

SECTION 00 91 01 – ADDENDUM NO. 01

October 28, 2020

Municipal Court Remodel (5694 Second Ave., Ferndale, WA)
City of Ferndale
PO Box 939
Ferndale, WA. 98248

Bidders and Suppliers:

The following changes for the subject project shall become a part of the Contract Documents including Drawings dated September 3, 2020 and Project Manual dated October 2020. Where a portion of the Documents are modified or deleted by Addenda, the unaltered portions of the Documents shall remain as indicated.

Acknowledge receipt of this addendum by inserting the number and date in Section 00 41 00, Bid Proposal. Failure to do so may subject the bidder to disqualification.

ATTACHMENTS AS PART OF THIS ADDEDNUM:

1. Site Walkthroughs Attendees List (1) from October 26, 2020
2. Pre-Bid Site Walk Agenda from October 26, 2020
3. Specification Section 00 01 10
4. Specification Section 00 31 13
5. Specification Section 01 11 10
6. Specification Section 01 23 00
7. Specification Section 02 80 00
8. Specification Section 02 82 13
9. Specification Section 02 83 13
10. Drawing HM2.01

A. GENERAL CLARIFICATION:

1. The Pre-Bid Meeting Walk Agenda and Attendees List from Monday, October 26, 2020, 1:00pm is attached for reference.
2. Regarding weekend work hours: should General Contractor or Subcontractors request to work Saturdays or Sundays, a request shall be provided two weeks in advance for the specified dates and City can authorize.

B. CHANGES TO THE PROJECT MANUAL:

1. **Revised** Section 00 01 10 – Table of Contents is issued.
2. **New** Section 01 11 00 – Summary of Hazardous Materials Work is added to the Project Manual.
3. **Revised** Section 00 31 13 – Preliminary Project Phases
4. **New** Section 01 23 00 – Alternates is added to the Project Manual.
5. **New** Section 02 80 00 – Hazardous Materials Report is added to the Project Manual.

6. **New** Section 02 82 13 – Asbestos Abatement is added to the Project Manual.
7. **New** Section 02 83 13 – Lead-Related Activities is added to the Project Manual.
8. Section 07 21 00 – Thermal Insulation: **Revise** 2.2, A to read:
 - i. “A. Manufacturers: Owen Corning or Insulfoam (Insulfoam R-Tech IV) or equivalent.”
9. Section 09 51 00 – Acoustical Ceilings: **Add** to 2.2, B the following:
 - ii. “Rockfon Educational Standard, #41100 and #41101 ceiling tiles are approved substitution.”

C. CHANGES TO THE DRAWINGS:

1. **New** Sheet HM2.01, Roof Hazardous Material Plan, is issued as part of the Bid documents.

END OF SECTION

MEETING ATTENDANCE RECORD

PROJECT NO./TITLE: Municipal Court Remodel

AGENCY/LOCATION: City of Ferndale

PROJECT LOCATION: 5694 Second Avenue, Ferndale, WA

MEETING DATE/TIME: Monday, October 26, 2020 at 1:00PM

MEETING LOCATION: At Project Site

MEETING SUBJECT: Pre-Bid Walk-Through

	NAME:	REPRESENTING	PHONE:	EMAIL:
1.	Tamas Bencsik	Coffman	206-521-0746	bencsik@coffman.com
2.	BRADY LUGAS	TIGER	360-599-7446	brady@tigerconstruction.us
3.	Grant Scarlett	Faber Construction	360-351-3500	Bids@faberconstruction.com
4.	PATRICK TILLEY	COFFMAN	206-465-4111	patrick.tilley@coffman.com
5.	KEVIN RENZ	COF	360-685-2376	KEVINRENZ@CITYOFFERDALE.OREG
6.	Jared Murphy	Smith Mech	360-384-3205	jmurphy@smithmechanical.com
7.	Wendell Godard	Janicki General Contracting	360-223-0992	wgodard@janickilogging.com
8.	BRAD CRAWFORD	RMC Architects	360-676-7733	brad.c@rmcarchitects.com
9.	Tim Grieb	VECA Electric	206-586-2153	Tgrieb@veca.com
10.	Chad Brewer	Redhawk Group	360-961-1820	chad@redhawkgroup.com
11.	Bob Valsonis	Great Floor	360-738-3599	BVALSONIS@GREATFLOORS.COM
12.	Peter Janicki	Janicki General Cont.	360-840-3569	peterk@janickilogging.com

PRE-BID CONFERENCE/WALKTHROUGH AGENDA

Project Title: **City of Ferndale – Municipal Court Remodel**
Date: **Monday, October 26, 2020 at 1:00PM**
Location: **5694 Second Avenue
Ferndale, WA 98248**

I. General Bidding Procedures/Requirements:

A. Sign-in sheet reminder, Introductions, COVID Safety

- Project Team for City:
 - Project Manager: Kevin Renz
- Project Team for RMC Architects
 - Project Manager: Brad Cornwell (Contact information below)
- COVID Safety
 - Masks required for all in attendance
 - Simultaneous building occupancy may be limited based on group size

B. Bid Opening time, date and location

- Bids to be received **prior to 3:00 PM Wednesday, November 4, 2020** at City of Ferndale, as advertised.
- Public bid opening will commence at approximately **3:30 PM Wednesday, November 4, 2020 via Microsoft Teams (link will be provided on project page)**.
- Addenda - Bidders must acknowledge receipt of all Addenda by using space provided on the Bid Proposal form.
- Do not include any Washington State Sales Tax in any amounts on the Bid Proposal.
- Liquidated Damages: \$250 for each consecutive calendar day this project is in default after the Contract Time.

C. Scope of Work

- Review Base Bid scope of work
- Estimated Base Bid MACC: \$360,000-\$410,000
- Review Alternates
 1. Alternate No. 1: Replace suspended acoustical ceiling tiles at Courtroom 101.
 2. Alternate No. 2: Install new carpet tile at Courtroom 101.
 3. Alternate No. 3: Remove existing roofing and insulation layers above existing structural decking at roof of North building and install new insulation and roofing.
 4. Alternate No. 4: Remove existing roofing and insulation layers above existing structural decking at roof of South building and install new insulation and roofing.
- Permit Status – #20032-COMM-TI ready to issue

D. Construction Schedule Review

- Anticipated NTP: December 9, 2020, Wednesday.
- Base Bid Substantial Completion within (87) calendar days after NTP.
- Substantial Completion within (180) calendar days after issued NTP.
- Final Completion within (30) calendar days after date of Substantial Completion

E. Information Items

- Questions during bidding period to be directed to City and RMC Project Manager:

Kevin Renz, Public Works Director
City of Ferndale
Phone: (360) 685-2376
Email: kevinrenz@cityofferndale.org

Brad Cornwell
RMC Architects
Phone: (360) 676-7733
Email: brad.c@rmcarchitects.com

- **Last projected addendum issuance date(s):**
- Wednesday, October 28, 2020.

F. Substitution Requests (RMC)

- Substitution Requests to be submitted on the form included in Specification Section 012501.
- Last date to submit substitution request: Monday, October 26, 2020.

II. Specific Job Related Issues:

A. Site Access and Staging/Laydown Area

- Building access
- Staging
- Ongoing building use – Social Service Agency and Court Functions.
- See Supplemental Conditions, Section 007300 for Hours of Work defined as 7:00AM-6:00PM, Monday through Thursday excluding holidays.

B. Personal Behavior/Security

- a. Security items
- b. Tobacco
- c. Respectful conduct
- d. Work hours – See Section 007300, 1.4.
- e. Parking: _____

III. Questions and Answers:

IV. Walkthrough:

Note that Pre-bid Conference notes and sign-in sheet will be included in an addendum. Questions answered in Pre-bid Conference do not change the contract requirements. All changes resulting from questions asked during Pre-bid Conference will be issued in addendums.

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DIVISION 02 – EXISTING CONDITIONS

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02 80 00	Hazardous Materials Report
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DIVISION 04 – MASONRY

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DIVISION 05 – METALS

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DIVISIONS 29-33 – NOT USED

END OF SECTION 00 01 10

SECTION 00 31 13 – PRELIMINARY PROJECT PHASES

The following Preliminary Project Phasing Plan is provided for planning purposes. This phasing plan is not meant to dictate means and methods to perspective Bidders or take the place any required planning on the part of the Bidder to provide a responsive Bid. This phasing plan is simply an outline of the work to be performed that takes into the account the lead-time and critical path nature of the submittals, ordering, and delivery of the project equipment.

Preliminary Project Phasing Plan

A. Work Summary (October 2020 to July 2021)

1. Bid Advertisement: October 14, 2020 – Wednesday
2. Pre-Bid Site Walk: October 26, 2020 – Monday
3. Last Day to Issue Bid Addendum: November 11, 2020 – Wednesday
4. Open Bids: November 23, 2020 – Monday
5. Notice of Award: December 8, 2020 – Tuesday
6. Preconstruction Meeting: December 29, 2020 – Tuesday
7. Construction Submittals: throughout Construction period
8. Notice to Proceed: Mobilize on-site: December 30, 2020 – Wednesday
9. Construct Remodel and Addition Improvements (Building, sidewalk, etc.)
10. Substantial Completion Deadline: June 21, 2021 – Monday
11. Final Completion: July 21, 2021 – Tuesday

END OF SECTION 00 31 13

SECTION 01 11 10 – SUMMARY OF HAZARDOUS MATERIALS WORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Hazardous Materials or materials needing special handling or disposal, that may be potentially impacted by the project or that could be encountered during construction, have been identified below. The purpose of this section is to identify all of these materials in one section and refer the reader to subsequent sections as necessary.

1.2 RELATED WORK

- A. Work performed under this specification section is governed by related specification sections, including, but not limited to, the following:
 - 1. Division 2: Existing Conditions, Section 02 82 13, Asbestos Abatement.
 - 2. Division 2: Existing Conditions, Section 02 83 13, Lead-Related Activities.

1.3 GENERAL REQUIREMENTS

- A. **SUPERVISORY AUTHORITY:** The General Contractor is to avail themselves of all responsibilities under applicable regulations related to their supervisory authority over sub-contractors and personnel performing work related to hazardous materials.
- B. **ACCESS RESTRICTIONS:** Work described in this Section includes restriction of work areas during hazardous materials activities. Access to various work areas by the general public, general trades and other individuals will not be possible during certain hazardous materials work sequences, as specified herein and elsewhere. General Contractor is to coordinate the Work to facilitate access by sub-contractors while enforcing work area restrictions, and to minimize disruption to building occupants and services.
- C. **EMERGENCY CONTACTS:** Designate qualified representatives of the General Contractor and specific hazardous materials sub-contractors who are to be available on a 24-hour emergency basis for the duration of the Work. Provide contact information to the Owner's Representative for inclusion in the project emergency contact list.
- D. **ASBESTOS PRODUCTS:** Contractor shall ensure that no asbestos products in any form are incorporated into the Work.

1.4 ASBESTOS

- . Asbestos-related work is included in this contract. See items below.
- B. The Contractor shall refer to the attached Limited Hazardous Materials Survey Report prepared by PBS Engineering and Environmental dated October 6, 2020. This document lists suspect asbestos-containing materials (ACM) sampled and analyzed for asbestos content, or presumed, at the areas of the building included in the Work. The Contractor shall ensure that copies of this information are made available to and retained on the project site by all subcontractors.

- C. The Contractor shall be aware that suspect-ACM may exist in inaccessible locations of the spaces included in the Work, and in areas of the buildings not included in the Work. The Contractor shall proceed with caution during all phases of the Work. Should any suspect-ACM not indicated in the Hazardous Materials Survey Report be encountered, the Contractor shall immediately notify the Owner's Representative.
- D. The Contractor is advised that, should additional ACM not included in the Hazardous Materials Survey Report be encountered, the Owner may elect to include the abatement of such materials in the Work at a mutually agreed upon price. Work impacting such materials is not to occur prior to the Contractor receiving explicit written authorization from the Owner, and any Work performed without such approval is performed at the Contractor's own risk and expense.
- E. The disturbance or impact of ACM may cause asbestos fibers to be released into the building's atmosphere, thereby creating a potential health hazard to building occupants. Contractor is to apprise all workers, supervisory personnel, subcontractors and consultants who will be at the jobsite of the seriousness of this potential hazard and of proper Work procedures that must be followed, should it occur.
- F. Should the disturbance or impact of ACM occur, or additional ACM not included in the Hazardous Materials Survey Report be encountered, the Contractor shall immediately notify the Owner's Representative.
- G. Damage of Asbestos by the Contractor: Damage to ACM to remain caused by the Contractor shall be repaired to the satisfaction of the Owner by the Contractor using certified asbestos workers according to these specifications, and at the sole expense of the Contractor.
- H. Where in the performance of the Work, workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified ACM, Contractor shall take appropriate continuous measures, as necessary, to protect all building occupants from the potential hazard of exposure to airborne asbestos. Such measures shall include the procedures and methods described herein, and compliance with applicable local, state and federal regulations.
- I. Contractor shall furnish all labor, materials, equipment, services and insurance (specifically covering the handling and transportation of ACM) that is specified, shown, or reasonably implied for activities related to asbestos-containing materials as identified on drawing sheet HM2.01.

1.5 LEAD

- . Lead-containing paint: The Owner has conducted a survey for lead-containing paint in the areas to be impacted by the Work. Refer to the Limited Hazardous Materials Survey Report for locations of lead-containing paint. Perform work impacting lead-containing paint in accordance with Section 02 83 13.

1.6 WORK PERFORMED BY ENVIRONMENTAL CONSULTANT

- A. Make available at all times all work areas for inspection by the Environmental Consultant on behalf of the Owner.
- B. The Environmental Consultant may perform air monitoring and inspection services on behalf of the Owner.

END OF SECTION 01 11 10

SECTION 01 23 00 – ALTERNATES

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes administrative and procedural requirements governing Alternates.
- B. General:
 - 1. Each bidder shall state in their bid, in the spaces provided in the Bid Form:
 - a. Their proposal for performing the Base Bid work.
 - b. Additive Alternate proposals, stating the sums to be added to the Base Bid for adding items of work listed in this section.
 - c. Substitute Alternate proposals, stating the sums to be added to or deducted from the Base Bid for substituting materials and/or construction listed in this section.
 - d. Deductive Alternate proposals, stating the sums to be deducted from the Base Bid for deleting items of work listed in this section.
 - 2. All bid prices shall include adjustments in the work of all trades as may be necessary.
 - 3. Identification of Work listed below is general in nature. The Contractor shall provide all materials and associated work necessary to complete the Work of each respective described Alternate.
 - 4. The cost or credit for each Alternate is the net addition to or deduction from the Contract Sum to incorporate the Alternate into the Work. No other adjustments are made to the Contract Sum.

1.03 DEFINITIONS

- A. The Base Bid includes all work indicated in the Contract Documents and any issued Addenda for all building and site construction work, all as designated and shown in the Contract Documents, EXCEPT the work included in the following Alternate Bids described in this section which may result in changes to the costs.
- B. An Additive Alternate is an amount proposed by bidders and stated on the Bid Form for certain work defined in the Contract Documents that may be added to the Base Bid amount if accepted by the Owner.
- C. A Substitute Alternate is an amount proposed by bidders and stated on the Bid Form for certain work defined in the Contract Documents that may be added to or deducted from the Base Bid amount if accepted by the Owner.
- D. A Deductive Alternate is an amount proposed by bidders and stated on the Bid

Form for certain work defined in the Bidding Requirements that may be deducted from the Base Bid amount if accepted by the Owner.

1.04 PROCEDURES

- A. Modify or adjust affected adjacent Work as necessary to completely and fully integrate the Alternate Work into the Project.
 - 1. Include as part of each Alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.
- B. Immediately following the award of the Contract, notify each party involved, in writing, of the status of each Alternate. Indicate whether Alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of any negotiated modifications to Alternates.
- C. Execute accepted Alternates under the same conditions as other Work of this Contract.

PART 2 – PRODUCTS

2.00 BASE BID:

- A. Complete all work indicated in drawings and specifications as shown for the areas indicated.
- B. Complete all work in all adjacent areas required to make the areas and rooms indicated above complete and functional.

2.01 ALTERNATE NO. 1:

- A. Replace suspended acoustical ceiling tiles at Courtroom 101.

2.02 ALTERNATE NO. 2:

- A. Install new carpet tiles at Courtroom No. 1 (involves removal of existing carpeting).

2.03 ALTERNATE NO. 3:

- A. Remove existing roofing (see Hazardous Materials sections in Division 2) and insulation layers above existing structural decking at roof of 'north' building and install new insulation and roofing.

2.04 ALTERNATE NO. 4:

- A. Remove existing roofing (see Hazardous Materials sections in Division 2) and insulation layers above existing structural decking at roof of 'south' building and install new insulation and roofing.

MUNICIPAL COURT REMODEL
CITY OF FERNDALE

SECTION 01 23 00
ALTERNATES

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 23 00

SECTION 02 80 00 – HAZARDOUS MATERIALS REPORT

See following pages for:

- Limited Hazardous Materials Survey Report,
by PBS Engineering & Environmental, dated October 6, 2020.

Limited Hazardous Materials Survey Report

City of Ferndale – Municipal Court Remodel
5694 2nd Avenue
Ferndale, Washington 98248

Prepared for:
City of Ferndale
2095 Main Street
Ferndale, WA 98248

October 6, 2020
PBS Project No. 41658.000



214 EAST GALER STREET
SUITE 100
SEATTLE, WA 98102
206.233.9639 MAIN
866.727.0140 FAX
PBSUSA.COM

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APPENDICES

APPENDIX A: PLM Bulk Sampling Information

PLM Bulk Sample Inventory

PLM Bulk Sample Laboratory Data Sheets

PLM Bulk Sample Chain of Custody Documentation

APPENDIX B: AA Lead Paint Chip Sampling Information

AA Lead Paint Chip Sample Inventory

AA Lead Paint Chip Laboratory Data Sheets

AA Lead Paint Chip Chain of Custody Documentation

APPENDIX C: Certifications

1 INTRODUCTION

1.1 Project Background

PBS Engineering and Environmental, Inc. (PBS) performed a limited hazardous materials survey of the Municipal Court Building in Ferndale, Washington. The intent of this investigation is to ensure that the City of Ferndale is in compliance with applicable regulatory requirements that a “good faith inspection” for ACMs be performed prior to renovations.

All accessible areas associated with the planned work were inspected for the presence of asbestos-containing materials (ACMs) and lead-containing paint (LCP). PBS’s understanding of the scope of work is based on Bid/Permit Set drawings prepared by RMC Architects dated 9/3/2020. It is our understanding that the work will generally include limited architectural, mechanical, and electrical renovations to the existing building and a small entrance addition at the west elevation and breezeway.

1.2 Building Description

The North and South Municipal Court Buildings are one-story slab-on-grade wood-framed structures built in 1955 totaling approximately 3,945 square feet. Interior spaces generally consist of offices and a courtroom. Interior finishes consist of carpet; textured gypsum wallboard and CMU walls; and 2’ x 4’ lay-in ceiling tile ceilings. The roof is flat with built-up roofing on a wood deck. The exterior of the building consists of CMU walls and clapboard wood siding.

Heating and cooling is provided by a forced-air HVAC system with fiberglass duct insulation.

1.2 Survey Process

Accessible areas included in the project scope were inspected by AHERA Certified Building Inspector Ryan Hunter (Cert. No. IRO-20-7254B Exp. 3/05/2021) on September 29, 2020. PBS endeavored to inspect all accessible areas within the scope of work. Inaccessible areas consist of those requiring selective demolition, fall protection, or confined space entry protocols in order to gain access.

When observed, suspect materials were sampled, or presumed to contain asbestos. Twenty-one (21) bulk samples were collected of suspect asbestos-containing materials as part of this investigation. All samples were assigned a unique identification number and transmitted for analysis to Seattle Asbestos Test (NVLAP #201057-0) under chain-of-custody protocols. Samples were analyzed according to EPA Method 600R-93/116 using Polarized Light Microscopy (PLM), which has a reliable limit of quantification of 1% asbestos by volume. Information regarding the type and location of sampled materials can be found on the attached PLM Sample Inventory.

Suspect ACMs may exist in inaccessible areas of the building. PBS endeavored to determine the presence and estimate the condition of suspect materials in all accessible areas. While PBS has endeavored to identify the ACM that may be found in concealed locations, additional unidentified ACM may exist.

2 FINDINGS

2.1 Asbestos-Containing Materials (ACMs)

The following materials were sample and found to contain **greater than 1% asbestos**

- **Built-up roofing** – North and South Buildings including covered walkways (approx. 4,400 SF)
- **Gray sealant** – roof exhaust, South Building (approx. 2 SF)

Non-Asbestos Materials

The following materials were sampled and found **not** to contain asbestos:

- Textured gypsum wallboard walls
- Yellow carpet mastic
- Mastic associated with tack board
- White 2'x4' lay-in ceiling tile
- Textured exterior plaster soffit
- Mortar associated with CMU
- Fiberboard and tar behind exterior wood siding
- Exterior door frame caulk
- Brown exterior window frame caulk
- Exterior window putty
- Gray caulk at concrete sidewalk
- Black tar on roof mounted air handler unit

Refer to Appendix A for a complete listing of PLM bulk samples and associated laboratory analysis.

2.2 Lead-Containing Paint (LCP)

Eight (8) representative painted coatings were sampled for lead content during this survey. The samples were assigned a unique identification number and transmitted to NVL Laboratories (AIHA IH #101861) in Seattle, Washington under chain-of-custody protocols for analysis using Flame Atomic Absorption.

Lead was detected in the following painted coatings.

- **White paint** - exterior wood siding at the west elevation – 0.013% lead
- **Gray paint** - exterior metal awning post at breezeway – 6.9% lead
- **Blue paint** - exterior wood parapet cap on south roof – 0.57% lead

The following painted coatings were sampled and determined **not** to contain detectable lead.

- Beige paint - gypsum wallboard wall in Courtroom 101
- White paint - gypsum wallboard wall in Hallway 102
- White paint - CMU exterior at the north elevation
- White paint - exterior plaster soffit at the breezeway
- Blue paint - exterior wood trim at the west elevation

Refer to Appendix B for a complete listing of paint samples and associated laboratory analysis.

3 RECOMMENDATIONS

3.1 ACMs

PBS recommends that ACMs to be impacted by renovation/demolition activities be removed prior to impact by construction activities by a qualified Washington State licensed asbestos abatement contractor. If the ACMs are not removed, any activities that may potentially impact the ACMs should only be performed by personnel with appropriate training and work practices. All removal and other impacts should be performed according to applicable local, state and federal regulations.

The possibility exists that suspect ACM may be present in equipment, wall and ceiling cavities, and in select areas included in the scope. These may include, but are not limited to pipe insulation, below slab components vapor barriers, and construction adhesives and wall mastics. In the event that suspect ACM is uncovered during demolition, contractors should stop work immediately and inform the owner promptly for confirmation testing. All untested materials should be presumed asbestos-containing or tested for asbestos content prior to impact.

3.2 LCP

Various paint coatings were found to contain detectable lead. Impact of paint with detectable concentrations of lead requires construction activities to be performed in accordance with the State of Washington Department of Labor and Industries regulation for Lead in Construction (WAC 296-155-176).

Paint coatings may exist in inaccessible areas of the building or in secondary coatings on building components. Any previously unidentified painted coatings should be considered lead containing until sampled and proven otherwise.

Report prepared by:

Report reviewed by:

Ryan Hunter
AHERA Building Inspector
Cert. #IRO-20-7254B Exp. 3/5/2021

Mark Hiley
Senior Project Manager

APPENDIX A

PLM Asbestos Bulk Sampling Information

PLM Asbestos Bulk Sample Inventory

PLM Asbestos Bulk Sample Laboratory Data Sheets

Chain of Custody

**Ferndale Municipal Court Remodel
City of Ferndale**

**PBS Engineering + Environmental
PBS Project #41658.000**

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41658.000 -001	Textured gypsum wallboard	Courtroom 101 West wall	Layer 1: Trace white powdery material with paint Layer 2: Trace white chalky material with paper	NAD NAD	SAT
41658.000 -002	Textured gypsum wallboard	Courtroom 101 West wall	Layer 1: Trace white powdery material with paint Layer 2: Trace white chalky material with paper	NAD NAD	SAT
41658.000 -003	Textured gypsum wallboard	Hallway 102	Layer 1: Trace white powdery material with paint Layer 2: Trace white chalky material with paper	NAD NAD	SAT
41658.000 -004	Yellow carpet mastic	Courtroom 101	Layer 1: Yellow mastic	NAD	SAT
41658.000 -005	Mastic associated with tack board	Hallway 102	Layer 1: Off-white mastic with paint	NAD	SAT
41658.000 -006	White 2'x4' lay-in ceiling tile	Courtroom 101	Layer 1: Gray fibrous material with trace paint	NAD	SAT
41658.000 -007	Textured plaster soffit	Exterior breezeway	Layer 1: Gray sandy/brittle material with paint	NAD	SAT
41658.000 -008	Textured plaster soffit	Exterior breezeway	Layer 1: Gray sandy/brittle material with paint	NAD	SAT
41658.000 -009	Textured plaster soffit	Exterior breezeway	Layer 1: Gray sandy/brittle material with paint	NAD	SAT
41658.000 -010	Mortar associated with concrete masonry unit	North elevation	Layer 1: Gray sandy/brittle material with paint	NAD	SAT
41658.000 -011	Fiberboard and tar	West elevation behind wood siding	Layer 1: Brown fibrous material Layer 2: Trace black asphaltic material	NAD NAD	SAT
41658.000 -012	Exterior door frame caulk	North elevation concrete masonry unit and metal frame	Layer 1: Off-white soft/elastic material with paint	NAD	SAT
41658.000 -013	Exterior door frame caulk	West elevation wood and wood frame	Layer 1: Off-white soft/elastic material with paint	NAD	SAT
41658.000 -014	Brown exterior window frame caulk	West elevation room 113	Layer 1: Brown/tan soft material with paint Layer 2: Trace gray sandy/brittle material with paint	NAD NAD	SAT

**Ferndale Municipal Court Remodel
City of Ferndale**

**PBS Engineering + Environmental
PBS Project #41658.000**

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41658.000 -015	Exterior window putty	West elevation room 113	Layer 1: Tan brittle material with paint	NAD	SAT
41658.000 -016	Gray caulk at concrete sidewalk	West elevation wood siding	Layer 1: Gray/dark brown soft material	NAD	SAT
41658.000 -017	Gray sealant on exhaust	Upper roof (South Building)	Layer 1: Gray/black soft/elastic material	3% Chrysotile	SAT
41658.000 -018	Black tar on air handling unit	Lower roof (North Building)	Layer 1: Silver paint Layer 2: Black asphaltic material	NAD NAD	SAT
41658.000 -019	Torched down roofing	Lower roof (North Building)	Layer 1: Silver paint Layer 2: Black asphaltic fibrous material Layer 3: Black asphaltic material Layer 4: Black asphaltic fibrous material Layer 5: Black asphaltic material Layer 6: Black asphaltic fibrous material Layer 7: Black asphaltic material Layer 8: Black asphaltic fibrous material Layer 9: Black asphaltic material Layer 10: Black asphaltic fibrous material Layer 11: Black asphaltic material Layer 12: Black asphaltic fibrous material Layer 13: Black asphaltic material Layer 14: Black asphaltic fibrous material Layer 15: Black asphaltic material Layer 16: Black asphaltic fibrous material Layer 17: Black asphaltic material Layer 18: Black asphaltic fibrous material Layer 19: Black asphaltic material Layer 20: Black asphaltic fibrous material Layer 21: Black asphaltic material Layer 22: Brown wood debris	NAD NAD NAD NAD NAD NAD NAD NAD NAD 24% Chrysotile NAD NAD NAD 22% Chrysotile NAD 20% Chrysotile NAD 23% Chrysotile NAD 25% Chrysotile NAD NAD	SAT

**Ferndale Municipal Court Remodel
City of Ferndale**

**PBS Engineering + Environmental
PBS Project #41658.000**

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41658.000 -020	Torched down roofing	Upper roof (South Building)	Layer 1: Silver paint	NAD	SAT
			Layer 2: Black asphaltic fibrous material	NAD	
			Layer 3: Black asphaltic material	NAD	
			Layer 4: Black asphaltic fibrous material	NAD	
			Layer 5: Black asphaltic material	NAD	
			Layer 6: Black asphaltic fibrous material	NAD	
			Layer 7: Black asphaltic material	NAD	
			Layer 8: Black asphaltic fibrous material	26% Chrysotile	
			Layer 9: Black asphaltic material	NAD	
			Layer 10: Black asphaltic fibrous material	NAD	
			Layer 11: Black asphaltic material	NAD	
			Layer 12: Black asphaltic fibrous material	NAD	
			Layer 13: Black asphaltic material	NAD	
			Layer 14: Black asphaltic fibrous material	NAD	
			Layer 15: Black asphaltic material	NAD	
41658.000 -021	Roofing on concrete wall	Lower roof at wall to upper roof	Layer 1: White paint	NAD	SAT
			Layer 2: Silver paint	NAD	
			Layer 3: Black asphaltic fibrous material	NAD	
			Layer 4: Black asphaltic material	NAD	
			Layer 5: Trace off-white sandy/brittle material	NAD	

SEATTLE ASBESTOS TEST, LLC

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA 98105, Tel: 206.633.1111, Fax: 206.633.4747, NVLAP Lab Code: 201057-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Mr. Ryan Hunter, Mr. Mark Hiley, Ms. Michelle Dodson

Client: PBS Engineering and Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Tel: 206.233.9639

Date Analyzed: 9/30/2020

Client Job#: 41658.000

Project Location: Ferndale Municipal Court Remodel

Laboratory batch#: 202021444

Samples Received: 21

Enclosed please find the test results for the bulk samples submitted to our laboratory for asbestos analysis. Analysis was performed using polarized light microscopy (PLM) in accordance with Test Method US EPA - 40 CFR Appendix E of Part 763, Interim Method of Determination of Asbestos in Bulk Insulation Samples and Test Method US EPA/600/R-93/116.

Percentages for this report are done by visual estimate and relate to the suggested acceptable error ranges by the method. Since variation in data increases as the quantity of asbestos decreases toward the limit of detection, the EPA recommends point counting for samples containing between <1% and 10% asbestos (NESHAP, 40 CFR Part 61). Statistically, point counting is a more accurate method. If you feel a point count might be beneficial, please feel free to call and request one.

The test results refer only to the samples or items submitted and tested. The accuracy with which these samples represent the actual materials is totally dependent on the acuity of the person who took the samples. This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government. The test report or calibration certificate shall not be reproduced except in full, without written approval of the laboratory.

This report is highly confidential and will not be released without your consent. Samples are archived for 30 days after the analysis, and disposed of as hazardous waste thereafter.

Thank you for using our service and let us know if we can further assist you.

Sincerely



Steve (Fanyao) Zhang
President



LABORATORY CHAIN OF CUSTODY

Project: Ferndale Municipal Court Remodel

Project #: 41658.000

Analysis requested: PLM

Date: 9/30/2020

Relinquished by/Signature: Ryan Hunter *[Signature]*

Date/Time: 9/30/2020

Received by/Signature: Carolyn Yeo *[Signature]*

Date/Time: 9/30/20 16:58

Email ALL INVOICES to: seattleap@pbsusa.com

E-mail results to:

- ☐ Brian Stanford
☐ Willem Mager
☐ Gregg Middaugh
☒ Mark Hiley
☐ Tim Ogden
☐ Prudy Stoudt-McRae

- ☐ Janet Murphy
☐ Kaitlin Soukup
☐ Martin Estira
☐ Justin Day
☐ Claire Tsai
☐ Holly Tuttle

- ☐ Mike Smith
☐ Ferman Fletcher
☒ Ryan Hunter
☒ Michelle Dodson
☐ _____

TURN AROUND TIME:

- ☐ 1 Hour
☐ 2 Hours
☐ 4 Hours

- ☒ 24 Hours
☐ 48 Hours

- ☐ 3-5 Days
☐ Other _____

PAGE 1 OF 2

SAMPLE DATA FORM

Sample #	Material	Location	Lab
41658.000-001	Textured Gypsum Wallboard	Courtroom 101 West Wall	SAT
41658.000-002	Textured Gypsum Wallboard	Courtroom 101 West Wall	
41658.000-003	Textured Gypsum Wallboard	Hallway 102	
41658.000-004	Yellow Carpet Mastic	Courtroom 101	
41658.000-005	Mastic A/w Tackboard	Hallway 102	
41658.000-006	White 2'x4' LICT	Courtroom 101	
41658.000-007	Textured Plaster Soffit	Exterior Breeze way	
41658.000-008	Textured Plaster Soffit	Exterior Breeze way	
41658.000-009	Textured Plaster Soffit	Exterior Breeze way	
41658.000-010	Mortar A/w CMU	North Elevation	
41658.000-011	Fiberboard and Tar	West Elevation behind Wood Siding	
41658.000-012	Exterior Door Frame Caulk	North Elevation CMU & Metal Frame	
41658.000-013	Exterior Door Frame Caulk	West Elevation Wood & Wood Frame	
41658.000-014	Brown Exterior Window Frame Caulk	West Elevation Room 113	
41658.000-015	Exterior Window Putty	West Elevation Room 113	
41658.000-016	Gray Caulk @ Concrete Sidewalk	West Elevation Wood Siding	
41658.000-017	Gray Sealant on Exhaust	Upper Roof	
41658.000-018	Black Tar on AHU	Lower Roof	



PAGE 2 OF 2

214 EAST GALER STREET, SUITE 300, SEATTLE, WA 98102 • 206.233.9639 MAIN • 866.727.0140 FAX • P8SUSA.COM

SEATTLE ASBESTOS TEST

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA 98105, Tel: 206.633.1111, Fax: 206.633.4747, NVLAP Lab Code: 201057-0

Disclaimer: This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government.

ANALYTICAL LABORATORY REPORT PLM by Method EPA/600/R-93/116

Attn.: Mr. Ryan Hunter,
Mr. Mark Hiley, Ms.
Michelle Dodson

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 41658.000

Batch#: 202021444

Date Received: 9/30/2020

Samples Rec'd: 21

Date Analyzed: 10/1/2020

Samples Analyzed: 21

Project Loc.: Ferndale Municipal Court Remodel

Analyzed by: Carolyn Yeo / Reported by:
Cassie Huang

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	41658.000-001	1	Trace white powdery material with paint		None detected	Binder, Filler, Paint	2	Cellulose
		2	Trace white chalky material with paper		None detected	Binder/filler, Gypsum/binder	28	Cellulose
2	41658.000-002	1	Trace white powdery material with paint		None detected	Binder, Filler, Paint	2	Cellulose
		2	Trace white chalky material with paper		None detected	Binder/filler, Gypsum/binder	29	Cellulose
3	41658.000-003	1	Trace white powdery material with paint		None detected	Binder, Filler, Paint	2	Cellulose
		2	Trace white chalky material with paper		None detected	Binder/filler, Gypsum/binder	26	Cellulose
4	41658.000-004	1	Yellow mastic		None detected	Mastic/binder	3	Cellulose
5	41658.000-005	1	Off-white mastic with paint		None detected	Mastic/binder, Paint	2	Cellulose
6	41658.000-006	1	Gray fibrous material with trace paint		None detected	Paint, Filler, Perlite	65	Cellulose
7	41658.000-007	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
8	41658.000-008	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
9	41658.000-009	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
10	41658.000-010	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
11	41658.000-011	1	Brown fibrous material		None detected	Filler	88	Cellulose
		2	Trace black asphaltic material		None detected	Asphalt/binder	2	Cellulose
12	41658.000-012	1	Off-white soft/elastic material with paint		None detected	Binder, Filler, Paint	3	Cellulose
13	41658.000-013	1	Off-white soft/elastic material with paint		None detected	Binder, Filler, Paint	2	Cellulose
14	41658.000-014	1	Brown/tan soft material with paint		None detected	Binder, Filler, Paint	3	Cellulose
		2	Trace gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
15	41658.000-015	1	Tan brittle material with paint		None detected	Binder, Filler, Paint	2	Cellulose

SEATTLE ASBESTOS TEST

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA 98105, Tel: 206.633.1111, Fax: 206.633.4747, NVLAP Lab Code: 201057-0

Disclaimer: This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government.

ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Mr. Ryan Hunter,
Attn.: Mr. Mark Hiley, Ms.
Michelle Dodson

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 41658.000

Batch#: 202021444

Date Received: 9/30/2020

Samples Rec'd: 21

Date Analyzed: 10/1/2020

Samples Analyzed: 21

Project Loc.: Ferndale Municipal Court Remodel

Analyzed by: Carolyn Yee / Reported by:
Cassie Huang

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
16	41658.000-016	1	Gray/dark brown soft material		None detected	Binder, Filler	3	Cellulose
17	41658.000-017	1	Gray/black soft/elastic material	3	Chrysotile	Binder, Filler	2	Cellulose
18	41658.000-018	1	Silver paint		None detected	Filler, Paint	2	Cellulose
		2	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
19	41658.000-019	1	Silver paint		None detected	Filler, Paint	2	Cellulose
		2	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	65	Cellulose, Glass fibers
		3	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		4	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	60	Cellulose, Glass fibers
		5	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		6	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	61	Cellulose, Glass fibers
		7	Black asphaltic material		None detected	Asphalt/binder	2	Cellulose
		8	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	67	Cellulose, Glass fibers
		9	Black asphaltic material		None detected	Asphalt/binder	2	Cellulose
		10	Black asphaltic fibrous material	24	Chrysotile	Filler, Asphalt, Binder	25	Cellulose
		11	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		12	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	63	Cellulose, Glass fibers
		13	Black asphaltic material		None detected	Asphalt/binder	2	Cellulose
		14	Black asphaltic fibrous material	22	Chrysotile	Filler, Asphalt, Binder	29	Cellulose
		15	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		16	Black asphaltic fibrous material	20	Chrysotile	Filler, Asphalt, Binder	31	Cellulose
		17	Black asphaltic material		None detected	Asphalt/binder	2	Cellulose
		18	Black asphaltic fibrous material	23	Chrysotile	Filler, Asphalt, Binder	34	Cellulose
		19	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose

SEATTLE ASBESTOS TEST

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA 98105, Tel: 206.633.1111, Fax: 206.633.4747, NVLAP Lab Code: 201057-0

Disclaimer: This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government.

ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Mr. Ryan Hunter,
Attn.: Mr. Mark Hiley, Ms.
Michelle Dodson

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 41658.000

Batch#: 202021444

Date Received: 9/30/2020

Samples Rec'd: 21

Date Analyzed: 10/1/2020

Samples Analyzed: 21

Project Loc.: Ferndale Municipal Court Remodel

Analyzed by: Carolyn Yeo / Reported by:
Cassie Huang

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
19	41658.000-019	20	Black asphaltic fibrous material	25	Chrysotile	Filler, Asphalt, Binder	30	Cellulose
		21	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		22	Brown wood debris		None detected	Wood debris	5	Cellulose
20	41658.000-020	1	Silver paint		None detected	Filler, Paint	3	Cellulose
		2	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	64	Cellulose, Glass fibers
		3	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		4	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	68	Cellulose, Glass fibers
		5	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		6	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	61	Cellulose, Glass fibers
		7	Black asphaltic material		None detected	Asphalt/binder	2	Cellulose
		8	Black asphaltic fibrous material	26	Chrysotile	Filler, Asphalt, Binder	24	Cellulose
		9	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		10	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	67	Cellulose, Glass fibers
		11	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		12	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	66	Cellulose, Glass fibers
		13	Black asphaltic material		None detected	Asphalt/binder	2	Cellulose
		14	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	61	Cellulose, Glass fibers
		15	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
21	41658.000-021	1	White paint		None detected	Filler, Paint	3	Cellulose
		2	Silver paint		None detected	Filler, Paint	2	Cellulose
		3	Black asphaltic fibrous material		None detected	Asphalt/binder, Filler	62	Cellulose, Glass fibers
		4	Black asphaltic material		None detected	Asphalt/binder	2	Cellulose
		5	Trace off-white sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose

APPENDIX B

AA Lead Paint Chip Sampling Information

AA Lead Paint Chip Bulk Sample Inventory

AA Lead Paint Chip Sample Laboratory Data Sheets

Chain of Custody

AA LEAD PAINT CHIP SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Paint Color / Component or Substrate</u>	<u>Sample Location</u>	<u>Results (mg/kg)</u>	<u>Results (%)</u>	<u>Lab</u>
41658.000 -Pb01	Beige / Gypsum wallboard / Wall	Courtroom 101	<51	<0.0051	NVL
41658.000 -Pb02	White / Gypsum wallboard / Wall	Hallway 102	<55	<0.0055	NVL
41658.000 -Pb03	White / Wood / Siding	West elevation	130	0.013	NVL
41658.000 -Pb04	White / Concrete masonry unit / Wall	North elevation	<53	<0.0053	NVL
41658.000 -Pb05	White / Plaster / Soffit	Breezeway	<56	<0.0056	NVL
41658.000 -Pb06	Blue / Wood / Trim	West elevation	<62	<0.0062	NVL
41658.000 -Pb07	Gray / Metal / Post	Awning post	69000	6.9	NVL
41658.000 -Pb08	Blue / Wood / Parapet cap	Roof	5700	0.57	NVL

October 1, 2020

Ryan Hunter

PBS Environmental - Seattle

214 E Galer St. Suite. 300

Seattle, WA 98102



NVL Batch # 2016378.00

RE: Total Metal Analysis
Method: EPA 7000B Lead by FAA <paint>
Item Code: FAA-02

Client Project: 41658.000

Location: Ferndale Municipal Court Remodel

Dear Mr. Hunter,

NVL Labs received 8 sample(s) for the said project on 10/1/2020. Preparation of these samples was conducted following protocol outlined in EPA 3051/7000B , unless stated otherwise.

Analysis of these samples was performed using analytical instruments in accordance with EPA 7000B Lead by FAA <paint>. The results are usually expressed in mg/Kg and percentage (%). Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

Shalini Patel, Lab Supervisor



Enc.: Sample results



Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Analysis Report

Total Lead (Pb)



Client: PBS Environmental - Seattle
Address: 214 E Galer St. Suite. 300
Seattle, WA 98102

Batch #: 2016378.00

Matrix: Paint
Method: EPA 3051/7000B
Client Project #: 41658.000
Date Received: 10/1/2020
Samples Received: 8
Samples Analyzed: 8

Attention: Mr. Ryan Hunter

Project Location: Ferndale Municipal Court Remodel

Lab ID	Client Sample #	Sample Weight (g)	RL in mg/Kg	Results in mg/Kg	Results in percent
20105515	41658.000-Pb01	0.1943	51	< 51	<0.0051
20105516	41658.000-Pb02	0.1823	55	< 55	<0.0055
20105517	41658.000-Pb03	0.1908	52	130	0.013
20105518	41658.000-Pb04	0.1872	53	< 53	<0.0053
20105519	41658.000-Pb05	0.1800	56	< 56	<0.0056
20105520	41658.000-Pb06	0.1620	62	< 62	<0.0062
20105521	41658.000-Pb07	0.1847	54	69000	6.9
20105522	41658.000-Pb08	0.2013	50	5700	0.57


Sampled by: Client

Analyzed by: Yasuyuki Hida

Reviewed by: Shalini Patel

Date Analyzed: 10/01/2020

Date Issued: 10/01/2020


Shalini Patel, Lab Supervisor

mg/ Kg =Milligrams per kilogram

Percent = Milligrams per kilogram / 10000

Note : Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

RL = Reporting Limit

'<' = Below the reporting Limit

Bench Run No: 2020-1001-3

FAA-02

LEAD LABORATORY SERVICES



Company PBS Environmental - Seattle
Address 214 E Galer St. Suite. 300
 Seattle, WA 98102
Project Manager Mr. Ryan Hunter
Phone (206) 233-9639
NVL Batch Number 2016378.00
TAT 1 Day **AH** No
Rush TAT
Due Date 10/2/2020 **Time** 8:00 AM
Email ryan.hunter@pbsusa.com
Fax (866) 727-0140

Project Name/Number: 41658.000 **Project Location:** Ferndale Municipal Court Remodel

Subcategory Flame AA (FAA)

Item Code FAA-02 EPA 7000B Lead by FAA <paint>

Total Number of Samples 8

Rush Samples

	Lab ID	Sample ID	Description	A/R
1	20105515	41658.000-Pb01		A
2	20105516	41658.000-Pb02		A
3	20105517	41658.000-Pb03		A
4	20105518	41658.000-Pb04		A
5	20105519	41658.000-Pb05		A
6	20105520	41658.000-Pb06		A
7	20105521	41658.000-Pb07		A
8	20105522	41658.000-Pb08		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Drop Box				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	10/1/20	800
Analyzed by	Yasuyuki Hida		NVL	10/1/20	
Results Called by					
<input type="checkbox"/> Faxed <input type="checkbox"/> Emailed					

Special Instructions:

Date: 10/1/2020
 Time: 8:34 AM
 Entered By: Kelly AuVu

Project: Ferndale Municipal Court Remodel**Project #: 41658.000**

Analysis requested: FAA – Total Lead Paint Chip Analysis

Date: 9/30/2020

Relinq'd by/Signature: Ryan Hunter / 

Date/Time: 9/30/2020

Received by/Signature: Kempster NM

Date/Time: 9/10/2022
5:00 PM

Email ALL INVOICES to: seattleap@pbsusa.com

E-mail results to:

- ☐ Brian Stanford
☐ Willem Mager
☐ Gregg Middaugh
☒ Mark Hiley
☐ Tim Ogden
☐ Prudy Stoudt-McRae

- ☐ Janet Murphy
- ☐ Kaitlin Soukup
- ☐ Martin Estira
- ☐ Justin Day
- ☐ Claire Tsai
- ☐ Holly Tuttle

- ☐ Mike Smith
☐ Ferman Fletcher
☒ Ryan Hunter
☒ Michelle Dodson
☐

TURN AROUND TIME:

- ☐ 1 Hour
☐ 2 Hours
☐ 4 Hours

- ☒ 24 Hours
☐ 48 Hours

- ☐
- 3-5 Days
-
- ☐
- Other

[illegible]

APPENDIX C

Certifications

THIS IS TO CERTIFY THAT

RYAN HUNTER

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ONLINE AHERA ASBESTOS INSPECTOR REFRESHER

CCB #SRA0615 4-Hr Training



Course Date: 03/05/2020

Course Location: Portland, OR

Certificate: IRO-20-7254B

4-Hour Online AHERA Inspector Refresher Training; AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 03/05/2021

For verification of the authenticity of this
certificate contact:
PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

A handwritten signature in black ink, reading 'Andy Fridley'.

Andy Fridley, Instructor

SECTION 02 82 13 – ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 SCOPE

- A. This section covers the removal and disposal of asbestos-containing materials and all activities impacting asbestos-containing materials in the project areas included in the Work as defined by these Contract Documents. See Section 01 11 10, Summary of Hazardous Materials Work.
- B. Provide all labor, materials, equipment, services, permits and insurance required to complete asbestos-related procedures as indicated in the Contract Documents.
- C. Field-identify the location and quantity of all asbestos-containing materials to be impacted as indicated in Section 01 11 10.
- D. The Contractor shall refer to the Limited Hazardous Materials Survey Report, which lists all suspect materials sampled and analyzed for asbestos content. The Contractor shall ensure that a copy of this information is made available to and retained on the project site by all subcontractors.

1.2 RELATED WORK

- A. Work performed under this specification section shall be governed by all related specification sections, including, but not limited to, the following:
 - 1. Section 01 11 10, Summary of Hazardous Materials Work.

1.3 DEFINITIONS

- A. Wherever the terms below occur in this contract document, they will have the meanings, which follow:
 - 1. Abatement: Procedures to control fiber release from asbestos-containing building materials. Includes encapsulation, enclosure, removal, repair and related activities.
 - 2. Adequately wet: sufficiently mixed, saturated, or coated with water or an aqueous solution to prevent emissions.
 - 3. AHERA: Asbestos Hazard Emergency Response Act, 40 CFR Part 763.
 - 4. Amended Water: Water containing a surfactant additive.
 - 5. Asbestos: Asbestiform varieties of actinolite, amosite, (Cummingtonite - grunerite, tremolite, chrysotile, crocidolite and anthophyllite.)
 - 6. Asbestos-containing Material (ACM): Any material containing more than one percent (1%) asbestos as defined under NESHAPS CFR 40, Part 61, and OSHA 29 CFR Part 1926.1101, or at least one percent (1%) asbestos as defined under Northwest Clean Air Agency (NWCAA) Section 570 – Asbestos Control Standards.
 - 7. Asbestos-containing Waste Material: Asbestos-containing materials, materials used to control the work area during the asbestos project, debris, containers, bags, protective clothing and HEPA filters.
 - 8. ASTM: American Society of Testing Materials.

9. Authorized Visitor: The Owner or designated representative, or a representative of any regulatory or other agency having jurisdiction over the project, and having required training, medical, fit test, etc.
10. Certified Asbestos Worker: person certified by WAC Chapter 296-65-010.
11. Certified Asbestos Supervisor: person certified by WAC Chapter 296-65-012, whose duties include at least: establishing negative pressure, mini-enclosure, glove bag or other engineering controls, ensure integrity of those controls, supervise employee monitoring, protective equipment, training, hygiene and decontamination procedures.
12. Certified Industrial Hygienist (CIH): An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.
13. Class I Asbestos Work: Activities involving the removal of TSI, surfacing ACM and presumed asbestos-containing materials as defined by OSHA. Materials include those otherwise regulated by WISHA including, but not limited to, pipe insulation.
14. Class II Asbestos Work: Activities involving the removal of ACM that is not thermal system insulation or surfacing material as defined by OSHA. This also includes, but is not limited to, the removal of asbestos-containing floor tile, cement asbestos board, roofing and siding.
15. Critical Barrier: Barrier constructed of two layers of six-mil plastic sheeting and sealed at the edges with duct tape and, as appropriate, spray adhesive. Critical barriers constructed in exterior areas shall utilize reinforced plastic sheeting.
16. Curtained Doorway: A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway in a pleated fashion and securing one vertical side of each sheet on alternating sides of consecutive sheets. Two curtained doorways spaced a minimum of 3 feet apart form an air lock.
17. Decontamination Area: Enclosed area adjacent and connected to regulated area and consisting of equipment room, shower area, and clean room, which is used to decontaminate workers, materials, and equipment.
18. Disposal: Procedures necessary to transport and deposit the asbestos-contaminated material in an approved waste disposal site in compliance with EPA and other applicable regulations.
19. Disposal Site: EPA approved landfill for asbestos-containing waste.
20. EPA: U. S. Environmental Protection Agency.
21. Encapsulant (Sealant): A liquid material which can be applied to asbestos-containing material and which controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant), or by penetrating into the material and binding its components together (penetrating encapsulant).
22. Environmental Consultant: Environmental consultant specializing in asbestos abatement and retained by the Owner.
23. Fiber: A particulate form five micrometers or longer, with a length to diameter ratio of at least 3:1.
24. Fibers/cc: Fibers per cubic centimeter of air.
25. Fitting: With regard to pipe insulation, a fitting is any elbow, offset, reducer, tee, etc.
26. Fixed Object: Fixtures that are attached to the building or are too heavy or bulky to remove from the work area.
27. Glove Bag: A manufactured device consisting of a transparent plastic bag with inward projecting sleeves, an internal tool pouch, provisions for fastening and

- sealing at the top and sides, and a receptacle in the bottom to hold asbestos waste. The glove bag is installed so as to surround the material to be removed and contain all fibers released during the process. Glove bags are used to remove insulation from small sections of pipe and fittings.
28. HEPA Filter: A High Efficiency Particulate Air (absolute) filter capable of trapping and retaining 99.97% of asbestos fibers greater than 0.3 microns in length.
 29. HEPA Vacuum Equipment: High Efficiency Particulate Air (absolute) filtered vacuuming equipment with a filter system capable of collecting and retaining asbestos fibers. Filters of 99.97% efficiency for retaining fibers of 0.3 microns in length or larger shall be installed for filtering discharge air.
 30. HVAC System: Heating, Ventilation and Air Conditioning System.
 31. Independent Testing Laboratory: A laboratory financially independent from and hired by the Owner or Contractor which is either AIHA-accredited for asbestos with demonstrated proficiency via the AIHA PAT program or has analysts proficient in the AIHA AAR program for air sample analysis.
 32. Industrial Hygienist: An employee of the Independent Testing Laboratory who is experienced and trained in asbestos sampling and analysis as specified.
 33. Isolated Work Area: A totally contained area of the facility where Class I abatement activities are performed as defined by OSHA 29 CFR 1910.
 34. Mini-enclosure: An enclosure fabricated to effectively contain a small work area conforming to EPA, AHERA, 40 CFR 763 Subpart E, Appendix B.
 35. Movable Object: Furnishings that are not attached to the building structure and can be removed from the work area.
 36. Negative-air Glove Bag: A manufactured device consisting of a transparent plastic bag with inward projecting sleeves, an internal tool pouch, provisions for fastening and sealing it at the top and sides, and a receptacle in the bottom to hold asbestos waste. The glove bag is installed so as to surround the material to be removed and contain all fibers released through the process, with provisions for allowing continuous airflow through the bag while maintaining negative pressure inside.
 37. Non-Isolated, Regulated Area: Work area where Class II asbestos abatement work is performed as defined by OSHA 29 CFR 1910.
 38. NVLAP: National Voluntary Laboratory Assurance Program.
 39. NWCAA: Northwest Clean Air Agency.
 40. Owner: Representatives designated by the City of Ferndale or designated employees of the City of Ferndale.
 41. PACM: Presumed asbestos-containing materials.
 42. PAT: Proficiency Analytical Testing program performed for NIOSH method 7400.
 43. PCM: Phase Contrast Microscopy analytic method applied to air samples to determine airborne fiber concentrations, NIOSH Method 7400.
 44. PLM: Phase Light Microscopy analytic method applied to bulk material samples to determine asbestos content, EPA method 40 CFR 763, Subpart F, Appendix A.
 45. Pressure Differential Fan System: An air-purifying fan system located within or outside the isolated work area, which draws air out of the work area through a HEPA filter, thus keeping the static air pressure in the work area lower than in adjacent areas, and preventing escape of contaminated air from work area to adjacent areas.
 46. Public Area: Any area outside the isolated work area. When work area isolation measures are removed, the work area becomes a public area.
 47. Regulated Area: Area which only certified asbestos workers and other persons authorized by Regulation I of the Washington Industrial Health Act have access,

- where asbestos materials to be removed exist, or where airborne fiber concentrations are expected to exceed 0.01 f/cc.
48. Removal: All operations where ACM and/or PACM are taken out or stripped from structures or substrates, including demolition activities.
 49. SDS: Safety Data Sheet supplied by manufacturer provides information on a product listed in OSHA 29 CFR 1910.1200(g)(2).
 50. Shower Room: A room between the clean room and the equipment room in the worker decontamination enclosure system, which is equipped with hot and cold running water controllable at the faucet and soap and shampoo, and which is suitably arranged for complete showering during decontamination. The shower room must be separated from the clean room and equipment room by air locks.
 51. Smoke tube method: A method of qualitatively testing the direction of air flow and seals in plastic sheeting walls and glove bags, using titanium tetrachloride (or equivalent) smoke tubes.
 52. Special Fitting: With regard to pipe insulation, a special fitting is any valve, union, strainer, gauge, flange, etc.
 53. Surfactant: A chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area.
 54. Thermal System Insulation (TSI): ACM applied to pipes, fittings, boilers, breaching, tanks, ducts or other structural components to prevent heat loss or gain.
 55. Transport: Hauling of asbestos-containing waste from a work site to a disposal site and deposit of the waste by a firm in compliance with the EPA, Washington State and NWCAA.
 56. Waste Load-out Area: A two chamber system adjacent to the negative pressure enclosure used for the final preparation and external decontamination of waste containers, and short-term storage waste containers prior to transport from the jobsite.
 57. Waste Shipment Records: Form similar to that shown in EPA NESHAP 40 CFR 61.150(d)(1), or an EPA approved state or local form.
 58. Worker Decontamination Enclosure System: A showering facility for workers, typically consisting of a clean room, a shower room, and an equipment room. Each of these rooms is separated from the others by air locks. The equipment room is separated from the work area by a curtained doorway. The clean room is separated from the public area by a curtained doorway.
 59. Worksite Entry Logbook: A logbook kept in the clean room, which must be signed by everyone entering or leaving the work area.

1.4 DOCUMENTS INCORPORATED BY REFERENCE

- A. The current issue of each document shall govern. Where conflict among requirements or with these Specifications exists, the most stringent requirements shall apply.
 1. U.S. Environmental Protection Agency National Emissions Standards for Hazardous Air Pollutants (NESHAPS). (Code of Federal Regulations Title 40, Part 61, Subparts A and B.)
 2. U.S. Environmental Protection Agency Office of Toxic Substances Guidance Document, Guidance for Controlling Friable Asbestos-Containing Materials in Buildings, EPA Report Number 560/5-85-024 ("Purple Book").
 3. U.S. Department of Labor Occupational Safety and Health Administration (OSHA):
 4. Title 29 Code of Federal Regulations Section 1910.1001--General Industry Standard For Asbestos.

5. Title 29 Code of Federal Regulations Section 1910.134--General Industry Standard For Respiratory Protection.
6. Title 29 Code of Federal Regulations Section 1910 et al.--Occupational Exposure to Asbestos; Final Rule.
7. Title 29 Code of Federal Regulations 1926.1101--Construction Standard for Asbestos.
8. Title 29 Code of Federal Regulations Section 1910.2--Access to Employee Exposure and Medical Records.
9. Title 29 Code of Federal Regulations Section 1910.1200--Hazard Communication.
10. Environmental Protection Agency 40 CFR Part 763, AHERA, Asbestos-Containing Materials in Schools; Final Rule and Notice.
11. National Institute for Occupational Safety and Health (NIOSH), 30 CFR, Part II, Respirators.
12. American National Standards Institute (ANSI) NY; ANSI Standard Z 88.2-1980 American National Standards Practice for Respiratory Protection, latest edition.
13. CERCLA, Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et.seq.)
14. RCRA, Resource Conservation and Recovery Act.
15. Washington State General Occupational Health Standards, Washington Administrative Code (WAC) Chapter 296-62-077 Asbestos, Tremolite, Anthophyllite, and Actinolite; Chapter 296-65 Asbestos Removal & Encapsulation; Chapter 296-155 Safety Standards for Construction Work.
16. Northwest Clean Air Agency (NWCAA) Section 570 – Asbestos Control Standards.
17. Washington Industrial Safety and Health Act (WISHA)
18. International Building Code (I.B.C.), latest edition, and regulations as applicable.
19. Electrical work shall be performed in accordance with the National Electrical Code.
20. All local ordinances, regulations, or rules pertaining to asbestos, including its storage, transportation, and disposal.

1.5 SUBMITTALS AND NOTICES

- A. Contractors shall provide "Pre-Job Submittals" as indicated below for review by the Environmental Consultant and Owner. No asbestos-related work will be permitted prior to submittals being approved by the Environmental Consultant. Allow ten (10) days for review.
- B. Additional requirements for submittals are also described in other sections of these specifications. The requirements in this section pertain to asbestos-containing materials removal.
- C. Contractors shall submit to the Environmental Consultant the following information prior to beginning work on the project:
 1. Work Plan: Include a detailed plan of the procedures proposed for use in complying with the requirements, including the following:
 - a. A description of all special equipment, techniques, and methods to be used on the Project, including description of work area layout(s) citing entries/exits, HEPA exhausts, decontamination units, waste load-outs, etc. as applicable
 - b. A detailed project schedule, including proposed clearance monitoring schedule and progression of abatement through the work areas.

- c. Specific information relating to handling, transport and disposal of asbestos-containing waste. Identify any disposal site at which any waste material generated during the project will be disposed and furnish evidence of all necessary government approvals to dispose of the waste.
 2. Laboratory Qualification Information: Submit information pertaining to the proposed Air Monitoring Program for this project. Air monitoring shall include employee exposure monitoring. This information shall include the name(s) of the on-site Industrial Hygiene Technician working under the foreman's supervision, types of equipment, sampling schedule, sampling procedures, calibration record keeping, name and address of proposed Independent Testing Laboratory, and evidence of analyst's NIOSH 582 course completion and AIHA PAT program participation.
 3. Notifications and Policies: Submit copy of all required notifications and permits obtained by the contractor (Washington State Department of Labor and Industries and NWCAA) and copies of all types of specified bonds and insurance. Submit upon receipt any approved amendments to notifications or re-notifications for multi-phase activities. See Paragraph 1.11 - Permits and Notifications for additional requirements.
 4. Asbestos Supervisor: Submit the name, Asbestos Supervisor Certification, Certificate of Worker Acknowledgment and resume of experience of the assigned on-site foreman. At a minimum, the foreman shall have successfully completed a supervisor-training course in compliance with WAC Chapter 296-65-007. References and work on similar projects will also be reviewed. The Owner and the Environmental Consultant reserve the right to reject the foreman from the work at any time during the project. The Contractor shall then submit another on-site foreman for approval as described above.
- D. Periodic Job Submittals
1. Personal Air Monitoring: Submit copies of all personal air monitoring data sheets, chain-of-custody and analytical results to the Owner and Environmental Consultant on a daily basis prior to the start of the next work shift following sample collection.
 2. Daily Logs: Submit daily logs to the Owner and Environmental Consultant daily prior to the start of the next work shift. Daily logs shall indicate the date, time, identity, company or agency represented, and reason for entry of all persons entering the work area, and the type, amount and location(s) of all ACMs removed.
- E. At the request of the Environmental Consultant or other representative of the Owner, immediately provide documentation of training or medical monitoring of employees as required by applicable regulations. Such documentation will be maintained on the project site as required by applicable regulations. Failure to comply with such request will result in immediate suspension of employees from work as defined by the Contract Documents.
- F. Post-Job Submittals shall be delivered to the Environmental Consultant within 15-days of completion of work and shall include the following:
1. Certification: Provide written certification from the Abatement Contractor's Project Manager or Supervisor that Contractor has fully inspected the work area and completed work in strict accordance with the Specifications.
 2. Air Monitoring: Submit documentation of all employee personal air monitoring results relative to OSHA and WISHA respiratory protection level compliance.

- Include copies of all air monitoring data sheets, chain-of-custody documentation and analysis reports for sampling conducted at the site.
 - 3. Project Record Documents: Provide project records including documentation of all contract changes, and copies of worksite entry log books, safety logs, sign-in sheets, and supervisor's daily field reports.
 - 4. Disposal Manifests: Submit copies of all asbestos waste disposal transportation and disposal manifests including signed receipts from the landfill, and chain-of-custody.
- G. Final payment will be issued by the Owner only with written approval, by the Environmental Consultant, of post-job submittals.

1.6 PERSONNEL PROTECTION

- A. Training
- 1. All personnel performing removal of asbestos-containing materials shall have received the minimum training as required by the Washington State Department of Labor and Industries for the work to be performed. At a minimum, the supervisor shall be the bearer of a current "Certified Asbestos Supervisor Certificate" issued by the Washington State Department of Labor and Industries. Prior to commencement of work, Contractor shall ensure all workers have been trained as specified in WAC Chapter 296-65.
 - 2. The Contractor shall provide and post decontamination, respirator, and work procedures for abatement crew.
 - 3. The Contractor shall ensure that all employees have been trained as to emergency evacuation procedures specific to each work area.
- B. Personnel Protective Equipment for Asbestos Removal
- 1. Provide protective clothing and equipment per WAC 296-62 and Section 2.1.

1.7 AIR MONITORING BY CONTRACTOR

- A. Laboratory Analysis: An Independent Testing Laboratory shall be retained by the Contractor for PCM sample analysis. All analysis shall be performed by an analyst experienced and trained in asbestos sampling and analysis. At a minimum, documentation of prior asbestos sampling and analysis experience, plus satisfactory completion of the NIOSH 582 course or equivalent will be required. Air sample collection may be performed by an Industrial Hygienist or the Contractor's foreman at the Contractor's option. The Contractor shall perform sampling and analysis of air samples for asbestos in compliance with WAC Chapter 296-62-07735, Appendix A-WISHA reference method.
- B. Sample Documentation: Documentation shall be kept for each filter sample procured as to worker sampled, activity, work area location, date and time taken, volume of air drawn through filter, pump identification number and calibration. Documentation shall indicate in what areas tests were taken and shall clearly indicate the specified maximum allowable fiber levels for each area tested. Submit chain-of-custody records along with all samples.
- C. Analysis Procedures: The samples shall be collected on 25 mm filters and analyzed within 12 hours using the membrane filter method at 400-500x magnification with phase contrast illumination--NIOSH Analytical Method No. 7400--for laboratory and field analysis. The analyst shall sign and submit permanent records of all samples

analyzed directly to the Environmental Consultant. The Independent Testing Laboratory shall seal the unused portion of all filters in airtight containers so that individual samples can be re-analyzed at a later date if necessary. The containers shall be clearly labeled with Project Name and Sample Number and shall become property of the Owner at work completion at the Owner's request.

- D. Controls: The Contractor's testing laboratory shall submit sample analysis results, chain-of-custody and equipment calibration records to the Environmental Consultant prior to the start of the next work shift following collection.
- E. Contractor's Sampling During Abatement
 - 1. Sample Collection: Air monitoring shall be performed to determine worker exposure during the period of asbestos abatement in each work area. Begin sampling when asbestos removal commences. Samples are to be taken where Class I or II work is being conducted during each 8-hour work shift until abatement is complete.
 - 2. Most Contaminated Worker: The Contractor shall determine which worker(s) in each work area is probably experiencing the most severe exposure. This is the "Most Contaminated Worker(s)". 8-hour TWA and 30-minute excursion samples shall be collected on this worker(s). This worker shall wear a personal sampling pump and the sample shall be drawn from the breathing zone of this worker.
 - 3. The number of air samples collected shall be in accordance with the Contractor's approved work plan, however, a minimum of one sample per work area must be collected daily.
- F. Quality Assurance: See Section 1.14, Quality Assurance, for additional requirements related to air monitoring.

1.8 OWNER OCCUPANCY

- A. Industrial Hygienist: The Environmental Consultant will collect and analyze asbestos air samples prior to abatement, inside the work area, outside the work area, at HEPA exhaust and after visual inspection at the Owner's discretion and expense. See Section 1.14, Quality Assurance, for additional requirements related to air monitoring.
- B. Sampling and analysis of asbestos samples shall be performed in compliance with WAC Chapter 296-62-07735, Appendix A--WISHA reference method.
- C. The Owner reserves the right to monitor Contractor's performance via air samples on abatement workers in addition to the Contractor's air monitoring.
- D. Any post-abatement air monitoring conducted by the Owner that is made necessary by air sample data above prescribed post-abatement limits shall be performed by the Environmental Consultant at the Contractor's expense.

1.9 AIR MONITORING BY OWNER

- A. The area of abatement shall be occupied only by properly trained and protected personnel during abatement activities. Construct the abatement control areas and perform the work so as not to interfere with the Owner's site and facility operations.

1.10 WORKING HOURS

- A. Submit proposed work schedule to Owner for approval in conjunction with Pre-Work Submittals. The Owner reserves the right to restrict and curtail any operations which are considered, at the Owner's sole determination, to generate such noise or activities as to interfere with facility operations. Any revisions to the approved work schedule shall be submitted in writing to the Owner a minimum of 48 hours prior to the desired change.

1.11 PERMITS AND NOTIFICATIONS

- A. The Contractor is responsible for obtaining and maintaining all permits and notifications as required for the completion of the work by the Washington State Department of Labor and Industries, the U.S. EPA, NWCAA and any other permitting agency involved with the completion of the work included herein.
- B. Northwest Clean Air Agency (NWCAA)
 - 1. At least 10 days before undertaking an Asbestos Project, the Contractor shall submit to the Owner a copy of the Notice of Intent to Remove Asbestos that the Contractor has filed with NWCAA. Prior to the start of any abatement work, the Contractor shall post the Notice of Intent to Perform an Asbestos Project.

1.12 LIABILITY

- A. The Contractor is an independent contractor and not an employee of the Owner, Architect or Environmental Consultant. The Owner, Architect and the Environmental Consultant shall have no liability to the Contractor or any third persons for Contractor's failure to faithfully perform and follow the provisions of these Specifications and the requirements of the governing agencies. Notwithstanding the failure of the Owner, Architect or the Environmental Consultant to discover a violation by the Contractor of any of the provisions of these Specifications, or to require the Contractor to fully perform and follow any of them, such failure shall not constitute a waiver of any of the requirements of these Specifications which shall remain fully binding upon the Contractor.

1.13 SUBCONTRACTORS

- A. Subcontractors employed by the Contractor shall be bound to all the work and safety standards specified. Subcontractor's personnel shall meet requirements as specified and shall be supervised by the Contractor during performance of this work.

1.14 QUALITY ASSURANCE

- A. Qualifications for Performance of Work
 - 1. Contractor shall have a record of successful experience in asbestos removal and related Work similar in scope and magnitude to this Project. Contractor shall have valid licenses and certifications as a Contractor and an Asbestos Abatement Contractor in the State of Washington.
 - 2. Maintain on site a full-time Certified Asbestos Supervisor approved by the Owner per pre-job submittals.
 - 3. Provide one experienced Foreman for every five asbestos workers, or portion thereof, utilized on the Project.

B. On-Site Observation

1. Pre-Removal: Environmental Consultant shall perform observations regarding demarcation of regulated area, installation of critical barriers, integrity of negative pressure enclosures, waste load-out facilities, and other conditions affecting abatement work. Contractor shall request pre-removal observations a minimum of two hours prior to desired removal commencing. No abatement work shall be performed prior to pre-removal observation by the Environmental Consultant.
2. Observation: Environmental Consultant shall perform observations regarding integrity of isolation barriers, decontamination facilities, worker protection, Contractor's air monitoring program, performance of abatement operations, and conformance to the Specification, EPA, OSHA, WISHA and NWCAA regulations.
3. Post Removal: Environmental Consultant shall perform visual inspections after the removal of asbestos-containing materials and cleaning of work area(s) is complete.
4. Following abatement and cleaning of work area(s), the abatement superintendent shall inspect the work area(s) and notify the Environmental Consultant that the scheduled post-abatement inspection may commence.
5. Visual Inspections shall be performed according to ASTM Standard E 1368, Standard Practice for Visual Inspection of Asbestos Abatement Projects.
6. Should additional cleaning of the work area be required to meet the standards set forth in paragraph b of this section, the Environmental Consultant shall indicate deficiencies on the "Post-Abatement Visual Inspection" form and notify the Contractor of such deficiencies.
7. The Contractor shall not proceed until post-removal visual inspection by the Environmental Consultant has determined work area(s) acceptable.
8. Stop Work: Environmental Consultant shall notify the Contractor in writing to stop abatement work if the Owner determines that work practices are in violation of regulations, these Specifications or that work is endangering workers or occupants of the building. The Contractor shall continue work when conditions and actions are corrected and when written authorization is received from the Environmental Consultant.
9. Schedule of Inspections: The Contractor shall schedule pre-removal and post-removal visual inspections with the Environmental Consultant a minimum of forty-eight (48) hours in advance of the desired inspection occurring.
10. Any delay in the completion of the Work caused by a lack of proper scheduling of inspections shall not be sufficient cause for any extension of time or extension of the project completion date.
11. Compensation for time spent by the Environmental Consultant on the Project resulting from pre-arranged meetings at which the Work has not progressed to the designated level of completion shall be the responsibility of the Abatement Contractor and will be deducted from future payments due the Abatement Contractor, by the Owner.

C. Air Monitoring

1. Notification: If, at any time during the work, analysis of an air sample taken by the Contractor, Owner, or Environmental Consultant, indicates a fiber concentration in excess of the applicable Maximum Allowable Fiber Concentration, the laboratory that analyzed the air sample shall immediately notify the Contractor's Superintendent and the Environmental Consultant.

- D. Maximum Allowable Fiber Concentrations:
 - 1. Outside all Regulated Work Areas: 0.01 f/cc (fibers per cubic centimeter by PLM) or below pre-abatement.
 - 2. Inside Isolated Regulated Work Area: 0.1 f/cc.
 - 3. Inside Non-Isolated Regulated Work Area: 0.01 f/cc or below pre-abatement levels.
 - 4. Post-Abatement: 0.01 f/cc.

- E. Procedures: Immediately upon being notified of fiber concentration in excess of the Maximum Allowable Fiber Concentration, the Contractor shall perform the following steps in the order presented, at no additional cost to the Owner:
 - 1. Stop abatement work and identify source of high fiber counts.
 - 2. Corrective Actions: Immediately correct containment breaches, pressure differential changes and potential cause of high fiber counts. The Environmental Consultant will determine the affected area considered to be contaminated and the proper cleaning to be performed by the Contractor at no additional cost to the Owner.
 - 3. Clean the affected area. Cleaning will include wet methods and HEPA vacuuming.
 - 4. Re-sample air until fiber counts are determined to be below the specified maximum levels.
 - 5. Secure and repair containment barriers, repair or add equipment, modify work procedures, and make other changes to reduce fiber counts.
 - 6. Resume work and air monitoring.

- F. Post-Abatement Sampling
 - 1. The Environmental Consultant will collect and analyze air samples following visual inspection and encapsulation.
 - 2. Post-abatement sampling, if required, will not be performed until the Environmental Consultant has determined that encapsulant has adequately dried to prevent interference with sample analysis procedures.
 - 3. All samples must meet fiber concentration criteria outlined above to be considered acceptable.
 - 4. The Abatement Contractor shall provide power and lighting to work areas to facilitate post-abatement sampling.
 - 5. Unacceptable Data: Additional post-abatement air sampling necessitated by improper cleaning, enclosure maintenance or improper procedures shall be performed by the Environmental Consultant at the Abatement Contractor's sole expense.
 - 6. Performance: Work shall be performed in a skillful manner representing industry standards. Environmental Consultant shall require Contractor to remove from the work site employees and subcontractors the Environmental Consultant deems incompetent, careless or objectionable.
 - 7. Additional Costs:
 - a. The Contractor shall be responsible for costs of any testing, cleanup, repair, down-time loss, etc. that is a result of the Contractor's negligence, poor maintenance of isolated areas, improper procedures or airborne fiber concentrations above the Maximum Allowable Fiber Concentrations.

PART 2 - PRODUCTS

2.1 PROTECTIVE CLOTHING AND EQUIPMENT

- A. Provide approved clothing per WAC 296-62 for all workers and all official representatives of the Owner, State or other governmental entity, and the Environmental Consultant who may inspect or visit the project. Work clothes shall consist of disposable full-body coveralls and head and foot covers ("Tyvek" or approved), boots, or sneakers. Eye, hearing, fall protection, gloves and hard hats shall be available, as required by job site conditions.
- B. Respirators: At a minimum, respiratory protection shall be approved by the National Institute for Occupational Safety and Health (NIOSH), United States Department of Labor, and U.S. Department of Health, Education and Welfare, Centers for Disease Control, in accordance with WAC Chapter 296-62-071. Respiratory protection shall provide workers with a maximum calculated fiber level inside the mask of 0.01 f/cc.
- C. Selection: As part of the Contractor's Respiratory Protection Program, all workers shall be provided with a selection of brands and sizes of respirators to choose from. At a minimum, all workers shall be quantitatively or qualitatively fit-tested at the time of respirator selection per WAC Chapter 296-62-07715.
- D. Contractor shall supply replacement filter cartridges as required. Cartridges, which have become wet or clogged, shall be replaced immediately.
- E. Contractor shall provide personal protective equipment and supplies to the Environmental Consultant and authorized visitors for use on the site.
- F. Vacuum Equipment: all vacuum equipment utilized in the work area shall be High-efficiency Particulate Air (HEPA) equipment, and suitable for wet/dry usage.
- G. Scaffolding: Scaffolding, as required to accomplish the specified work, shall meet all applicable safety regulations including WAC Chapter 296-155-475 to 48536. Special scaffolding shall have drawings and calculations stamped and signed by a civil or structural engineer registered in the state of Washington.
- H. Transportation Equipment: Transportation equipment, as required, shall be suitable for loading, temporary storage, transit, and unloading of contaminated waste without exposure to persons or property. Equipment shall have a hard bottom and sides. If equipment is rented, notify rental agency in advance, in writing, of intended use of equipment.
- I. Electrical: Electrical tools, equipment and lighting shall meet all applicable codes and regulations, including WAC Chapter 296-155-426 to 462. Ground fault protection as required by OSHA, shall be in effect at all times. Contractor shall take all additional precautions and measures necessary to ensure a safe working environment during wet removal.
- J. Other Tools and Equipment: Provide other suitable tools for the removal, enclosure, encapsulation, patching, and disposal activities including but not limited to: hand-held scrapers, wire brushes, sponges, and rounded-edge shovels.

- K. Lighting: Provide adequate lighting for safe execution of work and for Environmental Consultant to perform visual inspections of work areas.

2.2 MATERIALS

- A. Plastic Sheet: Plastic sheet shall be flame-retardant polyethylene material, minimum thickness of 6-mil, sized in lengths and widths to minimize the frequency of joints. Exterior applications require reinforced plastic sheeting.
- B. Plastic Bags: Plastic bags shall be 6-mil polyethylene printed with warning labels with waterproof print and permanent adhesive in accordance with WAC Chapter 296-62-07721, OSHA, DOT and EPA regulations. Permanently mark the label with the date the material was collected for disposal, the name of the waste generator, the name and affiliation of the certified asbestos supervisor, and the location at which the waste was generated.
- C. Tape: Tape shall be capable of sealing joints of adjacent sheets of plastic and for attachment of plastic sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under dry and wet conditions, including use of amended water. Minimum of 2" wide tape must be used. Do not use polyethylene tape.
- D. Disposal Containers: Disposal containers shall be suitable to receive and retain any asbestos-containing or contaminated materials until disposal at an approved site. The containers shall be labeled with waterproof print and permanent adhesive in accordance with WAC Chapter 296-62-07721, OSHA, DOT and EPA regulations. Permanently mark the label with the date the material was collected for disposal, the name of the waste generator, the name and affiliation of the certified asbestos supervisor, and the location at which the waste was generated. Containers must be both airtight and watertight, and have hardtop, bottom and sides.
- E. Warning Labels: Warning labels on plastic bags and disposal containers shall include the following information:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
AVOID BREATHING AIRBORNE ASBESTOS FIBERS

- F. Warning Signs: Warning signs shall be provided and displayed at each regulated area in accordance with WAC Chapter 296-62-07721. Warning signs shall include the following information:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING
ARE REQUIRED IN THIS AREA

- G. Amended Water: Clean potable water containing a surfactant additive. The surfactant additive shall be 50% polyoxyethylene ether and 50% polyethylene ester, or equivalent, and shall be mixed with water at a concentration of one ounce surfactant

to 5 gallons of water, or as recommended by the manufacturer in the case of an equivalent.

- H. Encapsulants (Sealants): Encapsulants shall be of the bridging or penetrating variety and shall be listed as "satisfactory" by the EPA. Penetrating Encapsulant: No. 207 Special Sealer #33775-27A as manufactured by Makus-Cincinnati, Inc.; "Asbestos 30B-2" as manufactured by Asbesco Corp.; "Cable Coating 22-P" as manufactured by American Coatings Corp. or approved Bridging Encapsulant: Decadex Firecheck, manufacturer's standard color "Magnolia", as manufactured by Pentagon Plastics, Inc.; "Cable Coating 2-B", manufacturer's standard color gray, as manufactured by American Coatings Corp.; or approved equal.
- I. Other Materials: Provide materials such as lumber, nails, and hardware, which may be required to construct and dismantle the decontamination area and barriers isolating the work area.
- J. Spray Glue: Spray glue shall be a heavy-duty adhesive in aerosol can, "CDC Spray Glue" as manufactured by AMREP, Inc., or approved equal.
- K. Personnel Protection During Work in Non-Isolated Work Areas
 1. Work clothes and respiratory protection as described in this section.
 2. Clothing: Workers shall wear two layers of coveralls after removal of street clothes. Worker decontamination will consist of personal decontamination in a regulated area over drop plastic sheeting with a HEPA vacuum and wet methods. The first layer of coveralls must be removed when exiting the work area.
 3. Workers shall not eat, drink or chew gum at the worksite except in the established clean room. Smoking or using other tobacco products is prohibited.
 4. Workers shall be fully protected with respirators and protective clothing immediately prior to the first disturbance of asbestos-containing or contaminated material and until final cleanup is completed.
- L. Emergency Precautions
 1. Emergency Exits: The Contractor shall establish emergency and fire exits from the work area. Contractor shall ensure these exits are well marked and remain unobstructed.
 2. First Aid: The Contractor shall be prepared to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately or evacuated without delay for decontamination.
 3. Fire Department: Contractor shall notify the local fire department of the asbestos abatement project prior to beginning work area preparation.
 4. Contractor shall provide fire extinguishers at all abatement work areas.
 5. Emergency Clean-up: Contractor to submit to the Environmental Consultant for approval, an emergency control and cleanup plan to be followed in the event of asbestos contamination during work in non-isolated work areas. Contractor shall ensure all workers are thoroughly familiar with approved plan.
- M. Building Security and Protection
 1. The Contractor shall post adequate warning signs at all potential entrances to work areas.
 2. Building Protection: Contractor shall protect all existing fixed equipment, existing building finishes that are to remain, and existing systems and functions from damage during the abatement process. Extra precautions are to be taken in

protecting existing electrical panels, light fixtures, etc. Any damage to existing building, services, and/or equipment shall be remedied by the Contractor at his expense.

3. Power Failure: Contractor shall notify Environmental Consultant and Owner immediately when a power failure occurs. Asbestos abatement work will stop, and the work area will be misted with water. If power failure exceeds 15 minutes, workers shall use appropriate personnel decontamination procedures and shall seal the work area. Precautions to prevent visible emissions will be performed under the direction of the Environmental Consultant.
4. Contractor shall clean external surfaces of contaminated containers and equipment thoroughly by wet sponging and HEPA vacuum.
5. Contractor shall maintain access and use of existing fire lanes and maintain security measures to prevent unauthorized access, theft, or vandalism.

PART 3 - PRODUCTS

3.1 NON-ISOLATED WORK AREA PREPARATION

- A. Performance: Contractor shall perform the following procedures in the order in which they are presented for work in non-isolated work areas according to the approved work plan. Any alternative control measures shall be approved by the Environmental Consultant and performed in accordance with WAC 296-62 and 29 CFR 1926.1101.
 1. Install critical barriers at all roof-level HVAC openings, doors, windows and other openings into the building within or adjacent to the work areas.
 2. Have emergency cleanup equipment and supplies, including HEPA vacuum, amended water, disposal bags, buckets, towels and sponges, on hand prior to start of abatement work.
- B. Compliance: No asbestos abatement work shall occur unless the work area has been found acceptable for Specification compliance by the Environmental Consultant. Notifications to perform asbestos abatement and the Limited Hazardous Material Survey Report (Good Faith Inspection Report) shall be posted at the work site.
- C. Access to Work Area by Others
 1. Except for emergency personnel, the Contractor shall limit access to the work area to authorized visitors.
 2. The Contractor shall provide protective clothing, respirators and equipment for all authorized visitors, as specified.
 3. All authorized visitors shall be subject to the personnel protection provisions specified above and shall sign in and out on the Worksite Entry Logbook.

3.2 REMOVAL OF ASBESTOS-CONTAINING MATERIALS IN NON-ISOLATED AREAS

- A. Contractor shall remove all asbestos-containing materials as defined in these Contract Documents. Contractor shall apply spray coat of amended water to asbestos materials to be removed. Keep material damp during entire removal process. Immediately place asbestos-containing materials in properly labeled asbestos waste bags following removal.
- B. Contractor shall maintain a safe and uncluttered work site including staging area, work area, worker decontamination system, and waste load-out area.
- C. Contractor shall promptly remove waste bags to the waste load-out area.

3.3 DISPOSAL

- A. Regulations: The Contractor shall determine current waste handling, transportation, and disposal regulations for the work site and for each waste disposal landfill. The Contractor must comply with these regulations and U.S. Department of Transportation, NWCAA Section 570 – Asbestos Control Standards, and EPA requirements.
- B. Waste Load-Out:
 - 1. Contractor shall coordinate activities to ensure that all asbestos-containing waste is properly containerized and removed from all work areas prior to the end of each work shift. Contractor shall prevent the accumulation of waste containers within work areas and shall ensure that all waste containers are stored in lockable, properly sealed storage container(s) at the end of each work shift.
 - 2. Contractor shall perform waste-load out activities during pre-approved time periods via pre-approved routes through the building per Work Plan approved by Owner and Environmental Consultant.
- C. Submit disposal receipts to the Environmental Consultant and Owner.

END OF SECTION 02 82 13

SECTION 02 83 13 – LEAD-RELATED ACTIVITIES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. General work items include, but are not limited to:
 - 1. Compliance: Activities requiring compliance with this Section include the manual demolition, cutting, sawing, and sanding of building components containing lead as defined in these Specifications and Drawings. See the Limited Hazardous Materials Survey Report for information regarding lead-containing paint in areas of the Work.
 - 2. Handling: Conduct activities involving lead-containing paint under Work of this Contract in accordance with this Section and current applicable state and federal regulations including WAC 296-62-07521: "Lead"; WAC 296-155-176: "Occupational Health and Environmental Control"; and 29 CFR 1926.62: "Lead Exposure in Construction - Interim Final Rule".
 - 3. Waste Disposal: The Contractor is responsible for determining current waste handling requirements according to applicable local, state and federal regulations.
 - 4. Monitoring: Monitoring of airborne concentrations of lead in accordance with WAC 296-155-176 and this Section. The intent of this Section is to reduce and maintain employee exposure to lead and surrounding airborne concentrations at or below the permissible exposure limit.

1.2 RELATED SECTIONS

- A. Work performed under this specification section is governed by related specification sections, including, but not limited to, the following:
 - 1. Division 1: General Requirements; Section 01 11 10 Summary of Hazardous Materials Work.

1.3 SUBMITTALS

- A. Submit the following "Pre-Work Submittals" prior to start of work. The Work may not proceed until complete Pre-Work Submittal package has been reviewed by the Environmental Consultant.
 - 1. Lead Work Plan: Submit a site-specific lead plan based on the elements of the Contractors' Lead Compliance Program required by WAC Chapter 296-155 for activities impacting lead. The Work Plan shall be developed and implemented to provide engineering, work practice and administrative controls to reduce and maintain employee exposure to lead at or below the permissible exposure limit. The plan will include, at a minimum, task-specific descriptions of activities; controls; personnel; procedures; method of compliance; technology used to meet compliance; air monitoring plan; detailed schedule; work practice program; administrative controls and other relevant information. Implementation of work practices not described in the Lead Work Plan shall not be permitted until an amendment to the submittal is reviewed by the Environmental Consultant and Owner.
 - 2. Medical Program: Submit written proof medical exam program is in compliance with OSHA Lead Regulations 29 CFR 1910.2 and 1926.62, and WAC Chapter 296-155. Initial medical surveillance consisting of biological monitoring in the

form of blood sampling and analysis for lead and zinc protoporphyrin levels shall be submitted for each employee occupationally exposed to lead at or above the action level.

3. Worker Training Program: Submit written proof indicating that all employees impacting lead-containing materials have received training per 29 CFR 1926.62 and WAC Chapter 296-155. Proof shall include a signature from the Contractor's Principal indicating that all employees performing lead related activities have completed such a program.
 4. Respirator Program: Submit written proof indicating respirator program is in compliance with all parts of OSHA Lead Regulations 29 CFR 1910.134 and 1926.62, and WAC Chapter 296-155.
- B. Final Submittals:
1. Project Record Documents: Provide record of lead control activities including disposition of each type of lead-containing item removed from the site.
 2. Air Monitoring: Submit copies of all air monitoring data (including sample data sheets), chain-of-custody documentation and calibration records related to the initial exposure assessment for lead.

1.4 AIR MONITORING

- A. Testing Laboratory: An Independent Testing Laboratory shall be retained by the Contractor for all lead air analysis. All exposure monitoring analysis shall be performed in accordance with 29 CFR Part 1926.62 and WAC Chapter 296-155. The laboratory must participate in the ELPAT Program and be a member of AIHA. Air sample collection may be performed by an Industrial Hygienist or the Contractor's trained supervisor at the Contractor's option.
- B. Sample Documentation: Documentation shall be kept for each filter sample procured as to worker sampled, social security number, activity, work area location, date and time taken, volume of air drawn through filter, pump identification number and calibration. Documentation shall indicate in what areas tests were taken and shall clearly indicate the specified maximum allowable levels for each area tested. Report all data. Complete laboratory chain-of-custody records.
- C. Analysis Procedures: The samples shall be collected on 37 mm filters and analyzed within 24 hours using NIOSH Analytical Method No. 7105 or 7082. The containers shall be clearly labeled with project name and Sample Number and shall become property of the Owner at work completion at the Owner's request.
- D. Contractor's Sampling During Lead Related Activities:
1. Initial exposure: Exposure monitoring shall be performed by the Contractor during impact of representative lead-painted building components per WAC 296-155.
 2. Most Contaminated Worker: The Contractor shall determine which worker(s) in each work area is probably experiencing the most severe exposure. This is the "Most Contaminated Worker(s)". 8-hour TWA samples shall be collected on this worker(s). Worker shall wear a personal sampling pump and the sample shall be drawn from the breathing zone of this worker.
 3. Number of samples: The number of air samples collected shall be as defined in the approved Lead Compliance Program. Historical measurements per WAC 296-155 may be used to satisfy continuing exposure assessment requirements.

- E. Work Area Monitoring
 - 1. Monitoring: The Owner reserves the right to monitor Contractor's performance via air, dust wipe and TCLP samples during lead related activities, in addition to the Contractor's exposure monitoring and testing. Sampling by the Owner will not be available for use as the Contractor's Initial Exposure Assessment.
- F. Quality Control
 - 1. Maximum allowable airborne concentrations: Contractor shall ensure that at all times airborne concentrations of lead outside lead work areas are at or below the OSHA Action Level of 30 mg/L³.
 - 2. Immediately upon being notified of concentrations exceeding the specified maximum allowable levels, the Contractor shall perform the following steps in the order presented, at no additional cost to the Owner: Stop lead related activities work, identify source of high lead concentrations, develop plan with Environmental Consultant and Owner to complete lead related activities in a manner to prevent visible emissions and elevated lead levels.

1.5 SUBCONTRACTORS

- A. Subcontractors employed by the Contractor shall be bound to all the work and safety standards specified. Subcontractor's personnel shall meet requirements as specified and shall be supervised by the Contractor during performance of this work.

1.6 LIABILITY

- A. The Contractor is an independent contractor and not an employee of the Owner, Architect or Environmental Consultant. The Owner and the Environmental Consultant shall have no liability to the Contractor or any third persons for Contractor's failure to faithfully perform and follow the provisions of these Specifications and the requirements of the governing agencies. Notwithstanding the failure of the Owner or the Environmental Consultant to discover a violation by the Contractor of any of the provisions of these Specifications, or to require the Contractor to fully perform and follow any of them, such failure shall not constitute a waiver of any of the requirements of these Specifications which shall remain fully binding upon the Contractor.

PART 2 – PRODUCTS

2.1 PROTECTIVE CLOTHING AND EQUIPMENT

- A. Personnel Protective Equipment for Lead related activities shall be provided per WAC 296-155.

PART 3 – EXECUTION

3.1 WORK PRACTICES

- A. Restrictions
 - 1. Use of mechanical methods including, but not limited to power sanding, grinding, sand-blasting, etc. shall be performed within a negative pressure enclosure (NPE) pending approval of negative exposure assessment by the Owner.

- B. Negative Exposure Assessment: The Contractor may waive the requirement of a negative pressure enclosure when using mechanical methods upon approval by the Environmental Consultant of data indicating a negative exposure assessment has been completed per WAC 296-155 and paragraph 1.4, Air Monitoring. The Contractor shall allow 48-hours for review of such data.
- C. Housekeeping: Maintain all surfaces as free as practicable of accumulations of lead and perform clean-up of work areas as necessary according to WAC 296-155-17617.
- D. Work Practices:
 - 1. Set-up Activities: Prior to impact of lead-containing components, Contractor shall cover the ground below the work area with 6-mil plastic sheeting or equivalent. The drop-sheeting shall extend outward a minimum of 6 feet from the location of item(s) being removed. Any tears that occur in the drop-sheeting shall be immediately repaired with duct tape or other acceptable seal.
 - 2. Perform work impacting lead-containing components in accordance with approved lead work plan. Use procedures and equipment required to limit occupational and environmental exposure to lead when lead-containing paint is impacted. The procedures employed by the Contractor shall not create the potential for contaminating surrounding areas or materials with lead-containing dust. Dust generation shall be minimized at all times.
 - 3. At completion of the above operations, HEPA vacuum drop-sheeting to remove any lead-containing particulate or debris.
- E. Debris Testing
 - 1. Debris Testing: A representative sample from debris. The method/location of disposal will be established by test results. See paragraph 3.1-F for disposal requirements.
- F. Disposal Procedures:
 - 1. Waste characterization will be performed, as necessary, by the Contractor on the anticipated general waste stream. Results of such TCLP characterization will be provided to the Owner by the Contractor. Components coated with lead-containing paint may be included in the general waste stream upon receipt of favorable waste characterization data.
 - 2. The Contractor shall be responsible for disposal of lead-containing debris produced by removal and surface preparation of lead-containing painted coatings according to applicable local, state, and federal regulations.

END OF SECTION 02 83 13

1 HAZARDOUS MATERIAL PLAN