



**Q&A #1**

**Date:** October 3<sup>rd</sup>, 2013

**Project:** Tempered water and cross connection control

---

Bidders must make sure that their bids are based on the latest version of the tender documents published and take into consideration the following amendments and information, including any information provided on amendments or Q&As previously published for this project.

Bidders that do not comply with this requirement will be discarded.

---

**1- Question :** Does a permit need to be applied for?

**Answer :** The contractor shall apply for the permit through the City of Guelph and bear all associated costs for the permit application.

**2- Question :** How is the recirculation line for the emergency fixtures to be installed in the pilot plant?

**Answer :** See drawing M-8 note 5.

**3- Question :** How is the work phasing to be handled?

**Answer :** The intent is to keep the labs operating throughout the course of construction. All work shall be after hours except in penthouse areas. See specification document 01 11 00 section 1.2. Contractor shall clean up and tidy all areas under construction before 06:00am each day to allow for building tenant daily operations to continue uninhibited. Contractor shall coordinate all work with AAFC facility personnel to ensure daily operations is not affected.

**4- Question :** Is there a specific roof contractor to be used?

**Answer :** No.

**5- Question :** Is there a DSS report?

**Answer :** Yes. See attached document 1

**6- Question :** Is there mandatory training the contractor must undergo in order to work in the building?

**Answer :** Yes. There will be a one (1) hour biohazard safety training program conducted by AAFC which all workers must undergo.

**7- Question :** Is there security clearance to be obtained in order to work in the building?

**Answer :** Yes. CSIS check will be coordinated through AAFC.

**8- Question :** Pipe labeling.



**Answer :** All existing pipe that is not labeled shall be labeled. All new pipe shall be labeled. See tender drawing M-6 notes 4 and 5 and specification document 22 05 53. See attached document 2 reference drawings by Smylie & Crow Associates Ltd for existing piping.

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**ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED**



## **DOCUMENT 1**

### **Designated Substances Audit**

Appendix A (Figures)

Appendix B (Bulk Asbestos Analytical Report)

Appendix C (Photographic Log)



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**DESIGNATED SUBSTANCES AUDIT  
Agriculture and Agri-Food  
Canada Research Facility  
93 Stone Rd. West, Guelph Ontario  
Guelph, Ontario**

**Prepared for:**  
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## 1.0 INTRODUCTION

Frontline Environmental Management was retained by Agriculture and Agri-Food Canada (AAFC) to conduct a Designated Substance Audit for the Guelph Research Facility located at 93 Stone Rd. West in Guelph, Ontario. Authorization to proceed with the project was provided by Mr. Demetre Bomis of Agriculture and Agri-Food Canada on July 25, 2005.

The purpose of the study was to identify designated substances within the subject building, to comply with Section 30 of the Occupational Health & Safety Act (OHSA). This report includes the details of the inspection and sampling program conducted by Frontline, along with our recommendations.

## 2.0 SCOPE OF WORK

The inspection process involved the following methodologies:

- Confirmation of scheduling and logistics for access to building;
- Visible inspection within all accessible areas of the building to identify suspect materials;
- Collection of 7 bulk samples of suspected asbestos containing materials for laboratory analysis;
- Photographic log; and
- Preparation of a report of findings.

## 3.0 DESIGNATED SUBSTANCES REVIEW

The Occupational Health and Safety Act (OHSA) lists eleven designated substances that require special handling and removal in accordance with Provincial regulations. During this audit Frontline observed the following suspected Designated Substances:

- Asbestos
- Mercury;
- Silica; and
- Ozone Depleting Substances (CFC, HCFC, HFC, Halon) (not a Designated Substance).

Field notes were taken regarding the identification and location of suspected designated substances. Samples of building materials suspected to contain asbestos were collected and submitted to RWDI AIR laboratories in Guelph.

### 3.1 Asbestos Containing Materials (ACMs)

Based on the age of the building, it is unlikely that building materials contain asbestos. However, to ensure proper identification samples of suspected asbestos containing materials (ACMs) were collected for laboratory analysis of asbestos content. The laboratory Certificates of Analysis are included as an attachment. Materials containing 0.5% or greater asbestos are classified as ACMs.



### **3.2 Lead**

Historically, lead oxides were used in paint pigment processes to obtain certain colours. The Federal limit for lead-based paint classification is 0.5% by weight (or 5000 parts per million - ppm). Based on the age of the building it is unlikely that paint within the subject building is classified as Lead containing.

The historic use of lead gaskets to seal sections of ductile iron pipes (particularly sanitary) was also typical. Although no accessible or visible lead pipe gaskets were observed, it is possible that lead pipe gaskets are contained or sealed in other locations.

### **3.3 Mercury**

Historically, mercury has been used as a switch mechanism in furnace thermostats. It is likely that some of the switches located within the building contain mercury.

Mercury is also used in the manufacture of fluorescent light tubes. It is likely that the light tubes found in the buildings contain mercury vapour.

### **3.4 Silica**

Silica is presumed to be present in cement, cement blocks, concrete, bricks and mortar. Location of such materials has not been specified in this report and typically would not represent an environmental or Health and Safety concern once manufactured as a building material and left undisturbed.

### **3.5 Polychlorinated Biphenyls (PCBs)**

Although not a designated substance as specified by the OHSA, it was discovered that PCBs are a concern to human health and the natural environment. Light ballasts throughout the building were observed to be T8 (1") tube supporting ballasts. These higher efficiency ballasts do not contain PCBs. The use of PCBs in fluorescent light ballasts was phased out in the late 1970's.

### **3.6 Urea Formaldehyde Foam Insulation (UFFI)**

Urea Formaldehyde Foam Insulation was used as post-construction injection insulation in buildings. Although not a designated substance, as specified by the OSHA, it was discovered that off-gassing of the formaldehyde after installation was a health concern to building occupants. UFFI was therefore phased out in the early 1980s.

### **3.7 Ozone-Depleting Substances (CFC, HCFC, HFC, Halon)**

Although not a designated substance as specified by the OHSA it was discovered that refrigerants are ozone-depleting substances (ODS) and are a concern when discharged to the natural environment. Under certain regulations, there is no requirement to remove ozone depleting substances from refrigeration, air conditioning or fire suppression units. All ODS containing units must be serviced by contractors licensed to handle ODS's. Once repaired or

maintained any ODS are typically replaced with a refrigerant which is less damaging to the environment.

Nineteen refrigerator units were observed within the facility. It is likely that more refrigerators are present in the Laboratories and Research Rooms. The appliances appeared to be in good condition and properly maintained, and, as such, present little concern.

#### 4.0 LEGISLATIVE REQUIREMENTS AND GUIDELINES

Legislation pertaining to the abatement of the designated substances identified in the building audited is listed below.

<b>Asbestos</b>	<ul style="list-style-type: none"><li>- Ontario Regulation 278/05 under the Occupational Health and Safety Act effective Nov. 1, 2005 which revokes O.Reg. 838/90; and</li><li>- Ontario Regulation 837 as amended 510/92 under the Occupational Health and Safety Act.</li></ul>
<b>Lead</b>	<ul style="list-style-type: none"><li>- Ontario Regulation 843 as amended 389/00 under the Occupational Health and Safety Act; and</li><li>- Ontario Ministry of Labour 2004 Guideline Lead on Construction Projects.</li></ul>
<b>Mercury</b>	<ul style="list-style-type: none"><li>- Ontario Regulation 844 as amended 390/00 under the Occupational Health and Safety Act. 4.9.2 Management Options</li></ul>
<b>Silica</b>	<ul style="list-style-type: none"><li>- Ontario Regulation 845 as amended 391/00 under the Occupational Health and Safety Act; and</li><li>- Ontario Ministry of Labour 2004 Guideline Silica on Construction Projects.</li></ul>
<b>Urea Formaldehyde Foam Insulation (UFFI)</b>	<ul style="list-style-type: none"><li>- Ontario Regulation 833 as amended 513/92 and 597/94 under the Occupational Health and Safety Act; and</li><li>- Hazardous Products Act.</li></ul>
<b>PCBs</b>	<ul style="list-style-type: none"><li>- Ontario Regulation 362 under the Environmental Protection Act; and</li><li>- Ontario Regulation 833 as amended 388/00 under the Occupational Health and Safety Act.</li></ul>
<b>Ozone Depleting Substances (ODSs)</b>	<ul style="list-style-type: none"><li>- Ontario Regulation 189/94 under the Environmental Protection Act</li></ul>

## 5.0 INSPECTIONS

Mr. M. Mielke and Ms. L. Capri of Frontline Environmental conducted site inspections on September 14<sup>th</sup> and September 27<sup>th</sup>, 2005. AAFC staff provided access to the site. The building was occupied at the time of the inspection.

The following sections include the findings of Frontline's inspection. Figures detailing sample locations and site features are provided as an attachment to this report.

### 5.1 Site Description

The site is located at 93 Stone Road West in the City of Guelph. The building is an L-shaped, two-storey concrete block structure with a poured concrete foundation and basement. The building comprises a footprint of approximately 610 m<sup>2</sup> (6,500 sq.ft.) The site is currently operated as a research facility and was constructed in the late 1990's.

Typical interior finishes included drywall and painted concrete block walls. Vinyl floor tiles and painted concrete block finishes are typical. Exterior finishes are comprised of brick facia and concrete block.

### 5.2 Asbestos Containing Materials (ACMs)

Samples of suspected Asbestos Containing Materials (ACMs) were collected for laboratory analysis of asbestos content. The location, description and summary of laboratory analysis are provided in Table 1 shown below:

**Table 1: Summary of Asbestos Analysis**

<i>Sample ID</i>	<i>Description</i>	<i>Location</i>	<i>Fiber Type</i>	<i>Laboratory Analysis</i>	<i>Status</i>
AFC-HALL-S700-FT-LB	Light blue 12 x 12" Floor Tile	1 <sup>st</sup> Floor, Hallway S700	-	-	No ACM
AFC-HALL-S700-FT-DB	Dark blue 12 x 12" Floor Tile	1 <sup>st</sup> Floor, Hallway S700	-	-	No ACM
AFC-HALL-S700-FT-WHT	White 12 x 12" Floor Tile	1 <sup>st</sup> Floor, Hallway S700	-	-	No ACM
AFC-HALL-S700-FT-Mastik	Tile adhesive	1 <sup>st</sup> Floor, Hallway S700	-	-	No ACM
AFC-HALL-S133-FS1	Fire Spray	1 <sup>st</sup> Floor, Hallway S133	-	-	No ACM
AFC-HALL-S133-FS2	Fire Spray	1 <sup>st</sup> Floor, Hallway S133	-	-	No ACM
AFC-HALL-S133-FS3	Fire Spray	1 <sup>st</sup> Floor, Hallway S133	-	-	No ACM

Based on laboratory analysis, all samples collected within the facility were reported as non-asbestos containing. It is possible that materials may be hidden in false ceilings and wall cavities/pipe chases and may not be visible until demolition has occurred. If suspected ACM's are discovered, all work should cease until the asbestos content of the suspect materials can

be verified. Otherwise, the materials should be handled as materials which contain asbestos of a type other than Chrysotile in accordance with O. Reg. 278/05.

### **5.3 Lead**

Based on the age of the facility (1999) it is unlikely that lead paint would have been used at this facility. The use of lead paint based ban occurred in the late seventies. No samples of suspect lead paint were collected.

Although no accessible and visible lead pipe gaskets were observed, it is possible that lead pipe gaskets are hidden in other locations. It is possible that lead shielding may be present in radioactive materials storage equipment.

### **5.4 Mercury**

5 pressure differential switches within the mechanical room of the building were observed to contain mercury. It is possible that other switches within laboratory and mechanical equipment may contain mercury switches.

Mercury vapour has also been used in fluorescent light tubes. It is likely that the light tubes in the building contain mercury vapour. Approximately 550 fluorescent light tubes were identified during the inspection of the building. Locations of fluorescent light fixtures are detailed in Figure 1, included with this report.

### **5.5 Silica**

Silica is presumed to be present in cement, cement blocks, concrete, bricks and mortar. No source of bulk free silica were observed.

### **5.6 Polychlorinated Biphenyls (PCBs)**

All ballasts observed within the building were newer T8 (1") tube-supporting (non-PCB) ballasts.

### **5.7 Urea Formaldehyde Foam Insulation (UFFI)**

At the time of inspection, no urea formaldehyde foam insulation or indications of its use in this building were observed. However, UFFI was used as injection insulation within building walls and can be difficult to identify. Frontline recommends periodic inspections of the building during demolition to identify any suspect hidden UFFI which may not become visible until demolition or renovation activities.

### **5.8 Ozone Depleting Substances (ODS's)**

At the time of the inspection 19 refrigerator units were observed in the basement. These units may contain ODS's. Continued use and proper maintenance of these products is recommended.

In accordance with Ontario Regulation 189/94 the collection of refrigerant from air conditioning or refrigeration equipment prior to its removal or maintenance is required. The removal of such refrigerants should be conducted by a certified technician licensed to handle these compounds. Any site or facility used in the collection of refrigerant becomes part of a "refrigerant management system" that is subject to the requirements of Regulation 347 and the Environmental Protection Act.

Reportedly, no halon fire suppression systems are located at this facility.

In accordance with Regulation 189/94 the collection of refrigerant should be properly conducted during the installation, disposal, servicing, testing, maintenance or demolition of refrigeration or air conditioning equipment. Regulation 189/94 strictly prohibits the discharge of a refrigerant into the natural environment.

## **6.0 REMEDIATION**

### **6.1 Lead and Lead Based Paints**

#### **6.1.2 In Place Management**

Removal of lead is only required if the material is damaged or likely to be disturbed during maintenance, renovation or demolition activities. Proper management of lead used in a process is required in accordance with O. Reg 843 to ensure worker protection in the form of a Lead Management Plan.

Maintenance staff who may come in contact with lead or be working in close proximity to lead containing material have an elevated risk of exposure and should be trained in the hazards of lead and procedures to be used in the proper handling lead based products. Absolutely no hot work should be performed on or near the area.

#### **6.2.2 Removals and Repairs During Construction**

Should repair or replacement of lead pipe gaskets be required, they will require handling as a Type 1 Operation in accordance with the *Ontario Ministry of Labour 2004 Guideline Lead on Construction Projects*.

Disposal of material in accordance with the Transportation of Dangerous Goods Act and Ontario Regulation 347, made under the Environmental Protection Act are required.

A suitable recycling option for the lead pipe gaskets may be utilized provided the recycler is approved by the MOE. A list of approved recyclers can be obtained by contacting the Ontario Waste Materials Exchange (OWME). The OWME can be contacted at 1-888-845-9083 or www.owe.org.

## 6.2 Mercury

### 6.2.1 In Place Management

Removal of mercury contained in fluorescent light tubes and thermostat switches are only required during maintenance, renovation or demolition activities. Proper management of Mercury is required in accordance with O. Reg 844 to ensure worker protection.

Currently there is little to no concern regarding exposure to building occupants provided that tubes are not crushed or broken on-site. It is strongly recommended that tubes not be crushed but safely stored for proper disposal. Maintenance staff who may come in contact with broken light tubes or thermostats have an elevated risk of exposure and should be trained on the hazards of mercury and proper handling procedures. Continued use of the light tubes and switches are recommended.

### 6.2.2 Removals and Repairs

Once removed or replaced light tubes and thermostats requires special handling and disposal. Salvage and reuse of mercury tubes in lighting fixtures is recommended. Should reuse of tubes or thermostats not be practical then recycling of collected tubes is recommended.

A suitable MOE approved recycling option for the mercury thermostats and light tubes is available by contacting the FLR Fluorescent Lamp Recyclers Inc. in Cambridge, Ontario 1-800-324-8997 or equivalent service.

Disposal of material in accordance to the Transportation of Dangerous Goods Act and Ontario Regulation 347 made under the Environmental Protection Act are required.

## 6.3 Silica

### 6.3.1 In Place Management

Special handling and management of silica in concrete, masonry mortar, stone or refractory materials is only required if the material is damaged or likely to be disturbed during maintenance, renovation or demolition activities. Proper management of silica is required in accordance with O. Reg 845 to ensure worker protection.

Currently there is little to no concern regarding exposure to building occupants. Maintenance staff who may be required to cut, drill or abrade materials containing silica have an elevated risk of exposure.

### 6.3.2 Removals and Repairs During Construction

Should cutting, drilling, or abrading of silica containing materials be required special procedures specified as Type 1 Operation in accordance with the Ontario Ministry of Labour Draft 2002 Guideline Silica on Construction Projects is required.

Disposal of material in accordance to the Transportation of Dangerous Goods Act and Ontario Regulation 347 made under the Environmental Protection Act are required.

## 6.4 Ozone Depleting Substances (CFC, HCFC, HFC, Halon)

### 6.4.1 In Place Management

In accordance with Regulation 189/94 the collection of refrigerant should be properly conducted during the installation, disposal, servicing, testing, maintenance or demolition. Regulation 189/94 strictly prohibits the discharge of any refrigerant into the natural environment.

The removal of such refrigerants should be conducted by a certified technician licensed to handle these compounds

## 7.0 SUMMARY OF DESIGNATED SUBSTANCES QUANTITY ESTIMATE

Based on observations made during the audit at the building, the following is a summary of designated substances quantities.

**Table 2: Designated Substances Quantity**

Designated Substance	Description	Location	Approximate Quantity
Mercury	Fluorescent light tubes	Throughout the building	550 units
	Mercury pressure differential switches	Mechanical Room SM2000	5
Silica	Cement, cement blocks, concrete, bricks and mortar	Throughout the building	Not quantified

## 8.0 LIMITATIONS

Services performed by **Frontline Environmental Management Inc.** were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the Environmental Engineering & Consulting profession. No other representation expressed or implied as to the accuracy of the information, conclusions or recommendations is included or intended in this report.

This report was completed for the sole use of Frontline and the client. It was completed in accordance with the Scope of Work referred to in Section 2.0. As such, this report may not deal with all issues potentially applicable to the site and may omit issues that are or may be of interest to the reader. Frontline makes no representation that the present report has dealt with all-important environmental features, except as provided in the Scope of Work. All findings and conclusions presented in this report are based on site conditions as they existed during the time period of the investigation. This report is not intended to be exhaustive in scope or to imply a risk-free facility.

Any use which a third party makes of this report, or any reliance on, or decisions to be made based upon it, are the responsibility of such third parties. Frontline accepts no responsibility for liabilities incurred by or damages, if any, suffered by any third party as a result of decisions made or actions taken, based upon this report.

Others with interest in the site should undertake their own investigations and studies to determine how or if the condition affects them or their plans.

It should be recognized that the passage of time might affect the views, conclusions and recommendations (if any) provided in this report because environmental conditions of a property can change. Should additional or new information become available, Frontline recommends that it be brought to our attention in order that we may re-assess the contents of this report.

All of which is respectively submitted,

### **FRONTLINE ENVIRONMENTAL MANAGEMENT INC.**



Bruce Decker CCEP, AMRT,  
Manager, Building Health Science



Martin Mielke B.Sc., WRT  
Env. Health and Safety Consultant

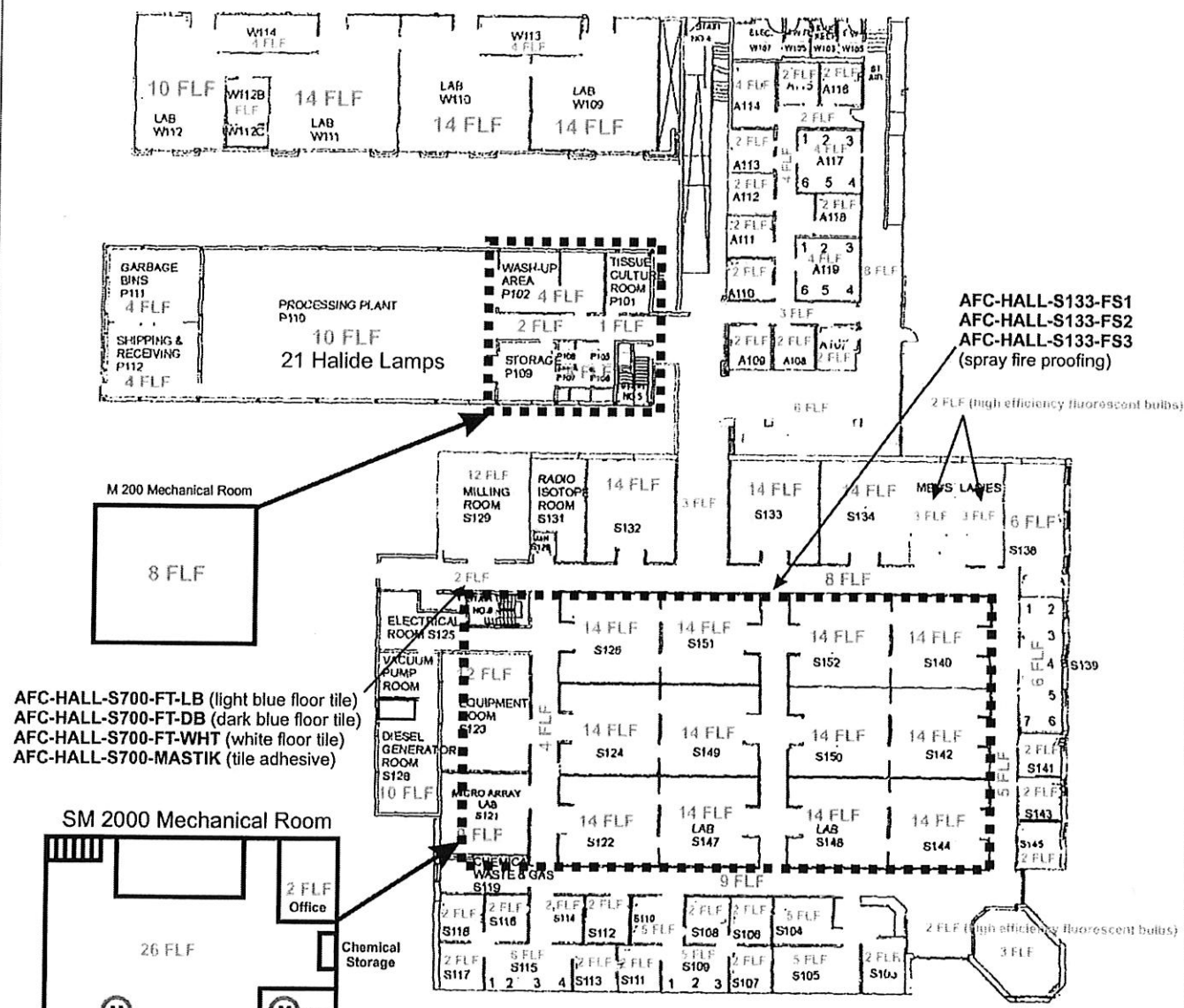


## **Appendix A**

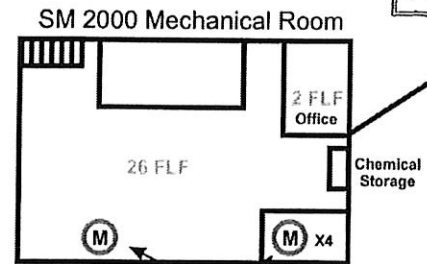
### **Figures**

# AGRICULTURE - AGRI-FOOD CANADA

## Designated Substance Survey



AFC-HALL-S700-FT-LB (light blue floor tile)  
 AFC-HALL-S700-FT-DB (dark blue floor tile)  
 AFC-HALL-S700-FT-WHT (white floor tile)  
 AFC-HALL-S700-MASTIK (tile adhesive)



### LEGEND

AFC-HALL- Sample locations (samples positively identified with asbestos are in red)

**(M)** Mercury switches

26 FLF Approximate location and quantity of Fluorescent Light Fixtures

AFC-HALL-S133-FS1  
 AFC-HALL-S133-FS2  
 AFC-HALL-S133-FS3 (spray fire proofing)  
 2 FLF (high efficiency fluorescent bulbs)

### Basement Units

**B101:** 50 Fluorescent Light Fixtures  
 5 Refrigeration Units

**B102:** 12 Fluorescent Light Fixtures  
 14 Refrigeration Units

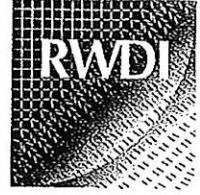
Not to Scale

Prepared by:	Project Name:	Date: November 2005
	Agriculture & Agri-food Canada	Project: 875-01
	93 Stone Road W, Guelph, ON	File: 875-01
Designated Substance Survey		Drawn by: MM
		<b>Figure 1</b>

# Bulk Asbestos Analytical Report


Thursday, September 29, 2005

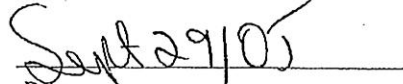
06-0998L



CONSULTING ENGINEERS  
& SCIENTISTS

Samples were analyzed using a Polarizing Light Microscope (PLM) according to NIOSH method 9002 "Asbestos (bulk) by PLM" May, 1989 and US EPA "Method for the Determination of Asbestos in Bulk Building Materials" (EPA 600/R-93/116), June 1993. This report applies only to materials tested

  
Kim O'Neill, M.Sc., C.Chem

  
Date

RWDI AIR Inc.  
650 Woodlawn Road West  
Guelph, Ontario  
Canada N1K 1B8

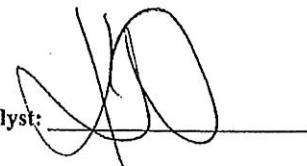
<b>Client Information</b>	Martin Mielke	Sampling Date: 9/27/2005
	Frontline Environmental Management	Client Ref #: 875-01
	650 Riverbend Drive	
	Kitchener Ontario N2K 3S2	

A member of the  
RWDI Group of Companies

All values are in percent and estimated using CVES (calibrated visual estimate)

Sample:	1	AFC - HALL - S133 - FS1		Grey
Chrysotile %	ND	Fiberglass %	ND	Non-Fibrous % 10
Amosite %	ND	Rockwool %	90	
Crocidolite %	ND	Glasswool %	ND	
Other Amphiboles %	ND	Cellulose %	ND	
KAO		Other Fibers %	ND	
<b>Sample:</b>	<b>2</b>	<b>AFC - HALL - S133 - FS2</b>		<b>Grey</b>
Chrysotile %	ND	Fiberglass %	ND	Non-Fibrous % 20
Amosite %	ND	Rockwool %	80	
Crocidolite %	ND	Glasswool %	ND	
Other Amphiboles %	ND	Cellulose %	ND	
KAO		Other Fibers %	ND	
<b>Sample:</b>	<b>3</b>	<b>AFC - HALL - S133 - FS3</b>		<b>Grey</b>
Chrysotile %	ND	Fiberglass %	ND	Non-Fibrous % 35
Amosite %	ND	Rockwool %	65	
Crocidolite %	ND	Glasswool %	ND	
Other Amphiboles %	ND	Cellulose %	ND	
KAO		Other Fibers %	ND	

Note: ND = None detected MDL = 0.1%  
It is recommended that floor tile samples be analyze using TEM.  
Other amphiboles = actinolite, tremolite, anthopholite  
Results apply only to materials tested.

Analyst: 



CONSULTING ENGINEERS & SCIENTISTS

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All values are in percent and estimated using CVES (calibrated visual estimate)

Sample:	4	AFC - HALL - S700 - FT - LB		Blue/Black/White
Chrysotile %	ND	Fiberglass %	ND	Non-Fibrous % 100
Amosite %	ND	Rockwool %	ND	
Crocidolite %	ND	Glasswool %	ND	
Other Amphiboles %	ND	Cellulose %	ND	
KAO		Other Fibers %	ND	

Sample:	5	AFC - HALL - S700 - FT - WHT		Blue
Chrysotile %	ND	Fiberglass %	ND	Non-Fibrous % 100
Amosite %	ND	Rockwool %	ND	
Crocidolite %	ND	Glasswool %	ND	
Other Amphiboles %	ND	Cellulose %	ND	
KAO		Other Fibers %	ND	

Sample:	6	AFC - HALL - S700 - FT - WHT		White/Black
Chrysotile %	ND	Fiberglass %	ND	Non-Fibrous % 100
Amosite %	ND	Rockwool %	ND	
Crocidolite %	ND	Glasswool %	ND	
Other Amphiboles %	ND	Cellulose %	ND	
KAO		Other Fibers %	ND	

Sample:	7	AFC - HALL - S700 - MASTIK		Black/Grey/White
Chrysotile %	ND	Fiberglass %	ND	Non-Fibrous % 100
Amosite %	ND	Rockwool %	ND	
Crocidolite %	ND	Glasswool %	ND	
Other Amphiboles %	ND	Cellulose %	ND	
KAO		Other Fibers %	ND	

Note: ND = None detected MDL = 0.1%  
It is recommended that floor tile samples be analyze using TEM.  
Other amphiboles = actinolite, tremolite, anthopholite  
Results apply only to materials tested.

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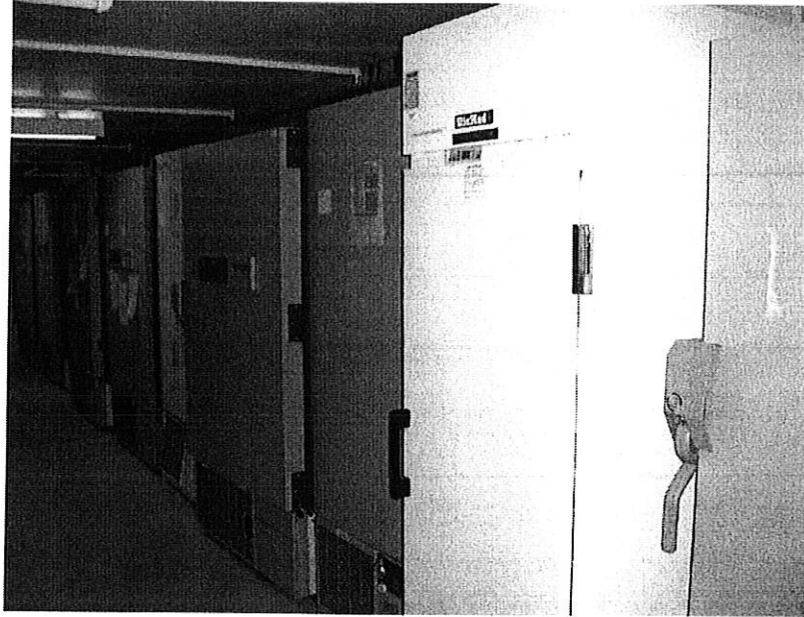
Analyst: 

Reputation Resources Results

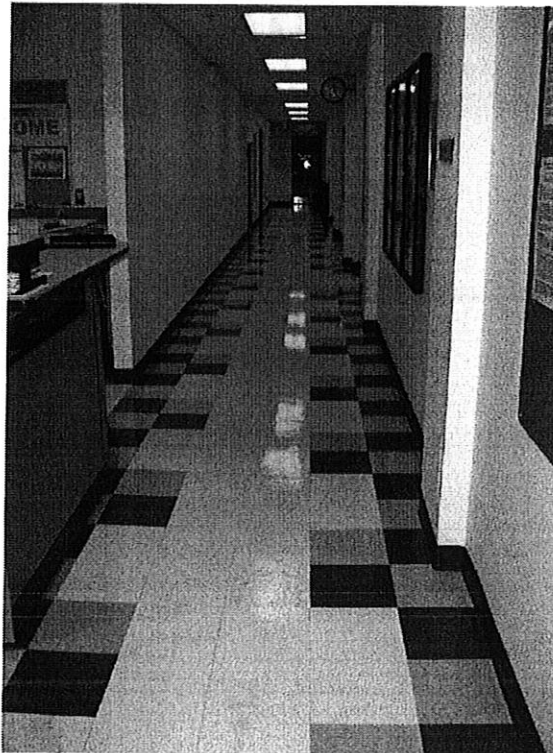
Tel: (519) 823-1311 Fax: (519) 823-1316 Web: www.rwdi.com

CANADA  
UNITED KINGDOM  
UNITED STATES

**Appendix C**  
**Photographic Log**



**Photo 1:** Basement storage area. Refrigerator units may contain ozone-depleting substances.



**Photo 2:** Reception Hallway. 12" x 12" floor tiles, reported to be non- asbestos containing.



Agriculture and  
Agri-Food Canada

Agriculture et  
Agroalimentaire Canada

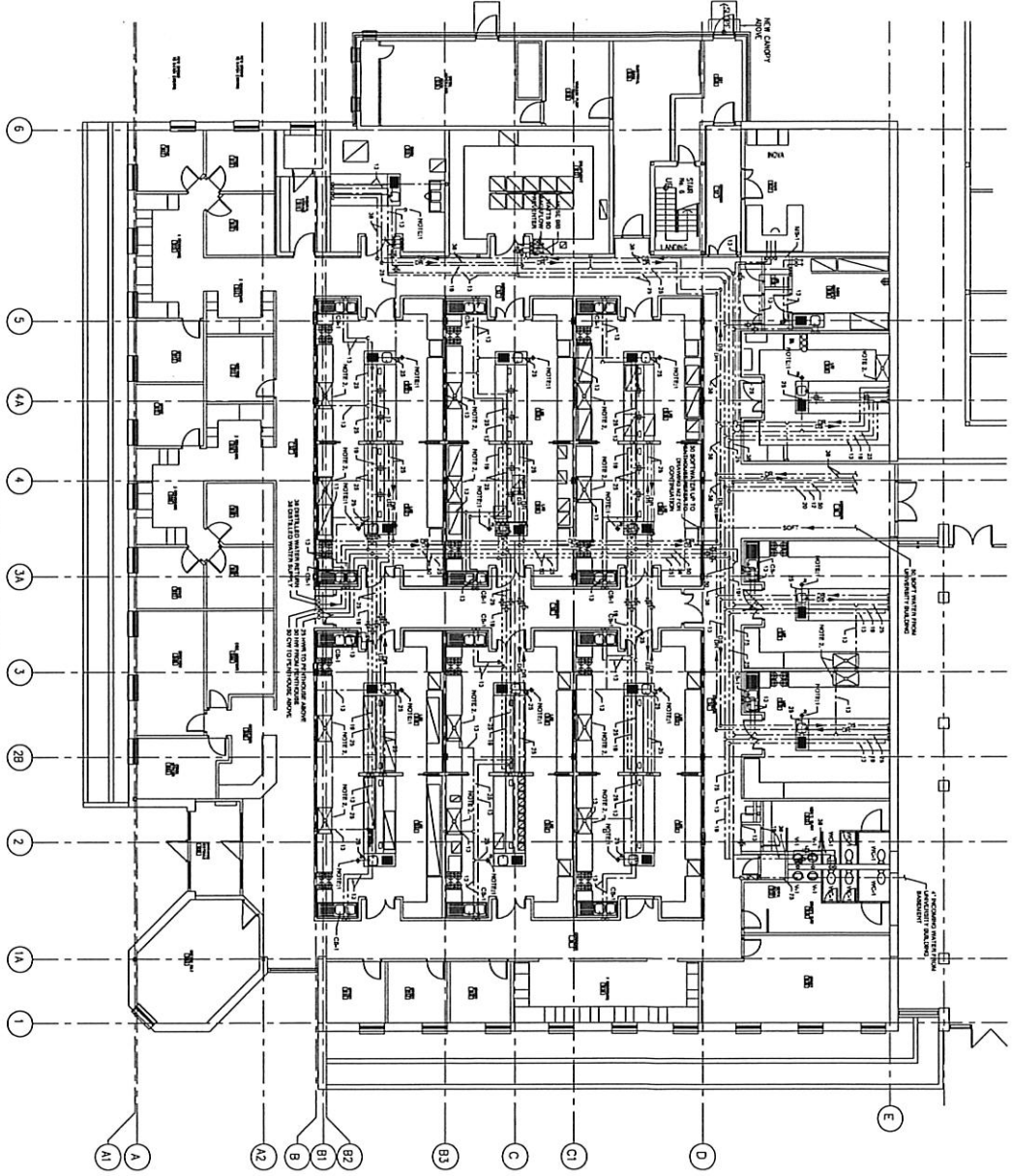
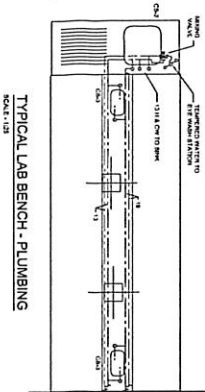
01B46-13-0116

## DOCUMENT 2

Drawings  
M-1 and M-2







NOTES:  
 1. REFER TO ARCHITECT'S LABORATORY PLAN.  
 2. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CANADIAN PLUMBING CODE.  
 3. REFER TO SECTION 11.1 FOR DETAILS.

Project Title: **AGRICULTURE AND AGRIFOOD CANADA**  
 33 STONE RD  
 QUEBEC, QUEBEC

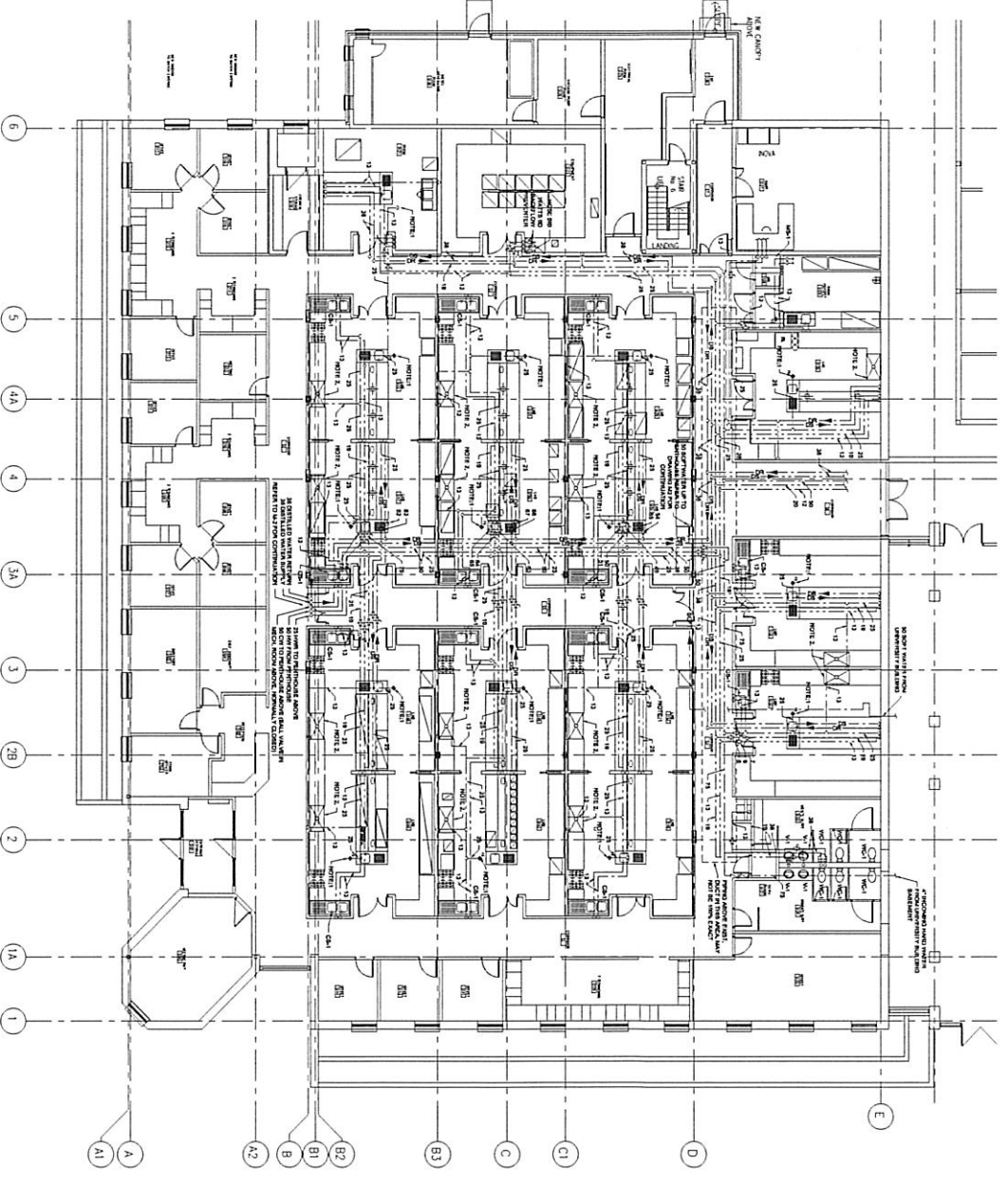
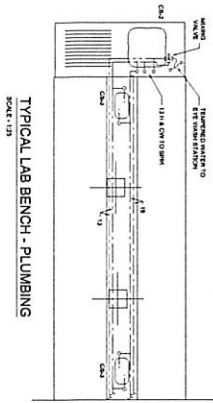
Client: **Smyle & Crow Associates Inc.**  
 11111 17th Avenue N.E.  
 Edmonton, Alberta T6A 1K6  
 Phone: (780) 462-1111  
 Fax: (780) 462-1112  
 Website: www.smyleandcrow.com

Contract No: **J00**  
 Date: **MARCH 2008**

Scale: **1:100**

Sheet Title: **POTABLE AND NON-POTABLE WATER AS-BUILTS**

Sheet Number: **M-1**  
 1 of 2



**FLOOR PLAN - PLUMBING**  
SCALE: 1/8"

AS-BUILT  
DATE: APRIL, 2008

AS-BUILT  
DATE: APRIL, 2008

NO.	DATE	DESCRIPTION
1	APRIL, 2008	AS-BUILT

**Symbol & Crow**  
Associates Inc.  
Professional Engineers  
1000 University Ave. Suite 200  
Ottawa, Ontario K1N 6N5  
Tel: 613-735-7777  
Fax: 613-735-7778  
www.symbolandcrow.com

**Project Title**  
AGRICULTURE AND  
AGRI-FOOD CANADA

**Project Site**  
23 STONE RD  
QUELPH, ONTARIO

**Site No. / 08007**

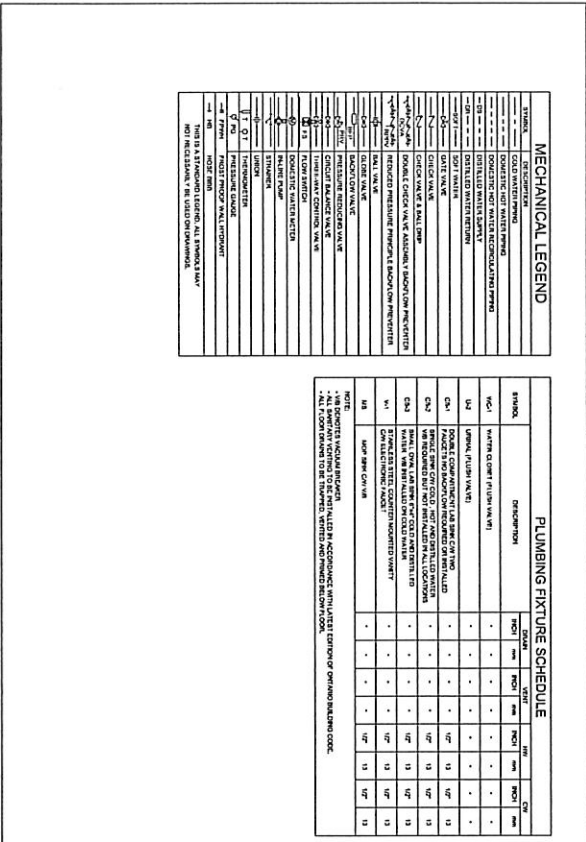
**Client**  
JGD

**Drawn**  
JGD

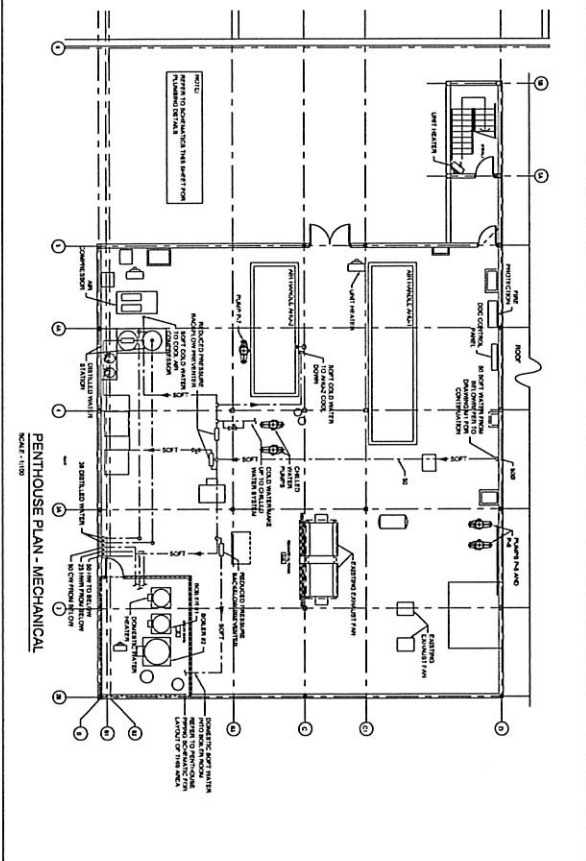
**Scale**  
1:100

**Project Title**  
PORTABLE AND  
NON-PORTABLE  
WATER  
AS-BUILTS

**M-1**  
1 of 2



PENTHOUSE - SOFT WATER SCHEMATIC



PENTHOUSE - DOMESTIC WATER SCHEMATIC

### MECHANICAL LEGEND

SYMBOL	DESCRIPTION
---	CONDENSING HOT WATER PIPING
---	CONDENSING HOT WATER PIPING (ISOLATED)
---	ISOLATED WATER SUPPLY
---	ISOLATED WATER RETURN
---	SOFT WATER
---	COLD WATER
---	COLD WATER (NON-POTABLE)
---	WATER TRIMMING VALVE
---	WATER TRIMMING VALVE (NON-POTABLE)
---	WATER TRIMMING VALVE (NON-POTABLE) (NON-RETURN)
---	WATER TRIMMING VALVE (NON-POTABLE) (NON-RETURN) (NON-FLUSH)
---	WATER TRIMMING VALVE (NON-POTABLE) (NON-RETURN) (NON-FLUSH) (NON-FLUSH)

SYMBOL	DESCRIPTION	TOILET	W.C.	URINAL	W.C.	BATH	W.C.
VOL1	VALVE TO CONTROL FLOW TO W.C.	•	•	•	•	•	•
CS4	ROCK & CONCRETE FOR W.C. PANIC ON THE WALL (ROCK & CONCRETE)	•	•	•	•	•	•
CS2	ROCK & CONCRETE FOR W.C. PANIC ON THE WALL (ROCK & CONCRETE) (NON-FLUSH)	•	•	•	•	•	•
CS3	ROCK & CONCRETE FOR W.C. PANIC ON THE WALL (ROCK & CONCRETE) (NON-FLUSH) (NON-FLUSH)	•	•	•	•	•	•
CS1	ROCK & CONCRETE FOR W.C. PANIC ON THE WALL (ROCK & CONCRETE) (NON-FLUSH) (NON-FLUSH) (NON-FLUSH)	•	•	•	•	•	•
W1	WATER TRIMMING VALVE	•	•	•	•	•	•
W2	WATER TRIMMING VALVE (NON-FLUSH)	•	•	•	•	•	•
W3	WATER TRIMMING VALVE (NON-FLUSH) (NON-FLUSH)	•	•	•	•	•	•
W4	WATER TRIMMING VALVE (NON-FLUSH) (NON-FLUSH) (NON-FLUSH)	•	•	•	•	•	•
W5	WATER TRIMMING VALVE (NON-FLUSH) (NON-FLUSH) (NON-FLUSH) (NON-FLUSH)	•	•	•	•	•	•
W6	WATER TRIMMING VALVE (NON-FLUSH) (NON-FLUSH) (NON-FLUSH) (NON-FLUSH) (NON-FLUSH)	•	•	•	•	•	•

SYMBOL	DESCRIPTION
---	CONDENSING HOT WATER PIPING
---	CONDENSING HOT WATER PIPING (ISOLATED)
---	ISOLATED WATER SUPPLY
---	ISOLATED WATER RETURN
---	SOFT WATER
---	COLD WATER
---	COLD WATER (NON-POTABLE)
---	WATER TRIMMING VALVE
---	WATER TRIMMING VALVE (NON-POTABLE)
---	WATER TRIMMING VALVE (NON-POTABLE) (NON-RETURN)
---	WATER TRIMMING VALVE (NON-POTABLE) (NON-RETURN) (NON-FLUSH)
---	WATER TRIMMING VALVE (NON-POTABLE) (NON-RETURN) (NON-FLUSH) (NON-FLUSH)



NORTH

---

NO.	DATE	DESCRIPTION

CONTRACT FOR PENTHOUSE - SOFT WATER SCHEMATIC AND DOMESTIC WATER SCHEMATIC. CONTRACT NO. 17-11-17.

DATE: MARCH 2008

SCALE: AS SHOWN

PROJECT: PENTHOUSE - SOFT WATER SCHEMATIC AND DOMESTIC WATER SCHEMATIC.

CLIENT: AGRIFood CANADA

DESIGNED BY: JGD

CHECKED BY: JGD

DATE: MARCH 2008

SCALE: 1:100

Project Title: **PENTHOUSE - SOFT WATER AND DOMESTIC WATER SCHEMATIC**

Client: **AGRI-Food CANADA**

Address: **83 STONE RD. GUELPH, ONTARIO**

Project No: **JGD-00007**

Drawn by: **JGD**

Checked by: **JW**


Date: **MARCH 2008**

Scale: **1:100**

Sheet Title: **POTABLE AND NON-POTABLE WATER AS-BUILTS**

Sheet No: **M-2**

Scale: **2 of 2**



NORTH

---

NO.	DATE	DESCRIPTION

CONTRACT FOR PENTHOUSE - SOFT WATER SCHEMATIC AND DOMESTIC WATER SCHEMATIC. CONTRACT NO. 17-11-17.

DATE: MARCH 2008

SCALE: AS SHOWN

PROJECT: PENTHOUSE - SOFT WATER SCHEMATIC AND DOMESTIC WATER SCHEMATIC.

CLIENT: AGRIFood CANADA

DESIGNED BY: JGD

CHECKED BY: JGD

DATE: MARCH 2008

SCALE: 1:100

Project Title: **PENTHOUSE - SOFT WATER AND DOMESTIC WATER SCHEMATIC**

Client: **AGRI-Food CANADA**

Address: **83 STONE RD. GUELPH, ONTARIO**

Project No: **JGD-00007**

Drawn by: **JGD**

Checked by: **JW**

Date: **MARCH 2008**

Scale: **1:100**

Sheet Title: **POTABLE AND NON-POTABLE WATER AS-BUILTS**

Sheet No: **M-2**

Scale: **2 of 2**

