auditorium. The southern half of the Site is used as an open parking lot with direct access to Ness Avenue. The southwest corner of the Site is used as a recycling facility with City of Winnipeg community recycling bins.

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## 6.4 WASTE GENERATION AND STORAGE

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### 6.4.1 SOLID WASTE

Domestic waste generated by the Site building is collected in a single bin located on the east side of the building and is disposed of through scheduled collection by Green for Life (GFL). Along the west side of the parking lot, a total of 12 recycling bins are used by the City of Winnipeg residents for local drop off. ERIS Ecolog results indicate that the Site is listed as a waste generator.

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### 6.4.2 LIQUID AND SEWAGE WASTE

Sewage waste generated from the Site building is connected to the City of Winnipeg sewage system.

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### 6.4.3 DRAINS AND SUMPS

Due to snow cover, no drains or sumps were observed during the Site visit. The Site representative reported two catch basins along the west side of the Site and one along the east side, though they were not observed due to snow and water cover.

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### 6.4.4 AIR DISCHARGES AND ODOURS

No odour or air discharges of concern were identified on-site at the time of the site visit.

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## 6.5 FUEL AND CHEMICAL STORAGE

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### 6.5.1 UNDERGROUND STORAGE TANKS

No evidence of underground storage tanks (USTs) was observed on-site at the time of the site visit (i.e. no vent pipes, fill pipes or other indicators of USTs) and none were reported as existing on the site by the Site representative.

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### 6.5.2 ABOVEGROUND STORAGE TANKS (ASTS)

No evidence of aboveground storage tanks (ASTs) was observed on-site at the time of the Site visit (i.e. no concrete pads, tank piping, dead vegetation or bare soil or other indicators of ASTs) and none were reported as existing on the Site by the Site representative.

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## 6.6 OTHER STORAGE CONTAINERS

At the time of the Site visit, an ammonia storage room was observed in a room to the north of the ice rink in the Arena. The room was locked, and the Site representative confirmed an alarm system with sensors was present as a safety precaution in case of a spill or leak.

A 189 L (50-gallon) drum of oil was observed outside along the northwest corner of the Arena. According to the Site representative, the oil is used for compressors and GFL removes the drum annually.

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## 6.7 EXTERIOR SITE OBSERVATIONS

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### 6.7.1 STRESSED OR STAINED VEGETATION

No stressed or stained vegetation was observed on-site at the time of the site visit with snow cover limiting observations.

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### 6.7.2 SURFACE STAINS

Oil residue was observed along the north side of the Arena. Snow cover obscured the extent of the remaining oil contamination but was seen to run along the wall for approximately four feet. Personal communication with the Client representative concluded that a large oil spill occurred in 2022 that resulted in approximately 454 L of motor oil to be spilled from oil drums that had been knocked over along the north side of the Arena. The number of drums included in the spill was unknown and the motor oil was stated to be from the compressors.

Oil mats and a large quantity of absorb-all were used by the City of Winnipeg staff to clean the surficial area and Miller Environmental collected the oil-impacted cleaning waste on October 12, 2022. Movement documents from Miller Environmental for the transportation of oil-impacted waste are provided in Appendix E-3. No excavation or intrusive remediation was conducted according to the Client Representative.

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### 6.7.3 FILL MATERIALS

Several small piles of fill material were observed at the northeast corner of the Site that appeared to contain gravel, sand with minor amounts of litter. The fill material may be remnants from melted snow stockpiles from previous snow clearing.

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### 6.7.4 WELLS

A water well database search was conducted through the MEC GWDrill (2018) database for the Site on March 16, 2023. The search was conducted using the Site's legal land Parish of St. James, by plotting all the well logs from the data file on Google Earth and acquiring the Well PID's of all well logs within 250 m of the Site. No well logs were registered within 250 m of the Site.

No groundwater wells were observed on-site during the Site visit.

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### 6.7.5 PITS AND LAGOONS

No pits and lagoons were observed on-site during the site visit.

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### 6.7.6 WATERCOURSES, DITCHES OR STANDING WATER

At the time of the Site visit, there were several small puddles of standing water observed around the Site due to melting snow. A significant amount of water was observed to be pooling along the west side of the Site where a drainage ditch was full of snow from the parking lot snow clearing.

In the southwest corner of the parking lot, standing water was observed in a low area that did not appear to be draining. The standing water made it difficult to confirm whether a drain is present or if it was clogged due to ice or debris.

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### 6.7.7 ROADS, PARKING FACILITIES AND RAILWAY RIGHTS-OF-WAY

The site is bound by the Assiniboine Golf Course along the north and west boundaries, Woodlawn Street along the east boundary and Ness Avenue along the south boundary. The southern half of the Site is a designated parking lot for the St. James Civic Centre.

There are no rail beds or rail rights-of-way on or adjacent to Site.

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## 6.8 HAZARDOUS BUILDING MATERIALS

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### 6.8.1 ASBESTOS-CONTAINING MATERIALS (ACMs)

Asbestos is a commercial term given to six naturally occurring minerals that are incombustible and separable into fibers. The fibers are strong, durable, and resistant to heat and fire and are long, thin, and flexible, enabling them to be woven into cloth. These qualities have resulted in the wide use of asbestos in commercial, industrial, automotive, and building materials. Common ACMs include pipe-covering, insulating cement, insulating block, refractory and boiler insulation materials, transite board, fireproofing spray, plasters, joint compound, vinyl floor tile, vinyl sheet flooring, ceiling tile, mastics, roofing products, and duct insulation for HVAC applications. The application of friable (crumbles with hand pressure) ACMs was banned by legislation in the mid to late 1980s. Non-friable ACMs are still used in some products. ACMs are not regulated in all countries and as such can be present in imported materials. Inhalation of asbestos fibers can result in deleterious health effects.

The Site representative stated previous testing has been conducted within the Arena and older areas of the building that resulted in asbestos containing materials identified in the walls and flooring. It was expressed that the old staff kitchen (north of the auditorium) will be demolished for the new extension where it is expected to contain asbestos in the floor tiles. As zonalite insulation was confirmed to be present in the as-built construction of the Site building through personal communication with the Site representatives, it should be assumed to be asbestos-containing.

Due to the original year of construction (1965) of the Site building, both friable and non-friable ACM could be present as building materials on-site.

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### 6.8.2 POLYCHLORINATED BIPHENYLS (PCBs)

PCBs were widely used as coolants and lubricants for electrical equipment from the 1930s to the 1970s. Historically, PCBs were used in transformers and capacitors, and in such industrial materials as sealing and caulking compounds, inks and additives of paint. The only remaining uses of PCBs in Canada are in electrical transformers and capacitors existing in Canada before July 1, 1980, and in certain other "closed-use equipment" (specifically heat transfer equipment, hydraulic equipment and vapour diffusion pumps) that were in Canada before September 1, 1977. PCB containing equipment must now be taken out of service prior to regulatory deadlines.

The existing light fixtures in the Main portion on the building are all LED and were installed during the last phase of renovations and upgrades in 1996, PCB containing light ballasts are unlikely to be present on-site. A pad-mounted transformer is located along the west boundary of the property. A white circle sticker is present on the pad-mounted transformer, indicating that no PCB is present within.

As the basement Electrical Room and the Pool Mechanical Room was inaccessible during the Site visit, it was not reviewed for PCB-containing equipment.

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### **6.8.3 LEAD-BASED MATERIALS**

Sources of lead in buildings include lead paint that was used during building construction prior to 1976 and lead-based water pipes and lead-solder joints on copper pipes that were primarily utilized in building construction between 1930 and 1986. Lead from paint, chips and dust can pose health hazards, especially in young children.

The Site representative stated previous testing had been conducted within the building that identified the presence of lead paint used on all walls on-site. In the last phase of renovations and upgrades in 1996, the walls were all repainted to cover the exposed lead paint. Some areas on the Arena walls were observed to be chipping, exposing the potential lead-based paint.

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### **6.8.4 UREA FORMALDEHYDE FOAM INSULATION (UFFI)**

Urea Formaldehyde Foam Insulation (UFFI) use was banned in Canada in 1980. Prior to the ban, UFFI was utilized as an insulation product in houses from the mid to late 1970s. It should be noted that commercial and industrial buildings do not commonly contain UFFI.

As the Site building was not constructed for residential purposes, UFFI is unlikely to be present on-site. It was also mentioned by the Site representatives that the Site building uses zonolite insulation.

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### **6.8.5 OZONE DEPLETING SUBSTANCES (ODS)**

Ozone-depleting substances (ODS) were commonly found in refrigeration and air conditioning equipment manufactured prior to 1998.

All refrigerators and air-conditioning equipment were assumed to have been upgraded and manufactured after 1998, therefore it is likely that there are no ODS present on-site. As the Arena uses liquid ammonia as a refrigerant, it is likely that no ODS are present in the Arena refrigeration system.

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## **6.9 SPECIAL ATTENTION ITEMS**

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### **6.9.1 MICROBIAL CONTAMINATION (MOULD) AND INDOOR AIR QUALITY**

Moisture problems associated with building design, construction, heating and ventilation systems, aging building components, overland flooding and high humidity can lead to the growth of mould in indoor environments. Water staining and water damage are often indicators of the potential for mould growth that can lead to adverse health issues. Only readily accessible areas were assessed for water damage and mould during this investigation.

The Site representative reported that the crawlspace beneath the Arena is constantly moist with high humidity throughout the year with standing water also present. It is unknown where the water is coming from.

A stagnant water odour was observed in the Boiler Room, containing 10 water tanks in the basement. The Site representative reported this was not a normal occurrence and was unsure where the odour was being generated.

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### **6.9.2 ELECTROMAGNETIC FIELDS (EMFs)**

Power transmission lines and electrical substations are common sources of EMFs. Currently, human health risks associated with exposure to EMFs are being investigated by Health Canada. Currently, Canada does not have any national, territorial, or provincial standards or guidelines related to EMFs.

Hydro-towers running high voltage transmission lines run north to south along the east border of the Site. Due to the height of the towers, EMFs are not likely a concern at ground level.

### 6.9.3 NOISE AND VIBRATION

Human health effects from noise and vibration are varied and are based on the characteristics of the noise/vibration, length of exposure and the susceptibility of the exposed individual.

Significant noise or vibrations were not detected during the site visit. Vehicle traffic may be a source of noise and vibration, but it is not expected to be at a level that pose an environmental concern.

### 6.9.4 INTERIOR SURFACE STAINS

Several radial water stains were observed on ceiling tiles, assumed to be from water damage and may be a source of mould impacts. Mould-impacted building materials could not be confirmed as no samples were taken.

## 6.10 ADJOINING PROPERTY INFORMATION

A summary of the current and historic activities conducted on neighboring properties is presented below (**Table 5**). Information regarding adjoining properties was collected from observations completed during the site visit and from a historical records review.

**Table 5. Current and Historic Activities Conducted on Neighbouring Properties**

Property 1	Description
<b>Address:</b>	Golf Course
<b>Direction From Site:</b>	North
<b>Relation to Property:</b>	Adjacent
<b>Occupant Name and Current Activities:</b>	Assiniboine Golf Course
<b>Historical Activities:</b>	Previously undeveloped, vacant land.
<b>Potential Environmental Concerns:</b>	Based on the current condition of the buildings and surrounding areas, this property is unlikely to pose an environmental concern to the Site.
Property 2	Description
<b>Address:</b>	Multiple residential houses
<b>Direction From Site:</b>	South
<b>Relation to Property:</b>	Adjacent
<b>Occupant Name and Current Activities:</b>	Multiple single-family residential community
<b>Historical Activities:</b>	Previously undeveloped, vacant land.
<b>Potential Environmental Concerns:</b>	Based on the current condition of the buildings and surrounding areas, this property is unlikely to pose an environmental concern to the Site.
Property 3	Description
<b>Address:</b>	425 Woodlawn Street
<b>Direction From Site:</b>	East
<b>Relation to Property:</b>	Adjacent
<b>Occupant Name and Current Activities:</b>	Deer Lodge Curling Club
<b>Historical Activities:</b>	Previously undeveloped, vacant land.

<b>Potential Environmental Concerns:</b>	Based on the current condition of the buildings and surrounding areas, this property is unlikely to pose an environmental concern to the Site.
<b>Property 4</b>	<b>Description</b>
<b>Address:</b>	Golf Course
<b>Direction From Site:</b>	West
<b>Relation to Property:</b>	Adjacent
<b>Occupant Name and Current Activities:</b>	Assiniboine Golf Course
<b>Historical Activities:</b>	Previously undeveloped, vacant land.
<b>Potential Environmental Concerns:</b>	Based on the current condition of the buildings and surrounding areas, this property is unlikely to pose an environmental concern to the Site.

# 7 SUMMARY OF FINDINGS

Based on the results of the Phase I ESA, a highlight of findings for the Site is as follows:

- Land parcels within the Site are registered to the client (the City of Winnipeg) and to the Rural Municipality of St. James. There are no caveats or liens in the land titles that appear to indicate an environmental concern to the Site.
- Historic aerial photographs indicate the Site was primarily vacant land prior to 1968 before being developed with a large on-site building similar to the present-day St. James Civic Centre. No ASTs nor stockpiles were observed to be present on-site and adjacent properties for each of the historical aerial photographs reviewed.
- Results from the ERIS Ecolog search referenced the Site and the north adjacent Assiniboine Golf Club as registered Waste Generators. None of the off-site listings are anticipated to pose an environmental concern to the Site. The Site likely generates used lubricating oil for the compressors servicing the Arena and functions as a transfer depot for recyclable wastes. On-site waste generation is not anticipated to be a significant environmental concern with proper housekeeping and storage.
- An MEC File Search response received on March 31 (File Search No. 6582) indicate that the Site is not listed as having any outstanding environmental orders, nor is it registered as having a file under the MEC Contaminated or Impacted Sites Program. The Site is not listed as a registered petroleum storage site.
- Based on personal communication with Mr. Larry Santucci, the Arena Foreman, during the interview with Client representatives on-site, an oil spill of approximately 454 litres had previously occurred at the northwest corner of the Site building with surficial clean-up with absorb-all completed by City of Winnipeg staff and oil-impacted debris removed by Miller Environmental on October 12, 2022. As there may be residual petroleum hydrocarbons impacts in the subsurface from seepage between the oil spill and the clean-up attempt, the northwest corner of the Site building exterior is identified as an Area of Potential Environmental Concern (APEC).
- Based on the age of the Site building construction (1965), asbestos-containing materials, lead paint, mercury-containing equipment, and PCB-containing equipment may be present on-site.



# 8 RECOMMENDATIONS

Based on the findings of the Phase I ESA, WSP recommends the following:

- Continued good housekeeping of lubricating oil, cleaning and chemical supplies on-site; ensure that the liquid ammonia storage area is inaccessible to the public and is well ventilated at all times.
- Prior to any renovation or demolition work, it is recommended to conduct a Hazardous Materials Assessment as the original building structure was constructed in 1965, and there may be additional unconfirmed locations with asbestos-containing materials, lead paint, ozone-depleting refrigerants, mercury-containing equipment, and PCB-containing equipment present on-site.
- Due to excessive moisture reported under the crawlspace of the arena, an odour of stagnant water present in the boiler room, water-stained ceiling tiles and the age of the building, it is recommended that an Indoor Air Quality and Fungal Assessment be conducted should there be reports from building occupants regarding respiratory irritations or musty odours indoors.
- A Limited Phase II ESA is recommended based on the identified APEC located at the northwest Site building corner associated with an oil spill in 2022. As a large quantity of absorb-all was used in the contaminant source removal at ground surface, the main objective of the Limited Phase II ESA would be to determine the presence or absence of residual impacts in the subsurface associated with the oil spill. Based on the results of the limited Phase II ESA, several outcomes are possible:
  - o Ideal Scenario: If soil contaminant parameters are below applicable guidelines for all soil samples, it is likely that impacts were limited to near surface, mostly removed by absorbent pads, and residual concentrations do not pose a threat to human and ecological health. No further environmental work may be necessary.
  - o Realistic Scenario: If soil contaminant parameters exceed guidelines for certain soil samples but are limited to a confirmed depth and lateral extent, i.e. soil samples have no exceedances below a certain depth or past a certain lateral distance from spill, then the soil impact plume can be considered delineated and an estimated volume of soil requiring remediation can be provided to the Province for approval to conduct remedial activities.
  - o Undesirable Scenario: If soil contaminant parameters exceed guidelines for certain soil samples, but cannot be delineated with a defined soil impact plume boundary during the limited Phase II ESA (i.e. the deepest soil samples from the Limited Phase II ESA exceeds guidelines, and deeper soil samples could not be obtained for vertical delineation that they do not exceed guidelines), then a Phase II ESA involving a drill rig and the installation of monitoring wells for the assessment of groundwater impacts may be required to determine the estimated volume of soil and groundwater impacts at depth.

# 9 STANDARD TERMS AND CONDITIONS

This report has been prepared for use by the City of Winnipeg in accordance with generally accepted environmental investigation practices at the time of the assessment within the scope suggested by Canadian Standard Association's Phase I Environmental Site Assessment document (CSA Z768-94). The Standard Limitations pertaining to the use of this report are presented in **Appendix F**.

# 10 QUALIFICATION OF ASSESSORS

**Mr. Darren Keam, M.Sc., P.Ag.**, is the Team Lead, Senior Soil Scientist and Regional Manager with the Occupational Health and Safety business unit at WSP. He has more than 22 years of experience in agriculture and environmental management and more than 20 years conducting and managing Phase I and II ESA projects. Mr. Keam leads EM opportunities, including Phase I and II ESA planning, site assessments and investigations and data analysis as well as providing senior technical review and quality assurance and quality control review of ESA data and reports. Mr. Keam is a member in good standing with the Manitoba Institute of Agrologists.

**Alfred Chan, B.Sc. Geol., P.Geo., PMP** is a Project Scientist in our EM Business Unit in Winnipeg, Manitoba. Alfred is a licensed Professional Geoscientist (P.Geo.) with the Association of Professional Engineers and Geoscientists of the Province of Manitoba (EGM). Alfred has over 10 years of experience consisting of Phase I and II environmental site assessments, site inspections, remedial groundwater monitoring, soil remediation, petroleum storage tank removal inspections, mineral exploration, geotechnical investigations and community road upgrades. In addition to field investigations, Alfred is involved with the coordination of projects and budgets, data analysis, technical reporting and utilizes software such as Bentley gINT Professional, MapINFO, ArcGIS and AutoCAD to produce deliverables for clients.

**Cassie Bujan, B.Env.Sc.** is a Project Scientist with the WSP Earth & Environment in Winnipeg, MB. She has a Bachelor of Environmental Science with a major in conservation and biodiversity. Cassie has a year of experience working in the Manitoba agriculture and environmental industries including laboratory research and analysis. Cassie has worked for numerous clients and projects including commercial and residential projects. Her responsibilities with WSP include conducting Phase I and Phase II ESAs, site inspections, biosolid management and groundwater monitoring. In addition to field investigation, Cassie is involved in the coordination of projects, data analysis and technical report writing.

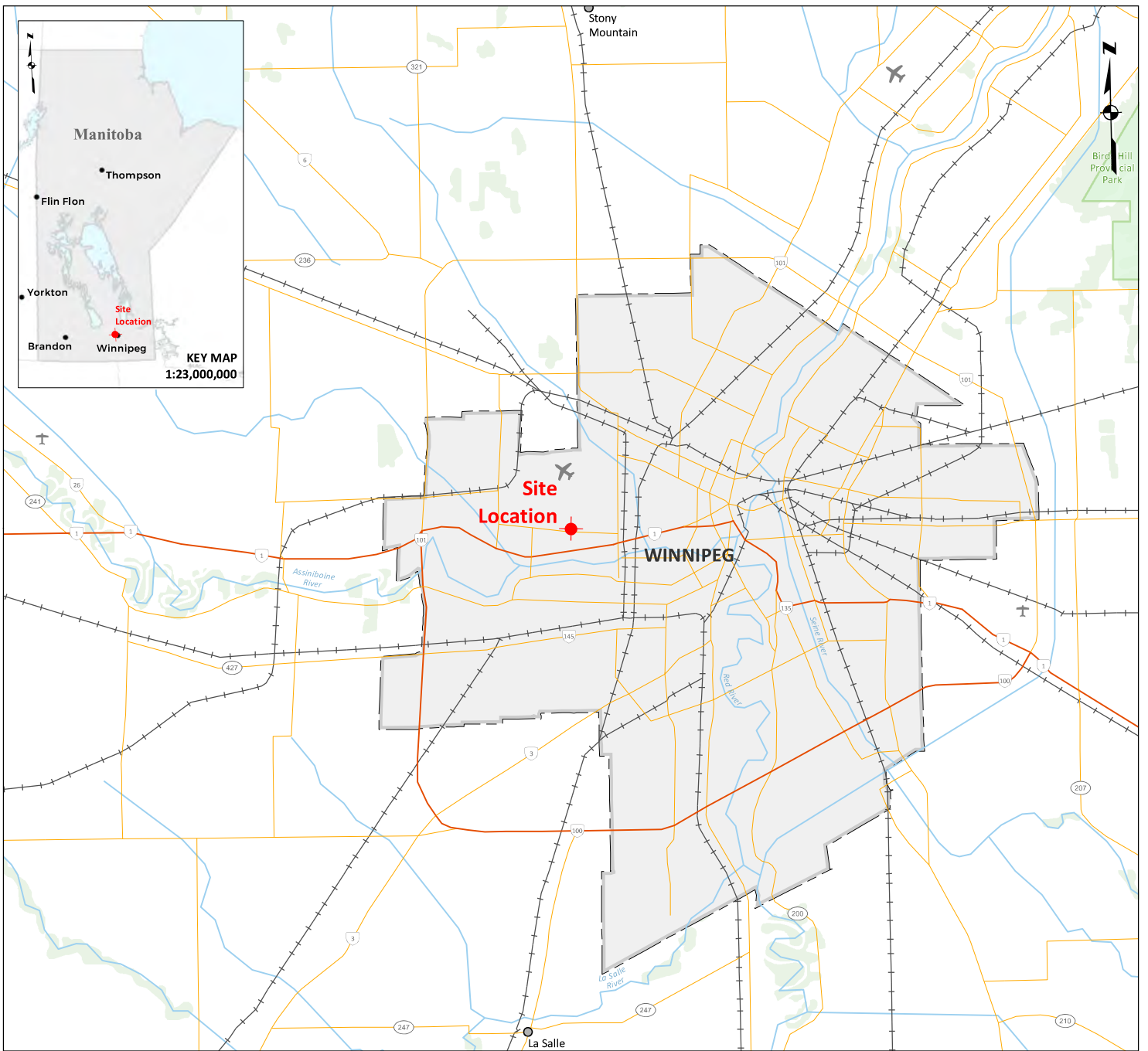
# ATTACHMENT

**A**

FIGURES







### Legend

#### Activity

● Site Location

#### Water Features

~ Perennial Creeks/Streams

#### Municipal

○ Towns/City

■ Major Urban Centre

#### Transportation

— Paved Roads

— TransCanada Highway

— Railways

✈ Airport

✈ Airfield

#### Environmental

■ Provincial Park

■ Vegetation

Scale: 1:500,000

0 2.5 5 7.5 10 12.5 Km

Universal Transverse Mercator (Zone 14)  
North American Datum (1983)

**Draft**

## Site Location Map

2055 Ness Avenue

Winnipeg, Manitoba



Figure 1



### Legend

- Site Layout Plan
- Area of Potential Environmental Concern
- Parcels

Scale: 1:1,500  
 0 12.5 25 50 75 100 125 Metres  
 Universal Transverse Mercator (Zone 14)  
 North American Datum (1983)

## Site Layout Plan

2055 Ness Avenue

Winnipeg, Manitoba



Figure 2

# ATTACHMENT

**B**

PHOTOGRAPHS







April 11, 2023



Photograph 1 – Exterior, north site boundary

*Looking north at the north adjacent property, Assiniboine Golf Course, from the north elevation.*

April 11, 2023



Photograph 2 – Exterior, northwest corner of site boundary

*Looking west towards the west adjacent property, Assiniboine Golf Course, from the northwest corner elevation.*

April 11, 2023



Photograph 3 – Exterior, southwest corner of site boundary

*Looking west towards the west adjacent property, Assiniboine Golf Course, from the southwest corner elevation.*

April 11, 2023



Photograph 4 – Exterior, south site boundary

*Looking south towards residential housing along Ness Avenue, from the south elevation.*

April 11, 2023



Photograph 5 – Exterior, southeast corner of site boundary  
*Looking east at adjacent property from the southeast elevation.*

April 11, 2023



Photograph 6 – Exterior, northeast corner of site boundary  
*Looking east at the adjacent property, Deer Lodge Curling Club, from the northeast elevation.*

April 11, 2023



Photograph 7 – Exterior, north site boundary  
*Looking southeast from the north elevation.*

April 11, 2023



Photograph 8 – Exterior, west site boundary  
*Looking east from the northwest elevation.*

April 11, 2023



Photograph 9 – Exterior, west site boundary  
*Looking east from the southwest elevation towards the Site parking lot.*

April 11, 2023



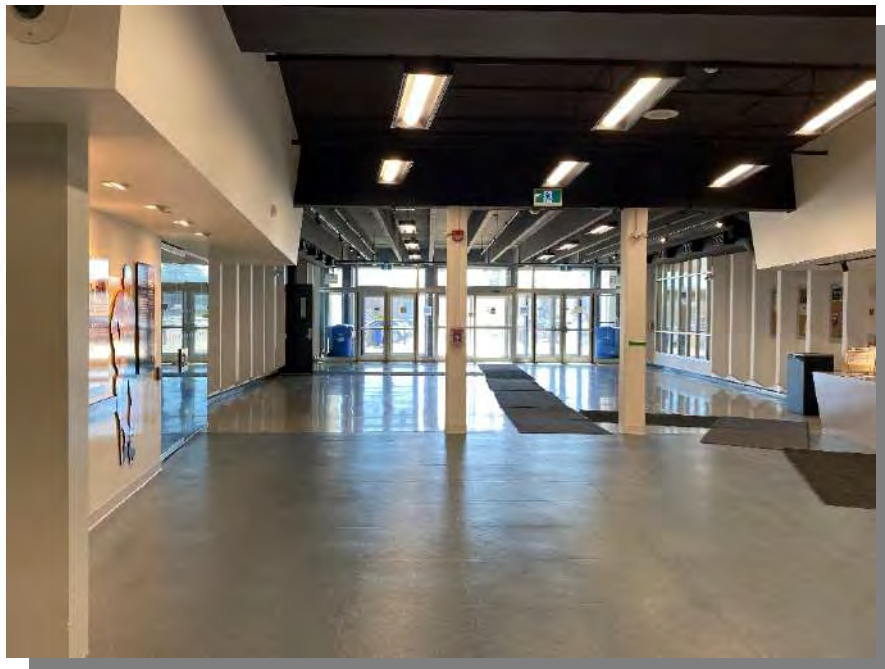
Photograph 10 – Exterior, south site boundary  
*Looking north from the south elevation.*

April 11, 2023



Photograph 11 – Exterior, east site boundary  
*Looking southwest from the northeast elevation.*

April 11, 2023



Photograph 12 – Interior, main lobby  
*Looking south from the Arena towards the building main entrance.*

April 11, 2023



Photograph 13 – Interior, Arena entrance  
*Looking north at the Arena main entrance from the lobby.*

April 11, 2023



Photograph 14 – Interior, Arena  
*Looking northwest at the Arena rink from the southeast corner.*



April 11, 2023



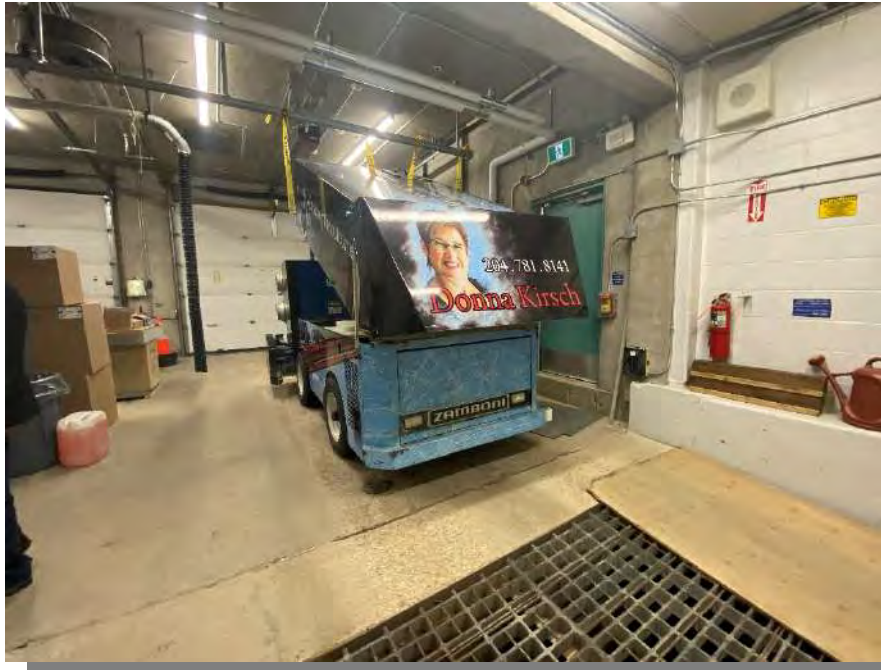
Photograph 15 – Interior, Arena  
*Looking south at the Arena rink from the north side.*

April 11, 2023



Photograph 16 – Interior, Arena changeroom  
*Looking inward at the changeroom located under the Arena bleachers.*

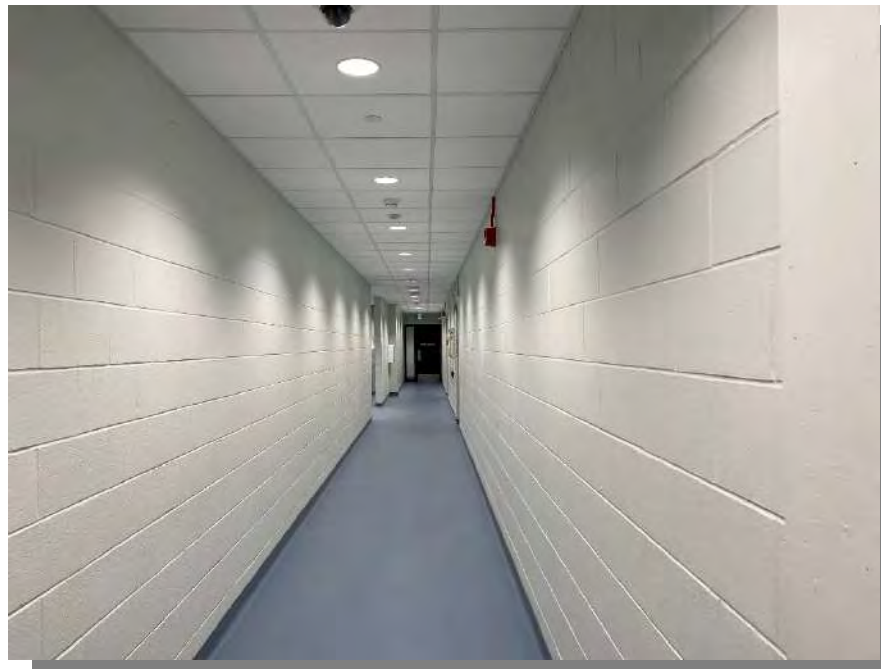
April 11, 2023



Photograph 17 – Interior, Zamboni room

*Looking inward at the Zamboni room from the doorway located in the northwest corner of the Arena.*

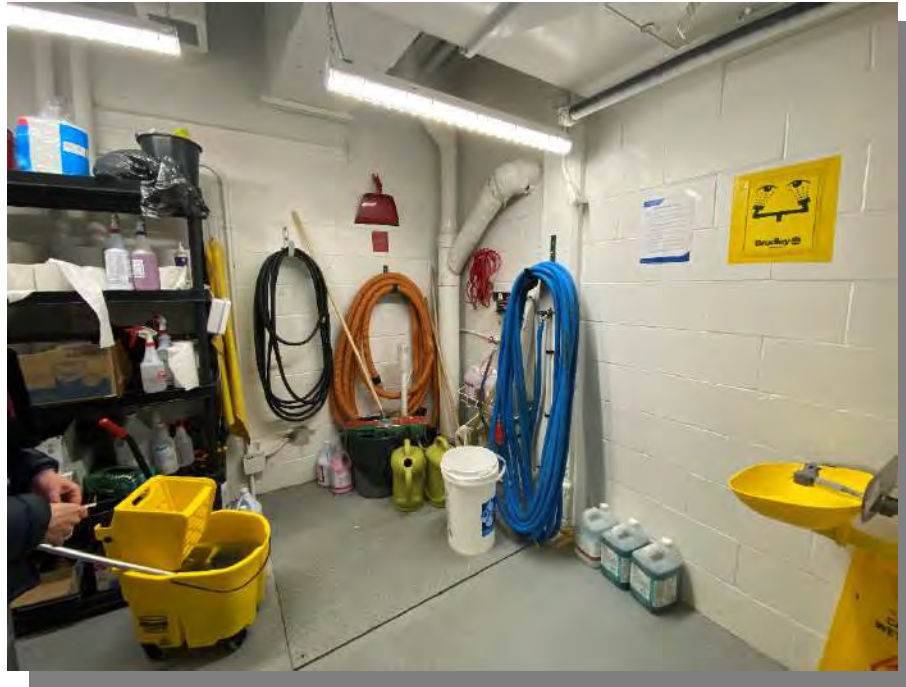
April 11, 2023



Photograph 18 – Interior, west corridor

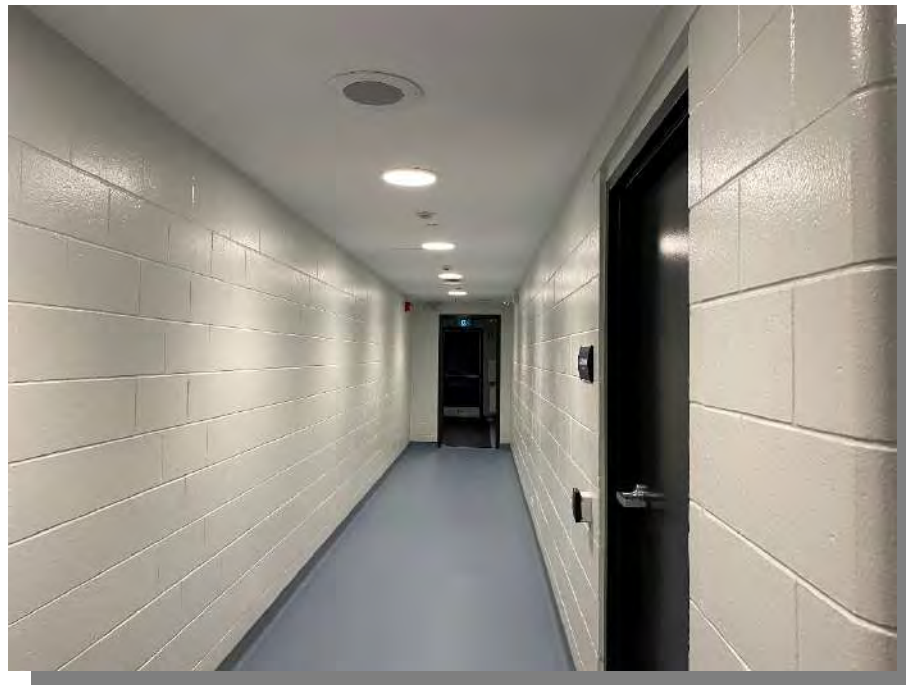
*Looking west down the west corridor just off the lobby.*

April 11, 2023



Photograph 19 – Interior, pool chemical room  
*Looking inward at the pool chemical room containing no hazardous materials.*

April 11, 2023



Photograph 20 – Interior, east corridor  
*Looking east down the east corridor just off the lobby.*

April 11, 2023



Photograph 21 – Interior, staff kitchen  
*Looking inward at the staff kitchen (to be removed), north off the east corridor.*

April 11, 2023



Photograph 22 – Interior, basement  
*Looking east down the basement corridor that is underneath the center portion of the building.*

April 11, 2023



Photograph 23 – Interior, basement storage room

*Looking inward at a large storage room located on the west side of the basement.*

April 11, 2023



Photograph 24 – Interior, basement boiler room

*Looking inward at ten new water tanks located in the basement boiler room.*

April 11, 2023



Photograph 25 – Interior, basement pool storage area

*Looking inward at the east portion of the storage area located in the basement under the pool.*

April 11, 2023



Photograph 26 – Interior, basement pool storage area

*Looking inward at the west portion of the storage area located in the basement under the pool.*

April 11, 2023



Photograph 27 – Interior, mechanical and electrical room  
*Looking inward at the newly renovated mechanical and electrical room.*

April 11, 2023



Photograph 28 – Interior, mechanical and electrical room  
*Looking inward at the back area of the newly renovated mechanical and electrical room.*

April 11, 2023



Photograph 29 – Interior, auditorium side kitchen  
*Looking inward at the small, side kitchen located just north of the auditorium.*

April 11, 2023



Photograph 30 – Exterior, small out-building  
*Looking north from the east elevation, just north of the auditorium, towards a small, unused out-building.*



April 11, 2023



Photograph 31 – Exterior, out-building interior

*Looking inward at the interior of the small, unused out-building located along the east side of the main building.*

April 11, 2023



Photograph 32 – Interior, Arena crawlspace

*Looking inward at the crawlspace located under the Arena, currently being worked on.*

April 11, 2023



Photograph 33 – Interior, pool crawlspace

*Looking inward at a section of the crawlspace located under the pool.*

April 11, 2023



Photograph 34 – Interior, Arena flooring

*Looking at the flooring in the Arena that may contain asbestos.*

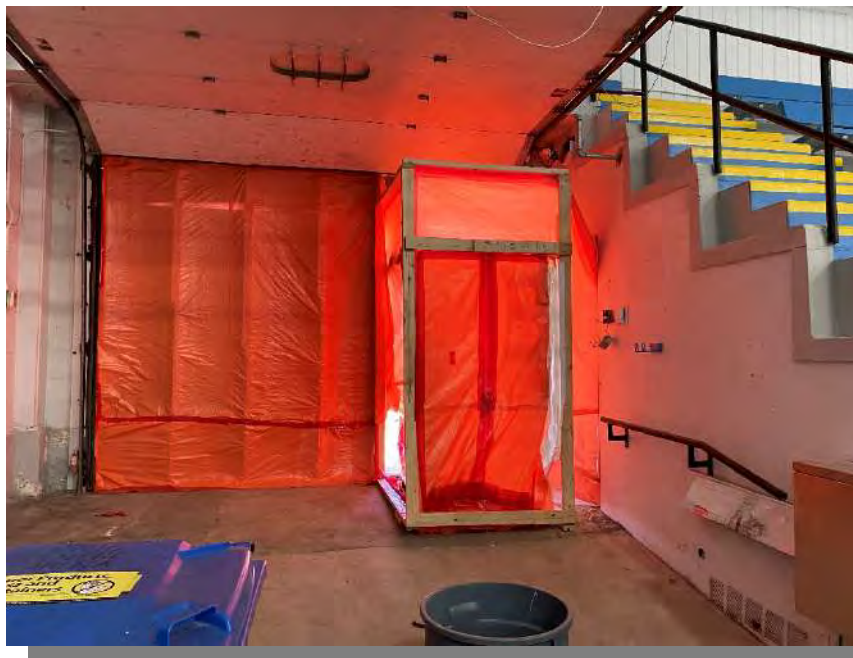
April 11, 2023



Photograph 35 – Interior, Arena north wall

*Looking at paint peeling on the north wall of the Arena that is revealing potentially lead-containing paint.*

April 11, 2023



Photograph 36 – Interior, construction area in Arena

*Looking at the northeast corner of the Arena where construction is occurring for the underlying crawlspace, with enclosure set up to prevent silica dust contamination.*

April 11, 2023



Photograph 37 – Interior, ammonia tanks  
*Looking at ammonia tanks stored to the north of the Arena.*

April 11, 2023



Photograph 38 – Exterior, oil contamination  
*Looking along the northwest corner of the building at oil contamination that has not been cleaned up.*

April 11, 2023



Photograph 39 – Exterior, oil barrels

*Looking along the northwest corner of the building having two oil storage barrels.*

April 11, 2023



Photograph 40 – Exterior, air handling unit

*Looking at the west side of the Arena at the air handling unit connected to the Zamboni room.*

April 11, 2023



Photograph 41 – Interior, ceiling stain  
*Looking at water damage stains on the ceiling of the staff kitchen that is to be removed.*

April 11, 2023



Photograph 42 – Interior, drain  
*Looking at a drain located in the basement storage room.*

April 11, 2023



Photograph 43 – Interior, stairs leading to the second floor  
*Looking at potentially asbestos containing materials on the stairs leading to the second floor.*

April 11, 2023



Photograph 44 – Interior, boiler room  
*Looking at unknown stains located in the boiler room floor.*

April 11, 2023



Photograph 45 – Exterior, fill piles

*Looking at unknown fill piles located at the northeast corner of the building.*

April 11, 2023



Photograph 46 – Exterior, transformer

*Looking at the transformer located to the east of the building with the Deer Lodge Curling Club in the background.*



April 11, 2023



Photograph 47 – Exterior, stormwater catch basin

*Looking southwest from the west elevation towards an apparent stormwater catch basin with ponded water.*

April 11, 2023



Photograph 48 – Exterior, recycling depot

*Looking southwest from the parking lot at the area designated as a community recycling depot for the City of Winnipeg.*

# ATTACHMENT

C

LAND TITLES





## STATUS OF TITLE

Title Number **2392235/1**  
Title Status **Accepted**  
Client File **231-0xxxx-00**



### 1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON  
IN THE FOLLOWING DESCRIBED LAND:

LOT 4 BLOCK 14 PLAN 1617 WLTO  
IN RL 22 TO 25 PARISH OF ST JAMES

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act*.

### 2. ACTIVE INSTRUMENTS

No active instruments

### 3. ADDRESSES FOR SERVICE

CITY OF WINNIPEG (LAW)  
3RD FLOOR  
185 KING ST.  
WINNIPEG MB  
R3B 1J1

### 4. TITLE NOTES

No title notes

### 5. LAND TITLES DISTRICT

Winnipeg

### 6. DUPLICATE TITLE INFORMATION

Duplicate not produced

### 7. FROM TITLE NUMBERS

B7995/1                      All

### 8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS

No real property application or grant information

**9. ORIGINATING INSTRUMENTS**

Instrument Type: **Request To Issue Title - Internal**  
Registration Number: **3968025/1**

Registration Date: 2010-08-18  
From/By: WLTO INTERNAL  
To:  
Amount:

**10. LAND INDEX**

Lot 4 Block 14 Plan 1617  
RL 22 TO 25 JA

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE  
SYSTEM OF TITLE NUMBER 2392235/1

## STATUS OF TITLE

Title Number **2421830/1**  
Title Status **Accepted**  
Client File **231-0xxxx-00**



### 1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON  
IN THE FOLLOWING DESCRIBED LAND:

LOT 4 BLOCK 13 PLAN 1617 WLTO  
IN RL 22 TO 25 PARISH OF ST. JAMES

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act*.

### 2. ACTIVE INSTRUMENTS

Instrument Type: **Bylaw**  
Registration Number: **G47980/1**  
Instrument Status: **Accepted**

Registration Date: 1965-05-17  
From/By: CITY OF WINNIPEG  
To:

Amount:  
Notes: AFF:CLOSES LANE  
Description: BY-LAW NO. 10200 CLOSES PT GUILDFORD ST & PUBLIC LANE

### 3. ADDRESSES FOR SERVICE

CITY OF WINNIPEG (LAW)  
3RD FLOOR  
185 KING ST.  
WINNIPEG MB  
R3B 1J1

### 4. TITLE NOTES

No title notes

### 5. LAND TITLES DISTRICT

Winnipeg

<b>6. DUPLICATE TITLE INFORMATION</b>
Duplicate not produced
<b>7. FROM TITLE NUMBERS</b>
A25786/1                  All
<b>8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS</b>
No real property application or grant information
<b>9. ORIGINATING INSTRUMENTS</b>
Instrument Type: <b>Request To Issue Title - Internal</b>
Registration Number: <b>3989018/1</b>
Registration Date:                  2010-10-04
From/By:                              CONVERSIONS
To:
Amount:
<b>10. LAND INDEX</b>
Lot 4 Block 13 Plan 1617 RL 22 TO 25 JA

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE SYSTEM OF TITLE NUMBER 2421830/1

## STATUS OF TITLE

Title Number **2302345/1**  
Title Status **Accepted**  
Client File **231-0xxxx-00**



### 1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED  
HEREON IN THE FOLLOWING DESCRIBED LAND:

LOTS 1 TO 7 INCLUSIVE AND LOTS 16 TO 27 INCLUSIVE  
BLOCK 23 PLAN 1693 WLTO  
EXC OUT OF LOT 1 NESS AVE PLAN 6490 WLTO  
IN RL 20 AND 21 PARISH OF ST JAMES

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act*.

### 2. ACTIVE INSTRUMENTS

Instrument Type: **Bylaw**  
Registration Number: **G47980/1**  
Instrument Status: **Accepted**

Registration Date: 1965-05-17  
From/By: CITY OF WINNIPEG  
To:

Amount:  
Notes: AFFECTS LOTS 1 TO 7  
Description: BY-LAW NO. 10200 CLOSES PT GUILDFORD ST & PUBLIC LANE

### 3. ADDRESSES FOR SERVICE

CITY OF WINNIPEG LAW DEPT.  
510 MAIN STREET  
WINNIPEG MB  
LEGAL SERV: FILE R.8/2004(25)  
R3B 1B9

### 4. TITLE NOTES

No title notes



**5. LAND TITLES DISTRICT**

Winnipeg

**6. DUPLICATE TITLE INFORMATION**

Duplicate not produced

**7. FROM TITLE NUMBERS**

862297/1            Part

**8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS**

No real property application or grant information

**9. ORIGINATING INSTRUMENTS**

Instrument Type:            **Request Electronic Title Conversion**

Registration Number:      **3619746/1**

Registration Date:         2008-05-28

From/By:                    WLTO CONVERSIONS

To:

Amount:

**10. LAND INDEX**

Lot 1 Block 23 Plan 1693  
EXC PLAN 6490 SLY 25' OF LOT 1 FOR NESS AVE

Lot 2 Block 23 Plan 1693

Lot 3 Block 23 Plan 1693

Lot 4 Block 23 Plan 1693

Lot 5 Block 23 Plan 1693

Lot 6 Block 23 Plan 1693

Lot 7 Block 23 Plan 1693

Lot 16 Block 23 Plan 1693

Lot 17 Block 23 Plan 1693

Lot 18 Block 23 Plan 1693

Lot 19 Block 23 Plan 1693

Lot 20 Block 23 Plan 1693

Lot 21 Block 23 Plan 1693

Lot 22 Block 23 Plan 1693

Lot 23 Block 23 Plan 1693

Lot 24 Block 23 Plan 1693

Lot 25 Block 23 Plan 1693

Lot 26 Block 23 Plan 1693

Lot 27 Block 23 Plan 1693

**CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE  
SYSTEM OF TITLE NUMBER 2302345/1**

## STATUS OF TITLE

Title Number **2423973/1**  
Title Status **Accepted**  
Client File **231-0xxxx-00**



### 1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON  
IN THE FOLLOWING DESCRIBED LAND:

LOTS 5 AND 6 BLOCK 14 PLAN 1617 WLTO  
IN RL 22 TO 25 PARISH OF ST JAMES

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act*.

### 2. ACTIVE INSTRUMENTS

No active instruments

### 3. ADDRESSES FOR SERVICE

CITY OF WINNIPEG (LAW)  
3RD FLOOR  
185 KING ST.  
WINNIPEG MB  
R3B 1J1

### 4. TITLE NOTES

No title notes

### 5. LAND TITLES DISTRICT

Winnipeg

### 6. DUPLICATE TITLE INFORMATION

Duplicate not produced

### 7. FROM TITLE NUMBERS

A20949/1                  All

### 8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS

No real property application or grant information

**9. ORIGINATING INSTRUMENTS**

Instrument Type: **Request To Issue Title - Internal**  
Registration Number: **3997456/1**

Registration Date: 2010-10-22  
From/By: WLTO INTERNAL - CONVERSIONS  
To:  
Amount:

**10. LAND INDEX**

Lot 5 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 6 Block 14 Plan 1617  
RL 22 TO 25 JA

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE  
SYSTEM OF TITLE NUMBER 2423973/1

## STATUS OF TITLE

Title Number **2459204/1**  
Title Status **Accepted**  
Client File **231-0xxxx-00**



### 1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON  
IN THE FOLLOWING DESCRIBED LAND:

LOTS 1, 2 AND 3 BLOCK 13 PLAN 1617 WLTO  
EXCEPT OUT OF SAID LOT 1 THE SLY 25 FEET  
IN RL 22 TO 25 PARISH OF ST JAMES

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act*.

### 2. ACTIVE INSTRUMENTS

Instrument Type: **Bylaw**

Registration Number: **G47980/1**

Instrument Status: **Accepted**

Registration Date: 1965-05-17

From/By: CITY OF WINNIPEG

To:

Amount:

Notes: No notes

Description: BY-LAW NO. 10200 CLOSES PT GUILDFORD ST & PUBLIC LANE

### 3. ADDRESSES FOR SERVICE

CITY OF WINNIPEG (LAW)  
3RD FLOOR  
185 KING ST.  
WINNIPEG MB  
R3B 1J1

### 4. TITLE NOTES

No title notes

### 5. LAND TITLES DISTRICT

Winnipeg

<b>6. DUPLICATE TITLE INFORMATION</b>
Duplicate not produced
<b>7. FROM TITLE NUMBERS</b>
898363/1            All
<b>8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS</b>
No real property application or grant information
<b>9. ORIGINATING INSTRUMENTS</b>
Instrument Type: <b>Request To Issue Title - Internal</b>
Registration Number: <b>4025592/1</b>
Registration Date:            2011-01-06
From/By:                      WLTO INTERNAL - CONVERSIONS
To:
Amount:
<b>10. LAND INDEX</b>
Lot 1 Block 13 Plan 1617 RL 22 TO 25 JA; EX SLY 25 FEET
Lot 2 Block 13 Plan 1617 RL 22 TO 25 JA
Lot 3 Block 13 Plan 1617 RL 22 TO 25 JA

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE SYSTEM OF TITLE NUMBER 2459204/1

**STATUS OF TITLE**

Title Number **2475173/1**  
Title Status **Accepted**  
Client File **231-0xxxx-00**



**1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION**

THE DEER LODGE CURLING CLUB LIMITED

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON  
IN THE FOLLOWING DESCRIBED LAND:

PARCEL 1: LOTS 7 TO 11 AND LOTS 34 TO 38 BLOCK 14 PLAN 1617 WLTO  
EXC OUT OF SAID LOT 34 THE SLY 20 FEET  
IN RL 22 TO 25 PARISH OF ST JAMES

PARCEL 2: ALL THAT PORTION OF RL 22 PARISH OF ST JAMES  
SHOWN COLOURED GREEN AND MARKED PARCEL "A" PLAN 6522 WLTO

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act*.

**2. ACTIVE INSTRUMENTS**

Instrument Type: **Bylaw**  
Registration Number: **C72882/1**  
Instrument Status: **Accepted**  
  
Registration Date: 1957-06-04  
From/By: CITY OF ST. JAMES  
To:

Amount:  
Notes: No notes  
Description: 7655 CLOSES LANE WTN LAND PL 6522

Instrument Type: **Caveat**  
Registration Number: **1108308/1**  
Instrument Status: **Accepted**

Registration Date: 1988-12-29  
From/By: THE CITY OF WINNIPEG  
To: AGENT: VED PARKASH BAHL

Amount:  
Notes: AFF: S20'LOT 7  
Description: No description

---

Instrument Type: **Mortgage**  
Registration Number: **4718677/1**  
Instrument Status: **Accepted**

Registration Date: 2016-05-05  
From/By: THE DEER LODGE CURLING CLUB LIMITED  
To: ROYAL BANK OF CANADA

Amount: \$50,000.00  
Notes: No notes  
Description: No description

---

Instrument Type: **Caveat**  
Registration Number: **4849930/1**  
Instrument Status: **Accepted**

Registration Date: 2017-06-06  
From/By: TM MOBILE INC.  
To:

Amount:  
Notes: No notes  
Description: LEASE EXPIRES 2037-01-31



Instrument Type:	<b>Caveat</b>
Registration Number:	<b>5283755/1</b>
Instrument Status:	<b>Accepted</b>
Registration Date:	2021-04-15
From/By:	ROGERS COMMUNICATIONS INC.
To:	LANDSOLUTIONS GP INC. as agent
Amount:	
Notes:	No notes
Description:	Lease, No Expiry
<b>3. ADDRESSES FOR SERVICE</b>	
THE DEER LODGE CURLING CLUB X	
<b>4. TITLE NOTES</b>	
No title notes	
<b>5. LAND TITLES DISTRICT</b>	
Winnipeg	
<b>6. DUPLICATE TITLE INFORMATION</b>	
Duplicate not produced	
<b>7. FROM TITLE NUMBERS</b>	
870067/1            All	
<b>8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS</b>	
No real property application or grant information	
<b>9. ORIGINATING INSTRUMENTS</b>	
Instrument Type:	<b>Request To Issue Title - Internal</b>
Registration Number:	<b>4026025/1</b>
Registration Date:	2011-01-07
From/By:	WLTO INTERNAL - CONVERSIONS
To:	
Amount:	
<b>10. LAND INDEX</b>	
RL 22 JA PT; SHOWN AS PCL "A" PLN 6522	

Lot 7 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 8 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 9 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 10 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 11 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 34 Block 14 Plan 1617  
RL 22 TO 25 JA; EX SLY 20'

Lot 35 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 36 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 37 Block 14 Plan 1617  
RL 22 TO 25 JA

Lot 38 Block 14 Plan 1617  
RL 22 TO 25 JA

**CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE  
SYSTEM OF TITLE NUMBER 2475173/1**

## STATUS OF TITLE

Title Number **2549013/1**  
Title Status **Accepted**  
Client File **231-0xxxx-00**



### 1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED  
HEREON IN THE FOLLOWING DESCRIBED LAND:

LOTS 13, 14 AND 17 TO 21 BLOCK 13 AND  
LOT 2 BLOCK 19 PLAN 1617 WLTO  
IN RL 22 TO 25 PARISH OF ST JAMES

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act*.

### 2. ACTIVE INSTRUMENTS

Instrument Type: **Bylaw**  
Registration Number: **G47980/1**  
Instrument Status: **Accepted**

Registration Date: 1965-05-17  
From/By: CITY OF WINNIPEG  
To:

Amount:  
Notes: AFF LOTS 13 & 14  
Description: BY-LAW NO. 10200 CLOSES PT GUILDFORD ST & PUBLIC LANE

### 3. ADDRESSES FOR SERVICE

CITY OF WINNIPEG (LAW)  
3RD FLOOR  
185 KING ST.  
WINNIPEG MB  
R3B 1J1

### 4. TITLE NOTES

No title notes

### 5. LAND TITLES DISTRICT

Winnipeg

**6. DUPLICATE TITLE INFORMATION**

Duplicate not produced

**7. FROM TITLE NUMBERS**

562332/1            All

**8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS**

No real property application or grant information

**9. ORIGINATING INSTRUMENTS**

Instrument Type:            **Request To Issue Title - Internal**

Registration Number:      **4062121/1**

Registration Date:         2011-04-20

From/By:                    WLTO INTERNAL - CONVERSIONS

To:

Amount:

**10. LAND INDEX**

Lot 13 Block 13 Plan 1617  
RL 22 TO 25 JA

Lot 14 Block 13 Plan 1617  
RL 22 TO 25 JA

Lot 17 Block 13 Plan 1617  
RL 22 TO 25 JA

Lot 18 Block 13 Plan 1617  
RL 22 TO 25 JA

Lot 19 Block 13 Plan 1617  
RL 22 TO 25 JA

Lot 20 Block 13 Plan 1617  
RL 22 TO 25 JA

Lot 21 Block 13 Plan 1617  
RL 22 TO 25 JA

Lot 2 Block 19 Plan 1617  
RL 22 TO 25 JA

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE  
SYSTEM OF TITLE NUMBER 2549013/1

# MANITOBA



## Certificate of Title

UNDER THE REAL PROPERTY ACT

THE RURAL MUNICIPALITY OF SAINT-JAMES.

is now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten for endorsed hereon in all the <sup>2<sup>nd</sup></sup> piece or parcel of land known and described as follows: Lots Eight, Fourteen and Fifteen in Block twenty-three which lots are shown on a plan of survey of part of Lots twenty and Twenty-one of the Parish of Saint-James in Manitoba, registered in the Winnipeg Land Titles Office, as No. 1692

IN WITNESS WHEREOF

*I have hereunto signed my name and  
affixed my seal of office this  
One thousand nine hundred and  
Signed in the presence of*

Sixteenth day of July

twenty-three

*J. G. Mellon*

*Drötter*

Deputy District Registrar  
for Winnipeg

1. Any unregistered mortgage, lien or other encumbrance, or other interest, not covered by an instrument registered in the office of the Registrar, which is not shown on the original plan of subdivision of the land.
2. Any unregistered charge, lien or other interest, not shown on the original plan of subdivision of the land.
3. Any unregistered mortgage, lien or other encumbrance, or other interest, not covered by an instrument registered in the office of the Registrar, which is not shown on the original plan of subdivision of the land.
4. Any unregistered mortgage, lien or other encumbrance, or other interest, not covered by an instrument registered in the office of the Registrar, which is not shown on the original plan of subdivision of the land.
5. Any unregistered mortgage, lien or other encumbrance, or other interest, not covered by an instrument registered in the office of the Registrar, which is not shown on the original plan of subdivision of the land.
6. Any unregistered mortgage, lien or other encumbrance, or other interest, not covered by an instrument registered in the office of the Registrar, which is not shown on the original plan of subdivision of the land.
7. All unregistered mortgages, liens and other interests, not covered by an instrument registered in the office of the Registrar, which are not shown on the original plan of subdivision of the land.
8. Any other unregistered mortgage, lien or other encumbrance, or other interest, not covered by an instrument registered in the office of the Registrar, which is not shown on the original plan of subdivision of the land.
9. The Registrar may permit a person to be named as a party to a certificate of title if he is entitled to the land when it was first brought under the Act.
10. Care must be taken in the preparation of a certificate of title to see that the description of the land is correct.

NATURE OF INSTRUMENT

DAY AND HOUR OF ITS PRODUCTION

NAME'S OF THE PARTIES TO IT

REGISTRATION NUMBER

By law No. 10,200  
of the Guildford  
& Public Land  
acts within  
land.

The 17<sup>th</sup> day of  
May 1885  
at 9 o'clock  
the forenoon

City of St. James  
G. 49950

Deputy District Registrar

The day of  
192  
at o'clock in  
the noon

Deputy District Registrar

The day of  
192  
at o'clock in  
the noon

Deputy District Registrar

The day of  
192  
at o'clock in  
the noon

Deputy District Registrar

The day of  
192  
at o'clock in  
the noon

Deputy District Registrar

The day of  
192  
at o'clock in  
the noon

Deputy District Registrar

The day of  
192  
at o'clock in  
the noon

Deputy District Registrar

Vertical stamp: CALLED FOR BY...

1135  
11/30/92  
C. H. ...  
PROPOSED OFFICE  
WITHDRAWAL

300 per cent

# MANITOBA

## Certificate of Title UNDER "THE REAL PROPERTY ACT"

THE RURAL MUNICIPALITY OF SAINT-JAMES:

*is now seized of an estate in fee simple in possession subject to such encumbrances liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all the <sup>one</sup> piece or parcel<sup>s</sup> of land known and described as follows* Lots Seven, Eight Nine and ten, Lots

Twelve to Twenty-four both inclusive Lots Twenty-seven to Thirty-two both inclusive Lots Thirty-five to Thirty eight both inclusive and Lots Forty to Fifty-four both inclusive in Block twenty-two which lots are shown on a plan of survey of part of Lots Twenty and Twenty-one of the Parish of Saint-James in Manitoba, registered in the Winnipeg Land Titles Office, as No. 1693.

The land mentioned in this Certificate of Title is under "The Real Property Act" and the implication to:  
1. Any subsisting reservation contained in the original grant of this land from the Crown.  
2. Any municipal charges, rates or assessments at the date of this Certificate, or thereafter, chargeable against this land.  
3. Any unregistered subsisting right of way or other easement over this land.  
4. Any unregistered subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of this land under the same.  
5. Any mechanic's lien affecting this land.  
6. Any judgments, decrees or orders for the payment of money against the registered owner, registered since the date of this Certificate and properly maintained in force.  
7. All public highways embraced in the description of this land.  
8. Any right of expropriation by statute.  
9. The title of any person adversely in actual occupation of and rightly entitled to this land when it was first brought under said Act.  
10. Caveats affecting this land registered since the date of this Certificate of Title.

IN WITNESS WHEREOF  
*I have hereunto signed, my name, and*  
*affixed my Seal of office this*  
*One thousand nine hundred and*  
*Signed in the presence of*

Seventh day of November  
twenty-three

COLLECT \$ 31.30 FEES  
under 11 Ccc. V Cap. 67 Sec. 11

*D. J. J. J.*  
Deputy District Registrar  
for Winnipeg



NATURE OF INSTRUMENT	DAY AND HOUR OF ITS PRODUCTION	NAMES OF THE PARTIES TO IT	REGISTRATION NUMBER
<p>Plan on S25ft lot 28 blk 22 for Hess Ave.</p>	<p>The 3<sup>rd</sup> day of April 1927 at 10.15 o'clock in the fore noon</p>	<p>6490 A. L. Hayward Deputy District Registrar</p>	<p>6490</p>
<p>By law no. 10,200 closed Hullford St. affects lots 35 to 38 &amp; 40 to 42.</p>	<p>The 17<sup>th</sup> day of May 1925 at 9.04 o'clock in the fore noon</p>	<p>City of St. James G. 47980 Deputy District Registrar</p>	
	<p>The day of 192 at noon o'clock in</p>	<p>Deputy District Registrar</p>	
	<p>The day of 192 at noon o'clock in</p>	<p>Deputy District Registrar</p>	
	<p>The day of 192 at noon o'clock in</p>	<p>Deputy District Registrar</p>	
	<p>The day of 192 at noon o'clock in</p>	<p>Deputy District Registrar</p>	
	<p>The day of 192 at noon o'clock in</p>	<p>Deputy District Registrar</p>	

No. 57982-CAVEAT FILED  
 FILED BY J. G. BARNES  
 AGENT

WHERE



9450

# MANITOBA

## Certificate of Title

### UNDER "THE REAL PROPERTY ACT"

THE RURAL MUNICIPALITY OF ST. JAMES.

*is now seized of an estate in fee simple in possession subject to such encumbrances liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all the piece or parcel of land known and described as follows* Lot Five in BLOCK THIRTEEN which lot

is shown on a plan of survey of part of lots Twenty Two to Twenty Five of the Parish of Saint James,

in Manitoba, registered in the Winnipeg Land Titles Office as No. 1617.

- The land mentioned in this Certificate of Title is under "The Real Property Act" subject by implication to:
1. Any subsisting reservation contained in the original grant of this land from the Crown.
  2. Any municipal charges, rates or assessments at the date of this Certificate, together, chargeable against this land.
  3. Any unregistered subsisting right of way or other easement over this land.
  4. Any unregistered subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of this land under the same.
  5. Any drainage or meadow's lien affecting this land.
  6. Any judgments, decrees or orders for the payment of money against the registered owner, registered since the date of this Certificate and property maintained in force.
  7. All public highways embraced in the description of this land.
  8. Any right of expropriation by statute.
  9. The title of any person adversely in actual occupation of and rightly entitled to this land when it was first brought under said Act.
  10. Caveats affecting this land registered since the date of this Certificate of Title.

IN WITNESS WHEREOF *I have hereunto signed my name and*  
*affixed my Seal of office this* FOURTH *day of* JANUARY  
*One thousand nine hundred and* SEVEN .  
*Signed in the presence of*

*W. L. ...*

*Holler*  
Deputy District Registrar  
for Winnipeg

REGISTERED IN THE  
LAND TITLES OFFICE  
WISCONSIN  
JAN 21 1917

NATURE OF INSTRUMENT	DAY AND HOUR OF ITS PRODUCTION	NAMES OF THE PARTIES TO IT	REGISTRATION NUMBER
By-law No. 10, 2000 closes line affects within land.	The 17 day of May 1965 at 9:00 o'clock in the forenoon	City of St. James S. 47980  Deputy District Registrar	
	The day of 19 at the noon o'clock in	Deputy District Registrar	
	The day of 19 at the noon o'clock in	Deputy District Registrar	
	The day of 19 at the noon o'clock in	Deputy District Registrar	
	The day of 19 at the noon o'clock in	Deputy District Registrar	
<div style="border: 1px dashed black; padding: 5px; width: fit-content;">       8710 J        230 N. McHenry        122     </div>	The day of 19 at the noon o'clock in	Deputy District Registrar	
	The day of 19 at the noon o'clock in	Deputy District Registrar	210

# MANITOBA

## Certificate of Title

### UNDER "THE REAL PROPERTY ACT"

THE RURAL MUNICIPALITY OF ST. JAMES.

The land mentioned in this Certificate of Title is under "The Real Property Act" subject by implication to:

1. Any subsisting reservation contained in the original grant of this land from town.
2. Any municipal charges, rates or assessments at the date of this Certificate, together, chargeable against this land.
3. Any unregistered subsisting right of way or other easement over this land.
4. Any unregistered subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of this land under the same.
5. Any drawings or mechanic's lien affecting this land.
6. Any judgments, decrees or orders for the payment of money against the registered owner, registered since the date of this Certificate and property maintained in force.
7. All public highways embraced in the description of this land.
8. Any right of expropriation by statute.
9. The title of any person adversely in actual occupation of and rightly entitled to this land when it was first brought under said Act.
10. Caveats affecting this land registered since the date of this Certificate of Title.

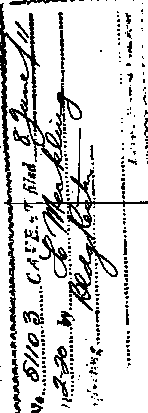
is now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum, underwritten (or endorsed hereon), in all the <sup>one</sup> piece or parcels of land known and described as follows. Lots Eight, Eleven, Twelve, Twenty-five and Twenty-six in Block Thirteen; which lots are shown on a plan of survey of part of Lots Twenty-two to Twenty-five of the Parish of Saint James, <sup>in Manitoba</sup> registered in the Winnipeg Land Titles Office as No. 1617.

IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this Ninth day of April One thousand nine hundred and Twenty Seven.  
Signed in the presence of

*Mcgray*

*Stotter*  
Deputy District Registrar  
for Winnipeg

COLLECT \$ 30.50 FEES  
ENCL. 11 C.S. 11 Sec 31.

NATURE OF INSTRUMENT	DAY AND HOUR OF ITS PRODUCTION	NAMES OF THE PARTIES TO IT	REGISTRATION NUMBER
By law No. 10, 200 closes lane affects Lots 8, 11 & 12.	The 17 <sup>th</sup> day of May 1962 at 9:00 <sup>AM</sup> the fore noon	City of St. James G. 47980  Deputy District Registrar	
	The day of 19 at the noon	Deputy District Registrar	
	The day of 19 at the noon	Deputy District Registrar	
	The day of 19 at the noon	Deputy District Registrar	
	The day of 19 at the noon	Deputy District Registrar	
	The day of 19 at the noon	Deputy District Registrar	
	The day of 19 at the noon	Deputy District Registrar	

2450

# MANITOBA

## Certificate of Title

UNDER "THE REAL PROPERTY ACT"

THE RURAL MUNICIPALITY OF ST. JAMES.

- The land mentioned in this Certificate of Title is under "The Real Property Act" only by implication to:
1. Any subsisting reservation contained in the original grant of this land from the Crown.
  2. Any municipal charges, rates or assessments at the date of this Certificate, whether chargeable against this land.
  3. Any unregistered subsisting right of way or other easement over this land.
  4. Any unregistered subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of this land under the same.
  5. Any mortgage or charge on the land under the same.
  6. Any charge or interest on the land for the payment of money.
  7. All public highways embraced in the description of this land.
  8. Any right of expropriation by statute.
  9. The title of any person adversely in actual occupation of and rightly entitled to this land when it was first brought under said Act.
  10. Covenants affecting this land registered since the date of this Certificate of Title.

is now seized of an estate in fee simple in possession subject to such encumbrances liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all the <sup>one</sup> piece or parcels of land known and described as follows: Lot Twenty-three in Block Sixteen; Lot Three in Block seventeen and Lot Thirty-nine in Block Twenty-two; which lots are shown on a plan of survey of part of Lots Twenty and Twenty-one of the Parish of Saint James, in Manitoba, registered in the Winnipeg Land Titles Office as No. 1693.

TRANSFER OF  
 To *Donald M. Robinson*  
 Registered on 2.9.20  
 Vol. Cont. No. 214.257

TRANSFER OF  
 Lot 23, B.L. 16  
*Donald M. Robinson*  
 Deputy District Registrar

TRANSFER OF  
 TO *Donald M. Robinson*  
 REG. ON 2.9.20  
 VIDE CERT. 124337

WITNESS WHEREOF

I have hereunto signed my name and  
 Third day of May  
 thousand nine hundred and twenty seven.

*Megray*

*Grotter*  
 Deputy District Registrar  
 for Winnipeg

9/9/5 653 B. 17 & 265  
 5-25-25  
*Paul*

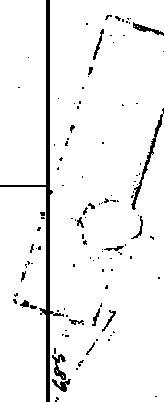
From No.

250622  
272043  
285763

Transit No. 30097

Application

NATURE OF INSTRUMENT	DAY AND HOUR OF ITS PRODUCTION	NAMES OF THE PARTIES TO IT	REGISTRATION NUMBER
By law No. 10,200 chases Guildford St. Affected bal.	The <sup>17</sup> day of May 1965 at 9.00 the forenoon	City of St. James G. 47980  Deputy District Registrar	
	The <sup>18</sup> day of at the noon	Deputy District Registrar	
	The <sup>18</sup> day of at the noon	Deputy District Registrar	
	The <sup>18</sup> day of at the noon	Deputy District Registrar	
	The <sup>19</sup> day of at the noon	Deputy District Registrar	
1965 J. A. Mackay Deputy District Registrar	The <sup>19</sup> day of at the noon	Deputy District Registrar	
1965 Deputy District Registrar	The <sup>19</sup> day of at the noon	Deputy District Registrar	



# MANITOBA

## Certificate of Title

### UNDER THE REAL PROPERTY ACT

THE RURAL MUNICIPALITY OF ST. JAMES .

- The land mentioned in this Certificate of Title is under "The Real Property Act" and by implication to:
1. Any subsisting reservation contained in the original grant of this land from Town.
  2. Any municipal charges, rates or assessments at the date of this Certificate, hereafter, chargeable against this land.
  3. Any unregistered subsisting right of way or other easement over this land.
  4. Any unregistered mining lease or agreement for a lease for a period not exceeding three years, where there is no actual completion of this lease under the Act.
  5. Any drainage easement or right of way over this land.
  6. Any judgment, decree or order for sale of any part of the land.
  7. All public highways embraced in the description of this land.
  8. Any right of expropriation by statute.
  9. The title of any person adversely in actual occupation of and rightly entitled to this land when it was first brought under said Act.
  10. Caveats affecting this land registered since the date of this Certificate of Title.

is now seized of an estate in fee simple in possession subject to such encumbrances liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all the <sup>at</sup> piece or parcel of land known and described as follows Lot Nine in Block Thirteen; which

lot is shown on a plan of survey of part of Lots Twenty-two to twenty-five of the Parish of Saint James in Manitoba, registered in the Winnipeg Land Titles Office as No. 1617.

IN WITNESS WHEREOF

*I have hereunto signed my name and  
affixed my Seal of office this  
One thousand nine hundred and  
Signed in the presence of*

*I have hereunto signed my name and  
Tenth day of October  
twenty seven.*

*Emmel*

*Hotter  
Deputy District Registrar  
for Winnipeg*



From No. 395061

Transfer 569186

Application

NATURE OF INSTRUMENT	DAY AND HOUR OF ITS PRODUCTION	NAMES OF THE PARTIES TO IT	REGISTRATION NUMBER
By law No. 10,200 classes have affects within land	The <sup>17</sup> day of May 1865 at 9 o'clock in the forenoon	City of St. James G. 47980.  Deputy District Registrar	
	The <sup>19</sup> day of at noon the	Deputy District Registrar	
	The <sup>19</sup> day of at noon the	Deputy District Registrar	
	The <sup>19</sup> day of at noon the	Deputy District Registrar	
	The <sup>19</sup> day of at noon the	Deputy District Registrar	
"8 April" G. P. No. 1111	The <sup>19</sup> day of at noon the	Deputy District Registrar	
51103 2.26	The <sup>19</sup> day of at noon the	Deputy District Registrar	

# MANITOBA

## Certificate of Title

UNDER "THE REAL PROPERTY ACT"

THE RURAL MUNICIPALITY OF ST JAMES .

is now seized of an estate in fee simple in possession subject to such encumbrances liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all the <sup>se</sup> piece or parcels of land known and described as follows Lot Fourteen in Block Ten; Lot Nine in Block twelve; Lot Six in block Thirteen; and Lots Twenty-two and Twenty-three in Block Fourteen; which lots are shown on a plan of survey of part of Lots twenty-two to twenty-five of the parish of Saint James in Manitoba registered in the Winnipeg Land Titles Office as No. 1617.

The land mentioned in this Certificate of Title is under "The Real Property Act" with implication to:

1. Any subsisting reservation contained in the original grant of this land from the Crown.
2. Any municipal charges, rates or assessments at the date of this Certificate, or hereafter, chargeable against this land.
3. Any unregistered subsisting right of way or other easement over this land.
4. Any unregistered subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of this land under the same.
5. Any change or amendment of the boundaries of this land.
6. Any judgments, decrees or orders for the payment of money against the registered owner, registered mortgagee or registered lessee of this land.
7. All public highways situated over the description of this land.
8. Any right of way or other easement over this land.
9. The title of any person adversely in actual occupation of and rightly entitled to this land when it was first brought under said Act.
10. Caveats affecting this land registered since the date of this Certificate of Title.

COLLECTED	
DEVELOPER'S FEES	AMOUNT
UNREGISTERED	
REGISTERED	
7/12/28	4.25
Dist. fees of	5.65

on Lot 14, 15, 16, 17 transferred to Con. Dist. N<sup>o</sup> 4.

No. 605724 - TRAN. R of Lot 14, 15, 16, 17, 18

To A. Bert A. Reider

Registered July 17/28

Title Cert. No. 148774

605724 - 2006 - 9 - 2006

Winnipeg No. 6211988

at 17/28 and 14/28/10

George Whitehead, Esq. 5132

1460 329

IN WITNESS WHEREOF  
I have hereunto signed, my name and  
affixed my Seal of office this  
twelfth day of January  
One thousand nine hundred and  
twenty-eight.  
Signed in the presence of

*Emmell*

*J. Grotter*  
Deputy District Registrar  
for Winnipeg

88 3234  
25 4121  
51 491  
28 4044

NATURE OF INSTRUMENT	DAY AND HOUR OF ITS PRODUCTION	NAMES OF THE PARTIES TO IT	REGISTRATION NUMBER
By-law No. 7655 closes lane affects Blk 14 see Plan 6522.	The 4 <sup>th</sup> day of June 1957 at 9:37 o'clock in the forenoon	City of St. James  Deputy District Registrar	C. 72882
By-law No. 10,200 closes lane affects Lot 6	The 17 <sup>th</sup> day of May 1965 at 9:08 o'clock in the forenoon	City of St. James G. 47980  Deputy District Registrar	
	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	
	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	
	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	
<p>James No. 5103 CAVIAT No. 21200 A. L. 20 by C. R. E. L. Affecting Blk 6 West 29th St 14</p> <p>No. 5103 CAVIAT No. 21200 A. L. 20 by C. R. E. L. Affecting Blk 6 West 29th St 14</p> <p>No. 6186 CAVIAT No. 21200 A. L. 20 by C. R. E. L. Affecting Blk 6 West 29th St 14</p>	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	
	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	

1350

# MANITOBA

## Certificate of Title

### UNDER THE REAL PROPERTY ACT

THE RURAL MUNICIPALITY OF ST JAMES.

is now seized of an estate in fee simple in possession subject to such encumbrances liens and interests as are notified by memorandum underwritten (or endorsed hereon) in all the piece or parcels of land known and described as follows. Lots One Two and Ten in Block Thirteen which lots are shown on a plan of survey of part of Lots Twenty-two to Twenty-five of the parish of Saint James in Manitoba registered in the Winnipeg Land Titles Office as No. 1617.

- The land mentioned in this Certificate of Title is under "The Real Property Act"
1. Any subsisting reservation contained in the original grant of this land.
  2. Any municipal charges rates or assessments at the date of this Certificate against this land.
  3. Any unregistered subsisting right of way or other easement over this land where there is actual occupation of this land under the same.
  4. Any unregistered subsisting lease or agreement for a lease for a period not exceeding three years, where there is actual occupation of this land under the same.
  5. Any change or mechanic's lien against this land.
  6. Any judgments decrees or orders for the payment of money against the registered owner registered since the date of this Certificate and properly maintained in force.
  7. Any rights of way or easements over this land.
  8. Any rights of way or easements over this land.
  9. The title of any person adversely in actual occupation of and rightly entitled to this land when it was first brought under said Act.
  10. Caveats affecting this land registered since the date of this Certificate of Title.

1258

116157 R 073189 C 645  
R 628  
12/83  
Paid

1. IMPRESSION

No. C 73189 TRANS

Wm. H. Links

Deputy District Registrar

Winnipeg

Form Ont. No. 36, J. S. 24

2d. C 73189 of Lot 1, 2, 3  
S 25A + Lot 2

IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this second day of April One thousand nine hundred and Twenty-eight.

Signed in the presence of

W. H. Links

Deputy District Registrar for Winnipeg

Form No. 245318 }  
313044 }

Submission 25614

Application

Nature of Instrument	Day and Hour of its Production	NAME OF THE PARTIES TO IT	Registration Number
Plan on S. 25 ft of lot 1 for Road Acq.,	The 3 <sup>rd</sup> day of April 1914 at 11.14 o'clock in the fore noon	A. L. Hayward 6490  Deputy District Registrar	6490
By-law No. 10,200 closes lane affects Lot 10	The 17 <sup>th</sup> day of May 1915 at 9.04 o'clock in the fore noon	City of St. James G. 47980.  Deputy District Registrar	
	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	
	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	
	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	
No. 51103 B. 20 S. J. Mc S. J. R.	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	
	The _____ day of _____ 19____ at _____ o'clock in the _____ noon	Deputy District Registrar	

880

# MANITOBA

## Certificate of Title

UNDER "THE REAL PROPERTY ACT"

THE RURAL MUNICIPALITY OF ST JAMES

IS now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests as are notified by memorandum underwritten for entered herein in all the one pieces or parcel of land known and described as follows

Lots Six and Twelve in Block Nine; Lots twenty-eight and thirty-four in Block Eleven; Lot Four in Block Twelve; Lots Fifteen and Sixteen in Block Thirteen; Lot Fourteen in Block Fourteen; Lot Twenty-seven in Block Fifteen; Lots Eighteen to Twenty-One both inclusive and Twenty-three to Twenty six both inclusive in Block Sixteen; Lot Forty-one in Block Seventeen and Lot Twenty-seven in Block Eighteen; which lots are shown on a plan of survey of part of Lots Twenty-two to Twenty-five, of the parish of Saint James in Manitoba registered in the Winnipeg Land Titles Office as No 1427

COLLECT

13/7/94	11/12/94
23/1/94	24/1/94
23/1/94	23/1/94
6/1/94	6/1/94

*Paul*

The duplicate of this Certificate of Title has been cancelled.  
 Date 10/1/95  
21/1/95  
 Registrar

### IN WITNESS WHEREOF

*600884*

*W. J. S. S. S.*

*604126*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

*W. J. S. S. S.*

INS TYPE REG NO 1660334

FOR Suburban Bl. 14 1/2

S. J. S. S. S. No 11 2857

REG 30.05.189

NEW TITLE

From No. 238

Transfer No. 35765

Application

38  
18  
17  
16  
15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1

NATURE OF INSTRUMENT

DAY AND HOUR OF ITS PRODUCTION

NAMES OF THE PARTIES TO IT

REGISTRATION NUMBER

By law No. 7655  
returned to the  
applicant with  
no return to it.

The 4<sup>th</sup> day of  
at 10 o'clock in  
the forenoon

City of St. James  
079357

079357

Deputy District Registrar

By law No. 10,000  
returned to the  
applicant with  
no return to it.

The 4<sup>th</sup> day of  
at 10 o'clock in  
the forenoon

City of  
St. James  
079357

Deputy District Registrar

Plan on land Blk. 18  
for Silver Ave

The 30<sup>th</sup> day of  
May 1889  
at 11:00 AM  
the noon

J. O. Seclair  
023857

Deputy District Registrar

The \_\_\_\_\_ day of  
at \_\_\_\_\_ o'clock in  
the \_\_\_\_\_ noon

Deputy District Registrar

The \_\_\_\_\_ day of  
at \_\_\_\_\_ o'clock in  
the \_\_\_\_\_ noon

Deputy District Registrar

The \_\_\_\_\_ day of  
at \_\_\_\_\_ o'clock in  
the \_\_\_\_\_ noon

Deputy District Registrar

The \_\_\_\_\_ day of  
at \_\_\_\_\_ o'clock in  
the \_\_\_\_\_ noon

Deputy District Registrar

By law No. 10,000  
returned to the  
applicant with  
no return to it.

# MANITOBA



## Certificate of Title

UNDER "THE REAL PROPERTY ACT"

THE RURAL MUNICIPALITY OF ST JAMES

The land veridically described in this Certificate of Title is under "The Real Property Act" subject to the provisions of the Act.

- 1. Any statutory charges, taxes or assessments on the original grant of the land from the Crown.
- 2. Any unincorporated charges, taxes or assessments on the date of this Certificate of Title.
- 3. Any unincorporated charges, taxes or assessments on the date of this Certificate of Title.
- 4. Any unincorporated charges, taxes or assessments on the date of this Certificate of Title.
- 5. Any unincorporated charges, taxes or assessments on the date of this Certificate of Title.
- 6. Any unincorporated charges, taxes or assessments on the date of this Certificate of Title.
- 7. All public highways and roads for the payment of money against the registered owner, registered since the date of this Certificate and properly maintained in force.
- 8. Any right of expropriation by statute.
- 9. The title of any person adversely in actual occupation of and rightly entitled to this land when it was first brought under said Act.
- 10. Covenants affecting this land registered since the date of this Certificate of Title.

I do hereby certify that the land described in this Certificate of Title is under "The Real Property Act" subject to the provisions of the Act.

IN BLOCK EIGHT LOTS FIVE, TWENTY ONE AND TWENTY TWO IN BLOCK THIRTEEN AND LOTS THIRTY THREE AND THIRTY FOUR IN BLOCK TWENTY TWO WHICH LOTS ARE SHOWN ON A PLAN OF SURVEY OF PART OF LOTS TWENTY AND TWENTY ONE OF THE PARISH OF SAINT JAMES IN MANITOBA, REGISTERED IN THE WINNIPEG LAND TITLES OFFICE, AS NO. 21693.

110148	467946	380
1220	994528	190

110148-467946  
1220-994528

Transfer No. 6532  
 To: *Mr. & Mrs. J. J. [illegible]*  
 For: *467946*

**IN WITNESS WHEREOF**

*I have hereunto signed my name and day of* \_\_\_\_\_ *JANUARY*

*thirty one*

*[Signature]*  
 District Registrar  
 for Winnipeg

723623  
 The R. M. of St James  
 No. 21693

*Transfer of*  
*Block of*  
*To: [illegible]*  
*Registered Map 14, 1950*  
*For Cert. No. 69866 [illegible]*

*No. 994528*  
*Lot 11, Block 4*  
*To: [illegible]*  
*Registered Map 14, 1950*  
*For Cert. No. 69866 [illegible]*



269438 } 172040  
 314323 }  
 308678 } 280736  
 Form No. 333

Transfer of 38385

Application

NATURE OF INSTRUMENT	DAY AND HOUR OF ITS PRODUCTION	NAMES OF THE PARTIES TO IT	REGISTRATION NUMBER
Plan 1693 Cancelled w.l. No 22608	The day of 19 at 12 o'clock in the noon	MFRUB	723673
By order of the court in the case of the State of Ohio	The day of 19 at 10 o'clock in the forenoon	County of St. Lawrence No. 41980	
	The day of 19 at 12 o'clock in the noon		
	The day of 19 at 12 o'clock in the noon		
	The day of 19 at 12 o'clock in the noon		
	The day of 19 at 12 o'clock in the noon		
	The day of 19 at 12 o'clock in the noon		
	The day of 19 at 12 o'clock in the noon		

5798  
11-09  
... HOLDING RESTRICTION

1740  
1703



NATURE OF INSTRUMENT	DAY AND HOUR OF ITS PRODUCTION	NAME OF THE PARTIES TO IT	REGISTRATION NUMBER
<p>Reg. book No. 10, 200          Adams Bradford St.          &amp; the same have affected          within land</p>	<p>The 17<sup>th</sup> day of          May 1914          at 11:14          the forenoon</p>	<p>City of          Salt Lake City</p>	<p>104980</p>
		Deputy District Registrar	
		Deputy District Registrar	
		Deputy District Registrar	
		Deputy District Registrar	
		Deputy District Registrar	
		Deputy District Registrar	
		Deputy District Registrar	
		Deputy District Registrar	
		Deputy District Registrar	

1102

# ATTACHMENT

**D**

AERIAL PHOTOGRAPHS







Photo 1. 1948 Aerial Photograph


	Date: 1948	Client: City of Winnipeg
	Obtained from: Canada Map Sales	Location: 2055 Ness Avenue, Winnipeg, Manitoba
	Project No.: CA0000644.3039	



Photo 2. 1959 Aerial Photograph



Date: 1959

Client: City of Winnipeg

Obtained from: Canada Map Sales

Location: 2055 Ness Avenue,  
Winnipeg, Manitoba

Project No.: CA0000644.3039

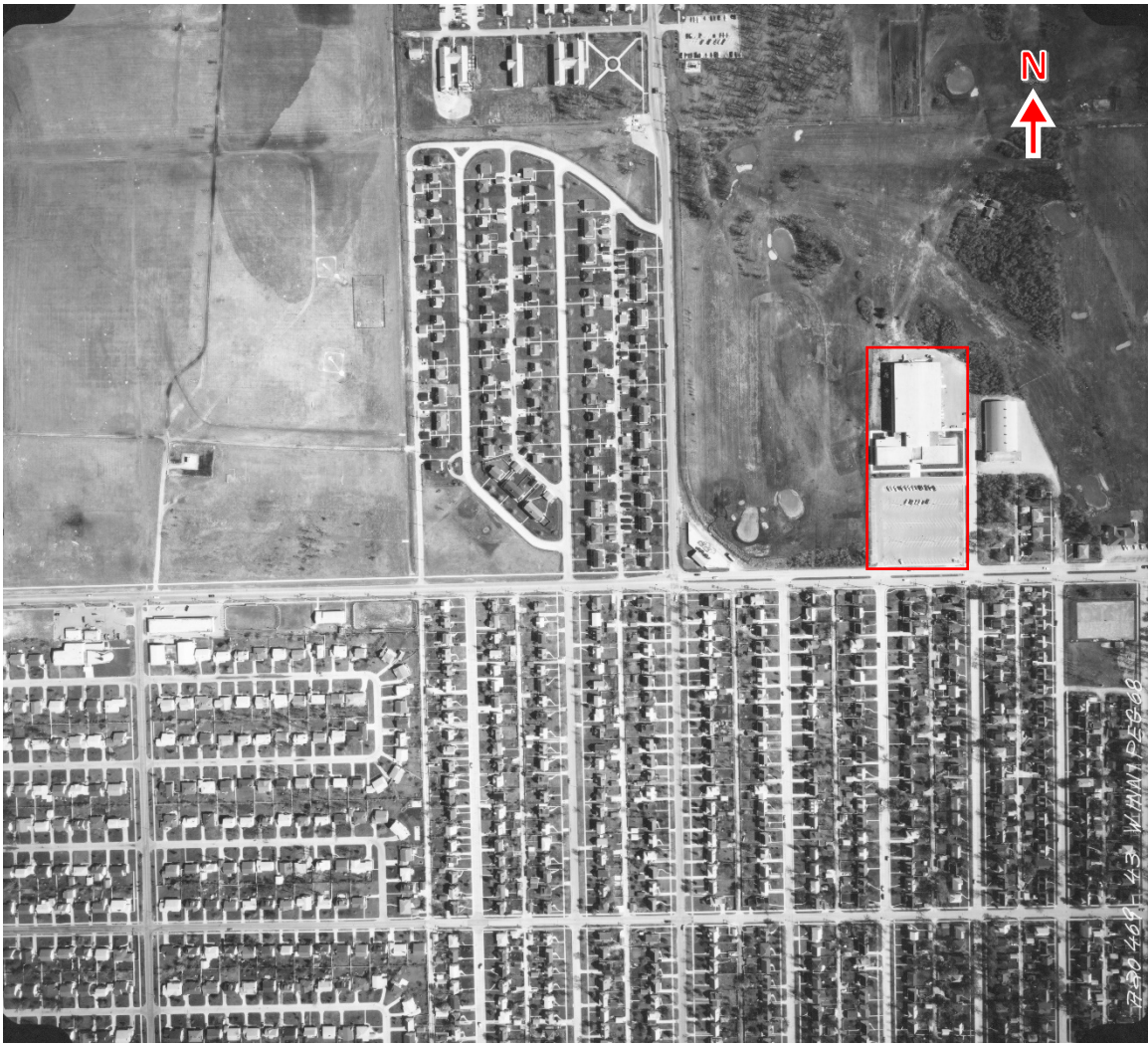


Photo 3. 1968 Aerial Photograph



Date: 1968

Client: City of Winnipeg

Obtained from: Canada Map Sales

Location: 2055 Ness Avenue,  
Winnipeg, Manitoba

Project No.: CA0000644.3039





Photo 4. 1979 Aerial Photograph



Date: 1979

Client: City of Winnipeg

Obtained from: Canada Map Sales

Location: 2055 Ness Avenue,  
Winnipeg, Manitoba

Project No.: CA000644.3039



Photo 5. 1988 Aerial Photograph



Date: 1988

Client: City of Winnipeg

Obtained from: Canada Map Sales

Location: 2055 Ness Avenue,  
Winnipeg, Manitoba

Project No.: CA0000644.3039

# ATTACHMENT

**E**

SUPPORTING DOCUMENTS



## APPENDIX

# ***E-1*** *ERIS ECOLOG SEARCH RESULTS*





---

# DATABASE REPORT

**Project Property:** *SJCC Phase 1 ESA  
2055 Ness Avenue  
Winnipeg MB R3J 0Z2*

**Project No:** *231-0xxxx-00 SJCC P1ESA*

**Report Type:** *Standard Report*

**Order No:** *23031600501*

**Requested by:** *WSP Canada Inc.*

**Date Completed:** *March 21, 2023*

**Environmental Risk Information Services**

*A division of Glacier Media Inc.*

1.866.517.5204 | [info@erisinfo.com](mailto:info@erisinfo.com) | [erisinfo.com](http://erisinfo.com)

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# Executive Summary

## **Property Information:**

**Project Property:** SJCC Phase 1 ESA  
2055 Ness Avenue Winnipeg MB R3J 0Z2

**Project No:** 231-0xxxx-00 SJCC P1ESA

## **Coordinates:**

**Latitude:** 49.8857969  
**Longitude:** -97.2344579  
**UTM Northing:** 5,527,427.82  
**UTM Easting:** 626,827.33  
**UTM Zone:** 14U

**Elevation:** 756 FT  
230.36 M

## **Order Information:**

**Order No:** 23031600501  
**Date Requested:** March 16, 2023  
**Requested by:** WSP Canada Inc.  
**Report Type:** Standard Report

## **Historical/Products:**

ERIS Xplorer [ERIS Xplorer](#)



## Executive Summary: Report Summary

<b>Database</b>	<b>Name</b>	<b>Searched</b>	<b>Project Property</b>	<b>Within 0.25 km</b>	<b>Total</b>
AUWR	<i>Automobile Wrecking &amp; Supplies</i>	Y	0	0	0
CA	<i>Certificates of Approval</i>	Y	0	0	0
CDRY	<i>Dry Cleaning Facilities</i>	Y	0	0	0
CHEM	<i>Chemical Manufacturers</i>	Y	0	0	0
CHM	<i>Chemical Register</i>	Y	0	0	0
CNG	<i>Compressed Natural Gas Stations</i>	Y	0	0	0
CONV	<i>Enforcement Actions</i>	Y	0	0	0
CS	<i>Contaminated/Impacted Sites</i>	Y	0	0	0
DRL	<i>Drill Holes</i>	Y	0	0	0
EEM	<i>Environmental Effects Monitoring</i>	Y	0	0	0
EHS	<i>ERIS Historical Searches</i>	Y	0	0	0
EIIS	<i>Environmental Issues Inventory System</i>	Y	0	0	0
FCON	<i>Federal Convictions</i>	Y	0	0	0
FCS	<i>Contaminated Sites on Federal Land</i>	Y	0	0	0
FRST	<i>Federal Identification Registry for Storage Tank Systems (FIRSTS)</i>	Y	0	0	0
FST	<i>Fuel Storage Tanks</i>	Y	0	0	0
FUEL	<i>Bulk Fuel Distributors</i>	Y	0	0	0
GEN	<i>Waste Generators Summary</i>	Y	5	0	5
GHG	<i>Greenhouse Gas Emissions from Large Facilities</i>	Y	0	0	0
IAFT	<i>Indian &amp; Northern Affairs Fuel Tanks</i>	Y	0	0	0
MAST	<i>Manure Storage Facilities</i>	Y	0	0	0
MINE	<i>Canadian Mine Locations</i>	Y	0	0	0
MNR	<i>Mineral Occurrences</i>	Y	0	0	0
MOGW	<i>Manitoba Oil and Gas Wells</i>	Y	0	0	0
NATE	<i>National Analysis of Trends in Emergencies System (NATES)</i>	Y	0	0	0
NDFT	<i>National Defense &amp; Canadian Forces Fuel Tanks</i>	Y	0	0	0
NDSP	<i>National Defense &amp; Canadian Forces Spills</i>	Y	0	0	0
NDWD	<i>National Defence &amp; Canadian Forces Waste Disposal Sites</i>	Y	0	0	0
NEBI	<i>National Energy Board Pipeline Incidents</i>	Y	0	0	0
NEBP	<i>National Energy Board Wells</i>	Y	0	0	0
NEES	<i>National Environmental Emergencies System (NEES)</i>	Y	0	0	0
NPCB	<i>National PCB Inventory</i>	Y	0	0	0
NPRI	<i>National Pollutant Release Inventory</i>	Y	0	0	0
OGWW	<i>Oil and Gas Wells</i>	Y	0	0	0
PAP	<i>Canadian Pulp and Paper</i>	Y	0	0	0
PCB	<i>Inventory of PCB Storage Sites</i>	Y	0	0	0

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Within 0.25 km</i>	<i>Total</i>
PCFT	<i>Parks Canada Fuel Storage Tanks</i>	Y	0	0	0
PITS	<i>Manitoba Pits and Quarries</i>	Y	0	0	0
PR	<i>Sustainable Development Public Registry</i>	Y	0	0	0
REC	<i>Waste Receivers Summary</i>	Y	0	0	0
RST	<i>Retail Fuel Storage Tanks</i>	Y	0	0	0
SCT	<i>Scott's Manufacturing Directory</i>	Y	0	1	1
SPL	<i>Manitoba Spills</i>	Y	0	0	0
SWS	<i>Solid Waste Sites</i>	Y	0	0	0
TCFT	<i>Transport Canada Fuel Storage Tanks</i>	Y	0	0	0
WDS	<i>Waste Disposal Site Inventory</i>	Y	0	0	0
WWIS	<i>Water Well Inventory</i>	Y	0	0	0
<b>Total:</b>			5	1	6

## Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
<a href="#">1</a>	GEN	ASSINIBOINE GOLF CLUB	NESS AVE., 2045 WINNIPEG MB R3J 0Z1	-/0.0	0.00	<a href="#">12</a>
<a href="#">1</a>	GEN	ASSINIBOINE GOLF CLUB	2045 NESS AVE Winnipeg MB R3J 0Z1	-/0.0	0.00	<a href="#">12</a>
<a href="#">1</a>	GEN	ST JAMES CIVIC CENTRE	2055 NESS AVE Winnipeg MB R3J 0Z2	-/0.0	0.00	<a href="#">12</a>
<a href="#">1</a>	GEN	ST JAMES CIVIC CENTRE	2055 NESS AVE Winnipeg MB	-/0.0	0.00	<a href="#">12</a>
<a href="#">1</a>	GEN	ASSINIBOINE GOLF CLUB	2045 NESS AVE Winnipeg MB	-/0.0	0.00	<a href="#">12</a>

## Executive Summary: Site Report Summary - Surrounding Properties

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
<a href="#">2</a>	SCT	Weatherwise Tent Rentals	382 Belvidere St Winnipeg MB R3J 2H3	SE/217.0	0.00	<a href="#">12</a>

# Executive Summary: Summary By Data Source

## **GEN - Waste Generators Summary**

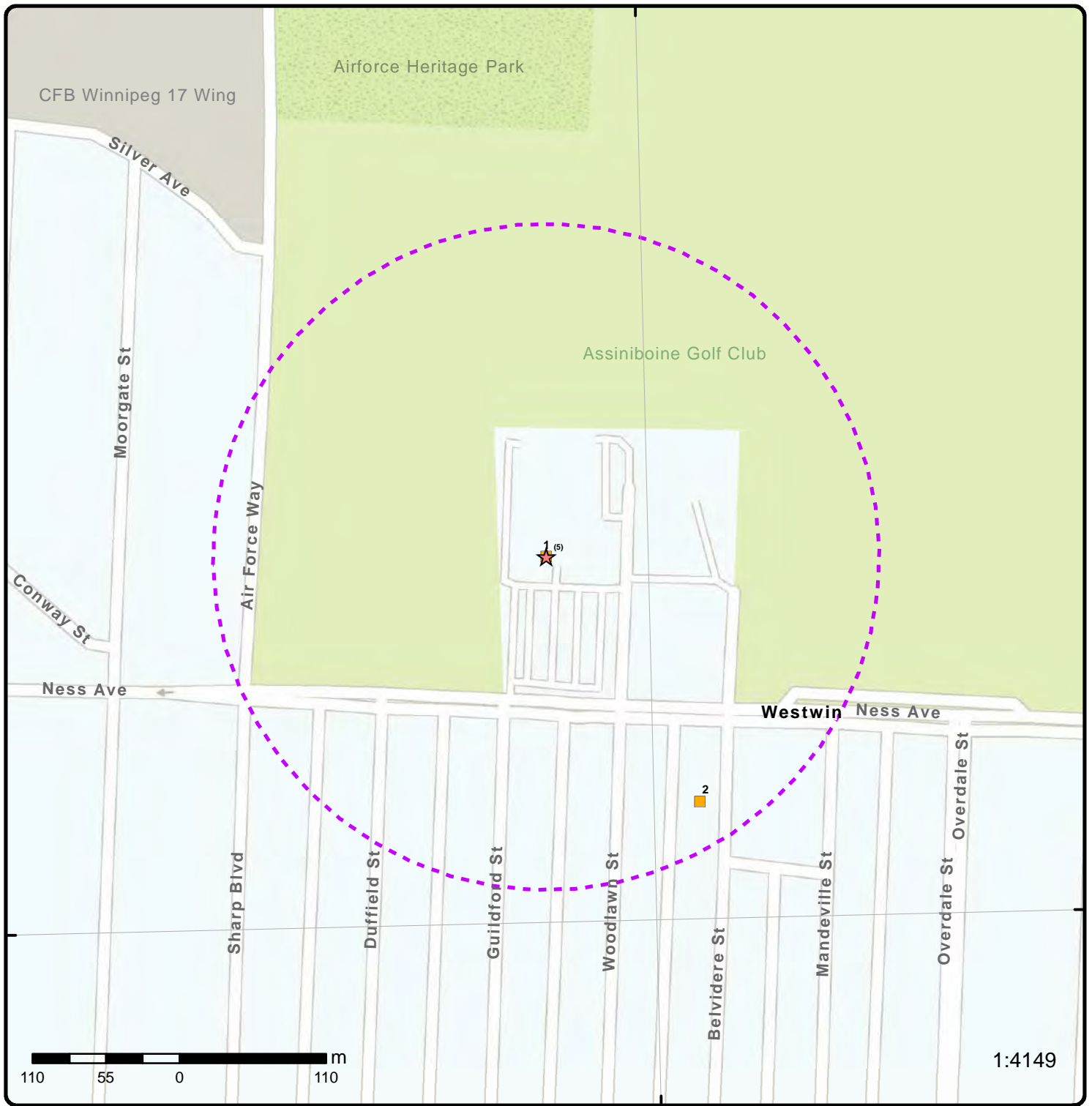
A search of the GEN database, dated 1998 - Sep 2022 has found that there are 5 GEN site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
ASSINIBOINE GOLF CLUB	NESS AVE., 2045 WINNIPEG MB R3J 0Z1	-	0.00	<a href="#"><u>1</u></a>
ASSINIBOINE GOLF CLUB	2045 NESS AVE Winnipeg MB R3J 0Z1	-	0.00	<a href="#"><u>1</u></a>
ST JAMES CIVIC CENTRE	2055 NESS AVE Winnipeg MB R3J 0Z2	-	0.00	<a href="#"><u>1</u></a>
ST JAMES CIVIC CENTRE	2055 NESS AVE Winnipeg MB	-	0.00	<a href="#"><u>1</u></a>
ASSINIBOINE GOLF CLUB	2045 NESS AVE Winnipeg MB	-	0.00	<a href="#"><u>1</u></a>

## **SCT - Scott's Manufacturing Directory**

A search of the SCT database, dated 1992-Mar 2011\* has found that there are 1 SCT site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
Weatherwise Tent Rentals	382 Belvidere St Winnipeg MB R3J 2H3	SE	216.99	<a href="#"><u>2</u></a>



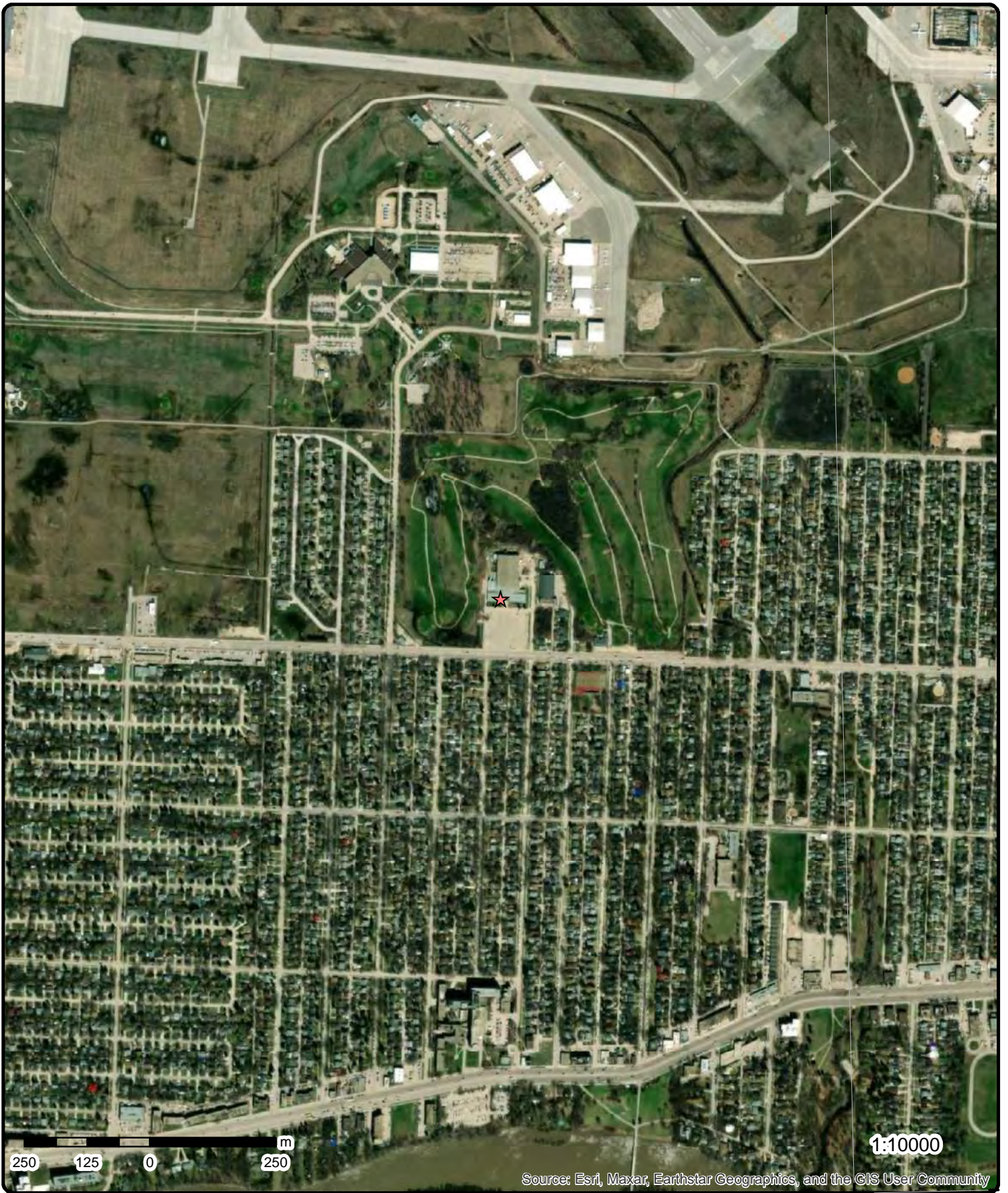
### Map: 0.25 Kilometer Radius

Order Number: 23031600501

Address: 2055 Ness Avenue, Winnipeg, MB



Project Property	Freeways; Highways	Beach	Shopping & Sports Area
Buffer Outline	Traffic Circle; Ramp	Airport	University/College
Eris Sites with Higher Elevation	Major Arterial; Minor Arterial	Industrial Area	Cemetery; Golf Course
Eris Sites with Same Elevation	Local Road	Military Base	Park (National)
Eris Sites with Lower Elevation	Service Road; Traffic Circle; Ramp	Aircraft Roads	Park (City/County)
Eris Sites with Unknown Elevation	Rail	Native Reservation	
		Hospital	



**Aerial** Year: 2022

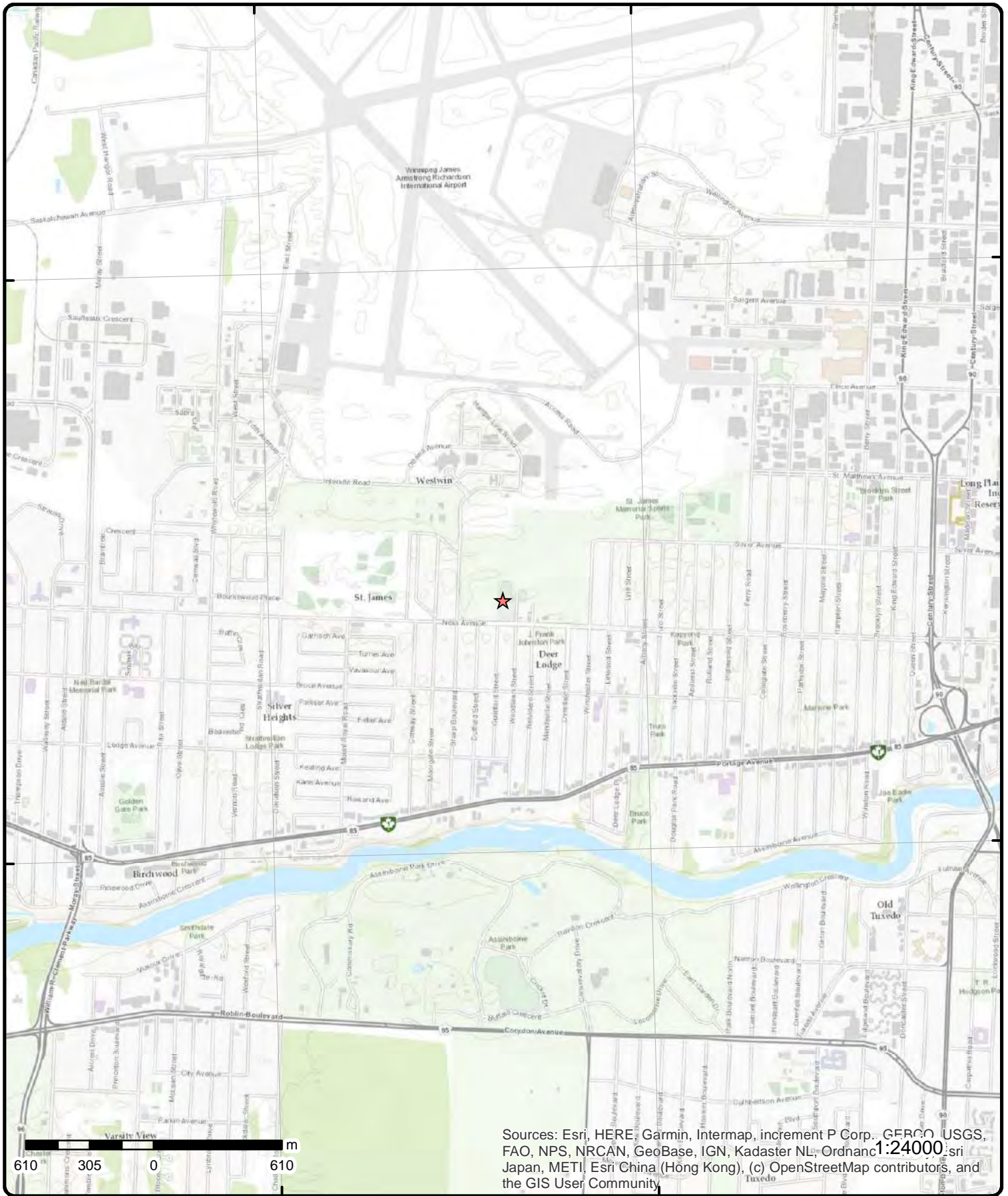
Order Number: 23031600501

**Address: 2055 Ness Avenue, Winnipeg, MB**



Source: ESRI World Imagery

© ERIS Information Limited Partnership



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

# Topographic Map

Order Number: 23031600501

Address: 2055 Ness Avenue, MB



Source: ESRI World Topographic Map

© ERIS Information Limited Partnership



# Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">1</a>	1 of 5	-/0.0	230.4 / 0.00	ASSINIBOINE GOLF CLUB NESS AVE., 2045 WINNIPEG MB R3J 0Z1	GEN
Registration No:		MBG007509			
SIC:					
DLS:					
<a href="#">1</a>	2 of 5	-/0.0	230.4 / 0.00	ASSINIBOINE GOLF CLUB 2045 NESS AVE Winnipeg MB R3J 0Z1	GEN
Registration No:		MBG07509			
SIC:					
DLS:					
<a href="#">1</a>	3 of 5	-/0.0	230.4 / 0.00	ST JAMES CIVIC CENTRE 2055 NESS AVE Winnipeg MB R3J 0Z2	GEN
Registration No:		MBG10294			
SIC:					
DLS:					
<a href="#">1</a>	4 of 5	-/0.0	230.4 / 0.00	ST JAMES CIVIC CENTRE 2055 NESS AVE Winnipeg MB	GEN
Registration No:		MBG10294			
SIC:					
DLS:					
<a href="#">1</a>	5 of 5	-/0.0	230.4 / 0.00	ASSINIBOINE GOLF CLUB 2045 NESS AVE Winnipeg MB	GEN
Registration No:		MBG07509			
SIC:					
DLS:					
<a href="#">2</a>	1 of 1	SE/217.0	230.4 / 0.00	Weatherwise Tent Rentals 382 Belvidere St Winnipeg MB R3J 2H3	SCT
Established:		1999			
Plant Size (ft²):					
Employment:		2			

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
----------------	--------------------------	--------------------------------	----------------------	-------------	-----------

**--Details--**

**Description:**

**SIC/NAICS Code:**

Textile Bag and Canvas Mills  
314910

# Unplottable Summary

Total: 3 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
FUEL	CANADA SAFEWAY - NESS AVE	NESS AVE	Winnipeg MB	
PR	Incinerator For The Burning Of Type 2 Waste	St. James Vocational School, Ness Avenue	Winnipeg MB	
PR	Ness Bridge Stream Channel Alteration	Ness Avenue	Winnipeg MB	

# Unplottable Report

---

**Site:** CANADA SAFEWAY - NESS AVE  
NESS AVE Winnipeg MB

**Database:**  
FUEL

**Permit No:** 33816  
**Type of Facility:** U/G  
**Region:**

**Expiry Date:** 31-Dec-15  
**Office:**  
**Comment:**

---

**Site:** Incinerator For The Burning Of Type 2 Waste  
St. James Vocational School, Ness Avenue Winnipeg MB

**Database:**  
PR

**File No:** 387.00  
**Licence No:** 659  
**Licence Issue Date:** 1977-02-16  
**Proponent Licencee:** The St. James Assiniboia School Division No. 40  
**Project Name:** Incinerator For The Burning Of Type 2 Waste  
**Status:** Completed  
**Comment Deadline Date:**  
**Project Summary:**  
**EAB Contact Person:**  
**EAB Contact Person Email:**  
**Last Date Modified:** 2014-11-19  
**Region:**  
**City:** Winnipeg  
**DLS:**  
**Location:** St. James Vocational School, Ness Avenue  
**File No URL:**  
**Licence No URL:** <https://www.gov.mb.ca/sd/eal/archive/2014licence.updates/659-387-00.pdf>  
**Project Summary URL:**

---

**Site:** Ness Bridge Stream Channel Alteration  
Ness Avenue Winnipeg MB

**Database:**  
PR

**File No:** 5790.00  
**Licence No:** 3157  
**Licence Issue Date:** 2015-11-09  
**Proponent Licencee:** City of Winnipeg  
**Project Name:** Ness Bridge Stream Channel Alteration  
**Status:** Completed  
**Comment Deadline Date:**  
**Project Summary:** Summary  
**EAB Contact Person:** Bruce Webb  
**EAB Contact Person Email:** <mailto:bruce.webb@gov.mb.ca>  
**Last Date Modified:** 2015-10-23  
**Region:** Central  
**City:** Winnipeg  
**DLS:**  
**Location:** Ness Avenue  
**File No URL:** <https://www.gov.mb.ca/sd/eal/registries/5790ness/index.html>  
**Licence No URL:** <https://www.gov.mb.ca/sd/eal/registries/5790ness/licence3157.pdf>  
**Project Summary URL:** <https://www.gov.mb.ca/sd/eal/registries/5790ness/summary.pdf>

# Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. **Note:** Databases denoted with " \* " indicates that the database will no longer be updated. See the individual database description for more information.

## **Automobile Wrecking & Supplies:**

Private

[AUWR](#)

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

**Government Publication Date: 1999-May 31, 2022**

## **Certificates of Approval:**

Provincial

[CA](#)

This database contains approvals issued since July 1988 within the following categories: Approvals for Air or Effluent and Orders, Permits and/or Regulated Sites designations for Air, Effluent, Refuse or Storage. The information available within this database pertains to client information, general location, class type, operation type, license # and the issue date of the CA. Please note that no specific site address information is available.

**Government Publication Date: 1988-Jun 2013\***

## **Dry Cleaning Facilities:**

Federal

[CDRY](#)

List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.

**Government Publication Date: Jan 2004-Dec 2020**

## **Chemical Manufacturers:**

Private

[CHEM](#)

The Manitoba Industry, Trade and Tourism department maintains a chemical register of all known 'active' manufacturers of chemicals, fertilizers and pesticides within the province. Inactive chemical manufacturers are not required to remain in the database. Information available within this register pertains to company name, location and the 'product line'.

**Government Publication Date: 1999-Jan 31, 2020**

## **Chemical Register:**

Private

[CHM](#)

This database includes a listing of locations of facilities within the Province or Territory that either manufacture and/or distributes chemicals.

**Government Publication Date: 1999-May 31, 2022**

## **Compressed Natural Gas Stations:**

Private

[CNG](#)

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

**Government Publication Date: Dec 2012 -Sep 2022**

## **Enforcement Actions:**

Provincial

[CONV](#)

This database summarizes enforcement activities (Convictions, Warnings, Director's Order's, EO Order's, MOH Order's, Offence Notice's, and Permit Suspensions) where companies/individual have been found guilty of environmental offenses under Manitoba's Environmental Protection Legislation. Please note that enforcement actions resulting from activities regulated under the Livestock Manure & Mortalities Mgmt Regulation MR 42/98 are also included.

**Government Publication Date: Apr 1994-Mar 2022**

## **Contaminated/Impacted Sites:**

Provincial

[CS](#)

List of sites registered under the Contaminated/Impacted Sites Program, made available by Manitoba Sustainable Development, Environmental Programs and Strategies branch. Includes sites that are on the Designated Impacted and Designated Contaminated Sites lists, as well as sites where impacts do not pose a concern, remediation has been completed, or further action is necessary.

**Government Publication Date: Up to Mar 2021**

**Drill Holes:**Provincial **DRL**

The "Open File Drill Holes" database contains information on more than 10,000 drill holes in the province of Manitoba. The database provides information in regard to drill hole location (place, latitude and longitude), depth and overburden of hole, exploration company and assessment report year.

**Government Publication Date: Jan 31, 2023**

**Environmental Effects Monitoring:**Federal **EEM**

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

**Government Publication Date: 1992-2007\***

**ERIS Historical Searches:**Private **EHS**

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

**Government Publication Date: 1999-Dec 31, 2022**

**Environmental Issues Inventory System:**Federal **EIIS**

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

**Government Publication Date: 1992-2001\***

**Federal Convictions:**Federal **FCON**

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

**Government Publication Date: 1988-Jun 2007\***

**Contaminated Sites on Federal Land:**Federal **FCS**

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government. Includes fire training sites and sites at which Per- and Polyfluoroalkyl Substances (PFAS) are a concern.

**Government Publication Date: Jun 2000-Dec 2022**

**Federal Identification Registry for Storage Tank Systems (FIRSTS):**Federal **FRST**

A list of federally regulated Storage tanks from the Federal Identification Registry for Storage Tank Systems (FIRSTS). FIRSTS is Environment and Climate Change Canada's database of storage tank systems subject to the Storage Tank for Petroleum Products and Allied Petroleum Products Regulations. The main objective of the Regulations is to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal lands. Storage tank systems that do not have a valid identification number displayed in a readily visible location on or near the storage tank system may be refused product delivery.

**Government Publication Date: May 31, 2018**

**Fuel Storage Tanks:**Provincial **FST**

The Petroleum Storage Tank database, which is maintained by Manitoba's Petroleum Storage Program, contains information in regard to company name, location, status, outlet type (retail, used oil, bulk/used'), number of tanks, tank capacity and tank status. This database will not be updated as this information is no longer collected in this format. For current information regarding bulk fuel distributors, please see the FUEL database.

**Government Publication Date: 1905-Feb 2003\***

**Bulk Fuel Distributors:**Provincial **FUEL**

Petroleum and allied product storage facilities are issued operating permits in accordance with the Regulation. This inventory contains a listing of current valid operating permits maintained by Government of Manitoba department of Environment, Climate and Parks. Fields such as Permit Number, Operation Name, Type of Facility, City/Municipality, and Region are included.

**Government Publication Date: 2006 - Dec 2022**

**Waste Generators Summary:**

Provincial **GEN**

Within Manitoba, a waste generator is defined as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled or stored at the site. This database contains the licensing/registration number (MB1 #), company name and address of registered generators. At present, access to the type of hazardous waste generated and the form of treatment used in the handling of the waste is only available by directly calling Manitoba's Hazardous Waste Program.

**Government Publication Date: 1998 - Sep 2022**

**Greenhouse Gas Emissions from Large Facilities:**

Federal **GHG**

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

**Government Publication Date: 2013-Dec 2019**

**Indian & Northern Affairs Fuel Tanks:**

Federal **IAFT**

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

**Government Publication Date: 1950-Aug 2003\***

**Manure Storage Facilities:**

Provincial **MAST**

Under the Livestock Manure and Mortalities Management Regulation (MR 42/98), permits are issued for the construction, modification or expansion of manure storage facilities. Once issued, the Environmental Livestock Program is responsible for the enforcement of regulations on the management of manure and mortalities. Please note that the MAST database only provides information on permit number, operation name, RM and permit issue date. All other information must be obtained from MB Conservation.

**Government Publication Date: Jul 1994-Sep 2022**

**Canadian Mine Locations:**

Private **MINE**

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

**Government Publication Date: 1998-2009\***

**Mineral Occurrences:**

Provincial **MNR**

For over 25 years, Manitoba has been compiling Mineral Inventory Cards on mineral deposits in the province. This database was obtained from Manitoba Industry, Trade and Mines, and contains information on over 650 mineral occurrences in the province. Data is provided on the Mineral Inventory File No., Mineral Deposit Name, Product, Associated Minerals or Products of Value, NTS area, Name of Property Owner or Operator and Address, location, and geographical coordinates.

**Government Publication Date: 1961-Mar 2022**

**Manitoba Oil and Gas Wells:**

Provincial **MOGW**

The Manitoba Oil and Gas Wells database was collected through the assistance of The Land Systems Company. Information is provided regarding license number and location for over 4,800 wells. Please note that this database will not be updated, information on wells drilled after May 2002 can be found in the Oil and Gas Wells (OGW) database under the 'Private Source Database' section.

**Government Publication Date: 1951-May 2002\***

**National Analysis of Trends in Emergencies System (NATES):**

Federal **NATE**

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

**Government Publication Date: 1974-1994\***

**National Defense & Canadian Forces Fuel Tanks:**

Federal **NDFT**

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

**Government Publication Date: Up to May 2001\***

**National Defense & Canadian Forces Spills:**

Federal

[NDSP](#)

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

**Government Publication Date:** Mar 1999-Apr 2018

**National Defence & Canadian Forces Waste Disposal Sites:**

Federal

[NDWD](#)

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

**Government Publication Date:** 2001-Apr 2007\*

**National Energy Board Pipeline Incidents:**

Federal

[NEBI](#)

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

**Government Publication Date:** 2008-Jun 30, 2021

**National Energy Board Wells:**

Federal

[NEBP](#)

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

**Government Publication Date:** 1920-Feb 2003\*

**National Environmental Emergencies System (NEES):**

Federal

[NEES](#)

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

**Government Publication Date:** 1974-2003\*

**National PCB Inventory:**

Federal

[NPCB](#)

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

**Government Publication Date:** 1988-2008\*

**National Pollutant Release Inventory:**

Federal

[NPRI](#)

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

**Government Publication Date:** 1993-May 2017

**Oil and Gas Wells:**

Private

[OGWW](#)

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at [www.nickles.com](http://www.nickles.com).

**Government Publication Date:** 1988-Nov 30, 2022

**Canadian Pulp and Paper:**

Private

[PAP](#)

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

**Government Publication Date:** 1999, 2002, 2004, 2005, 2009-2014



**Inventory of PCB Storage Sites:**

Provincial **PCB**

Manitoba's Hazardous Waste Program maintains a listing of all "active" PCB storage facilities. Inactive PCB storage equipment and/or disposal sites are not required to remain as part of the PCB inventory database for the province. Please note that some of the sites have no wastes in storage at present, but are retained should they be required for future acceptance of PCB equipment as it comes out of service. The records within this database only provide information on facility name and location. Information pertaining to the inventory of stored wastes and waste quantities at a designated site is only available by directly contacting the Hazardous Waste Program. Please note that this database will not be updated, information after 1999 can be found in the National PCB Inventory (NPCB) database.

**Government Publication Date: 1998-1999\***

**Parks Canada Fuel Storage Tanks:**

Federal **PCFT**

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

**Government Publication Date: 1920-Jan 2005\***

**Manitoba Pits and Quarries:**

Provincial **PITS**

The Manitoba Pits and Quarries database is comprised of 3 different types of permits. 1. Quarry Lease and Exploration Permits, which have a ten year term with exclusive rights for crown minerals. Quarry Exploration permits have a three year term with exclusive rights. 2. Private Pits and Quarry Permits require annual registration of private aggregate operations in the province and 3. Casual Permits which are for annual permits of Crown materials.

**Government Publication Date: 1994-Aug 2022**

**Sustainable Development Public Registry:**

Provincial **PR**

The public registry system contains information on projects that are undergoing environmental assessment under The Environmental Act and projects applying for a license under The Dangerous Goods Handling and Transportation Act. This listing is made available by Manitoba Sustainable Development.

**Government Publication Date: Jan 31, 2021**

**Waste Receivers Summary:**

Provincial **REC**

Disposal of regulated waste is maintained through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. A waste receiving location is any site or facility to which waste is transferred through a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by company name and address.

**Government Publication Date: 1998-Jul 2017**

**Retail Fuel Storage Tanks:**

Private **RST**

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

**Government Publication Date: 1999-May 31, 2022**

**Scott's Manufacturing Directory:**

Private **SCT**

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

**Government Publication Date: 1992-Mar 2011\***

**Manitoba Spills:**

Provincial **SPL**

The Manitoba Conservation Environmental Management System (EMS) records spills from across the province. Information from this database includes incident type, substance type, reason, location of spill, contaminate info and responsible party.

**Government Publication Date: Apr 2009-Jun 2022**

**Solid Waste Sites:**

Provincial **SWS**

Locations of solid waste sites and waste transfer stations registered with the Waste Reduction and Recycling Support (WRARS) Program, as well as First Nation landfills. Includes Class 1, 2, and 3 Solid Waste Sites, First Nation Solid Waste Sites, and Waste Transfer Stations. First Nations data was sourced from Indigenous and Northern Affairs Canada (INAC). Made available by Manitoba Government.

**Government Publication Date: Mar 2022**

**Transport Canada Fuel Storage Tanks:**

Federal **TCFT**

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

**Government Publication Date: 1970 - Apr 2020**

**Waste Disposal Site Inventory:**

Provincial

[WDS](#)

Manitoba Conservation retains a separate inventory of all known active and inactive regulated waste disposal grounds and waste transfer facilities for each of the five regions in the province. Registered companies may hold a permit or certificate for release of the following waste types: Effluent, Refuse, Air and Special Waste Storage.

**Government Publication Date: 1998\***

**Water Well Inventory:**

Provincial

[WWIS](#)

The GW Drill database compiled by the Manitoba Water Stewardship Division and Groundwater Management Program provides information on water wells across the province. The GW Drill database is a compilation of records from various sources and is intended to provide water well, stratigraphic, and hydrogeologic background information. The compilation is extensive but is not a comprehensive or complete inventory of wells in the province. For many records, location has been provided in DLS (Dominion Land Survey) format and locations may be accurate to the section or quarter section only. Any analysis or interpretation of records or the absence thereof must take into consideration that the GW Drill database is not comprehensive and should not be used as an inventory.

**Government Publication Date: 1880-May 2015**

# Definitions

**Database Descriptions:** This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

**Detail Report:** This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

**Distance:** The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

**Direction:** The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

**Elevation:** The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

**Executive Summary:** This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

**Map Key:** The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

**Unplottables:** These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

## APPENDIX

# ***E-2** MEC FILE SEARCH*





## Environmental File Search Request Form

### Search Requested By

Name: Cassie Bujan

Company Name: WSP Canada Inc.

Email: cassie.bujan@wsp.com

Phone Number: 204-999-8512

### Responder

Environment Officer: Julie Froese

Date Completed: 2023-03-27

Environment Officer Phone Number: 204-945-7104

### Office Use

Date Received: 2023-03-16

File Search #: 6582

Total Fees: 126.00

Order Number: mhp23074144208p73

# Environmental File Search Request Form

## **Property Information #1**

Business Name(s)/Property Owner: City of Winnipeg

Business Type: Civic Centre

Corporate File Number:

## **Legal Land Description**

Municipality: Winnipeg - City of Winnipeg

Roll Number: 07051908000

File Number:

Nearest Road/Street Intersection: Ness Avenue and Guilford Street

## **Civic Address**

Street Address: 2055 Ness Avenue

Postal Code: R3J0Z2

## **911 Address**

Street Address:

Postal Code:

## **Lot, Block, Plan**

Lot:

Block:

Plan:

## **Section, Township, Range**

Quarter Section:

Section Information:

Section:

Township:

Range:

Meridian:

## **River Lot**

River Lot Number:

## **Parish**

Parish Number:

## **Settlement**

Settlement Number:

## **GPS Coordinates**

Latitude:

Longitude:

## **Additional Information**

Additional Information:

## Environmental File Search Request Form

Program	File	Status	Licence/Permit/Operation ID/Operation Name <small>("+" in lower right corner of field indicates more information. Click to expand field.)</small>
Environmental Act Licence or Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Operating <input type="checkbox"/> Decomissioned <input type="checkbox"/> Inactive	
DGHT Act Licence or Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Operating <input type="checkbox"/> Decomissioned <input type="checkbox"/> Inactive	
Registered Hazardous Waste Generator	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Operating <input type="checkbox"/> Decomissioned <input type="checkbox"/> Inactive	OPID: 29965, St. James Civic Centre, 2055 Ness Ave, MBG10294
Registered Petroleum Storage Site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Operating <input type="checkbox"/> Decomissioned <input type="checkbox"/> Inactive	
Permitted/Registered Manure Storage Facility or Confined Livestock Area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Operating <input type="checkbox"/> Decomissioned <input type="checkbox"/> Inactive	
Contaminated/ Impacted Site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Not Designated <input type="checkbox"/> Designated Contaminated <input type="checkbox"/> Designated Impacted	The Contaminated/Impacted Site Program does not have a file on the site. This site is not a designated contaminated or impacted site pursuant to The Contaminated Sites Remediation Act.
Orders (Environmental Protection Order, Emergency Notice, Director's Order, or Environmental Order)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

**Disclaimer:** This response summarizes the information found in current records maintained by the Department of Conservation and Climate and is for informational purposes only. No representation or responsibility is assumed whatsoever as to the completeness of this information as it relates to the environmental condition or prior incidents associated with the property in question. In order to obtain more complete information on the property, persons may wish to retain the services of a qualified consultant for the purposes of conducting an environmental audit.

Additional Comments:



***E-3*** *MOVEMENT  
DOCUMENTATION  
(MILLER  
ENVIRONMENTAL)*

Modified: 04-03-2017

Print Date: 10-14-2022

# Container Check-In Sheet

Sales Order: 75208      Company #: 13136  
 Generator: Saint James Civic Centre

Return to Sales: Y  
 Ready to Invoice: Y

Manifest	Doc. #	Line	Item	Profile	Common Name	Container	Billing UM	EW Weight	Weight	Sample #
2828351-3	D106516	1	1	35656	RAGS CW OIL	205 DM	DM	100	.	.
2828351-3	D106516	2	2	35657	USED OIL WITH DEBRIS	205 DM	DM	100	.	.

# INQUIRY/SALES ORDER PICKUP FORM

Return to Winnipeg for Invoicing

## Miller Environmental Corporation

1803 Hekla Ave Winnipeg, Manitoba MB R2R 0K3  
Ph: 204-925-9600 Fax: 204-925-9601  
Gen #: MBG11228

## Manitoba Environmental Center

NE 2-3-1 EPM, RM of Montcalm, MB R0G 2B0  
Ph: 204-925-9600 Fax: 204-737-2161  
Gen #: MBG02410

**Sales Order: 75208**

**Salesperson:** Carter Steinke

**Document(s):** D106516

**Revenue Center:** Commercial

### Bill-To Name and Address

**Bill-To Company #** 4162

City of Winnipeg - Accounts Payable  
Corporate Finance - Accts Payable  
4th Floor Admin Bldg, 510 Main St  
Winnipeg, MB R3B 1B9

**Effective Date:** 21-SEP-22

**Main Contact:**

**Company Phone#:**

**Company Fax#:**

Line	Description	Profile	Waste Codes	UN/NA	Type - Size	Qty	UM
1	TRANSPORT				-	1.5	HR
2	RAGS C/W OIL	35656	252T	N/A	DM - 205	1	DM
3	USED OIL WITH DEBRIS	35657	251T	N/A	DM - 205	1	DM

### Pickup Site Address

**Pickup Company #** 13136  
Saint James Civic Centre  
2055 Ness Avenue  
Winnipeg, MB R3J 0Z2

**MB. Generator No:** MBG10294

**Pickup Contact** Larry Santucci

**Pickup Phone#** 204-471-7617

**P/O#:** -

**Pickup Cell#:**

**Notes:**

### Customer Service Special Instructions:

What am I doing? Picking up one drum of oily rags, and one drum of used oil with debris in it. Area is pretty wet right now (Sept. 21st), give it a week or two to dry up.  
Pictures in schedule folder

### Pickup Notes

**Lab Pack Hours:** \_\_\_\_\_

**Note for jobs outside of WPG:**

**Transport Hours:** \_\_\_\_\_

### Supplies Used for Job Completion

**Used Metal O/T:** \_\_\_\_\_ **Gaylords:** \_\_\_\_\_

**Used Poly O/T:** \_\_\_\_\_ **Gaylord Liners:** \_\_\_\_\_

**Drum Liners:** \_\_\_\_\_ **Pallets:** \_\_\_\_\_

**20L Pails/Lids:** \_\_\_\_\_ **Overpacks:** \_\_\_\_\_

**Vermiculite:** \_\_\_\_\_ **Totes:** \_\_\_\_\_

11:35 AM -



# Movement Document Attachment Sheet

Consignor Name: St James Circle Centre  
Consignor Address: 2055 Noss Ave

SO # 75208  
Tech: James Kahler

UN No.	Shipping Name	Class Sub/Class	PG	Quantity Shipped	Units L/KG	Pack. No.	Profile #	Manifest #	EC#	Type	Size
252T	Hazardous waste used oil			est	Kg	1	35657	2828351		L/P DM TO BK PL BG	205L
N/A	Regulator's waste w/o ID			est	Kg	1	35656	1		L/P DM TO BK PL BG	205L
N/A	Regulator's waste w/o ID			100	Kg	1				L/P DM TO BK PL BG	

24 HOUR NUMBER 204-957-6327

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous good safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations

Consignor (Print Name): X Seery West

Date: Oct 12th/22

A = Labpacks & Gaylords—Equivalency Certificate # SU 11161 (Ren. 5)  
B = Tubskids—Equivalency Certificate # SU 7133 (Ren. 11)

C = Batteries on Pallets—Equivalency Certificate # SU 10981 (Ren. 4)

**MOVEMENT DOCUMENT / MANIFESTO  
DOCUMENT DE MOUVEMENT / MANIFESTE**

Doc 1 106510

NO: 801 75208

Movement Document / Manifest Reference No.  
N° de référence du document de mouvement/manifeste

2828351-3

**A**  
Generator / consigneur  
Producteur / expéditeur

Registration No. / Provincial ID No.  
N° d'immatriculation - d'id provincial  
MN010294

Company name / Nom de l'entreprise  
Miller Environmental Corporation

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2J 0K2

Mailing address / Adresse postale  
1803 Hekla Avenue, Winnipeg, MB R2H 0K3

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2J 0K2

Shipping site address / Adresse du lieu de l'expédition  
2055 Neer Avenue

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2J 0K2

Intended Receiver / consignataire  
Réceptionnaire / destinataire prévu  
Miller Environmental Corporation  
1803 Hekla Avenue, Winnipeg, MB R2H 0K3  
Tel. No. / N° de tél.  
(204) 925-9600

E-mail / Courriel électronique  
E-mail / Courriel électronique

Receiving site address / Adresse du lieu de destination  
379, Hwy 1A & 75  
Winnipeg, MB R2H 2E0

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2H 2E0

**B**  
Carrier  
Transporteur

Registration No. / Provincial ID No.  
N° d'immatriculation - d'id provincial  
MNC00202

Company name / Nom de l'entreprise  
Miller Environmental Corp. - MB TRANSPORTER

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2H 0K3

Mailing address / Adresse postale  
1803 Hekla Avenue, Winnipeg, MB R2H 0K3

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2H 0K3

E-mail / Courriel électronique  
E-mail / Courriel électronique

Vehicle / Véhicule  
Trailer - Rail car No. 1  
Trailer - Remorque, wagon  
Trailer - Rail car No. 2  
Z remorque - wagon

Registration No. / N° d'immatriculation  
1001925-9600

Port of entry / Point d'entrée  
International use only

Port of exit / Point de sortie  
International use only

Carrier Certification: I certify that I have received waste or recyclable material from the generator/consignor for delivery to the receiver/consignee as set out in Part A and that the information contained in Part B is complete and correct. Attestation du transporteur: J'atteste avoir reçu les déchets ou matières recyclables du producteur/expéditeur en vue de leur livraison au réceptionnaire/destinataire, les noms figurant à la partie A et que les renseignements inscrits à la partie B sont exacts et complets.

Name of authorized person (print)  
Nom du représentant autorisé (caractères d'imprimerie):  
JAMES COLVER  
Tel. No. / N° de tél.  
(204) 925-9600

Year / Année  
Month / Mois  
Day / Jour  
Signature:  
22 10 02 James Colver

**C**  
Receiver / consignee  
Réceptionnaire / destinataire

Receiver / consignee information same as in Part A  
Les renseignements du réceptionnaire / destinataire sont les mêmes qu'à la Partie A

Yes / Oui  No, complete the box below / Non, remplir la case ci-dessous

Company name / Nom de l'entreprise  
Miller Environmental Corporation

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2R 0K3

Mailing address / Adresse postale  
1803 Hekla Ave

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2R 0K3

E-mail / Courriel électronique  
E-mail / Courriel électronique

Receiving site address / Adresse du lieu de destination  
1803 Hekla Ave

City / Ville  
Winnipeg

Province  
MB

Postal code / Code postal  
R2R 0K3

Date received / Date de réception  
Year / Année  
Month / Mois  
Day / Jour  
2 2 1 0 1 4

Time / Heure  
AM  PM

If waste or recyclable material to be transferred, specify intended company name! Si les déchets ou matières recyclables doivent être transférés, préciser le nom du destinataire

Quantity received / Quantité reçue  
Units / Unités  
L or / ou kg  
Kg  
100 Est  
Kg

Comments / Commentaires  
01  
01

Handling / Code de manutention  
01  
01

Shipment / Envoi  
Accepted / Accepté  
Released / Relâché  
Pack. / Véh.  
Cont. / Véh.

Decont. / Décont.  
Pack. / Véh.  
Cont. / Véh.

Signature  
AHTTS  
Tel. No. / N° de tél.  
(204) 925-9600

**International use only**

Generator / consigneur / producteur / expéditeur: I certify that the information contained in Part A is correct and complete. I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/dispensed, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. Attestation du producteur / expéditeur: J'atteste que tous les renseignements à la partie A sont exacts et complets. Je déclare que le contenu de ce chargement est décrit ci-dessus de façon complète et exacte par la désignation officielle de transport et qu'il est correctement emballé, marqué, étiqueté, et est en toutes circonstances en parfait état pour être transporté conformément aux règlements internationaux et nationaux applicables.

Name of authorized person (print)  
Nom de l'agent autorisé (caractères d'imprimerie)  
James Colver  
Signature  
JAMES COLVER

Instructions on reverse  
Instructions au verso

Copy / Copie 3 (yellow / jaune)

# ATTACHMENT

**F**

CONDITIONS AND  
LIMITATIONS





## STANDARD LIMITATIONS OF LIABILITY

WSP Canada Inc. (“WSP”) prepared this report solely for the use of the intended recipient, City of Winnipeg, in accordance with the professional services agreement between the parties. In the event a contract has not been executed, the parties agree that the WSP General Terms for Consultant shall govern their business relationship which was provided to you prior to the preparation of this report.

The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment.

The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by WSP and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

WSP disclaims any obligation to update this report if, after the date of this report, any conditions appear to differ significantly from those presented in this report; however, WSP reserves the right to amend or supplement this report based on additional information, documentation or evidence.

WSP makes no other representations whatsoever concerning the legal significance of its findings.

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