September 26, 2023

Colliers Project Leaders
5255 Orbitor Drive, Suite 101
Mississauga, Ontario, L4W 5M6

Re: **Mechanical Spaces Lead Abatement**
145 Sir William Hearst Avenue, Toronto, Ontario
Pinchin File: 329906

Please find attached the technical specifications for the hazardous material remediation project at 145 Sir William Hearst Avenue, Toronto, Ontario.

The specifications are limited to the following areas / locations, as identified in the project scope: Basement Mechanical Room 18, Basement Plumbing Room 32, Basement Chiller Room, West Penthouse Mechanical Room and East Penthouse Mechanical Room.

These documents are intended to be used in conjunction with the report “Bulk Sampling for the Presence of Lead Paint – Summary Report West and East Penthouse, Basement Sprinkler Room and Boiler Room 18, 145 Sir William Hearst Avenue, North York, Ontario” dated August 17, 2022, Prepared by OHE Consultants.

The specifications have been written with the intent to obtain a Stipulated Price based on the previous mentioned report and confirmation by a pre-bid site visit by the proponents. The pre-bid site visit is scheduled for late October.

The following documents have been prepared:

Section	Section	Date
02 81 00	Hazardous Materials – General Provision	September 26, 2023
02 83 10	Lead Abatement – Class 1 - Low Risk Precautions	September 26, 2023
	Bid Form	September 26, 2023
	OHE Consultants Report	August 17, 2022

TERMS AND LIMITATIONS

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

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

CLOSURE

If you have any questions regarding the contents of this letter, please contact the undersigned at 905.245.0691 or mhorobin@pinchin.com.

Sincerely,

Pinchin Ltd.

Prepared by:

Mike Horobin, C.E.T., EP
Senior Project Manager

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Template: Master Cover Letter for Specifications, HAZ, February 27, 2020

Bid Form

Pinchin File:	329906
Project:	Mechanical Spaces Lead Abatement
Location:	145 Sir William Hearst Avenue, Toronto, Ontario
Submitted To:	Mike Horobin Pinchin Ltd. mhorobin@pinchin.com

Quotes are due by email on or before November 10, 2023.

We, _____

(Company Name)

of _____

_____

(Business Address)

having attended the mandatory job showing and examined the Scope of Work and Addenda No. to No. inclusive, all as issued by

Pinchin Ltd.

(Consultant)

and having visited the Project Site (if required), hereby offer to enter into a Contract with Colliers Project Leaders to perform the work outlined in the Specifications issued on September 26, 2023.

Base Bid – lump sum cost of: $_____ plus applicable taxes.

CONDITIONS

It is understood that:

a. Pinchin Ltd. and Colliers Project Leaders reserves the right to accept or reject any and all qualified bids;

b. no person, firm or corporation other than the undersigned has any interest in this Bid or in the proposed Contract for which this Bid is made;

c. this Bid open to acceptance for a period of Choose an item days from date of Bid closing;

d. the person signing this form represents and warrants that he or she is duly authorized and has legal capacity to execute and deliver this Bid and has authority to bind the corporation.

SIGNATURES

Signed and submitted for and on behalf of:

Company: _____

(Name)

_____

(Street Address or Postal Box Number)

_____

(City, Province, Postal Code)

Signature: _____

Name and Title: _____

Dated at _____ this _____ day of _____, 2023.

\\pinchin.com\pet\Job\329000s\0329906.000 Colliers,145SirWilliamHearst,HAZ,CONS\Deliverables\Specifications\329906 Bid Form 145 William Hearst Ave Toronto ON Colliers Sept 25 2023.docx

Master Template, Bid Form for Scope of Work, IEQ, March 18, 2019

PART 1 GENERAL

1.1 General and Related Work

.1 Read this Section in conjunction with all drawings and all other Sections so as to comply with the requirements of the General Conditions of the Contract.

.2 Related work specified elsewhere:

Section 02 83 10 Lead Abatement – Class 1 Procedures

.3 Site Conditions identifies all known hazardous building materials within the Project Area. The information provided is for general reference only. Each Contractor must confirm existing conditions on site prior to tender close.

.1 The specification fulfils the requirements of Section 30 of the Ontario Occupational Health and Safety Act.

.4 The Outline of Work identifies the location, condition and quantities of hazardous building materials to be removed as part of this project.

.1 It is the intent that work prescribed this Section will result in the removal of all hazardous materials as outlined and the decontamination of all surfaces or materials which may have been or become contaminated by hazardous materials either during or prior to work of this Contract.

1.2 Site Conditions

.1 Refer to the report entitled “Bulk Sampling for the Presence of Lead Paint – Summary Report West and East Penthouse, Basement Sprinkler and Boiler Room 18”, dated August 17, 2022, prepared by OHE Consultants, file number 27963.

.2 Asbestos:

.1 Asbestos-containing materials were not identified in the project area.

.3 Lead:

.1 The following paint finishes have been confirmed to contain significant concentrations of lead:

.1 Light yellow paint on concrete walls, East Penthouse Mechanical Room.
.2 Grey paint on fan supply unit, East Penthouse Mechanical Room.
.3 Light green paint on fan supply East Penthouse Mechanical Room.
.4 Green/off-white paint on masonry wall Plumbing Room 32.
.5 Light yellow paint on masonry wall Basement Mechanical Room 18.
.6 Light green paint on masonry wall West Penthouse Mechanical Room.
.7 Light yellow paint on masonry walls West Penthouse Mechanical Room.
.8 Light yellow paint on masonry walls East Penthouse Mechanical Room.

.2 The following paint finishes have been confirmed to contain insignificant concentrations of lead:

.1 Cream paint on masonry walls West Penthouse Mechanical Room.

.4 Mercury:

.1 The following building materials are presumed, or have been confirmed, to contain mercury:

.1 Fluorescent light tubes/bulbs.

.5 Silica:

.1 The following building materials are presumed, or have been confirmed, to contain silica:

.1 Concrete
.2 Masonry
.3 Ceramic tile

.6 Polychlorinated Biphenyls:

.1 The following building materials are presumed, to contain PCBs:

.1 Light ballasts

.7 Remaining designated substances including arsenic, acrylonitrile, benzene, coke oven emissions, ethylene oxide, isocyanates, vinyl chloride monomer, are not typically found in building materials in a composition/state that is hazardous and are not presumed to be present within the Work Areas.

.8 General Building Conditions:

.1 Heat and smoke detectors to remain live throughout work.

.2 Sprinklers to remain live throughout work.

.3 Steam and condensate pipes to remain live throughout work.

.1 Unless shutdown is arranged with building for after hours.

.4 Fan unit motors and HAVC are to be shut down for the abatement work.

1.3 Outline of Work

.1 Coordinate the following items with the Owner’s Project Manager and the Construction Manager, including but not limited to: electrical isolations, GFI connection, water connections, HVAC and exhaust ventilation system isolation, bin placement, schedule, disconnects, etc.

.2 Using procedures prescribed in the Section identified in Related Work, remove and dispose of the following.

.1 Abatement Work Area 1: Basement Mechanical Room 18.

.1 Remove and dispose of all flaking paint as outlined during the site visit.
.2 Prime and paint all areas of removal to match existing.

.2 Abatement Work Area 2: Basement Plumbing Room 32.

.1 Remove and dispose of all flaking paint as outlined during the site visit.
.2 Prime and paint all areas of removal to match existing.

.3 Abatement Work Area 3: East Penthouse Mechanical Room.

.1 Remove and dispose of all flaking paint as outlined during the site visit.
.2 Prime and paint all areas of removal to match existing.

.4 Abatement Work Area 4: West Penthouse Mechanical Room.

.1 Remove and dispose of all flaking paint as outlined during the site visit.
.2 Prime and paint all areas of removal to match existing.

.3 Refer to Specification Sections identified in the Related Work for specified personnel protective measures for the safe handling, removal, clean-up of hazardous materials in each phase or work area.

.4 Visit the site prior to tender close to confirm the location and extent of any hazardous building materials or materials contaminated by hazardous materials.

.5 Protect surfaces, building fabrics and items remaining within the Abatement Work Areas.

.6 Maintain emergency and fire exits from Abatement Work Area, or establish alternative exits satisfactory to Provincial Fire Marshall and local authorities having jurisdiction. Maintain extra routes from occupied areas. Place emergency exit signs at locations to clearly mark exit route. Seal emergency exit doors so as not to impede use of door during emergency evacuation.

.7 Remove and dispose of as appropriate waste, building components, materials and items contaminated by hazardous materials that cannot be effectively cleaned.

.8 Final clean work area to remove visible signs of debris or settled dust within the work area.

.9 Unless otherwise specified, the handling, removal, clean-up or repair of hazardous materials or surfaces contaminated with hazardous materials is to be performed following wet removal techniques.

1.4 Schedule

.1 Provide necessary manpower, supervision, equipment and materials to maintain and complete the project on schedule.

.2 Work Hours:

.1 Coordinate all work, scheduling and phasing with the Owner.

.2 Duration of quiet hours work will have to be scheduled accordingly and in consultation with the Owner.

.3 Provide 48 hours written notice to the Abatement Consultant of any request to work outside normal working hours. Obtain written approval before proceeding.

1.5 Definitions

.1 Abatement Consultant: Owner's Representative providing inspection and air monitoring.

.2 Abatement Contractor: Contractor or sub-contractor performing work of this section.

.3 Abatement Work Area: Area where work takes place which will, or may, disturb hazardous materials.

.4 Amended Water: Water with wetting agent added for the purpose of reducing surface tension to allow thorough wetting of materials.

.5 Authorized Visitors: Building Owner, Abatement Consultant, or designated representative, and persons representing regulatory agencies.

.6 Competent Worker: A worker who is qualified because of knowledge, training and experience to perform the work, is familiar with the Occupational Health and Safety Act, and has knowledge of the potential or actual danger to health and safety in the work.

.7 Contaminated Waste: Material identified under Site Conditions, including fallen material, settled dust, other debris and materials or equipment deemed to be contaminated by the Abatement Consultant.

.8 HEPA: High Efficiency Particulate Aerosol filter that is at least 99.97 percent efficient in collecting a 0.3 micrometre aerosol.

.9 Lead-Containing: The Ontario Ministry of Labour (MOL) has not established a lower limit for concentrations of lead in paint, below which precautions do not need to be considered during construction projects. Pinchin follows the recommendations of the Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair. The Guideline suggests that 0.1% (1,000 ppm) lead in paint represents a de minimis concentration of lead in paint for construction hygiene purposes, that is a concentration below which the lead content is not the limiting hazard in any disturbance of leaded paint for non-aggressive disturbance of painted finishes, (hand powered demolition, chipping, scraping, light sanding, etc.).

.10 Lead Waste: Waste generated from removal of lead-containing materials, or the substrate and paint finish where left intact.

.11 Milestone Inspection: Inspection of the Abatement Work Area at a defined point in the abatement operation.

.12 Occupied Area: Any area of the building or adjoining space outside the Abatement Work Area.

.13 Personnel: All Contractor's employees, sub-contractors employees, supervisors.

.14 Remove: Remove means remove and dispose of (as applicable type of waste) unless followed by other instruction (e.g. remove and turn over to Owner).

.15 Toxicity Characteristic Leachate Procedure (TCLP): Laboratory analysis to determine leachable parameters in lead waste.

1.6 Regulations and Guidelines

.1 Comply with Provincial, and local requirements, provided that in any case of conflict among those requirements or with these Specifications, the more stringent requirements shall apply. Work shall be performed under regulations in effect at the time work is performed.

.2 Where regulations are not present, follow accepted industry standards and applicable Guideline documents.

.3 Regulations and Guidelines include but are not limited to the following:

.1 Ministry of Labour Occupational Health and Safety Act Regulations for Construction Projects including Revised Statutes of Ontario 1990, Chapter 0.1.

.2 Ministry of the Environment Regulation for the disposal of waste, including R.R.O. 1990, Reg. 347 as amended.

.3 Environmental Abatement Council of Canada (EACC), Lead Guideline For Construction, Renovation, Maintenance or Repair, October 2014.

1.7 Quality Assurance

.1 Removal and handling of hazardous materials is to be performed by persons trained in the methods, procedures and industry practices for Abatement.

.2 Ensure work proceeds to schedule, meeting all requirements of this Specification.

.3 Complete work so that at no time airborne dust, visible debris, or water runoff contaminate areas outside the Abatement Work Area.

.4 Any contamination of surrounding area (indicated by visual inspection or air monitoring) shall necessitate the clean-up of affected area, and in the same manner applicable to an Abatement Work Area at no cost to the Owner.

.5 All work involving electrical, mechanical, carpentry, glazing, etc., shall be performed by licensed persons experienced and qualified for the work required.

1.8 Supervision

.1 Provide on site for each work shift, a Shift Superintendent(s), who has authority regarding all aspects related to manpower, equipment and production.

.2 At all times during work, the Overall or Shift Superintendent(s) must be on site. Failure to comply with this requirement will result in a stoppage of all work, at no cost to the Owner.

.3 Replace supervisory personnel, with approved replacements, within three (3) working days of a written request from the Owner. Owner reserves the right to request replacement of supervisory personnel without explanation.

.4 Do not replace supervisory personnel without written approval from the Owner.

1.9 Instruction and Training

.1 Instruction and training must be provided by a competent person.

1.10 Notification

.1 Before commencing work, notify orally and in writing, an inspector at the office of the Ontario Ministry of Labour nearest the project site, where required.

.2 Inform all trades on site of the presence and location of hazardous materials identified in the Contract documents.

.3 Notify the Owner or Owner's Representative, the Joint Occupational Health and Safety Committee and the Provincial Ministry of Labour, if suspected asbestos-containing materials not identified in the contract documents are discovered during the course of the work. Stop work in these areas immediately.

.4 Notify Sanitary Landfill site as per O.Reg. 347/90 as amended.

1.11 Submittals

.1 Submit prior to starting work:

.1 Provincial Workers' Compensation Board Clearance Certificate.

.2 Insurance certificates.

.3 Copy of Company Health and Safety Policy and applicable programs.

.4 Ministry of Labour Notice of Project form.

.5 Copy of Certificate of Approval for disposal of hazardous materials waste and location of landfill.

.6 Pre-removal damage survey of the Abatement Work Area(s), waste transport routes, and bin storage areas

.2 Submit the following information regarding personnel prior to starting work:

.1 Completed Vendor Security Screening Form for all personnel who will be on site including MGS security clearance status.

.2 Resumes of the supervisory personnel.

.3 Written statement that personnel have had instruction on hazards of exposure to hazardous materials identified within this scope, the use of respirator, protective clothing, worker and waste decontamination procedures, and all aspects of work procedures and protective measures.

.4 WHMIS training certificates for all personnel.

.5 Certificate proving that each worker on site has been fit tested for the respirator appropriate for the work being performed.

.3 Submit the following information regarding HEPA filtered devices prior to use:

.1 Performance data on HEPA filtered vacuums including DOP tests no more than 3 months old.

.2 DOP tests to be performed by an independent testing company.

.1 DOP testing company is required to submit a detailed technical report of testing protocol, including Introduction, Methodology, Results, Conclusions, and Recommendations, including results of the Air-Aerosol Mixing Uniformity test as per ASME N510-2007.

.2 DOP testing company must also provide calibration certificates from an independent calibration firm or from the manufacturer of the testing equipment for both the aerosol photometer and the pressure gauge on the aerosol generator dated within 1 calendar year from the on-site testing date.

.3 DOP testing company must also provide the National Sanitation Foundation (NSF) certification name and number of the on-site technician performing the testing.

.3 Proof of calibration of DOP testing equipment.

.4 Submit the following prior to isolating the work area:

.1 Safety Data Sheets for chemicals or material used in the course of the Abatement Project.

.5 Submit the following upon completion of the work.

.1 Manifests, waybills, bills of ladings etc. as applicable for each type of waste.

1.12 Insurance

.1 Maintain a Commercial General Liability Policy with an insurance company acceptable to Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc.. The intent of this policy is to hold Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc. harmless as it relates to claims for Bodily Injury or Property Damage or both, relating to the contract. Commercial General Liability insurance shall be provided on an "occurrence" basis to cover injury or damage (whether detected or not during the policy period) which happens during the policy period.

.2 Maintain an Automobile or Fleet Policy, and Non-owned Automobile Policy with an insurance company acceptable to Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc.. The intent of these policies is to hold Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc. harmless as it relates to claims for Bodily Injury or Property Damage or both, relating to the contract.

.3 Maintain a Pollution Liability Policy (or asbestos/lead liability policy or specific coverage under the CGL for asbestos/lead abatement) with an insurance company acceptable to Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc.. The intent of this policy is to hold Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc. harmless as it relates to claims for Bodily Injury or Property Damage or both, relating to the contract. Pollution Liability shall be provided on an "occurrence" basis to cover injury or damage (whether detected or not during the policy period) which happens during the policy period. Without limiting the generality of the foregoing, the policy shall insure the operations of abatement and shall not contain any environmental and/or health hazard exclusions relating to remediation operations.

.4 Forward all certificates to Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc. before work is commenced, showing Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc. as additional insured as their interest may appear.

.5 Pinchin Ltd. and OILC and His Majesty the King in Right of Ontario and Colliers Project Leaders Inc. may request a certified true copy of the policies.

.6 The limits will not be less than:

.1	Commercial General Liability	$5,000,000.00
.2	Automobile	$2,000,000.00
.3	Pollution Policy	$5,000,000.00

1.13 Inspection

.1 From commencement of work until completion of clean-up operations, the Abatement Consultant is empowered by the Owner to inspect for compliance with the requirements of governing authorities, adherence to specified procedures and materials, and to inspect for final cleanliness and completion.

.2 The Abatement Consultant is empowered by the Owner to order a shutdown of work when leakage of asbestos from the controlled work area has occurred or is likely to occur.

.3 Any deviation from the requirements of the Specifications or governing authorities that is not approved in writing may result in a stoppage of work, at no cost to the Owner.

.4 Additional labour or materials expended by the Contractor to rectify unsatisfactory conditions and to provide performance to the level specified shall be at no additional cost to the Owner.

.5 Inspection and air monitoring performed as a result of Contractor's failure to perform satisfactorily regarding quality, safety, or schedule, shall be back-charged to the Contractor.

.6 Facilitate inspection and provide access as necessary. Make good work disturbed by inspection and testing at no cost to the Owner.

.7 Refer to the Sections identified in Related Work for specified milestone inspections which are to take place at defined points throughout the abatement operation specific to each phase or work area.

.8 The following Milestone Inspections may take place, at the Owner's cost, as outlined in each related specification section:

.1 Milestone Inspection - Visual Clearance

.1 Inspection of Abatement Work Area after completion of all abatement, but prior to application of new paint finishes.

.9 Do not proceed with next phase of work until written approval of each milestone is received from the Abatement Consultant.

1.14 Worker Protection

.1 Instruct workers before allowing entry to the Abatement Work Area. Instruction shall include training in use of respirators, dress, showering, entry and exiting from an Abatement Work Area, and all other aspects of work procedures and protective measures.

.2 Workers shall not eat, drink, chew gum or tobacco, vape or smoke in the Abatement Work Area.

.3 Provide soap, towels and facilities for washing of hands and face, which shall be used by all personnel when leaving the Abatement Work Area.

.4 Respiratory Protection

.1 Refer to each particular Section of the Specification for specified type of respiratory equipment specific to each phase or work area.

.2 Respirators shall be:

.1 Certified by the National Institute of Occupational Safety and Health (NIOSH) or other testing agency acceptable to the Ministry of Labour.
.2 Fitted so that there is an effective seal between the respirator and the worker's face. Ensure that no person required to enter an Abatement Work Area has facial hair which affects the seal between respirator and face.
.3 Assigned to a worker for their exclusive use.
.4 Maintained in accordance with manufacturer's specifications.
.5 Cleaned, disinfected and inspected by a competent person after use on each shift, or more often if required.
.6 Repaired or have damaged or deteriorated parts replaced.
.7 Stored in a clean and sanitary location.
.8 Provided with new filters as necessary, according to manufacturer's instructions.
.9 Worn by personnel who have been fit checked by qualitative or quantitative fit-testing.
.10 Instruction on proper use of respirators must be provided by a competent person as defined by the Occupational Health and Safety Act.

.3 Provide protective clothing, to all personnel which:

.1 Is made of a material that does not readily retain nor permit penetration of asbestos fibres or lead/silica dust.
.2 Consists of head covering and full body covering that fits snugly at the ankles, wrists and neck.
.3 Once coveralls are worn, treat and dispose of as contaminated waste.
.4 Is replaced or repaired if torn or ripped.

.4 Use hard hats, safety footwear and other protective equipment and apparel required by applicable construction safety regulations.

1.15 Visitor Protection

.1 Provide clean protective clothing and equipment to Authorized Visitors.

.2 Instruct Authorized Visitors in the use of protective clothing and Abatement Work Area entry and exit procedures.

.3 Authorized visitors are required to be fit tested on respirators, prior to entering Abatement Work Area.

1.16 Signage

.1 Lead Abatement Signs: Post signs at access points to the Abatement Work Area, stating at minimum, the following:

.1 There is a lead dust, fume or mist hazard.

.2 Access to the work area is restricted to authorized persons.

.3 Respirators must be worn in the work area.

.2 Place placards in accordance with Transportation of Dangerous Goods Act.

1.17 Waste and Material Handling

.1 Waste bins must be placed on grade as approved by the Owner.

.2 All bins for hazardous materials must be covered and locked when waste transfer is not being performed.

.3 Clean and wash equipment prior to removal from Abatement Work Area if removed prior to completion.

.4 Place all equipment, tools and unused materials that cannot be cleaned in Abatement Waste Containers.

.5 As work progresses, and at regular intervals, transport the sealed and labelled waste containers from the Abatement Work Area to waste bin.

.6 Place items in bins according to waste classification. Place lead waste, metals, non-asbestos waste, etc. in separate bins.

.7 Removal of waste containers and decontaminated tools and materials from the Abatement Work Area shall be performed as follows:

.1 Remove any visible contamination from the surface of non-porous or cleanable waste being removed from the Abatement Work Area. If the item can be cleaned, remove it from the site as clean waste.

.2 Place waste or item in Waste Container and seal closed.

.3 Wet wipe outside of Waste Container.

.4 Remove waste containers and transport to appropriate bin.

.8 Transport waste and materials via the predetermined routes and exits. Arrange waste transfer route with Owner. Use a closed, covered cart to transport through Occupied Areas.

.9 Provide workers transporting waste with means to access full personal protective equipment and all tools required to properly clean up spilled material in the case of a rupture of a Waste Container.

.10 Pick-up and drop off of garbage bin shall be at pre-approved times, and must not interfere with the Owners operations.

.11 Transport hazardous waste to landfill or waste transfer station licensed by the provincial Ministry of the Environment.

.12 Cooperate with the provincial Ministry of the Environment inspectors and immediately carry out instructions for remedial work at dump to maintain environment, at no additional cost to the Owner.

PART 2 PRODUCTS AND FACILITIES

2.1 Materials and Equipment

.1 Refer to the Sections identified in Related Work for specified materials, equipment or facilities specific to each phase or work area.

.2 Materials and equipment must be in good condition and free of debris and fibrous materials. Disposable items must be of new materials only.

.3 HEPA Vacuum: Vacuum with necessary fittings, tools and attachments. Discharged air must pass through a HEPA filter.

.4 Lead Waste Container: An impermeable container acceptable to disposal site and Ministry of the Environment, that is:

.1 Dust tight.

.2 Suitable for the type of waste.

.3 Evaluated for leachable lead content, and disposed of in accordance with applicable regulations.

.1 Where lead waste exceeds 5.0 mg/L of lead in the TCLP analysis, label as lead waste and dispose of as leachate toxic hazardous waste.

.2 Where lead waste is below 5.0 mg/L of lead in the TCLP analysis, disposed of as construction waste.

.5 Polyethylene Sheeting: 6 mil (0.15 mm) minimum thickness unless otherwise specified, in sheet size to minimize joints.: 6 mil (0.15 mm) minimum thickness unless otherwise specified, in sheet size to minimize joints.

.6 Protective Clothing: Disposable coveralls complete with head covering and full body covering that fits snugly at the ankles, wrists and neck.

.7 Rip-Proof Polyethylene Sheeting: 8 mil (0.20 mm) fabric made up from 5 mil (0.13 mm) weave and two (2) layers of 1.5 mil (0.05 mm) poly laminate or approved equal. In sheet size to minimize on-site seams and overlaps.

.8 Sprayer: Garden type portable manual sprayer or water hose with spray attachment if suitable.

.9 Tape: Duct tape or tape suitable for sealing polyethylene to surfaces under both dry and wet conditions in the presence of Amended Water.

.10 Wetting Agent: Non-sudsing surfactant added to water to reduce surface tension and increase wetting ability.

PART 3 EXECUTION

.1 Refer to the Sections identified in Related Work for specified procedures for work area preparation, maintenance, site dismantlement, application of lock-down agent and all other procedures for the safe handling, removal and clean-up of hazardous materials specific to each phase or work area.

END OF SECTION

\\pinchin.com\pet\Job\329000s\0329906.000 Colliers,145SirWilliamHearst,HAZ,CONS\Deliverables\Specifications\329906 02 81 00 Hazardous Materials - General Provisions 145 William Hearst Ave Toronto ON Colliers Sept 25 2023.docx

PART 1 GENERAL

.1 Read this Section in conjunction with all drawings and all other Sections so as to comply with the requirements of the General Conditions of the Contract.

.2 Requirements specified elsewhere:

.1 Section 02 81 00 Hazardous Materials – General Provisions

1.2 Outline of Work

.1 Refer to Section 02 81 00 Hazardous Materials – General Provisions for the Outline of Work.

.2 The intent of this Section is to provide safe work practices and procedures to govern the handling, removal, clean-up and disposal of lead-containing materials following Class 1 or Low Risk procedures, and Pinchin and Owner specific requirements.

.3 Comply with requirements of this Section when performing following Work:

.1 Removal of lead-containing surface coatings with a chemical gel, stripper or paste.

1.3 Instruction and Training

.1 Provide instruction and training to all workers including the following:

.1 Hazards of lead.

.2 Use, care and disposal of protective equipment (including but not limited to respirators and filters) and clothing that would be used and worn during abatement work, including:

.1 Limitations of equipment.

.2 Inspection and maintenance of equipment.

.3 Proper fitting of equipment.

.4 Disinfecting and cleaning of equipment.

.3 Personal hygiene to be observed when performing the work.

.4 The measures and procedures prescribed by this section including decontamination of the worker.

.5 Instruction and training must be provided by a competent person.

1.4 Personal Protection

.1 Provide non-powered half-face respirators with P100 high efficiency cartridge filters when requested by personnel.

.2 Provide protective clothing, when requested by personnel, entering the Abatement Work Area, including:

.1 Disposable protective clothing that does not readily retain or permit skin contamination, consisting of full body covering including head covering with snug fitting cuffs at wrists, ankles, and neck.

.3 Provide protective clothing, to all personnel entering the Abatement Work Area, including:

.1 Dust impermeable gloves appropriate for the work being completed.

.4 Wear hard hats, safety shoes and other personal protective equipment required by applicable construction safety regulations.

.5 Lead-specific soaps and hygiene indicators are recommended to be provided for shower and hand-wash stations.

1.5 Inspections

.1 Refer to Part 1.13 Inspections in Section 02 81 00 – General Provisions.

PART 2 PRODUCTS AND FACILITIES

.1 Refer to Section 02 81 00.

PART 3 EXECUTION

3.1 Site Preparation - General

.1 Provide washing facilities consisting of a wash basin, clean water, soap and towels.

.1 Workers are to use washing facilities each time leaving the Abatement Work Area.

.2 Stored or non-fixed items, including but not limited to equipment, furniture, waste etc., shall be removed from the Abatement Work Area prior to abatement work.

.3 Isolate, at panel, and disconnect existing power supply to Abatement Work Area. Power supply to remaining areas of building must not be disrupted during work of this section.

.1 Lock-out/tag-out power at electrical panels.

.2 Mark/tag any items within or passing through the Abatement Work Area that are to remain live including but not limited to cable, conduit, wire, fixtures, equipment panels, etc.

.4 Shut down HVAC systems serving the Abatement Work Area.

.1 Install polyethylene sheeting over openings in ducts and diffusers and seal.

.2 HVAC to remaining areas of building must not be disrupted during work of this section.

.3 System shall remain inoperative until completion of work, unless ducts can be effectively capped.

.4 Perform work at scheduled times after shutting down HVAC systems affecting the Abatement Work Area.

.5 Remove visible dust from all surfaces in the work area including those to be worked on, using HEPA Vacuums or wet wiping.

.6 Provide amended water for wetting materials, and adequate method of wetting (garden sprayers, airless sprayers, etc.).

.7 Provide electrical power and shut off for operation of powered tools and equipment. Provide ground fault interrupter circuits on power source for electrical tools, in accordance with applicable CSA Standard.

.1 Ensure safe installation of electrical lines and equipment.

.8 Do not use compressed air to clean or remove dust or debris.

.9 Frequently and at regular intervals during the work, clean up dust and waste using HEPA vacuums and/or wet sweeping or mopping.

.10 Frequently and at regular intervals, place all waste in waste containers.

.11 Immediately upon completion of work, clean area with HEPA vacuum and/or wet sweeping or mopping.

3.2 Site Preparation – No Enclosure Required

.1 Isolate Abatement Work Area with barrier tape.

.2 Maintain Abatement Work Area in tidy condition.

.3 Remove waste and debris frequently.

.4 Remove standing water on polyethylene/floor at the end of every shift.

.5 Turn off water supply to hoses and reduce pressure in hose, prior to leaving the Abatement Work Area at end of shift.

3.3 Lead-Containing Paint Abatement

.1 Removal methods minimizing dust generation should be used wherever possible.

.1 Wet methods are to be used to reduce dust generation.

.2 Wetting agents should be used where possible.

.3 Wet methods are not to be used if it creates a hazard or cause damage to equipment or to project.

.2 Provide drop sheets below all lead operations that may produce dust, chips or debris containing lead.

.3 Waste water from cleaning or removal operations must be contained, for treatment or disposal.

.4 Remove lead-containing paint in small sections and pack as it is being removed in sealable lead waste containers.

.5 Follow manufacturer’s instructions for all use of chemical gels, strippers and pastes.

.1 Ensure agent neutralizers, were required, are applied.

.2 Do not use chemical gels, strippers or pastes on surfaces where they are scheduled to be repainted, and the material affect the new paint application.

.6 After completion of stripping work, wire brush and wet sponge surface from which lead based paint has been removed to remove visible material. During this work keep surfaces wet.

.7 Wet clean entire work area, and equipment used in process.

.1 Compressed air or dry sweeping not be used to clean up lead-containing dust or waste.

.2 Ensure all waste is cleaned and packaged.

.8 Seal filled containers. Clean external surfaces thoroughly by wet sponging. Remove from immediate working area to staging area. Clean external surfaces thoroughly again by wet sponging. Wash containers thoroughly pending removal to outside.

3.4 Waste Management and Disposal

.1 Per Section 02 81 00.

3.5 Final Cleaning

.1 Remove polyethylene sheet by rolling it away from walls to centre of work area. Vacuum visible lead containing particles observed during cleanup, immediately, using HEPA vacuum.

.2 Place polyethylene sheets, tape, cleaning material, clothing, and contaminated waste in plastic bags and sealed labelled waste containers for transport.

.3 Conduct final check to ensure no dust or debris remains on surfaces as result of dismantling operations.

END OF SECTION

\\pinchin.com\pet\Job\329000s\0329906.000 Colliers,145SirWilliamHearst,HAZ,CONS\Deliverables\Specifications\329906 02 83 10 Lead Abatement - Class 1 Precautions 145 William Hearst Ave Toronto ON Collier Spet 25 2023.docx

OHE CONSULTANTS
Occupational Hygiene & Environment

August 17, 2022

VIA E-MAIL (gabriel.areaya@cbre.com)

CBRE Limited
IO Property and Land Management Services
145 Sir William Hearst Avenue
North York, ON
M3M 0B6

Phone: 647 208 0419

Attention: Mr. Gabriel Areaya, Facilities Manager

Dear Mr. Areaya:

Subject: Bulk Sampling for the Presence of Lead in Paint – Summary Report
West and East Penthouses, Basement Sprinkler Room and Boiler Room 18
145 Sir William Hearst Avenue, North York, Ontario
OHE Project No.: 27963

We are pleased to submit this summary report regarding bulk sampling of paint for the presence of lead in various locations in the West and East Penthouses and in the basement sprinkler room and Boiler Room 18 located at 145 Sir William Hearst Avenue, North York, Ontario (herein referred to as the "Subject Location").

SCOPE OF WORK

The scope of work consisted of the following:

- Site visits and visual inspection of the Subject Location;
- Collection and analysis of nine (9) bulk samples of paint for the presence of lead; and
- Preparation of a summary report to document the findings.

The fieldwork was conducted by Ms. Natalya Babayeva, Project Coordinator, of OHE Consultants (OHE) on July 29, 2022 and August 16, 2022.

METHODOLOGY

Bulk Sampling and Analysis for Lead

Bulk samples of suspect lead-containing materials are analyzed in accordance with a US EPA method for the determination of lead content in bulk materials, EPA Method (SW 846 3050B/7000B). The EPA Method requires that the samples be analyzed using the Flame Atomic Absorption Spectrometry (SW 846 3050B/7000B) technique. This method may be used determine trace elements in solution.

The lead bulk samples were analyzed by EMSL Canada. Inc. (EMSL), an independent and Environmental Lead Laboratory Accreditation Program (ELLAP) accredited laboratory.

FINDINGS

Nine (9) samples (OHE Samples 27963-L1 to 27963-L9) of paint were collected at the Subject Location. Eight (8) of the samples (OHE Samples 27963-L1 to 27963-L8) were found to be lead-containing. It should be noted at the paint in all locations sampled was identified to be damaged (peeling, flaking).

The following table summarizes the analysis of the bulk sample for the presence of lead in paint (the laboratory analysis report is attached to this letter report):

Summary of Analysis of Lead on Surfaces
Collected on July 29 and August 16, 2022

OHE Sample Number	Sample Description	Sample Location	Contains Lead by Weight (%)
27963-L1	**Light Yellow Paint**	**Brick Wall, West Penthouse**	**0.020**
27963-L2	**Light Yellow Paint**	**Brick Wall, East Penthouse**	**0.023**
27963-L3	**Light Yellow Paint**	**Concrete Wall, East Penthouse**	**0.14**
27963-L4	**Gray Paint**	**Fan Supply Unit, Lower Section, East Penthouse**	**0.31**
27963-L5	**Light Green Paint**	**Fan Supply Unit, Upper Section, East Penthouse**	**0.17**
27963-L6	**Green/Off-White Paint**	**Wall, Sprinkler Room, Basement**	**0.47**
27963-L7	**Light Yellow Paint**	**Wall, Boiler Room 18, Basement**	**0.44**
27963-L8	**Light Green Paint**	**Mechanical Systems Insulation, Boiler Room 18, Basement**	**2.0**
27963-L9	Cream Paint	Brick Wall, Upper West Penthouse	0.0082

CONCLUSIONS

Based on the findings of the sampling, the following conclusions are presented:

- Lead-containing paint was identified in light yellow, gray, light green, and green/off-white paints in various areas at the Subject Location. It is assumed that the results presented apply to all paint(s) of the same colour.

- The paints identified at the Subject Location were noted to be damaged.

RECOMMENDATIONS

OHE's recommendations, based on the findings, are as follows:

- Remove the damaged lead-containing paint. The removal of the damaged paint should be prioritized in areas where building staff are likely to come into contact with the damage paint to prevent potential exposure of the building staff to lead.

- Remove all lead-containing materials that are likely to be disturbed during planned renovations.

- Removal of identified lead-containing materials shall be carried out in accordance with the following requirements:
    - Guideline: Lead on Construction Projects (issued by Ontario Ministry of Labour);
    - Designated Substances Regulation, O. Reg. 490/09; and
    - Regulation for Construction Projects, O. Reg. 213/91.

- Provide a copy of this report to contractors bidding on or performing work within the Subject Location.

LIMITATIONS OF THE PROJECT

The site visit and bulk sampling for lead was limited to the areas and paint, as directed by the client.

GENERAL STATEMENT OF LIMITATIONS

The information and opinions rendered in this report are for use exclusively by the **CBRE Limited**. OHE Consultants reserves the right to review and comment on any interpretation of the data or conclusions derived by **CBRE Limited**. No other representation, either expressed or implied, is included in this report.

OHE Consultants has exercised a degree of thoroughness and competence that is consistent with the profession during the execution of the sampling. OHE Consultants considers the opinions and information as they are presented in this report to be factual at the time of the sampling in the subject space.

OHE Consultants relied on professional judgment while gathering and analyzing the information obtained. OHE Consultants cannot warrant or guarantee that the conclusions reached are absolutely complete or accurate. However, OHE Consultants commits itself to care and competence in reaching those conclusions.

We trust that this report meets with your requirements. Please do not hesitate to contact the undersigned should you have any questions or require further information.

Dated August 2022

OHE Consultants
Occupational Hygiene & Environment

Original Signed by:

Prepared by:
Natalya Babayeva, B.Eng.
Project Coordinator

Original Signed by:

Reviewed by:
Michal Zitnik, M.H.Sc., ROH, CIH
Vice President

Attachments: Appendix A: Laboratory Analysis Reports
Appendix B: Site Photographs

Laboratory Analysis Reports

EMSL Canada Inc.
2756 Slough Street, Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com torontolab@emsl.com

EMSL Canada Or	552211941
CustomerID:	55OHEI93
CustomerPO:	27963
ProjectID:	

Attn: **Fred Atrash**
OHE Consultants
311 Matheson Blvd. East
Mississauga, ON L4Z 1X8

Phone: (905) 890-9000
Fax: (905) 890-9005
Received: 8/2/2022 01:38 PM
Collected:

Project: **27963**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected	Analyzed	Weight	RDL	Lead Concentration
27963-L1		8/3/2022	0.2500 g	0.0080 % wt	0.020 % wt
552211941-0001	Site: Light Yellow Paint, Brick Wall, West Penthouse				
27963-L2		8/3/2022	0.2495 g	0.0080 % wt	0.023 % wt
552211941-0002	Site: Light Yellow Paint, Brick Wall, East Penthouse				
27963-L3		8/3/2022	0.2504 g	0.0080 % wt	0.14 % wt
552211941-0003	Site: Light Yellow Paint, Concrete Wall, East Penthouse				
27963-L4		8/3/2022	0.2511 g	0.0080 % wt	0.31 % wt
552211941-0004	Site: Gray Paint, Fan Supply Unit, Lower Section, East Penthouse				
27963-L5		8/3/2022	0.2497 g	0.0080 % wt	0.17 % wt
552211941-0005	Site: Light Green Paint, Fan Supply Unit, Upper Section, East Penthouse				
27963-L6		8/3/2022	0.2498 g	0.016 % wt	0.47 % wt
552211941-0006	Site: Green/Off-White (Multiple Layers) Paint, Wall, Sprinkler Room, Basement				

Rowena Fanto, Lead Supervisor
or other approved signatory

* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.
Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA-LAP, LLC - ELLAP #196142

Initial report from 08/09/2022 09:02:19

EMSL Canada Inc.
2756 Slough Street, Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com torontolab@emsl.com

EMSL Canada Or	552212654
CustomerID:	55OHEI93
CustomerPO:	27963
ProjectID:	

Attn: **Fred Atrash**
OHE Consultants
311 Matheson Blvd. East
Mississauga, ON L4Z 1X8

Phone:	(905) 890-9000
Fax:	(905) 890-9005
Received:	8/17/2022 09:21 AM
Collected:	8/16/2022

Project: **27963**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	*Collected*	*Analyzed*	*Weight*	*RDL*	*Lead Concentration*
27963-L7	8/16/2022	8/17/2022	0.2541 g	0.016 % wt	0.44 % wt
552212654-0001	Site: Light Yellow Paint, Wall, Boiler Room 18, Basement				
27963-L8	8/16/2022	8/17/2022	0.2463 g	0.081 % wt	2.0 % wt
552212654-0002	Site: Light Green Paint, Mechanical Systems Insulation, Boiler Room 18, Basement				
27963-L9	8/16/2022	8/17/2022	0.2480 g	0.0081 % wt	0.0082 % wt
552212654-0003	Site: Cream Paint, Wall, Upper West Penthouse				

Rowena Fanto, Lead Supervisor
or other approved signatory

* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA-LAP, LLC - ELLAP #196142

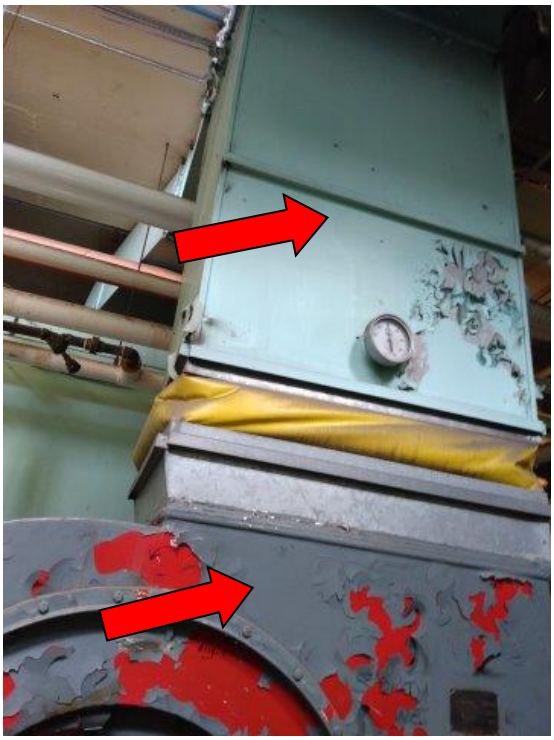
Initial report from 08/17/2022 15:08:57

Site Photographs

Photograph 1: View of the damaged (peeling and flaking) lead-containing light yellow paint on the brick wall in the west penthouse at the Subject Location.

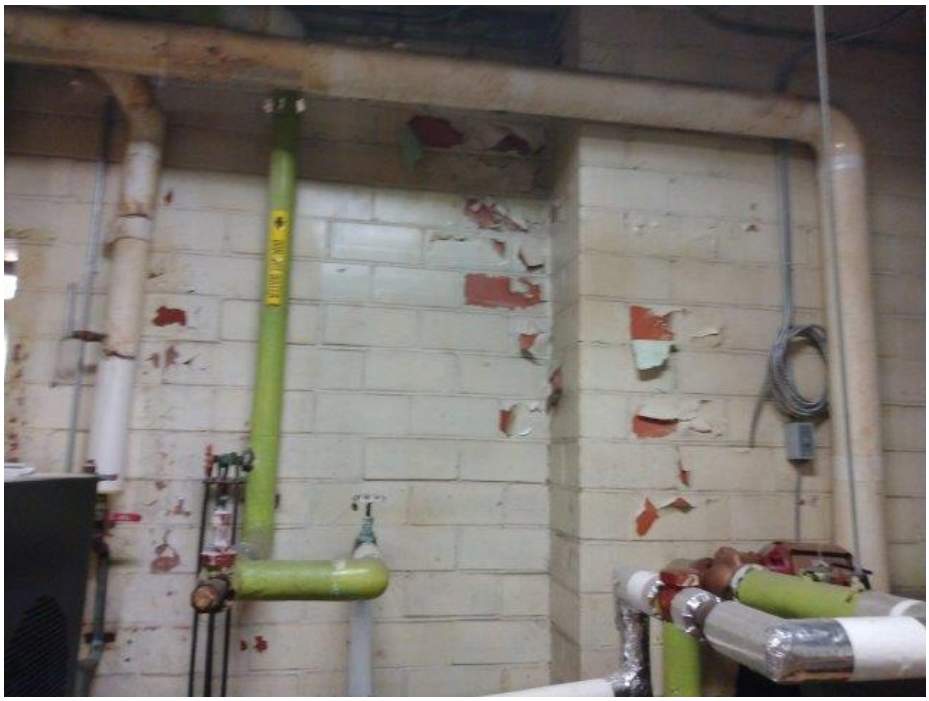
Photograph 2: View of the damaged (peeling) lead-containing light yellow paint on the concrete wall in the east penthouse at the Subject Location.

Photograph 3: View of the damaged (peeling and flaking) lead-containing light yellow paint on the brick wall in the east penthouse at the Subject Location.



Photograph 4: View of the damaged (peeling and flaking) lead-containing gray paint on the lower section and damaged (peeling and flaking) lead-containing light green paint on the upper section of the fan supply unit in the east penthouse at the Subject Location.

Photograph 5: View of the damaged (peeling and flaking) lead-containing multiple layer (green/off-white) paint on the wall in the basement sprinkler room at the Subject Location.



Photograph 6: View of the damaged (peeling and flaking) lead-containing light yellow paint on the brick wall in the boiler room 18 in the basement at the Subject Location.

Photograph 7: View of the damaged (peeling and flaking) lead-containing light green paint on the mechanical systems insulation and on the tank in the boiler room 18 in the basement at the Subject Location.