SNC LAVALIN O&M

ASBESTOS MANAGEMENT PLAN

For:

C.D. HOWE BUILDING
235 QUEEN STREET AND
240 SPARKS STREET
OTTAWA, ONTARIO

NOVEMBER 2012

Prepared By:
InAIR Environmental Ltd.
1390 Prince of Wales Drive, Suite 503
Ottawa, Ontario K2C 3N6

ASBESTOS MANAGEMENT PLAN

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1 PREFACE

The Asbestos Management Plan is required in order to comply with Canada Labour Code and provincial regulations governing the safe work environment for employees, public and contractors visiting or working in a building containing asbestos.

The Asbestos Management Plan (AMP) will perform several functions:

- To act as a common term of reference for the safe operation and management of a building containing asbestos materials.
- To be a central depository of information for each facility.
- To act as a control mechanism to ensure compliance.
- To communicate roles and responsibilities of those required to work with or around asbestos materials.
- To communicate the accepted departmental procedures for working with asbestos materials.

This document provides information, procedures, and work practices necessary for the Asbestos Management Plan (AMP) to be functional. The AMP sets guidelines for all facility maintenance, alteration, repair or other activities that may disturb asbestos, and it provides ongoing re-assessment of friable asbestos materials. If continuing disturbance or severe deterioration of friable asbestos is indicated, the material will be removed. Major renovations will be preceded by total removal of friable asbestos materials in the project area.

The AMP describes work practices for minor disturbance of friable asbestos materials (Type 2 work), and removal or installation of non-friable materials (Type 1). This document is divided so that specific sections can be copied and provided to the worker or contractor performing the work. The AMP includes policies for inspection of work, air monitoring, and worker training.

The AMP does not describe work procedures for major asbestos removal. Such removals are classified as Type 3. These procedures generally require an experienced contractor to execute and therefore are not detailed within this AMP document. This type of work usually requires “project specific approach” and therefore should be coordinated and monitored by the Property Manager.

2 DEFINITIONS

Abatement - control or attend to.

Amended Water - water which has been treated with a chemical agent to enhance the wetting of asbestos material prior to removal.

Amosite - "brown asbestos" is from the amphibole family.

Area by area survey - survey of large areas where each plane within the area is sampled visually and scientifically tested for the presence of asbestos containing materials, i.e., corridors, assembly areas, total basement, boiler rooms, etc.

Asbestos - naturally occurring mineral silicates which are capable of being separated into fibres. Asbestos comes from the Greek word indestructible.

Crocidolite - "blue asbestos" is from the amphibole family.

Chrysotile - "white asbestos" is from the serpentine family.

Friable - can be crushed, crumbled, or reduced to a powder by hand pressure when dry.

Generic survey - spot check type survey where a small number of random samples are done at different locations of similar or non similar materials to get a localized perspective as to where asbestos containing materials are located. This type of survey would be good in areas such as boiler rooms where high concentrations of most materials are suspect to contain asbestos in localized areas such as boiler jacketing, pipe lagging, and exhaust breaching.

PCM - Phase contrast microscopy approved method for measurement of airborne particulate matter.

PLM - Polarized light microscopy method of detection for asbestos in bulk samples.

Room by room survey - survey of individual rooms where each plane within the room is sampled visually and scientifically tested for the presence of asbestos containing material.

Serpentine and amphiboles - rock types.

TEM - method of detection used for positive identification of airborne asbestos fibres via the use of an electron microscope.

3 CONTACT LIST

C.D. HOWE BUILDING

Name	**Address**	**Number**
SNC Lavalin Project Manager **Doug Skinner**	235 Queen Street Ottawa, Ontario	Phone (613)-295-1693
PWGSC, Asbestos Regional Asbestos Coordinator **Richard Farmer**	2720 Riverside Drive Ottawa, Ontario	Phone (613)-736-3218 Cell (613) 282-6737 Fax (613)-736-2171
Standing Offer Asbestos Consultant	N/A	
Human Resources Development Canada - Labour Program Occupational Safety	EMERGENCY 24 HR.	Phone (613) 946-2800
Health Canada - Occupational and Environmental Health Services	EMERGENCY 7:30-5:30	Phone (613) 954-6541
Supervisor, Operations and Maintenance **Fraser Marston**	235 Queen Street Ottawa, Ontario	Phone (613) 234-2310
Standing Offer Asbestos Contractor	N/A	
SNC Lavalin Facility Manager **Paul Jeanveaux**	235 Queen Street Ottawa, Ontario	Phone (613) 234-0425

4 EMERGENCY PROCEDURES

If Type 2 procedures cannot be strictly observed due to the urgency, some judgement will be required of the person responsible for the work, and other staff or contractors responding to the emergency. The general principle of emergency response work is to protect the workers performing the repair and to minimize the exposure of others to airborne asbestos. The procedures given below should be followed to the extent possible in the circumstances of the emergency.

VACATE the area of unnecessary personnel.

CONTACT the C.D. Howe Facility Manager for guidance on contamination; or, in the absence of same, the Property Manager, or the Asset Manager, the standing offer asbestos consultant or the standing offer asbestos contractor.

LIMIT the asbestos contamination.
Construct enclosure around area if time permits.
Shut down ventilation system serving area.
Use drop sheet under work to minimize clean-up if possible.

Worker performing repair shall wear protective respirator and disposable suit. If normal work clothes are worn they must be disposed of if visibly contaminated.

Perform emergency repair with minimum disturbance of asbestos.

Obtain asbestos equipment and perform clean-up of visible material before allowing unprotected personnel to enter area. Use HEPA filtered vacuum or wet cleaning. Dispose of all cleaning supplies as contaminated waste.

The worker should wipe off or vacuum disposable clothing and footwear. Proceed to washroom to wash face and hands.

Notify the Property Manager regarding the asbestos disturbance. The Property Manager will arrange for removal, clean-up or repair of the asbestos material.

INFORM the following of the emergency:

- Occupational & Environmental Health Services, Health Canada (OEMs HC)
- Human Resources Development Canada - Labour Program, Occupational Safety
- Property Manager
- All clients in the building
- Workers Compensation Board (when private sector Clients/contractors present)

Before removing an enclosure, monitor the air to confirm acceptable levels and document readings. **OBTAIN** verification from Occupational Health and Safety Agency (HC) on air monitoring

requirements. If the regulatory bodies do not perform the monitoring, hire a qualified consultant. (Use the standing offer consultant, if available.)

Arrange for a Property Manager to **INSPECT** the work as soon as possible and, in conjunction with the regulatory bodies, to **OVERSEE** the work and **APPROVE** the corrective work required.

DOCUMENT THE DISPOSAL OF THE ASBESTOS AND THE PROCEDURES USED.

5 EMERGENCIES - GENERAL INFORMATION

Examples of possible emergencies: an asbestos clad boiler explodes; heating main breaks and floods the building.

Most asbestos emergencies are unique, but basic procedures apply in all cases:

- handle emergencies as quickly as possible;
- follow standard PWGSC procedures;
- notify regulatory agencies and the Property Manager at once.

The main goal is to limit contamination. Decontaminate and/or enclose problem areas with polyethylene. Shut off air-handling units to affected areas; post warning signs.

In a minor emergency, decontamination may be handled by trained in-house personnel or by a reputable asbestos contractor.

The asbestos emergency situation is under control when the asbestos relating to the emergency is enclosed.

Before removing an enclosure, monitor the air to confirm acceptable levels and document readings. If the regulatory bodies do not perform the monitoring, hire a qualified consultant. (Use the standing offer consultant, if available.)

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6 Part 1 – BUILDING SPECIFIC INFORMATION

ASBESTOS MANAGEMENT PLAN

Building Specific Information

Construction Date:	**1977**
Address:	**235 Queen Street and 240 Sparks Street**
Configuration:	**2 office towers each with 11 levels and one penthouse, 1 building service level 3 commercial levels and 3 level parking garage levels**
Occupancy:	**3,500+**
Primary Use:	**Office Building and Commercial Spaces**
Gross Area:	**140,000 sq.m.**
Structural System:	**Concrete Frame**
Exterior Cladding:	**Concrete**

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7 PART 2 - ASBESTOS RE-ASSESSMENT 2012

November 2012

PART 1 - GENERAL

1.1 REGULATORY REQUIREMENTS

.1 An investigation into the remaining types and conditions of asbestos containing materials was conducted as part of the Asbestos Re-Assessment Survey for 2012 by InAIR Environmental Ltd. The re-assessment survey was conducted of the C.D. Howe Building located at 235 Queen Street and 240 Sparks Street in Ottawa, ON. This survey was conducted in order to meet the requirements of Section 30 of the *Ontario Occupational Health and Safety Act, Revised Statues of Ontario, 1990, Chapter 0.1*. The *Canada Labour Code* also stipulates under Part II, Section 124 that every employer shall ensure that the health and safety at work of every person employed by the employer is protected. By having an asbestos re-assessment survey conducted, the Project Manager will be able to inform his or her employees, contractors, and tenants of any asbestos containing substances that may be present and possibly disturbed throughout the duration of the project. The informed Project Manager will then be able to impose appropriate health and safety precautions for all applicable personnel as required. The *Guide to Green Government* sets out the policy requirements for the federal government to meet or exceed federal environmental statutes and regulations, and the emulation of best practices from the public and private sector. Within the *Guide to Green Government*, pollution prevention efforts are required in federal projects. Pollution prevention is defined as the use of processes, practices, materials, products or energy that avoids or minimizes the creation of pollutants and waste, and reduces overall risk to human health and environment. These policies must be adhered to throughout all construction, renovation or demolition activities at the C.D. Howe Building.

.2 The regulation governing asbestos identified in the *Occupational Health and Safety Act* and its corresponding regulations are:

.1 **Asbestos**

.1 *O. Reg. 837* as amended by *O. Reg. 386/00*

.2 *O. Reg. 838* as amended by *O. Reg. 510/92*

3. *O.Reg. 875/05.*

.3 All contractors requesting tenders from subcontractors shall furnish this report to subcontractors.

1.2 VALIDITY DATE

.1 The site survey was carried out by under the direction of Ms. Trudy Lucas, Project Manager of InAIR Environmental Ltd. Ms. Lou Ann Lee, InAIR's Junior Technician conducted the site survey on August 1st and 2nd, 2012 and October 31st and November 1st, 2012.

.2 The site survey consisted of a room-by room, floor-by-floor survey of the entire building. This entails the two government occupied towers each consisting of 11 floors and the penthouse mechanical rooms, 3 commercial levels, 1 building service level and 3 parking garage levels.

.1 The scope of work for this report utilizing the existing 2009 asbestos inventory provided to InAIR Environmental by SNC Lavalin O&M. A visual inspection of all areas was conducted and the existing inventory was updated accordingly with updates of quantities and conditions of each previously identified asbestos containing material.

.2 From the visual inspection, suspect asbestos materials that were not listed on 2009 inventory were sampled and analyzed, where appropriate, specifically in the Holt Renfrew commercial space. On the basis of this inspection, a total of nine (9) bulk samples of suspected asbestos containing material were collected and sent under a Chain-of-Custody form to Scientific Analytical Institute (SAI) Laboratories of Greensboro, North Carolina for analysis using Polarized Light Microscopy (PLM) with dispersion staining. SAI is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP) to perform asbestos analysis of bulk samples.

.3 Prior to beginning work, InAIR confirmed with the Project Manager that no additional suspect asbestos containing materials have been brought to the project area.

.7 There is a possibility that materials may exist which could not be reasonably identified within the scope of this assessment, or were not apparent during previous site visits. Should any suspect asbestos containing materials be encountered in the course of demolition, stop work, take preventative measures, and notify the Project Manager immediately. Do not proceed until written instructions have been received.

PART 2 – ASBESTOS SURVEY

2.1 SURVEY RESULTS

Asbestos is a naturally occurring material which was once used in several building materials in the construction industry. More common uses are thermal insulation for pipes and boilers, structural steelwork fireproofing, floor tiles and in wall and ceiling plasters. There are two classes of asbestos containing materials: these are friable and non-friable. Friable asbestos containing materials are loose in composition or can be easily crumbled using hand pressure. Non-friable asbestos containing materials are more durable and are held together by a binder such as cement, vinyl or asphalt.

A total of nine (9) representative asbestos bulk samples, including acoustic ceiling tiles, drywall joint compound and cove base mastic were collected from the areas in question (Holt Renfrew Commercial Space). Laboratory analysis indicated that all materials were non-detected (below the regulatory limit of 0.5%) Therefore, these materials are not considered to be asbestos containing (O.Reg 278/05). Please refer to attached Laboratory Reports.

The results of the nine (9) bulk samples of suspect asbestos containing materials (ACM's) are available in Appendix - Summary of Materials - Holt Renfrew.

The 2009 survey identified select areas where the asbestos containing materials were deemed to be in fair to poor condition by visual inspection. Please see Appendix - C.D. Howe - Asbestos Re-assessment - Fair to Poor Condition.

The full survey is in Appendix - C.D. Howe - Asbestos Re-assessment 2012.

2.2 RECOMMENDATIONS

1 PRECAUTIONARY MEASURES

All precautionary measures must be adhered to as per The Asbestos Management Plan set in Treasury Board Manual, Human Resources Management, Procedures for Occupational Exposure to Asbestos, Chapter 4-03, 1994 and in the Deputy Minister Directives, Asbestos Management, and Code of Practice (DMP 057). Please refer to the 2012

Asbestos Management Plan for C.D. Howe Building Appendix B – Type 1 Procedures, Appendix C – Type 2 Procedures or Appendix D – Type 2 Glove Bag Procedures. All asbestos abatement work will be under the direction of the Property Manager.

2 CONTRACTORS DUTIES

.1 The contractor must review the asbestos survey and take the necessary precautions to protect the health and safety of the workers and the environment. As per s. 30 (4) of the *Ontario Occupational Health and Safety Act*, the party hiring the contractor (i.e., The Project Manager) shall ensure that the contractor and subcontractor (if any) for the project has received a copy of the asbestos survey report prior to entering a binding contract for the supply of work on the project. As per s. 27 (2) (a, b, c,) of the *Ontario Occupational Health and Safety Act*, while onsite, the contractor supervisor shall take every reasonable precaution in the protection of a worker. If you have any questions about the asbestos survey report, please contact the Departmental Representative.

PART 3 – EXECUTIVE SUMMARY

1. EXECUTIVE SUMMARY

InAIR Environmental Ltd. (InAIR) conducted an asbestos re-assessment survey of the C.D. Howe Building located in Ottawa, ON. The survey was conducted at the request Mr. Doug Skinner, Project Manager for SNC Lavalin O&M. The survey was performed by InAIR's Junior Technician, Ms. Lou Ann Lee.

3. CONCLUSIONS AND RECOMMENDATIONS

Based on the existing 2009 asbestos survey, the visual inspection and the laboratory analytical results, the following materials were identified as containing asbestos: pipe fitting parging, fire stop parging, vinyl floor tiles, Transite drain pipe, and acoustic ceiling tiles.

In accordance with the Occupational Health and Safety Act regarding asbestos containing materials, the Building owner must notify all employees and contractors involved in building maintenance and building renovations of the presence of asbestos containing materials. A copy of this survey report should be made available for review (upon request) by any employee, building maintenance personnel or outside contractors working in the building.

Report Conditions and Limitations

The findings contained in this report rely on data and information collected during the limited Asbestos Re-Assessment Survey conducted by InAIR Environmental Ltd. of the subject building, and is based solely on site conditions present at the time of our survey. The observations presented in this report are based on the specific areas assessed and hence the findings may not apply throughout the entire building.

Due to the nature of the survey and the limited data collected, the assessors cannot warrant against undiscovered environmental liabilities. Should additional information become available, InAIR Environmental Ltd. requests that this information be brought to our attention so that we may re-assess the conclusions and recommendations presented herein.

This report is intended for the sole use of the SNC Lavalin O&M, and its authorized personnel. InAIR Environmental Ltd. accepts no responsibility for any unauthorized use of the information contained within this report by any third party.

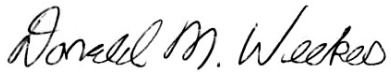
We trust that the information presented in this report meets your current requirements. Should you have any questions or concerns regarding the report please do not hesitate to contact the undersigned.

InAIR Environmental Limited

Report prepared by:

Trudy Lucas, B.Sc.
Project Manager

Report reviewed by:



Donald M. Weekes, CIH, CSP

APPENDICES

Summary of Materials - Holt Renfrew
Laboratory Report of Analysis (1)
C.D. Howe – Asbestos Re-assessment - Fair to Poor Condition
C.D. Howe – Asbestos Re-assessment – 2012

Summary of Materials - Holt Renfrew

Summary of Materials - 434 Queen Street, Ottawa, ON

Floor	Room Number(s)	General Building Construction			Potential Asbestos-Containing Materials						
		Ceiling	Walls	Floor	Material	Friability (F/NF)	Sample Number	Laboratory Result (>0.5%)	Quantity	Units	Condition
C1	Holt Renfrew North and South	Drywall with Compound	Drywall Joint Compound	Ceramic	Drywall Joint Compound	F	CDHOWE-AS-002c	N/A	150	m	Good
				Carpet	Carpet Mastic	NF	Unable to Samples	None Detected	30	m^2	Good
C2	Holt Renfrew South	Drywall with Compound	Drywall Joint Compound	Carpet	Acoustic Ceiling Tile (1x1 - fissures with pinholes)	F	CDHOWE-AS-001a	None Detected	1	m^2	Fair
		Acoustic ceiling tiles			Drywall Joint Compound	F	CDHOWE-AS-002a	None Detected	50	m	Good
C2	Holt Renfrew North	Acoustic Ceiling Tiles	Drywall Joint Compound	Carpet	Acoustic Ceiling Tile (1x1 - fissures with pinholes)	F	CDHOWE-AS-001b	None Detected	100	m^2	Good
				Hardwood	Drywall Joint Compound	F	CDHOWE-AS-002 (a-c)	None Detected	100	m	Fair
				Ceramic Tiles							
C2	Holt Refrew Room Office Next to Women's Washroom (North)	Acoustic Ceiling Tiles	Drywall Joint Compound	Carpet (no mastic)	Acoustic Ceiling Tile (2x4 wormholes with pinpricks)	F	Unable to Samples	N/A	2	m^2	Fair
					Drywall Joint Compound	F	CDHOWE-AS-002 (a-c)	None Detected	2	m	Good
C2	Holt Renfrew Women's Washroom (North)	Drywall with Compound	Drywall Joint Compound	Ceramic Tiles	Drywall Joint Compound	F	CDHOWE-AS-002 (a-c)	None Detected	4	m	Good
C2-C3	Holt Renfrew North Stairwell (Behind Elevators)	Drywall with Compound	Drywall Joint Compound	Cove Base	Drywall Joint Compound	F	CDHOWE-AS-002 (a-c)	None Detected	5	m	Good
				Cove Base Mastic	Cove Base Mastic	NF	CDHOWE-AS-003a-c	None Detected	4	m^2	Good
C3	Holt Renfrew Personel Offices (Above Elevators in North side)	Acoustic Ceiling Tiles (2x4 smooth finish)	Drywall joint compound	Carpet	Acoustic Ceiling Tile (2x4 smooth finish)	F	Unable to sample	N/A	30	m^2	Good
					Drywall Joint Compound	F	CDHOWE-AS-002b	None Detected	30	m	Good

Laboratory Report of Analysis (1)

Bulk Asbestos Analysis

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

NVLAP Lab Code: 200664-0

Customer: InAir Environmental Ltd.
1390 Prince of Wales Dr Unit 503
Ottawa, ON K2C 3N6

Attn: Trudy Lucas

Lab Order ID: 1212283
Analysis ID: 1212283PLM
Date Received: 9/4/2012
Date Reported: 9/7/2012

Project: 12c126

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
CDHOWE-AS001a	Ceiling tile (1x1 fissures with pinpricks)	**None Detected**	**60% Fiber Glass** **30% Cellulose**	**10% Other**	White Non Fibrous Homogeneous
1212283PLM_1					Teased
CDHOWE-AS001b	Ceiling tile (1x1 fissures with pinpricks)	**None Detected**	**60% Fiber Glass** **30% Cellulose**	**10% Other**	White Non Fibrous Homogeneous
1212283PLM_2					Teased
CDHOWE-AS001c	Ceiling tile (1x1 fissures with pinpricks)	**None Detected**	**60% Fiber Glass** **30% Cellulose**	**10% Other**	White Non Fibrous Homogeneous
1212283PLM_3					Teased
CDHOWE-AS002a	Drywall joint compound	**None Detected**		**100% Other**	White Non Fibrous Homogeneous
1212283PLM_4					Crushed
CDHOWE-AS002b	Drywall joint compound	**None Detected**		**100% Other**	White Non Fibrous Homogeneous
1212283PLM_5					Crushed
CDHOWE-AS002c	Drywall joint compound	**None Detected**		**100% Other**	White Non Fibrous Homogeneous
1212283PLM_6					Crushed
CDHOWE-AS003a	Cove base mastic	**None Detected**		**100% Other**	Brown Non Fibrous Homogeneous
1212283PLM_7					Dissolved
CDHOWE-AS003b	Cove base mastic	**None Detected**		**100% Other**	Brown Non Fibrous Homogeneous
1212283PLM_8					Dissolved

Bart Huber (9)

Analyst

Nathaniel Durham, MS or Approved Signatory

Bulk Asbestos Analysis

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

NVLAP Lab Code: 200664-0

Customer: InAir Environmental Ltd.
1390 Prince of Wales Dr Unit 503
Ottawa, ON K2C 3N6

Attn: Trudy Lucas

Project: 12c126

Lab Order ID: 1212283
Analysis ID: 1212283PLM
Date Received: 9/4/2012
Date Reported: 9/7/2012

Sample ID *Lab Sample ID*	Description *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
CDHOWE-AS003c	Cove base mastic	None Detected		100% Other	Brown Non Fibrous Homogeneous
1212283PLM_9					Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommended that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agenc

Bart Huber (9)

Analyst

Nathaniel Durham, MS or Approved Signatory

C.D. Howe – Asbestos Re-assessment - Fair to Poor Condition

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY		UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			FAIR	POOR					
Parking Level P2									
Parking Area	Mechanical Fitting	Parging Cement	2		EA	Y	C-Exposed	25,26,27	ok
Parking Level P1									
Parking Area	Mechanical Fitting	Parging Cement	2		EA	Y	C-Exposed		ok
Ramp to S-1	Mechanical Fitting	Parging Cement	2	2	EA	Y	C-Exposed	29 - 32	ok
Mechanical Room 205- 207	Mechanical Fitting	Parging Cement	1		EA	Y	C-Exposed	28	ok
Mechanical Room 213	Firestop	Parging Cement		4	EA	Y	C-Exposed		ok
Basement Level S-1									
Room S-107	Firestop	Parging Cement	1	5	EA	Y	c-exposed	1, 2	ok
Room S-119	Mechanical Fitting	Parging Cement	1	1	EA	Y	C-Exposed	13,14,15	ok
	Firestop	Parging Cement		10	EA	Y	C-Exposed		ok
Room S-121A (Men's Lockers)	Firestop	Parging Cement		1	EA	Y	c-concealed		ok
Mechanical Room S-123 (Main Area)	Firestop	Parging Cement		5	EA	Y	C-Exposed	11, 12	ok
Mechanical Room S-123 (Storage)	Firestop	Parging Cement		3	EA	Y	C-Exposed		ok
Mechanical Room S-123 (Welding)	Firestop	Parging Cement	6		EA	Y	C-Exposed		ok
Room S-124	Mechanical Fitting	Parging Cement	1		EA	Y	C-Exposed	18,19	ok
Room S-125 (Cleaners' Room)	Firestop	Parging Cement	1		EA	Y	C-Exposed	8, 9, 10	ok
Mechanical Room S-127	Firestop	Parging Cement		4	EA	Y	C-Exposed	6,7	ok
Hallway (S-145 to S- 170)	Firestop	Parging Cement	1		EA	Y	C-Exposed	16,17	ok
Plenum Beneath Queen Street Entrance	Mechanical Fitting	Parging Cement		24	EA	Y	C-Exposed		ok
Loading Dock	Firestop	Parging Cement	1	2	EA	Y	C-Exposed	20-24	ok
Commercial Level C1									
Perimeter Service Corridors	Firestop	Parging Cement		1	EA	Y	C-Exposed		ok
Mechanical Room, Adj. to Rexall	Firestop	Parging Cement		2	EA	Y	C-Exposed		ok
West Mechanical Rooms, Adj. to Bathrooms	Firestop	Parging Cement		6	EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement		4	EA	Y	C-Exposed		ok
CR1 Storage Area	Firestop	Parging Cement		1	EA	Y	C-Exposed		ok
North Central Stairwell	Firestop	Parging Cement		1	EA	Y	C-Exposed		ok
North Central Electrical Rm	Firestop	Parging Cement		2	EA	Y	C-Exposed		photo 54 and 55
South Central Stairwell	Firestop	Parging Cement		6	EA	Y	C-Exposed		ok

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY		UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			FAIR	POOR					
Commercial Level C2									
Central Control - Security Office	Firestop	Parging Cement		1	EA	Y	C-Concealed		ok
	Mechanical Fitting	Parging Cement		1	EA	Y	C-Concealed		ok
Fairweather (Back Room)	Ceiling	Tile		10	SM	Y	C-Exposed		photo 52
	Mechanical Fitting	Parging Cement		1	EA	Y	C-Concealed		photo 52
Central Mech Room	Firestop	Parging Cement		5	EA	Y	C-Exposed		ok
South Central Stairwell	Firestop	Parging Cement		1	EA	Y	C-Exposed		ok
Holt Renfrew North	Mechanical Fitting	Parging Cement		3	EA	Y	C-Concealed	35-37	OK - exposed acm piping
Joenette	Mechanical Fitting	Parging Cement	4		EA	Y	C-Exposed		photo 53
Stairwells/Service Elevator lobbies	Firestop	Parging Cement			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement		6	EA	Y	C-Exposed		ok
West Stairwell	Wall/Ceiling	Parging Cement		2	EA	Y	C-Exposed		photo 56
South Central Electrical Room	Firestop	Parging Cement		1	EA	Y	C-Exposed		ok
South East Stairwell	Firestop	Parging Cement		4	EA	Y	C-Exposed		ok
East Mech. Room	Firestop	Parging Cement		2	EA	Y	C-Exposed		ok
North Central Janitor Closet	Firestop	Parging Cement		2	EA	Y	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement		2	EA	Y	c-exposed	38-39	ok
North Central Janitor Closet	Firestop	Parging Cement		2	EA	Y	C-Exposed		ok
Level 1									
West Central Electrical Room	Firestop	Parging Cement		2	EA	Y	c-exposed	38-39	ok
Level 8									
East Electrical Room	Firestop	Parging Cement		1	EA	Y	c-exposed	44-45	ok - exposed acm parging
Level 9									
A. Mech 907	Firestop	Parging Cement		1	EA	Y	c-exposed	48	ok
West Central Electrical Room	Firestop	Parging Cement		1	EA	Y	c-exposed	46-47	0k
Level 10									
Stairwell A	Firestop	Parging Cement	2		EA	Y	c-exposed	54 and 55	ok
A. Mech 1007	Firestop	Parging Cement		1	EA	Y	c-exposed		ok
East Electrical Room	Firestop	Parging Cement	1		EA	Y	c-exposed	49, 50 (not acm),51, 52, 53	ok

C.D. Howe – Asbestos Re-assessment – 2012

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			GOOD	FAIR	POOR					
Parking Level P3										
Parking Area	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
Mechanical Room 405	Mechanical Fitting	Parging Cement	54			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	34			EA	Y	C-Exposed		ok
Parking Level P2										
Parking Area	Mechanical Fitting	Parging Cement	24	2		EA	Y	C-Exposed	25,26,27	ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Mechanical Room 304	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Mechanical Room 305-307	Mechanical Fitting	Parging Cement	11			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	27			EA	Y	C-Exposed		ok
Parking Level P1										
Parking Area	Mechanical Fitting	Parging Cement	60	2		EA	Y	C-Exposed		ok
	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
Ramp to S-1	Mechanical Fitting	Parging Cement	10	2	2	EA	Y	C-Exposed	29 - 32	ok
	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Mechanical Room 205- 207	Mechanical Fitting	Parging Cement	72	1		EA	Y	C-Exposed	28	ok
	Firestop	Parging Cement	11			EA	Y	C-Exposed		ok
Mechanical Room 213	Firestop	Parging Cement	4		4	EA	Y	C-Exposed		ok
Basement Level S-1										
Mechanical Room S-101	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-102	Mechanical Fitting	Parging Cement	25			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
Room S-104	Mechanical Fitting	Parging Cement	22			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-105	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	20			EA	Y	C-Exposed		ok
Room S-106	Wall Board	Transite	100			m2	N	C-Exposed		ok
Room S-107	Mechanical Fitting	Parging Cement	17			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	24	1	5	EA	Y	C-Exposed	1, 2	ok
Room S-108 (ProFac Shop)	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-109/S-115	Mechanical Fitting	Parging Cement	23			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	19			EA	Y	C-Exposed		ok
Hallway S105 to S118	Mechanical Fitting	Parging Cement	67			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	56			EA	Y	C-Exposed	3,4,5	ok
Room S-112	Mechanical Straight	Paper Insulation	21			LM	Y	C-Exposed		ok
Room S-114	Mechanical Fitting	Parging Cement	5			EA	Y			CANNOT ACCESS- High SECURITY
	Firestop	Parging Cement	6			EA	Y			
Mechanical Room S-116	Mechanical Fitting	Parging Cement	5			EA	Y			ok
	Firestop	Parging Cement	4			EA	Y			ok
Room S-117	Mechanical Fitting	Parging Cement	2			EA	Y			CANNOT ACCESS - TOP SECRET
	Firestop	Parging Cement	8			EA	Y			
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Room S-117A	Floor	Vinyl Floor Tile	35			m2	N	C-Exposed		ok
Room S-118	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
Room S-118A	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-119	Mechanical Fitting	Parging Cement	4	1	1	EA	Y	C-Exposed	13,14,15	ok
	Firestop	Parging Cement	15		10	EA	Y	C-Exposed		ok
Room S-120	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	12			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	25		1	EA	Y	C-Concealed		ok
Room S-121A (Men's Lockers)	Floor	Vinyl Floor Tile	36			m2	N	C-Concealed		ok
Room B-188 (Men's Washroom)	Firestop	Parging Cement	10			EA	Y	C-Concealed		ok
	Floor	Vinyl Floor Tile	9			m2	N	C-Concealed		ok
Room S-122										
	Firestop	Parging Cement	16			EA	Y	C-Exposed		ok
Mechanical Room S-123 (Main Area)	Mechanical Fitting	Parging Cement	123			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	63		5	EA	Y	C-Exposed	11, 12	ok
Mechanical Room S-123 (Storage)	Mechanical Fitting	Parging Cement	10			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	11		3	EA	Y	C-Exposed		ok
Mechanical Room S-123 (Welding)	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement		6		EA	Y	C-Exposed		ok
Mechanical Room S-123 (Back Corridor)	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
Room S-124	Mechanical Fitting	Parging Cement	5	1		EA	Y	C-Exposed	18,19	ok
	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Hallway S117 to S125	Mechanical Fitting	Parging Cement	30			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	51			EA	Y	C-Exposed		ok
Men's Washroom (near Loading Dock)	Mechanical Fitting	Parging Cement	4			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	6			EA	Y	C-Concealed		ok
	Mechanical Fitting	Parging Cement	39			EA	Y	C-Exposed		ok
	Mechanical Straight	Paper Insulation	16			LM	Y	C-Exposed		ok
Room S-125 (Cleaners' Room)	Firestop	Parging Cement	10	1		EA	Y	C-Exposed	8, 9, 10	ok
Mechanical Room S-126	Mechanical Fitting	Parging Cement	57			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	83			EA	Y	C-Exposed		ok
Fan Room 12	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	7			EA	Y	C-Exposed	6,7	ok
	Firestop	Parging Cement	25		4	EA	Y	C-Exposed		ok
Mechanical Room S-127	Mechanical Straight	Paper Insulation	13			LM	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	7			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	12			EA	Y	C-Concealed		ok
Room S-129 (Women's Lockers)	Floor	Vinyl Floor Tile	24			m2	N	C-Concealed		ok
	Mechanical Fitting	Parging Cement	15			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	12			EA	Y	C-Concealed		ok
Room B-187 (Women's Washroom)	Floor	Vinyl Floor Tile	16			m2	N	C-Concealed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Concealed		ok
Hallway S153 to S130	Firestop	Parging Cement	54			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	28			EA	Y	C-Exposed		ok
Room S-134 (Air Intake)	Firestop	Parging Cement	22			EA	Y	C-Exposed		ok
Room S-134 Hallway	Mechanical	Parging Cement	11			EA	Y	C-Exposed		ok
Room S-132	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-135 (Commissionaire's Office)	Mechanical Fitting	Parging Cement	3			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	3			EA	Y	C-Concealed		ok
Room S-136	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
Room B-142B	Mechanical Fitting	Parging Cement	14			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
OAG Storage (former Telephone Room)	Mechanical Fitting	Parging Cement	20			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Room S-143 (Mail Scanning)	Firestop	Parging Cement	3			EA	Y	C-Concealed		ok
Room S-144	Mechanical Fitting	Parging Cement	14			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	13			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
Room S-145 (Holt Renfrew Storage)	Mechanical Straight	Paper Insulation	10			LM	Y	C-Exposed		ok
Room S-146 (Bell Room)	Floor	Vinyl Floor Tile	40			m2	N	C-Exposed		ok
Transformer Room Corridor	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
Room S-148	Firestop	Parging Cement	7			EA	Y			NEED AUTHORIZATION
Room S-154	Mechanical Straight	Paper Insulation	4			LM	Y	C-Exposed		ok
Room S-165	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Hallway (S-145 to S- 170)	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	16	1		EA	Y	C-Exposed	16,17	ok
Room S-172	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-174, Unit A	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-174, Unit B	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-174, Unit C	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-176	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Parking Ticket Room (off Parking Ramp)	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
Stairwell F Corridor (off Parking Ramp)	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			GOOD	FAIR	POOR					
Transformer Room (off Parking Ramp)	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
Parking Ramp to Queen Street	Mechanical Fitting	Parging Cement	32			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
Plenum Beneath Queen Street Entrance	Wall and Ceiling	Transite	200			m2	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	26		24	EA	Y	C-Exposed		ok
Loading Dock	Mechanical Fitting	Parging Cement	140			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	42	1	2	EA	Y	C-Exposed	20-24	ok
	Mechanical Straight	Paper Insulation	97			LM	Y	C-Exposed		ok
Corridors (West)	Mechanical Fitting	Parging Cement	61			EA	Y	C-Exposed		ok (see above 'hallways')
	Firestop	Parging Cement	160			EA	Y	C-Exposed		ok (see above 'hallways')
Corridors (East)	Mechanical Fitting	Parging Cement	90			EA	Y	C-Exposed		ok (see above 'hallways')
	Firestop	Parging Cement	115			EA	Y	C-Exposed		ok (see above 'hallways')
Commercial Level C1										
Perimeter Service Corridors	Firestop	Parging Cement	50		1	EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	45			EA	Y	C-Exposed		ok
Mechanical Room, Adj. to Rexall	Firestop	Parging Cement	4		2	EA	Y	C-Exposed		ok
West Mechanical Rooms, Adj. to Bathrooms	Firestop	Parging Cement	40		6	EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	16		4	EA	Y	C-Exposed		ok
Southwest Mechanical Room, Adj. to Techs	Mechanical Fitting	Parging Cement	40			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	20			EA	Y	C-Exposed		ok
Mechanical Room (109)	Firestop	Parging Cement	35			EA	Y	C-Exposed		ok
CR1 Storage Area	Firestop	Parging Cement			1	EA	Y	C-Exposed		ok
North Central Stairwell	Firestop	Parging Cement	3		1	EA	Y	C-Exposed		ok
North Central Elevator Lobby	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
North Central Electrical Rm	Firestop	Parging Cement	2		2	EA	Y	C-Exposed	54,55	ok
South Central Electrical	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
South Central Elevator Lobby	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
South Central Stairwell	Firestop	Parging Cement	4		6	EA	Y	C-Exposed		ok
North East Mech Rm C131	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Southwest Concourse	Drain Pipe	Transite	40			LM	Y	C-Concealed		ok
Northwest Concourse	Drain Pipe	Transite	40			LM	Y	C-Concealed		ok
Commercial Level C2										
	Firestop	Parging Cement	3		1	EA	Y	C-Concealed		ok
Central Control - Security Office	Mechanical Fitting	Parging Cement	2		1	EA	Y	C-Concealed		ok
Fairweather (Back Room)	Floor	Tile	15			SM	N	A	51	ok
	Ceiling	Tile			10	SM	Y	C-Exposed	52	ok
	Mechanical Fitting	Parging Cement	5		1	EA	Y	C-Concealed	52	ok
East Central Mechanical Room	Firestop	Parging Cement	25			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
Hall Adjacent to East Mech Room	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
West Central Mechanical Room (in Holt Renfrew)	Firestop	Parging Cement	30			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Stairwell (in Holt Renfrew)	Mechanical Fitting	Parging Cement	12			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Hall Adjacent to West Central Mech Room	Firestop	Parging Cement			5	EA	Y	C-Exposed		ok
South Central Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
South Central Elevator Lobby	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
South Central Stairwell	Firestop	Parging Cement	5		1	EA	Y	C-Exposed		ok
North Central Stairwell	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
Holt Renfrew North	Mechanical Fitting	Parging Cement			3	EA	Y	C-Concealed	35-37	OK - exposed acm piping
LCBO	Mechanical Fitting	Parging Cement	15			EA	Y	C-Concealed		ok
Benton	Mechanical Fitting	Parging Cement	6			EA	Y	C-Concealed		ok
Joenette	Mechanical Fitting	Parging Cement		4		EA	Y	C-Exposed	53	ok
South Concourse	Drain Pipe	Transite	50			LM	N	C-Concealed		ok
North Concourse	Drain Pipe	Transite	50			LM	N	C-Concealed		ok
Commercial Level C3										
Stairwells/Service Elevator lobbies	Firestop	Parging Cement	14			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	20		6	EA	Y	C-Exposed		ok
East Concourse	Drain Pipe	Transite	35			LM	N	C-Exposed		ok
West Concourse	Drain Pipe	Transite	35			LM	N	C-Exposed		ok
West Mechanical Room	Firestop	Parging Cement	20			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Stairwell	Wall/Ceiling	Parging Cement	2		2	EA	Y	C-Exposed	56	ok
South Central Electrical Room	Firestop	Parging Cement			1	EA	Y	C-Exposed		ok
South Central Elevator Lobby	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
South Central Stairwell	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	10			EA	Y	C-Exposed		ok
South East Stairwell	Firestop	Parging Cement	4		4	EA	Y	C-Exposed		ok
East Mech. Room	Firestop	Parging Cement	25		2	EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
Hallway Adjacent East Mech. Rm.	Firestop	Parging Cement	16			EA	Y	C-Exposed		ok
East Stairwell	Mechanical Fitting	Parging Cement	8			EA	Y	C-Exposed		ok
North Central Janitor Closet	Firestop	Parging Cement	2		2	EA	Y	C-Exposed		ok
North Central Elevator Lobby	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
North Central Stairwell	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	18			EA	Y	C-Exposed		ok
Hallway Adjacent to PWGSC Office	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
PWGSC Kitchenette	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Level 1										
Stairwell A	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell B	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
B. Mech 105	Firestop	Parging Cement	9			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
A. Mech 107	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
A. Mech 130	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
B. Mech 131	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement			2	EA	Y	C-Exposed	38-39	ok
East Electrical Room	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
East Pipe Chase	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 2										
Stairwell A	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell B	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
B. Mech 205	Firestop	Parging Cement	14			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	7			EA	Y	C-Exposed		ok
A. Mech 207	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 230	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
B. Mech 231	Firestop	Parging Cement	11			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
East Electrical Room	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			GOOD	FAIR	POOR					
Level 3										
Stairwell A	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell B	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
B. Mech 305	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 307	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 330	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
B. Mech 331	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 4										
Stairwell A	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell B	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
B. Mech 405	Firestop	Parging Cement	6			EA	Y	C-Exposed	41	ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
A. Mech 407	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
A. Mech 430	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
B. Mech 431	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Pipe Chase	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 5										
Stairwell A	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
	mechanical fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 505	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
B. Mech 531	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Electrical Room	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 6										
Stairwell A	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
B. Mech 605	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 607	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 631	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 7										
Stairwell A	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 730	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 731	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
Level 8										
Stairwell A	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 830	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 831	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	1			EA	Y	C-Exposed	42	ok
West Pipe Chase	Drain Pipe	Transite	1			LM	N	C-Exposed		ok
East Electrical Room	Firestop	Parging Cement			1	EA	Y	C-Exposed	44-45	ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Central Electrical Room	Firestop	Parging Cement	4			EA	Y	C-Exposed	43	ok
Level 9										
B. Mech 905	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 907	Firestop	Parging Cement	2		1	EA	Y	C-Exposed	48	ok
A. Mech 930	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 931	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement	3		1	EA	Y	C-Exposed	46-47	ok
East Electrical Room	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
East Central Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Level 10										
Stairwell A	Firestop	Parging Cement	1	2		EA	Y	C-Exposed	54, 55	ok
Stairwell C	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
B. Mech 1005	Firestop	Parging Cement	15			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 1007	Firestop	Parging Cement	2		1	EA	Y	C-Exposed		ok
A. Mech 1030	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
B. Mech 1031	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement	0			EA	Y			ok
East Electrical Room	Firestop	Parging Cement	6	1		EA	Y	C-Exposed	51, 52, 53	ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 11										
Stairwell A	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
B. Mech 1105	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 1107	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
A. Mech 1130	Firestop	Parging Cement	11			EA	Y	C-Exposed		ok
B. Mech 1131	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
West Pipe Chase	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	4			LM	N	C-Exposed		ok
East Electrical Room	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			GOOD	FAIR	POOR					
Terrace Level										
	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell C	Drain Pipe	Transite	6			LM	N	C-Exposed		ok
	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell E-T	Drain Pipe	Transite	4			LM	N	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell A-T	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell G-T	Mechanical Fitting	Parging Cement	6			EA	Y	C-Exposed		ok
Office Corridor	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
ProFac Washroom	Mechanical Fitting	Parging Cement	4			EA	Y	C-Concealed		no access
ProFac Offices	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
South Vestibule	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
	Exhaust Breeching	Parging Cement	10			m2	Y	C-Exposed		ok
	Mechanical Straight	Parging Cement	2			LM	Y	C-Exposed		ok
Generator Room	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	45			EA	Y	C-Exposed		ok
West Mechanical Room	Drain Pipe	Transite	40			LM	N	C-Exposed		ok
	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	27			EA	Y	C-Exposed		ok
East Mechanical Room	Drain Pipe	Transite	50			LM	N	C-Exposed		ok
Mezzanine Level										
Freight Elevator Mechanical Room (north)	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Mechanical Mezzanine	Mechanical Fitting	Parging Cement	47			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	6			LM	N	C-Exposed		ok
East Mechanical Mezzanine	Mechanical Fitting	Parging Cement	24			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	7			LM	N	C-Exposed		ok
Penthouse Level										
West Corridor	Mechanical Fitting	Parging Cement	16			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	5			EA	Y	C-Exposed		OK
East Corridor	Mechanical Fitting	Parging Cement	17			EA	Y	C-Exposed		ok
East Air Intake Plenum	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok

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LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			GOOD	FAIR	POOR					
Parking Level P3										
Parking Area	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
Mechanical Room 405	Mechanical Fitting	Parging Cement	54			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	34			EA	Y	C-Exposed		ok
Parking Level P2										
Parking Area	Mechanical Fitting	Parging Cement	24	2		EA	Y	C-Exposed	25,26,27	ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Mechanical Room 304	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Mechanical Room 305-307	Mechanical Fitting	Parging Cement	11			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	27			EA	Y	C-Exposed		ok
Parking Level P1										
Parking Area	Mechanical Fitting	Parging Cement	60	2		EA	Y	C-Exposed		ok
	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
Ramp to S-1	Mechanical Fitting	Parging Cement	10	2	2	EA	Y	C-Exposed	29 - 32	ok
	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Mechanical Room 205- 207	Mechanical Fitting	Parging Cement	72	1		EA	Y	C-Exposed	28	ok
	Firestop	Parging Cement	11			EA	Y	C-Exposed		ok
Mechanical Room 213	Firestop	Parging Cement	4		4	EA	Y	C-Exposed		ok
Basement Level S-1										
Mechanical Room S-101	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-102	Mechanical Fitting	Parging Cement	25			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
Room S-104	Mechanical Fitting	Parging Cement	22			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-105	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	20			EA	Y	C-Exposed		ok
Room S-106	Wall Board	Transite	100			m2	N	C-Exposed		ok
Room S-107	Mechanical Fitting	Parging Cement	17			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	24	1	5	EA	Y	C-Exposed	1, 2	ok
Room S-108 (ProFac Shop)	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-109/S-115	Mechanical Fitting	Parging Cement	23			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	19			EA	Y	C-Exposed		ok
Hallway S105 to S118	Mechanical Fitting	Parging Cement	67			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	56			EA	Y	C-Exposed	3,4,5	ok
Room S-112	Mechanical Straight	Paper Insulation	21			LM	Y	C-Exposed		ok
Room S-114	Mechanical Fitting	Parging Cement	5			EA	Y			CANNOT ACCESS- High SECURITY
	Firestop	Parging Cement	6			EA	Y			
Mechanical Room S-116	Mechanical Fitting	Parging Cement	5			EA	Y			ok
	Firestop	Parging Cement	4			EA	Y			ok
Room S-117	Mechanical Fitting	Parging Cement	2			EA	Y			CANNOT ACCESS - TOP SECRET
	Firestop	Parging Cement	8			EA	Y			
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Room S-117A	Floor	Vinyl Floor Tile	35			m2	N	C-Exposed		ok
Room S-118	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
Room S-118A	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-119	Mechanical Fitting	Parging Cement	4	1	1	EA	Y	C-Exposed	13,14,15	ok
	Firestop	Parging Cement	15		10	EA	Y	C-Exposed		ok
Room S-120	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	12			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	25		1	EA	Y	C-Concealed		ok
Room S-121A (Men's Lockers)	Floor	Vinyl Floor Tile	36			m2	N	C-Concealed		ok
Room B-188 (Men's Washroom)	Firestop	Parging Cement	10			EA	Y	C-Concealed		ok
	Floor	Vinyl Floor Tile	9			m2	N	C-Concealed		ok
Room S-122										
	Firestop	Parging Cement	16			EA	Y	C-Exposed		ok
Mechanical Room S-123 (Main Area)	Mechanical Fitting	Parging Cement	123			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	63		5	EA	Y	C-Exposed	11, 12	ok
Mechanical Room S-123 (Storage)	Mechanical Fitting	Parging Cement	10			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	11		3	EA	Y	C-Exposed		ok
Mechanical Room S-123 (Welding)	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement		6		EA	Y	C-Exposed		ok
Mechanical Room S-123 (Back Corridor)	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
Room S-124	Mechanical Fitting	Parging Cement	5	1		EA	Y	C-Exposed	18,19	ok
	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Hallway S117 to S125	Mechanical Fitting	Parging Cement	30			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	51			EA	Y	C-Exposed		ok
Men's Washroom (near Loading Dock)	Mechanical Fitting	Parging Cement	4			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	6			EA	Y	C-Concealed		ok
	Mechanical Fitting	Parging Cement	39			EA	Y	C-Exposed		ok
	Mechanical Straight	Paper Insulation	16			LM	Y	C-Exposed		ok
Room S-125 (Cleaners' Room)	Firestop	Parging Cement	10	1		EA	Y	C-Exposed	8, 9, 10	ok
Mechanical Room S-126	Mechanical Fitting	Parging Cement	57			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	83			EA	Y	C-Exposed		ok
Fan Room 12	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	7			EA	Y	C-Exposed	6,7	ok
	Firestop	Parging Cement	25		4	EA	Y	C-Exposed		ok
Mechanical Room S-127	Mechanical Straight	Paper Insulation	13			LM	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	7			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	12			EA	Y	C-Concealed		ok
Room S-129 (Women's Lockers)	Floor	Vinyl Floor Tile	24			m2	N	C-Concealed		ok
	Mechanical Fitting	Parging Cement	15			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	12			EA	Y	C-Concealed		ok
Room B-187 (Women's Washroom)	Floor	Vinyl Floor Tile	16			m2	N	C-Concealed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Concealed		ok
Hallway S153 to S130	Firestop	Parging Cement	54			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	28			EA	Y	C-Exposed		ok
Room S-134 (Air Intake)	Firestop	Parging Cement	22			EA	Y	C-Exposed		ok
Room S-134 Hallway	Mechanical	Parging Cement	11			EA	Y	C-Exposed		ok
Room S-132	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-135 (Commissionaire's Office)	Mechanical Fitting	Parging Cement	3			EA	Y	C-Concealed		ok
	Firestop	Parging Cement	3			EA	Y	C-Concealed		ok
Room S-136	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
Room B-142B	Mechanical Fitting	Parging Cement	14			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
OAG Storage (former Telephone Room)	Mechanical Fitting	Parging Cement	20			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Room S-143 (Mail Scanning)	Firestop	Parging Cement	3			EA	Y	C-Concealed		ok
Room S-144	Mechanical Fitting	Parging Cement	14			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	13			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
Room S-145 (Holt Renfrew Storage)	Mechanical Straight	Paper Insulation	10			LM	Y	C-Exposed		ok
Room S-146 (Bell Room)	Floor	Vinyl Floor Tile	40			m2	N	C-Exposed		ok
Transformer Room Corridor	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
Room S-148	Firestop	Parging Cement	7			EA	Y			NEED AUTHORIZATION
Room S-154	Mechanical Straight	Paper Insulation	4			LM	Y	C-Exposed		ok
Room S-165	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Hallway (S-145 to S- 170)	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	16	1		EA	Y	C-Exposed	16,17	ok
Room S-172	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-174, Unit A	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-174, Unit B	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-174, Unit C	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Room S-176	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Parking Ticket Room (off Parking Ramp)	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
Stairwell F Corridor (off Parking Ramp)	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			GOOD	FAIR	POOR					
Transformer Room (off Parking Ramp)	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
Parking Ramp to Queen Street	Mechanical Fitting	Parging Cement	32			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
Plenum Beneath Queen Street Entrance	Wall and Ceiling	Transite	200			m2	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	26		24	EA	Y	C-Exposed		ok
Loading Dock	Mechanical Fitting	Parging Cement	140			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	42	1	2	EA	Y	C-Exposed	20-24	ok
	Mechanical Straight	Paper Insulation	97			LM	Y	C-Exposed		ok
Corridors (West)	Mechanical Fitting	Parging Cement	61			EA	Y	C-Exposed		ok (see above 'hallways')
	Firestop	Parging Cement	160			EA	Y	C-Exposed		ok (see above 'hallways')
Corridors (East)	Mechanical Fitting	Parging Cement	90			EA	Y	C-Exposed		ok (see above 'hallways')
	Firestop	Parging Cement	115			EA	Y	C-Exposed		ok (see above 'hallways')
Commercial Level C1										
Perimeter Service Corridors	Firestop	Parging Cement	50		1	EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	45			EA	Y	C-Exposed		ok
Mechanical Room, Adj. to Rexall	Firestop	Parging Cement	4		2	EA	Y	C-Exposed		ok
West Mechanical Rooms, Adj. to Bathrooms	Firestop	Parging Cement	40		6	EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	16		4	EA	Y	C-Exposed		ok
Southwest Mechanical Room, Adj. to Techs	Mechanical Fitting	Parging Cement	40			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	20			EA	Y	C-Exposed		ok
Mechanical Room (109)	Firestop	Parging Cement	35			EA	Y	C-Exposed		ok
CR1 Storage Area	Firestop	Parging Cement			1	EA	Y	C-Exposed		ok
North Central Stairwell	Firestop	Parging Cement	3		1	EA	Y	C-Exposed		ok
North Central Elevator Lobby	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
North Central Electrical Rm	Firestop	Parging Cement	2		2	EA	Y	C-Exposed	54,55	ok
South Central Electrical	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
South Central Elevator Lobby	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
South Central Stairwell	Firestop	Parging Cement	4		6	EA	Y	C-Exposed		ok
North East Mech Rm C131	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Southwest Concourse	Drain Pipe	Transite	40			LM	Y	C-Concealed		ok
Northwest Concourse	Drain Pipe	Transite	40			LM	Y	C-Concealed		ok
Commercial Level C2										
	Firestop	Parging Cement	3		1	EA	Y	C-Concealed		ok
Central Control - Security Office	Mechanical Fitting	Parging Cement	2		1	EA	Y	C-Concealed		ok
Fairweather (Back Room)	Floor	Tile	15			SM	N	A	51	ok
	Ceiling	Tile			10	SM	Y	C-Exposed	52	ok
	Mechanical Fitting	Parging Cement	5		1	EA	Y	C-Concealed	52	ok
East Central Mechanical Room	Firestop	Parging Cement	25			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
Hall Adjacent to East Mech Room	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
West Central Mechanical Room (in Holt Renfrew)	Firestop	Parging Cement	30			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Stairwell (in Holt Renfrew)	Mechanical Fitting	Parging Cement	12			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Hall Adjacent to West Central Mech Room	Firestop	Parging Cement			5	EA	Y	C-Exposed		ok
South Central Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
South Central Elevator Lobby	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
South Central Stairwell	Firestop	Parging Cement	5		1	EA	Y	C-Exposed		ok
North Central Stairwell	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
Holt Renfrew North	Mechanical Fitting	Parging Cement			3	EA	Y	C-Concealed	35-37	OK - exposed acm piping
LCBO	Mechanical Fitting	Parging Cement	15			EA	Y	C-Concealed		ok
Benton	Mechanical Fitting	Parging Cement	6			EA	Y	C-Concealed		ok
Joenette	Mechanical Fitting	Parging Cement		4		EA	Y	C-Exposed	53	ok
South Concourse	Drain Pipe	Transite	50			LM	N	C-Concealed		ok
North Concourse	Drain Pipe	Transite	50			LM	N	C-Concealed		ok
Commercial Level C3										
Stairwells/Service Elevator lobbies	Firestop	Parging Cement	14			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	20		6	EA	Y	C-Exposed		ok
East Concourse	Drain Pipe	Transite	35			LM	N	C-Exposed		ok
West Concourse	Drain Pipe	Transite	35			LM	N	C-Exposed		ok
West Mechanical Room	Firestop	Parging Cement	20			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Stairwell	Wall/Ceiling	Parging Cement	2		2	EA	Y	C-Exposed	56	ok
South Central Electrical Room	Firestop	Parging Cement			1	EA	Y	C-Exposed		ok
South Central Elevator Lobby	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
South Central Stairwell	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	10			EA	Y	C-Exposed		ok
South East Stairwell	Firestop	Parging Cement	4		4	EA	Y	C-Exposed		ok
East Mech. Room	Firestop	Parging Cement	25		2	EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
Hallway Adjacent East Mech. Rm.	Firestop	Parging Cement	16			EA	Y	C-Exposed		ok
East Stairwell	Mechanical Fitting	Parging Cement	8			EA	Y	C-Exposed		ok
North Central Janitor Closet	Firestop	Parging Cement	2		2	EA	Y	C-Exposed		ok
North Central Elevator Lobby	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
North Central Stairwell	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	18			EA	Y	C-Exposed		ok
Hallway Adjacent to PWGSC Office	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
PWGSC Kitchenette	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Level 1										
Stairwell A	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell B	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
B. Mech 105	Firestop	Parging Cement	9			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
A. Mech 107	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
A. Mech 130	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
B. Mech 131	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement			2	EA	Y	C-Exposed	38-39	ok
East Electrical Room	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
East Pipe Chase	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 2										
Stairwell A	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell B	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
B. Mech 205	Firestop	Parging Cement	14			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	7			EA	Y	C-Exposed		ok
A. Mech 207	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 230	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
B. Mech 231	Firestop	Parging Cement	11			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
East Electrical Room	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			GOOD	FAIR	POOR					
Level 3										
Stairwell A	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell B	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
B. Mech 305	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 307	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 330	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
B. Mech 331	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 4										
Stairwell A	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell B	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	6			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
B. Mech 405	Firestop	Parging Cement	6			EA	Y	C-Exposed	41	ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
A. Mech 407	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
A. Mech 430	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
B. Mech 431	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Pipe Chase	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 5										
Stairwell A	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
	mechanical fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 505	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
B. Mech 531	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Electrical Room	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 6										
Stairwell A	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
B. Mech 605	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 607	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 631	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 7										
Stairwell A	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 730	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 731	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
Level 8										
Stairwell A	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell F	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 830	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 831	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	1			EA	Y	C-Exposed	42	ok
West Pipe Chase	Drain Pipe	Transite	1			LM	N	C-Exposed		ok
East Electrical Room	Firestop	Parging Cement			1	EA	Y	C-Exposed	44-45	ok
	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
East Central Electrical Room	Firestop	Parging Cement	4			EA	Y	C-Exposed	43	ok
Level 9										
B. Mech 905	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 907	Firestop	Parging Cement	2		1	EA	Y	C-Exposed	48	ok
A. Mech 930	Mechanical Fitting	Parging Cement	1			EA	Y	C-Exposed		ok
B. Mech 931	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement	3		1	EA	Y	C-Exposed	46-47	ok
East Electrical Room	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
East Central Electrical Room	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Level 10										
Stairwell A	Firestop	Parging Cement	1	2		EA	Y	C-Exposed	54, 55	ok
Stairwell C	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
B. Mech 1005	Firestop	Parging Cement	15			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 1007	Firestop	Parging Cement	2		1	EA	Y	C-Exposed		ok
A. Mech 1030	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
B. Mech 1031	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Pipe Chase	Drain Pipe	Transite	3			LM	N	C-Exposed		ok
West Central Electrical Room	Firestop	Parging Cement	0			EA	Y			ok
East Electrical Room	Firestop	Parging Cement	6	1		EA	Y	C-Exposed	51, 52, 53	ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok
Level 11										
Stairwell A	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell C	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell E	Firestop	Parging Cement	5			EA	Y	C-Exposed		ok
Stairwell G	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
B. Mech 1105	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
A. Mech 1107	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
A. Mech 1130	Firestop	Parging Cement	11			EA	Y	C-Exposed		ok
B. Mech 1131	Firestop	Parging Cement	12			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
West Electrical Room	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
West Pipe Chase	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	4			LM	N	C-Exposed		ok
East Electrical Room	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
East Pipe Chase	Drain Pipe	Transite	2			LM	N	C-Exposed		ok

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	Accessibilty	Photo	COMMENTS
			GOOD	FAIR	POOR					
Terrace Level										
	Firestop	Parging Cement	7			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell C	Drain Pipe	Transite	6			LM	N	C-Exposed		ok
	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	4			EA	Y	C-Exposed		ok
Stairwell E-T	Drain Pipe	Transite	4			LM	N	C-Exposed		ok
	Firestop	Parging Cement	2			EA	Y	C-Exposed		ok
Stairwell A-T	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	3			EA	Y	C-Exposed		ok
Stairwell G-T	Mechanical Fitting	Parging Cement	6			EA	Y	C-Exposed		ok
Office Corridor	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
ProFac Washroom	Mechanical Fitting	Parging Cement	4			EA	Y	C-Concealed		no access
ProFac Offices	Firestop	Parging Cement	8			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	5			EA	Y	C-Exposed		ok
South Vestibule	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	1			EA	Y	C-Exposed		ok
	Exhaust Breeching	Parging Cement	10			m2	Y	C-Exposed		ok
	Mechanical Straight	Parging Cement	2			LM	Y	C-Exposed		ok
Generator Room	Mechanical Fitting	Parging Cement	3			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	45			EA	Y	C-Exposed		ok
West Mechanical Room	Drain Pipe	Transite	40			LM	N	C-Exposed		ok
	Firestop	Parging Cement	10			EA	Y	C-Exposed		ok
	Mechanical Fitting	Parging Cement	27			EA	Y	C-Exposed		ok
East Mechanical Room	Drain Pipe	Transite	50			LM	N	C-Exposed		ok
Mezzanine Level										
Freight Elevator Mechanical Room (north)	Mechanical Fitting	Parging Cement	2			EA	Y	C-Exposed		ok
West Mechanical Mezzanine	Mechanical Fitting	Parging Cement	47			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	6			LM	N	C-Exposed		ok
East Mechanical Mezzanine	Mechanical Fitting	Parging Cement	24			EA	Y	C-Exposed		ok
	Drain Pipe	Transite	7			LM	N	C-Exposed		ok
Penthouse Level										
West Corridor	Mechanical Fitting	Parging Cement	16			EA	Y	C-Exposed		ok
	Firestop	Parging Cement	5			EA	Y	C-Exposed		OK
East Corridor	Mechanical Fitting	Parging Cement	17			EA	Y	C-Exposed		ok
East Air Intake Plenum	Firestop	Parging Cement	4			EA	Y	C-Exposed		ok

9 PART 4 – REFERENCE REPORTS

APPENDIX 2

ASBESTOS SUMMARY TABLE

SNC-LAVALIN PROFAC
ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
2009

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE	COMMENTS
			GOOD	FAIR	POOR		(Y/N)	
Parking Level P3								
Parking Area	Mechanical Fitting	Parging Cement	5			EA	Y	
Mechanical Room 405	Mechanical Fitting	Parging Cement	82		8	EA	Y	
	Firestop	Parging Cement	34			EA	Y	
Parking Level P2								
Parking Area	Mechanical Fitting	Parging Cement	26			EA	Y	
	Firestop	Parging Cement	2			EA	Y	
Mechanical Room 304	Firestop	Parging Cement	2			EA	Y	
Mechanical Room 305	Mechanical Fitting	Parging Cement	26			EA	Y	
	Firestop	Parging Cement	20			EA	Y	
Mechanical Room 308	Mechanical Fitting	Parging Cement	2			EA	Y	
	Firestop	Parging Cement	7			EA	Y	
Parking Level P1								
Parking Area	Mechanical Fitting	Parging Cement	60		3	EA	Y	
	Firestop	Parging Cement	5			EA	Y	
Ramp to S-1	Mechanical Fitting	Parging Cement	15		10	EA	Y	
	Firestop	Parging Cement	3			EA	Y	
Mechanical Room 205	Mechanical Fitting	Parging Cement	90			EA	Y	
	Firestop	Parging Cement	11			EA	Y	
Mechanical Room 213	Firestop	Parging Cement	4		3	EA	Y	
Basement Level S-1								
Mechanical Room S-101	Mechanical Fitting	Parging Cement	18		1	EA	Y	
	Firestop	Parging Cement	10			EA	Y	
Room S-102	Mechanical Fitting	Parging Cement	25			EA	Y	
	Firestop	Parging Cement			5	EA	Y	
Room S-104	Mechanical Fitting	Parging Cement	23			EA	Y	
	Firestop	Parging Cement	8		2	EA	Y	
Room S-105	Mechanical Fitting	Parging Cement	5			EA	Y	
	Firestop	Parging Cement	3			EA	Y	
Room S-106	Mechanical Fitting	Parging Cement	8			EA	Y	
	Firestop	Parging Cement	20			EA	Y	
	Wall Board	Transite	100			m^2	N	
Room S-107	Mechanical Fitting	Parging Cement	20			EA	Y	
	Firestop	Parging Cement	25		5	EA	Y	
Room S-108 (ProFac Shop)	Mechanical Fitting	Parging Cement	14			EA	Y	
	Firestop	Parging Cement	13			EA	Y	
Room S-109/S-115	Mechanical Fitting	Parging Cement	23			EA	Y	
	Firestop	Parging Cement	19		3	EA	Y	
Room S-112	Mechanical Straight	Paper Insulation	21			LM	Y	Asbestos paper insulation was observed on the sanitary sewer line, between the canvas wrap and fibreglass insulation.
	Firestop	Parging Cement	6			EA	Y	

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			GOOD	FAIR	POOR		(Y/N)	
Room S-114	Mechanical Fitting	Parging Cement	5			EA	Y	
	Firestop	Parging Cement	6			EA	Y	
Mechanical Room S-116	Mechanical Fitting	Parging Cement	5			EA	Y	
	Firestop	Parging Cement	4		2	EA	Y	
Room S-117	Mechanical Fitting	Parging Cement	2			EA	Y	
	Firestop	Parging Cement	8			EA	Y	
Room S-117A	Mechanical Fitting	Parging Cement	4			EA	Y	
	Firestop	Parging Cement	6			EA	Y	
	Floor	Vinyl Floor Tile	35			m^2	N	
Room S-118	Firestop	Parging Cement	5			EA	Y	
Room S-118A	Mechanical Fitting	Parging Cement	6			EA	Y	
	Firestop	Parging Cement	9		2	EA	Y	
	Duct	Parging Cement			0.03	m^2	Y	Exposed parging cement was observed on a duct access hatch in room S-118A.
Room S-119	Mechanical Fitting	Parging Cement	4			EA	Y	
	Firestop	Parging Cement	15		10	EA	Y	
Room S-120	Firestop	Parging Cement	8		8	EA	Y	
Room S-121A (Men's Lockers)	Mechanical Fitting	Parging Cement	12			EA	Y	
	Firestop	Parging Cement	25		1	EA	Y	
	Floor	Vinyl Floor Tile	36			m^2	N	
Room B-188 (Men's Washroom)	Firestop	Parging Cement	10			EA	Y	
	Floor	Vinyl Floor Tile	9			m^2	N	
Room S-122	Mechanical Fitting	Parging Cement	8		4	EA	Y	
	Firestop	Parging Cement	16			EA	Y	
Mechanical Room S-123 (Main Area)	Mechanical Fitting	Parging Cement	132			EA	Y	
	Firestop	Parging Cement	63		5	EA	Y	
Mechanical Room S-123 (Storage)	Mechanical Fitting	Parging Cement	10			EA	Y	
	Firestop	Parging Cement	11		3	EA	Y	
Mechanical Room S-123 (Welding)	Mechanical Fitting	Parging Cement	2			EA	Y	
	Firestop	Parging Cement			6	EA	Y	
Mechanical Room S-123 (Back Corridor)	Firestop	Parging Cement	7			EA	Y	
Room S-124	Mechanical Fitting	Parging Cement	6			EA	Y	
	Firestop	Parging Cement	6			EA	Y	
Men's Washroom (near Loading Dock)	Mechanical Fitting	Parging Cement	4			EA	Y	
	Firestop	Parging Cement	6			EA	Y	
Room S-125 (Cleaners' Room)	Mechanical Fitting	Parging Cement	39			EA	Y	
	Mechanical Straight	Paper Insulation	16			LM	Y	
	Firestop	Parging Cement	10			EA	Y	
Mechanical Room S-126	Mechanical Fitting	Parging Cement	57			EA	Y	
	Firestop	Parging Cement	83			EA	Y	
Fan Room 12	Mechanical Fitting	Parging Cement	3			EA	Y	
Mechanical Room S-127	Mechanical Fitting	Parging Cement	7			EA	Y	
	Firestop	Parging Cement	25		4	EA	Y	
	Mechanical Straight	Paper Insulation	13			LM	Y	
Room S-128/S-130 (Glass Room)	Firestop	Parging Cement	4			EA	Y	
Room S-129 (Women's Lockers)	Mechanical Fitting	Parging Cement	7			EA	Y	
	Firestop	Parging Cement	12			EA	Y	
	Floor	Vinyl Floor Tile	24			m^2	N	
Room B-187 (Women's Washroom)	Mechanical Fitting	Parging Cement	15			EA	Y	
	Firestop	Parging Cement	12			EA	Y	
	Floor	Vinyl Floor Tile	16			m^2	N	
Mechanical Room S-129	Mechanical Fitting	Parging Cement	2			EA	Y	

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			GOOD	FAIR	POOR		(Y/N)	
Mechanical Room S-129	Firestop	Parging Cement	6			EA	Y	
Room S-132	Firestop	Parging Cement	8			EA	Y	
Room S-135 (Commissionaire's Office)	Mechanical Fitting	Parging Cement	3			EA	Y	
	Firestop	Parging Cement	3			EA	Y	
Room S-136	Firestop	Parging Cement	12			EA	Y	
Room B-142B	Mechanical Fitting	Parging Cement	14		1	EA	Y	
	Firestop	Parging Cement	8			EA	Y	
OAG Storage (former Telephone Room)	Mechanical Fitting	Parging Cement	20			EA	Y	
	Firestop	Parging Cement	6			EA	Y	
Room S-143 (Mail Scanning)	Mechanical Fitting	Parging Cement	3			EA	Y	
	Firestop	Parging Cement	3			EA	Y	
	Mechanical Straight	Paper Insulation	4			LM	Y	Paper insulation was exposed at 5 ends on the sanitary sewer line.
Room S-144	Mechanical Fitting	Parging Cement	24			EA	Y	
	Firestop	Parging Cement	13			EA	Y	
Room S-145 (Holt Renfrew Storage)	Mechanical Fitting	Parging Cement	5			EA	Y	
	Firestop	Parging Cement	6			EA	Y	
	Mechanical Straight	Paper Insulation	16			LM	Y	
Room S-146 (Bell Room)	Floor	Vinyl Floor Tile	40			m^2	N	
Transformer Room Corridor	Firestop	Parging Cement	12			EA	Y	
Room S-148	Firestop	Parging Cement	7			EA	Y	
Room S-152	Firestop	Parging Cement	4			EA	Y	
Room S-154	Mechanical Straight	Paper Insulation	8			LM	Y	Paper insulation was exposed at 5 ends on the sanitary sewer line.
Room S-160	Mechanical Fitting	Parging Cement	2			EA	Y	
	Firestop	Parging Cement	2			EA	Y	
Room S-165	Mechanical Fitting	Parging Cement	3			EA	Y	
	Firestop	Parging Cement	3			EA	Y	
Room S-168	Mechanical Fitting	Parging Cement	9			EA	Y	
	Firestop	Parging Cement	12			EA	Y	
Room S-172	Firestop	Parging Cement	2			EA	Y	
Room S-174, Unit A	Mechanical Fitting	Parging Cement	2			EA	Y	
	Firestop	Parging Cement	2			EA	Y	
Room S-174, Unit B	Mechanical Fitting	Parging Cement	2			EA	Y	
	Firestop	Parging Cement	2			EA	Y	
Room S-174, Unit C	Mechanical Fitting	Parging Cement	2			EA	Y	
	Firestop	Parging Cement	2			EA	Y	
Room S-176	Mechanical Fitting	Parging Cement	2			EA	Y	
	Firestop	Parging Cement	2			EA	Y	
Parking Ticket Room (off Parking Ramp)	Firestop	Parging Cement	7			EA	Y	
Stairwell F Corridor (off Parking Ramp)	Firestop	Parging Cement	6			EA	Y	
Transformer Room (off Parking Ramp)	Firestop	Parging Cement	1			EA	Y	
Parking Ramp to Queen Street	Mechanical Fitting	Parging Cement	32			EA	Y	
	Firestop	Parging Cement	10			EA	Y	
Plenum Beneath Queen Street Entrance	Wall and Ceiling Panels	Transite	200			m^2	Y	
	Mechanical Fitting	Parging Cement	26		24	EA	Y	
Loading Dock	Mechanical Fitting	Parging Cement	140			EA	Y	
	Firestop	Parging Cement	45			EA	Y	
	Mechanical Straight	Paper Insulation	97			LM	Y	Paper insulation was exposed at 10 ends on the sanitary sewer line.
Corridors (West)	Mechanical Fitting	Parging Cement	61			EA	Y	
	Firestop	Parging Cement	160			EA	Y	
Corridors (East)	Mechanical Fitting	Parging Cement	90			EA	Y	
	Firestop	Parging Cement	115			EA	Y	

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			GOOD	FAIR	POOR		(Y/N)	
Commercial Level C1								
Perimeter Service Corridors	Firestop	Parging Cement	50		1	EA	Y	
	Mechanical Fitting	Parging Cement	50			EA	Y	
Hemmingway's Restaurant	Firestop	Parging Cement	8		4	EA	Y	
	Mechanical Fitting	Parging Cement	20		5	EA	Y	
Mechanical Room, Adj. to Hemmingway's	Firestop	Parging Cement	4		2	EA	Y	
West Mechanical Rooms, Adj. to Bathrooms	Firestop	Parging Cement	40		6	EA	Y	
	Drain Pipe	Transite	3			LM	Y	
	Mechanical Fitting	Parging Cement	16		4	EA	Y	
Southwest Mechanical Room, Adj. to Techs	Mechanical Fitting	Parging Cement	40		2	EA	Y	
	Firestop	Parging Cement	20		10	EA	Y	
SNC-Lavalin ProFac - Tech Office	Mechanical Fitting	Parging Cement			2	EA	Y	
	Firestop	Parging Cement			1	EA	Y	
Puzzles and Games - Surplus Store	Mechanical Fitting	Parging Cement	4		2	EA	Y	
Akad	Mechanical Fitting	Parging Cement	14			EA	Y	
	Firestop	Parging Cement			4	EA	Y	
Wave and Oasis	Mechanical Fitting	Parging Cement	6			EA	Y	
Cat Jam - Main	Mechanical Fitting	Parging Cement	22			EA	Y	
	Firestop	Parging Cement	6		2	EA	Y	
Cat Jam - Storage	Firestop	Parging Cement	6		2	EA	Y	
Tempest Office	Firestop	Parging Cement	15		5	EA	Y	
Greetings	Mechanical Fitting	Parging Cement	12		10	EA	Y	
Shopper's Drug mart	Mechanical Fitting	Parging Cement	55		5	EA	Y	
	Firestop	Parging Cement	3		1	EA	Y	
Mechanical Room (109)	Firestop	Parging Cement	35			EA	Y	
Mexican Restaurant, Adj. to Stairs	Firestop	Parging Cement	4			EA	Y	
Nico's	Mechanical Fitting	Parging Cement	4			EA	Y	
Marcello's	Mechanical Fitting	Parging Cement	10			EA	Y	
Barsellino	Firestop	Parging Cement	6		2	EA	Y	
Studio 240	Firestop	Parging Cement	8			EA	Y	
	Mechanical Fitting	Parging Cement	4			EA	Y	
East Janitor Closet - CR1	Firestop	Parging Cement	8			EA	Y	
	Mechanical Fitting	Parging Cement	8			EA	Y	
West Perimeter Corridor	Firestop	Parging Cement	4		4	EA	Y	
	Mechanical Fitting	Parging Cement	10			EA	Y	
CR1 Storage Area	Firestop	Parging Cement	0		1	EA	Y	
North Central Stairwell	Firestop	Parging Cement	3		1	EA	Y	
North Central Elevator Lobby	Firestop	Parging Cement	5			EA	Y	
North Central Electrical Rm	Firestop	Parging Cement	2		2	EA	Y	
South Central Electrical	Firestop	Parging Cement	4			EA	Y	
South Central Elevator Lobby	Firestop	Parging Cement	3			EA	Y	
South Central Stairwell	Firestop	Parging Cement	4		6	EA	Y	
North East Mech Rm C131	Firestop	Parging Cement	3			EA	Y	
Southwest Concourse	Drain Pipe	Transite	40			LM	Y	
Northwest Concourse	Drain Pipe	Transite	40			LM	Y	

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			GOOD	FAIR	POOR		(Y/N)	
Commercial Level C2								
	Firestop	Parging Cement	3		1	EA	Y	
Central Control - Security Office	Mechanical Fitting	Parging Cement	2		1	EA	Y	
LCBO	Mechanical Fitting	Parging Cement	10			EA	Y	
Fairweather	Floor	Tile	15			SM	N	
	Ceiling	Tile			10	SM	Y	
	Mechanical Fitting	Parging Cement	6			EA	Y	
East Central Mechanical Room	Firestop	Parging Cement	25			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Stairwell	Firestop	Parging Cement			2	EA	Y	
Hall Adjacent to East Mech Room	Firestop	Parging Cement	4			EA	Y	
West Central Mechanical Room	Firestop	Parging Cement	30			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Stairwell	Mechanical Fitting	Parging Cement	12			EA	Y	
	Firestop	Parging Cement	2			EA	Y	
Hall Adjacent to West Central Mech Room	Firestop	Parging Cement			5	EA	Y	
South Central Electrical Room	Firestop	Parging Cement	2			EA	Y	
South Central Elevator Lobby	Firestop	Parging Cement	8			EA	Y	
South Central Stairwell	Firestop	Parging Cement	5		1	EA	Y	
Southeast Stairwell	Firestop	Parging Cement	2		2	EA	Y	
North Central Stairwell	Firestop	Parging Cement	2			EA	Y	
	Mechanical Fitting	Parging Cement	5			EA	Y	
Northwest Stairwell	Firestop	Parging Cement	3		7	EA	Y	
	Mechanical Fitting	Parging Cement	16			EA	Y	
Holt Renfrew North	Mechanical Fitting	Parging Cement	2			EA	Y	
LCBO	Mechanical Fitting	Parging Cement	15			EA	Y	
Tip Top	Mechanical Fitting	Parging Cement	10			EA	Y	
Craig Armstrong	Mechanical Fitting	Parging Cement	8			EA	Y	
Benton	Mechanical Fitting	Parging Cement	6			EA	Y	
Elisa G.	Mechanical Fitting	Parging Cement	6			EA	Y	
Dack's	Mechanical Fitting	Parging Cement	6			EA	Y	
Joenette								
Betty Barclay								
Naturalizer	Mechanical Fitting	Parging Cement	16			EA	Y	
South Concourse	Drain Pipe	Transite	50			LM	N	
North Concourse	Drain Pipe	Transite	50			LM	N	
Commercial Level C3								
Stairwells/Service Elevator lobbies	Firestop	Parging Cement	14			EA	Y	
	Mechanical Fitting	Parging Cement	20		6	EA	Y	
North Concourse	Drain Pipe	Transite	35			LM	N	
South Concourse	Drain Pipe	Transite	35			LM	N	
West Mechanical Room	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Stairwell	Wall/Ceiling	Parging Cement	2		2	EA	Y	
	Mechanical Fitting	Parging Cement	10			EA	Y	
South Central Electrical Room	Firestop	Parging Cement			1	EA	Y	
South Central Elevator Lobby	Firestop	Parging Cement	7		1	EA	Y	
South Central Stairwell	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	10			EA	Y	
South East Stairwell	Firestop	Parging Cement	4		4	EA	Y	
East Mech. Room	Firestop	Parging Cement	25		2	EA	Y	

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			GOOD	FAIR	POOR		(Y/N)	
	Drain Pipe	Transite	3			LM	N	
Hallway Adjacent East Mech. Rm.	Firestop	Parging Cement	16			EA	Y	
East Stairwell	Mechanical Fitting	Parging Cement	14			EA	Y	
	Firestop	Parging Cement			4	EA	Y	
North Central Janitor Closet	Firestop	Parging Cement	2		2	EA	Y	
North Central Elevator Lobby	Firestop	Parging Cement	4			EA	Y	
North Central Stairwell	Firestop	Parging Cement	7			EA	Y	
	Mechanical Fitting	Parging Cement	18			EA	Y	
Hallway Adjacent to PWGSC Office	Firestop	Parging Cement	4			EA	Y	
PWGSC Kitchenette	Firestop	Parging Cement	4			EA	Y	

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			GOOD	FAIR	POOR			
Level 1								
Stairwell A	Firestop	Parging Cement	4			EA	Y	
Stairwell B	Firestop	Parging Cement	4			EA	Y	
Stairwell C	Firestop	Parging Cement	4			EA	Y	
Stairwell E	Firestop	Parging Cement	6			EA	Y	
Stairwell F	Firestop	Parging Cement	4			EA	Y	
Stairwell G	Firestop	Parging Cement	6			EA	Y	
B. Mech 105	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	5			EA	Y	
A. Mech 107	Firestop	Parging Cement	8			EA	Y	
	Mechanical Fitting	Parging Cement	3			EA	Y	
A. Mech 130	Firestop	Parging Cement	8			EA	Y	
	Mechanical Fitting	Parging Cement	3			EA	Y	
B. Mech 131	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	4			EA	Y	
West Electrical Room	Firestop	Parging Cement	12			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	10			EA	Y	
Level 2								
Stairwell A	Firestop	Parging Cement	5			EA	Y	
Stairwell B	Firestop	Parging Cement	4			EA	Y	
Stairwell C	Firestop	Parging Cement	6			EA	Y	
Stairwell E	Firestop	Parging Cement	6			EA	Y	
Stairwell F	Firestop	Parging Cement	4			EA	Y	
Stairwell G	Firestop	Parging Cement	6			EA	Y	
B. Mech 205	Firestop	Parging Cement	14			EA	Y	
	Mechanical Fitting	Parging Cement	6			EA	Y	
A. Mech 207	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	5			EA	Y	
A. Mech 230	Firestop	Parging Cement	8			EA	Y	
	Mechanical Fitting	Parging Cement	6			EA	Y	
B. Mech 231	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	7			EA	Y	
West Electrical Room	Firestop	Parging Cement	12			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Electrical Room	Firestop	Parging Cement	10			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	10			EA	Y	

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			GOOD	FAIR	POOR		(Y/N)	
Level 3								
Stairwell A	Firestop	Parging Cement	3			EA	Y	
Stairwell B	Firestop	Parging Cement	4			EA	Y	
Stairwell C	Firestop	Parging Cement	7			EA	Y	
Stairwell E	Firestop	Parging Cement	6			EA	Y	
Stairwell F	Firestop	Parging Cement	4			EA	Y	
Stairwell G	Firestop	Parging Cement	7			EA	Y	
B. Mech 305	Firestop	Parging Cement	14			EA	Y	
	Mechanical Fitting	Parging Cement	6			EA	Y	
A. Mech 307	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
A. Mech 330	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
B. Mech 331	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	4			EA	Y	
West Electrical Room	Firestop	Parging Cement	10			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	10			EA	Y	
East Electrical Room	Firestop	Parging Cement	10			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
Level 4								
Stairwell A	Firestop	Parging Cement	4			EA	Y	
Stairwell B	Firestop	Parging Cement	4			EA	Y	
Stairwell C	Firestop	Parging Cement	6			EA	Y	
Stairwell E	Firestop	Parging Cement	6			EA	Y	
Stairwell F	Firestop	Parging Cement	4			EA	Y	
Stairwell G	Firestop	Parging Cement	7			EA	Y	
B. Mech 405	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	4			EA	Y	
A. Mech 407	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	0			EA	Y	
A. Mech 430	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
B. Mech 431	Firestop	Parging Cement	21			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
West Electrical Room	Firestop	Parging Cement	12			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	10			EA	Y	
East Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
Level 5								
Stairwell A	Firestop	Parging Cement	3			EA	Y	
Stairwell B	Firestop	Parging Cement	3			EA	Y	
	Mechanical Fitting	Parging Cement	7			EA	Y	
Stairwell C	Firestop	Parging Cement	6			EA	Y	
Stairwell E	Firestop	Parging Cement	4			EA	Y	

SNC-LAVALIN PROFAC
ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
2009

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE	COMMENTS
			GOOD	FAIR	POOR		(Y/N)	
Stairwell E	Mechanical Fitting	Parging Cement	5			EA	Y	
Stairwell F	Firestop	Parging Cement	2			EA	Y	
	Mechanical Fitting	Parging Cement	5			EA	Y	
Stairwell G	Firestop	Parging Cement	6			EA	Y	
	Mechanical Fitting	Parging Cement	5			EA	Y	
B. Mech 505	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
A. Mech 507	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
A. Mech 530	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
B. Mech 531	Firestop	Parging Cement	19			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
West Electrical Room	Firestop	Parging Cement	15			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	10			EA	Y	

SNC-LAVALIN PROFAC
ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
2009

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE	COMMENTS
			GOOD	FAIR	POOR		(Y/N)	
Level 6								
Stairwell A	Firestop	Parging Cement	3			EA	Y	
Stairwell B	Firestop	Parging Cement	0			EA	Y	
Stairwell C	Firestop	Parging Cement	5			EA	Y	
Stairwell E	Firestop	Parging Cement	3			EA	Y	
Stairwell F	Firestop	Parging Cement	0			EA	Y	
Stairwell G	Firestop	Parging Cement	3			EA	Y	
B. Mech 605	Firestop	Parging Cement	15			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
A. Mech 607	Firestop	Parging Cement	11			EA	Y	
	Mechanical Fitting	Parging Cement	0			EA	Y	
A. Mech 630	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	1			EA	Y	
B. Mech 631	Firestop	Parging Cement	19			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
West Electrical Room	Firestop	Parging Cement	10			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	10			EA	Y	
East Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
Level 7								
Stairwell A	Firestop	Parging Cement	4			EA	Y	
Stairwell B	Firestop	Parging Cement	0			EA	Y	
Stairwell C	Firestop	Parging Cement	2			EA	Y	
Stairwell E	Firestop	Parging Cement	2			EA	Y	
Stairwell F	Firestop	Parging Cement	0			EA	Y	
Stairwell G	Firestop	Parging Cement	4			EA	Y	
B. Mech 705	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
	Mechanical Straight	Paper Insulation	12			LM	Y	Paper insulation was exposed at 3 ends on the sanitary sewer line.
A. Mech 707	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	0			EA	Y	
A. Mech 730	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	1			EA	Y	
B. Mech 731	Firestop	Parging Cement	15			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
West Electrical Room	Firestop	Parging Cement	12			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
Level 8								
Stairwell A	Firestop	Parging Cement	4			EA	Y	
Stairwell B	Firestop	Parging Cement	0			EA	Y	
Stairwell C	Firestop	Parging Cement	3			EA	Y	
Stairwell E	Firestop	Parging Cement	3			EA	Y	

SNC-LAVALIN PROFAC
ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
2009

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE	COMMENTS
			GOOD	FAIR	POOR		(Y/N)	
Stairwell F	Firestop	Parging Cement	1			EA	Y	
Stairwell G	Firestop	Parging Cement	4			EA	Y	
B. Mech 805	Firestop	Parging Cement	13			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
A. Mech 807	Firestop	Parging Cement	14			EA	Y	
	Mechanical Fitting	Parging Cement	0			EA	Y	
A. Mech 830	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	1			EA	Y	
B. Mech 831	Firestop	Parging Cement	15			EA	Y	
	Mechanical Fitting	Parging Cement	4			EA	Y	
West Electrical Room	Firestop	Parging Cement	2			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	10			EA	Y	
Level 9								
Stairwell A	Firestop	Parging Cement	4			EA	Y	
Stairwell B	Firestop	Parging Cement	0			EA	Y	
Stairwell C	Firestop	Parging Cement	0			EA	Y	
Stairwell E	Firestop	Parging Cement	3			EA	Y	
Stairwell F	Firestop	Parging Cement	0			EA	Y	
Stairwell G	Firestop	Parging Cement	5			EA	Y	
B. Mech 905	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
A. Mech 907	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	0			EA	Y	
A. Mech 930	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	1			EA	Y	
B. Mech 931	Firestop	Parging Cement	18			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
West Electrical Room	Firestop	Parging Cement	8			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	15			EA	Y	
East Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	12			EA	Y	

SNC-LAVALIN PROFAC
ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
2009

LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE	COMMENTS
			GOOD	FAIR	POOR		(Y/N)	
Level 10								
Stairwell A	Firestop	Parging Cement	3			EA	Y	
Stairwell B	Firestop	Parging Cement	0			EA	Y	
Stairwell C	Firestop	Parging Cement	4			EA	Y	
Stairwell E	Firestop	Parging Cement	6			EA	Y	
Stairwell F	Firestop	Parging Cement	0			EA	Y	
Stairwell G	Firestop	Parging Cement	4			EA	Y	
B. Mech 1005	Firestop	Parging Cement	15			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
A. Mech 1007	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	0			EA	Y	
A. Mech 1030	Firestop	Parging Cement	14			EA	Y	
	Mechanical Fitting	Parging Cement	3			EA	Y	
B. Mech 1031	Firestop	Parging Cement	15			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
West Electrical Room	Firestop	Parging Cement	7			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
West Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Electrical Room	Firestop	Parging Cement	10			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
Level 11								
Stairwell A	Firestop	Parging Cement	3			EA	Y	
Stairwell B	Firestop	Parging Cement	0			EA	Y	
Stairwell C	Firestop	Parging Cement	4			EA	Y	
Stairwell E	Firestop	Parging Cement	5			EA	Y	
Stairwell F	Firestop	Parging Cement	0			EA	Y	
Stairwell G	Firestop	Parging Cement	4			EA	Y	
B. Mech 1105	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
A. Mech 1107	Firestop	Parging Cement	12			EA	Y	
	Mechanical Fitting	Parging Cement	5			EA	Y	
A. Mech 1130	Firestop	Parging Cement	11			EA	Y	
	Mechanical Fitting	Parging Cement	0			EA	Y	
B. Mech 1131	Firestop	Parging Cement	15			EA	Y	
	Mechanical Fitting	Parging Cement	6			EA	Y	
West Electrical Room	Firestop	Parging Cement	12			EA	Y	
West Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	4			LM	N	
West Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Electrical Room	Firestop	Parging Cement	12			EA	Y	
East Pipe Chase	Firestop	Parging Cement	20			EA	Y	
	Drain Pipe	Transite	3			LM	N	
East Central Electrical Room	Firestop	Parging Cement	12			EA	Y	
Terrace Level								
Stairwell C	Firestop	Parging Cement	7			EA	Y	
	Mechanical Fitting	Parging Cement	3			EA	Y	
	Drain Pipe	Transite	6			LM	N	
Stairwell E	Firestop	Parging Cement	4			EA	Y	
	Mechanical Fitting	Parging Cement	4			EA	Y	
	Drain Pipe	Transite	4			LM	N	

SNC-LAVALIN PROFAC
ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
2009

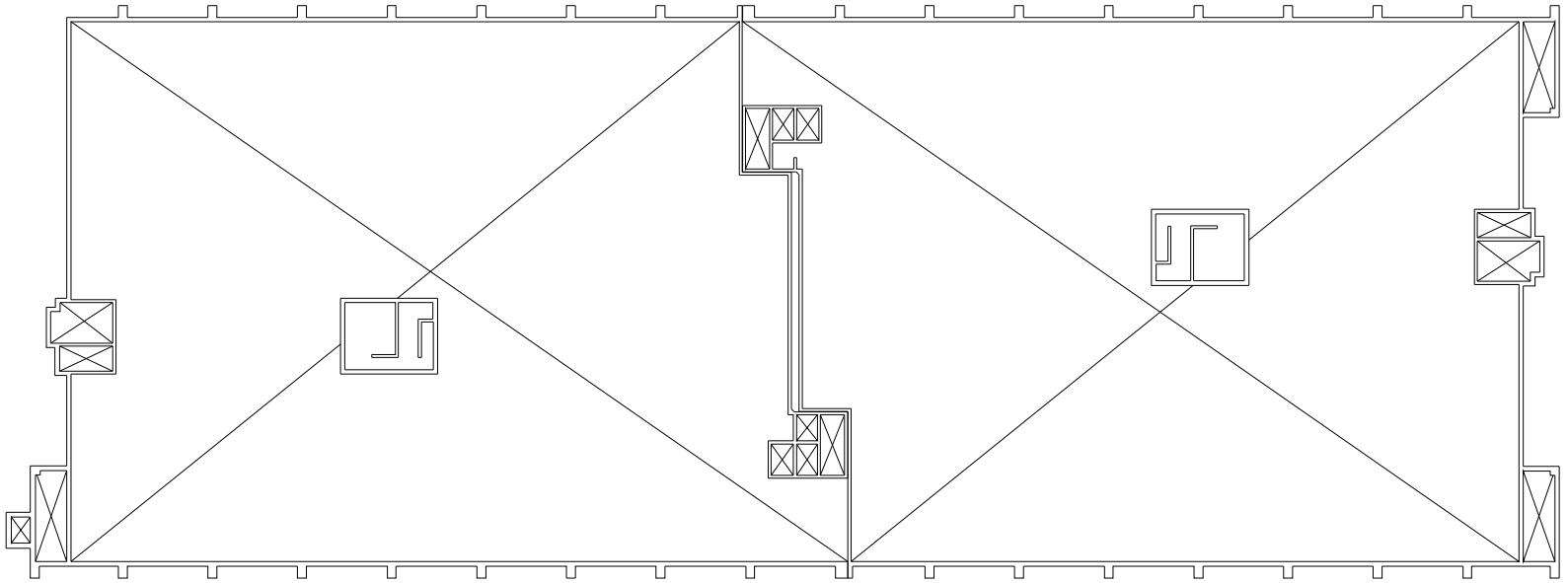
LOCATION	COMPONENT	MATERIAL	CONDITION/QUANTITY			UNIT	FRIABLE (Y/N)	COMMENTS
			GOOD	FAIR	POOR			
Office Corridor	Firestop	Parging Cement	4			EA	Y	
	Mechanical Fitting	Parging Cement	2			EA	Y	
ProFac Washroom	Mechanical Fitting	Parging Cement	4			EA	Y	
ProFac Offices	Firestop	Parging Cement	8			EA	Y	
	Mechanical Fitting	Parging Cement	5			EA	Y	
South Vestibule	Mechanical Fitting	Parging Cement	2			EA	Y	
Generator Room	Exhaust Breeching	Parging Cement	10			m^2	Y	
	Mechanical Straight	Parging Cement	2			LM	Y	
	Mechanical Fitting	Parging Cement	3			EA	Y	
West Mechanical Room	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	45			EA	Y	
	Drain Pipe	Transite	40			LM	N	
East Mechanical Room	Firestop	Parging Cement	10			EA	Y	
	Mechanical Fitting	Parging Cement	27			EA	Y	
	Drain Pipe	Transite	50			LM	N	
Mezzanine Level								
Freight Elevator Mechanical Room (north)	Mechanical Fitting	Parging Cement	2			EA	Y	
	Drain Pipe	Transite	5			LM	N	
Freight Elevator Mechanical Room (south)	Mechanical Fitting	Parging Cement	8			EA	Y	
	Drain Pipe	Transite	5			LM	N	
West Mechanical Mezzanine	Mechanical Fitting	Parging Cement	47			EA	Y	
East Mechanical Mezzanine	Mechanical Fitting	Parging Cement	24			EA	Y	
Penthouse Level								
West Corridor	Mechanical Fitting	Parging Cement	16			EA	Y	
East Corridor	Mechanical Fitting	Parging Cement	17			EA	Y	
West Elevator Mechanical Room	Mechanical Fitting	Parging Cement	2			EA	Y	
West Air Intake Plenum	Firestop	Parging Cement	6		8	EA	Y	
East Air Intake Plenum	Firestop	Parging Cement	3		6	EA	Y	

APPENDIX 3

FLOOR PLANS

GENERAL NOTES:

1. NO ACM's OBSERVED ON THIS LEVEL.



C.D. HOWE BUILDING
ELEVATOR PIT PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

No.	Revision	Date

gec
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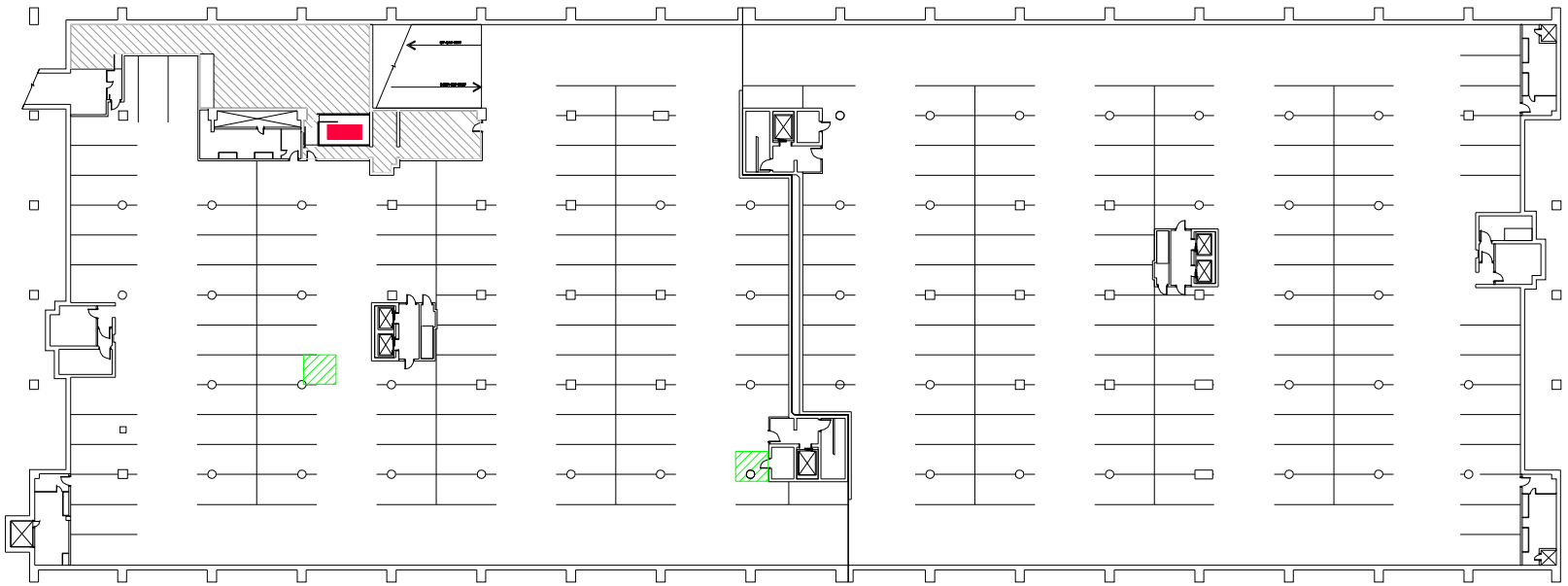
PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
ELEVATOR PIT PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 1 / 22



C.D. HOWE BUILDING
PARKING 3 PLAN

LEGEND:

- ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS
- LOCATION of FRIABLE ACMs
- LOCATION of DAMAGED FRIABLE ACMs

ACM ASBESTOS-CONTAINING MATERIAL

No.	Revision	Date

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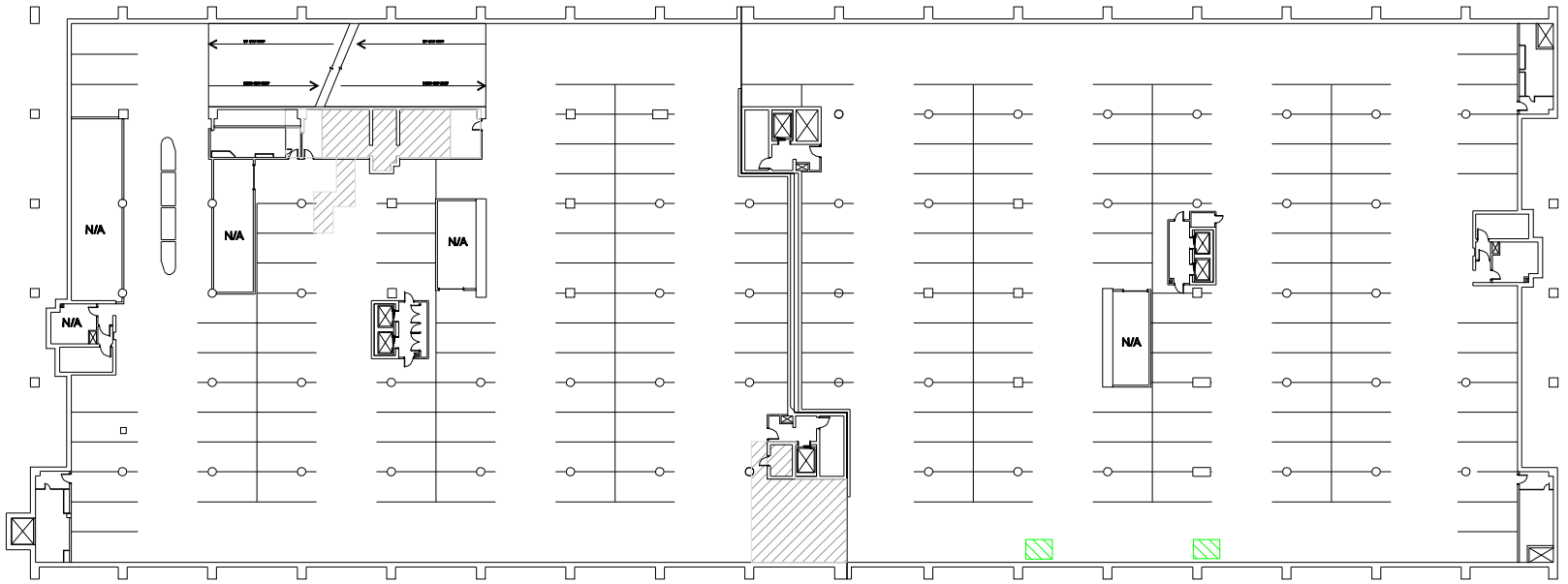
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
PARKING 3 PLAN

DATE **MARCH 2009**
SCALE **NOT TO SCALE**
PROJECT NO. **24732**
DRAWING NO. **2 / 22**



C.D. HOWE BUILDING
PARKING 2 PLAN

LEGEND:

ACM	ASBESTOS-CONTAINING MATERIAL
N/A	NO ACCESS
	LOCATION of FRIABLE ACMs
	ACM MECHANICAL INSULATION AND ACM FIRESTOP AT WALL / CEILING PIPING PENETRATIONS

No.	Revision	Date

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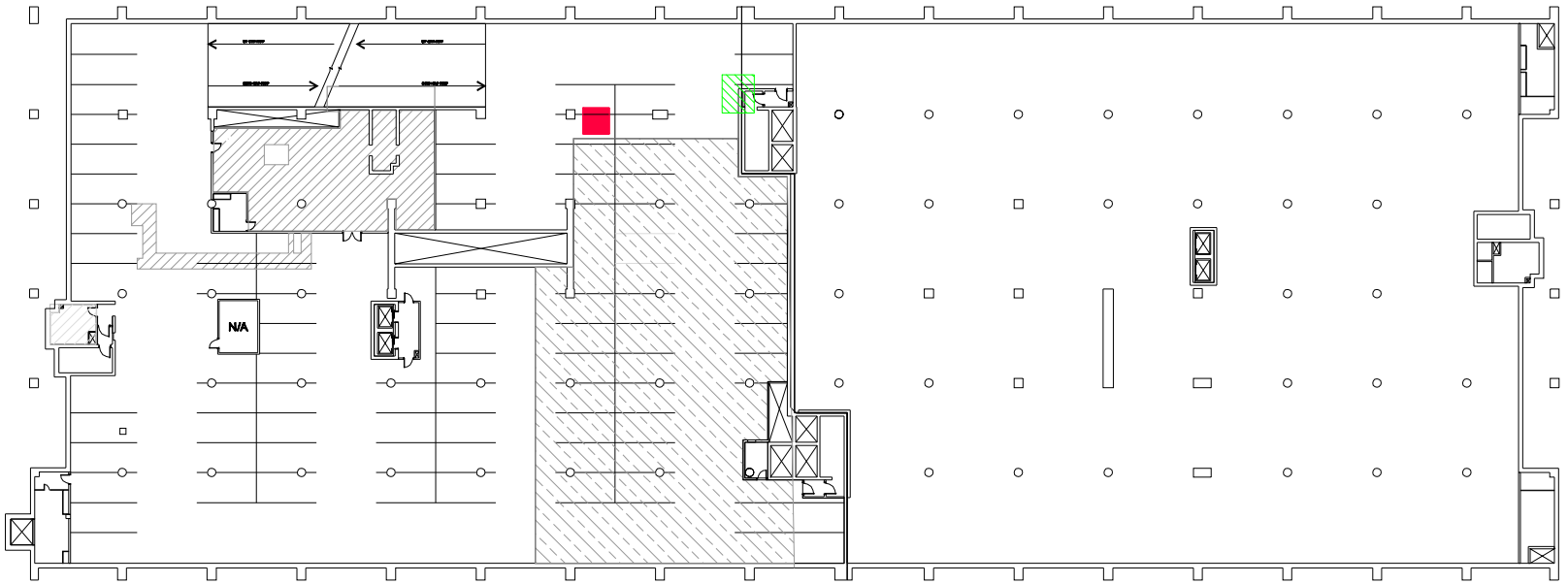
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
PARKING 2 PLAN

DATE: MARCH 2009
SCALE: NOT TO SCALE
PROJECT NO.: 24732
DRAWING NO.: 3 / 22



C.D. HOWE BUILDING
PARKING 1 PLAN

LEGEND:

ACM	ASBESTOS-CONTAINING MATERIAL
N/A	NO ACCESS
	ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS
	ACM ON PIPE FITTINGS
	LOCATION of DAMAGED FRIABLE ACMs
	LOCATION of FRIABLE ACMs

No.	Revision	Date

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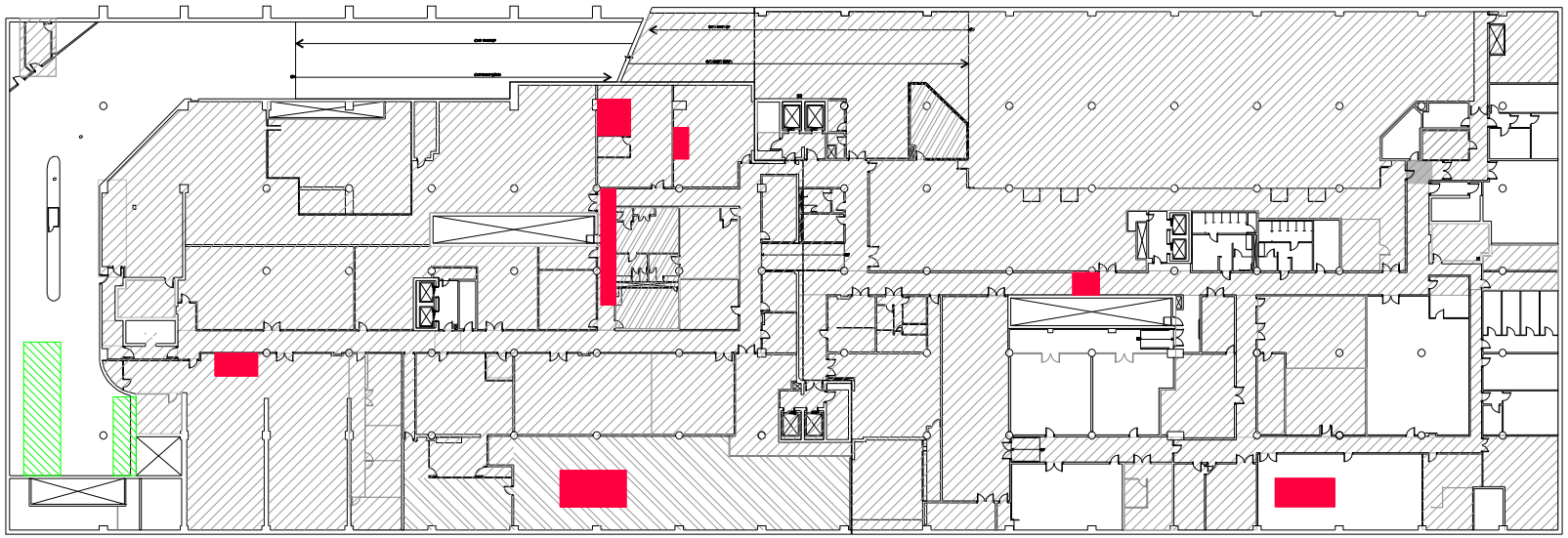
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
PARKING 1 PLAN

DATE: MARCH 2009
SCALE: NOT TO SCALE
PROJECT NO.: 24732
DRAWING NO.: 4 / 22



C.D. HOWE BUILDING
BASEMENT S-1 PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS AND ACM CEMENT BOARD

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS AND ACM FLOOR TILE

LOCATION of DAMAGED FRIABLE ACMs

LOCATION of FRIABLE ACMs

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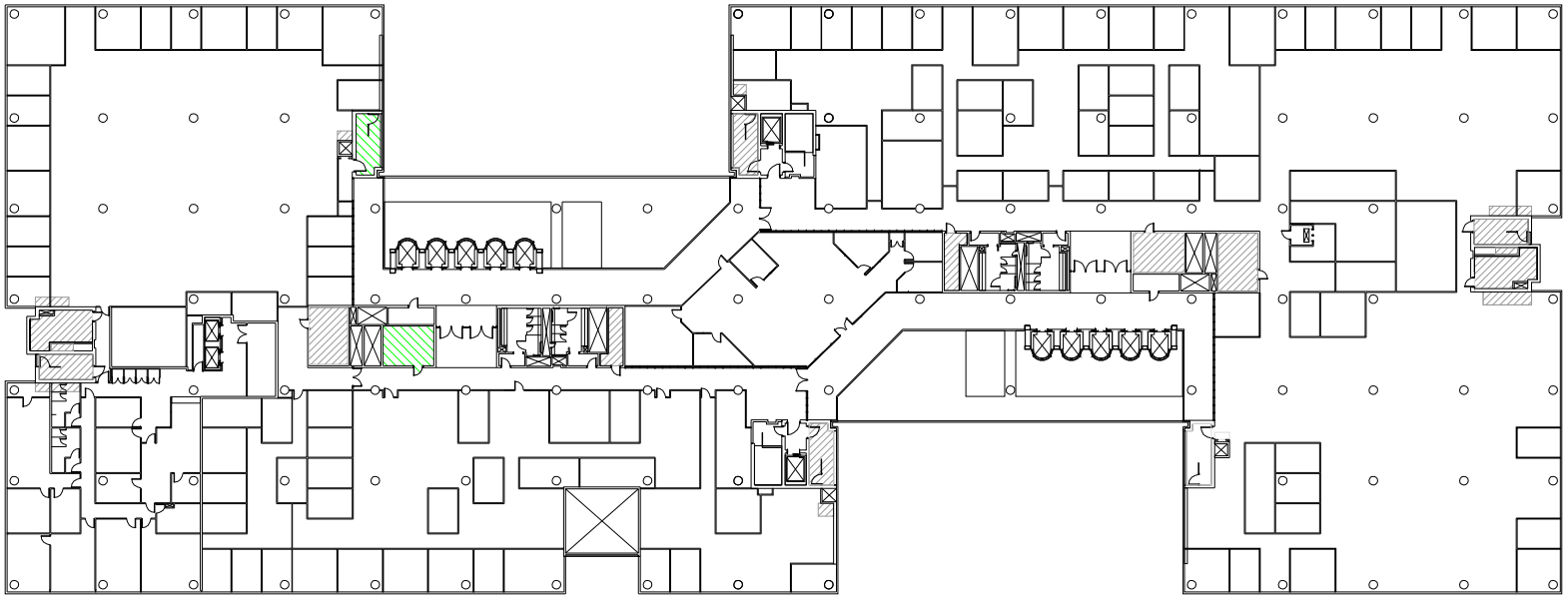
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
BASEMENT S-1 PLAN

DATE: MARCH 2009
SCALE: NOT TO SCALE
PROJECT NO.: 24732
DRAWING NO.: 5 / 22



C.D. HOWE BUILDING
FIRST FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

No.	Revision	Date

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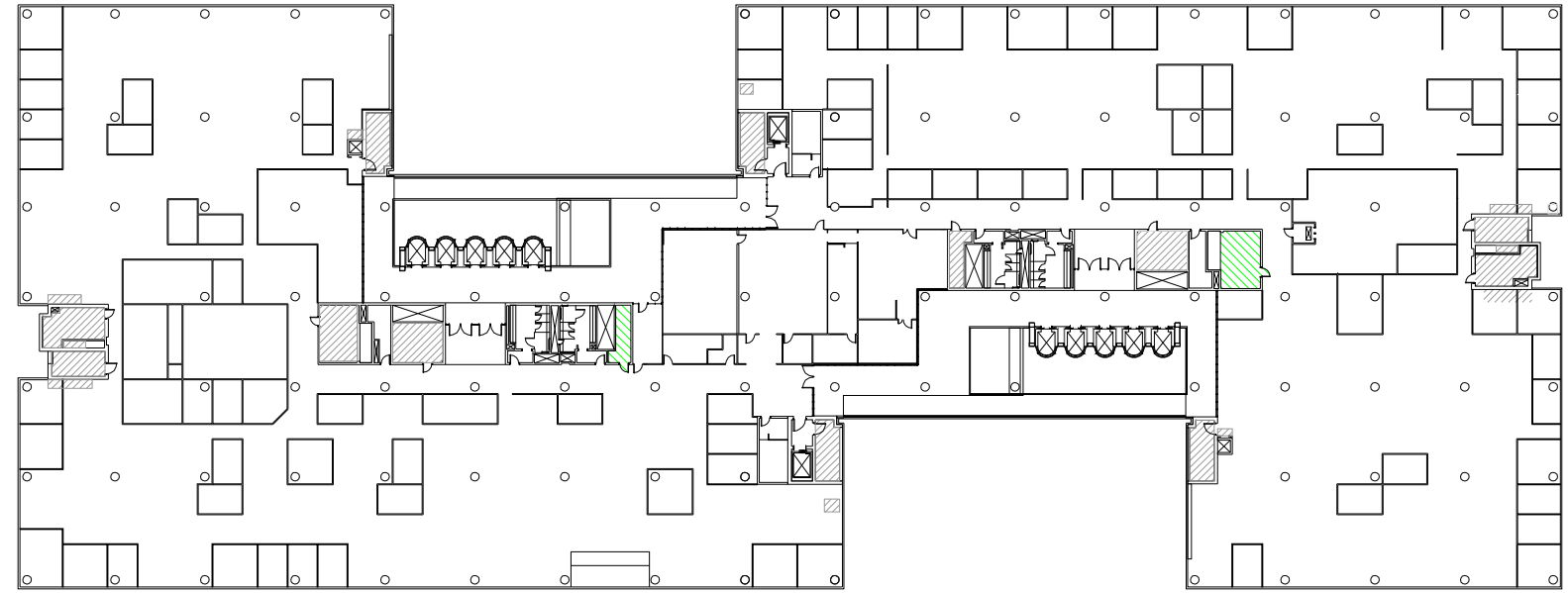
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
FIRST FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 6 / 22



C.D. HOWE BUILDING
SECOND FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

No.	Revision	Date

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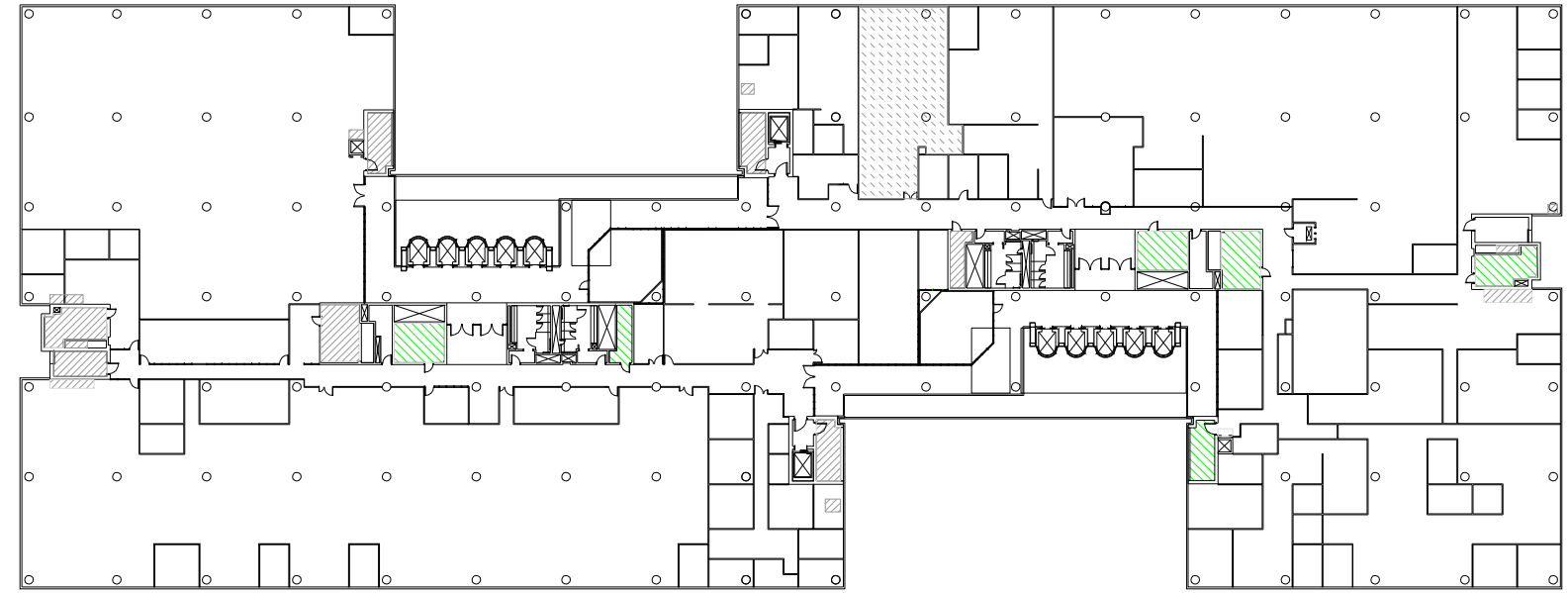
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
SECOND FLOOR PLAN

DATE **MARCH 2009**
SCALE **NOT TO SCALE**
PROJECT NO. **24732**
DRAWING NO. **7 / 22**



C.D. HOWE BUILDING
THIRD FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

ACM FLOOR TILE

LOCATION of FRIABLE ACMs

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PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
THIRD FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 8 / 22

C.D. HOWE BUILDING
FOURTH FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

No.	Revision	Date

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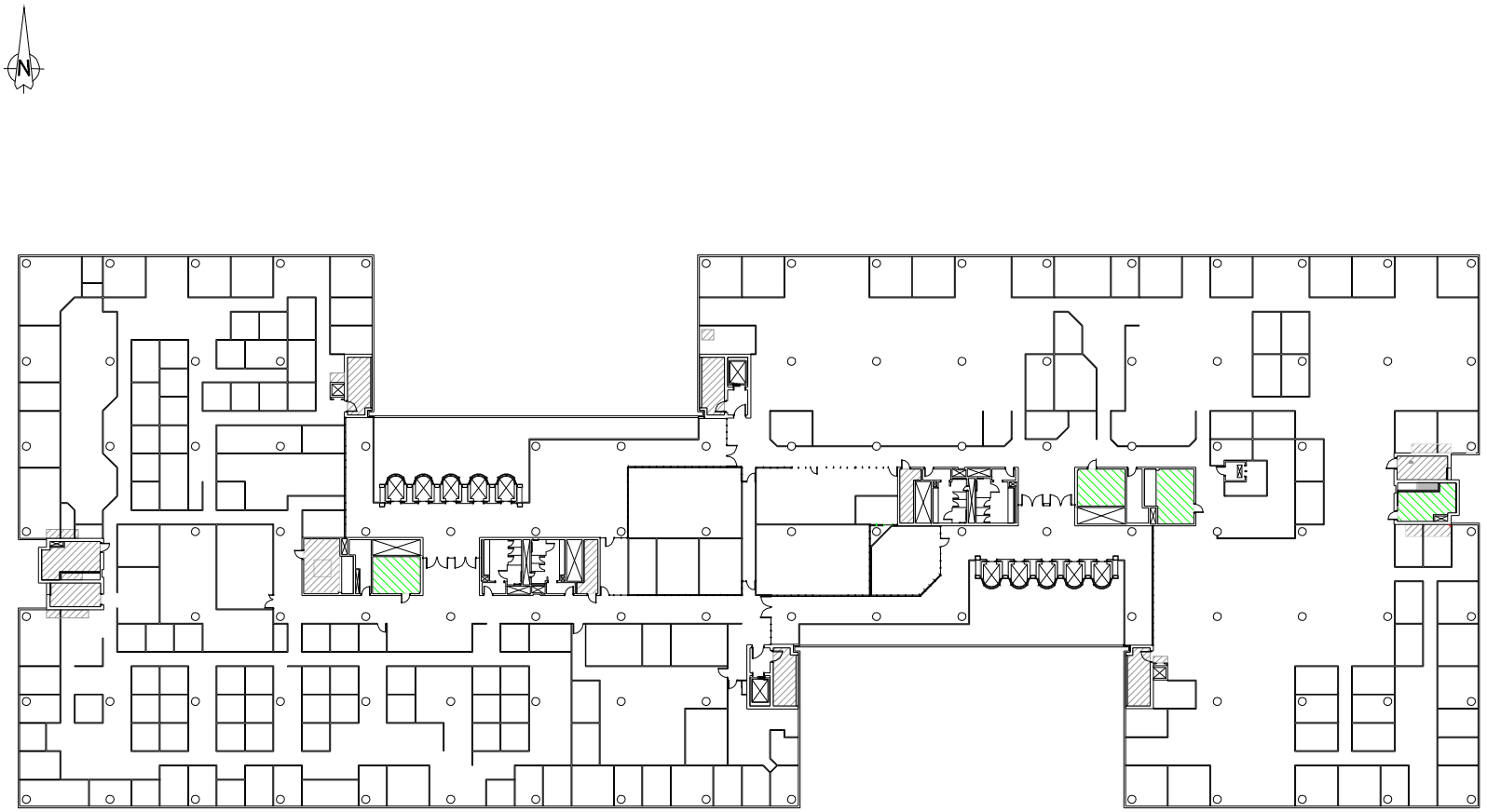
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
FOURTH FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 9 / 22



LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

No.	Revision	Date

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Ottawa, ON., K2C 0P9, (613) 792-1125

PROJECT

2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE

FIFTH FLOOR PLAN

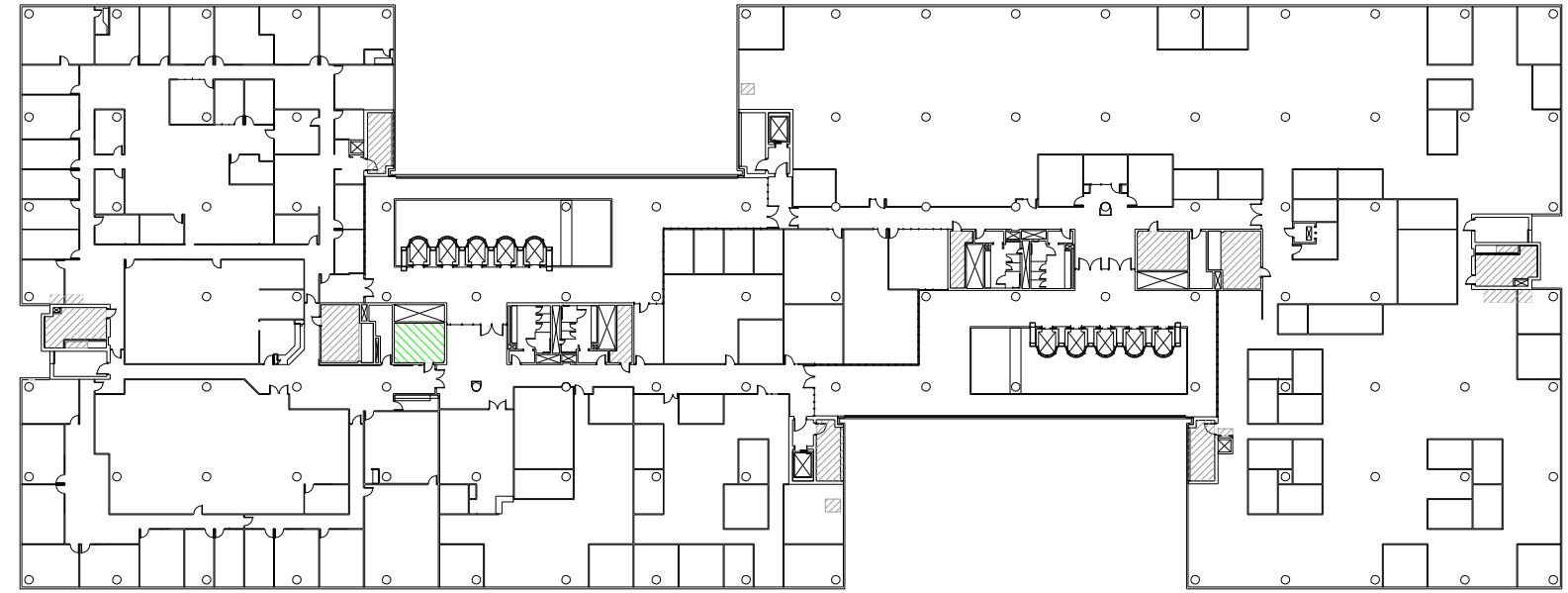
DATE **MARCH 2009**

SCALE **NOT TO SCALE**

PROJECT NO. **24732**

DRAWING NO. **10 / 22**

C.D. HOWE BUILDING
FIFTH FLOOR PLAN



C.D. HOWE BUILDING
SIXTH FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

No.	Revision	Date

gec
greenough environmental consulting inc.
1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-4125

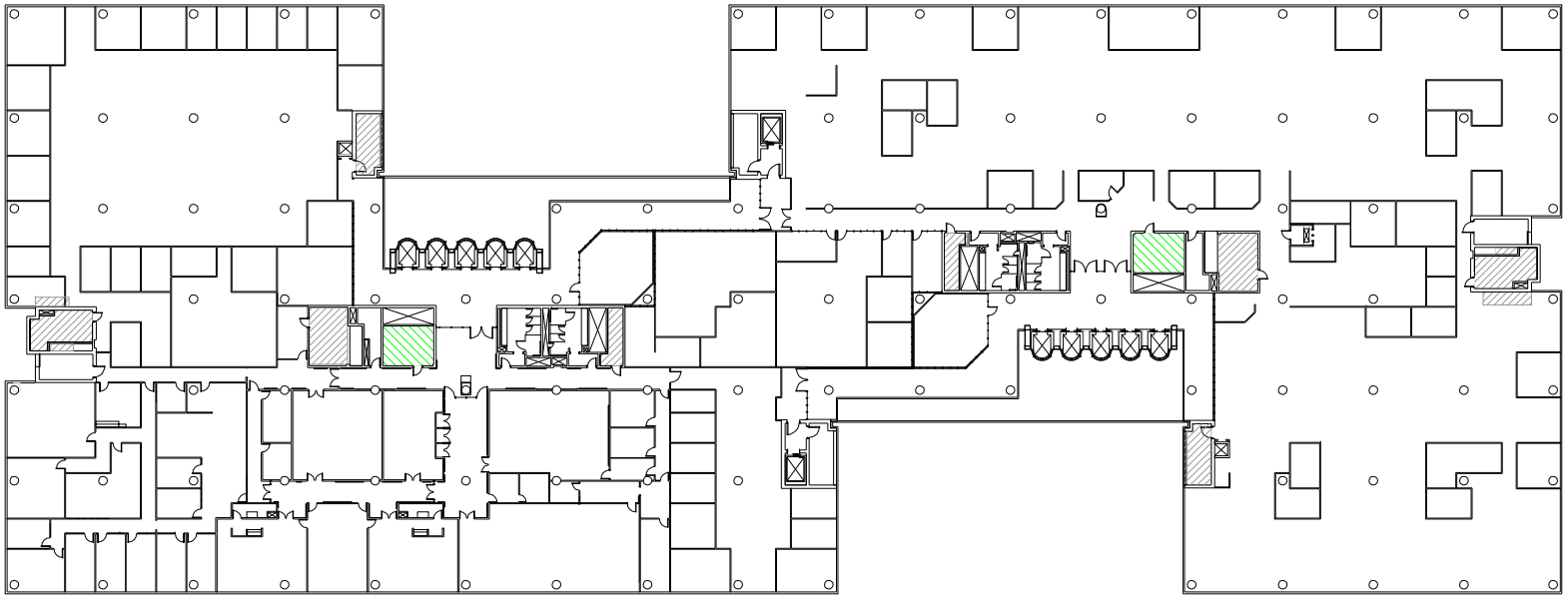
PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
SIXTH FLOOR PLAN

DATE **MARCH 2009**
SCALE **NOT TO SCALE**
PROJECT NO. **24732**
DRAWING NO. **11 / 22**

DRAWING NOTES:

1. NORTHWEST CORNER OF BUILDING NOT ACCESSED DURING ORIGINAL SURVEY - OFFICE OF AUDITOR GENERAL. GEC INSTRUCTED TO OMIT FROM SURVEY.



C.D. HOWE BUILDING
SEVENTH FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

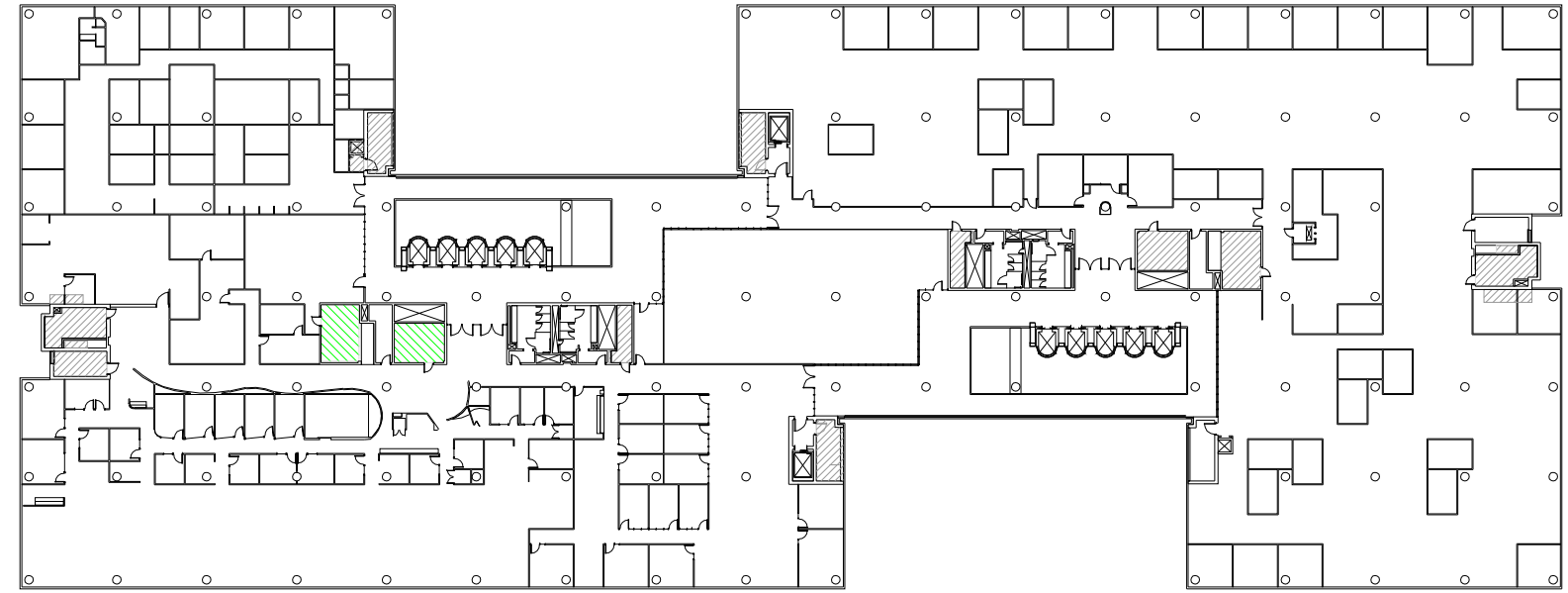
No.	Revision	Date

gec
greenough environmental consulting inc.
1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-4125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
SEVENTH FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 12 / 22



C.D. HOWE BUILDING
EIGHTH FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

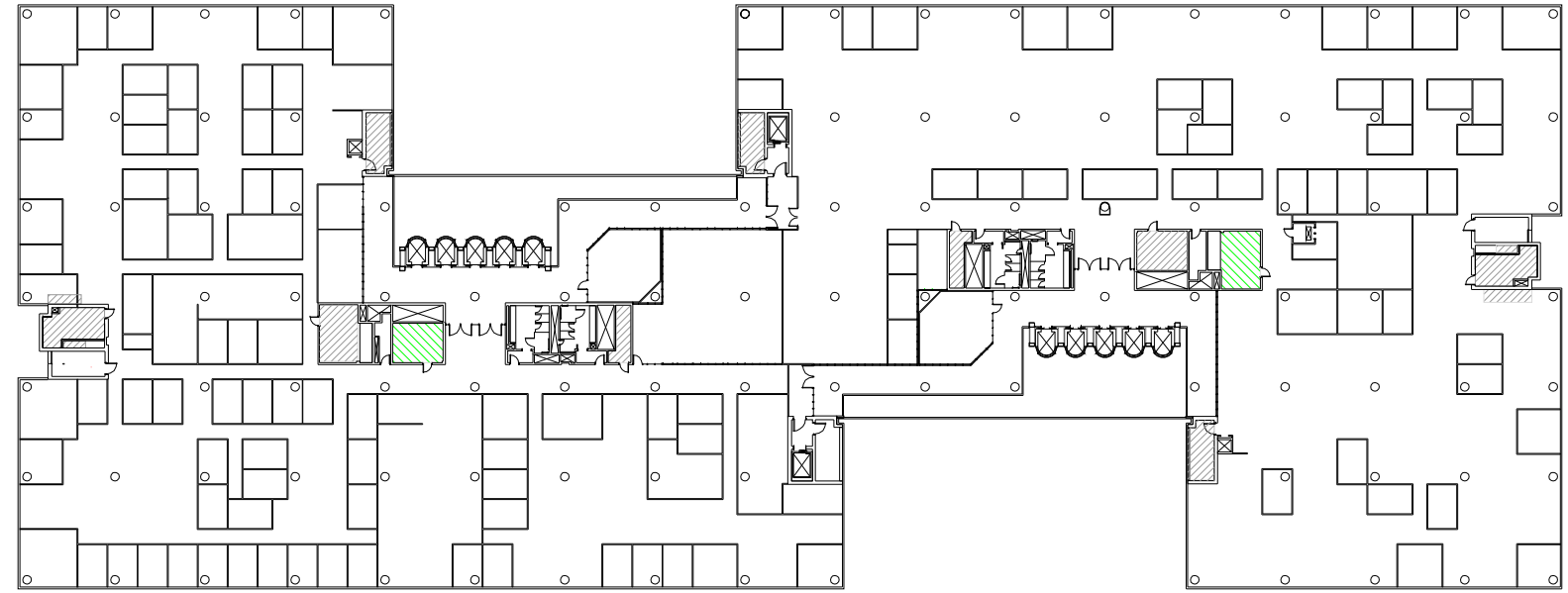
No.	Revision	Date

gec
greenough environmental consulting inc.
1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-4125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
EIGHTH FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 13 / 22



C.D. HOWE BUILDING
NINTH FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

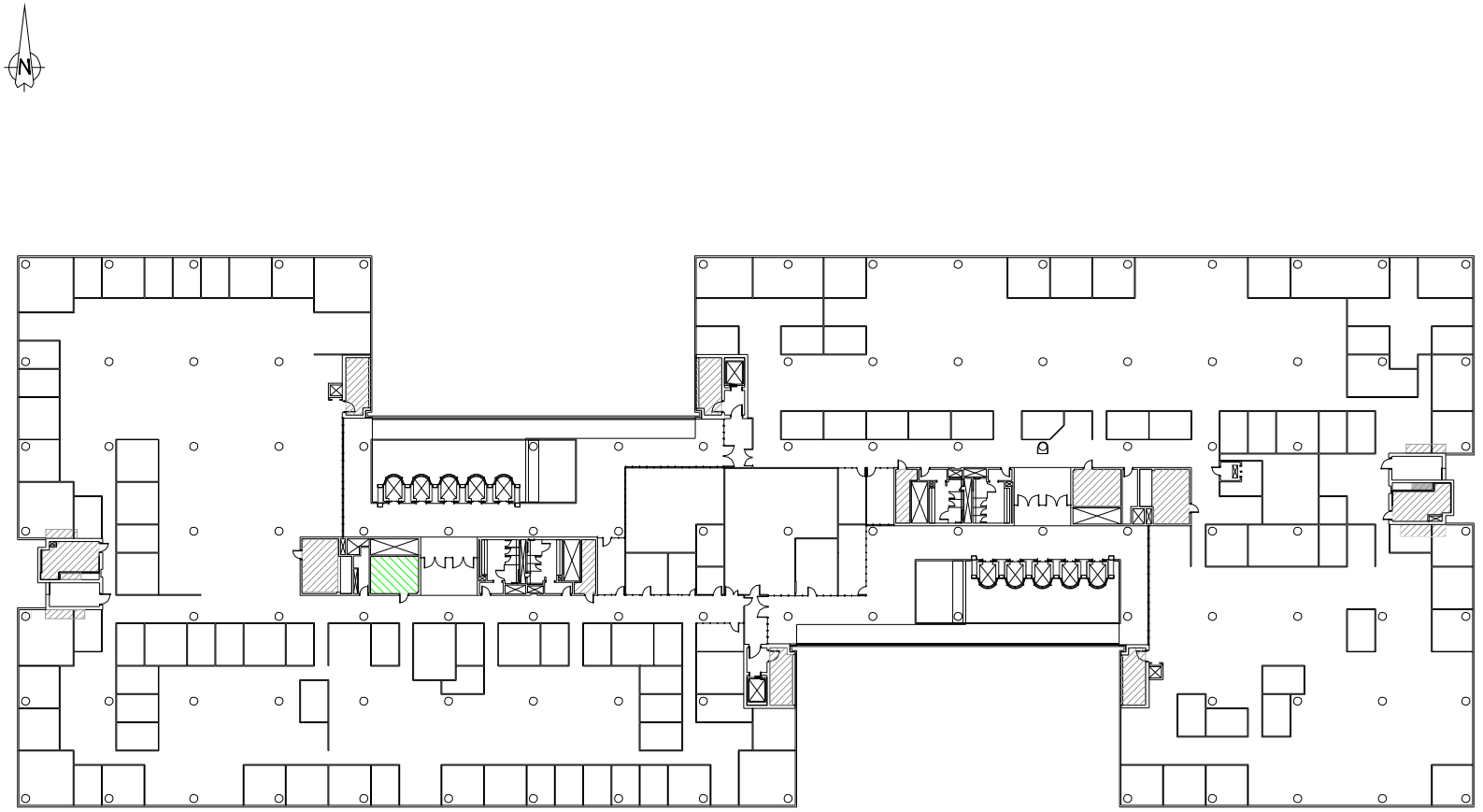
No.	Revision	Date

gec
greenough environmental consulting inc.
1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-4125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
NINTH FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 14 / 22



C.D. HOWE BUILDING
TENTH FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

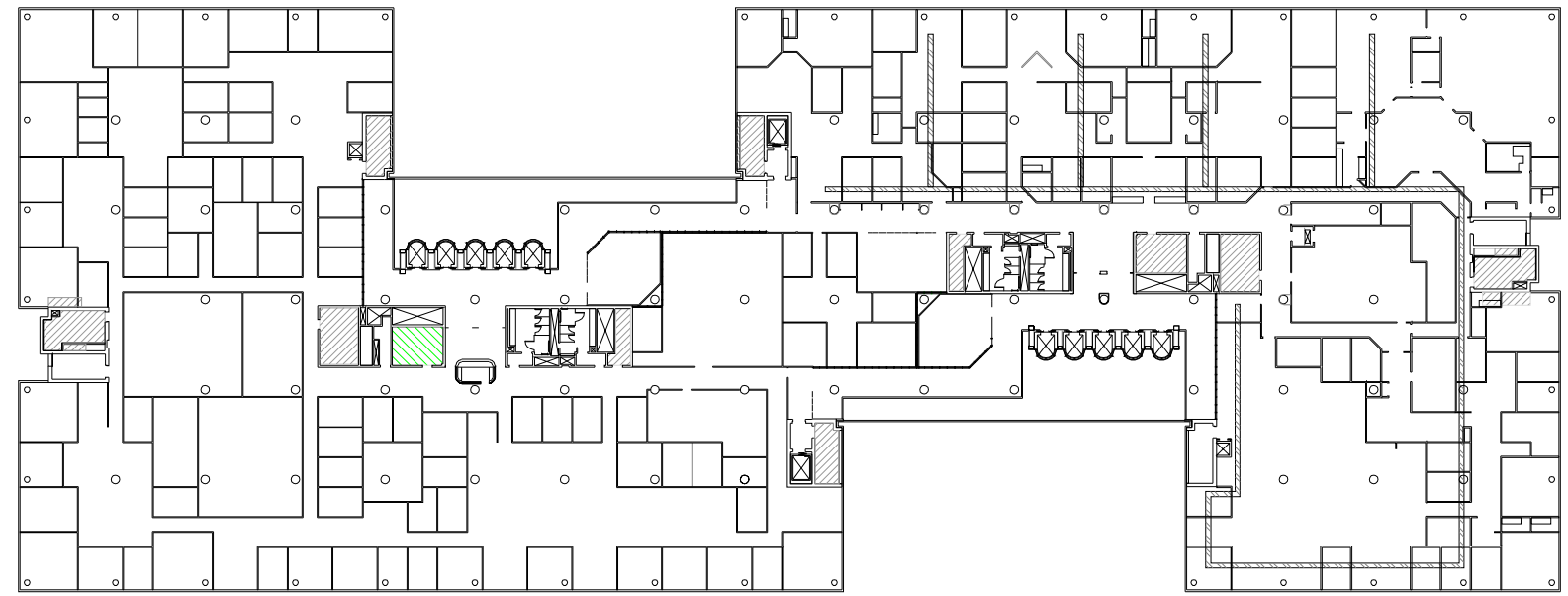
No.	Revision	Date

gec
greenough environmental consulting inc.
1627 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-4125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
TENTH FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 15 / 22



C.D. HOWE BUILDING
ELEVENTH FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

TRANSITE PIPE

LOCATION of FRIABLE ACMs

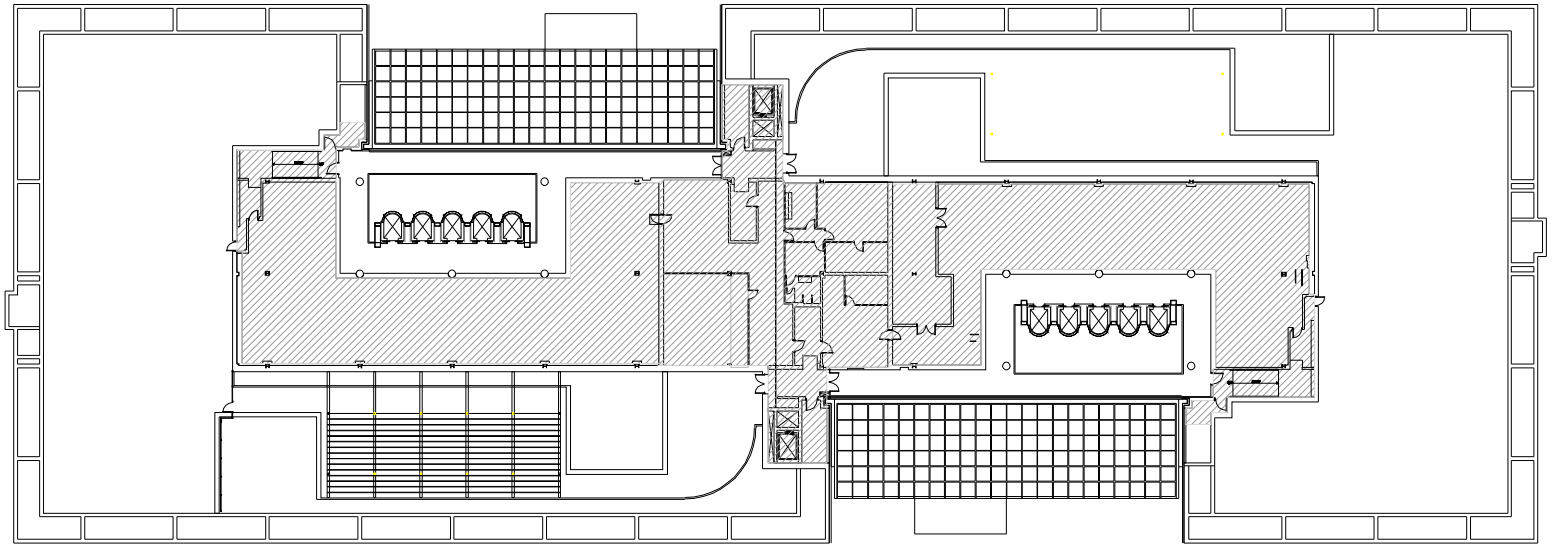
No.	Revision	Date

gec
greenough environmental consulting inc.
1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-4125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
ELEVENTH FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 16 / 22



C.D. HOWE BUILDING
TERRACE FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

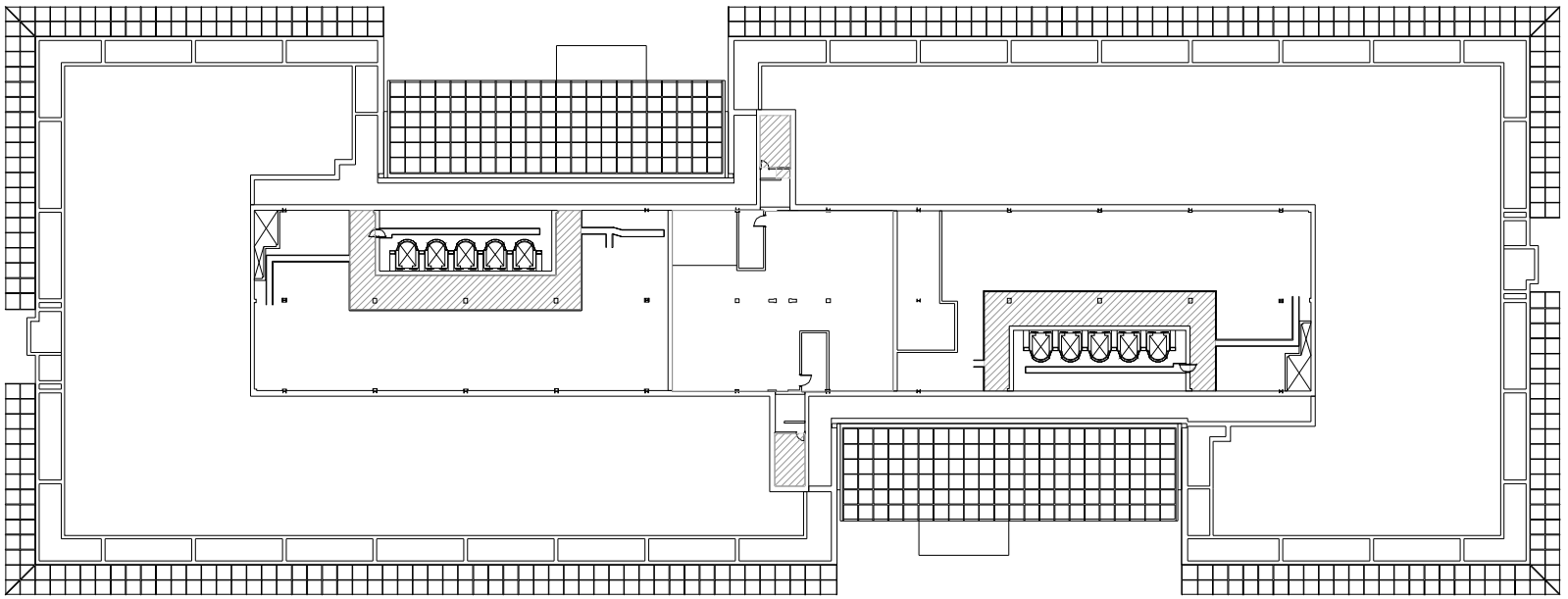
No.	Revision	Date

gec
greenough environmental consulting inc.
1527 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-4125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
TERRACE FLOOR PLAN

DATE MARCH 2009
SCALE NOT TO SCALE
PROJECT NO. 24732
DRAWING NO. 17 / 22



C.D. HOWE BUILDING
MEZZANINE FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

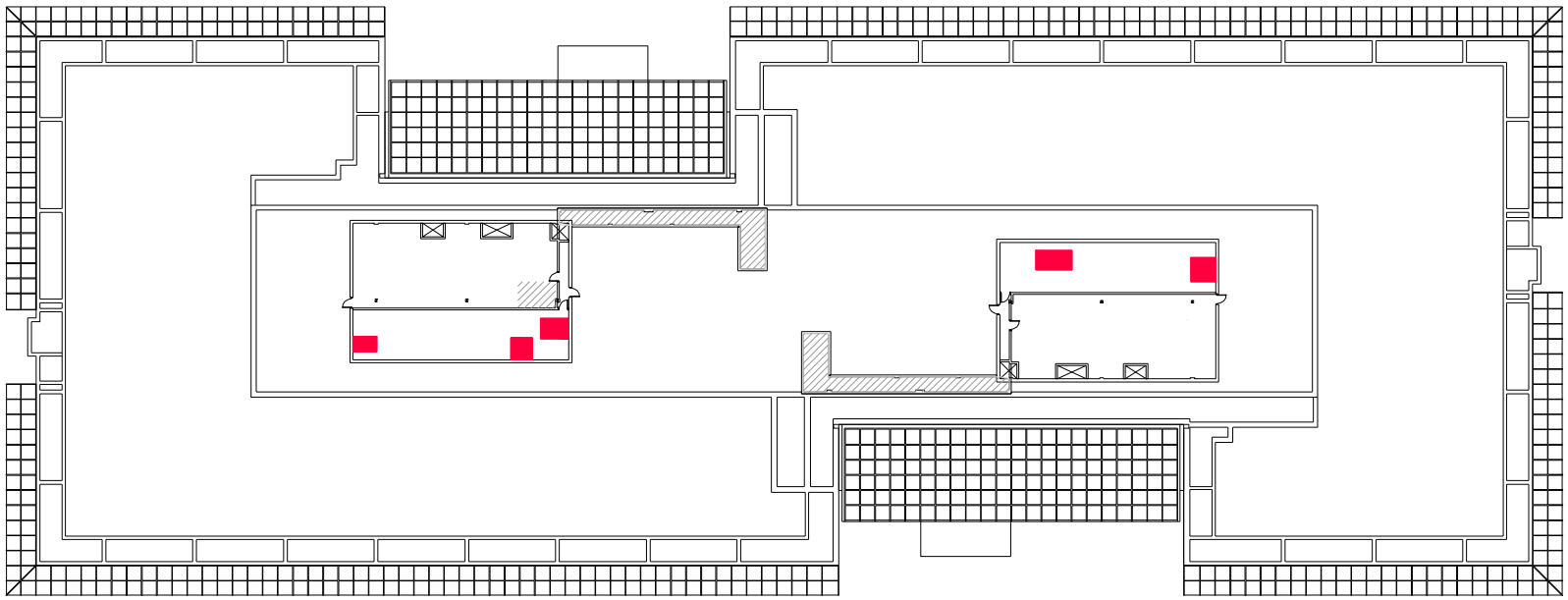
No.	Revision	Date

gec
greenough environmental consulting inc.
1627 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 782-4125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
MEZZANINE FLOOR PLAN

DATE **MARCH 2009**
SCALE **NOT TO SCALE**
PROJECT NO. **2473.2**
DRAWING NO. **18 / 22**



C.D. HOWE BUILDING
PENTHOUSE FLOOR PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of DAMAGED FRIABLE ACMs

No.	Revision	Date

gec

greenough environmental consulting inc.

1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-1125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

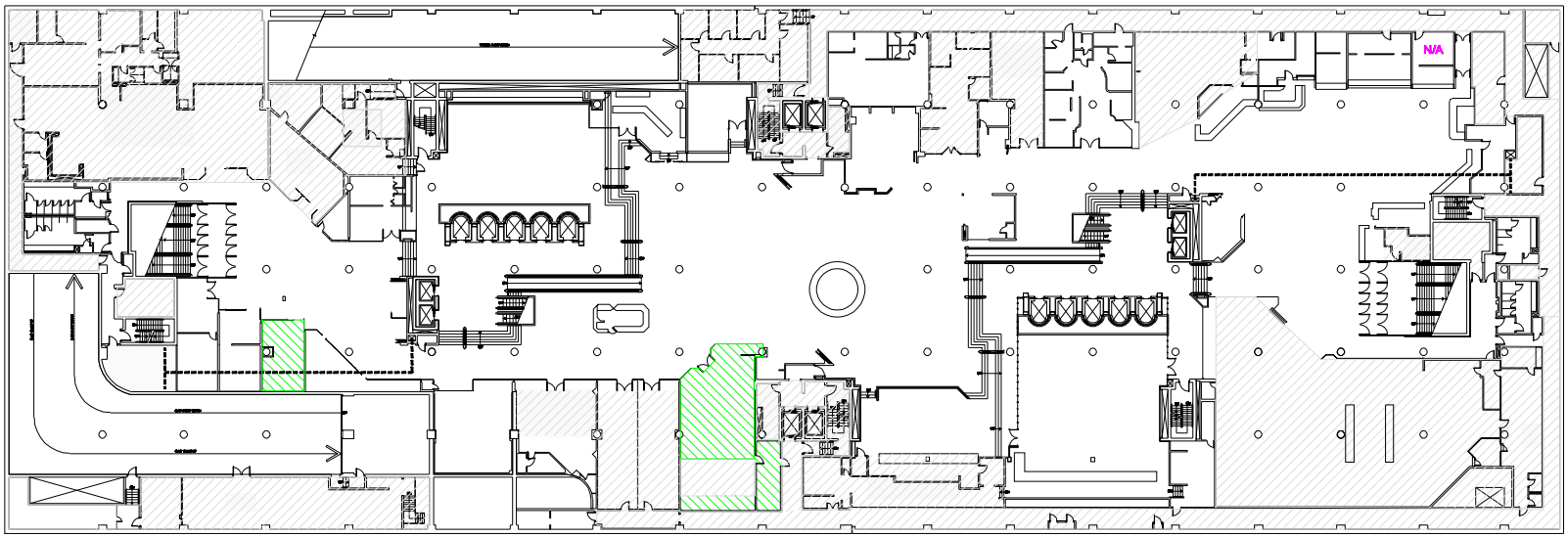
TITLE
PENTHOUSE FLOOR PLAN

DATE **MARCH 2009**

SCALE **NOT TO SCALE**

PROJECT NO. **24732**

DRAWING NO. **19 / 22**



C.D. HOWE BUILDING
LEVEL A COMMERCIAL PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

TRANSITE DRAIN PIPE

DAMAGED FRIABLE ACMs

LOCATION of FRIABLE ACMs

No.	Revision	Date

gec
greenough environmental consulting inc.
1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-4125

PROJECT
2016 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

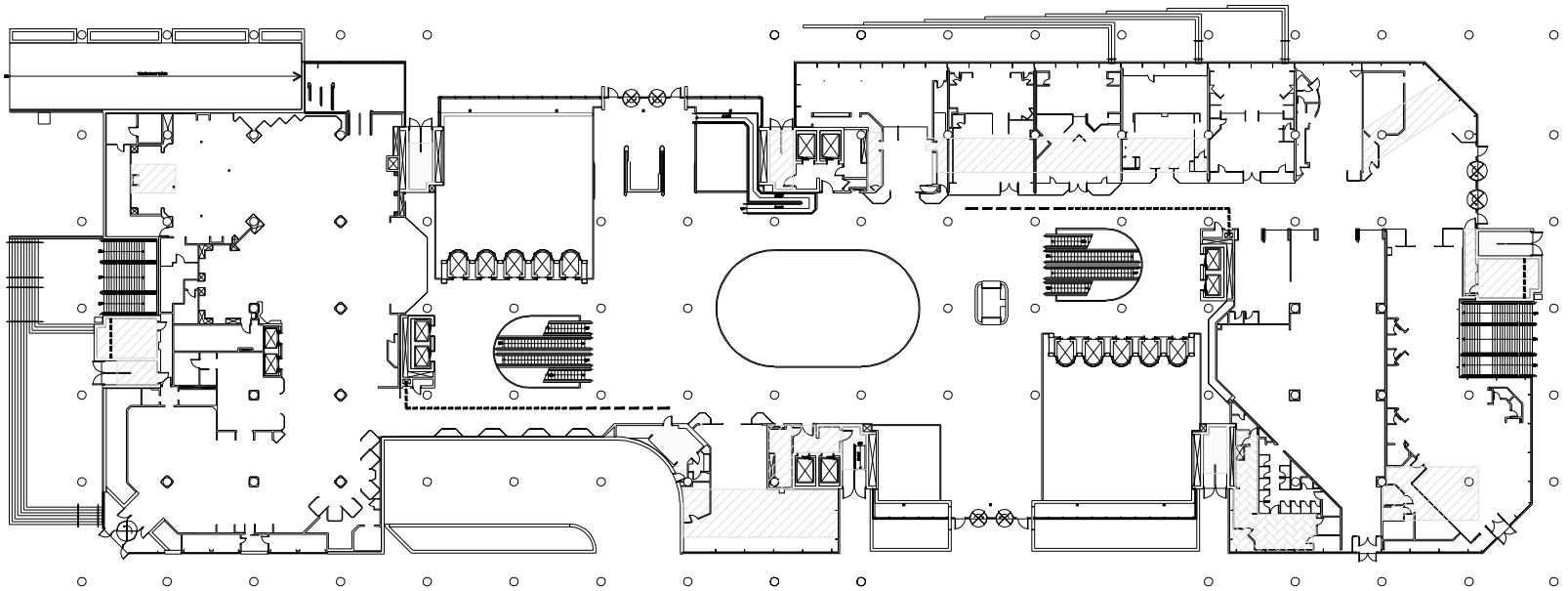
TITLE
LEVEL A COMMERCIAL PLAN

DATE
AUGUST 2016

SCALE
NOT TO SCALE

PROJECT NO.
16-0124

DRAWING NO.
20 / 22



C.D. HOWE BUILDING
LEVEL B COMMERCIAL PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

ACM CEILING TILE AND ACM FLOOR TILE

DAMAGED FRIABLE ACMs

TRANSITE PIPE

(BECOMES A FIBERGLASS RUN)

No.	Revision	Date

gec
greenough environmental consulting inc.
1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-1125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

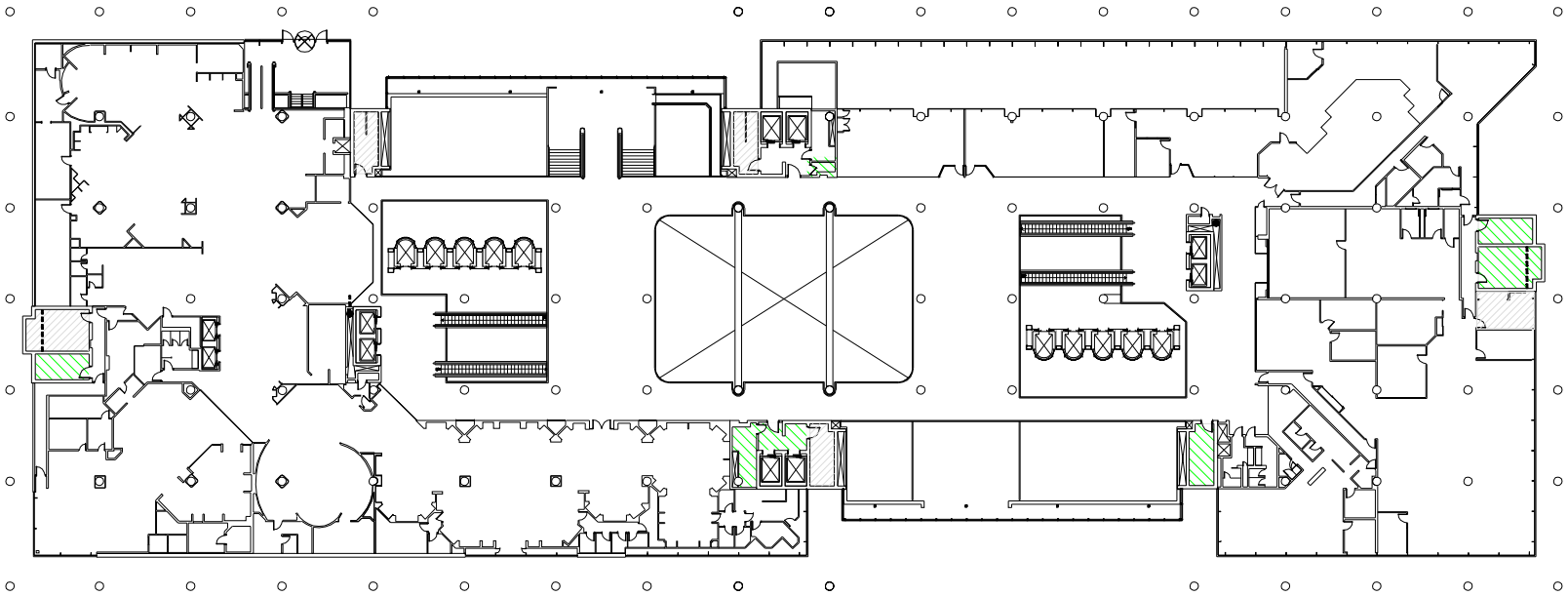
TITLE
LEVEL B COMMERCIAL PLAN

DATE
[illegible]

SCALE
NOT TO SCALE

PROJECT NO.
[illegible]

DRAWING NO.
21 / 22



C.D. HOWE BUILDING
LEVEL C COMMERCIAL PLAN

LEGEND:

ACM ASBESTOS-CONTAINING MATERIAL

ACM ON PIPE FITTINGS AND/OR FIRESTOP AT PIPING PENETRATIONS

LOCATION of FRIABLE ACMs

(BECOMES A FIBERGLASS RUN)

No.	Revision	Date

gec
greenough environmental consulting inc.
1827 Woodward Drive, Suite 110
Ottawa, ON., K2C 0P9, (613) 792-1125

PROJECT
2009 ASBESTOS MANAGEMENT PLAN UPDATE
C.D. HOWE BUILDING
240 SPARKS STREET
OTTAWA, ONTARIO

TITLE
LEVEL C COMMERCIAL PLAN

DATE
[illegible]

SCALE
NOT TO SCALE

PROJECT NO.
[illegible]

DRAWING NO.
22 / 22

10 PART 5 - GENERAL INFORMATION AND REQUIREMENTS

ASBESTOS MANAGEMENT PLAN

10.1 INTRODUCTION TO THE PROGRAM

10.1.1 Objectives

The Asbestos Management Plan is formulated to meet the following objectives:

- To identify all friable asbestos materials. Friable asbestos materials are defined in the Program.
- To maintain all accessible friable asbestos materials in good condition.
- To prevent unintended asbestos exposures to client staff and visitors, contractors, and current Property Management staff.
- To manage all construction and maintenance activities that might disturb asbestos materials.
- To comply with all federal, provincial, territorial, and municipal requirements for occupational health and safety, and environmental control.

10.1.2 Response to Policy Directives

This PWGSC Asbestos Management Plan has been developed to meet Federal and Provincial regulatory requirements and to comply with the pledge of the Environmental Management Plan for Public Works Canada, December, 1992:

"PWC will maintain an asbestos management programme for all PWC owned facilities and will ensure that all asbestos, as a toxic material, is managed and disposed of in accordance with the Canadian Environmental Protection Act."

This Asbestos Management Plan must meet the requirements for employee health protection set in Treasury Board Manual, Human Resources Management, Procedures for Occupational Exposure to Asbestos, Chapter 4-03, 1994 and in the Deputy Minister Directives, Asbestos Management, and Code of Practice (DMP 057).

10.1.3 Regional Asbestos Coordinator

A position of Regional Asbestos Coordinator exists to provide services for asbestos control. Name and telephone number of the Regional Asbestos Coordinator for the National Capital Area is the following:

Regional Asbestos Coordinator
Richard Farmer
Tel: 613-736-3218
Fax: (613)-736-2171

10.1.4 Regulatory Requirements

SNC Lavalin O&M, as per request of PWGSC, has responsibilities as building owner, tenant, landlord, and employer, under the following regulations and statutes:

- Canada Labour Code, Part II
- Canadian Environmental Protection Act
- Provincial and territorial occupational health and safety legislation
- Provincial and territorial environmental protection legislation

10.2 DEPARTMENTAL POLICIES

10.2.1 Definition of Friable Asbestos Products

For the purposes of the AMP, a friable asbestos material is a material that when dry can be crumbled, pulverized or powdered by hand pressure, and includes dust or debris arising from non-friable materials that is or will become crumbled, pulverized or powdered (such as asbestos-containing plaster disturbed by demolition). Friable asbestos-suspect products include, but are not limited to:

- Sprayed asbestos products (fireproofing, thermal insulation, acoustic insulation, or decorative products) applied in 1974 or earlier.
- Acoustic or texture plaster applied in 2005 or earlier.
- Mechanical insulation installed in 1983 or earlier, whether or not jacketed.
- Compressed mineral fibre ceiling tiles installed in 2005 or earlier.

10.2.2 Detection Limit of Bulk Analysis

Asbestos-containing material is defined as any material found to contain asbestos at or above the detection limit of asbestos fibres set provincially, as determined by the standard Polarized Light Microscopy method for the analysis of bulk samples. The provincial detection limits are as follows:

RECOGNIZED LIMITS FOR PLM METHOD

Province (Region)	Detection Limit
Newfoundland Nova Scotia Prince Edward Island New Brunswick Alberta British Columbia	1.0%
Ontario (includes part of National Capital Area) Saskatchewan	0.5%
Quebec (includes part of National Capital Area) Manitoba	0.1%

PWGSC will adopt the above Provincial regulated limits.

10.3 ASBESTOS INVENTORY AND ASSESSMENT

SNC Lavalin O&M has arranged for a complete asbestos re-assessment of asbestos materials.

This survey to provide the up to date Asbestos Inventory and Assessment and has been performed on a room-by-room basis. The inventory information is located in part two (2) of this document. This inventory allows for easy retrieval for reports to be submitted as and when required.

The survey addresses all of the friable asbestos materials, as defined in the Asbestos Management Plan (AMP), plus applications of floor finishes and asbestos-reinforced cement products (i.e., asbestos cement sheeting and piping).

The evaluation of friable asbestos materials follows the criteria given in Appendix A.

The analysis of bulk samples was performed to the detection limits given in Section 2.2, by a laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) of the U.S. National Institute of Science and Technology (NIST) for Polarized Light Microscopy analysis of asbestos materials.

The survey was conducted by Ms. Lou Ann Lee of InAIR Environmental Ltd. Field work was completed in two phases: (1) East and West Towers, building service level, penthouses and parking garages (2) commercial levels C1, C2 and C3. The survey was carried out on August 1st

and 2nd 2012 and October 31st and November 1st, 2012. InAIR's Project Manager, Ms. Trudy Lucas oversaw the work and developed the AMP.

SNC Lavalin O&M will arrange for copies of the completed Asbestos Inventory and Assessment reports and annual re-assessments to be held by the following persons and locations:

- Property Manager
- A location in the building, accessible to maintenance staff and contractors.
- Copies will also be retained by SNC Lavalin O&M.

The Property Manager will arrange for removal or repair of damaged or deteriorated friable asbestos materials identified by the Asbestos Inventory and Assessment.

10.4 RE-ASSESSMENT

The Property Manager will arrange for a yearly re-assessment of all friable asbestos materials in exposed accessible locations.

Copies of the re-assessment reports will be distributed to holders of the Asbestos Inventory and Assessment reports. Copies will be inserted into part 4, Various Reports, of this document.

The Property Manager will to arrange for removal or repair of damaged or deteriorated friable asbestos materials identified by the yearly re-assessments and when Type 3 removal and repairs are required.

10.5 NOTIFICATION

10.5.1 General Notification

Under the Canada Labour Code, government employees have to be informed of any asbestos in facilities they work in. To this, Property Manager will provide a written interim notice of the presence of friable asbestos materials, as known at the time the Asbestos Management Plan (AMP) comes into effect, and will ensure written notice is provided to the following groups:

- The building's Health and Safety Committees representatives;
- Maintenance employees;
- Contractors with standing agreements who may enter parts of the building where friable asbestos materials may be present, i.e., telecommunications firms, boiler maintenance contractors. Refer to Appendix I for a contractor notification and acknowledgement form.

The Property Manager will retain copies of these notices.

10.5.1.1 Notification Requirements for Planned Type 3 Asbestos Work

DO NOT START an asbestos removal project, testing and/or maintenance without notifying the clients and appropriate authorities.

Client Notification

The clients should be informed by the Property Manager or his/her representative.

Notification of Authorities

The following authorities should be contacted;

(a) Labour Canada
Regional Office of Labour Canada, Ottawa District Manager
Mayfair Building, 6th Floor 1355 Bank Street,
Ottawa, ON K1H 8K7
Phone: (613) 998-6842
Fax: (613) 998-9083

(b) Occupational and Environmental Health Services (Health Canada)
Occupational Health and Safety Agency
171 Slater Street, 12th Floor
Ottawa, ON K1A 0L3
Phone: (613) 954-6541
Fax: (613) 954-6311

10.6 TRAINING

All C.D. Howe Facilities Management Personnel, who have responsibilities under the Asbestos Management Program, must have Asbestos Awareness Training. The training is available in modules, so that staff can receive the training necessary for their particular duties. This is also to prevent duplication with previous training. The Facilities Manager will maintain records of training. Record of such training will be kept in the employee's file.

10.6.1 Asbestos Procedures Training

Training will be provided to maintenance workers who will perform Type 1 or Type 2 disturbance of asbestos products. The training will include an introduction to the Asbestos Inventory and Assessment reports, health hazards of asbestos exposure, regulations, the Asbestos Management Plan, Type 1 and Type 2 work practices, and disposal procedures.

Respirator training will be provided to all those who will perform Type 2 work, and all those who will perform Type 1 work and request a respirator. The training will cover limitations of use, facial hair, fitting, and maintenance of respirators. Persons provided with a respirator will be fit-tested with the assigned respirator, using the CSA irritant smoke method. Appendix E gives notes on respirator fitting and maintenance. Persons who will wear tight-fitting respirators will be required to be clean-shaven where the respirator seals to the face. Depending on the extent of asbestos work to be undertaken and case-by-case evaluation, the Facility Manager may provide workers with facial hair alternate respirators which do not require a facial seal. Reference should be made to the new CSA Z94.4, Selection, Care and Use of Respirators.

10.6.2 Asbestos Awareness Training

Training will be provided to all maintenance and operations personnel who may work around asbestos materials, or who supervise workers or contractors. The training will introduce the Asbestos Inventory and Assessment reports, health hazards of asbestos exposure, the Asbestos Management Plan, and emergency procedures.

10.7 CLASSIFICATION OF ASBESTOS WORK

Asbestos work will be classified as Type 1, 2, or 3 according to the following criteria based on the Occupational Health and Safety Act – Ontario Regulation 278/05 Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations:

10.7.1 TYPE 1 WORK

- Installing or removing ceiling tiles that are ACM, if tiles cover an area less than 7.5 square metres and are installed or removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
- Installing or removing non-friable ACM (other than tiles), if material is removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
- Breaking, cutting, drilling abrading, grinding, sanding, or vibrating non-friable ACM if, material is wetted to control the spread of dust and fibres and the work is done by non-powered hand tools.
- Removing less than one square metre of drywall in which joint-filling compounds are ACM.
- Collecting samples of suspect friable ACM.

10.7.2 TYPE 2 WORK

- Removing all or part of a false ceiling to obtain access to a work area, if ACM is likely to be lying on the surface of the false ceiling.
- Removal or disturbance of one square metre or less of friable ACM during the repair, alteration, maintenance or demolition of all or part of machinery or equipment or a building, aircraft, locomotive, railway car, vehicle or ship.
- Enclosing friable ACM.
- Applying tape or sealant or other covering to pipe or boiler insulation that is ACM
- Installing or removing ceiling tiles that are ACM, if tiles cover an area 7.5 square metres or more and are installed or removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
- Breaking, cutting, drilling abrading, grinding, sanding, or vibrating non-friable ACM if, material is not wetted to control the spread of dust and fibres and the work is done by non-powered hand tools.
- Removing one square metre or more of drywall in which joint-filling compounds are ACM.
- Breaking, cutting, drilling abrading, grinding, sanding, or vibrating non-friable ACM if, material if the work is done by means of power tools that are attached to dust-collecting devices equipped with HEPA filters.
- Removing insulation that is ACM from a pipe, duct or similar structure using a glove bag.
- Cleaning or removing filters used in air handling unit equipment in a building that has sprayed fireproofing that is ACM.
- An operation that may expose a worker to asbestos and is not classified as Type 1 or Type 3 operation.

10.7.3 TYPE 3 WORK

- Removal or disturbance of more than one square metre of friable ACM during the repair, alteration, maintenance or demolition of all or part of machinery or equipment or a building, aircraft, locomotive, railway car, vehicle or ship.
- The spray application of an encapsulant or sealer to friable asbestos surfacing materials.
- Cleaning or removing air handling equipment, including rigid ducting but not including filters, in a building that has sprayed fireproofing that is ACM.
- Repair, alteration, or demolition all or part of a boiler, furnace, kiln, or similar equipment with asbestos-containing refractory materials.
- Breaking, cutting, drilling, abrading, grinding, sanding, or vibrating non-friable ACM if the work is done by means of power tools that are not attached to dust-collecting devices equipped with HEPA filters.
- Repairing, altering or demolishing all or part of any building in which asbestos is or was used in the manufacture of products, unless the asbestos was cleaned up and removed before March 16, 1986.
- Work on ceiling tiles, drywall or friable ACM is classified according to the totals work area on which work is done consecutively in a room or enclosed area, even if the work is divided into smaller jobs.
- Work not permitted under Type 1 and Type 2 work.

10.8 IDENTIFICATION AND CONTROL OF ASBESTOS-RELATED WORK

10.8.1 Maintenance Work

The Property Manager or a designate is responsible to review all maintenance work for the possibility of disturbance of asbestos materials.

If there are friable asbestos materials in the area of maintenance, but the Property Manager or designate judges that the friable materials will not likely be disturbed by the maintenance work, the Property Manager must caution the maintenance staff or the contractor of the presence of friable asbestos materials.

If there is friable or non-friable asbestos materials in the area of maintenance, and this will be disturbed by the intended work, the Property Manager or designate will classify the work as Type 1, Type 2, or Type 3.

The Property Manager will be responsible to review or direct all maintenance work that will require Type 3 asbestos work.

At the completion of any maintenance work which involves asbestos removal or repair, a report will be provided to the Property Manager.

10.8.2 Asbestos-Related Work Record

The supervisors of SNC Lavalin O&M performing Type 2 or Type 3 work will be responsible to ensure that a record is completed for each period of work. These records shall be copied to the employee's employment file, and a copy forwarded to the Property Manager. Appendix G gives an example of an Asbestos-Related Work Record.

All SNC Lavalin O&M who will perform Type 2 or Type 3 work shall be medically examined through the facilities of Health Canada. The examinations shall be carried out in accordance with the Treasury Board Occupational Health evaluation standard.

Documentation should also be placed on the employee’s medical file that they are asbestos workers.

10.8.3 Renovations and Construction Work

The Project Manager will review the asbestos survey reports prior to all renovation and construction work for the possible impact on asbestos materials.

Prior to projects that includes the demolition of plaster, testing of the plaster for asbestos will be undertaken unless previous comprehensive testing in the building has shown this plaster to be asbestos-free. Records of plaster test results will be maintained by the Property Manager with the asbestos surveys of the building.

If there are friable asbestos materials in the renovation area, but the Project Manager judges that the friable materials will not likely be disturbed by the maintenance work, the Project Manager or must notify, in writing, the maintenance staff or the contractor of the presence of friable asbestos materials.

In Ontario, the Project Manager will provide a Designated Substance report (a prescribed listing of asbestos, lead, silica, and other hazardous materials) prior to tendering the work.

The Project Manager will classify the disturbance of asbestos materials as Type 1, Type 2, or Type 3.

The Project Manager, will arrange for specifications to be prepared for asbestos work, following the National Master Specification, with alterations for special provincial requirements, where needed.

At the completion of project work which alters the amount or condition of friable asbestos materials, the Asbestos Coordinator will alter the Asbestos Survey and Assessment report to reflect the changes. This alteration will be noted in the building survey and distributed to holders of the Asbestos Inventory and Assessment reports.

10.8.4 Type 1, Type 2, and Type 2 - Glove Bag Procedures

Appendices B, C, and D, give standard practices for performing Type 1, Type 2, and Type 2 - glove bag asbestos work, respectively.

10.8.5 Project Inspection and Air Monitoring

Type 1 and Type 2 work will be subject to the normal maintenance or project inspection provided to non-asbestos work by PWGSC. Asbestos specific air monitoring or inspection will not be mandatory.

The Project Manager will arrange for inspection and air monitoring of Type 3 asbestos projects. In an occupied building or a building in use, inspection and air monitoring will be provided on a daily basis. If the building is not occupied, inspection shall be at critical stages of the work unless provincial standards require daily inspection (Quebec and British Columbia).

Type 3 removal projects will be subject to final clearance air testing. The clearance criteria will be a maximum fibre concentration of 0.01 fibres per cubic centimetre of air, as determined by the standard PCM method. The clearance may be performed by Health Canada or a third party contractor. The NIOSH method 7400 will be used.

If work inside the enclosure fails a first test using PCM method, the samples may be subjected to a second analysis using transmission electron microscopy (TEM). TEM shall be carried out in accordance with NIOSH method 7402. The clearance criteria will be the average concentration of asbestos fibres in the samples collected inside the enclosure must be statistically less than the average concentration of asbestos fibres in the samples collected outside the enclosure or if there is no statistical difference between the two average concentrations the clearance air test will pass.

10.8.6 Emergency Asbestos Work

Procedures for immediate response to floods, pipe breaks, ceiling collapses, or other emergencies that affect asbestos materials, are given in Appendix F. The general principles of emergency asbestos work are to protect the responder and prevent tenants and visitors from having an asbestos exposure.

10.9 AIR MONITORING AND BULK ANALYSIS

10.9.1 Air Monitoring for Hazard Assessment

Air monitoring will not be used as the primary resource for the assessment of hazard from asbestos materials. If the Property Manager is requested to perform air monitoring under normal conditions of building use (i.e., away from asbestos work) the measurements will be made by the Transmission Electron Microscopy (TEM) analytical method. Asbestos air monitoring will be conducted by a qualified Asbestos Consultant.

10.9.2 Air Monitoring during Asbestos Work Procedures

The Property Manager may arrange for air monitoring during Type 3 work, to confirm the safety of work practices and the effectiveness of work area isolation. These measurements would be made by the Phase Contrast Microscope (PCM) method recognized by Labour Canada and provincial occupational health and safety authorities. Health Canada monitors the air outside the removal area to protect the federal employees.

PCM measurements will be made by NIOSH method 7400.

Analysis of PCM samples will be performed by Health Canada or individuals or organizations successfully participating in a recognized external quality control program.

10.9.3 Bulk Sample Collection and Analysis

Appendix J gives procedures for collection and labelling of bulk samples for asbestos analysis.

Analyses of materials to determine asbestos content will be performed by Health Canada or by private laboratories accredited by the National Voluntary Laboratory Accreditation Program of the U.S. National Institute of Science and Technology. The laboratories shall report to the limits of detection given in Section 2.2.

10.10 FACILITIES AND WASTE DISPOSAL

10.10.1 Equipment and Supplies

The Property Manager will maintain a stock of the necessary asbestos-related equipment, as required for Type 1 and Type 2 work, for those facilities where SNC Lavalin O&M staff will perform asbestos work.

10.10.2 Waste Disposal

Where SNC Lavalin O&M staff will perform asbestos work, asbestos debris will be packaged in double-bagged containers or other suitable air tight containers, by staff completing the project. These containers will be held at a secure location in the building. The Property Manager will arrange for periodic collection.

APPENDIX A

EVALUATION AND RECOMMENDATION CRITERIA FOR CONTROL OF ASBESTOS CONTAINING MATERIALS (ACM)

ASBESTOS MANAGEMENT PLAN

1. ASSESSMENT OF CONDITION

1.1 Spray Applied Fireproofing, Insulation and Texture Finishes

To evaluate the condition of ACM spray applied as fireproofing, thermal insulation, or texture, decorative or acoustic finishes, the following criteria are applied:

GOOD
Surface of material shows no significant signs of damage, deterioration or delamination. Up to 1 percent visible damage to surface is allowed within range of **GOOD**. Evaluation of sprayed fireproofing requires the surveyor to be familiar with the irregular surface texture typical of sprayed asbestos products. **GOOD** condition includes unencapsulated or unpainted fireproofing or texture finishes, where no delamination or damage is observed, and encapsulated fireproofing or texture finishes where the encapsulation has been applied after the damage or fallout occurred.

POOR
Sprayed materials show signs of damage, delamination or deterioration. More than 1 percent damage to surface of ACM spray.

In observation areas where damage exists in isolated locations, both **GOOD** and **POOR** condition may be reported. The extent or percentage of each condition will be recorded on the survey or re-assessment form. **FAIR** condition is not utilized in the evaluation of the sprayed fireproofing, sprayed insulation, or texture coat finishes.

The evaluation of ACM spray applied as fireproofing, non-mechanical thermal insulation, or texture, decorative or acoustic finishes which are present above ceilings, may be limited by the number of observations made, and by building components such as ducts or full height walls that obstruct the above ceiling observations. Persons entering the ceiling are advised to be watchful for ACM **DEBRIS** prior to accessing or working above ceilings in areas of buildings with ACM regardless of the reported condition.

1.2 Mechanical Insulation

The evaluation of the condition of mechanical insulation (on boilers, breaching, ductwork, piping, tanks, equipment etc.) utilizes the following criteria:

GOOD
Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor surface damage (i.e., scuffs or stains), but the jacketing is not penetrated.

FAIR

Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges should be minor to none.

POOR
Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired.

The evaluation of mechanical insulation may be limited by the number of observations made and building components such as ducts or full height walls that obstruct observations. It is not possible to observe each foot of mechanical insulation from all angles.

1.3 Non-friable and Potentially Friable Materials

Non-friable materials generally have little potential to release airborne fibres, even when damaged by mechanical breakage. However, some non-friable materials, i.e., exterior asbestos cement products, may have deteriorated so that the binder no longer effectively contains the asbestos fibres. In such cases of significantly deteriorated non-friable material, the material should be treated as a friable product.

2. EVALUATION OF ACCESSIBILITY

The accessibility of building materials known or suspected of being ACM is rated according to the following criteria:

ACCESS (A)
Areas of the building within reach (from floor level) of all building users. Includes areas such as gymnasiums, workshops, and storage areas where activities of the building users may result in disturbance of ACM not normally within reach from floor level.

ACCESS (B)
Frequently entered maintenance areas within reach of maintenance staff, without the need for a ladder. Includes:

- areas within reach from a fixed ladder or catwalk, i.e., tops of equipment, mezzanines.
- frequently entered pipe chases, tunnels and service areas.

ACCESS (C) EXPOSED
Areas of the building above 2.4 metres where use of a ladder is required to reach the ACM. Only refers to ACM that is exposed to view, from the floor or ladder, without the removal or opening of other building components such as ceiling tiles, or service access door or hatch. Does not include infrequently accessed service areas of the building.

ACCESS (C) CONCEALED

Areas of the building which require the removal of a building component, including lay-in ceilings and access panels into solid ceiling systems. Includes rarely entered crawl spaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

ACCESS (D)
Areas of the building behind inaccessible solid ceiling systems, walls or mechanical equipment, etc. where demolition of the ceiling, wall or equipment, etc. is required to reach the ACM. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials in ACCESS D.

3. ACM DEBRIS

3.1 **DEBRIS** from Friable ACM

The presence of fallen ACM is noted separately from the presumed friable ACM source (sprayed fireproofing, thermal insulation, texture, decorative or acoustic finishes or mechanical insulation) and is referred to as **DEBRIS**.

3.2 **DEBRIS** from Damaged Non-Friable ACM

The presence of fallen ACM from damaged non-friable ACM is also reported separately from the non-friable ACM source. Only fallen non-friable ACM that has become friable is reported as **DEBRIS**.

The identification of the exact location or presence of **DEBRIS** on the top of ceiling tiles is limited by the number of observations made and the presence of building components such as ducts or full height walls that obstruct observations. Workers are advised to be watchful for the presence of **DEBRIS** prior to accessing or working in proximity to mechanical insulation or above ceilings in areas of buildings with ACM regardless of the reported presence or absence of **DEBRIS**.

4. ACTION MATRIX AND DEFINITIONS

The Asbestos Management Plan requires the following responses:

- Immediately clean-up **DEBRIS** that is likely to be disturbed.
- Remove, repair or enclose friable ACM in **POOR** or **FAIR** condition whose continued deterioration will result in **DEBRIS** that is likely to be disturbed.

The following factors are also considered in making site-specific recommendations for compliance with the regulation and the practical implementation of the Asbestos Management Plan:

i) ACM in **POOR** condition is not routinely repairable.

If an abatement action is necessary, removal is the recommended action (enclo sure is a viable option in unusual circumstances).

ii) Mechanical insulation in **FAIR** condition can be repaired or removed based on the following general recommendations applied on a case by case basis (Note: Either repair or removal are legally acceptable options for the treatment of ACM found in **FAIR** condition):

- Repair ACM mechanical insulation found in **FAIR** condition in **ACCESS (B)** or **ACCESS (C EXPOSED)** areas.
- Remove ACM mechanical insulation found in **FAIR** condition in **ACCESS (B)** and **ACCESS (C EXPOSED)** areas, where future damage to the ACM is likely to occur.
- Remove ACM mechanical insulation found in **FAIR** condition with **ACCESS (A)** to eliminate the potential for re-damaging ACM by all building users.

iii) ACM in **GOOD** condition present in **ACCESS (A)** can be managed by surveillance, as long as it is not disturbed by future renovation, maintenance or demolition. However, pro-active removal of the ACM in **ACCESS (A)** should be considered where damage is possible by ongoing occupant activity (accidental or intentional).

iv) Non-friable or manufactured products are considered in the action matrix as follows:

Non-friable or manufactured products reported in **POOR** condition or friable **DEBRIS** resulting from the deterioration of non-friable ACM are treated as friable materials and the appropriate Action, depending on accessibility, is determined from the Action Matrix for friable ACM.

For non-friable or manufactured products reported in **GOOD** condition, Action 7 (surveillance) is recommended regardless of Accessibility.

v) Remove all ACM from a particular area where small quantities of asbestos are present and removal will negate the need for the use of the Asbestos Management Plan in that area.

With these principles in mind the following Action Matrix Tables establish the recommended asbestos control action. Note that factors not included in the above discussion, such as an owner's policy decision to remove material, knowledge of upcoming maintenance, etc., may result in a recommendation that differs from this table. The **ACTIONS** are described in full following the tables.

4.1 Action Matrix Tables

FRIABLE ACM

	CONDITION			
ACCESS	**GOOD**	**FAIR**	**POOR**	**DEBRIS**
(A)	ACTION 5/7[1]	ACTION 5/6[2]	ACTION 3	ACTION 1
(B)	ACTION 7	ACTION 6/5[3]	ACTION 3	ACTION 1
(C) EXPOSED	ACTION 7	ACTION 6	ACTION 4	ACTION 2
(C) CONCEALED	ACTION 7	ACTION 7	ACTION 4	ACTION 2
(D)	ACTION 7	ACTION 7	ACTION 7	ACTION 7

[1] If material in **ACCESS (A)/GOOD** condition is not removed **ACTION 7** is required.

[2] If material in **ACCESS (A)/FAIR** condition is not removed **ACTION 6** is required.

[3] Remove ACM in **ACCESS (B)/FAIR** condition if ACM is likely to be disturbed.

4.2 Action Definitions

ACTION 1 - Immediate Clean-Up of DEBRIS that is Likely to Be Disturbed

Restrict access that is likely to cause a disturbance of the ACM **DEBRIS** and clean up ACM **DEBRIS** immediately. Utilize correct asbestos procedures. This action is required for compliance with regulatory requirements. The surveyor should immediately notify the Asbestos Coordinator of this condition.

ACTION 2 - Type 2 Precautions for Entry into Areas with ACM DEBRIS

At locations where ACM **DEBRIS** can be isolated in lieu of removal or cleaned up, use appropriate means to limit entry to the area. Restrict access to the area to persons utilizing Type 2 asbestos precautions. The precautions will be required until the ACM **DEBRIS** has been cleaned up, and the source of the **DEBRIS** has been stabilized or removed.

ACTION 3 - ACM Removal Required for Compliance

Remove ACM for compliance with regulatory requirements. Utilize asbestos procedures appropriate to the scope of the removal work.

ACTION 4 - Type 2 Precautions for Access into Areas Where ACM is Present and Likely to be Disturbed by Access

Use Type 2 asbestos precautions when entry or access into an area is likely to disturb the ACM. **ACTION 4** must be used until the ACM is removed (Use ACTION 1 or 2 if **DEBRIS** is present).

ACTION 5 - Proactive ACM Removal

Remove ACM in lieu of repair, or at locations where the presence of asbestos in **GOOD** condition is not desirable.

ACTION 6 - ACM Repair

Repair ACM found in **FAIR** condition, and not likely to be damaged again or disturbed by normal use of the area or room. Upon completion of the repair work treat ACM as material in **GOOD** condition and implement **ACTION 7**. If ACM is likely to be damaged or disturbed, during normal use of the area or room, implement **ACTION 5**.

ACTION 7 - Routine Surveillance

Institute routine surveillance of the ACM. Trained workers or contractors must use appropriate asbestos precautions (Type 1, Type 2 or Type 3) during disturbance of the remaining ACM.

APPENDIX B

TYPE 1 WORK PROCEDURES

ASBESTOS MANAGEMENT PLAN

For locations of non-friable asbestos materials, refer to the current version of the Asbestos Inventory and Assessment Report.

NOTE: These Type 1 procedures assume the non-friable material can be removed with relatively little loose dry dust released. Generation of debris is permissible as long as the debris can be well wetted before being removed. If the work will release more than a trivial amount of dry loose dust, do not proceed. The Property Manager will determine which of Type 1, 2 or 3 procedures are appropriate.

1. EQUIPMENT

All equipment must be on site before proceeding.

1.1 Vacuum

Use of a vacuum is optional. Wet cleaning methods may be used in place of a vacuum. If a vacuum is used it must be equipped with a high efficiency particulate (HEPA) filter and all brushes, fittings, etc. The vacuum must only be opened in an enclosure following Type 2 procedures, or in a laboratory exhaust hood. The vacuum exterior should be carefully wet cleaned after emptying.

1.2 Respirators

Use of a respirator is optional. However, a respirator is strongly advised for work on sheet flooring, any type of ceiling tile, any other work performed overhead. PWGSC will supply a NIOSH approved respirator (in accordance with Table 2 of Ontario Regulation 278/05), at the workers request, a half face respirator with HEPA filters, with training on use and qualitative fit-testing. Respirator must be used according to written use procedures provided to worker as per training procedures. Filters must be changed after 24 hours of wear or sooner if breathing resistance increases. No person using respirator shall wear facial hair which affects the seal between respirator and face.

1.3 Protective Clothing

Reusable or disposable clothing may be used. Non-disposable clothing with visible asbestos contamination shall be cleaned with a HEPA vacuum and laundered as asbestos contaminated. Disposable clothing and respirator filters to be disposed of as asbestos waste.

1.4 Other Equipment

- plastic sheet (6 mil polyethylene) - to serve as a drop sheet.
- pump sprayer with mister nozzle or alternative method to wet material.
- labelled yellow asbestos waste bags (6 mil) - for all asbestos waste, disposable equipment, plastic, etc.
- small tools and cleaning supplies - e.g., scouring pads, sponges, brushes, buckets, etc.

2. OTHER PROTECTIVE MEASURES

Do not eat, drink or smoke in the work area.

On leaving work area, proceed to washroom and wash all exposed skin on hands and face.

3. PREPARATION

Before disturbing non-friable asbestos materials, wherever practical cover floor and surfaces below work with polyethylene sheeting to catch debris.

Wherever dust on a surface is likely to be disturbed remove with HEPA vacuum or damp cloth.

4. EXECUTION

4.1 Removal of Vinyl Asbestos Floor Tile

Do not use electric powered scrapers.

Start removal by wedging a heavy duty scraper in seam of two adjoining tiles and gradually force edge of one tile up and away from floor. Do not break off pieces of tile, but continue to force balance of tile up.

Continue removal of tiles using hand tools, removing tiles intact wherever possible. When adhesive is spread heavily or is quite hard, it may prove easier to force scraper through tightly adhered areas by striking scraper handle with a hammer using blows of moderate force while maintaining scraper at 25^0 to 30^0 angle to floor. When even this technique cannot loosen tile, removal can be simplified by heating tile thoroughly with a hot air gun until heat penetrates through tile and softens the adhesive.

When tiles are removed, place into asbestos waste receptor. Do not break into smaller pieces.

After removal of small area scrape up adhesive remaining on floor with a hand scraper until only a thin smooth film remains. Where deposits are heavy or difficult to scrape, a hot air gun may be used. Deposit scrapings in the asbestos waste disposal bag. Do not dry scrape surface of adhering pieces of tile. Do not use powered electric scrapers.

On completion of area, vacuum clean floor with HEPA vacuum or wet mop. Dispose of the mop head as contaminated waste.

4.2 Removal of Asbestos-containing Sheet Flooring

Remove binding strips or other restrictive mouldings. Workers shall wear air purifying respirator fitted with high efficiency filter, and coveralls at all times.

Make series of cuts 100 mm to 200 mm (4" to 8") apart through top layers and about halfway through felt backing, parallel to wall.

Start at end of room furthest from door and pry up corner of strip, separating top sheet from backing layer. Pull top layer back upon itself slowly and evenly, and half backing and top layers should pull free. After it is removed, roll up strip face out into tight roll, tape or tie securely, and place into asbestos waste receptor. Wet the asbestos felt underlay remaining on floor as soon as exposed.

Continue with successive strips. Avoid walking on exposed asbestos felt. Seal asbestos waste receptors when filled. Remove maximum of three strips before wet scraping exposed felt underlay.

Remove remaining adhered underlay by wet scraping. Soak area with water applied by sprayer. Allow water to penetrate felt. Scrape off remaining material. Maintain material wet by applying more water. Place scrapings in asbestos waste receptor.

Continue this procedure alternately removing top sheets and then wet scraping felt, three strips at a time. Be careful not to walk on stripped floor.

When whole floor has been cleaned of asbestos felt, allow it to dry and vacuum up any dirt with a HEPA vacuum or wet mop. Do not dry sweep. Dispose of the mop head as contaminated waste.

Thoroughly clean tools and equipment with a damp cloth before being put back into regular service. Dispose of cloth as contaminated waste.

4.3 Installing, Cutting or Drilling Non-friable Asbestos Materials

Only non-powered hand-held tools are permitted for Type 1 work.

Where possible wet all materials to be disturbed.

Immediately place waste in asbestos waste receptor. Clean area frequently during work with HEPA vacuum or by wet methods.

At completion of work, clean drop sheets to be reused with HEPA vacuum or by wet methods.

Drop sheets shall be disposed of as asbestos waste.

4.4 Removal of Other Non-friable Asbestos Materials

The Type 1 procedures apply only to materials which can be removed intact, or in sections, without producing a pulverized or powdered waste. This method is most applicable to asbestos-cement board products, acoustic ceiling tiles, gaskets, etc.

Where possible wet all material to be disturbed.

Undo fasteners necessary to remove material. Whenever possible remove asbestos cement panels intact. Break only if unavoidable. If broken, wet freshly exposed edges.

Where sections are adhered to the substrate, wet material and use hand scraping to remove adhering material.

Place removed material into asbestos waste receptor. Clean surrounding surfaces and asbestos work area frequently with HEPA vacuum or with wet methods. Damp cloth disposed of as asbestos waste after cleaning.

Drop sheets shall be disposed of as asbestos waste.

5.0 WASTE TRANSPORT AND DISPOSAL

Place waste into asbestos labelled disposal bag, seal with tape, clean the exterior of the bag with a clean cloth, and place into a second clean bag, also to be sealed with tape. Use a barrel, fibre drum, or cardboard or wooden box in place of the second bag when the asbestos waste material is likely to tear the inner bag. Seal the outer container.

Provide storage area for holding minor amounts of asbestos waste in sealed containers. Garbage containers shall be labelled and assigned exclusively for asbestos waste.

Dispose of the waste in compliance with provincial regulations. The Property Manager will arrange for disposal.

APPENDIX C

TYPE 2 WORK PROCEDURES

ASBESTOS MANAGEMENT PLAN

TYPE 2 WORK PROCEDURES

For locations of asbestos materials, refer to the current version of the Asbestos Inventory and Assessment Report.

1 EQUIPMENT

Equipment required for the work must be on-site before proceeding.

1.1 Vacuum

An asbestos-approved vacuum (HEPA filtered), equipped with brushes, fittings, etc. Vacuum must not be opened except by a fully protected worker within a Type 2 enclosure.

1.2 Respirators

Workers within the work area shall wear NIOSH approved respirators. Respirators and filters will be provided by the employer, and individually assigned to workers. Respirator shall be a minimum half-face piece respirator with high efficiency filters. Respirators must be kept in position throughout the entire time the worker is in the area of the work from first disturbance of the ceiling tile or asbestos material until the final cleaning of the area and bagging of waste is complete. Change filters after 24 hours of wear or sooner if breathing resistance increases. No person using respirator shall wear facial hair which affects seal between respirator and face.

1.3 Protective Clothing

All workers shall wear disposable coveralls with attached elasticized hood. Coveralls should be worn with the hood in place at all times. Coveralls may be vacuumed or wet wiped clean for re-use, for a maximum of 8 hours cumulative wear. Suit and head cover shall remain in place until worker leaves work area or the enclosure is dismantled. Boot covers or dedicated boots are recommended.

1.4 Other Equipment

- plastic sheet (6 mil polyethylene) - to erect a total enclosure or to serve as drop sheet
- wood framing or clips to support polyethylene sheeting, as appropriate to work area
- tape - to fasten plastic enclosure to ceiling or to tape drop sheet to floor; 3/4" double-sided tape recommended for attaching polyethylene to T-bar ceiling
- labelled asbestos waste bag (6 mil) - for all asbestos waste, disposable suit, plastic for disposal, etc.
- pump sprayer containing water with wetting agent to wet asbestos as necessary; dilute wetting agent 2 oz per gallon of water asbestos warning signs
- cleaning supplies - e.g., scouring pads, sponges, brushes, buckets, etc. insulation repair supplies (lagging compound, cloth, PVC covers)
- encapsulating sealer, for brush or airless spray application

1. OTHER PROTECTIVE MEASURES

Do not eat, drink or smoke in the work area.

On completing clean-up of work area, use vacuum or wet cloth to clean hands, face, respirator and boots. Remove protective equipment and proceed to nearest washroom to wash exposed skin on hands and face.

2. SCHEDULING OF WORK

Schedule work when occupants are absent. If persons are present, do not start work.

If work above ceiling is required on an emergency basis when area is occupied, have the Client Department advise occupants to vacate area until work is complete and clearance is given to return.

3. PREPARATION

Shut down ventilation systems to and from the work area. Seal over all ventilation openings, diffusers, grilles, etc., with plastic and tape.

Before beginning work, visible dust shall be removed with damp wiping or HEPA vacuuming. Where practical, clear areas of movable furnishings or equipment. This should include anything which occupants may wish to use during work period. Any furnishings or equipment not removed shall be adequately covered and sealed using 6 mil polyethylene and tape. The intent of the protection is to provide an airtight envelope to protect the articles from airborne dust or splashed debris.

Post signs or barrier tape to indicate asbestos hazard and requirement for protective clothing for anyone entering the space.

For small rooms, cover walls with plastic such that the complete room becomes the work area. For larger rooms, erect enclosure of 6 mil polyethylene of suitable dimensions to enclose the work area and scaffolds and ladders required to gain access. If a suspended ceiling is present, the enclosure shall extend to the ceiling line. The enclosure shall be as airtight as conditions permit including the provision of a double overlapping flap at the entrance. The floor of the work area shall be a layer of 6 mil polyethylene sealed to the plastic walls of the enclosure.

Don protective clothing and respirator prior to removing ceiling tile or disturbing pipe jacketing or sprayed fireproofing.

4. EXECUTION

To remove fireproofing or texture plaster, saturate using amended water solution, by use of a pump sprayer. Do not remove the asbestos material until the material is thoroughly wetted to the substrate. **Do not use water where electrical hazard exists.**

To remove pipe insulation, first wet any area of damage, then carefully cut jacket. Keep insulation surface wetted by mist of water with wetting agent. Remove insulation in large sections and place immediately in disposal bag. After large pieces have been removed, saturate debris on mechanical equipment and clean all exposed surfaces with abrasive pads, sponges, cloths, etc.

To repair pipe insulation, use drop sheet under area of work to aid clean-up of any dislodged material. **Plastic enclosure is not required.** Mist any exposed insulation to wet surface and apply lagging paint and canvas or PVC jacketing as required.

For removal of suspended ceiling tiles (where asbestos debris is present on top of tiles or equipment to be accessed), remove the first tile carefully and vacuum all surfaces. Vacuum the upper surface of each subsequent tile prior to removal. Store tiles in the work area.

Remove dust and loose friable material likely to be disturbed in the process of doing the work, with a HEPA vacuum or by damp wiping.

When asbestos material is removed, all pieces should be placed directly into 6 mil polyethylene bags as they are removed. Avoid dropping material to floor wherever possible. After bulk removal is complete, wet wash the exposed surface.

Frequently, and at regular intervals during the work, clean up dust and waste in the work area by wet mopping, placing in disposal bags, or by HEPA vacuuming.

After completion of removal, seal exposed ends of fireproofing, texture plaster, or mechanical insulation with heavy layer of encapsulating sealer. Apply sealer coat to surfaces from which asbestos material was removed.

At completion of work, decontaminate equipment, tools and materials used in the work area by wet cleaning or HEPA vacuum.

Dispose of drop sheets and enclosures by wetting the polyethylene, then folding into disposal bags. Do not reuse drop sheets or enclosures.

Before leaving work area, decontaminate shoes and protective clothing by using HEPA vacuum or damp wiping. When protective clothing is to be disposed of, it shall be decontaminated as above and placed in labelled disposal bags. Workers shall vacuum all exposed skin, suit and respirator, and proceed to nearest washroom to wash hands and face.

5. WASTE TRANSPORT AND DISPOSAL

Place waste into asbestos labelled disposal bag, seal with tape, clean the bag, and place into a second clean bag, also to be sealed with tape. Use a barrel, fibre drum, or cardboard or wooden box in place of the second bag when the asbestos waste material is likely to tear the inner bag. Seal the rigid outer container.

Provide storage area for holding minor amounts of asbestos waste in sealed containers. Containers shall be labelled and assigned exclusively for asbestos waste.

Dispose of waste in compliance with provincial regulations. The Property Manager will arrange for disposal.

APPENDIX D

TYPE 2
GLOVE BAG WORK PROCEDURES

ASBESTOS MANAGEMENT PLAN

1. EQUIPMENT

All equipment must be on site before proceeding with the work. Note that these procedures are primarily based on the use of Safe-T-Strip polyvinyl chloride movable glove bags. Only the Safe-T-Strip glove bag is allowed in Ontario. If the single use polyethylene glove bags permitted in some other jurisdictions are used, it should be understood that they are for use at one location only, and cannot be moved or used elsewhere.

1.1 Glove Bag

Prefabricated, 0.25 mm (10 mil) minimum thickness polyvinyl-chloride bag with integral 0.25 mm (10 mil) thick polyvinyl-chloride gloves and elasticized port. Bag shall be equipped with reversible double-pull double throw zipper on top. Bag must incorporate internal closure strip if it is to be removed from pipe for re-use elsewhere.

Prefabricated polyethylene glove bag, single use, not movable.

Provide size and configuration appropriate for insulation to be removed. Once filled bag must be disposed of. Bag shall not be emptied and reused.

1.2 Securing Straps

Reusable nylon straps at least 1" wide with metal buckle for sealing ends of bags around pipe and/or insulation.

1.3 Water Sprayer

Garden reservoir type, low velocity, capable of producing mist or fine spray with water containing wetting agent. Wetting agent shall be diluted 2 oz. per gallon of water.

1.4 Respirators

Workers using glove bag must wear approved respiratory protection. Respiratory protection must be equal to or exceed protection of half-face respirator with high efficiency filters. Respirators must be kept in position from the time the worker attaches the glove bag to the pipe until final cleaning of the pipe and bagging of waste is completed. Filters shall be changed after 24 hours of wear or sooner if breathing resistance increases. No person using respirator shall wear facial hair which affects the seal between respirator and face.

1.5 Other Equipment

- labelled asbestos waste bags (6 mil) - for all asbestos waste in glove bag, disposable suit, cleaning materials, etc.
- asbestos warning signs
- wire saw - saw with flexible serrated wire blade and handles to allow use inside glove bag
- knife with fully retractable blade for use inside glove bag
- plastic sheet (4 mil polyethylene) to cover exposed or damaged section of pipe prior to attaching glove bag
- tape - to fasten plastic to pipe if required
- cleaning supplies, e.g., scouring pads, sponges, brushes, buckets, etc.
- HEPA vacuum, for evacuating air from bag prior to removing bag from pipe

1.6 Protective Clothing

Workers shall wear disposable suit with attached head cover. Suit and head cover shall remain in place until worker completes cleaning of pipe. Suit may be cleaned for re-use or disposed of as asbestos waste.

2. OTHER PROTECTIVE MEASURES

Do not eat, drink or smoke in the work area.

On completing clean-up of work area, use HEPA vacuum or wet cloth to clean hands, face, respirator and boots. Remove protective equipment and proceed to nearest washroom to wash all exposed skin on hands and face.

3. SCHEDULING OF WORK

Schedule work when occupants are absent. If persons are present, do not start work.

4. PREPARATION

Where practical, clear area below pipe of moveable furnishing or equipment. Provide scaffold as required to reach pipe.

Post an asbestos warning sign at all entrances to room in which the procedure is being used. Use rope or tape barriers to separate work area.

Segregate the area of asbestos work from other parts of the building required to remain in use using polyethylene walls or barrier tape.

Shut off and seal all diffusers, vents and other openings to ventilation and exhaust systems in the room with polyethylene secured with tape.

Cover all items or equipment located in the designated work area with polyethylene if the items or equipment cannot be cleaned in the case of a spill. Tape the polyethylene in place. The polyethylene should cover a width equal to the height of the pipe from the floor, with a minimum width of 12 feet, where required.

Seal all openings or voids in the vicinity of the glove bag operation with one layer of polyethylene secured with tape.

Check condition of pipe insulation where work will be performed. If the pipe insulation has minor isolated damage, mist surface and patch with tape. If damage is more extensive, wrap pipe with plastic and "candy stripe" it with duct tape first. If pipe insulation is severely damaged and cannot be simply repaired, glove bag is not appropriate. (See Type 3 Procedures.)

Pre-clean with HEPA vacuum or wet methods any loose material on surface of pipe or any material on the floor. Follow type 2 procedures for clean-up.

Place necessary tools in bottom of glove bag.

5. EXECUTION

Zip the bag onto the pipe and seal each end to the pipe with the securing straps. Do not pull the bag tightly to the ends - a small amount of slack allows better room to work within the bag. If a vertical bag is in use, ensure lower strap passes through plastic grommet and cloth tab on zipper.

Place hands into gloves and use necessary tools (wire saw, utility knife, wire cutters) to remove insulation from pipe. Arrange insulation in bottom of bag to obtain full capacity of bag. Roll jacketing carefully to minimize the possibility of ripping or puncturing the bag.

Insert nozzle of spray pump into bag through valve and wash pipe and interior of upper section of bag thoroughly. Use one hand to aid washing process. Wet surface of insulation in lower section of bag and any exposed ends of asbestos insulation remaining on pipe.

Prior to removing the bag from the pipe, wash the top section of the bag and tools thoroughly. Insert nozzle of HEPA filtered vacuum into bag through elasticized valve and evacuate air from bag. Seal the closure strip, remove the vacuum nozzle and straps, and remove the bag. Re-install and seal in new location before reopening closure.

If bag is to be moved along the same pipe, loosen securing straps, move bag, re-seal to pipe using double-pull zipper to pass hangers. Repeat insulation removal operation.

If during use the glove bag is ripped, cut or opened in any way, cease work and repair opening before continuing work. All spilled material must be cleaned up and removed with a HEPA vacuum or wet cleaning.

To remove tools after completion of insulation removal, thoroughly wash top section of bag and tools. Place tools in one glove, pull hand out inverted, twist to create a separate pouch, tape inside-out glove at two separate locations 1" apart to seal pouch. Remove inside-out glove and tools by cutting between the tape seals.

Place glove pouch and tools into the next clean glove bag to be used. Alternately, place the tool pouch into water bucket, open pouch underwater and clean tools, then allow to dry.

Prior to disposal of bag, evacuate the bag with a HEPA vacuum. Pull a 6 mil polyethylene bag over glove bag before removing from pipe. Remove securing straps. Unfasten zipper. Seal glove bag and seal 6 mil polyethylene bag.

After removal of bag ensure pipe is clean of all residue. If necessary, after removal of each section of asbestos, vacuum all surfaces of pipe, using HEPA filtered vacuum equipment or wipe with wet cloth.

Seal all surfaces of freshly-exposed pipe with encapsulating sealer to tack-down any residual dust. Cover exposed ends of any remaining asbestos insulation with lagging cloth or tape.

Before leaving work area, decontaminate shoes and protective clothing by using HEPA vacuum or damp wiping. When protective clothing is to be disposed of, it shall be decontaminated as above and placed in labelled disposal bags. Workers shall vacuum all exposed skin, suit, respirator and hair (after removing hood) and proceed to nearest washroom to wash hands and face.

6. WASTE TRANSPORT AND DISPOSAL

Provide storage area for holding minor amounts of asbestos waste in sealed containers. Containers shall be labelled and assigned exclusively for asbestos waste.

Dispose of waste in compliance with provincial regulations. The Property Manager will arrange for disposal.

APPENDIX E

RESPIRATOR FITTING, INSPECTION, CLEANING AND DISINFECTION

NOTES FOR AIR PURIFYING HALF FACEPIECE RESPIRATORS

WARNING: This respirator does not supply oxygen. It must not be used in oxygen deficient atmospheres (less than 19.5%); in poorly ventilated areas or enclosed spaces such as tanks or small rooms; for abrasive blasting or firefighting; or for protection against contaminants excluded or not covered by the applicable Approval Label.

Respirators must be approved for protection against asbestos. Check for NIOSH certification. Please refer to the new CSA Z94.4, Selection, Care and Use of Respirators. Federal employees must comply with Z94.4.

RESPIRATOR FITTING

1. Persons required to wear respirators must first pass a qualitative fit-test administered according to the current version of CSA standard Z-94.4. The fit-test should be repeated yearly.

2. The respirator wearer must be clean-shaven along all the seal points for proper protection. Even stubble growth may be sufficient to reduce the seal of the face piece, and therefore the protection. The respirator approval is voided for users with facial hair which interferes with the seal.

INSPECTION ITEMS PRIOR TO EACH USE:

1. Examine face piece for:
   - dirt
   - cracks, tears or holes
   - distortion and inflexibility
   - crack or breaks in filter holders, worn threads and missing gaskets

2. Examine head straps for:
   - breaks or tears
   - loss of elasticity
   - broken or malfunctioning buckles and attachments

3. Examine valves for:
   - detergent residue, dust or other material on valves or valve seats
   - cracks, tears or distortion in the valve material
   - missing or defective valves or valve covers

4. Examine filter for:
   - proper filter for protection against asbestos (High Efficiency Particulate)
   - incorrect installation, loose connections, missing or worn gaskets or cross threading
   - cracks or dents in filter housing

5. Leak-checks:

Perform the following tests on each donning:
   - negative pressure test: cover inlets to filters, breathe in and hold breath; respirator should be drawn to face for minimum of 10 seconds (if not, check exhalation valve and fit)
   - positive pressure test: cover exhalation valve cover and puff out slightly and hold breath; respirator should slightly pressurize and still hold seal (if not, check inhalation valves and fit)

RESPIRATOR CLEANING AND DISINFECTION

1. Remove filters and disassemble face piece. Discard or repair defective parts.

2. Wash components in warm water ($50^{o}C$ - $60^{o}C$) with mild detergent, using a brush. Cleaning and disinfectant solutions are available from respirator manufacturers.

3. Thoroughly rinse components in clean, warm water.

4. Air dry or hand dry components with a clean, lint-free cloth.

5. Reassemble respirator and test to ensure that all components are working properly (see above). Be careful to check that valves are not lost in the cleaning.

FILTER CARTRIDGE HANDLING AND REPLACEMENT

1. Filter cartridges should be sealed on the inlet side with tape once used.

2. Filters can be re-used until an increase in breathing resistance is noted. Under typical Type 2 conditions, filter cartridges should last a minimum of 24 hours.

APPENDIX F

PROCEDURES FOR EMERGENCY ASBESTOS WORK

ASBESTOS MANAGEMENT PLAN

If Type 2 procedures cannot be strictly observed due to the urgency, some judgement will be required of the person responsible for the work, and other staff or contractors responding to the emergency. The general principle of emergency response work is to protect the workers performing the repair and to minimize the exposure of others to airborne asbestos. The procedures given below should be followed to the extent possible in the circumstances of the emergency.

1. Clear area of all occupants.

2. Construct enclosure around area if time permits.

3. Shut down ventilation system serving area.

4. Worker performing repair shall wear protective respirator and disposable suit. If normal work clothes are worn they must be disposed of if visibly contaminated.

5. Use drop sheet under work to minimize clean-up if possible.

6. Perform emergency repair with minimum disturbance of asbestos.

7. Obtain asbestos equipment and perform clean-up of visible material before allowing unprotected personnel to enter area. Use HEPA filtered vacuum or wet cleaning. Dispose of all cleaning supplies as contaminated waste.

8. The worker should wipe off or vacuum disposable clothing and footwear. Proceed to washroom to wash face and hands.

9. Notify the Property Manager regarding the asbestos disturbance. The Property Manager will arrange for removal, clean-up or repair of the asbestos material.

APPENDIX G

ASBESTOS-RELATED WORK RECORD

APPENDIX H

CERTIFICATE OF TRAINING FOR ASBESTOS-RELATED WORK

APPENDIX I

CONTRACTOR NOTIFICATION AND ACKNOWLEDGEMENT

APPENDIX J

BULK SAMPLE COLLECTION PROCEDURES

BULK SAMPLE COLLECTION PROCEDURES

1. Sample the material when the area is not in use. Only those persons needed for sampling should be present in the immediate area.

2. Spray the material with a light mist of water to prevent fibre release during sampling. Do not disturb the material any more than necessary.

3. Materials of different appearance should be sampled separately. Mechanical insulation must be sampled separately on all systems, tanks, vessels, etc. Sample both the straight sections of pre-formed insulation and the insulating cement typically present at elbows, fittings, etc. (unless visually identified as fibreglass).

4. Collect the sample by penetrating the entire depth of the material, as the insulation may have been applied in more than one layer or covered with paint or other protective coating.

5. Depending on the condition of the material, significant amounts of airborne fibres can be generated during sampling. The use of a respirator is recommended for all sampling.

6. If pieces of material break off during sampling, the contaminated area must be cleaned up with a HEPA vacuum cleaner or by wet cleaning. Any debris generated must be placed in plastic bags, labelled, sealed and disposed of as asbestos waste.

7. Place samples in labelled plastic bags with a zip-lock closure or in sealed plastic vials. Samples shall be identified with the following information:
   - Sample Number
   - Building
   - Room Number
   - Date of Sampling
   - Name of Sampler
   - Source of sample, e.g., Cold Water Pipe, Cold Water Fitting, etc.

8. Temporarily seal any openings created to collect the sample, for example, with metal foil tape wrapped completely around the pipe.

9. Analysis must be performed by a laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). Contact the C.D. Howe Facility Manager for a list of acceptable laboratories.

APPENDIX K

ROLES AND RESPONSIBILITIES

ASBESTOS MANAGEMENT PLAN

SAMPLE

ROLES AND RESPONSIBILITIES

Regional Asbestos Technical Coordinator (Non-Mandatory)

The Regional Asbestos Technical Coordinator's roles and responsibilities are:

A. To maintain a technical competency within Environmental Services.
B. To provide technical training to RPS staff.
C. Working with the Regional Asbestos Coordinator to develop training packages for various groups of staff involved with asbestos.
D. Provide asbestos audit and survey when requested.
E. To provide advisory support to the Regional Asbestos Coordinator.
F. To provide communication on technical issues.
G. Develop and maintain standing offer contracts for asbestos related services.
H. Provide technical support and advice to all of RPS.
I. Conduct the quality assurance evaluations of survey reports performed by others.
J. Conduct the quality assurance evaluations of removal and repair work being performed by others, when requested.

Regional Asbestos Coordinator (Mandatory)

The Regional Asbestos Coordinator's roles and responsibilities are:

A. To develop and maintain a liaison with Maintenance Management in the NCOE for day-to-day reporting and communication.
B. To liaise with Maintenance Management in the CSU for day-to-day communication and support.
C. To arrange for a complete survey and assessment of asbestos materials.
D. Will decide the degree/detail of surveys required to meet Departmental Policy. (This is to be done in concert with Regional Asbestos Technical Advisor).
E. Will decide the degree/detail of reassessment of all friable asbestos materials in exposed locations. (This is to be done in concert with Regional Asbestos Technical Advisor).
F. To maintain and manage a regional inventory of asbestos. Inventory to include all test results, positive and negative.
G. To establish a system of keeping the reports to ensure ready access to COE, CSU, and field staff.
H. To establish an acceptable paper trail to deal with removal and repair of asbestos.
I. To establish an acceptable system of notifying Property Managers of new findings of asbestos.
J. To maintain a regional inventory of trained personnel and the level of training given.
K. To maintain a consistency standard within the region.
L. To provide communication on management issues to the CSUs.
M. To develop a standard reporting form to be used to report on maintenance repair and removal work.

ASBESTOS MANAGEMENT PLAN

All contractors

This includes anyone contracted to do work on the interior or exterior of PWGSC owned buildings.

Their responsibilities are:

A. To review the asbestos survey reports prior to all renovation and construction work for the possible impact on asbestos.
B. *To complete "Contractor Notification and Acknowledgement" form.*
C. Not to disturb asbestos materials as part of their doing their work. The disturbance of asbestos building materials may only be undertaken by contractors who have received training in asbestos-related precautions.
D. As a condition of their contract to provide services and materials to PWGSC, their company will not disturb asbestos-containing materials without prior notification to the "Asbestos Control Officer". This firm and its workers, while working in this "location of work", will follow all procedures specified by the PWGSC Asbestos Management Program.

All Contractors, doing work involving Asbestos

This includes any work on the interior or exterior of PWGSC owned buildings involving asbestos.

Their responsibilities are:

A. To ensure they follow all procedures specified by the PWGSC Asbestos Management Program.
B. To ensure that they complete all the required documentation required by the PWGSC Asbestos Management Program.

APPENDIX L

LOG BOOK

10.11 ASBESTOS WORK LOG

C.D. Howe Building **235 Queen Street and 240 Sparks Street, Ottawa, ON**			
Location / Item Worked On	**Performed By**	**Type of Operation**	**Date**
Example: *Floor 2 – Mechanical Room – Pipe Elbow*	*Example:* *Joe Smith*	*Example:* *Glove Bag*	*Example:* *Jan. 1, 2007*