



Lakewood Library Demolition Bid Set Project Manual

January 3, 2024



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SECTION 00 03 00- ADVERTISEMENT FOR BID

DATE OF ADVERTISEMENT: Daily Journal of Commerce, Seattle: January 10, 13, and 16, 2024

NAME OF PROJECT: LAKEWOOD LIBRARY DEMOLITION

MANDATORY PRE-BID SITE WALK: January 30, 2024, 1:00PM
6300 Wildaire Rd, SW, Lakewood, WA 98499

LAST SUBMISSION OF QUESTIONS: February 6, 2024, 4:00PM to Architect
Answered by February 16, 2024

BIDS DUE: March 5, 2024, 2:00PM to
PMcBride@piercecounitylibrary.org

DATE OF BID OPENING: March 5, 2024 at PCLS, 2:30PM
3005 112th St E., Tacoma, WA 98446
Or via Microsoft Teams at link below.

PROJECT DESCRIPTION:

Solicitation of bids to fully permit and demolish the existing building, site improvements, and utilities at 6300 Wildaire Road, SW, Lakewood, WA 98499 based on Design Documents and Project Manual dated January 3, 2024.

The scope of work includes site preparation and removal of all existing building, site surface improvements, underground utilities, and associated structures within the project site. Contractor to backfill void left by existing basement removal with specified materials. Contractor to coordinate salvage of existing log display with owner's contractor, Omega Morgan. Contractor to provide new chain link fence panels. All existing trees shall be protected during demolition and site preparation activities. Contractor to remove and dispose of hazardous materials as identified in and in accordance with the Hazardous Materials Survey Report dated October 17, 2022 and Project Manual.

The Pierce County Library System (Owner) will receive electronic bids from qualified general contractors ONLY until 2:00PM, March 5, 2024 sent to Petra McBride at PMcBride@piercecounitylibrary.org. BIDS RECEIVED AFTER 2:00PM WILL NOT BE ACCEPTED.

A public reading of the sealed bids, including Additives, Alternatives, Deductives and Unit Prices, if any, will be conducted at 2:30PM, March 5, 2024 in PCLS Processing & Administrative Center, 3005 112th Street East Tacoma, WA 98446, Meeting Room B. Optional virtual attendance via Microsoft Teams can also be used to view reading of the bids at:

Microsoft Teams link:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_Nzg5OGI5ZDQ1MWUxYS00MTllLThhZWUtMmVjZDQ1NzdkYjI5%40tHread.v2/0?context=%7b%22Tid%22%3a%221a2f4643-38c9-4533-8193-a4a48217102c%22%2c%22Oid%22%3a%223f05e95f-8984-4ca0-8fdc-52d3f927608a%22%7d

Meeting ID: 217 087 773 345
Passcode: NC4J9g

Or call in (audio only): 1-347-618-4825, 274068317#
Phone Conference ID: 274 068 317#

TIMELINE OF EVENTS FOR BID OPENING

2:00PM Sealed Base Bid, Additives, Alternates, Deductives, Unit Prices due
2:30PM Public reading of sealed Base Bid and Additives, Alternates, Deductives

No bid will be considered unless accompanied by a certified or bank cashier's check, or by a bid bond from a state- licensed surety company in an amount of not less than five percent (5%) of the Base Bid including sales tax and Additives, made payable to PIERCE COUNTY LIBRARY SYSTEM.

Bid, Bid Bond and other enclosures shall be enclosed in an opaque, sealed envelope bearing the name and address of the Bidder and addressed to the Owner. Mark lower left corner of the envelope "PCLS Lakewood Library Bid – Demolition."

Bid documents will be available on January 10, 2024. Plans, specifications, addenda, bidders list, and plan holders list for this project are available through Builder's Exchange of Washington's on-line plan room for the Lakewood Library Demolition. Free-of-charge access is provided to Prime Bidders, Subcontractors, and Vendors by going to <http://bxwa.com> and clicking on "Posted Projects", "Public Works", and "Pierce County Library System". Bidders are encouraged to "Register" in order to receive automatic email notification of future addenda and to be placed on the Bidders List. Contact Builders Exchange of Washington at (425) 258-1303 for assistance.

Questions should be directed to the project architect **NO LATER THAN 4:00PM, February 6, 2024:** BuildingWork Architects, 159 Western Ave West, Suite 486, Seattle, WA 98119, attn: Kate Weiland, kate@buildingwork.design and Kami Lemke, kami@buildingwork.design

No bidder may withdraw its bid after the hour set for the opening thereof, unless and until the award of contract has been delayed for a period of sixty (60) days.

The Owner reserves the right to reject any and all bids and to waive any informalities. The Owner may also reject any bid for one or more of the following reasons:

- a. Liens, judgments, or claims from previous work,
- b. Evidence of financial insolvency and/or poor credit history,
- c. Lack of previous experience in performing contracts of similar scope and nature,
- d. Bidder has been placed on a State or Federal list of debarred or ineligible contractors.

DATES OF PUBLICATION IN DAILY JOURNAL OF COMMERCE, SEATTLE:

Wednesday, January 10, 2024
Saturday, January 13, 2024
Tuesday, January 16, 2024

Pierce County Library System is an Equal Opportunity Employer.

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DEFINITIONS AND CONDITIONS

DEFINITIONS

The following terms, listed in alphabetical order, are defined as follows:

ADDENDUM: A written or graphic instrument, issued prior to the Bid opening to all Bidders and identified as an Addendum, which modifies or clarifies the Bid Documents.

ADVERTISEMENT FOR BIDS: A public notice published in the Official Newspaper of The Daily Journal of Commerce, Seattle soliciting Bids for the Work.

AGREEMENT FORM: The written agreement between the Owner and the Contractor setting forth the obligations of the parties there under including, but not limited to, the performance of the Work, the basis of payment and the Contract Time.

ALTERNATE A unit of Work or group of Bid items, identified separately in the Bid, which permits a choice of different methods or material of construction for performing the same work.

ADDITIVE ALTERNATE: A supplemental unit of work or group of Bid items, identified separately in the Bid that may, at the discretion of the Owner, be added to the Base Bid.

DEDUCTIVE ALTERNATE: A supplemental unit of work or group of Bid items, identified separately in the Bid that may, at the discretion of the Owner, be deducted from the Base Bid.

ARCHITECT: A licensed registered Architect of the State of Washington, acting directly or through duly authorized representatives in the administrative management of the Contract.

BASE BID: That amount stipulated in a bid for which the Bidder offers to do the Work and perform the Contract excluding Alternates and taxes collected separately pursuant to Washington State Excise Tax Rules. The terms "Proposal," "Bid Proposal," and like terms are synonymous.

BID: Those written amounts stipulated in a bid for which the Bidder offers to do the Work and perform the Contract including Alternates and taxes collected separately pursuant to Washington State Excise Tax Rules. The terms "Proposal," "Bid Proposal," and like terms are synonymous.

BID DOCUMENTS: The Advertisement for Bids, Instructions to Bidders, Bid Form, and the proposed Contract Documents, including any Addenda issued prior to Bid opening.

BID FORM: The Bid and the Affidavit included in the Bid Documents.

BID GUARANTY: Bid bond, cash, cashier's check or certified check accompanying the Bid as a guarantee that the Bidder will enter into an agreement with the Owner for performance of the Work if the Bidder is Awarded the Contract.

BIDDER: An individual, partnership, firm, corporation, or joint venture, submitting a Bid. When required by law or otherwise such individual, partnership, firm, corporation or joint venture shall be pre-qualified.

CHANGE ORDER: See Section 00 70 00 Article 7.2.1.

CONTRACT: See Section 00 70 00, Article 1.1.2

CONTRACT BOND: The approved form of security, furnished by the Contractor and the Contractor's Surety, guaranteeing completion of the Work and payment to persons supplying labor and materials in the prosecution of the Work. (SEE Section 00 61 00).

CONTRACT COMPLETION DATE: See "DATES"

CONTRACT DOCUMENTS: See Section 00 70 00, Article 1.1.1

CONTRACT PRICE:

1. **Awarded Contract Price:** The lump sum base bid for all items of Work, including accepted Alternates, and applicable taxes, upon which the Award is made.
2. **Revised Contract Price:** The Awarded Contract Price, at any time after Award but prior to the Completion Date, adjusted as a result of approved Change Orders.
3. **Final Contract Price:** The total amount of money payable to the Contractor under the terms and conditions of the Contract

CONTRACT TIME: See "DATES"

CONTRACTOR: The individual or entity contracting with the Owner to do the Work.

DATES: The following are Contract milestone dates:

1. **Bid Opening Date:** The date on which Bids for the Work are opened and read publicly.
2. **Award Date:** The date on which the Owner formally accepts for the Work, the lowest responsive Bid of a responsible Bidder and Awards the Contract.
3. **Contract Completion Date:** The date by which the Work is contractually required to be physically completed. The Contract Completion Date will be stated in the Notice to Proceed. The Architect will revise this date in writing whenever there is an extension of the Contract Time.
4. **Notice to Proceed Date:** The date stated in the Notice to Proceed on which the Contract Time begins.
5. **Substantial Completion Date:** The date the Architect determines the Owner has full and unrestricted use and benefit of the facilities, both from an operational and safety standpoint, and only minor incidental work, replacement of temporary substitute facilities, or correction or repair remain for the physical completion of the total Contract.
6. **Physical Completion Date:** The day all Work is physically complete on the Project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.
7. **Final Completion Date:** The date, certified in writing by the Owner, when the Work specified in the Contract Documents is completed and all the obligations of the Contractor under the Contract

are fulfilled. The Contractor must furnish all documentation required by the Contract and by law before this date is established.

DAY: Unless otherwise specified, Day(s) means Calendar Day(s).

1. Business Day: Any day other than Saturday, Sunday, or Holiday.
2. Calendar Day: The time period of twenty-four hours measured from midnight to the next midnight.
3. Non-Working Day: The following are Non-Working Days:
 - Saturday
 - Sunday
 - Holiday
 - A day the Contract specifically requires the Contractor to suspend the Work.
4. Working Day: A day not otherwise defined as a Non-Working Day.

DRAWING: See Section 00 70 00 Article 1.1.5

FORM OF PROPOSAL: See "Bid".

HOLIDAY: A day designated by as exempt from labor. Pursuant to RCW 1.16.050. When any Holiday falls on a Sunday, the following Monday shall be considered a Holiday. When any Holiday falls on a Saturday, the preceding Friday shall be considered a Holiday. The Pierce County Library System recognizes the following Holidays:

- First day of January (New Year's Day)
- Third Monday of January (Martin Luther King, Jr.'s Birthday)
- Third Monday of February (President's Day)
- Last Monday of May (Memorial Day)
- Nineteenth day of June (Juneteenth)
- Fourth day of July (Independence Day)
- First Monday of September (Labor Day)
- Eleventh day of November (Veterans' Day)
- Fourth Thursday of November and the Friday immediately following (Thanksgiving Day)
- Twenty-fourth day of December (Christmas Eve)
- Twenty-fifth day of December (Christmas Day)

LIQUIDATED DAMAGE: See Section 00 70 00 Article 8.2.4.

MATERIAL: Any substance specified for use in the construction of the Project that enters into and forms a part of the finished Project. The substance shall be capable of being so used and shall be furnished for that purpose.

MATERIALMAN: A person or entity that furnishes a Material, supply, commodity, equipment, or manufactured or fabricated product and does not perform labor at the Project Site; a Supplier.

NOTICE: A written communication to the Owner, Architect, Contractor, or Surety relative to the Work.

NOTICE OF INTENT TO AWARD: The Owner's written Notice to the successful Bidder of their intention to accept the Bid.

NOTICE OF AWARD: The Owner's Written Notice to the successful Bidder accepting the Bid.

OWNER The Pierce County Library System or its authorized representative, also referred to as Project Manager.

PROJECT: See Section 00 70 00, Article 1.

PROJECT MANUAL: See Section 00 70 00, Article 1.

PROJECT SITE: The geographical location usually defined by legal boundary lines, where the Work is to be performed.

SUBCONTRACTOR: An individual or entity contractually obligated to the Contractor to perform a portion of the Work. Also see Supplier.

SUPPLIER: See "Materialman."

SURETY: A surety company that is bound with the Contractor to ensure faithful performance of the Contract, and payment of all laborers, mechanics, Subcontractors and Materialmen and all persons or entities that supply any such person with provisions and supplies for the carrying on of the Work.

UNIT PRICE: A fixed price for construction per unit of measurement.

WORK: See Section 00 70 00, Article 1.

QUALIFICATIONS OF BIDDERS

Bidders shall be qualified by experience, financing, equipment, and organization to do the work called for in the Contract Documents. The Owner reserves the right to take whatever action it deems necessary to ascertain the ability of a Bidder to perform the work satisfactorily. This action may include conducting an evaluation of a Bidder's qualifications and references prior to Award.

BID DOCUMENTS

Information as to where Bid Documents can be obtained or reviewed will be found in the Advertisement for Bid (See Section 00 03 00).

UNIT PRICES

The quantities shown on the Form of Proposal Section 00 30 00 Unit Prices, if any are estimates only and are stated only for Bid comparison purposes. The Owner does not warrant, expressly or by implication that actual quantities of the Work will correspond with those estimated. The Owner reserves the right to increase or decrease the amount of any item of Work associated with a Unit Price, or to make other changes in the Work as necessary. Payment will be made on the basis of the actual quantities of each item of Work completed in accordance with the Contract Documents.

Unit Prices must be submitted with the sealed bids. See Section 00 30 00, Form of Proposal.

EXAMINATION OF BID DOCUMENTS AND PROJECT SITE

GENERAL

Bidders shall carefully examine the Bid Documents. Submittal of a Bid shall be conclusive evidence that the Bidder has made these examinations and understands all requirements for the performance of the Work. By submitting a Bid, the Bidder further warrants, agrees and acknowledges that the Bidder:

has taken all steps necessary to ascertain the full scope, nature and location of the Work;

has investigated and is satisfied as to the general and local conditions which can affect the Work or its cost, including but not limited to:

conditions bearing upon acquisition, transportation, disposal, handling, and storage of materials;

the availability of labor, materials, water, electric power, and roads;

uncertainties of weather, river stages, tides, or similar physical conditions at the site;

the conformation and condition of the site;

the character of equipment and facilities needed preliminary to and during work performance;

site and environmental conditions which by statute, law, or regulation require specific training and certifications for employees;

is satisfied as to the character, quality, and quantity of site development construction or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Bid Documents and other information made a part of this Contract;

is satisfied as to the adequacy of the amount of time allowed for physical completion of the Contract.

Any failure of the Bidder to take the actions described and acknowledged above shall not relieve the Bidder from responsibility:

for estimating properly, the difficulty and cost of successfully performing the Work; and

from proceeding to successfully perform the Work without additional expense to the Owner.

The Bidder agrees that the Owner shall not be liable to the Bidder for any claim whatsoever, including claims for additional payment or time, if the claim directly or indirectly results from the Bidder's failure to investigate and become sufficiently knowledgeable of the conditions under which the Contract is to be performed.

The Bidder shall be familiar and comply with all Federal, State, and local laws, ordinances, and regulations that might affect those engaged in the Work. The Bidder agrees not to assert and the Owner will not consider any plea of misunderstanding or ignorance of such requirements.

Bid prices shall reflect what the Bidder anticipates to be the cost of completing the Work, including methods, materials, labor, and equipment. The Bidder will not be compensated for any costs that exceed those in the Bid prices except as the Contract Documents may provide.

The Bidder is advised to include in its Bid the applicable costs required by Section 00 70 00 - Article 11 related to insurance and bonds.

A claim will not be allowed because of any ambiguity in the Contract Documents if:

the Bidder discovers an ambiguity but fails to notify the Owner, or

the Bidder failed to discover any ambiguity that would have been discovered by a reasonably prudent Contractor in preparing its Bid.

Any prospective Bidder desiring an explanation or interpretation of the Bid Documents must request the explanation or interpretation in writing no later than **5 business days prior to the Bid Date**. Oral explanations, interpretations, or instructions given by anyone before Award will not be binding on the Owner. Any information given to a prospective Bidder concerning any of the Bid Documents will be furnished to all prospective Bidders as an Addendum if:

that information is deemed by the Owner to be necessary in submitting a Bid, or

the Owner concludes that the lack of information would be prejudicial to other prospective Bidders.

BID PROCEDURES

FORM AND STYLE OF BID

A Bid shall be submitted only on the Form of Proposal (SEE Section 00 30 00) issued by the Owner. The Bid Form will identify the Project and may describe the Work by listing estimated quantities, units of measure, items of work, and Materials to be furnished.

Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. A price shall be submitted for each Bid item listed.

Required certifications, as appropriate, shall be included on the Affidavit of the Bid Form.

The signer of the Bid shall initial any correction to a Bid made by interlineation, alteration, or erasure. The Bidder shall make no stipulation on the Bid Form nor qualify the Bid in any manner. A Bid shall be submitted for every Additive, Alternate, or Deductive identified in the Bid Form, unless otherwise specified.

A Bid by a corporation shall be executed in the corporate name, by the president or a vice president {or other corporate officer, accompanied by evidence of authority to sign}.

A Bid by a partnership {including a joint venture} shall be executed in the partnership name, and signed by a partner.

ADDENDA

Questions regarding the meaning or intent of the Bid Documents shall be submitted to the Architect in writing. If the Architect determines it warranted, modifications or clarifications will be provided by Addenda. Only questions answered by formal written Addenda will be binding on the parties. Oral or other interpretations or clarifications will be without legal effect.

Addenda may be issued to modify or clarify the Bid Documents. Addenda will be posted on Builder's Exchange. The Bidder shall acknowledge receipt of each Addendum by filling in the appropriate spaces on the Bid Form Affidavit.

The Bidder should always check with the Architect the day before Bids are opened to ensure all Addenda have been received. The address and telephone number of the Owner's office or other designated locations where copies of Bid Documents and addenda may be obtained is stated in the Advertisement for Bids.

BID GUARANTY

A Bid shall be accompanied by:

a certified or cashier's check payable to the order of Pierce County Library System;

cash; or

a Bid Guaranty {See Section 00 41 00}.

The cash, check, or bond shall be for a sum of not less than five percent of the maximum Bid amount that could be Awarded, including sales tax and Additives, if applicable. A Bid will not be accepted or considered unless accompanied by such check, cash, or Bid bond.

If a Bid bond accompanies a Bid, a Surety company authorized to do business in the State of Washington shall furnish the Bid bond. In order to be authorized to do business in the state of Washington, the Surety must be registered with the Washington State Insurance Commissioner and the Surety's name must appear on the current list of authorized insurance companies published by the Office of the Insurance Commissioner.

Bid bonds shall contain the following:

the name and nature of the improvement;

the Pierce County Library System named as obligee;

the amount of the Bid bond stated either as a dollar figure or as a percentage that represents five percent of the maximum Bid amount that could be Awarded;

the signature of the Bidder's officer empowered to sign official statements. The signature of the person authorized to submit the Bid should agree with the signature on the bond, and the title of the person must accompany the said signature; and

the signature of the Surety's officer empowered to sign the bond and the power of attorney.

NONCOLLUSION REQUIREMENT

The Bidder, by signing and having the Bid Form notarized, swears, deposes and says that the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in the preparation and submission of a Bid to the Owner for consideration in the Award of a Contract for the Work.

BID SUBMITTAL

GENERAL

The Bid Form shall be submitted at the time and place specified in the Advertisement for Bids. The Bid Form, together with the Bid Guaranty and such other documentation as is required, shall be enclosed as attachments marked with the Project name and the Bidder's name and address, and be addressed to:

PMcBride@piercecounyalibrary.org

Attention: Petra McBride, Manager of Executive Office Admin
ph: 253-548-3420
Subject: PCLS Lakewood Library Demolition

The Bidder shall assume full responsibility for the timely delivery at the location designated in the Advertisement for Bids for receipt of Bids. A Bid submitted or delivered after the time fixed for receipt of Bids will not be accepted.

CHANGE OF BID SUBMITTAL DATE

The Owner reserves the right to change the date and time for Bid submittal. Notification of the change will be by Addendum.

SUBCONTRACTOR LIST

Pursuant to RCW 39.30.060, on a public works contract that is estimated to cost \$1 million or more, the Bidder is required to:

... submit as part of the bid, or within one hour after the published bid submittal time, the names of the subcontractors with whom the bidder, if awarded the contract, will subcontract for performance of the work of heating, ventilation and air conditioning, plumbing as described in chapter 18.106 RCW, and electrical as described in chapter 19.28 RCW, or to name itself for the work. The bidder shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the bidder must indicate which subcontractor will be used for which alternate. Failure of the bidder to submit as part of the bid the names of such subcontractors or to name itself to perform such work or the naming of two or more subcontractors to perform the same work shall render the bidders' bid nonresponsive and, therefore, void. The requirement of this section to name the bidder's proposed heating, ventilation and air conditioning, plumbing, and electrical subcontractors applies only to proposed heating, ventilation and air conditioning, plumbing, and electrical subcontractors who will contract directly with the general contractor submitting the bid to the public entity.

MODIFICATION OR WITHDRAWAL OF BID

After submitting a Bid, the Bidder may withdraw or revise it if:

- the Bidder submits a written request signed by an authorized person; and
- the Owner receives the request before the time for receipt of Bids.

If the request for modification or withdrawal is by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the time designated for receipt of Bids.

The original Bid, as revised in writing, and received prior to the time designated for receipt of Bids, will be acceptable as the official Bid.

A Bid may not be modified, withdrawn, or canceled by the Bidder after the time for Bid submittal unless the Award is delayed for a period exceeding the limit set forth for Award or a Bidder's claim of error is upheld by the Owner.

ADDITIVES. ALTERNATES. DEDUCTIVES

The Owner reserves the right to arrange the Bid Form with Alternates, Additives, or Deductives, if such be to the Owner's advantage. The Bidder shall Bid on all Alternates, Additives, or Deductives set forth in the Bid Form unless otherwise specified in the Project Manual.

Alternate Bids must be submitted with the Bid.

PUBLIC OPENING OF BIDS

Bids will be opened and read as indicated in the Advertisement for Bids (See Section 00 03 00).

IRREGULAR BIDS

A Bid will be considered irregular and non-responsive, and will be rejected if:

The Bidder has not been prequalified when so required.

The authorized Bid Form is not used or is altered.

The completed Bid Form contains any unauthorized addition, deletion, alternate Bid, or condition.

The Bidder adds provisions reserving the right to accept or reject the Award or to enter into the Contract.

A price per unit cannot be determined, where applicable.

For Projects estimated to cost \$1,000,000 or more, the Bidder did not comply with the Subcontractor list requirements.

The Bid does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.

A Bid may be considered irregular and may be rejected if:

The Bid Guaranty is insufficient or improper.

Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid} to the potential detriment of the Owner.

Receipt of Addenda is not acknowledged.

A member of a partnership and the partnership submit a Bid for the same Project (in such an instance, both Bids may be rejected}.

The entries in the Bid Form are not typewritten or entered in ink.

The Bid is not properly executed.

The Bidder did not Bid on all Additives, Deductives, or Alternates, when required.

The Bid does not include a unit price for every Bid item.

DISQUALIFICATIONS OF BIDDERS

A Bidder may be deemed not responsible and its Bid rejected if:

More than one Bid is submitted for the same Project from a Bidder under the same or different names.

Evidence of collusion exists with any other Bidder, potential Bidder or party. Participants in collusion will be restricted from submitting further Bids.

A Bidder, in the opinion of the Owner, is not qualified for the work specified, or if the Bid exceeds the authorized prequalification amount as may have been determined by a prequalification or pre-Award evaluation of the Bidder.

An unsatisfactory performance record exists as shown by past or current work for the Owner, or for others, as judged from the standpoint of conduct of the work, environmental and safety compliance records, workmanship, progress, affirmative action, or equal employment opportunity practices.

There is uncompleted work (for the Owner or others) which might hinder or prevent the prompt physical completion of the Work Bid upon.

The Bidder failed to settle bills for labor or materials on past or current contracts.

The Bidder has failed to complete a public contract or has been convicted of a crime arising from a previous public contract.

The Bidder is unable, financially or otherwise, to perform the Work.

A Bidder is not authorized to do business in the State of Washington (not registered in accordance with Chapter 18.27 RCW).

For any other reason deemed proper by the Owner.

AWARD OF CONTRACT

BID TABULATION

The Base Bid, including the summation of additive alternates, the summation of deductive alternates, will be used for award purposes, and to fix the awarded contract price and the amount of the contract bond. Owner reserves the right to reject or accept any alternate(s) and to award the bid based on the Base Bid plus any combination of Additive and/or Deductive Alternates.

CLAIM OF ERROR

A Bidder who wishes to claim error after the Bids have been opened and tabulated shall submit a signed and notarized affidavit, accompanied by original worksheets used in the preparation of the Bid, requesting relief from the responsibilities of Award. The affidavit shall describe the specific error(s) and certify that the worksheets are the originals used in the preparation of the Bid. The affidavit and the worksheets shall be submitted to the following by 5:00 p.m. on the next Business Day after Bid opening or the claim will not be considered.

Pierce County Library System
Processing and Administration Center
3005 112th St. E.
Tacoma, WA 98446-2215
Attention: Petra McBride, Manager of Exec Office Admin,
PMcBride@piercecounitylibrary.org
Ph: 253-548-3420

The Architect will review the certified work sheets to determine the validity of the claimed error and make recommendation to the Owner. If the Owner concurs in the claim of error, the Bidder will be relieved of responsibility and the Bid Guaranty of the Bidder will be returned. Thereafter, at the discretion of the Owner, all Bids may be rejected or Award made to the next lowest responsive, responsible Bidder.

PRE-AWARD INFORMATION

The Owner will evaluate all Bids to determine the lowest responsive, responsible Bidder. This evaluation may include investigations to establish the responsibility, qualifications and financial ability of the Bidder to do the Work.

A Bidder whose Bid is under consideration for Award shall, upon request, promptly complete and submit Section 001100 Pre-award Bidder Information. Documented information shall be submitted within 7-days after receipt of a written request from the Owner.

In addition, a Bidder under consideration for Award may be required to furnish:

a complete statement as to the origin, composition, and manufacture of any and all Materials to be used in the Project, together with samples which may in turn be subjected to tests to determine their quality and fitness for the Work;

a breakdown of costs assigned to any Bid item; and

such additional information as the Owner may request to assist the Owner in ascertaining the Bidder's general ability to perform the Work.

RIGHTS OF THE OWNER

In addition to such other rights as may be reserved elsewhere in the Contract Documents, the Owner reserves the right to:

Reject any or all Bids,

Waive informalities in the Bidding,

Accept the lowest responsive Bid of a responsible Bidder,

Correct arithmetical errors in a Bid,

Re-advertise for Bids,

Revise or cancel the Work,

Require the Work be done in another way if, in the opinion of the Owner, the best interest of the public will be served, and

Award such Additives, Deductives, or Alternates, as may be set forth in the Bid Form.

AWARD OF CONTRACT

The Owner reserves the right to Award such Additives, Deductives or Alternates as may be set forth in the Bid Form.

If a Contract is to be awarded, the Owner will endeavor to Award the same to the lowest, responsive, Bidder within 60 days after the Bid Opening Date. If a Contract is not awarded within that 60-day Award period, all Bids will expire and will not be considered further unless the Owner deems it necessary to try to secure an extension of the time period for Bid evaluation and the allowable period for Award. In such event, prior to the end of the 60-day Award period, the Owner shall issue an invitation to the apparent low Bidder and such other Bidders as the Owner, in the exercise of its discretion, deems appropriate, to extend the period each such Bid is valid and capable of Owner acceptance.

The following conditions shall apply to each such extension:

the extension shall be by mutual consent between the Owner and the Bidder;

the extension shall be documented in writing in a form acceptable to the Owner; and,

the written extension shall be received by the Owner prior to the expiration of the initial 60-day period for Award.

A Notice of Award will be mailed to the successful Bidder following the Owner's Award.

EXECUTION OF CONTRACT

GENERAL

The Owner is prohibited by RCW 39.06.010 from executing a contract with a contractor who is not registered or licensed under Washington law. If required by the City of Lakewood, the Contractor and Subcontractors performing work within the City of Lakewood must acquire a City of Lakewood Business License.

At the Owner's request, the Contractor shall submit legible copies of the Contractor's State of Washington Contractor's Registration and City of Lakewood Business License to the Owner, prior to Notice of Award of Contract.

TIME TO EXECUTE AGREEMENT FORM

The original and one copy of the Project Manual, including the unsigned "Standard Form of Agreement between Contractor and Owner for Construction of Buildings," AIA Document No. A101, 2007 edition, issued by the American Institute of Architects, will be available for signature by the successful Bidder at:

Pierce County Library System
Processing and Administration Center 3005 112th St. E.
Tacoma, WA 98446-2215
Attention: Christina Neville-Neil, Facilities Project Manager
Ph: 253-548-3475

The documents will be ready on the first Business Day following Notice of Intent to Award, or shortly thereafter. See Section 00 50 00 Standard Form of Agreement for a draft copy of AIA Document A101-2007.

The successful Bidder shall sign and return to the Pierce County Library System Processing and Administration Center within **7 calendar days** of the Notice of Intent to Award:

- the original of the Agreement Form (See Section 00 50 00 Standard Form of Agreement);
- the Performance and Payment Bond (See Section 00 61 00 Performance and Payment Bond); and
- acceptable evidence of insurance (See Section 00 70 00 General Conditions - Article 11 Insurance and Bonds).

The above time limit may be extended by mutual agreement between the Owner and the successful Bidder.

The Owner will forward the Notice of Award and a copy of the fully executed Agreement Form to the successful Bidder for incorporation into the successful Bidder's copy of the Project Manual.

No work shall begin within the Project limits or within sites furnished by the Owner until the successful Bidder has received the fully executed Agreement Form and has been given the Notice to Proceed. The Contractor shall bear all risks for any work begun prior to the issuance of the Notice to Proceed.

PAYMENT AND PERFORMANCE BOND

See Section 00 61 00, Payment and Performance Bond.

If Contractor is submitting their own form, it must be submitted to the Owner for approval.

RECORDS RETENTION

The contractor shall, within seven days of Contract Award, collect copies of all documents and written materials relating to the Project on which he relied in arriving at his bid, seal the copies in a package, and deliver the sealed package to an escrow company or similar third party approved by the Owner. The conditions of the escrow shall be that the sealed package will be kept safe and unopened until the Owner certifies that the Project has achieved Final Completion and that the Contractor has signed a satisfactory release of Claims arising from the Project. However, if the Contractor asserts a claim against the Owner as to which the bid materials are relevant evidence, the package shall be opened at the Owner's request and the Owner shall be allowed to review and copy all of the contents.

FAILURE TO EXECUTE THE CONTRACT

The Bidder's Bid Guaranty will be forfeited if the Bidder to whom the Award was made fails to:

- execute the Agreement Form within the required time period;
- furnish satisfactory bond(s) and insurance(s) within the required time period; or
- refuses to enter into a Contract with the Owner.

The Owner may then Award the Contract to the second lowest responsible Bidder.

If the second lowest responsive, responsible Bidder fails to execute the Agreement Form, and furnish satisfactory bond(s) and insurance(s) within 7 **days** after Award has been made to the second Bidder, or within the time period mutually agreed upon by the Owner and second Bidder, the second Bidder's Bid Guaranty will also be forfeited. The Owner may issue Notices of Award successively in a like manner to the remaining lowest responsive, responsible Bidders until the Agreement Form is executed and bond(s) and insurance(s) furnished, by a responsible Bidder, or the remaining Bids are rejected.

The time for the successful Bidder to execute the Agreement Form and return the Project Manual and furnish satisfactory bond(s) and insurance(s) may be extended if requested by the Bidder, and the Owner deems circumstances warrant the extension.

RETURN OF BID GUARANTY

After the Agreement Form has been executed and the required bond(s) and insurance(s) approved by the Owner, the Bid Guaranty in the form of cash or check will be returned to the successful Bidder. A Bid Guaranty in the form of a Bid Bond from the successful Bidder shall be filed with the executed Contract. A Bid Guaranty in the form of cash or check will be returned to each unsuccessful Bidder after Contract Award or after all Bids have been rejected. Bid Bonds of unsuccessful Bidders will be retained for 30-days after the Contract has been executed, and then disposed of, unless return is requested by an unsuccessful Bidder.

APPEALS

Any protest of an intended Award must be filed by 5:00 P.M. on the fifth Business Day from the date of Bid opening. An appeal of a notice that a Bid is non-responsive or a Bidder is not responsible must be

Demolition Bid Set
January 3, 2024

LAKESWOOD LIBRARY DEMOLITION
SECTION 00 10 00
INSTRUCTION TO BIDDERS

filed by 5:00 PM on the third Business Day of such notification. All such protests or appeals shall be filed with:

Pierce County Library System
Processing and Administration Center
3005 112th St. E.
Tacoma, WA 98446-2215
Attention: Christina Neville-Neil, Facilities Project Manager
CNeville-neil@piercecounitylibrary.org
Ph: 253-548-3475

END OF SECTION 00 10 00

SECTION 00 11 00 - PREAWARD BIDDER INFORMATION

REQUIRED INFORMATION

The following worksheets are to be completed only by Bidder whose Bid is under consideration for Award, upon request of the Owner and within 3 calendar days of the request.

Pre-award Bidder Information

Questions regarding this information should be directed to:

Christina Neville-Neil, Facilities Project Manager
Pierce County Library System
Phone: (253) 548-3475
CNeville-neil@piercecountylibrary.org

Submit all items within 3 business days of the request to:

Pierce County Library System
3005 112th St. E
Tacoma, WA 98446-2215
Attn: Christina Neville-Neil, Facilities Project Manager
CNeville-Neil@piercecountylibrary.org

1. PREAWARD BIDDER INFORMATION

Firm name: _____
Address: _____

Telephone no.: _____

2. Bidder has been in business continuously from _____ to _____ (indicate in years).
3. Bidder has had experience in work comparable in value and scope with that required under the proposed contract:
- a. as a prime contractor for _____ years;
 - b. as a subcontractor for _____ years.
4. List two projects of the Bidder, completed in the last five (5) years, that are similar in character and in magnitude to that required in the proposed contract:

a. Project 1
Year _____
Owner _____
Project Name _____
Location _____
Contract Amount \$ _____

b. Project 2
Year _____
Owner _____
Project Name _____
Location _____
Contract Amount \$ _____

5. Furnish references for information concerning the work as listed above (list references corresponding to the projects listed in No. 4 above):

a. Project 1
Name _____
Contact _____

b. Project 2
Name _____
Contact _____

6. List the supervisory personnel to be employed by the Bidder and available for work on this Project:

a. Project Manager _____

Furnish a detailed resume of the qualifications, previous employers and experience of the Supervisory personnel proposed to be assigned to this Project:

7. The following subcontractors are proposed to be employed for major portions of the construction. Major portions include any subcontract over 1% of total contract).

Name	Trade	% of Total Contract
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- a. Named subcontractors must be competent in their fields of work. General Contractor assumes responsibility for quality of work performed by subcontractors.
 - b. If Contractor proposes to perform any of listed items with own staff, so state on this form and demonstrate competence in those fields of work.
 - c. In the event any of these subcontractors are not approved, Contractor agrees to propose other subcontractors for listed work, until Owner/Architect approves, and further agrees that approved subcontractors may not be changed without Owner's written consent.
8. Enclose a copy of Bidder's last annual financial statement or balance sheet showing assets, liabilities and net worth.

Signature

Print Name and Title

Date

SECTION 00 20 10 – BIDDERS' CHECKLIST

1. REQUIRED FORMS FOR BID

The Bidder shall submit the following forms, which must be executed in full and submitted with the proposal.

- a. Form of Proposal, fully filled out and signed by authorized individual and notarized. (use Form in Section 00 30 00)
- b. Bid Guaranty, Bond or Bid Deposit (refer to Section 00 41 00)
- c. Statement of Bidder's Qualifications (refer to Section 00 45 13)
- d. Non-Collusion Certificate (refer to Section 00 45 19)

2. PRE-AWARD BIDDER INFORMATION

Bidder shall submit the following form:

- a. Pre-Award Bidder Information (refer to Section 00 11 00)

3. AGREEMENT FORMS

The following forms are to be executed and the following Certificates of Insurance are to be provided after the Contract is awarded and prior to Notice to Proceed.

- a. Payment and Performance Bond
- b. Certificate of Insurance
- c. Certificate of Builders Risk
 - i. "All Risk" Insurance

END OF SECTION 00 20 10

SECTION 00 30 00 - FORM OF PROPOSAL

The undersigned, having carefully examined the Contract Documents entitled

PCLS LAKESWOOD LIBRARY DEMOLITION

including the Project Manual and the Drawings similarly entitled, and being familiar with all of the conditions affecting the construction of the proposed project, hereby proposes to furnish all labor, materials and supplies, insurance and bonds, and to construct the Project and perform all work as required by and in strict accordance with the Contract Documents and all addenda at the prices stated below.

All work related to the PCLS LAKESWOOD LIBRARY DEMOLITION project, as required by the contract documents and all addenda.

BASE BID:

The undersigned agrees to perform the Work described in the Contract and as modified by all addenda for the Lump Sum of

(Write out dollar amount in space above.) (Do not include Washington State Sales Tax.)

Dollars (\$ _____)

Amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

STATE SALES TAX

None of the above bids include Washington State Sales Tax.

CONTRACT

If the undersigned be notified of the acceptance of this proposal within sixty (60) days of the time set for the opening of bids, the undersigned agrees to execute a contract for the above Work, for a compensation computed from the above named sums, in the "Standard Form of Agreement between Owner and Contractor," AIA Document No. A101, 2007 edition, issued by the American Institute of Architects and to give bonds as required by the Contract Documents (see Section 00 50 00 Standard Form of Agreement).

TIME OF COMPLETION

The undersigned hereby agrees to commence work under this Contract on or before a date to be specified in a written "Notice to Proceed," and to Substantially Complete the Work no later than or no earlier than **120** calendar days after the date of "Notice to Proceed." Final Completion shall be **120** calendar days after the date of "Notice to Proceed."

As required in Section 00 70 00 General Conditions Article 3.10, the "Baseline" schedule must show the Substantial Completion Date as an activity. The Substantial Completion Date shall be calculated by adding the calendar days noted above to the date of the Notice to Proceed. Baseline schedules indicating a Substantial Completion date different than the date, as calculated using this method, will not be accepted.

LIQUIDATED DAMAGES

The undersigned further agrees to pay as fixed, agreed liquidated damages, but not as a penalty, the sum of \$500 per calendar day, as described in Section 00 72 60 Addendum to AIA A101 and A201 - 2007 Contract.

REINSTATEMENT OF UNACCEPTED ALTERNATES

The undersigned further agrees that the Owner shall have the right to reinstate, at the bid price, any alternate bid not incorporated into the Contract if the Owner so notifies the Contractor within thirty (30) calendar days after the signing of the Contract.

BID GUARANTY

The undersigned further agrees that the certified or bank cashier's check or bid bond (See Section 00 41 00 Bid Guaranty) payable to the Owner, accompanying this proposal, in the amount of five percent (5%) of the base bid is the measure of liquidated damages which the Owner will sustain by the failure of the undersigned to execute and deliver the above-named Contract and the associated performance bond, and that if the undersigned defaults in executing that Contract and in furnishing the performance bond within ten (10) days of written notification of the award of the Contract to the Contractor, then the amount of the check or bid bond shall be due and forfeited to the Owner. If this proposal is not accepted within sixty (60) days after the opening of bids, or if the undersigned executes and delivers said Contract and performance bond, the check shall be returned to the Contractor or this bid bond shall become null and void.

ADDENDA

Receipt of Addenda numbered _____ through _____ is hereby acknowledged.

Bidder Signature

Legal name of Bidder

By, Title

State of Washington Contractor's
Registration No.

Street or Building Address

State of Washington Worker's
Compensation No.

City, State, Zip

Federal Tax ID No.

Telephone

City of Lakewood Business License No.
(if required by City of Lakewood)

Other documents required to be submitted with bid (refer to other specification sections):

00 45 13 Statement of Bidder's Qualifications
00 45 19 Non-Collusion Certificate

ACKNOWLEDGEMENT OF PRINCIPAL OF BIDDER, IF A CORPORATION

State of _____)
County of _____) ss:

On this _____ day of _____, 20____ before me personally came and appeared _____ to me known, who being by me duly sworn, did depose and say that they reside at

that they are the _____ of

the corporation described in and which executed the foregoing instrument; that they know the seal of said corporation; that one of the impressions affixed to said instrument is an impression of such seal; that it was so affixed by order of the directors of said corporation; and that they signed their name thereto by like order.

(SEAL)
My Commission Expires: _____

ACKNOWLEDGEMENT OF PRINCIPAL OF BIDDER, IF A SOLE PROPRIETORSHIP

State of _____)
County of _____) ss:

On this _____ day of _____, 20____ before me personally came and appeared to me known, and known to me to be one of the members of the firm of, described in and who executed the foregoing instrument, and they acknowledged to me that they executed the same as and for the act and deed of said firm.

(SEAL)
My Commission Expires: _____

SUBCONTRACTOR LIST: required only for bids over \$1,000,000

See Section 00 10 00 Instructions to Bidders -Subcontractor List for instructions. If additional space is required, provide same information on separate sheet.

<u>Firm Name</u>	<u>Designated Work</u>
1) _____	_____
2) _____	_____
3) _____	_____
4) _____	_____
5) _____	_____
6) _____	_____
7) _____	_____
8) _____	_____
9) _____	_____
10) _____	_____
11) _____	_____
12) _____	_____
13) _____	_____
14) _____	_____
15) _____	_____

Signed by

Print Name

Name of Bidder/Firm Submitting Bid (Title)

SECTION 00 41 00 - BID GUARANTY

The Bid Guaranty or "Bid Bond" AIA Document A310 will be used as the Bid Guaranty form for this project unless a certified or cashier's check is submitted as a bid guarantee. Copies of the form are available from the American Institute of Architects, 1735 New York Ave. NW, Washington, D.C. 20006 or from AIA Chapter offices in many cities. The Southwest Washington Chapter AIA office is located at 708 Broadway, Tacoma, (253) 627-4006; the Seattle Chapter AIA office is located at 1010 Western Ave, Seattle, (206) 667-9184.

END OF SECTION 00 41 00

SECTION 00 45 13 - STATEMENT OF BIDDER'S QUALIFICATIONS

1. Firm Name: _____
Firm Address: _____

2. Telephone No.: _____ Fax No.: _____

3. Washington State License No.: _____ Expires: _____

4. Number of years engaged in contracting business under above name: _____

5. The Firm submitting this proposal is a:

- Sole Proprietorship
- Partnership
- Corporation

6. The names and titles of the principal officers of the corporation submitting this proposal, or of the partnership, or of all persons interested in this proposal as principals are as follows:

NOTE: Signatories of this proposal must be identified above. Failure to identify the Signatories will be cause for considering the proposal irregular and for subsequent rejection of the bid.

7. General character of work performed by Bidder: _____

8. Approximate value of work currently under contract: \$ _____

9. Bank Reference: _____

10. Name of Bidder's Field Superintendent proposed for this project (attach resume which contains pertinent experience):

11. List of similar projects completed by the Bidder within the last ten (10) years (use additional sheets if necessary):

Project Name	Owner	Owner's Representative	Owner's Phone No.	Completion Date of Construction	Contractor's Field Superintendent

The undersigned certifies that the preceding information is true and correct.

By: _____
Signature

Print Name

Title

Date: _____

END OF SECTION 00 45 13

SECTION 00 45 19 – NON-COLLUSION CERTIFICATE

STATE OF WASHINGTON)
) ss.
COUNTY OF PIERCE)

The undersigned, being duly sworn, deposes says that the person, firm, association, co-partnership or corporation herein named, has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in the preparation and submission of a proposal to the Pierce County Library System for consideration in the award of a contract on the improvement described as follows:

Name of Project: **PCLS LAKEWOOD LIBRARY DEMOLITION**

Name of firm: _____

Signature of authorized member: _____

Signed and sworn to before me this

_____ Day of _____, 20____.

NOTARY SEAL

Notary Public

SECTION 00 50 00 - STANDARD FORM OF AGREEMENT

The "Standard Form of Agreement Between Owner and Contractor" AIA Document A101-2007 will be used as the form of agreement for this project. Copies of the form are available from the American Institute of Architects, 1735 New York Ave. NW, Washington, D.C. 20006 or from AIA Chapter offices in many cities. The Southwest Washington Chapter AIA office is located at 708 Broadway, Tacoma, (253) 627-4006; the Seattle Chapter AIA office is located at 1010 Western Ave, Seattle, (206) 448-4938.

END OF SECTION 00 50 00

SECTION 00 61 00 - PAYMENT AND PERFORMANCE BOND

PIERCE COUNTY LIBRARY SYSTEM

Bond No. _____

We, _____ ("Principal"), and
(Insert full legal name of Vendor / Contractor)

_____ a _____ corporation
(Insert legal name of Surety and its state of incorporation)

authorized to transact surety business in the State of Washington, ("Surety"), are held and firmly bound unto **Pierce County Library System** ("Library"}, as Obligee, in an amount equal to the total compensation and expense reimbursement payable to Principal for satisfactory completion of Principal's work under Contract No. _____ between Principal and Library, which total is **initially** _____ Dollars (\$ _____), lawful money of the United States of America, for the payment of which sum Principal and Surety bind themselves, their heirs, legal representatives, successors and assigns, jointly and severally, firmly by these presents. Said contract (hereinafter referred to as "the Contract") is for _____ and is made a part hereof by this reference. The Contract includes the original agreement as well as all documents attached thereto or made a part thereof and all addenda, amendments, change orders, and any other document modifying, adding to or deleting from said Contract any portion thereof.

This Bond is executed in accordance with the laws of the State of Washington and is subject to all provisions thereof and the Charter and ordinances of Library insofar as they are not in conflict therewith, and is entered into for the use and benefit of Library, and all laborers, mechanics, subcontractors, and materialmen, and all persons who supply such person or persons, or subcontractors, with provisions or supplies for the carrying on of the work covered by the Contract.

THE CONDITION OF THIS OBLIGATION is such that if Principal faithfully performs all the provisions of the Contract and pays all laborers, mechanics, and subcontractors and materialmen, and all persons who supply such person or persons, or subcontractors, with provisions and supplies for the carrying on of such work; and pays all other just debts incurred in the performance of such work (provided, however, that the conditions of this obligation shall not apply to any money loaned or advanced to any such contractor or subcontractor or other person in the performance of such work); and to the extent permitted by law indemnifies, defends, and holds Library harmless from all cost and damage by reason of Principal's default, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

THE PARTIES FURTHER ACKNOWLEDGE AND AGREE AS FOLLOWS:

- (1) Surety hereby consents to, and waives notice of any extension of time made by Library, and any and all other alterations, change orders, and modifications of the Contract including but not limited to increases in the balance of the Contract price. In the event of any increase in the balance of the Contract price, the penal sum of this bond shall be increased by an equal sum.
- (2) Surety recognizes that the Contract includes provisions for additions, deletions, and modifications to

the work or Contract Time and the amounts payable to Principal (i.e., Vendor/Contractor). No such change or any combination thereof shall void or impair Surety's obligation hereunder.

- (3) Whenever Library has declared Principal (i.e., Vendor/Contractor) to be in default and Library has given Surety written notice of such declaration, Surety shall promptly (in no event more than thirty (30) days following receipt of such notice) specify, in written notice to Library, which of the following actions Surety intends to take to remedy such default, and thereafter shall:
- (a) Remedy the default within fifteen (15) days after its notice to Library; or
 - (b) Assume within fifteen (15) days following its notice to Library, full responsibility for the completion of the Contract in accordance with all of its provisions, and become entitled to payment of the balance of the Contract sum as provided in the Contract; or
 - (c) Pay City upon completion of the Contract, in cash, the cost of completion together with all other reasonable costs and expenses incurred by Library as a result of Principal's (i.e., Vendor/ Contractor's) default, including but not limited to those incurred by Library to mitigate its losses, which may include but are not limited to attorneys' fees and the cost of efforts to complete the work prior to Surety's exercising any option available to it under this Bond; or
 - (d) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon a determination by Library and Surety jointly of the lowest responsible bidder, arrange for one or more agreements between such bidder and Library, and make available as work progresses (even though there is a default or a succession of defaults under such agreement(s) for completion arranged for under this paragraph) sufficient funds to pay the cost of completion of the Contract less the balance of the Contract price, but not exceeding, including other costs and damages for which Surety may be liable hereunder, the penal sum of this Bond. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable by Library to Principal (i.e., Vendor/Contractor) under the Contract, less the amount properly paid by Library to Principal (i.e., Vendor/Contractor).

In addition to (a) through (d) above, Surety shall pay Library all other reasonable costs and expenses incurred by Library as a result of Principal's (i.e. Vendor/Contractor's) default, and prior to Surety's exercising any option available to Surety under this bond.

- (4) If Library commences suit and obtains judgment against Surety for recovery hereunder, then Surety, in addition to such judgment, shall pay all costs and attorneys' fees incurred by Library in enforcement of Library's rights hereunder. Surety agrees to be bound by the laws of the State of Washington and subject to the jurisdiction of the State of Washington. The venue for any action arising out of or in connection with this bond shall be in Pierce County, Washington.
- (5) No right or action shall accrue on this Bond to or for the use of any person or corporation other than Pierce County Library System and, to the extent required under RCW Chapter 39, all laborers, mechanics, subcontractors, and materialmen, and all persons who supply such person or persons, or subcontractors, with provisions or supplies for the carrying on of the work covered by the Contract.
- (6) Nothing of whatever kind or nature whatsoever that will not discharge the Principal shall operate as a discharge or a release of liability of the Surety, any law, rule of equity, or usage relating to the liability of sureties to the contrary notwithstanding.
- (7) No rider, amendment, or other document modifies this Bond except the following, which by this reference, is incorporated herein: _____.
- (8) Surety shall give to Principal and to Library not less than sixty (60) days' prior written notice by certified mail, return receipt requested, of the effective date of the expiration or cancellation of this bond. Notice to Library shall be sent to: Pierce County Library System, Processing and Administration Center, 3005 11th St. E., Tacoma, WA 98446-2215. Attention: Christina Neville-Neil, project manager.

- (9) Principal must provide Library with a replacement bond, acceptable to Library, not less than thirty (30) days before the effective date of this bond's expiration or cancellation as specified in the Surety's notice provided pursuant to Condition (8) above.

SURETY QUALIFICATIONS: Every Surety named on this bond must either appear on the United States Treasury Department's most current list (Circular 570 as amended r superseded) or have a current rating of at least A-: VII in A. M. Best's Key Rating Guide. Additionally, every Surety named on this bond must be authorized by the Washington State Insurance Commissioner to transact business as a surety in the State of Washington.

INSTRUCTIONS FOR SIGNATURES: This bond must be signed by the president or a vice-president of a corporation; the managing general partner of a partnership; managing joint venturer of a joint venture; entity; a general partner of a limited liability partnership (LLP"); or the owner(s) of a sole proprietorship. If the bond is signed by any other representative, the Principal must attach written proof of that signer's authority to bind the Principal, identifying and quoting the provision in the corporate articles of incorporation, bylaws, Board resolution, partnership agreement, certificate of formation, power of attorney, or other document authorizing delegation of signature authority to such signer, and confirmation acceptable to the Pierce County Library System Attorney's Office that such delegation was in effect on the date the bond was signed.

A NOTARY PUBLIC MUST ACKNOWLEDGE EACH SIGNATURE ON THIS BOND.

Bond No. _____

FOR THE SURETY:

By _____

(Signature of Attorney-in-Fact)

(Type or print name of Attorney-in-Fact)

(Type or print telephone number of Attorney-in-Fact)

FOR THE PRINCIPAL:

By _____

(Signature of authorized signer for Principal)

(Type or print name of signer for Principal)

(Type or print telephone number of signer for Principal)

STATE OF _____)

_____) SS: **ACKNOWLEDGMENT FOR PRINCIPAL**

COUNTY OF _____)

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, said person acknowledged that he/she signed this bond, and on oath stated that he/she was authorized to execute that bond on behalf of the Principal as the Principal's free and voluntary act for the uses and purposes mentioned therein.

WITNESS my hand and official seal hereto affixed this _____ day of _____, 20____.

(signature of Notary Public)

(Print or type name of Notary Public)

Notary Public in and for the state of _____ residing at _____.

My commission expires _____.

SEAL

Bond No. _____

STATE OF _____)

) SS: **ACKNOWLEDGMENT FOR SURETY**

COUNTY OF _____)

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me as the Attorney-in-Fact for the Surety that executed the foregoing bond, acknowledged said bond to be the free and voluntary act and deed of the Surety for the uses and purposes therein mentioned, and on oath stated that he/she is authorized to execute said bond on behalf of the Surety, and that the seal affixed on said bond or the annexed Power of Attorney is the corporate seal of said Surety.

WITNESS my hand and official seal hereto affixed this _____ day of _____, 20____.

(signature of Notary Public)

(Print or type name of Notary Public)

Notary Public in and for the state of _____ residing at _____.

My commission expires _____.

SEAL

SECTION 00 70 00 · GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

AIA Document A201 - 2017 MODIFIED

The following General Conditions of the Contract for Construction are based on the AIA Document A201- 2017. An addendum to AIA A101 and A201 - 2017 follows. See 00 73 00 for Supplemental Conditions.

The following version of the General Conditions of the Contract for Construction AIA Document A201- 2017 are printed with a draft watermark on each page. Bidders should treat this document as the final document subject to any addenda issued during the bid period and bid accordingly. A final unchanged document will be printed and issued to the low bidder without the draft watermark.

END OF SECTION 00 70 00

DRAFT AIA® Document A101® - 2017

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the « » day of « » in the year « »
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

« »
« »
« »
« »

and the Contractor:
(Name, legal status, address and other information)

« »
« »
« »
« »

for the following Project:
(Name, location and detailed description)

« »
« »
« »

The Architect:
(Name, legal status, address and other information)

« »
« »
« »
« »

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A101®-2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

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TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS**
- 2 THE WORK OF THIS CONTRACT**
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION**
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- 5 PAYMENTS**
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- 8 MISCELLANEOUS PROVISIONS**
- 9 ENUMERATION OF CONTRACT DOCUMENTS**

EXHIBIT A INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

- [« »] The date of this Agreement.
- [« »] A date set forth in a notice to proceed issued by the Owner.
- [« »] Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)
 [« »]

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:

(Check one of the following boxes and complete the necessary information.)

- [« »] Not later than « » (« ») calendar days from the date of commencement of the Work.

[« »] By the following date: « »

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date
[REDACTED]	[REDACTED]

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be « » (\$ « »), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
[REDACTED]	[REDACTED]

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. (Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
[REDACTED]	[REDACTED]	[REDACTED]

§ 4.3 Allowances, if any, included in the Contract Sum: (Identify each allowance.)

Item	Price
[REDACTED]	[REDACTED]

§ 4.4 Unit prices, if any: (Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
[REDACTED]	[REDACTED]	[REDACTED]

§ 4.5 Liquidated damages, if any: (Insert terms and conditions for liquidated damages, if any.)

« »

§ 4.6 Other: (Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

« »

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

« »

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the « » day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the « » day of the « » month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than « » (« ») days after the Architect receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201™–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

« »

§ 5.1.7.1.1 The following items are not subject to retainage:
(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

« »

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:
(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

« »

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:
(Insert any other conditions for release of retainage upon Substantial Completion.)

« »

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

§ 5.1.9 Except with the Owner’s prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner’s final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect’s final Certificate for Payment, or as follows:

« »

§ 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
(Insert rate of interest agreed upon, if any.)

« » % « »

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

« »

« »

« »

« »

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

[« »] Arbitration pursuant to Section 15.4 of AIA Document A201–2017

[« »] Litigation in a court of competent jurisdiction

[« »] Other *(Specify)*

« »

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 7.1.1 If the Contract is terminated for the Owner’s convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows:

(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner’s convenience.)

« »

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner’s representative:

(Name, address, email address, and other information)

« »

« »

« »

« »

« »

« »

§ 8.3 The Contractor’s representative:

(Name, address, email address, and other information)

« »

« »

« »

« »

« »

« »

§ 8.4 Neither the Owner’s nor the Contractor’s representative shall be changed without ten days’ prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™–2017 Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

« »

§ 8.7 Other provisions:

« »

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A101™–2017, Exhibit A, Insurance and Bonds
- .3 AIA Document A201™–2017, General Conditions of the Contract for Construction
- .4 AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

(Insert the date of the E203-2013 incorporated into this Agreement.)

« »

.5 Drawings

Number	Title	Date

.6 Specifications

Section	Title	Date	Pages

.7 Addenda, if any:

Number	Date	Pages

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[] AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017 incorporated into this Agreement.)

« »

[« »] The Sustainability Plan:

Title	Date	Pages

[« »] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

.9 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™-2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

« »

This Agreement entered into as of the day and year first written above.

OWNER (Signature)

« »« »

(Printed name and title)

CONTRACTOR (Signature)

« »« »

(Printed name and title)

DRAFT AIA® Document A201® - 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

<< >>
<< >>

THE OWNER:

(Name, legal status and address)

<< >>< >>
<< >>

THE ARCHITECT:

(Name, legal status and address)

<< >>< >>
<< >>

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For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, *Guide for Supplementary Conditions*.



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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or

relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.3.2 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 2.3.4 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.5 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as

the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1** allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2** Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3** whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and

similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will

specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

§ 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 Communications

The Owner and Contractor shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.

§ 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in

number and means a Subcontractor or an authorized representative of the Subcontractor. The term “Subcontractor” does not include a Separate Contractor or the subcontractors of a Separate Contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term “Sub-subcontractor” is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor’s Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor’s Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor, and Architect stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Architect;

- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner or Architect require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
 - .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
 - .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
 - .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
 - .5 damage to the Owner or a Separate Contractor;
 - .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- or

.7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;

- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed

by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the

procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect

timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.4.5 If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract

Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work

properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party

provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.



ADDENDUM TO AIA A101 AND A201-2017 CONTRACT

Pierce County Library System ("**Owner**") and _____ ("**Contractor**") are entering into a Construction Contract with respect to the upcoming **PCLS Lakewood Library Demolition** (the "**Project**"). The Project's contract documents include AIA Document A101-2017 (Stipulated Sum Contract) ("**A101**") and AIA Document A201-2017 (General Conditions Contract) ("**A201**") (collectively, the "**Contract**"). Set forth below are provisions that modify the Contract, which modifications will apply to the Contract between the Contractor and Owner with respect to the Project. Section numbers below refer to the section numbers in the A201 and A101, respectively, as marked.

1. Article 3; Date of Commencement and Substantial Completion. A new provision, **§3.4**, is hereby added to the **A101**:

*§3.4 Liquidated Damages for Contractor Delay. The parties hereby acknowledge and agree that substantial completion must be obtained by **120** days from Not to Proceed date (the "Substantial Completion Date") or Owner will be damaged with respect to loss of income from the Project. The parties further acknowledge that Owner's damages would be difficult or impossible to determine but the parties have agreed that the sum of Five Hundred Dollars (\$500) per day is a fair and reasonable amount to reflect the damages which Owner will incur as a result of any delay in substantial completion beyond the Substantial Completion Date. Consequently, if substantial completion has not occurred by that date, and has not occurred within thirty (30) days after written notice by Owner to Contractor of such failure, then Contractor shall pay Owner liquidated damages in the amount of Five Hundred Dollars (\$500) per day (measured from the end of the 30-day notice) until substantial completion has in fact been accomplished.*

2. Article 5; Payments. The following provisions are hereby amended in Article 5 of the **A101** as follows:

- a. **§5.2.2.** The words, "as follows" in §5.2.2 are hereby deleted and replaced with:

"Once all of the items described in §5.2.1 have been satisfied, whichever is later. "

- b. **§5.2.2.** The following language is to be added to the end of §5.2.1 of **A101**:

*In addition to the conditions to final payment set forth above and in **A201**, prior to final payment to Contractor, Contractor shall provide owner with the following:*

A. Final lien release from all subcontractors;

B. Contractor's affidavit setting forth that the subcontractors named in such affidavit are all of the subcontractors who have performed the Work and that each of the same have been paid in full, In the event any subcontractor has not been paid in full, then said affidavit shall state the amount to be paid from the final payment or from the amount held or to be withheld from such subcontractor and the reason for such withholding;

C. A final lien waiver from the Contractor; and

D. A final certificate of occupancy from all authorities having jurisdiction as may be

required for occupancy by the Owner to operate its business from this location.

3. Article 8; Miscellaneous Provisions.

a. **§8.6 Other provisions.** The following subsections are added to **A101 §8.6**:

§8.6.1 *For any change orders, the parties agree that a reasonable factor for overhead and profit is eight percent (8%) of the increased costs in the change order.*

§8.6.2 Section 3.7.1 of A201 is hereby modified to confirm that Contractor shall apply for and obtain all applicable building permits, other permits, fees, licenses, inspections needed, and a permanent Certificate of Occupancy for the building. The parties acknowledge that the cost of such items are included in the Contract Sum set forth in §4.1 of A101.

§8.6.3 Section 9.3.3 of A201 is hereby modified by deleting the words "to the best of the Contractor's knowledge, information and belief."

§8.6.4 Section 9.3.3 of A201 is hereby modified by adding the following additional provisions:

Contractor warrants that no Work, material or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing Work at the site or furnishing materials and equipment for the Project, subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof or an encumbrance thereon is retained or otherwise imposed by the seller or the supplier. The Contractor further warrants good title to all materials, supplies and equipment installed or incorporated in the Work and agrees, upon completion of all Work, to deliver the premises, together with all improvements and appurtenances constructed or placed thereon by it, to the Owner, free from any liens, claims or charges.

§8.6.5 Section 10.3 of A201 is modified by inserting the following additional provision as new section **§10.3.7**:

§10.3.7 *Except as called for in the Project specifications or pursuant to Owner's written direction, Contractor shall not cause or permit any chemical or hazardous substance to be generated, treated or disposed of on the Project. Contractor will not cause or permit any condition on the Project site that would cause the Project site or any part thereof, to be deemed a hazardous waste treatment, storage or disposal facility requiring a permit, interim status or any other special authorization under the Resource Conservation and Recovery Act or any other environmental law. As used herein, the term "Hazardous Substance" means any hazardous, toxic or dangerous substance, waste or material which is or becomes regulated under any federal, state or local statute, ordinance, rule, regulation or other law now or hereafter in effect pertaining to environmental protection, contamination or clean up, including without limitation any substance, waste or material which now or hereafter is (A) designated as a "hazardous substance" under or pursuant to the Federal Water Pollution Control Act (33 US. C. §1251 et seq.), (B) defined as a "hazardous waste" under or pursuant to the Resource Conservation and Recovery Act (42 US. C. §6901 et seq.), (C) defined as a "hazardous substance" in (or for purposes of) the Comprehensive Environmental Response,*

Compensation and Liability Act (42 U.S.C. §9601 et seq.), or (D) defined or listed as a "hazardous substance" under or pursuant to The Model Toxics Control Act of the State of Washington (RCW Chapter 70.105D). The Contractor shall indemnify the Owner for the cost and expenses the Owner incurs as a result of Contractor's breach of the provisions of this section.

§8.6.6 *Contractor agrees that if a lien for labor or material furnished to or with respect to the Work is filed, then, upon Owner's written request, Contractor will cause such lien to be discharged or bonded against in the form of a bond equal to two times the amount of the claim. If the Contractor fails to so bond or discharge the lien within ten (10) days following receipt of written request from Owner, then Owner shall have the right to satisfy such lien or to take such other action as Owner deems prudent to remove the lien.*

§8.6.7 Attorneys Fees. *In the event any party hereto, or his, her, or its authorized representative, successor, or assign, institutes suit to enforce or interpret this Agreement or for any breach thereof, the substantially prevailing party in such suit or proceeding will be entitled to an award of his, her, or its reasonable costs, expenses and attorneys' fees incurred, both at the trial and appellate court levels, before and after judgment.*

§8.6.8 **Section 1.6 of the A201** form is hereby amended to read as follows:

§1.6 If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall use the AL4 E201-2017 form to establish necessary protocols governing such transmissions, to supplement or modify terms already provided in the Agreement. Any transmissions pursuant to a license shall be without additional license fees.

§8.6.9 **Section 2.2.5 of the A201** form is hereby amended by adding "Upon request," at the beginning of that section.

§8.6.10 *The last sentence of §5.4.1 and all of §5.4.3 of A201* form are hereby deleted.

§8.6.11 **Section 3.18.2 of the A201** form is hereby amended by adding the following:

Contractor's obligation to indemnify Owner under this section includes the obligation to indemnify for losses resulting from death or injury to Contractor's employees, and Contractor accordingly hereby waives any and all immunities it now has or may hereafter have under any industrial insurance act, or other workers compensation, disability benefit or similar act, to the extent such immunity would preclude a claim for indemnification by Owner. This waiver is for the exclusive benefit of the Owner is not intended, nor will it be construed, to be for the benefit of any employee of Contractor or for the benefit of any other party. This waiver has been mutually negotiated by the parties.

§8.6.12 *If Owner does not use an Architect, then the role of the Architect under the contract documents will be performed by the Owner.*

§8.6.13 The following language in §9.5.3 of **A201** is hereby deleted: "If the Architect withholds certification for payment under §9.5.1.3,..." In its place the following language is added:

"Regardless of whether the Architect withholds its certification for payment under Sections 9.5.1.2 or 9.5.1.3, if the conditions described in Sections 9.5.1.2 or 9.5.1.3 exists, ... "

§8.6.14 Any references to *"fiduciary"* in §11.3.10 of **A201** are hereby removed.

§8.6.15 Sections 15.3.2 and 15.4.1 of the **A201** are hereby amended to delete the requirement to use *"American Arbitration Association in accordance with its Construction Industry Arbitration Rules"* and the same are hereby replaced with the requirement to use, *"JAMS in Seattle, Washington, in accordance with its Construction Arbitration Rules ... "*

To the extent that this Amendment conflicts with any of the provision of the other contract documents, then the provisions of this Addendum will apply.

Owner:

PIERCE COUNTY LIBRARY SYSTEM

By: _____

Its: _____

Contractor:

By: _____

Its: _____

SECTION 00 73 00 - SUPPLEMENTAL CONDITIONS

These Supplemental Conditions form a part of, and are incorporated in the Contract Documents and modify, delete, add, and replace provisions of the General Conditions. Provisions not altered remain in effect. All terms defined elsewhere in the Contract Documents shall have the same meaning in these Supplemental Conditions.

PERMITS, FEES AND NOTICES

The owner will pay for the following permits and fees relating to the permanent structures and utilities for the Project:

Land use permit and plan checking fees, including SEPA and design review,

Site development and foundation permit and plan checking fees,

City sewer permit, related site development/engineering fees, city agency installation fees, capacity expansion fees, and added facility expansion fees,

Water service disconnection fees,

Gas service disconnection fees,

General telephone and cable charges.

Obtaining and paying for all other permits is the responsibility of the contractor.

TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Work shall be commenced on the effective date specified in the Notice to Proceed and shall be substantially complete within the period specified in the Form of Proposal. For failure to achieve Substantial Completion of the Work within the time provided, Contractor shall pay Owner **\$500** for each calendar day from the date when Substantial Completion should have been achieved to the date Substantial Completion is actually achieved. The provisions of the General Conditions for liquidated damages remain in effect.

Refer to Form of Proposal for anticipated project timeline.

PERMITS REQUIRED

The following items of work will be permitted by Contractor, including, but not limited to;

- A. Structure, Building Foundation
- B. Utilities
- C. All associated permits, from City of Lakewood, AHJ, and State L & I, as required.

END OF SECTION 00 73 00

SECTION 00 78 00 - PREVAILING WAGE RATES

Prevailing wage rates must be paid on all work performed on this Contract, in accordance with Washington State Department of Labor and Industries regulations. Bidders are responsible for verifying all requirements and regulations. Contact the Department for complete information.

- In general, transportation of prefabricated components to the site and all work performed on the site must be paid at site rates for Pierce County.
- Construction work on prefabricated components performed in the factory are paid at Prevailing Wage factory rates.

Current versions of Washington State Prevailing Wage Rates and Benefit Code Key for Public Works Contracts, Pierce County are available on-line. Check website for updates:

www.lni.wa.gov

END OF SECTION 00 78 00

SECTION 00 80 00 - CONSTRUCTION FORMS

These forms will be used to facilitate the Project and Contractors will be required to utilize them when appropriate. Copies of these forms are available from the American Institute of Architects, 1735 New York Ave. NW, Washington, D.C. 20006 or from AIA Chapter offices in many cities. The Southwest Washington Chapter AIA office is located at 708 Broadway, Tacoma, (253) 627-4006; the Seattle Chapter AIA office is located at 1010 Western Ave, Seattle, (206) 448-4938.

They include but are not limited to the following:

Change Order Form (AIA-Doc G701)

Application and Certification for Payment (AIA Doc G702 & 703)

Proposal Request (AIA-Doc G709)

Construction Change Directive (AIA-Doc G714)

Architect's Supplemental Instructions (ASI)

END OF SECTION 00 80 00

SECTION 01 11 00 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

A. The Scope of Work includes, but is not limited to:

- a. Solicitation of bids to fully permit and demolish the existing building, site improvements, and utilities at 6300 Wildaire Road, SW, Lakewood, WA 98499 based on Design Documents and Project Manual dated January 3, 2024.
- b. The scope of work includes site preparation and removal of all existing building, site surface improvements, underground utilities, and associated structures within the project site.
- c. Contractor to backfill void left by existing basement removal with specified materials. Contractor to coordinate salvage of existing log display with owner's contractor, Omega Morgan. Contractor to provide new chain link fence panels. All existing trees shall be protected during demolition and site preparation activities. Contractor to remove and dispose of hazardous materials as identified in and in accordance with the Hazardous Materials Survey Report dated October 17, 2022 and Project Manual.
- d. Schedule for work is to be completed with owner's contractor that is relocating the log display.
- e. Business license (endorsement) with City of Lakewood, submittals, revisions and procurement, including coordination with City of Lakewood and all other jurisdictions having authority. Owner will pay building permit fees associated with review by City of Lakewood. All other license and permit fees are the responsibility of the bidder.
- f. Coordination with utility providers on timeline, sequencing, and requirements of systems.

B. Related Sections:

1. Section 00 70 00 - General Conditions of the Contract
2. Section 01 33 10 - Submittal Procedures
3. Section 01 57 00 - Temporary Control
4. Section 01 77 00 - Contract Closeout

1.02 CONTRACT

A. See Section 00 50 00, Standard Form of Agreement.

1.03 WORK SEQUENCE

A. Coordinate with Owner's contractors who will perform log display removal.

1.04 COOPERATION AND COORDINATION

- A. Coordinate and schedule work of workers and subcontractors to expedite progress of the Project.
- B. Subcontractor Instructions: Notify subcontractors to become familiar with specified requirements.

1.05 CONTRACTOR'S USE OF SITE

- A. Contractor will have full use of the site for all described site.
- B. Coordinate use of site under direction of Architect and Owner's Representative.
- C. Assume full responsibility for the protection and safekeeping of Products under this Contract.
- D. Assume full responsibility for the protection and safekeeping of Owner's property and the property of Owner's employees and visitors in the project facilities following Substantial Completion during Owner's construction activities.
- E. Assume full responsibility for the site in the area of construction prior to Final Completion.
- F. Do not allow any storage of combustible materials in any mechanical or electrical equipment room.

1.06 CONSTRUCTION STAGING AREA

- A. Coordinate use of site with the Owner prior to utilization of area. Providing barriers and security for site is Contractor's responsibility.

1.07 OBJECTIONS TO APPLICATION OF PRODUCTS

- A. Contractor and subcontractors for this Project are required to thoroughly familiarize themselves with specified products and installation procedures prior to start of work. Prior to bidding, submit to Architect any objections to specified products or installation procedures, or any conflicts (in writing) not later than 10 days after Notice To Proceed. Proposed substitutions must be submitted in accordance with Section 01 62 00, for consideration by Architect. Start of work constitutes acceptance of products and procedures specified.

1.08 OWNER-FURNISHED PRODUCTS

- A. General: Certain items, designated on the Drawings by the abbreviations "FOIO" and "NIC" often require blocking, backing and accessory items necessary to complete the installations. This blocking and backing is a requirement of this project.
- B. Items designated by the Drawings by the abbreviations "FOIO" will be "Furnished and Installed by Owner," following Substantial Completion of site.

1.09 MISCELLANEOUS WORK

- A. Items include, but are not limited to:
 - 1. Maintain a pedestrian and vehicular access to and around site, and to adjacent properties.
 - 2. Do not load structure with weight endangering structure.
 - 3. Move stored products interfering with Owner's other contractors.

4. Obtain and pay for use of additional storage or work areas needed for operations.
5. Examination and Inspections: Follow requirements of General Conditions.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 11 00

PART 1 - GENERAL

1.1 SUMMARY

- 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. These materials may include asbestos, lead-containing paint, PCB-containing materials, and mercury-containing fluorescent lamps.
- B. 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.
 - 3. Division 2: Existing Conditions, Section 02 84 16, PCB-Related Activities.
 - 4. Division 2: Existing Conditions, Section 02 84 17, Mercury-Related Activities.

1.2 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 subcontractors 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.

1.3 ASBESTOS

- A. Asbestos-related work is included in this contract. See items below.

- B. The Contractor shall refer to the attached Hazardous Materials Survey Report and contract documents. These 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. 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 the hazardous materials drawing sheets.

1.4 Lead-Related Activities

- A. Lead-containing components: The Owner has conducted a survey of lead-containing components in the building to be impacted by the Work. Survey samples and results are included in the attached Hazardous Materials Survey Report.
- B. Consider all items similar to those testing positive for lead to be lead-containing. Consider any painted coatings that have not been tested to be lead-containing.

- C. The Contractor shall comply with all applicable regulations, laws and ordinances concerning removal, remodeling, cutting, handling, storage, disposal, monitoring and protection against exposure or environmental pollution. Work related to lead-containing paint and lead-containing components is the responsibility of the General Contractor, in addition to all affected subcontractors, and shall be performed in accordance with Section 02 83 13.
- D. The Contractor shall perform appropriate waste stream sampling by toxicity characteristic leaching procedure (TCLP) to determine whether the waste will require disposal according to WAC 173-303, Dangerous Waste Regulations. Results of testing shall be provided to the Owner.

1.5 POLYCHLORINATED BIPHENYLS (PCBS)

- A. Light Ballasts: PCB-containing light ballasts exist in various locations throughout the buildings. Remove and dispose of up to 50 ballasts as PCB-containing according to Section 02 84 16 and applicable local, state and federal regulations.

1.6 MERCURY (HG)

Fluorescent Lamps

- 1. Remove approximately 1,350 four-foot fluorescent light tubes, 6 two-foot fluorescent light tubes, 150 compact fluorescent bulbs, and 24 U-shaped light tubes prior to demolition. All fluorescent light tubes to be removed are considered mercury-containing. Remove, handle, and containerize light tubes to be removed as part of the Work in accordance with Section 02 84 17.

1.7 WORK PERFORMED BY ENVIRONMENTAL CONSULTANT

- A. The Environmental Consultant will perform air monitoring and inspection services on behalf of the Owner, which may include, but are not limited to, pre- and post-Abatement asbestos monitoring, asbestos work area monitoring, asbestos work area inspections, lead area monitoring, PCB area monitoring, etc.

PART 2 – PRODUCTS NOT USED

PART 3 – EXECUTION NOT USED

END OF SECTION

SECTION 01 11 50- INTENT AND DEFINITIONS OF LANGUAGE USED IN THIS MANUAL

PART 1 - GENERAL

1.01 SUMMARY

- A. Following supplements Article 1, General Provisions, and other paragraphs of the General Conditions 00 70 00, and expands on definitions and intent of language generally used in this Project Manual.
- B. Related Sections:
 - 1. Section 00 10 00 - Instructions to Bidders
 - 2. Section 00 70 00 - General Conditions of the Contract
 - 3. Section 01 31 13 - Project Coordination
 - 4. Mechanical and Electrical Sections

1.02 INTENT AND LANGUAGE

- A. The Project Manual is part of the Contract Documents between Owner and Contractor and is therefore written addressing the Contractor. Although references to subcontractors are made occasionally, it is not the intent of the Project Manual to divide the work into subcontracts; this is the responsibility of the Contractor.
- B. Following information is provided to facilitate project manual comprehension, format, language, implications, conventions, and content. This information does not modify the substance of any requirements.
 - 1. Project Manual is divided into Divisions, subdivisions and Sections for convenience. Division titles are not intended to fully describe the work of each Division, subdivision, or Section, and are not an integral part of the text specifying requirements.
 - 2. Division and Section Numbers listed in Table of Contents, and items of work included in each Section, conform in general to the Construction Specifications Institute's "Masterformat 2004 edition - Master List of Numbers and Titles for the Construction Industry." Numbering of Sections is merely for identification and may not be consecutive. Verify contents page by page to be sure book is complete in accordance with Table of Contents.
 - 3. Except for Division 0 and certain Division 1 Sections, sections are usually subdivided into three "parts" for uniformity and convenience (Part 1 - General; Part 2 - Products; and Part 3 - Execution).
 - 4. Section pages are numbered independently for each Section. Section number linked with page number appears at bottom of each page of most sections.
 - 5. Project title usually appears at top left corner of each page.
 - 6. Section title and number appear at bottom of each page.
 - 7. Trade Associations and General Standard Abbreviations: Generally understood abbreviations may be used in text.
 - 8. Text is most frequently "abbreviated" or "streamlined" type and includes incomplete sentences and phrases where completion must be implied.
 - 9. References to other project manual sections are often indicated as " ../013310/013323." Read this as meaning "in accordance with requirements of Sections 01 33 10 and 01 33 23."
 - 10. Architectural/Engineering Abbreviations: See Drawings.
 - 11. Interpret singular words plurally and plural words singularly wherever applicable and full context of requirements implies.

- C. Reference to Specifications Sections in Division 01: Where General Conditions provisions and Modifications thereto relate generally to work of Contractor and Subcontractor as project administrative requirements, procedural requirements, temporary facilities, and the like, these provisions may be amplified by specifications sections in Division 1, "General Requirements."

1.03 DEFINITIONS

- A. "Accepted" means "accepted by Architect."
1. Where "or accepted" is used, Architect is sole judge of quality and suitability of proposed substitution or installation.
- B. "For Architect's acceptance" or "for Architect's approval" means "for Architect's review of intent of contract documents."
- C. "For approval" means "for Architect's/Owner's Project Manager's approval." In no case will "approval" by Architect be interpreted as a release of Contractor from responsibilities to fulfill requirements of the Contract Documents. Where the term "approval" is used, the Architect shall be the sole judge of the quality and suitability of the proposed substitution, and the term shall in no way be construed as giving the Contractor the option of using materials other than those specified without written permission of the Architect.
- D. "Selected" means "as selected by Architect." It is not necessarily limited to manufacturer's standard line of colors, finishes or details, unless otherwise called for.
- E. "As directed" means "as directed by Architect/Owner's Project Manager." However, no such implied meaning will be interpreted to extend Architect's responsibility into Contractor's area of construction supervision.
- F. "As required" means:
1. "as required to suitably complete the work to the Architect's acceptance;"
2. "as required by code;" and
3. "at the direction of the Architect."
- G. "Provide" means "pay for, furnish, and install complete, in place, ready for operation, and use."
- H. "Furnish" means "supply and deliver to project site, ready for unloading, unpacking, assembly, installation, and the like, as applicable in each instance.
- I. "Verify" means "verify existing or new conditions and coordinate with Architect."
- J. "Indicated" means "where reasonably implied and necessary in conformance with work specified, drawn, or required for completion." Words indicate. Drawings indicate. The term "indicated" also is a cross-reference to details, notes or schedules on the drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in the contract documents. Where terms such as "shown," "noted," "scheduled" and "specified" are used in lieu of "indicated," it is for purpose of helping reader locate cross-reference, and no limitation of location is intended except as specifically noted.
- K. "Coordinate" means "coordinate scheduling, submittals, and work of the various Sections of

specifications, drawings and work of subcontractors to assure efficient and orderly sequence of installation of interdependent construction elements."

- L. "Architect:" The Architect as defined in the General Conditions 00 70 00 subparagraph 4.1.1 means BuildingWork, 159 Western Ave W, Suite 486, Seattle, WA 98119.
- M. "Consultant:" Where the term "Consultant" is used, it means consultant to the Architect or Owner as listed in the Project Manual.
- N. "Engineer:" Where the term "Engineer" is used, sometimes in connection with a discipline such as "Mechanical Engineer," it means either:
 - 1. Consultant in his/her discipline to the Architect or Owner as listed in the Project Manual.
 - 2. Consultant to the Contractor, retained by Contractor to perform services required by construction activities.
- O. "Specialist" means "an individual or firm of established reputation (or, if newly organized, whose personnel have previously established a reputation in the same field)." This individual or firm must be regularly engaged in and maintain a regular force of workers skilled in (as applicable): Manufacturing, fabricating, or otherwise performing required work.
- P. "Contractor" and "Subcontractor" are defined in General Conditions 00 07 00 and Section 00 10 00. Where "You" in imperative mode is used or implied, Contractor is the one who shall perform or is responsible for the performance of others.
- Q. "Installer:" The entity (person or firm) engaged by the Contractor for the performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (installers) be specialists in operations they are engaged to perform.
- R. Cutting and Patching: See Section 01 71 29.
- S. "Manufacturer's Instructions and Directions;" "Install in Accordance with Manufacturer's Instructions and Directions:"
 - 1. Throughout the documents, although it may not be specifically stated, install work in accordance with manufacturer's instructions and directions.
 - a. In the event of conflict between manufacturer's instructions and these documents, immediately notify Architect. *Do not proceed until written authorization is received.*
 - 2. Except as otherwise defined in greater detail, term "install" is used to describe operations at project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations, as applicable in each instance.
 - 3. Unless otherwise noted or directed, install work in accordance with each manufacturer's instructions for best results.
 - a. Not one preparatory step or installation procedure may be omitted unless specifically modified or exempted by these documents.
 - 4. Where Contractor is required to follow manufacturer's instructions, directions and the like, but more than one manufacturer is involved in the work, or its component parts, follow all manufacturer's instructions, directions and the like.
 - a. In the event of conflict between manufacturers' directions and recommendations, submit discrepancy or conflict to Architect for resolution and instruction.

- T. The term "install" means entered permanently into project for intended use.
- U. The term "reinstall" means entered permanently into project after temporary removal in the same manner as if the object to be reinstalled was new.
- V. The term "remove" means completely and permanently removed from the Work.
- W. The term "salvage" means carefully remove to prevent damage to product, protect and store for future reinstallation on this or other projects.
- X. The term "clean" means 100% of the exposed surface of all exterior material to be cleaned.
- Y. The term "repair" means perform minor repair and patching of all materials per specifications whether indicated in the drawings or not.
- Z. The term "restore" means major repair of missing or damaged pieces of material in place to match existing or original texture and profiles and indicated on the drawings and defined in the specifications.
- AA. The term "replace" means provide and install new material to match existing construction as indicated on the drawings.
- BB. "Product" as used in these Contract Documents refers to materials, systems, and equipment provided by Contractor.
- CC. The term "similar," where it occurs in the Contract Documents, means that a portion of the Work shall have common features with, but may not necessarily be identical to, other related portions of the Work. Contractor shall correlate similar conditions of the work.
- DD. "Project Manual" as used in these Contract Documents include Bidding and Contract Requirements, General Requirements, Specifications and other items that may be listed in the Table of Contents.
- EE. "General" and "General Requirements:" These terms as used in Conditions of the Contract and this specification apply to the balance of Specification Divisions, Section of a Division, Article, or parts of a Section.
- FF. "Regulations:" The term includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that have control of the Work.
- GG. "Project Site:" The space available to the Contractor for performing construction activities, either exclusively or in conjunction, with others performing other work as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built. Certain construction activity may extend beyond the project site.
- HH. "Testing Agencies:" A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project Site, or elsewhere, and to report on and, if required, to

interpret results of those inspections or tests. ·

1.04 MISCELLANEOUS EXPLANATIONS- INTENT

A. Intent of Drawings:

1. Drawings are in part diagrammatic and do not necessarily show complete details of construction, work or materials, performance or installation. They do not necessarily show how construction details, other items or work, fixtures, and equipment may affect any particular installation. Ascertain and correlate the work to bring the parts together into a satisfactory and completed whole.
2. Drawings do not show exact characteristics of the work, piping and air distribution configurations, or necessary number of fittings. The Drawings indicate only such details as are necessary to give a comprehensive ideal of the Work. In order to illustrate the Work, the Architect may furnish additional Drawings, explanations and clarifications consistent with the original Drawings, purpose and intent of the Contract. Conform Work to such Drawings and explanations. The furnishing of such additional Drawings, explanations or clarifications is for the convenience of the Contractor and shall not entitle the Contractor to an increase in the Contract time or Contract Sum.
3. Furnish and install work not covered under any heading, Section, branch, class or trade of the Project Manual, but shown on or reasonably inferable from the Drawings. This includes work necessary to produce the intended results.
4. Do not scale drawings. Dimensional accuracy is not guaranteed, and field verification of dimensions, locations, and levels to suit field conditions is required.

B. Wording of these Specifications: These Specifications are of the abbreviated or streamlined type and may include incomplete sentences.

1. Words such as "the," "all," "shall," "the Contractor shall," "shall be," and similar mandatory phrases, are required to be supplied by inference in the same manner as they are in a note on the Drawings.
2. Provide all items, articles, materials, and operations listed, including labor, materials, equipment and incidentals required for their completion.

C. Number of Specified Items Required: Wherever in these Specifications an article, device or piece of equipment is referred to in the singular number, the reference applies to as many such articles as are shown on the Drawings or required to complete the installation.

D. Tense, Gender, Singular, Plural: Present tense words include future tense. Words in masculine gender include feminine and neuter genders. Words in the singular include plural. Plural words include singular.

E. All, Entire, and the Like: For brevity throughout the documents, these words may be omitted. Read their implications into all work, as the following parenthetical insertion exemplifies: "Balance and adjust (all) dampers."

F. Specification by Reference: Materials and products specified by reference or number, symbol or title of a specified standard, such as commercial standard, ANSI and ASTM documents, Federal Specifications, trade association standard, or the like, shall comply with the following:

1. The latest revision requirements thereof, and:
2. Any amendment or supplement thereto in effect on date of Project Manual, except as modified; and:

3. When building code requirements refer to a different issue of standards specifications, such issue governs; and:
4. Listing of certain reference standards: Refer to Section 01 42 00.

G. First Class Workmanship is expected.

1. Prior to installing any item or material, verify that receiving surfaces are plumb, level, true to line, and straight to the degree necessary to achieve tolerances specified or required. Perform without extra cost all shimming, blocking, grinding, or patching required to make such surfaces plumb, level, true to line and straight.
2. Take care in attention to details and fitting at intersections and junctures of materials. Joints are to be tight, straight, even, and smooth.

H. Presence of Architect/Owner: Do not misconstrue presence of this person or any of Architect's/Owner's representatives at the site as assuring compliance with Contract Documents.

1.05 GENERAL INSTALLATION PROVISIONS

A. General: Provide all items, articles, materials, and operations listed, including labor, materials, equipment and incidentals required for their completion.

B. Installer's Inspection of Conditions:

1. Require the Installer of each major unit of work to inspect the substrate to receive work and conditions under which the work is to be performed.
2. The Installer shall report unsatisfactory conditions in writing to the Contractor.
3. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer. Start of work constitutes acceptance of substrates.
4. See General Conditions, subparagraphs 3.3.3 and 3.3.4.

C. Inspection of Items to Be Installed:

1. Inspect each item of materials or equipment immediately prior to installation.
2. Reject damaged and defective items.

D. Attachment and Connection:

1. Provide attachment and connection devices and methods for securing work. Secure work true to line and level, and within recognized industry tolerances. Allow for expansion and building movement.
2. Provide uniform joint width in exposed work. Arrange joints in exposed work as drawn or to obtain the best visual effect. Refer questionable visual-effect choices to the Architect for final decision.

E. Measurements: Check measurements and dimensions of the work, as an integral step of starting each installation.

F. Dimensions and Measurements on Drawings:

1. Dimensions govern.
2. Do not scale.
3. Check dimensions in the field and verify them with respect to adjacent or incorporated work and in accordance with General Conditions 00 70 00, subparagraph 3.3.3. Large scale drawings take precedence over smaller scale drawings, plans, elevations, and cross sections.
 - a. Information concerning existing conditions was considered suitable for preparation of

the Drawings and is given for Contractor's convenience. Architect and Owner does not guarantee accuracy of such conditions. Field verify, as per above.

4. See Section 01 31 13 for further descriptions.

G. Weather Conditions:

1. Install each unit of work during weather conditions and project status which will ensure the best possible results in coordination with the entire work.
2. Isolate each unit of finished work and protect as necessary to prevent deterioration.

H. Inspection and Tests: Coordinate enclosure of the work with required inspections and tests, so as to minimize the necessity of uncovering work for that purpose.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 11 50

SECTION 01 22 00- UNIT PRICES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Administrative and procedural requirements for unit prices.
 - 2. Schedule of unit prices.
- B. Related Sections:
 - 1. Section 00 30 00 - Form of Proposal
 - 2. Specification sections for work where unit prices are requested

1.02 DEFINITIONS

- A. Unit price is an amount proposed by bidders, stated on the Form of Proposal, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if the estimated quantities of Work required by the Contract Documents are increased or decreased.

1.03 PROCEDURES

- A. Unit prices include necessary material, cost for delivery, installation, insurance, overhead, profit, and applicable taxes.
- B. Measurement and Payment:
 - 1. The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this work measured, at the Owner's expense, by an independent surveyor acceptable to the Contractor.

PART 2 - PRODUCTS

2.02 UNIT PRICE SCHEDULE

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 22 00

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes description of procedures for change and field orders including:
 - 1. Submittals.
 - 2. Supplemental Instructions.
 - 3. Correlation of Contractor submittals.
- B. A change or substitution of any subcontractor listed in the Agreement shall be subject to the prior acceptance of the Owner and Architect, and shall be confirmed with a no-cost change order except as noted in General Conditions 00 70 00, subparagraph 5.2.3.
- C. Related Sections:
 - Section 00 70 00 - The General Conditions of the Contract; Changes in the Work
 - Section 01 29 10 - Applications for Payment
 - Section 01 31 14 - Communications, Correspondence, and Request for Information
 - Section 01 78 39 - Project Record Documents

1.02 SUBMITTALS

- A. Designate in writing the names of authorized members of Contractor's organization who accept changes in the Work, and are responsible for informing other workers of the authorized changes.

PART 2 - PRODUCTS

2.01 FORMS

- A. Change Order Proposal Requests, Change Order Proposals, Change Orders, Field Authorizations, etc.: Contractor's standard form. Submit sample form to Architect for review and acceptance.

PART 3 - EXECUTION

3.01 ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS (ASI)

- A. The Architect may issue written authorizations which interpret the Contract Documents, or which order minor changes in the Work without change in the Contract Sum or Contract Time, if agreed to by the Contractor.
 - 1. Form: Architect's standard form. See Section 00 80 00
 - 2. Contractor will assign an ASI number and list each one on an ASI log.
 - 3. Changes/clarification by other consultants will be issued through the Architect.

3.02 PRELIMINARY INITIATIONS/CHANGES

- A. Supplemental instructions or Construction Memos authorizing minor changes in the work, issued by the Architect.

3.03 CORRELATION WITH CONTRACTOR'S SUBMITTALS

- A. Revise Schedule of Values and Application for Payment forms to record each change in conformance with General Conditions 00 70 00.
- B. Revise Construction Schedules reflecting each change in contract time in accordance with General Conditions.
 - 1. Revise sub-schedules to show changes for other items of work affected by changes.
- C. Promptly enter changes in Project Record Documents.

3.04 DISTRIBUTION

- A. Send copies to all concerned parties.
 - 1. Change Orders: Upon authorization, Owner transmits one signed copy each to Contractor and Architect.
 - 2. Construction Change Authorization:
 - a. Distribution of copies:
 - 1) One to Owner.
 - 2) One to Contractor.
 - 3) One to Architect.

END OF SECTION 01 26 00

SECTION 01 29 10 - APPLICATION FOR PAYMENT

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes requirements for submittal of Payment Applications according to accepted schedule and General Conditions 00 70 00, Payments and Completion.

- B. Related Sections:
 - 1. Section 00 70 00 - General Conditions of the Contract:
 - 2. Section 01 26 00 - Contract Modification Procedures
 - 3. Section 01 77 00 - Closeout Procedures
 - 4. Section 01 78 39 - Project Record Documents

1.02 FORMAT AND DATA REQUIRED

- A. Refer to General and Supplementary Conditions.

1.03 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Application Form: Use AIA Document G702 and G703, or Contractor's standard form, if acceptable to Owner.

1.04 PAYMENT SCHEDULE

- A. Submit Application for Payment in accordance with Contract and General Conditions or monthly progress applications.

PART 2 – PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 29 10

SECTION 01 29 73 - SCHEDULE OF VALUES AND APPLICATION AND CERTIFICATION FOR PAYMENT

PART 1 - GENERAL

1.01 FORMAT

- A. Type Schedule on 8-1/2 x 11 in. bond paper.
- B. For minimum listing of schedule of values, provide summary line item cost for complete modular building, with sub-categories for engineering, shop drawings, permit and review fees, fabrication, transportation to site, erection, and final installation.
- C. For Specification Divisions 0, as a minimum, include one (1) line item for each of the following: mobilization/demobilization, General Conditions, bonds and insurance, and project closeout, including record drawings, O&M Manuals, and Owner-instruction.

1.02 REQUIREMENTS

- A. Two (2) weeks prior to submission of first Application and Certificate for Payment, submit schedule of values to Architect for review.
- B. List installed value of each major item of Work to serve as a basis for computing values for Progress Payments. Round off values to nearest dollar.
- C. Coordinate listings with Progress Schedule.
- D. All line item listings shall each include a directly proportional amount of Contractor overhead and profit.

1.03 SUBMITTAL

- A. Submit one digital copy of Schedule.
- B. Transmit via email under transmittal letter. Identify project by title and by contract number.

1.04 SUBSTANTIATING DATA

- A. When Architect requires substantiating information, submit data justifying line item amounts in question.
- B. Provide one (1) copy of data with cover letter for each copy of Application and Certificate for Payment.

1.05 APPLICATION AND CERTIFICATE FOR PAYMENT

- A. See General Conditions of the Contract.
- B. The approved Schedule of Values will be typed by the Contractor onto an Owner approved Application and Certificate for Payment Form.

1.06 FIRST APPLICATION AND CERTIFICATE FOR PAYMENT

- A. Complete administrative requirements prior to submission of initial Application for Payment. Application will not be reviewed until requirements are met.
- B. Partial list of requirements follows. Other requirements may be listed elsewhere in the Contract Documents.
 - 1. Performance and Payment Bonds
 - 2. Certificates of Insurance
 - 3. Building Permit Submittal Copies
 - 4. Schedule of Values
 - 5. Progress Schedule
 - 6. List of Sub-Contractor and Suppliers
 - 7. Schedule of Submittals

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 29 73

SECTION 01 31 13 – PROJECT COORDINATION

PART 1 - GENERAL

1.01 SUMMARY

- A. Coordination of Work of the Contract.
- B. Includes coordination with PCLS and AHJ.
- C. Related Sections:
 - 1. Section 01 11 00 - Summary of Work
 - 2. Section 01 31 14 - Communication, Correspondence, and Request for Information
 - 3. Section 01 31 19 - Project Meetings
 - 4. Section 01 33 23 - Shop drawings, Product Data, and Samples
 - 5. Section 01 62 00 - Substitutions and Product Options
 - 6. Section 01 71 29 - Cutting and Patching
 - 7. Section 01 77 00 - Closeout Procedures

1.02 DESCRIPTION

- A. Coordinate scheduling, submittals, and work of the various sections of Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.
- B. Coordinate work between the parts of the Contract Documents to avoid conflicts and omissions. Take special care to coordinate work which is normally indicated in some but not all Architectural, Mechanical, Electrical and other major Divisions of the Contract Documents.

1.03 COOPERATION AND COORDINATION OF WORK

- A. Coordination of work among the general and various subcontractors will be a critical element in the success of this project. Coordinate the installation of the Work and that of subcontractors to ensure compliance with the contract documents and to expedite the progress of the project.
- B. Ensure that the work of subcontractors complies with General Conditions of the Contract 00 70 00, Division 01 - General Requirements, and the work of other Sections related to their own work. No additional payments or time extensions will be authorized for failure on the part of subcontractors to be familiar with and in compliance with the aforementioned specification divisions and sections.
- C. *Project Coordination and Scheduling Control: Responsibility for coordination and close adherence to time schedules rests solely with the Contractor who shall maintain coordination and scheduling control at all times:*
 - 1. Each subcontractor responsible to the Contractor shall cooperate diligently with the Contractor in the execution of their work so as to cause no delay in the completion of the Project. This responsibility includes the completion of work in a timely manner and items of equipment connected and fully operating at the time of Substantial Completion of each phase. Each subcontractor shall diligently comply with the following requirements:
 - a. Cooperate in planning and layout of the work well in advance of operations to

- properly interface with work of other trades and Owner's separate contractors.
 - b. Inform other trades of requirements at proper time to prevent delay or revisions.
 - c. Be informed on the requirements of other trades and check own work for conflicts with the work of other trades.
 - d. Ensure delivery of materials and performance of work on coordinated schedule with other trades.
 - e. Attend pre-installation conferences as described in Section 01 31 19.
 - 2. Ensure that the subcontractors and equipment suppliers are responsible for compatibility and completeness of the installation and operation of the equipment in their respective Specification Sections including conformance with code requirements. If power, piping, ductwork, or other work required for complete installation is not provided by others to equipment location or is not adequate for complete installation, the subcontractor or equipment supplier shall be responsible for providing the necessary connections.
- D. Notification and Correction of Defective Work:
 - 1. Before starting a section of work, each contractor and subcontractor shall carefully examine preparatory work that has been executed to receive each contractor's work. Check carefully, by whichever means required, to ensure that the work and adjacent, related work will finish to proper contours, planes, and levels.
 - 2. Promptly notify the Contractor of any defects or imperfections in preparatory work which will in any way affect satisfactory completion of the work. Under no condition shall a section of work proceed prior to preparatory work having been completed, cured, dried, or otherwise made satisfactory to receive such related work.
 - 3. Correction of defective work shall be the responsibility of the Contractor or subcontractor providing the defective work. Correction of work due to underlying defects shall be the responsibility of the Contractor or subcontractor providing work.
- E. Intent of Drawings:
 - 1. The work of each contractor and subcontractor shall conform to the intent of the contract drawings. Drawings are partly diagrammatic and do not intend to show in detail all features of work. Each contractor shall carefully review the work to be performed by other trades, compare related drawings and shall thoroughly understand the building conditions affecting their work.
 - a. Changes required in the work caused by failure to do so shall be at no expense to the Owner.
- F. Interferences and Right-Of-Way:
 - 1. Make proper provisions to avoid interferences.
 - 2. Where conflicts occur, architectural and structural has right-of-way over mechanical and electrical work; concealed mechanical work has right-of-way over concealed electrical work; exposed electrical fixtures have right-of-way over mechanical fixtures.
 - 3. Submit conflicts which cannot be resolved by right-of-way to Architect for instructions.
 - 4. Submit in accordance with requirements of Sections 01 33 10 and 01 33 23.
- G. Cooperate and coordinate with any other separate contractors and subcontractors under Contract with the Owner.
- H. Coordination Drawings:
 - 1. The purpose of coordination drawings is to resolve potential interdisciplinary dimensional interferences and conflicts prior to shop fabrication or field installation of components and

- systems. While the designers have exercised the accepted standard of care in performing overall dimensional coordination in the preparation of the design intent documents, additional factors influence coordination which the contractors and subcontractors must address in the coordination drawings. These factors include, but are not limited to, specific means and methods, the sequence of work, the characteristics of the specific equipment to be installed (where the documents allow multiple options), recognition of existing conditions, and the pricing/negotiation assumptions made by each contractor/subcontractor.
2. Prepare coordination drawings, consisting of plans, sections, and details, for those areas of the building where the dimensional location of one's trade work could adversely influence the dimensional location of other trades' work. Drawings shall depict the interrelationships of components shown on separate shop drawings, the intended installation sequences, and how work is to be installed or constructed. in relation to the work of other trades and existing conditions.
 3. Prepare coordination drawings in accordance with the following guidelines:
 - a. Sheet size to be the same as the construction documents.
 - b. Plans to be at an appropriate scale to depict the necessary detail, but not less than 1/4" = 1'-0".
 - c. Sections to be at an appropriate scale to depict the necessary detail, but not less than 1/2" = 1'-0".
 4. Contractor and each subcontractor shall sign drawings to indicate their participation in the coordination process and their agreement that the individual systems and components can be installed as indicated in the drawings and in the conformance with the contract documents.
 5. These drawings shall be submitted for informational purposes only prior to installation of any components of the work to be included in order to demonstrate that the installation of the aforementioned items have been coordinated by the Contractor prior to commencement of the work.
 6. Submit in accordance with requirements of Section 01 33 10.

1.04 MEETINGS

- A. In addition to progress meetings specified in Section 01 31 19, hold coordination meetings and pre-installation conferences with personnel and subcontractors to ensure coordination of Work.

1.05 COORDINATION OF SUBMITTALS

- A. Schedule and coordinate submittals specified in Sections 01 33 10 and 01 33 23.
- B. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service equipment.
- C. Coordinate requests for substitutions to assure compatibility of space, of operating elements, and effect on work of other sections.

1.06 COORDINATION OF SPACE

- A. Coordinate use of Project space and sequence of installation of mechanical and electrical work which is indicated diagrammatically on Drawings.

1.07 COORDINATION OF CONTRACT CLOSEOUT

- A. Coordinate completion and cleanup of work by the various trades involved in preparation for Substantial Completion.
- B. Assemble and coordinate closeout submittals specified in Section 01 77 00, Closeout Procedures.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 31 13

SECTION 01 31 14 - COMMUNICATION, CORRESPONDENCE AND REQUEST FOR INFORMATION

PART 1-- GENERAL

1.01 SUMMARY

- A. Section includes procedures and formats for communications.

1.02 RELATED SECTIONS

- 1. Section 00 70 00 - General Conditions of the Contract
- 2. Section 01 26 00 - Contract Modification Procedures
- 3. Section 01 33 10 - Submittal Procedures

1.03 GENERAL COMMUNICATION

- A. See Section 00 70 00, General Conditions, for general communications.
- B. Subcontractors:
 - 1. Do not contact members of the design team directly.
 - 2. Transmit problems or questions in writing using the Request for Information (RFI) form through the Contractor to the Architect.

1.04 CORRESPONDENCE

- A. Address correspondence to the Architect with copy to the Owner's Representative.
- B. Format:
 - 1. Number correspondence sequentially.
 - 2. Include Project Title, Owner's Contract Number, and Architect's Project Number.

1.05 REQUEST FOR INFORMATION (RFI)

- A. When field conditions or contract document contents require clarification or verification by the Architect or Architect's Consultants, a written RFI is to be submitted per following:
 - 1. Identify the nature and location of each clarification/verification using the RFI form and providing no less information than below:
 - a. Project name and number;
 - b. Date;
 - c. Date response required by;
 - d. Effect on contract amount; check box to indicate "cost change" or "no cost change;"
 - e. RFI number;
 - f. Subject;
 - g. Initiator of the field question;
 - h. Indication of interpretation and cost included in bid;
 - i. Location within building;
 - j. Contract drawing reference;
 - k. Contract specification section and paragraph reference;
 - l. Descriptive text;

- m. Space for reply on same page as question;
 - 2. Submit each RFI separately by discipline, and number each discipline sequentially from #001. Only one issue per RFI.
 - 3. Maintain log of RFI's for Architect, Owner's Representative, and subcontractor use.
- B. Route: RFI's in same manner as correspondence.
- C. Copy: RFI's in same manner as correspondence.
- D. Time: Architect will endeavor to respond to RFI's by due date requested by Contractor on form, but not later than within 7 working days.
- E. Clarifications: May only be discussed on-site or by telephone with Architect Incorporate the essence of the discussion into an RFI form. Also see "Bulletins" below.

1.06 BULLETINS, MEMOS, AND ASI

- A. Architect may issue a "Bulletin", "Memo", or ASI describing a document clarification or field condition.

1.07 FORMS

- A. RFI:
 - 1. Contractor's standard RFI. Submit sample form to Architect for review and acceptance.
- B. ASI: Architect's standard form.
- C. Other:
 - 1. See Section 00 80 00 for list of construction forms, or submit sample of Contractor's standard form to Architect for review and acceptance.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 31 14

SECTION 01 31 19 - PROJECT MEETINGS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Preconstruction conference meetings;
 - 2. Progress meetings; and
 - 3. Pre-installation conferences.

- B. Related Sections:
 - 1. Section 00 70 00 - General Conditions of the Contract
 - 2. Section 01 78 39 – Project Record Documents

PART 2 - PRODUCTS

2.01 PRECONSTRUCTION CONFERENCE MEETINGS

- A. Owner will schedule Preconstruction Conferences after Notice of Proceed. These meetings are to review Contract administration requirements, and prepare the way for commencement of the Work. The City and the Owner may call for additional preconstruction conferences as applicable to the work being started.
 - 1. Contractor shall provide meeting location at a central site, convenient for all parties.
 - 2. Attendance is required of the following:
 - a. Contractor, Contractor's Superintendent, Project Manager, and individuals authorized to sign for Contractor;
 - b. Major subcontractors and suppliers;
 - c. Others, as appropriate.

- B. Agenda:
 - 1. Owner's Representative and Architect will discuss pertinent detail information paralleling Project Manual requirements such as:
 - a. The Work.
 - 1) Discussion includes responsibilities and authority of Owner, Owner's Representative and Architect; Contractor and Contractor's designated personnel; and Permitting and Inspection Agencies.
 - b. Work sequence, phasing, and occupancy
 - c. Contractor's use of the site.
 - 1) Site utilization, access and mobilization issues.
 - 2) Potential construction work occurring on neighboring properties.
 - 3) Environmental controls/daily clean-up.
 - d. Procedures and processing.
 - 1) Field decisions
 - 2) Proposal requests
 - 3) Submittals
 - 4) Change Orders
 - 5) Application for payment
 - 6) Other
 - e. Special project procedures.

- 1) Procedures for testing and inspections during factory fabrication.
 - 2) Requirements for startup of equipment.
 - 3) Inspection and acceptance of equipment put into service during construction period.
 - f. Prefabricated component transportation plan and schedule
 - g. Site erection/construction facilities, controls, and construction aids.
 - h. Coordination with Owner-provided foundation and utility rough-in at crawl space.
 - i. On-site security procedures.
 - j. Coordination with Owner's Site Development/Foundation Contractor
 - k. Safety and first-aid procedures.
 - l. Housekeeping Procedures.
 - m. Other.
 - n. Project Closeout:
 - 1) Final cleaning.
 - 2) Record documents and warranties.
 - 3) O&M documents, training and instruction of personnel.
 - o. Punchlist Completion:
 - 1) Architect and Owner have responsibility for accepting Work.
 - 2) Punchlist work shall be completed within the time stipulated by the Architect, but not more than 10 days beyond date of inspection.
 - p. Contractor will present and distribute information indicating:
 - 1) List of major subcontractors and suppliers.
 - 2) Tentative schedule for engineering, shop drawing, permit submittal/review, factory fabrication, transportation to site, site erection/installation and completion, final inspections.
- C. Contractor will:
1. Record minutes; include significant proceedings, decisions, and summarize questions raised.
 2. Reproduce and distribute copies of minutes within 3 days of each meeting to:
 - a. meeting participants;
 - b. parties affected by decisions.

2.02 PROGRESS MEETINGS

- A. Owner's Representative will schedule and administer progress meetings, and specially called meetings throughout work progress.
1. Purpose of Meeting: Objective is to communicate and discuss the schedule, impediments to progress, submittals, quality control, safety, site constraints, coordination with other contractors and Owner-retained suppliers and vendors, pre- installation conferences, and related timely subject.
 2. Prearrange meeting time and day.
 - a. Meetings will take place not more than once a week but not less than once every month, appropriate to the progress of work.
 - b. Such meetings will continue until final completion of the work.
 3. Make physical arrangements for meetings; prepare agenda.
 4. Preside at meetings.
 5. Representatives of Contractors, subcontractors, and suppliers attending meetings are required to be qualified and authorized to act on behalf of their firms.
- B. Contractor will:
1. Record minutes; include significant proceedings, decisions, and summarize questions raised.

2. Reproduce and distribute copies of minutes prior to the next progress meeting to:
 - a. meeting participants;
 - b. parties affected by decisions.
- C. Meeting Locations: PCLS Administrative Building, unless otherwise notified. Meeting may move to site upon delivery of building. Virtual meetings may be established upon mutual agreement between all attendees.
- D. Attendance:
 1. Contractor: Superintendent and Project Manager.
 2. Owner's Representative, Architect and Contractor to mutually agree on attendance of the following before agenda is established for each meeting:
 - a. Subcontractors;
 - b. Suppliers; and
 - c. Manufacturers' Representatives.
 3. Owner's Representative, Architect and professional consultants, as needed.
 4. Others as appropriate.
- E. Suggested Agenda:
 1. Review and accept minutes of previous meeting.
 2. Review work progress since previous meeting.
 3. Present field observations, problems, and conflicts.
 4. Discuss problems impeding Construction Schedule.
 5. Review factory fabrication.
 6. Review delivery schedules.
 7. Present corrective measures and procedures to regain projected schedule, as applicable.
 8. Revise Construction Schedule, as required.
 9. Review plans for progress for succeeding work period.
 10. Coordinate work.
 11. Review submittal schedules.
 12. Review maintenance of quality standards.
 13. Review proposed changes for:
 - a. effect on Progress Schedule and on completion date;
 - b. effect on any other Contracts on the Project.
 14. Review required revisions to Project Record Documents.
 15. Review project safety.
 16. Status of Payments; Upcoming Application for Payment.
 17. On-going commissioning process.
 18. Review any other business.

2.03 PRE-INSTALLATION AND COORDINATION CONFERENCES

- A. Contractor will schedule and administer pre-installation conferences as indicated in respective specification section or as otherwise required throughout work progress.
 1. Purpose is to ensure Contractor and Contractor's Superintendent, Subcontractors and applicable foremen, installers, suppliers, fabricators, and others as appropriate, are coordinated and understand the Project requirements, quality requirements, safety, and design parameters and constraints.
- B. Those meetings shall be scheduled by the Contractor as agreed by the Owner's Representative at

least 4 days prior to any work for the applicable section.

1. Schedule meetings to occur in conjunction with other regularly scheduled construction meetings that Architect and Owner's Representative attend.
 2. Applicable submittals as well as the Subcontractor's safety plan and insurance certificates shall have been submitted to and approved by the Owner prior to scheduling this conference. The Contractor may elect to group several sections or divisions to minimize the number of these meetings.
- C. Subcontractors and major suppliers are required to attend pre-installation conferences prior to commencing work of their respective specifications section, or as required by related work in other specification sections.
- D. Require attendance of entities directly affecting, or affected by, work of the section including Architect, Owner, Owner's Representative, Contractor's Project Manager and Superintendent with Lead Person performing the work, and/or the appropriate subcontractors/suppliers/fabricators.
- E. Agenda (as applicable):
1. Review technical contract requirements with any options. Contractor to submit any options and resolve with Owner any conflicts, interference, or compatibility problems.
 2. Insurance and certifications.
 3. Schedule.
 4. Review requirements and status as relates to:
 - a. schedule;
 - b. submittals and mock-ups;
 - c. tolerances;
 - d. Manufacturer's requirements; and
 - e. weather limitations.
 5. Quality control methods:
 - a. Testing/Inspection requirements;
 - b. Acceptability of substrates;
 - c. Required performance results; and
 - d. Recording requirements.
 6. Applicable governing rules and regulations.
 7. Temporary facilities and controls:
 - a. Safety, environmental controls, security, noise;
 - b. Space and access limitations.
 8. Protection of work, curing periods and related subjects.
 9. Other business.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 31 19

SECTION 01 32 15-CONSTRUCTION SCHEDULE

PART 1 - GENERAL

1.01 SUMMARY

- A. Prepare Preliminary Schedule, the Construction Schedule, Short Interval Schedules with two-week look aheads, monthly updates and changes according to General Conditions 00 70 00.

1.02 RELATED SECTIONS

- A. Coordinate related work specified in other parts of the Project Manual, including but not limited to following:
 - 1. Section 00 70 00 - General Conditions of the Contract
 - 2. Section 01 33 23 - Shop Drawings, Product Data and Samples: review time

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 32 15

SECTION 01 33 10- SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. General submittal procedures, further described in other sections, including but not limited to:
 - a. Construction schedules and reports as required by General Conditions.
 - b. List of Submittals.
 - 1) Include approximate schedule for submittals.
 - 2) Schedule of submittals shall be organized chronologically and by section number.
 - 3) Provide not later than first payment application.
 - c. Shop drawings, product data, and samples as required by Section 01 33 23.
 - 1) Materials Safety Data Sheets (MSDSs).
 - d. Testing laboratory and inspection reports as required by Section 01 45 23.
2. Miscellaneous submittals, including but not limited to:
 - a. Submittals prior to start of construction.
 - b. Proposed products lists.
 - c. Manufacturers' installation instructions.
 - d. Manufacturers' Certificates.
 - e. Project closeout submittals other than those described in Sections 01 77 00, 01 78 23, 01 78 35 and 01 78 39.
3. Designate in Construction Schedule the dates for submission and submittal review as described in General Conditions.
 - a. For Architect's review, allow 5 working days. Allow 3 additional normal working days for each involved Consultant's and Owner's review.
 - b. Allow an additional 5 days for submittals which deviate from design intent of Contract Documents.

B. Related Sections:

1. Section 00 70 00 - General Conditions of the Contract
2. Section 01 26 00 - Contract Modification Procedures: Submit data in required form
3. Section 01 29 10 - Application for Payment: Submit data in required forms
4. Section 01 31 13 - Project Coordination: Coordination of Submittals; Coordination Drawings, including but not limited to Reflected Ceiling Coordination Drawings
5. Section 01 31 19 - Project meetings: Minutes
6. Section 01 31 14 - Communication, Correspondence, and Request for Information
7. Section 01 33 23 - Shop Drawings, Product Data and Samples
8. Section 01 45 23 - Testing Laboratory and Inspection Services: Reports
9. Section 01 61 00 - Basic Product Requirements: Purchase orders and documentation for long lead time items, as applicable
10. Section 01 62 00 - Substitutions and Product Options: Substitution Request form
11. Section 01 71 29 - Cutting and Patching: Requirements as specified
12. Section 01 78 23 - Operating and Maintenance Data
13. Section 01 78 35 - Warranties and Bonds
14. Section 01 78 39 - Project Record Documents
15. Various Sections, Division 2 through 34: As required and specified

1.02 GENERAL

- A. Communications between the Owner and the Contractor shall be forwarded through the Architect in accordance with requirements of General Conditions 00 70 00 and Section 01 31 14.
- B. Electronic submission of all submittals shall be through Architect. Contractor shall provide 3 physical samples for all sample submittals.

1.03 COMPLETE SUBMITTALS REQUIRED

- A. Unless indicated otherwise, submittals shall include the items required under the individual specification sections for the product(s) indicated. For example, product data, samples, certificates, design data and shop drawings, and the like, where required, shall be organized and submitted in a single package. Partial or incomplete submittals will be returned to the Contractor for Corrective action and resubmittal.

1.04 SEQUENCING/SCHEDULING

- A. Phase-in properly with Progress Schedule as described in General Conditions.

PART 2 - PRODUCTS

2.01 SUBMITTALS PRIOR TO START OF ENGINEERING AND SHOP DRAWINGS

- A. Submit to Owner in accordance with General Conditions 00 70 00:
 - 1. List of subcontractors and material suppliers in conformance with General Conditions.
 - 2. Names and references for proposed:
 - a. Superintendent,
 - b. Project Manager, and
 - c. Major Subcontractors.
 - 3. Policies of all types of specified bonds and insurance and notification of bonding and insurance companies indicating extent of coverage.
 - 4. List of Submittals. Include:
 - a. Specification section numbers as per this Project Manual.
 - b. Dates of submittals.
 - c. Interrelationships with other specification sections and required coordination.

2.02 MANUFACTURER'S INSTALLATION INSTRUCTIONS

- A. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- C. Identify conflicts between manufacturers' instructions/warranty requirements and Contract Documents.

2.03 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification Sections, submit manufacturers' certificate to Architect

for review, in quantities specified for Product Data.

- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect.

2.04 MISCELLANEOUS

- A. Submit evidence that tests, adjustments, and inspections required for mechanical and electrical work in mechanical and electrical divisions have been made with acceptable results.
- B. Submit information required as a condition of building permit issued by Code authority, including but not limited to:
 - 1. Certificate of Occupancy.
 - 2. Certificate of Approval from appropriate Fire Marshal.
 - 3. Certificate of Code Compliance from appropriate Electrical Inspector.
 - 4. Certificate of Code Compliance from appropriate Mechanical/Plumbing Inspector.
- C. Make following submittals to Architect where items occur within specification sections:
 - 1. Proof of subcontractors' years of experience.
 - 2. Status of "accepted" installer (manufacturer licensing, certifications, etc.).
 - 3. Approval Certificates by Manufacturer.
 - 4. Reports of intermittent inspections.
 - 5. Reports from Manufacturer's Representatives.

PART 3 - EXECUTION

3.01 SUBMITTAL PROCEDURES

- A. Use these procedures to make submittals.
 - 1. Coordinate and review submittals for accuracy, completeness, and compliance with contract requirements. Indicate Contractor approval on each submittal as evidence of coordination and review.
 - 2. Shop drawings submitted without evidence of the Contractor's approval will not be reviewed.
 - 3. Where fabrication, construction or erection procedures require engineering and calculations, Contractor shall hire a Professional Engineer licensed in the State of Washington to perform these services, affix seal, and provide signature.
 - 4. Approval by the Architect shall not relieve the Contractor from responsibility for the safety of his methods or equipment or from responsibility for complying with the requirements of applicable codes and of this contract, except with respect to specifically approved variations.
 - 5. The review of drawings by the Architect or Architect's consultants is limited to general design requirements only, and shall in no way relieve the Contractor from responsibility for errors or omissions contained therein.
- B. Sequentially number the transmittal forms. Resubmittals to have original number with an alphabetic suffix. Date each submittal and resubmittal.
 - 1. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail numbers, and specification Section number, as appropriate.

2. Apply Contractor's stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
3. Schedule submittals to expedite the Project, submit electronically. Coordinate submission of related items. Include with each Submittal, early and late start for work related to submitted item, and early and late date for ordering product to meet early and late start dates. Submittal shall be rejected as incomplete without this information.
4. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
5. Provide space for Contractor and Architect review stamps.
6. Revise and resubmit submittals as required, identify all changes made since previous submittal.
7. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

C. Submittal Review:

1. The Architect will review only those items required by the Contract Documents. Information submitted by the Contractor that is not required will be returned marked "No Approval Necessary."
2. In the event a single submittal contains both required and non-required information, only the required information is subject to the Architect's review.
3. Submittals will be checked for conformance with the design concept of the project and compliance with the information given in the Contract Documents.
4. The Architect's review of drawings or data prepared by a Professional Engineer licensed in Washington will be limited to the submittal's effect on the integrity of the completed project.

3.02 ARCHITECT'S REVIEW STAMP

- A. Architect's Review Stamp bears markings and text similar to the following:
- REVIEWED
 - REVISE AND RESUBMIT
 - REJECTED

Review is performed only for the limited purpose of checking for general conformance with information given and the design concept expressed in the Contract Documents. Review does not include determining the accuracy and completeness of details such as dimensions and quantities or substantiating instructions for installation or performance of equipment or systems designed by the Contractor, all of which is the Contractor's responsibility. Review does not constitute approval of safety precautions or of construction means, methods, techniques, sequences or procedures. Review of a specific item does not constitute review of an assembly of which the item is a component.

3.03 VARIATIONS FROM CONTRACT REQUIREMENTS

- A. Variations from the Contract Drawings and Specifications shall be specifically and separately approved by the Architect.
1. Show and describe variations from the contract requirements in writing, and submit for approval in conformance with requirements of Section 01 62 00.

END OF SECTION 01 33 10

SECTION 01 33 23 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes requirements for:
1. Shop Drawings, Product Data and Samples required by the Contract Documents.
 - a. Submit Coordination Drawings as described in Section 01 31 13 in same manner as Shop Drawings.
 2. Designate in Construction Schedule the dates for submission and submittal review as described in General Conditions and as indicated in Section 01 33 10.
 3. Make submittals through Architect.
 4. Pay costs for reproduction, distribution, and materials.
- B. Related Sections:
1. Section 00 70 00 - General Conditions of the Contract
 2. Section 01 31 13 - Project Coordination: Schedule for submittals
 3. Section 01 33 10 - Submittals: Note in particular requirements for complete submittals, Article 1.04
 4. Section 01 78 39 - Project Record Documents

PART 2 - PRODUCTS

2.01 SHOP DRAWINGS

- A. General:
1. Submit Shop Drawings for fabricated and other work, as required by Specifications. Fabricate no work until Shop Drawings have been reviewed and accepted.
 2. Show by whom materials, items, work, and installation are supplied, performed, or installed. Designate every item, material article, and the like, of installations. *Do not use the expression "by others."*
 3. If Shop Drawings show variations from Contract requirements because of standard shop practices or other reason, Contractor shall make specific mention of such variations in the transmittal.
 - a. If indicated departures affect a correlated function, item, article, work, installation or construction of other trades, Contractor shall make note of it in the transmittal. Assume all extra costs involved in related changes.
 4. Clearly identify revisions on resubmittals. *Do not make revisions to previously reviewed and approved items.*
 5. If the Architect makes changes in the Shop Drawings varying from Contract and causing Contract sum deviation, notify the Architect. Do not proceed with fabrication or installation until Contractor receives written instructions or a Change Order from the Architect.
 - a. If Contractor proceeds with changes without written instructions or a Change Order, it is assumed that Contractor has accepted additional costs at own expense.
- B. Shop Drawings Requirements: Present in a clear and thorough manner.
1. Identify details by reference to sheet and detail, schedule, room numbers, or other reference shown on Contract Drawings.
 2. Do not submit freehand drawings.

3. Provide 8-1/2" x 11", 8-1/2" x 14", 11" x 17", 24" x 36".
4. Provide electronic submission to Architect.

C. Copies Required for Each Review:

1. 11" x 17" and smaller: electronic format.
2. Larger than 11" x 17": electronic format
3. Also note requirements of Section 017839, Project Record Documents.

2.02 PRODUCT DATA

A. Clearly identify on each copy, as applicable:

1. Pertinent products or models;
2. Performance characteristics and capacities;
3. Dimensions and clearances;
4. Wiring, piping diagrams, controls, and the like pertinent information.
5. Collect required data into one submittal for each unit of work or system; mark each copy to show which choices and options are applicable to project.
6. MSDSs: For each and every chemical which is known to be present in the workplace, submit Materials Safety Data Sheets (MSDSs). Attach to each copy of product data above.

B. Manufacturer's Standard Schematic Drawings and Diagrams:

1. Modify drawings and diagrams to delete inapplicable information.
2. Supplement to provide pertinent information.

C. Copies required:

1. Submit 3 copies of opaque reproductions to Architect unless otherwise indicated.
2. After reviewed product data is returned to Contractor by Architect, provide copies of reviewed product data for distribution as indicated: Assure that *Architect* receives 2 reviewed copies and *each consultant* involved in the product data review receives 1 copy.

2.03 SAMPLES

A. Submit *samples for selection* of finishes in sufficient time for review cycle.

1. Office samples shall be of sufficient size and quantity to clearly show colors, textures, and patterns.
2. Include identification on each Sample, giving full information.
3. Assure that *Architect* receives 2 reviewed copies and each consultant involved in the sample review receives 1 copy.
 - a. Reviewed Samples which may be used in the Work are indicated in the Specification section.
4. Provide field finishes at Project as required by individual Specification Section. Install sample complete and finished. Acceptable finishes in place may be retained in completed Work.

B. Submit samples of products in sufficient time for review cycle.

1. Samples are required to illustrate product's functional characteristics with integral parts and attachment devices. Coordinate submittal of different categories for interfacing work.
2. Include identification on each Sample, giving full information.
3. Assure that *Architect* receives 2 reviewed copies and each consultant involved in the sample review receives 1 copy. Reviewed Samples which may be used in the Work are indicated in

the Specification section.

2.04 INDUSTRY STANDARDS

- A. Where submittal of a standard is specified, except where included integrally with Product Data submittal, submit single copy for Architect's use.
- B. Where workmanship at Project Site and elsewhere is governed by a standard, furnish additional copies to fabricators, installers, and others involved in performance of the Work.

2.05 OTHER PERTINENT DATA, AS APPLICABLE

- A. Submit as required.
- B. Include manufacturers' installation instructions when required by the Specification section.

PART 3 - EXECUTION

3.01 SUBMISSION REQUIREMENTS

- A. Transmit each submittal to Architect with AIA Form G810, or as mutually agreed. Make notification of deviations from Contract Documents.
 - 1. *Note that submittals via fax will not be accepted.*
- B. Sequentially number the transmittal forms. Resubmittals to have original number with an alphabetic suffix.
- C. *Thoroughly review submittals prior to forwarding. Architect will perform initial review to determine if Contractor has adequately reviewed the submittal before forwarding. If not adequately reviewed, submittal will be rejected. Dates for submission and review will be subsequently revised in the Construction Schedule, with no revisions to completion date.*
- D. Include in one location on original Shop Drawings, or on 8-1/2" x 11" white paper affixed to product data and samples the following:
 - 1. Project title.
 - 2. Date.
 - 3. Architect.
 - 4. Owner.
 - 5. Contractor/Supplier/Manufacturer:
 - a. Name.
 - b. Address.
 - c. Telephone number.
 - d. Representative's name.
 - 6. Identification of product or material, as appropriate:
 - a. Detail number.
 - b. Location.
 - c. Specification Reference.
 - d. Applicable Standard.
 - e. Finishes.
 - f. Identification of deviations from Contract Documents.

7. A 4" x 5" blank space for Architects/Engineers stamp.
 8. Contractor's and applicable Subcontractors' stamps, initialed or signed, certifying review, verification of field measurements, and Contract Documents compliance. *REVIEW AND SIGNING BY CONTRACTOR AND APPLICABLE SUBCONTRACTORS REQUIRED BEFORE SUBMITTAL TO ARCHITECT.*
 9. Identification of revisions on resubmittals.
- E. Additional Information Required:
1. Relation to adjacent structure or materials.
 2. Fabrication methods, assembly, installation, accessories, fasteners, and other pertinent information.
 3. Field dimensions, clearly identified.
 4. Coordination with other trades. Stamped and signed by affected trades.
- F. Submit other pertinent data as applicable:
1. Templates to other trades.
 2. Inserts to other trades in timely fashion.

3.02 RESUBMISSION REQUIREMENTS

- A. Make any corrections or changes in the submittals required by the Architect and resubmit until accepted.
1. Revise Construction Schedule to include review time for resubmission same as for initially allowed.
- B. Shop Drawings and Product Data:
1. Revise initial drawings or data, and resubmit as specified for the initial submittal.
 2. Indicate any changes which have been made other than those requested by the Architect.
- C. Samples: Submit new samples as required for initial submittal.
- D. *If more than one resubmittal is required, Contractor shall compensate Architect and each consultant involved in the review for the time they have to spend on submittal review until submittal is accepted. Contractor will compensate Architect for each additional submittal review at Architect's and Consultants' standard hourly billing rate and expenses.*

3.03 DISTRIBUTION

- A. Distribute reproductions of Shop Drawings and copies of Product Data bearing Architect's review stamp to:
1. Job site file.
 2. Record documents file.
 3. Other concerned Contractors.
 4. Subcontractors.
 5. Suppliers and fabricators.
 6. Owner's Project Manager.
- B. Distribute samples carrying the Architect's review stamp, as directed by Architect.

3.04 ARCHITECT'S REVIEW RESPONSIBILITIES

- A. Reviewing is only for general conformance and compliance with Project design concept and Contract Documents in accordance with 00 70 00, subparagraph 4.2.7. Any action shown is subject to Contract Documents' requirements. *Contractor* is responsible for:
1. Dimensions (confirm and correlate at job site).
 2. Fabrication processes; construction techniques.
 3. Quantities, space requirements, coordination of work with that of other trades.
 4. Union jurisdiction, infringements of patent rights.
 5. Possible cause of injury to persons or property.
 6. Satisfactory performance of Contractor's work, and the like.
- B. Architect's review of separate items does not constitute review of assembly in which it functions.
- C. Submission of Materials Safety Data Sheets (MSDSs) is for Architect's information and use and will not be reviewed for completeness or appropriateness for use on project site.

END OF SECTION 01 33 23

SECTION 01 41 00 - REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes but is not limited to following:
 - 1. Comply with laws, ordinances, rules, regulations and lawful orders as required and in conformance with Contract Documents. Keep building department, fire department, and other authorities completely informed of changes in the work in a timely manner. This includes contract modifications, amendments, additions, shop drawings, and the like, current as of Project Manual date.
 - 2. Gain approvals as required for Owner occupancy within contract scheduling requirements.
 - 3. Make adjustments and modifications as required to conform to ordinances, and regulations.
- B. Related Sections:
 - 1. Section 00 70 00 - General Conditions of the Contract
 - 2. Section 00 72 00 - Supplemental Conditions
 - 3. Section 01 57 19 - Environmental Controls

1.02 COMPLIANCE REQUIREMENTS

- A. Referenced codes establish minimum requirement levels. Where provisions of various codes or standards conflict, the more stringent provisions govern. Promptly submit to Architect written notice of observed contract document variations from legal requirements.
- B. Compliance requirements include, but are not limited to following:
 - 1. 2018 International Building Code (IBC), with Lakewood Amendments.
 - 2. 2018 International Mechanical Code, with Lakewood Amendments.
 - 3. 2018 International Fire Code, with Lakewood Amendments.
 - 4. 2018 Washington State Energy Code (WSEC), with Lakewood Amendments.
 - 5. Accessibility:
 - a. ICC/ANSI A117.1-2009 Accessible and Usable Buildings and Facilities - as Code Alternate.
 - b. US Department of Justice, Americans with Disabilities Architectural Guidelines (ADAAGs), 2010 edition.
 - c. 2018 IBC with Lakewood Amendments.
 - 6. National Fire Protection Association (NFPA) Codes including, but not limited to the following:
 - a. NFPA 10-2002 Standard for Portable Fire Extinguishers.
 - b. NFPA 13-2002, Standard for the Installation of Sprinkler Systems.
 - c. NFPA 80-1999, Standard for Fire Doors and Windows.
 - d. NFPA 101-2006, The Life Safety Code.
 - 7. State of Washington, WAC Chapter 296-24, General Safety and Health Standards, Washington Industrial Safety and Health Act (WISHA).
 - 8. State of Washington, WAC Chapter 296-305-06501, Safety Standards for Fire Fighters.
 - 9. Rules and Regulations of the State Board of Health.
 - 10. Department of Labor and Industries (L&I) Regulations: Hazard Communication Standards (MSDS), WAC 296-62-054 through WAC 296-62-05427.

11. State of Washington, WAC Chapter 51-13, Ventilation and Indoor Air Quality, current adopted edition.
 12. Environmental Requirements: Relevant statutes and regulations dealing with prevention of environmental pollution and preservation of public natural resources.
 - a. Washington State Department of Ecology: Emission Standards and Controls for Sources Emitting Volatile Organic Compounds (VOC), WAC 173-490, 2/2/1998 edition, or current adopted edition.
 - b. United States Environmental Protection Agency, National Volatile Organic Compound Emissions standards for Architectural Coatings, Federal Register/Vol. 63, No. 176/September 11, 1998/Rules and Regulations, Final Rule.
 - c. Puget Sound Clean Air Agency (PSCAA).
 13. City of Lakewood Municipal Code.
- C. Specifications of Higher Standards: Drawings and Specifications govern whenever Drawings and Specifications require higher standards than are required by governing codes, regulations, and the like.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 41 00

SECTION 01 51 00-TEMPORARY UTILITIES AND FACILITIES

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Furnish, install, maintain and protect temporary utilities required for construction. Include installation of extensions and branching, as required.
 - a. Temporary utilities shall be safe, non-hazardous, and sanitary. They are to be protective of persons and property, and be free of deleterious effects.
2. Remove temporary utilities after completion of work.
3. Interface temporary utilities with each phase of construction as required.
4. Coordinate utility shutdowns with Owner.
5. Parking.
6. Staging and laydown area.
7. Deliveries.

B. Related Sections:

1. Section 01 52 13 - Field Offices and Sheds
2. Section 01 54 00 - Construction Aids
3. Section 01 56 00 - Temporary Barriers and Enclosures
4. Section 01 57 00 - Temporary Controls
5. Mechanical and Electrical Divisions.

1.02 REFERENCES AND STANDARDS

A. Applicable provisions of the following standards shall apply to the work of this Section, except as modified herein, and are hereby made a part of these Specifications to the extent required:

ANSI A10.3-95	Safety Requirements for Power Actuated Fastening Systems
ANSI A10.4-94	Safety Requirements for Personnel Hoists
ANSI A10.5-92	Safety Requirements for Material Hoists
ANSI A10.6-90(R 1998)	Requirements for Demolition Safety
ANSI A10.7-98	Commercial Explosives and Blasting Agents - Safety Requirements for Transportation, Storage, Handling and Use
ANSI A10.8-01	Safety Requirements for Scaffolding
ANSI A10.9-97	Concrete and Masonry Work Safety Requirements
ANSI A10.10-90(R 1998)	Safety Requirements for Temporary and Portable Space Heating Devices and Equipment
ANSI A10.11-89(R1998)	Safety Requirements for Safety Nets
ANSI A10.12-98	Safety Requirements for Excavation
ANSI A10.13-01	Safety Requirements for Steel Erection
ANSI A10.14-91	Construction and Demolition Operations - Requirements for Safety Belts, Harnesses, Lanyards, and Lifelines for Construction and Demolition Use
ANSI A10.15-95	Safety Requirements for Dredging
ANSI A10.17-97	Safe Operating Practices for Hot Mix Asphalt (HMA) Construction
ANSI A10.18-96	Safety Requirements for Temporary Floors; Hole, Wall

ANSI A10.22-90(R 1998)	Openings, Stairways and Other Unprotected Edges in Construction and Demolition Operations Safety Requirements for Rope-Guided and Non-Guided Worker's Hoists
NFPA 241-2000	Safeguarding Construction, Alteration, and Demolition Operations

1.03 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies: See Section 014100 for referenced codes, ordinances, and the like, and comply with the following:
 - 1. Rules and recommendations of utility companies.
 - 2. Applicable local industry standards for construction work (published recommendations by local "building councils").
 - 3. Applicable provisions of ANSI-Series standards on construction safety, including A10.3, A10.4, A10.5, A10.6, A10.7, A10.8, A10.9, A10.10, A10.11, A10.12, A10.13, A10.14, A10.15, A10.17, A10.18, A10.20, and A10.22.
 - 4. NFPA 241.
 - 5. Conserving Energy Material: Install and operate temporary facilities and perform construction activities in manner to conserve and avoid waste of materials, energy, and water.
 - 6. OSHA.
 - 7. Local agencies and Fire Department as applicable.

PART 2 - PRODUCTS

2.01 TEMPORARY SERVICES

- A. General: Required services include, but are not limited to water, electrical power, heating and ventilating, and telephones. Comply with service companies' recommendations for materials and methods, or engage service companies to install services. Locate and relocate services (as necessary) to minimize interference with construction operations.
- B. Materials may be new or used, but are required to be of adequate capacity for usage. Do not use materials constituting unsafe conditions, or that violate applicable codes and standards.
- C. Interface temporary utilities with each phase of construction as required.

2.02 TEMPORARY ELECTRICITY AND LIGHTING

- A. Size to provide service required for power and lighting.
- B. Furnish, install and maintain circuit and branch wiring, with area distribution boxes located so that electricity is available for power and lighting throughout the construction by the use of construction type power cords. Install and maintain temporary equipment in accordance with applicable safety regulations.
- C. Provide adequate artificial lighting for:
 - 1. work areas where natural light is not adequate for work;
 - 2. areas of public access; and for:
 - 3. security/night-time illumination.

2.03 TEMPORARY HEAT AND VENTILATION

- A. Provide temporary heat and ventilation required to:
 - 1. maintain adequate environmental conditions facilitating work progress;
 - 2. maintain minimum ambient temperature of 50° F, in areas where construction is in progress, unless indicated otherwise in specifications.
- B. Provide adequate forced ventilation of enclosed areas to:
 - 1. disperse humidity; and
 - 2. prevent hazardous accumulations of dust, fumes, vapors, and gases.
- C. Portable heaters: Use standard approved units complete with controls.
- D. Pay for power or other fuels {propane, and the like) used.
- E. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.

2.04 TEMPORARY TELEPHONE/FAX SERVICE/E-MAIL

- A. At start of site Work, arrange with local telephone service company as necessary.
- B. Pay costs for installations, maintenance, and removals.
 - 1. Pay service charges for local calls.
 - 2. Require toll charges to be paid by party placing call.

2.05 TEMPORARY WATER

- A. Provide water for construction purposes.
 - 1. Install branch piping as required for construction; include appropriate pressure- reducing stations. Locate taps so water is available throughout the Project by use of hoses. Protect piping and fittings against freezing.
- B. Provide drinking water from a proven safe source for all those connected with the Work. Pipe or transport water in such a manner as to keep it clean and fresh. Serve in single service containers or sanitary drinking fountains.

2.06 TEMPORARY SANITARY FACILITIES

- A. Coordinate with Owner's Site Development/Foundation Contractor for shared, temporary use of sanitary facilities or arrange and pay costs for installation, maintenance, and removal of temporary sanitary facilities.

2.07 TEMPORARY FIRE PROTECTION

- A. Comply with governing laws, codes, and regulations to maintain required protection at all times. Include proper and adequate back up protection during any "shut-down" of normal protection systems.

- B. Conduct operations in a manner that is fire-safe for the work area and adjacent areas. Proper fire extinguishers shall be provided, identified, and maintained. The premise shall be maintained, clear of rubber, debris, or other material constituting a potential fire hazard.
 - 1. All contractors shall have personnel trained in fire prevention and emergency action.
 - 2. Use only flame-proof tarpaulins.
 - 3. Use welding and flame cutting equipment only in the presence of a designated user of fire protection equipment.
 - 4. Fire extinguishers for use by personnel at sites: Provide types, sizes, numbers, and locations to be effective in early stage extinguishing.
- C. *Pay costs for installations, maintenance, and removals.*

2.08 SITE ACCESS FOR PARKING, STAGING, LAYDOWN, DELIVERIES

- A. Limited site parking will be available to the Contractor for temporary use during erection and installation.
- B. Limited areas will be available to the Contractor for temporary staging, laydown, and deliveries during erection and installation. Contractor is not to block driveways or otherwise interfere with ongoing work by Owner's Site Development/Foundation Contractor. Coordinate specific requirements with Architect prior to delivery.

2.09 FENCING AND SECURITY

- A. Contractor to provide temporary security fencing or other protection measures, as required to secure modular building and surrounding area during erection/installation and completion of modular building.

PART 3 - EXECUTION

3.01 GENERAL

- A. Maintain, operate, modify, and extend systems as work progress requires. Assure continuous services. Verify termination/removals with Architect.
- B. Protect storm/landscape drains by using filter fabrics or other means acceptable for local requirements.

3.02 REMOVAL

- A. Completely remove temporary materials and equipment when no longer required.
 - 1. Remove temporary above grade or buried utilities, equipment, facilities, materials, prior to Final Application for Payment inspection.
 - 2. Clean and repair damage to site or site improvements caused by temporary installations and use of temporary facilities. Restore permanent facilities used during construction to specified condition.
 - 3. Disinfect premises occupied by temporary sanitary facilities.
 - 4. Replace used air filters in air systems used for temporary heat and ventilation.
- B. Prior to Final Inspections, remove temporary lamps and install new lamps unless otherwise

Demolition Bid Set
January 3, 2024

LAKESWOOD LIBRARY DEMOLITION
SECTION 01 51 00
TEMPORARY UTILITIES AND FACILITIES

specified/Division 34, Electrical.

END OF SECTION 01 51 00

SECTION 01 56 00 - TEMPORARY BARRIERS AND ENCLOSURES

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Prevent injury to persons, including from traffic.
2. Protect the work from Construction operations.
3. Prevent public entry.
4. Protect adjacent properties, structures, and utilities.
5. Remove barriers at completion of the Work, or when no longer needed.

B. Related Sections:

1. Section 00 70 00 - General Conditions of the Contract
2. Section 01 31 19 - Project Meetings

1.02 QUALITY ASSURANCE

- A. Regulatory Requirements:** See Section 014100 for federal, state, city, and other local codes and regulations, as applicable. Comply with the most stringent requirements.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Materials may be new or used. They are to be suitable for intended purposes, reasonably clean, and uniform in appearance. They must not violate requirements of governing codes and standards.**

2.02 GENERAL CONSTRUCTION FENCING

- A. Chain link fencing per City of Lakewood and Owner requirements.**

2.03 BARRIERS AND OTHER PROTECTIVE DEVICES

- A. Choose any allowed appropriate material, as suitable for required purposes.**

PART 3 - EXECUTION

3.01 GENERAL

- A. Install barriers neatly, reasonably uniform, and structurally adequate for required purpose. Maintain barriers as long as required. Relocate barriers as required by construction progress.**

3.02 CONSTRUCTION FENCES

- A. Prior to start of on-site work and at earliest reasonable date, install enclosure fence in location to suit Site Development/Foundation Contractor and Owner requirements.**

3.03 BARRIERS AND OTHER PROTECTIVE DEVICES

- A. Provide and install as required and necessary.
 - 1. Contractor's equipment located on sidewalks or other pedestrian ways shall be suitably barricaded for cane detection as a warning for sight impaired persons. Barricade shall include a horizontal member at a maximum of two feet above the walking surface, pedestrian traffic will be diverted with appropriate signs, barricades, fences, and the like from any area where contractor equipment or operations may pose a threat to the safety and health of staff, students and visitors.
 - 2. Use certified flaggers.
 - 3. Maintain barriers in safe and secure condition for duration of their need.

3.04 REMOVAL

- A. Completely remove specified facilities including foundations, when no longer needed. Clean areas as required at installations.
- B. Clean and repair damage caused by installations. Perform any necessary filling and grading to make work conform to required construction finish elevations and slopes. Patch holes in pavement to match existing where fence posts have been removed.

END OF SECTION 01 56 00

SECTION 01 56 36 - SECURITY

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Protect Work, stored products, and construction equipment from theft and vandalism; and:
2. Protect modular building during site erection/installation from entry by unauthorized persons.

B. Related Sections:

1. Section 01 31 19 - Project Meetings
2. Section 01 51 00 - Temporary Utilities and Facilities
3. Section 01 57 00 - Temporary Controls
4. Section 01 61 00 - Product Requirements

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 MAINTENANCE OF SECURITY

- A. Provide adequate security to protect the building and work site from unauthorized entry. The Contractor is solely responsible for any theft, damage, or injury caused by a breach of such security.
- B. Initiate security program promptly after job mobilization, when enclosure fence, gates, and temporary enclosures are installed.
- C. Maintain security program throughout construction period, until Owner occupancy or Owner acceptance precludes the need for contractor security.

3.02 PERSONNEL

- A. Exclude from building any personnel not authorized and properly identified.

3.03 ENTRANCE CONTROL

- A. Provide control of persons and vehicles entering and leaving modular fabrication area and site areas.
- B. Allow entrance only to authorized persons with proper identifications.

3.04 SECURITY SERVICE

- A. Contractor may employ a recognized patrol/guard service to provide a watchman service, at times of day or night when general construction work is not in progress.

END OF SECTION 01 56 36

SECTION 015700 - TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Provide and maintain controls using methods, equipment, and temporary construction.
2. Protect against unfavorable conditions over environmental and other factory and site conditions and related areas under your management. Remove physical evidence of temporary control facilities at completion of Work.
3. Protect adjacent buildings and sitework outside of project area.
4. Coordinate with project phasing.
5. Protect existing utilities to remain both on-site and off-site.
6. Include control provisions for:
 - a. Dust
 - b. Water
 - c. Debris: Disposal management requirements are specified in Section 01 74 19.
 - d. Pollution
 - e. Erosion and sediment
 - f. Protection of work
 - g. Noise
 - h. Fumes (i.e., paints and coatings, exhausts)
 - i. Others, as required
7. Ensure compliance with regulations governing the site and vicinity. Designate one person - the Construction Superintendent, or other to enforce provisions preventing:
 - a. Air, water, and soil pollution.
 - b. Waste generation.
 - c. Other irritating, harmful effects.

B. Related Sections:

1. Section 01 11 00 - Summary of Work: Work sequence, Contractor's use of premises
2. Section 01 51 00 - Temporary Utilities and Facilities
3. Section 01 57 19 - Environmental Controls
4. Section 01 71 29 - Cutting and Patching
5. Section 01 74 19 - Construction Waste and Disposal Management
6. Section 01 74 23 - Final Cleaning

1.02 QUALITY ASSURANCE

- ##### A. Requirements of Regulatory Agencies: See Section 01 41 00 for referenced Codes, ordinances and the like.
1. Where applicable, conform to requirements of state and local air pollution control agency, and other authorities' rules and regulations.
 2. Comply with applicable authorities' requirements including those of local utility companies.

1.03 DUST CONTROL

- ##### A. Provide positive methods and apply dust control materials to minimize raising dust from construction operations. Prevent air-borne dust from dispersing into adjacent facilities and the

atmosphere.

- B. Block out and/or cover HVAC ducts, enclosures, voids and the like during construction to ensure no dust or fume accumulation.

1.04 WATER CONTROL

- A. Provide methods to control rain water during site erection/installation of prefabricated building until downspouts are permanently connected to stormwater systems. Prevent damage to prefabricated building and adjoining properties.
- B. Control site installation activities to direct surface drainage away from construction areas, and to direct drainage to proper runoff. Maintain excavations free of water.
- C. Provide, operate, and maintain hydraulic equipment of adequate capacity to control water.
- D. Dispose of drainage water in a manner to prevent flooding, and other damage to any portion of the building, site or adjoining properties.

1.05 POLLUTION CONTROL

- A. In accordance with Section 01 57 19, and following:
 - 1. Provide methods, means, and facilities required to prevent contamination of soil, water, or atmosphere. Allow no discharge of noxious substances or fumes from construction operations.
 - 2. Provide equipment and personnel; perform emergency measures required to contain spillages. Remove contaminated soils and liquids.
 - a. Excavate and dispose of earth contaminated by contractor operations off-site in compliance with laws and regulations.
 - b. Replace with suitable compacted fill and topsoil. Provide Owner with receipt of soil acceptability prior to installation.
 - 3. Take special measures to prevent harmful substances from entering public waters.
 - a. Prevent disposal of wastes, effluents, chemicals, or other such substances in or adjacent to bodies of water, or in sanitary or storm sewers.
 - 4. Provide systems for control of atmospheric pollutants in accordance with federal, state, and local published rules and regulations.
 - a. Prevent toxic concentrations of chemicals.
 - b. Prevent harmful dispersal of pollutants into the atmosphere or building HVAC system in the adjacent surrounding buildings.

1.06 EROSION AND SEDIMENT CONTROL

- A. Provide temporary protection of erodible soils during site erection/installation of prefabricated building until downspouts are permanently connected to stormwater systems and installation crews have demobilized from site. Employ methods as may be necessary to effectively prevent erosion and control sedimentation.
- B. Mechanically retard and control runoff rate. This includes construction of diversion ditches, benches, and berms to retard and divert runoff to protected drainage courses.

- C. Temporary erosion and siltation control work shall conform to the local and state requirements except costs for the work shall be considered incidental to and included in the contract.
- D. Periodically inspect earthwork to detect any evidence of the start of erosion, apply corrective measures as required to control erosion.

1.07 PROTECTION OF WORK DURING SITE ERECTION/INSTALLATION/COMPLETION

- A. Provide temporary protection measures for roof seams and other openings in walls or roof during transportation to site, during erection/installation of prefabricated components on site and for all other activities associated with project.
- B. Provide temporary protection for installed products during final completion on site. Control traffic in immediate area to minimize damage.
 - 1. Prohibit traffic or storage upon waterproofed or roofed surfaces.

1.08 REMOVAL

- A. Remove temporary materials, equipment, services, and construction when Architect authorizes.
 - 1. Clean and repair damage caused by installations and use of temporary facilities. Remove temporary control installations. Restore existing facilities used during construction to specified, or to original, condition.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 57 00

SECTION 01 57 19 - ENVIRONMENTAL CONTROLS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes

1. Familiarity with Laws and Ordinances:
 - a. Abide by the following laws and ordinances where and if applicable to this Project.
 - b. Pay fines and penalties resulting from the Contractor's failure to comply with the Federal, State, and local pollution control regulations set forth herein.
 - c. Costs involved with these preventive measures shall be considered as incidental to the construction of this Project and shall be included in the contract price for the various items which comprise this Contract.
2. Environmental protection.

B. Section Includes:

1. Section 01 57 00 - Temporary Controls
2. Section 01 57 20 - Indoor Air Quality
3. Section 01 57 30 - Noise Control
4. Section 01 74 13 - Cleaning

1.02 AIR POLLUTION

- A. Maintain air quality within the National Emission Standards for Hazardous Air Pollutants. Air pollutants being defined as that to which no ambient air quality standard is applicable and which in the judgment of the Administrator of the Environmental Protection Agency Clean Air Act may cause, or contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness.
- B. Comply with local standards and regulations, as applicable.

1.03 WATER POLLUTION CONTROL

- A. In order to effectively control water pollution, erosion and related damage, the Contractor will be expected to perform work of a temporary nature.
- B. Comply with local standards and regulations, as applicable.

1.04 NOISE POLLUTION

- A. Pursuant to the EPA Noise Control Act of 1972, conduct the Work within the noise limits specified as follows:
 1. Section 1(a): For the purposes of this ordinance, "allowable level of noise" means not more than ninety five (95) decibels as measured on the "A" scale of a General Radio Company #1551-B sound level meter, or equivalent, stationed at a distance of not less than twenty (20) feet to the side of a motor vehicle as such motor vehicle passes the sound level meter, or is stationed not less than twenty (20) feet from a stationary motor or engine, horn, whistle,

amplifier, tool or other object being tested.

- B. Comply with local standards and regulations, as applicable.

1.05 ENVIRONMENTAL PROTECTION

- A. Contractor is encouraged to use environmentally friendly products, such that are made of recycled materials and use less of natural resources; and methods and procedures that are energy efficient and non-polluting.
- B. Whenever possible, recycle construction waste and demolition debris. Process recycling on site where possible, or sort debris for off-site recycling. Comply with local standards and regulations, as applicable.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 57 19

SECTION 01 57 30- NOISE CONTROL

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Conduct work, use appropriate construction methods and equipment, and furnish and install acoustical barriers as necessary, so that no noise emanating from the process or any related tool or equipment will exceed noise levels as indicated.

B. Related Sections:

1. Section 01 57 00 - Temporary Controls
2. Section 01 57 19 - Environmental Controls

1.02 INTENT

- A. The purpose of this specification is to keep the level of construction noise inside adjacent buildings from exceeding a dBA 55 curve {with windows closed} during normal working hours. Night time activities, if any, should be quiet.

1.03 SUBMITTALS

- A. Mitigation of Construction Noise Impact: Submit to the Owner proposed plans to mitigate the construction noise impacts and to comply with the noise criteria specified herein, including the method of construction, the equipment to be used, and acoustical treatments if necessary.

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements: Noise control regulations as currently amended.

1.05 SEQUENCING/SCHEDULING

- A. Restrict construction noise to hours and magnitudes indicated by the Lakewood Municipal Code.
- B. Construction activities occurring during other hours shall be quiet. "Quiet" is defined as sound not exceeding existing ambient noise or 45 dBA, whichever is lowest.
1. Request permission by Owner to exceed "quiet" during any of these hours. Submit written request not less than one week in advance to allow Owner time to coordinate and notify neighbors. State reason for request.
 2. Notify and obtain prior approval from the City of Lakewood prior to beginning unusually noisy procedures.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 NOISE CONTROL

- A. Conform to noise control regulations. Be familiar with applicable laws and ordinances.
 - 1. General: Equipment that can be electrically driven instead of gas or diesel is preferred. If noise levels on any gear cannot reasonably be brought down to criteria, do not use that gear. Conformance to this specification shall be included in the Contract price and no compensation will be allowed for special equipment, overtime, and the like that may be required.
 - 2. Outdoor Vehicle and Internal Combustion Engine Noise: Noise level of each piece of equipment shall not be greater than 86 dBA at a distance of 50 feet as measured under noisiest operating conditions. Rubber-tired equipment will be used whenever possible instead of equipment with metal tracks. Mufflers for stationary engines shall be hospital area quality of silencing.
 - 3. Air compressors: Equip with silencing packages. Electric driven are required.
 - 4. Jack Hammers and Roto Hammers: May be used if permitted by the Owner. Use core-drilling or saw cutting equipment. Time of use subject to approval by Owner.

END OF SECTION 01 57 30

SECTION 01 62 00-SUBSTITUTIONS AND PRODUCT OPTIONS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Furnish and install Products specified, under options and conditions for substitutions stated in this Section.
 - 2. Substitutions will not be considered during construction if:
 - a. They are indicated or implied on Shop Drawings or other Project data submittals, without proper notice shown on attached form;
 - b. They are requested directly by a subcontractor or supplier;
 - c. Acceptance will require substantial revisions of Contract Documents.
- B. Related Sections:
 - 1. Section 00 70 00 - General Conditions of the Contract
 - 2. Section 01 33 23 - Shop Drawings, Product Data and Samples
 - 3. Section 01 61 00 - Product Requirements

1.02 PRODUCTS

- A. Where specified only by reference standards, select any product meeting standards by any manufacturer.
- B. Where specified by naming several products or manufacturers, select any product and manufacturer named. Other products and manufacturers will not be considered.
- C. Where specified by naming one or more products, but indicating "or accepted" or similar terminology after specified listing, submit any request for another product substitution on attached form in conformance with Article 1.03, Substitutions, below.
- D. Where specified by naming only one product and manufacturer, followed by words indicating that no substitution is permitted, there is no option, and no substitution will be allowed.

1.03 SUBSTITUTIONS

- A. General: Contractor will evaluate all substitution requests and make recommendations before submitting to Owner and Architect.
- B. Substitution Requests Prior to Bid Opening: As required, submit written substitution requests (on form provided) to Architect.
 - 1. Electronic submission to kate@buildingwork.design
 - 2. Time/submitted in order to be received in Architect's office: Not later than 10 days prior to bid opening. Request received after this date will not be considered.
 - 3. Submittals received with less than required days for review or with incorrect form may be rejected.
- C. After Contract date, Owner and Architect may, at their option, consider certain other substitutions submitted in accordance with requirements of this Section.

1. Substitution requests must be made within the first 20 days after Notice to Proceed.
2. Allow not less than 10 days for Architect's consideration of product substitution in addition to time required for submittal review in accordance with Section 01 33 23.
3. As required, submit written substitution requests (on form provided) to Architect: 3 copies/each of product submission.

D. Indicate one or more of following reasons for request:

1. Substitution is required for compliance with final Code interpretation requirements, or insurance regulations.
2. Specified product is unavailable through no fault of Contractor or subcontractor.
3. Subsequent information discloses specified product unable to perform properly or fit designated space.
4. Manufacturer or fabricator refuses to certify or guarantee performance of specified product, as required.
5. Substitution provides significant benefit to the Owner by saving substantial cost, time or other considerations. (Show accurate cost data on proposed substitution in comparison with product or method specified.)

E. In making request for Substitution, manufacturer/ Contractor represents:

1. Contractor has personally investigated proposed product, and in his/her opinion, it is equal or superior in all respects to that specified.
2. Contractor will coordinate installation of accepted substitution and guarantees to complete it in all respects.
 - a. Contractor has outlined any changes required in accordance with form.
3. Contractor will provide the same guarantee for Substitution as for specified product.
4. Contractor waives all claims for additional costs related to Substitution which consequently become apparent.
5. Cost data is complete and includes related costs under his/her Contract, but excludes:
 - a. Cost under separate Contracts. (Show impact on attached form.)
6. Where substitution(s) affect(s) the system design (as determined by the Architect) the Contractor has included in his/her cost data a credit to the Owner of the amount necessary for the Architect to revise the contract documents and/or record drawings.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

NOTE: SUBSTITUTION REQUEST FORM FOLLOWS.

SUBSTITUTION REQUEST FORM

TO: BuildingWork
159 Western Ave West
Suite 486
Seattle, WA 98119
Attn: Kate Weiland
kate@buildingwork.design

PROJECT NAME: PCLS Lakewood Library Demolition
Lakewood, Washington

CONTRACTOR:

We hereby submit for consideration, the following product instead of specified item for above project:

SECTION	PARAGRAPH	SPECIFIED ITEM
---------	-----------	----------------

Proposed substitution: _____

Attach complete dimensional information and technical data in conformance with Sections 01 33 10 and 01 33 23, including laboratory tests, if applicable.

Include complete information on changes to Drawings and Specifications which proposed substitution will require for its proper installation.

Submit with request all necessary samples and substantiating data to prove equal quality, performance, and appearance to that specified. Clearly mark manufacturer's literature to indicate equality in performance. Indicate differences in quality of materials and construction.

Fill in Blanks Below:

A. Does the substitution affect dimensions shown on Drawings?
Yes _____ No _____ If yes, clearly indicate changes. _____

B. The Undersigned agrees to pay for changes to the building design and Architect's review time, including engineering and detailing costs caused by the requested substitution.

C. What affect does substitution have on other trades, other Contracts, and Contract completion date?

D. What affect does substitution have on applicable code requirements?

-

E. Difference between proposed substitution and specified item? _____

F. Manufacturer's guarantees of the proposed and specified items are:
_____ Same _____ Different
(explain) _____

G. List of names and addresses of 3 similar projects on which product was used, date of installation, and Architect's name and address:

1. _____
2. _____
3. _____

Cost impact: _____

CERTIFICATION OF EQUAL PERFORMANCE AND ASSUMPTION OF LIABILITY FOR EQUAL PERFORMANCE

The Undersigned attests function and quality equal or superior to specified items.

Signature must be by person having authority to legally bind his/her firm to the above terms. Failure to provide legally binding signature will result in retraction of acceptance.

Submitted By:

Signature Address

PRINTED NAME AND TITLE

Firm Telephone

Date

For Use by Architect:

_____ Accepted _____ Accepted as Noted
_____ Not Accepted _____ Received Too Late

By _____ Date _____

Remarks _____

END OF FORM

END OF SECTION 01 62 00

SECTION 01 71 29 - CUTTING AND PATCHING

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Provide cutting, fitting, and patching including attendant excavation and backfill, required to complete the Work, and to:
 - a. make its several parts fit together properly;
 - b. uncover portions of the Work to provide for installation of any ill-timed work;
 - c. remove and replace defective work;
 - d. remove and replace work not conforming to requirements of Contract Documents;
 - e. remove samples of installed work as specified for testing;
 - f. provide routine penetrations of non-structural surfaces for installation of piping, duct work and electrical conduit;
2. For additional requirements for cutting and patching, see respective Specifications Sections.

B. Related Sections:

1. Section 00 70 00 - General Conditions of the Contract:
2. Section 01 61 00 - Product Requirements
3. Individual Specification Sections: Cutting and patching, incidental to work of those Sections.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Comply with Specifications and standards for each applicable product.
- B. Product Substitution: For any proposed change in materials, submit request for substitution under provisions of Sections 01 61 00 and 01 62 00.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Inspect elements subject to damage or movement during cutting and patching.
- B. After uncovering work, inspect conditions affecting product installations and work performance.
- C. Submit written reports to Owner and Architect of unsatisfactory work or questionable conditions. Do not proceed with work until Owner issues further instructions.

3.02 PREPARATION

- A. Provide adequate temporary support as necessary to assure structural integrity of affected work portion.
- B. Provide devices and methods protecting other portions of project from damage.

- C. Provide protection from elements for work exposed by cutting and patching.

3.03 CUTTING

- A. Execute cutting and removals by methods preventing damage to other work. Use core drilling equipment and diamond saws for cutting required openings in concrete and masonry. Do not overcut corners. (Do not use hammering and chopping tools.) Provide proper surfaces to receive repairs.
- B. Execute any required excavating and backfilling by methods preventing settlement or damage to other work.
- C. Uncover work to install improperly sequenced work.
- D. Remove and replace defective or non-conforming work.
- E. Remove samples of installed work for testing when requested.
- F. Provide openings in the work for penetration of mechanical and electrical work.
- G. Employ a "Specialist" as defined in Section 01 11 50 to perform cutting and patching for:
 - 1. sight-exposed finished surfaces; and
 - 2. weather-exposed and moisture-resistant elements.
 - 3. Employ original installer to perform cutting and patching of newly installed materials.
- H. Execute fitting and adjustment of products to provide finished installations complying with specified products, functions, tolerances, and finishes.
- I. Restore work cut or removed. Install new products as required to complete work in accordance with Contract Documents.
- J. Cutting shall be done wet whenever possible. Take precautions to protect workers and public from dust.

3.04 PATCHING

- A. Execute patching to complement adjacent work.
- B. Fit products together to integrate with other work.
- C. Execute work by methods to avoid damage to other work, and which will provide appropriate surfaces to receive patching and finishing.
- D. Employ a "Specialist" as defined in Section 01 11 50, experienced in restoration projects to perform patching for:
 - 1. sight-exposed finished surfaces;
 - 2. weather-exposed and moisture-resistant elements;
 - 3. at penetrations of waterproof membranes, such as test areas.
 - 4. Employ original installer to perform cutting and patching of newly installed materials.

- E. Restore work with new products in accordance with requirements of Contract Documents.
- F. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- G. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 84 00, to full thickness of the penetrated element.
- H. Refinish entire surfaces as necessary to provide even finish matching adjacent finishes.
 - 1. For continuous surfaces, refinish to nearest intersection.
 - 2. For an assembly, refinish the entire unit.

END OF SECTION 01 71 29

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Control waste generation and reuse, salvage or recycle materials as much as economically feasible and consistent with the intent of RCW 39.04.135.
 - 2. Develop a Waste Management Plan for this project.
- B. Related Sections:
 - 1. Section 01 74 23 - Cleaning

1.02 DEFINITIONS

- A. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals and inorganic wastes.
- B. Class III Landfill: A landfill that accepts non-hazardous waste such as household, commercial and industrial waste, including construction, remodeling, repair and demolition operations.
- C. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- D. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- E. Environmental Pollution and Damage: The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humanity; or degrade the utility of the environment for aesthetic, cultural or historical purposes.
- F. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- G. Inert Fill: A permitted facility that accepts inert waste such as asphalt and concrete exclusively.
 - 1. Inert Solids/ Inert Waste: Non-liquid solid waste including, but not limited to, soil and concrete, that does not contain hazardous waste or soluble pollutants at concentrations in excess of water-quality objectives established by a regional water board pursuant to local regulations and does not contain significant quantities of decomposable solid waste.
- H. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- I. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- J. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.

- K. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.
- L. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- M. Return: To give back reusable items or unused products to vendors for credit.
- N. Reuse: To reuse a construction waste material in some manner on the project site.
- O. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- P. Sanitary Wastes:
 - 1. Garbage: Refuse and scraps resulting from preparation, cooking, distribution or consumption of food.
 - 2. Sewage: Domestic sanitary sewage.
- Q. Sediment: Soil and other debris that has been eroded and transported by storm or well production runoff water.
- R. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- S. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- T. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- U. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

1.03 SYSTEM DESCRIPTION

- A. Landfill Alternatives:
 - 1. An analysis of trash/waste to be generated and landfill options as specified for Waste Management Plan described below.
 - 2. Describe as many alternatives to landfilling as possible.
 - a. List each material proposed to be salvaged, reused, or recycled during the course of the Project.
 - b. Estimate quantities for each waste stream.
 - c. State the proposed recycle or disposal method for each waste stream.
 - d. State on-site storage method for each waste stream.
 - e. State transportation method for each waste stream.
 - f. State the estimated net cost resulting from each alternative, after subtracting revenue from sale of recycled or salvaged materials and landfill tipping fees saved due to diversion of materials from the landfill.
 - 3. Provide alternatives to landfilling for at least the following materials:
 - a. Aluminum and plastic beverage containers.

- b. Corrugated cardboard.
 - c. Wood pallets.
 - d. Clean dimensional wood: May be used as blocking or furring.
 - e. Metals, including packaging banding, metal studs and trim, ductwork, piping, sheet metal, structural steel, reinforcing bars, door frames, and other items made of steel, iron, galvanized steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - f. Glass.
 - g. Gypsum drywall and plaster.
 - h. Carpet, carpet cushion, carpet tile, and carpet remnants, both new and removed: DuPont {<http://flooring.dupont.com>) and Interface {www.interfaceinc.com) conduct reclamation programs.
 - i. Paint.
 - j. Plastic sheeting.
 - k. Rigid foam insulation.
 - l. Plumbing fixtures.
 - m. Mechanical and electrical equipment.
 - n. Fluorescent lamps {light bulbs}.
 - o. Acoustical ceiling tile and panels.
4. Include the names for each subcontractor who will transport solid or hazardous waste from the site and the name of the receiving facility that will accept waste for disposal.
- B. Waste Management Plan:
1. Analysis of the trash and waste projected to be generated during the entire project construction cycle, including types and quantities.
 2. Landfill Options: The name, address, and telephone number of the landfill(s) where trash/waste will be disposed of, the applicable landfill tipping fee(s), and the projected cost of disposing of project trash/waste in the landfill(s).
 3. Landfill Alternatives: List waste materials that will be diverted from landfills by reuse, salvage, or recycling.
 - a. List each material proposed to be salvaged, reused, or recycled.
 - b. List the local market for each material.
 - c. State the estimated net cost, versus landfill disposal.
 4. Meetings: Describe regular meetings to be held to address waste prevention, reduction, recycling, salvage, reuse, and disposal.
 5. Materials Handling Procedures: Describe the means by which materials to be diverted from landfills will be protected from contamination and prepared for acceptance by designated facilities; include separation procedures for recyclables, storage, and packaging.
 6. Transportation: Identify the destination and means of transportation of materials to be recycled; i.e. whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler.
- C. Implementation:
1. For each material recycled, reused, or salvaged from the project, the amount (in tons or cubic yards), the date removed from the job site, the receiving party, the transportation cost, the amount of any money paid or received for the recycled or salvaged material, the net total cost or savings of salvage or recycling the material. Include manifests, weight ticket receipts or invoices.
 2. The amount (in tons or cubic yards) of material landfilled from the project, the location of the receiving facility, the total amount of tip fees paid at the landfill, and the total disposal cost. Include manifests, weight tickets, receipts and invoices.

1.04 SUBMITTALS

- A. Submit in accordance with Section 01 33 10, Submittal Procedures:
 - 1. Landfill Alternatives Proposal/Draft Waste Management Plan: Within 14 working days after receipt of Notice to Proceed, or prior to any trash or waste removal, whichever occurs first, submit to the Architect and Owner for review and approval 3 copies of a Draft Waste Management Plan projecting trash/waste that will require disposal and alternatives to landfilling, with net costs. The plan is described in Paragraph 1.03 A. above.
 - 2. Waste Management Plan: Include information as described in Paragraph 1.03 B. above.
 - 3. Implementation: Submit a monthly progress report summary of waste generated at the project. Submit the summary on a form acceptable to the Owner containing information indicated in Paragraph 1.03 C. above.

1.05 RESOURCES

- A. Contractor must meet any City of Lakewood disposal requirements.
- B. Recycling Centers and Waste Haulers: For information, contact the Department of Ecology Recycling (1-800-RECYCLE) or the Solid Waste Department of nearby Counties.

1.06 ADDITIONAL RECYCLING REQUIREMENTS

- A. Handling:
 - 1. Materials shall be free of dirt, adhesives, solvents, petroleum contamination and other substances deleterious to recycling process. Clean materials which are contaminated prior to placing in collection containers.
 - 2. Arrange for collection by or delivery to the appropriate recycling center or transfer station that accepts construction and demolition waste for purpose of recycling.

PART 2 - PRODUCTS

2.01 PRODUCT SUBSTITUTIONS

- A. Notify Architect when Contractor is aware of materials, equipment or products that meet the aesthetic and programmatic intent of Contract Documents, but which are more environmentally-sensitive than materials, equipment or products specified or indicated in the Contract Documents.
- B. For each proposed product substitution, submit the following information in addition to requirements specified in Section 01 62 00, Substitutions:
 - 1. Relative amount of waste produced, compared to specified product.
 - 2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Sum.
 - 3. Proposed disposal method for waste product.
 - 4. Markets for recycled waste product.

PART 3 - EXECUTION

3.01 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Owner, and Architect.
- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. Meetings: Discuss trash/waste management goals and issues at project meetings.
 - 1. Pre-construction meeting.
 - 2. Regular job-site meetings.
- E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
 - 1. As a minimum, provide:
 - a. Separate area for storage of materials to be reused on-site, such as wood cut-offs for blocking.
 - b. Separate dumpsters for each category of recyclable materials.
 - c. Recycling bins at worker lunch area.
 - 2. Provide containers as required.
 - 3. Provide temporary enclosures around piles of separated materials to be recycled or salvaged.
 - 4. Provide materials for barriers and enclosures that are nonhazardous, recyclable, or reusable to the maximum extent possible; reuse project construction waste materials if possible.
 - 5. Locate enclosures out of the way of construction traffic.
 - 6. Provide adequate space for pick-up and delivery and convenience to subcontractors.
 - 7. If an enclosed area is not provided, clearly lay out and label a specific area on-site.
 - 8. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- F. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- H. Disposal Operations:
 - 1. Promptly and legally transport and dispose of removed and demolished items and waste materials that are not identified to be recycled or reused.
 - 2. Do not burn, bury or otherwise dispose of rubbish and waste materials on project site.

END OF SECTION 01 74 19

SECTION 01 74 23 - CLEANING

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Cleaning During Fabrication and Site Construction
 - a. Maintain Interior and exterior areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition. Protect work in progress and adjoining work on the basis of continuous maintenance.
 - b. Remove waste materials, debris, and rubbish from site weekly and dispose off- site.
2. Final Cleaning
 - a. Employing skilled Cleaning Contractor for final cleaning.
 - 1) Ductwork shall be vacuumed by company specializing in this service.
 - b. Conducting cleaning and disposal operations.
3. Complying with governing codes, ordinances, regulations, anti-pollution laws, and the like during cleaning.

B. Related Sections:

1. Section 00 70 00 - General Conditions of the Contract
2. Section 01 57 19 - Environmental Controls
3. Section 01 57 20 - Indoor Air Quality
4. Specifications: For cleaning of specific product or work, see Specification Section for that work.

1.02 SUBMITTALS

- A. Submit in accordance with Sections 01 33 10, Submittal Procedures, and 01 33 23, Shop Drawings, Product Data and Samples:
1. Cleaning Plan.

1.03 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies: See Sections 01 41 00 and 01 57 19 for referenced codes, ordinances and the like.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Do not use cleaning materials damaging to surfaces.
- B. Do not use cleaning materials creating hazards to health or property.
- C. Use only cleaning materials and methods recommended by manufacturer of surface material to be cleaned.

PART 3 - EXECUTION

3.01 CLEANING DURING FABRICATION AND SITE INSTALLATION/COMPLETION

A. Material Control

1. Execute periodic cleaning. Keep work areas free from accumulation of construction waste materials, rubbish, and windblown debris.
 - a. Protect new materials from damage by construction debris.
 - b. Dispose daily of flammable, hazardous, and toxic waste materials. Storage of these materials will not be permitted on the interior of the building.
 - 1) Disposal and storage must be in accordance with 40 CFR; WAC 173-303; 49 CFR; state and local fire codes and regulations.
2. Provide on-site containers for collection of waste materials, debris, and rubbish.
 - a. Periodically remove from site.
 - b. Dispose of legally at disposal areas away from site.
3. Store volatile wastes in covered metal containers and remove from premises daily. Prevent accumulation of wastes which create hazardous conditions. Provide adequate ventilation during use of volatile or noxious substances.

B. Dust Control

1. Clean interior spaces and surfaces prior to start of finish painting. Continue cleaning on an "as-needed" basis until painting is finished.
2. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly coated surfaces.

C. Debris Control

1. In accordance with Section 015719, Environmental Protection Procedures, and following:
 - a. Maintain all areas free of extraneous debris.
 - b. Initiate and maintain a specific program to prevent accumulation of debris at construction site, storage and parking areas, and along access roads and haul routes.
 - 1) Provide containers for deposit of debris as specified.
 - 2) Prohibit overloading of trucks to prevent spillages on access and haul routes.
 - a) Provide periodic inspection of traffic areas to enforce requirements.
 - c. Schedule periodic collection and disposal of debris as specified.
 - 1) Provide additional collection and disposal of debris whenever the periodic schedule is inadequate to prevent accumulation.
 - d. Keep storm sewers free of debris or extraneous materials

3.02 FINAL CLEANING

A. Cleaning includes but is not limited to following procedures:

1. Clean in accordance with excellent housekeeping practices. Remove dust and dirt in corners.
2. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, non-permanent labels, and other foreign materials from sight-exposed interior and exterior surfaces.
 - a. Clean hard-surfaced finishes, to dirt-free condition, free of dust, stains, films and similar noticeable detracting substances.
 - b. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces.
 - c. Restore reflective surfaces to original reflective conditions.
3. Remove debris from limited-access spaces including trenches, equipment vaults, manholes, and similar spaces.
4. Clean light fixtures and lamps so as to function with full efficiency.

5. Ventilating System:
 - a. Clean permanent filters and replace disposable filters, if units were operated during construction.
 - b. Clean ducts, blowers, and coils, if units were operated without filters during construction. Clean inside ducts.
6. Surfaces of mechanical and electrical equipment. Include vertical and horizontal surfaces, pipes, ducts, conduits, and the like.
7. Clean plumbing fixtures to sanitary condition.
8. Vacuum or mop as required concrete floors.
9. Vacuum carpet and remove stains as required.
10. Provide special cleaning for all trades at completion of work as follows:
 - a. Clean the top surfaces of removable ceiling panels and ducts, light fixtures, piping, conduit, and horizontal collecting surfaces above removable ceilings.
 - b. Remove stains from glass; wash, polish same, inside and outside.
 - c. Exercise care not to scratch glass.
 - d. Replace broken glass.
 - e. Remove marks, stains, fingerprints, dust, dirt from painted and decorated work.
 - f. Clean, polish hardware for all trades; this shall include removal of stains, dust, dirt, paint and the like.
 - g. Remove spots, soil, paint from tile work and mirrors; wash same.
 - h. Clean fixtures, shelves, casework, furnishings, equipment; remove stains, paint, dirt, dust.
 - i. Remove temporary floor protections; clean finish floors and floor coverings.
 - j. Clean exterior, interior metal surfaces, including doors and windows of oil, stains, dust, dirt, paint and the like. Polish, leave without fingerprints, other blemishes.
 - k. Remove from site crates, packing materials, and the like.
 - l. Clean lighting fixtures including both lenses and exposed surfaces.
11. Clean project site (yard and grounds), and areas affected by these construction activities, including landscape development areas, of litter and foreign substances. Sweep paved areas to a broom-clean condition. Remove stains, petro-chemical spills and other foreign deposits. Rake grounds which are neither planted nor paved to a smooth, even-textured surface.
 - a. Include parking and other staging areas.
12. Building Exterior:
 - a. Remove debris from roof areas. Clean dirt from membrane in preparation of final inspection.
 - b. Wipe metal siding, flashing and trim with soft cloth in preparation for final inspection.
 - c. Prior to installation of topsoil and final planting, drag the construction site with a magnet rake to pick up hidden metal.
 - d. Clean drain line of all debris and material.

B. Removal of Protection: Except as otherwise indicated or requested by Architect, remove temporary protection devices and facilities installed during course of the Work to protect previously completed work during remainder of construction period.

C. Extra Materials: Where excess materials of value remaining after completion of associated work have become Owner's property, dispose of these to Owner's best advantage as directed.

3.03 PROGRESS INSPECTIONS

A. Continually, and not less than every third day, inspect performed cleaning in conformance with cleaning standards. Close off cleaned areas or fully protect finished/cleaned work.

3.04 FINAL INSPECTIONS

- A. Prior to final completion, or Owner occupancy, inspect exposed surfaces. Verify that the entire Work is clean.

END OF SECTION 01 74 23

SECTION 01 77 00 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the Work.

B. Related Sections:

1. Section 00 10 00 - Instructions to Bidders
2. Section 00 70 00 - The General Conditions of the Contract;
3. Section 01 74 23 - Cleaning
4. Section 01 78 35 - Warranties and Bonds
5. Section 01 78 39 - Project Record Documents
6. Closeout Submittals Required of Trades/respective Specifications Sections

1.02 REINSPECTION FEES

A. Should Architect perform reinspection due to failure of the Work to comply with completion status claimed:

1. Owner will compensate Architect for each additional service at Architect's standard hourly billing rate; and
2. Deduct Architect's compensation from Contractor's final payment.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 77 00

SECTION 01 78 39- PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Maintain for Owner. and Architect, one Record Copy of Contract Documents. Include:
 - a. Drawings, annotated as work progresses;
 - b. Specifications, annotated as work progresses;
 - c. Addenda;
 - d. Change Orders and other Contract Modifications;
 - e. Field Orders or other written instructions;
 - f. Reviewed Shop Drawings and Product Data;
 - g. Field Test Records; and
 - h. Construction photographs.
 - i. Current Progress Schedule.

B. Related Sections:

1. Section 00 70 00 - General Conditions of the Contract
2. Section 01 29 10 - Applications for Payment
3. Section 01 33 10 - Submittal Procedures
4. Section 01 33 23 - Shop Drawings, Product Data and Samples
5. Mechanical and Electrical Divisions

1.02 MAINTENANCE OF RECORD DOCUMENTS AND SAMPLES

A. Maintain and store apart from documents used for construction.

1. Contract drawings.
2. Specifications.
3. Addenda.
4. Change orders and other modifications to the Contract.
5. Accepted shop drawings and other submittals.
6. Field test records.

B. Provide files and racks for storage of documents in field office.

1. Sample Storage: Provide locked cabinet or other secured storage.
2. File documents in accordance with Project Manual Table of Contents.

C. Maintain documents in orderly, clean, and legible conditions. Do not use record documents for construction purposes.

D. Make documents and samples available at all times for inspection by Owner and Architect.

1.03 MARKING DEVICES

- A. Provide felt tip marking pens or non-smearing dark pencils for recording information.

1.04 RECORDING

- A. Label each document "PROJECT RECORD. "Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- B. Drawings: Legibly mark construction prints to record actual construction. Indicate the following, as applicable to work in this contract:
 - 1. Keep accurate measurements of underground services and utilities, referenced to the building or other permanent construction.
 - 2. Note changes of directions and locations, by dimension and elevations, as utilities are actually installed. Show mechanical dampers, valves, reheat boxes, clean out, and other items that require maintenance. Show fire alarm system.
 - 3. Show location of construction-concealed internal utilities and appurtenances referenced to visible and accessible features of the structure.
 - 4. Record accurate locations of piping, valves, traps, dampers, duct work, equipment, and the like.
 - 5. Show details and locations not on original Contract Drawings.
 - 6. Indicate field changes of dimension and detail.
 - 7. Show changes made by Field Order or by Change Order.
 - 8. Erase conditions not constructed or "X-out" and appropriately annotate "not constructed," whichever condition most clearly conveys the actual "as constructed" condition.
 - 9. Indicate revisions to drawings with a "cloud" drawn around the revision and note date revision was made.
- C. Pay costs, including cost of reproduction.
- D. Specifications and Addenda: Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and supplier of each equipment item actually installed; and
 - 2. changes made by Field Order or by Change Order.
- E. Shop Drawings: Maintain as record documents; legibly annotate to record changes made after review.

1.05 SUBMITTALS

- A. Submit in accordance with Sections 01 33 10, Submittal Procedures, and 01 33 23, Shop Drawings, Product Data and Samples:
 - 1. With each submittal/Application for Payment, make drawing print and specification mark-up (as of Application date) of pertinent Project Record Documents available for Architect's and Owner's observation of progress.
 - 2. At Contract Closeout and before final payment, deliver record Documents to Owner.
 - a. Legibly marked construction drawings to record actual construction, and two copies;
 - b. Original legibly marked original project manual and all addenda, and two copies.
 - 3. Pay printing costs.
 - 4. Accompany submittal with duplicate transmittal letters indicating:
 - a. Date;
 - b. Project title and number;
 - c. Contractor's name and address;
 - d. Title and number of each Record Document; and
 - e. Signature of Contractor or Contractor's authorized representative.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01 78 39

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Section includes removing and disposing of materials as indicated on the plans. The work also includes the backfilling of trenches, holes or pits that result from such removals.
- B. See drawings for location and design of protection of existing trees
- C. Owner has a separate contract with a mover who will be removing and transporting log display currently located inside the library building. Demolition contractor must remove portions of the building as required so the log can be removed. See drawings and general requirements below for more information; approximate dimensions of log are 4' thick by 12'-9" diameter. Estimated to be 10 tons.

1.2 STANDARD SPECIFICATIONS

- A. All work to be performed and materials to be used shall be in accordance with the 2018 City of Lakewood Municipal Code, unless otherwise indicated herein.
- B. Where indicated, work and materials shall be in accordance with the 2021 Standard Specifications and Standard Plans for Road, Bridge and Municipal Construction as published by the Washington State Department of Transportation (WSDOT Standard Specifications)

PART 2 - PRODUCTS

2.1 DESCRIPTION

- A. Existing building hazardous material and asbestos surveys has been completed by Owner, and survey is included in the Appendix. Contractor is responsible for the legal abatement and disposal of all elements as required to complete contract work.
- B. Testing of elevator oil for PCBs has been completed by the owner and report is included in the Appendix. Contractor is responsible for the legal disposal of all elements as required to complete contract work.

2.2 PERFORMANCE AND DESIGN CRITERIA

- A. 29 CFR 1910: Occupational Safety and Health Standards.
- B. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.
- C. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.
- D. Storage or sale of removed items or materials on-site is not permitted.
- E. Comply with hauling and disposal regulations of authorities having jurisdiction.

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS

- A Contractor is to carefully remove portions of the building as needed to for owner to access, remove, and transport the existing log display, currently on exhibit within the library space. Timing and extent of structure removal to be coordinated with owner and owner's moving company prior to start of demolition work.
- B . With certain exceptions, the Contractor shall raze, remove and dispose of all buildings and foundations, structures, fences, paving, and other obstructions that lie wholly or partially within the clearing limits. The exceptions are utility-owned equipment, items indicated to remain on the plans, and any other items the Owner may direct the Contractor to leave intact. The Contractor shall:
1. Protect existing trees and plantings as described.
 2. Remove and cap all utilities at the property line.
 3. Remove foundations completely.
 4. Break up basement floors to promote drainage.
 5. Fill basements or other cavities left by the removal of structures. The fill shall match the level of the surrounding ground. Any such fill shall be nonstructural fill with the following qualifications:
 - i Nonstructural fill shall be imported well-graded granular material free of organics and debris. Maximum particle size 4 inches and no more than 30 percent fines (material passing no. 200 sieve). Material shall be capable of being compacted as specified under the weather conditions prevailing at time of demolition.
 6. Make a vertical saw cut between any existing improvements to remain and the portion to be removed.
 7. Replace at no expense to the Owner any existing improvements to remain that are damaged during the removal of other improvements.
 8. Leave the site in a stable condition enclosed by new chain link fencing panels as described by the site plan and TESC notes.
- C . Any material not named as the Owner's property will belong to the Contractor. The Contractor shall store or dispose of such material off-site in a safe and legal manner at no expense to the Owner.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section 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 and the hazardous materials drawing sheets.
- D. The Contractor shall refer to the 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 follows:
 - 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 Puget Sound Clean Air Agency (PSCAA) – 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. PSCAA: Puget Sound Clean Air Agency.
40. Owner: Employees or representatives designated by Pierce County Library Systems.
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 PSCAA.
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. Sustainable Design Submittals:

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. Puget Sound Clean Air Agency (PSCAA) – 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 complete "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.
 - 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 PSCAA) 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 on a daily basis 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 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 legible, fully executed 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 accomplishing 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, 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 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 AIR MONITORING BY OWNER

- 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 OWNER OCCUPANCY

- 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" required by this Section. 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, PSCAA and any other permitting agency involved with the completion of the work included herein.
- B. Puget Sound Clean Air Agency (PSCAA)
 - 1. At least ten (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 PSCAA. Prior to the start of any abatement work, the Contractor shall post the Notice of Intent to Perform an Asbestos Project with PSCAA's case number and signature of reviewing officer to prove that the Notification has been processed by PSCAA.

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 PSCAA 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), complete and sign the "Post-Abatement Visual Inspection" form 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. Upon completion of the post-abatement inspection, the Environmental Consultant shall indicate acceptance of the work area for compliance, as appropriate, by signing the "Post-Abatement Visual Inspection" form.
7. 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.

8. The Contractor shall not proceed until post-removal visual inspection by the Environmental Consultant has determined work area(s) acceptable.
 9. 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.
 10. 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.
 11. 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.
 12. 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 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. Air-purifying Equipment: Air-purifying equipment shall consist of High-efficiency Particulate Air (HEPA) filtration systems. No air movement system or air equipment shall discharge asbestos fibers outside the work area. Each unit shall be capable of variable volume from a minimum of 500 CFM to at least 1700 CFM under load and shall have at least 2 stages of prefiltration ahead of the HEPA final filter. Each unit shall be equipped with an elapsed time indicator (hour meter), static pressure gauge with low flow alarm, and be overload protected. At the Contractor's option, each unit shall be equipped with heat and smoke sensors, which will visually and audibly warn workers and shut unit fan down within 30 seconds. The units shall be: Micro-Trap Portable Air Filtration System manufactured by Asbestos Control Technology, Inc. or approved equal.
- G. Water-purifying Equipment: Capable of removing all fibers longer than 5 microns or as required by local regulations from water used in abatement work and decontamination showers. Control Resource Systems, Inc. "AQUA-HOG" or approved equal.
- H. Vacuum Equipment: all vacuum equipment utilized in the work area shall be High-efficiency Particulate Air (HEPA) equipment, and suitable for wet/dry usage.
- I. 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.
- J. 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.
- K. 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.

- L. Glove Bags: Bags shall be clean poly bags, seamless at the bottom, with pre-printed asbestos warning labels, 6-mil PVC with attached TYVEK arms and latex gloves. Bags shall be "Profo' Bag" manufactured by Asbestos Control Technology, Inc., or "Asbest'O'Saf/SAC" by Control Resource Systems, Inc., or approved equal.
- M. Remote Filter Housing: Stainless steel housing with pre-filters and HEPA filter sealed to cabinet flanges by Century Equipment "Advance Guard II" or approved equal.
- N. 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.
- O. Lighting: Provide adequate lighting for safe execution of work and for Environmental Consultant to perform visual inspections of work areas.
- P. Pre-manufactured Remote Decontamination Facility: Remote decontamination facilities shall be in compliance with all applicable state, federal and local codes and regulations and function in accordance with these specifications.

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
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

- 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
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
WEAR RESPIRATORY PROTECTION AND
PROTECTIVE CLOTHING 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.; "Asbestop 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.

PART 3 - EXECUTION

3.1 WORK AREA PREPARATION

- A. Worker Decontamination Facilities
1. Worker Decontamination Enclosure System: The Contractor shall construct a personnel decontamination facility immediately outside of isolated work areas consisting of three chambers and two air locks in compliance with WAC Chapter 296-62-07719 and as follows:
 2. The equipment room shall consist of an air lock to the shower room and curtained doorway to the work area.
 3. The shower room shall have two air locks, one to the equipment room and one to the clean room. All showers shall have hot and cold water controllable at the taps and shall be installed in this room. The Contractor shall supply and maintain soap, shampoo and towels at all times in the shower area. Shower wastewater shall be filtered to remove all fibers larger than 5 microns or as required by local regulations, before disposal in the municipal sewer system, or shall be collected and disposed of as asbestos contaminated material. Water filters shall be disposed of as asbestos waste. Comply with all regulations as to water discharge.

4. The clean room shall consist of an air lock to the shower room and a curtained doorway to the adjacent building area. The clean room shall contain a first aid kit, storage for workers' and visitors' clothing and shoes, a place to sit down, and the Worksite Entry Logbook. Work, respirator and decontamination procedures, notifications, Limited Hazardous Materials Survey Report and Prevailing Wage Rates shall be conspicuously posted. There shall be a supply of clean protective clothing, respirators and cartridges in the clean room at all times.
 5. Contractor shall not begin asbestos abatement work unless this system is functional, in good repair, and has been found acceptable for specification compliance by the Environmental Consultant.
- B. Modified Worker Decontamination Enclosure System
1. At entrances to non-isolated work areas the Contractor shall construct a personnel decontamination enclosure system or area consisting of plastic sheeting barriers with a HEPA vacuum and a water source. The system shall include a decontamination area where workers can remove contaminated protective clothing, decontaminate themselves and change into street clothing.
 2. Contractor shall not begin asbestos abatement work unless this system is functional, in good repair, and has been found acceptable for specification compliance by the Environmental Consultant.
- 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.
 4. During phases where building occupants have access to adjoining areas, entrances to asbestos abatement work areas shall include a solid lockable door. This door shall be locked when the abatement contractor is not on site.
- D. Personnel Protection During Work in Isolated Work Areas
1. Work clothes and respiratory protection as described in this section.
 2. Each worker shall, upon entering the jobsite: Remove street clothes in the clean change room, put on and fit test his respirator, put on clean protective clothing and sign in on the Worksite Entry Logbook before entering the equipment room or the work area.

3. Workers shall, each time they leave the work area: remove gross contamination from clothing before leaving the work area; proceed to the equipment room and remove and dis-pose of disposable work clothes; remove and store shoes, boots and other equipment except respirators; still wearing the respirator proceed to the showers; clean the outside of the respirator with soap and water while showering; remove the respirator; thoroughly shampoo and wash themselves; remove filters, dispose of filters in the container provided for the purpose; and wash and rinse the inside of the respirator.
 4. Following showering and drying off, each worker shall proceed directly to the clean change room and dress in clean clothes at the end of each day's work, or before eating, smoking, or drinking. Before re-entering the work area from the clean change room, each worker shall put on his respirator with clean filters, dress in clean protective clothing, and sign in on the Worksite Entry Logbook.
 5. Contaminated work footwear and other equipment shall be stored in the equipment room when not in use in the work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste or clean thoroughly inside and out using soap and water before removing from work area.
 6. 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.
 7. 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.
- E. 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.
- F. 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.

G. 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.

3.2 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 considered for Class II asbestos abatement work involving the removal of ACM that is not TSI, surfacing or sheet flooring materials shall be approved by the Environmental Consultant and performed in accordance with WAC 296-62 and 29 CFR 1926.1101.
1. Coordinate with Prime Contractor to ensure isolation of HVAC equipment. Coordinate with Prime Contractor regarding all electrical, safety and other service connections, requirements and equipment. Contractor is responsible to detect operation of systems intended to be shut down during abatement.
 2. Install critical barriers at HVAC openings, adjacent doors, windows and other openings to work areas.
 3. Completely pre-clean visible accumulation of any asbestos debris in work area using HEPA vacuum equipment or wet cleaning methods.

4. Set up a modified worker decontamination enclosure system as described above. Once this system is installed and abatement commences, it shall be utilized in the specified manner for the ingress and egress of only personnel. All personnel shall sign the Worksite Entry Logbook each time they pass in or out of the modified decontamination enclosure system. Work performed outdoors in excavated areas shall be performed wearing two disposable suits.
5. Install HEPA exhaust fan(s) in work areas where asbestos fiber releases are anticipated. Duct fan intake to immediate area of work in such a manner that any fibers released will be drawn away from the worker and into HEPA filter. Exhaust fans away from occupied areas.
6. Cover floor and other objects below work area with plastic sheeting. Seal openings and install curtained doorways and air locks as directed by the Environmental Consultant. Secure entrance into asbestos abatement work areas when asbestos contractor is not on site.
7. 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 Materials Inspection Summary (Good Faith Inspection) shall be posted at the work site.

3.3 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.
- D. Glove bag: Glove bag work shall be as follows. All removal using the glove bag method shall be performed strictly according to regulations, manufacturer's printed instructions, and as demonstrated by the manufacturer's representative or as further specified in this section. A minimum of two workers is required during glove bag operations. Workers are not to smoke or wear hand or wrist jewelry while using glove bags.
1. Contractor shall coordinate with the Owner to ensure the shutoff of all sources of heat to objects to be worked on. Do no work on objects above 150 F.
 2. Contractor shall install port for hose of HEPA vacuum to create reduced pressure inside glove bag. Installing of fresh air intake and/or bridging to prevent collapse of bag are acceptable. Contractor shall use the smoke test method to check for leaks in each glove bag.

3. During the removal phase, Contractor shall utilize amended water to reduce potential for airborne fibers.
4. After completion of insulation removal and cleaning, but prior to removal of glove bag, Contractor shall apply a single "tack" coat of penetrating encapsulant to surface of pipe and any remaining non-asbestos insulation, within the glove bag.
5. After the pipe has been encapsulated, but prior to removal of glove bag, Contractor shall thoroughly wash the upper chamber of the glove bag and seal the contents of the bag in the lower chamber.
6. Contractor shall remove all contaminated air in the glove bag using a HEPA vacuum.
7. Contractor shall promptly double bag the glove bag after removal is complete, place into a sealed container and remove to the bag holding enclosure.
8. Contractor shall not reuse glove bag, slide glove bag or join multiple glove bags to perform additional removal.
9. Asbestos-containing material remaining in wall and floor penetrations shall be wetted and placed in asbestos waste bag. Area shall be HEPA vacuum cleaned.

3.4 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, PSCAA – 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 and chain-of custody for waste as specified.

END OF SECTION

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 Section 01 11 10, Summary of Hazardous Materials Work and the Hazardous Materials Survey Report for information regarding lead-containing paint/components in areas of the Work.
2. Handling: Conduct activities involving lead-containing paint and components 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 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 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-Related Activities Work Plan: Submit a site-specific lead plan based on the elements of the Contractors' Lead Compliance Program required by WAC 296-155 for activities impacting lead-containing paint or components. 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-Related Activities 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 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 WAC 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 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/L&I Action Level of 30 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$) for lead.
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. Not with-standing 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 - GENERAL

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, sandblasting, 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. Wet wash plastic sheeting to remove all dust. Any wash water shall be retained on the drop-sheeting and removed by mops or wet/dry vacuums. The residue/debris and water shall be placed in storage drums for testing prior to disposal. See below for testing requirements.

E. Debris Testing

1. Contractor is responsible for TCLP sampling to determine disposal requirements of demolition debris under WAC 173-303, Dangerous Waste.

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 work impacting lead-containing painted coatings according to applicable local, state and federal regulations.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions and Division-1 Specification sections, apply to work of this section.

1.2 SCOPE

- A. Contractor shall provide all labor, materials, equipment, services, permits and insurance required to complete the removal transport and proper disposal of polychlorinated biphenyl (PCB)-containing light ballasts.

1.3 RELATED WORK

- A. The Contractor shall coordinate with the following related sections:
 - 1. Section 01 11 10, Summary of Hazardous Materials Work

1.4 DEFINITIONS

- A. 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 approval, fit test, etc.
- B. Controlled Area: Area which only qualified and properly protected workers or authorized visitors have access.
- C. Decontamination Area: enclosed area adjacent and connected to controlled/ regulated work area, consisting of an equipment room and clean room, which is used to decontaminate workers, materials, and equipment. Where PCB removal is done in conjunction with asbestos or lead abatement the decontamination area for asbestos or lead may be used for this purpose.
- D. Disposal: Procedures necessary to transport and deposit the PCB materials in an approved waste disposal site in compliance with EPA and other applicable regulations.
- E. Environmental Consultant: Environmental consultant specializing in hazardous materials abatement--PBS Engineering and Environmental--or any subcontractor designated by PBS.
- F. SDS: Safety Data Sheet supplied by manufacturer provides information on a product listed in OSHA 29 CFR 1910.1200(g)(2).
- G. Polychlorinated Biphenyls (PCBs): A class of chlorinated hydrocarbon compounds containing a variable number of chlorine atoms. Commercially available products contain mixtures of as many as 40 to 70 PCB compounds (isomers). A compound containing more than 50 ppm of PCBs is considered to be PCB-containing. PCBs range from oily liquids to white, crystalline solids to hard, non-crystalline resins or waxy solids.
- H. PCB Bulk Product Waste (PCB-BPW): A category of waste defined in 40 CFR 761.3 as non-liquid wastes or debris from the demolition of building and other man-made structures manufactured, coated, or serviced with PCBs, including waste derived from caulk or paint containing PCBs greater than or equal to fifty parts per million.

- I. Waste Shipment Records: Form similar to *Uniform Hazardous Waste Manifest*, or an EPA approved state form.

1.5 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 Toxic Substance Control Act, TSCA, (Code of Federal Regulations Title 40, Part 761)
 - 2. U.S. Environmental Protection Agency Office of Toxic Substances Guidance Document, *Summary of PCB Regulations*, EPA Document No. 910-S-94-002.
 - 3. U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), 40 CFR 1910.120.
 - 4. RCRA, Resource Conservation and Recovery Act, 40 CFR Part 761, Subpart D.
 - 5. Washington State Department of Ecology, Dangerous Waste Regulations, Chapter 173-303 WAC.

1.6 SUBMITTALS AND NOTICES

- A. Contractors shall submit the following information 10 days prior to beginning work:
 - 1. **WORK PLAN.** Submit a written "work plan" satisfactory to the Owner and Environmental Consultant describing the schedule for PCB abatement, methods and work practices and worker protection. The work plan shall also include decontamination procedures and plans for a decontamination area. Also include emergency control and cleanup procedures and emergency phone number(s).
 - 2. **DISPOSAL PLAN.** Submit written proof that all required arrangements have been made with the disposal/recycling facility.
- B. Prior to making final application for payment the Contractor shall submit Waste Shipment Records completely filled out, legible and signed by all transporters and disposal facilities.
- C. Refer to EPA, OSHA, and other standards referenced herein for further information and regulatory requirements not included above.

1.7 PERSONNEL PROTECTION

- A. Personnel Protective Equipment for PCB Removal
 - 1. Worker personal protective equipment (PPE) shall consist of PCB-resistant gloves and clothing. Eye, hearing, head and fall protection as necessary.
 - 2. Half-face mask, negative-pressure respirator with disposable chemical vapor cartridge. Protection factor: 10. Additional HEPA filter cartridges for particulates including asbestos and lead shall be available for use in areas where these materials are present.
 - 3. Provide additional personnel and respiratory protection to minimize any possible exposure from inhalation.

B. Worker Decontamination Area

1. Where PCB abatement is performed in conjunction with asbestos, lead abatement or other hazardous materials abatement, a multiple use decontamination area shall be established.
2. The Contractor shall provide a decontamination/emergency clean up area consisting of PCB-resistant sheeting (drop cloth) with absorbent material and other necessary equipment. Washing facilities with hot water and cleanser that is capable of removing oily compounds without injury to human skin.

1.8 SAFETY

- A. With regard to the work of this contract, the safety of the Contractor's employees, the Owner's employees, and the public is the sole responsibility of the Contractor.

1.9 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.

1.10 QUALITY ASSURANCE

- A. Environmental Consultant shall perform periodic inspections to observe work, handling and packaging procedures. Environmental Consultant may perform surface and air testing for PCBs to determine possible contamination and exposure and verify that PCB levels are not exceeded.
- B. Environmental Consultant shall notify the Contractor in writing to stop work if the Environmental Consultant determines that work practices are in violation of the Specifications or work is endangering workers and 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.

1.11 LIMITS

- A. The Contractor shall limit PCB levels as follows:
1. Airborne concentrations below $1 \mu\text{g}/\text{m}^3$ (microgram per cubic meter) or pre-abatement background levels, where available.
 2. Concentrations below $10 \mu\text{g}/1 \text{ cm}^2$ (microgram per square centimeter) on building surfaces.

PART 2 - PRODUCTS

2.1 PLASTIC SHEET

- A. Plastic sheeting shall be flame-retardant polyethylene material. It shall not dissolve on contact with PCB compounds or any chemicals used by the contractor for abatement/decontamination. The minimum thickness shall be 6-mil.

2.2 STORAGE CONTAINERS

- A. Storage containers shall be suitable to receive and retain any PCB-containing or contaminated materials disposal or incineration at an approved site. They shall comply with container specifications set forth in 49 CFR 178.80, 178.82, 178.102 or 178.116. Containers shall be labeled with waterproof print and permanent adhesive in accordance with WAC, OSHA, DOT and EPA regulations.

2.3 WARNING LABELS

- A. Labels on all disposal containers/drums shall be according to EPA Region 10 Toxic Substances Section, PCB Regulations (ML).

2.4 WARNING SIGNS

- A. Unless other signs or security access is provided, warning signs shall be provided and displayed at each regulated area to warn of the presence of PCBs.

PART 3 - EXECUTION

3.1 RELATED DOCUMENTS

- A. Where the work area containment requirements are determined by abatement of other hazardous materials, the Contractor shall perform PCB abatement within existing containments.
- B. Where no other hazardous materials abatement is performed in conjunction with the PCB abatement prepare the work area as follows:
 - 1. Contractor shall isolate the work area from unauthorized, unqualified and unprotected persons. At a minimum, warning signs indicating the presence of PCBs and danger tape shall be used. Whenever possible, doors should be closed to further reduce unauthorized access.
 - 2. An approved disposable floor covering (i.e. plastic sheeting) shall be kept beneath the work and in areas of dismantling, consolidation or packaging.
 - 3. An approved worker decontamination area.

3.2 REMOVAL AND DISPOSAL OF PCB-CONTAINING WASTE

- A. Contractor shall isolate work area and perform work at times and in a manner that will not result in the release or discharge of PCBs or the exposure to employees or other building occupants.
- B. Contractor shall carefully handle light ballasts and shall not break, drop, throw or otherwise damage the ballasts. All disposal shall be performed in strict accordance with WAC 173-303 and EPA TSCA.
- C. Where leaking light ballasts are observed, the Contractor shall thoroughly clean the light fixture and building areas where PCB-laden oils spill. The Contractor shall notify the owner of observed leaks.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED WORK DESCRIPTION ELSEWHERE

- A. The provisions and intent of the contract, including the General Conditions, Special Conditions, and General Requirements apply to this work as specified herein. Related work is described in:
 - 1. Division 1, General Requirements: Section 01 11 10, Summary of Hazardous Materials Work.

1.2 DESCRIPTION OF WORK

- A. The Contractor's employees involved with the removal, handling, transportation, or recycling of fluorescent light tubes shall receive hazard communication training for mercury in accordance with WAC 296-62, Part C.
- B. The Contractor shall supply all labor, materials, vehicles, services, insurance, special permits and equipment necessary to remove and recycle/dispose of fluorescent light tubes. The contractor shall carry out the work in accordance with all applicable federal, state and local regulations and these specifications.
- C. The work specified herein shall be the removal, transportation, and recycling and/or disposal of all fluorescent light tubes within the project area in accordance with all applicable federal, state and local regulations and these specifications.
- D. The work also includes removing and storing light tubes in a manner not to break tubes while other work is being performed in the area.
- F. All shipping/receiving logs shall be legibly filled out in ink. Forms shall include all information requested.

1.3 REFERENCE STANDARDS

- A. General Requirements:
 - 1. All work under this contract shall be done in strict accordance with all applicable regulations, standards and codes governing mercury and in accordance with best available technology and practice. This includes any other work, including trade work conducted in conjunction with the project.
- B. Specific Standards:

The most recent edition of any relevant regulation, standard, document or code shall be in effect during the work, regardless of the effective date of this specification's governing contract. Where conflict among the requirements or with these specifications exists, the most stringent requirements shall be utilized. All regulatory revisions and requirements relating to this project after the contract is signed shall, nonetheless, be incorporated at no additional cost to the Owner.

1. United States Environmental Protection Agency (EPA) –
 - a. Title 40 Code of Federal Regulations Part 61, Subparts A and M (Revised Subpart B) National Emission Standard for Asbestos.
 2. State of Washington Department of Labor & Industries (L&I) –
 - a. Chapter 296-24 WAC - Safety Standards,
 - b. Chapter 296-62 WAC - Occupational Health and Safety Regulations, including:
 - c. Chapter 296-62-054 WAC - Hazard Communication Standard
 - d. Chapter 296-62-071 WAC - Respiratory Protection.
 - e. Chapter 296-155 WAC Construction Standards.
 3. Washington State Department of Ecology
 - a. WAC 173-303, Dangerous Waste Regulations
 4. Puget Sound Clean Air Agency
- C. Other guidelines, codes or documents:
1. United States Department of Transportation (DOT) Hazardous Materials Regulations, Code of Federal Regulations Title 49.

1.4 DEFINITIONS

- A. AIHA - American Industrial Hygiene Association
475 Wolf Ledges Parkway
Akron, OH 44311
- B. ASTM - American Society for Testing and Materials
- C. Authorized Visitor - Designated representatives of the contractor, tenant or the Owner, and representatives of a regulatory or other agency having jurisdiction over the project.
- D. Certified Industrial Hygienist (CIH) - An industrial hygienist certified in the Comprehensive Practice of Industrial Hygiene by the American Board of Industrial Hygiene.
- E. Construction Manager - The designated contact person in charge of the project for the Owner.
- F. Contractor - The individual or business with which the Owner arranges to perform the hazards abatement.
- G. Ecology - Washington State Department of Ecology
- H. EPA - United States Environmental Protection Agency
- I. HEPA Filter - A high efficiency particulate air filter capable of removing particles greater than 0.3 microns in diameter with 99.97% efficiency.
- J. L & I - Washington State Department of Labor & Industries
805 Plum Street, S. E. (HC-412)
Olympia, Washington 98504
- K. NESHAP - The National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).
- L. NIOSH - The National Institute for Occupational Safety and Health

Building "J" N.E., Room 3007
Atlanta, GA 30333

- M. PSCAA – Puget Sound Clean Air Agency
- N. OSHA - The Occupational Safety and Health Administration
200 Constitution Avenue
Washington D.C. 20210
- O. WAC - Washington Administrative Code as enforced by the Washington State Department of Labor and Industries.
- P. WISHA - Washington Industrial Safety and Health Act as enforced by the Washington State Department of Labor and Industries

1.5 SUBMITTALS AND NOTICES

- A. Within ten (10) calendar days of the Contract Execution the contractor shall submit to Owner's Representative for review and acceptance, the contractor's project Health and Safety Plan, suitably titled and indexed, providing detailed information concerning the following items as a minimum:
 - 1. General description of the preparation of work area, setting barriers, arrangement for temporary services, etc.
 - 2. General description of the proposed removal and handling methods to be used.
 - 3. General description for the packaging and transportation methods including procedures to minimize breakage of fluorescent light tubes.
 - 4. Description of safeguards to protect workers handling broken bulbs and clean-up procedures.
 - 5. A list of employees who will participate in the project, including description of experience, training and assigned responsibilities during the project.
 - 6. A description of personal protective equipment to be worn by contractor's personnel and visitors, including respiratory protection and protective clothing.
 - 7. A description of employee work practices and restrictions, personal hygiene procedures such as decontamination, and general health and safety procedures such as anticipating and dealing with heat stress.
 - 8. Procedures for determining under what conditions the project can be shut down and how the project is to be restarted.
 - 9. Recordkeeping procedures for packaging, transportation and recycling. Labeling procedures for fluorescent tube packaging.
 - 10. A description of the transportation and recycling methods and procedures.
 - 11. Name and location of the recycling site.
 - 12. Emergency procedures and contingency plans including plans for fire within work area and

injury to worker within the work area.

- B. Within ten (10), calendar days of the Contract Execution, ensure or submit as required, the following to the Owner's Environmental Consultant for review, acceptance and post documentation on site:
 - 1. Documentation that all employees or agents required to wear a negative pressure respirator has been medically evaluated in accordance with WAC 296-62, Part E.
 - 2. Document NIOSH approvals for all respiratory protective devices utilized on site, including a list of approved components (parts) for each type of respirator that may potentially be used on the project.
 - 3. Document respirator fit testing for all contractor employees and agents who wear a negative pressure respirator. This fit testing shall be in accordance with quantitative procedures as detailed in the WAC 296-62, Part E.
 - 4. Submit SDSs for all materials to be used in removal, packaging, and cleaning up of broken tubes and thermostat bulbs to be used on site.
 - 5. A phone contact list containing the names, addresses, and telephone numbers of the contractor; contractor's supervisor, and all other contractor personnel who may be required to assist during removal activities.
- C. During removal, transportation, and recycling, the Contractor shall submit:
 - 1. As directed by the Owner's Environmental Consultant, the Contractor's Supervisor shall provide detailed reports concerning job progress, including review of progress with respect to previously established milestones and schedules, major problems and action taken, injury reports, equipment breakdown, and all other information concerning the project and its completion.

1.6 RESPONSIBILITIES

- A. Training:

The Contractor shall be responsible for assuring the following training has been completed prior to the Commencement of work:

 - 1. Hazard communication for mercury in accordance WAC 296-62, Part C.
 - 2. Special on-site training on equipment and procedures unique to this job site shall be performed as required.
 - 3. Training in emergency response and evacuation procedures shall be performed.

1.7 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver all materials in good condition in the original packages, containers or bundles visibly/legibly bearing the name of the manufacturer and the brand name of the product.
- B. Store all materials in a manner that will prevent their damage or contamination. Replacement materials shall be stored outside of the work area until abatement is completed.

- C. Damaged, deteriorating or previously used materials shall not be used and shall be removed from the worksite and disposed of properly.

PART 2 - PRODUCTS

2.1 EQUIPMENT AND SUPPLIES

A. Personal Protective Equipment:

1. Respiratory Protection: All employees cleaning up broken fluorescent light tubes shall be provided with and required to use adequate and appropriate respiratory protection in accordance with WAC 296-62, Part E.
2. For workers cleaning up broken fluorescent light tubes, full body disposable protective clothing incorporating head, body and feet covering constructed of material such as Tyvek (or equivalent) shall be provided in sufficient quantities and adequate sizes to accommodate movement without tearing, to all workers and authorized visitors.
3. Additional safety equipment (e.g., hard hats meeting the requirements of ANSI Standard Z89.1-1981, eye protection meeting the requirements of ANSI Standard Z87.1-1979, safety shoes meeting the requirements of ANSI Standard Z41.1-1967, disposable gloves) shall be provided as necessary to all workers and authorized visitors and shall be sized to fit the wearer.

B. Removal Equipment:

1. A sufficient supply of scaffolds, ladders, lifts and hand tools (e.g., screwdrivers) shall be provided as needed.
2. Additional support equipment as needed.

C. Packaging Equipment and Material:

1. Fiberglass drums or fluorescent light tube shipping boxes as needed

PART 3 - EXECUTION

3.1 INSPECTIONS

A. Prior to Commencement of Work:

1. The Contractor and the Owner have inspected the site to make sure that work can begin.

B. Throughout the Project: Consultants will perform routine inspections of the site to assure compliance with applicable regulations and this specification. The Owner may also conduct spot checks throughout the project.

3.2 SITE SECURITY

A. The work area is to be restricted only to authorized, trained and protected personnel.

B. Entry into the work area by unauthorized individuals shall be reported immediately by the

contractor to the Owner.

3.3 EMERGENCY PLANNING

- A. Emergency contingency plans shall be developed by the Contractor for approval by the Owner prior to initiation of any work.

3.4 PREPARATION OF THE WORK AREA

- A. Contractor shall coordinate with the Owner to ensure that any required shut down and lock out of utilities such as electric power, water or HVAC to the project area is performed. The Contractor shall provide temporary power and lighting. Ensure safe installation (including ground faulting) of temporary power sources and equipment by compliance with all applicable electrical codes and WISHA requirements for temporary electrical systems.

3.5 REMOVAL PROCEDURES

- A. Removal and Packaging of Fluorescent Light Tubes:

1. Tubes shall be removed in a manner to prevent breakage. If a tube breaks immediately clean-up debris and place in a box specified for broken tubes. Broken tubes shall also be recycled but must be separated from unbroken tubes.
2. Tubes shall be placed in boxes or fiberglass drums in a manner to prevent breakage.
3. Tubes shall not be taped together.

- B. Clean-up Procedures for Broken Fluorescent Light Tubes:

1. Contractor shall have cleanup kit on site prior to removing/dismantling fluorescent light fixtures.
2. Broken tubes shall be cleaned up immediately.
3. Use calcium polysulfide wetting solution on spilled lamp material to inhibit vaporization
4. Following removal of broken glass, clean the floor with diluted trisodium phosphate solution according to manufacturer's recommendations.
5. Identify, seal, and mark all containers with broken bulbs for special handling.
6. Mark and seal all drums of collected phosphate powder.

3.6 HANDLING AND TRANSPORTATION TO OFF-SITE FACILITIES

- A. Transportation and disposal to be performed by an appropriately licensed facility. Submit complete and legible disposal manifest or certificate of recycling to the Environmental Consultant.

END OF SECTION

Hazardous Materials Survey Report

Lakewood Library

6300 Wildaire Road SW

Lakewood, Washington 98499

Prepared for:

Pierce County Library System

3005 112th Street

Tacoma, Washington 98446

October 17, 2022

PBS Project 41854.000



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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: PCB Sampling Information

PCB Sample Inventory
PCB Laboratory Data Sheets
PCB Chain of Custody Documentation

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1 INTRODUCTION

1.1 Project Background

PBS Engineering and Environmental Inc. (PBS) performed a hazardous materials survey of the Lakewood Library, at 6300 Wildaire Road Southwest, in Lakewood, Washington. The intent of this investigation is to ensure compliance with applicable regulatory requirements that a "good faith inspection" for asbestos-containing materials (ACMs) be performed prior to renovation or demolition activities.

All accessible areas of the building were inspected for the presence of ACMs, lead-containing paint (LCP), mercury containing components, and polychlorinated biphenyls (PCBs).

1.2 Building Descriptions

The Lakewood Library is a two-story brick and mortar structure with two basements, constructed in 1963 with an addition in 1974 and renovations in 1994 and 2006. Interior finishes consist of the following: concrete, ceramic floor tile, vinyl floor tile, sheet vinyl flooring, and carpet. Walls consist of plaster, cement masonry unit (CMU), brick and mortar, and gypsum wallboard. Ceilings finishes include suspended ceiling tiles and popcorn ceiling texture. Exterior finishes include brick and mortar, "Marble Crete", and plaster soffits. Windows are metal- framed; the roof is pitched with composition shingles.

1.3 Survey Process

Accessible areas included in the project scope were inspected by Asbestos Hazard Emergency Response Act (AHERA) Certified Building Inspector Claire Tsai (Cert. No. IR-21-7316B Exp. 12/10/2022) on September 27, 28 and October 3, 2022. PBS endeavored to inspect all accessible areas of the scope of work. Inaccessible areas consist of those requiring selective demolition, fall protection, or confined space entry protocols to gain access.

When observed, suspect materials were sampled. One hundred and ten (110) samples were assigned a unique identification number and transmitted for analysis to Seattle Asbestos Test (NVLAP #200768-0) in Lynwood, Washington 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.

PBS endeavored to determine the presence and estimate the condition of suspect materials in all inaccessible areas included in the scope of work. ACMs may be found in concealed locations; additional unidentified ACMs may exist.

2 FINDINGS

2.1 Asbestos-Containing Materials (ACMs)

Regulated asbestos-containing building materials are defined by EPA as containing greater than 1% asbestos by weight.

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

- **Black mastic** associated with non-ACM 12" grey vinyl floor tile – west basement: storage rooms, server closet and custodian room, present below casework (Approximately 650 SF)
- **Black mastic** associated with non-ACM beige vinyl floor tile – Storage 110 (Approximately 50 SF)
- **Black mastic** associated with non-ACM beige vinyl floor tile under non-ACM sheet vinyl flooring – lounge kitchen (Approximately 150 SF)

- **Black speaker box mastic** – West basement, Room 207, 208, 209, 215, 217, 218, Lounge 202, and north elevation near main entrance (Approximately 13 EA)
- **Brown caulk** – southeast basement at wire penetrations into wall (Approximately 10 LF)
- **Cement asbestos board relite panels** – north, south, and east elevation window inserts (Approximately 320 SF)
- **Grey caulk** – North elevation east area between window frame and concrete slab (Approximately 110 LF)
- **Hard mudded fittings** of various sizes– both exposed and concealed in wall and ceiling cavities throughout (Approximately 300 LF)
- **Black sealant** – Level 2 roof associated with fibrous skylight panels (Approximately 475 LF)

The following materials sampled and found **not** to contain detectable concentrations of asbestos as part of this investigation:

- Joint compound and gypsum wallboard assemblies – throughout west basement, Level 1 and Level 2
- Skim coat and plaster walls – stairs to east basement and Level 1 men and women restrooms
- Wall texture – throughout west basement, Level 1 and Level 2
- Popcorn ceiling texture – throughout level 1 and level 2
- Texture on structural poles – throughout west basement, Level 1 and Level 2
- Fireproofing– throughout west basement, Level 1 and Level 2
- 12" grey vinyl floor tile associated with ACM black mastic – west basement storage rooms and custodian room
- 12" beige vinyl floor tile associated with ACM black mastic – Room 210
- Grey pebble sheet vinyl flooring on non-ACM beige vinyl floor tile associated with ACM black mastic – Lounge 202 kitchen
- 12" beige vinyl floor tile and associated yellow mastic – Level 1 north west interior book drop
- 12" off-white with black marks and associated brown mastic – Room 121
- 12" off-white with color streaks and associated brown mastic – Room 121
- Yellow, green, and blue carpet mastic – throughout
- White, grey, and brown leveling compound – various areas throughout
- 4" black vinyl cove base and associated tan- throughout
- Cream or brown mastic associated with 4" grey vinyl cove base – throughout
- Grey pebble sheet vinyl flooring and associated mastic – west basement restrooms and custodiam room
- Blue/tan sheet vinyl flooring and associated mastic – Room 101, 105, 106
- White/grey sheet vinyl flooring and associated mastic – Room 122
- Pink sheet vinyl flooring and associated mastic – Room 112
- Beige sheet vinyl flooring and associated mastic – Room 113
- Grey grout and cream mastic associated with 4" ceramic wall tile – Room 105 and 106
- Beige ceramic floor tile, grey grout, and mortar bed – Room 211, 212, and 218
- Tectum panels – Level 1 and Level 2 above suspended ceiling
- Grey and white sink undercoats – Room 108 and 202
- 2' x 4' lay-in-ceiling-tile square pattern – throughout

- 2' x 4' lay-in-ceiling-tile fissure pin hole pattern – throughout
- Grey caulk – southeast basement on HVAC equipment
- Grey doorframe caulk – west basement
- White caulk – sink counters in restrooms
- Expansion joint – west basement at cracks in concrete
- Gasket – west basement sprinkler system
- Hard red firestop – southeast basement at wire penetrations
- Red firestop west basement elevator mechanical room
- Cement masonry unit and associated mortar – southeast and west basements
- Brick and mortar – building exterior
- Grout and brown ceramic tile – north elevation columns
- Brown and black doorframe caulk – exterior doorframes
- Tan mastic – west elevation center doorframe cover plate
- Window caulk – exterior windows
- White texture and grey plaster soffit – Level 1 and 2 exteriors
- Marble Crete – level 2 elevations
- White sealant on black sealant – roof vents
- Grey sealant on black sealant – Roof level triangle shape window frames
- Black sealant – roof flashing
- Grey window putty – roof triangle windows
- Grey window caulk – roof triangle window frames
- Fibrous skylight panels – Level 2 roof
- Black asphaltic material – Level 1 roof drains
- Asphaltic built-up roofing – Level 1 central roof on flat roof and parapet
- Composition roof shingles and black vapor barrier – Level 1 and 2 roofing

Refer to Appendix A for specific samples locations and associated laboratory analysis.

2.2 Lead-Containing Components

Seven (7) representative painted coatings were sampled for lead content. The samples were assigned unique identification numbers and transmitted to NVL Laboratories, Inc. (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 on ACM cement board relite panels – exterior elevations (0.057% lead)

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

- Brown paint on metal doorframes – west basement
- Beige paint on wood framed column – throughout Level 1
- Orange paint on gypsum wallboard wall – throughout Level 1
- Brown paint on metal door – Level 1 doors
- Off-white paint on gypsum wallboard walls – throughout Level 2
- Brown paint on metal handrail – curved stair between Level 1 and 2

- Brown metal flashing – roof levels

Refer to Appendix B for specific sample locations and associated laboratory analysis.

Lead Vent Pipes

PBS observed approximately eight (8) lead-containing plumbing vent flashing caps that require recycling when the roof is demolished. PBS recommends these items be segregated from other wastes and be recycled at an appropriate facility.

Sheet Lead Roof Flashing

PBS observed approximately 3 SF of sheet lead roof flashing on the level 1 roof at the base of the east triangle window frame.

2.3 Mercury-Containing Components

All fluorescent light tubes are presumed to contain mercury. PBS counted the number of fluorescent tubes for the purposes of mercury vapor recovery prior to demolition activities. Approximately 1,350 four-foot, 6 two-foot light tubes, 24 U-shape tubes, and 150 compact fluorescent bulbs are present in the building areas to be impacted by the project. Caution should be exercised during demolition to not break these bulbs. Fluorescent light tubes were observed in the main space and above the suspended ceiling.

2.4 PCB-Containing Components

Magnetic fluorescent light fixture ballasts are known to contain PCBs. Electronic ballasts do not contain PCBs. PBS used a Philips Advance ballast checker to test representative fluorescent light fixture ballasts throughout the building. All ballasts tested were found to be electronic.

Representative caulking and sealants are also suspect PCB-containing materials and were tested for the presence of PCBs. The samples were assigned unique identification numbers and transmitted to NVL Laboratories, Inc. (AIHA IH # 102063-0) in Seattle, Washington under chain-of-custody protocols for analysis. The samples were analyzed by EPA Method 8082.

The following materials were samples and determined **not** to contain greater than 50 ppm PCBs:

- Cream caulk on Air Handling Unit 2 at seams – west basement
- Cream caulk on HVAC at seams – southeast basement
- Black window caulk – exterior windows
- Black doorframe caulk – exterior doors

Refer to Appendix C for locations and laboratory results of PCB samples.

3 RECOMMENDATIONS

3.1 Asbestos-Containing Materials (ACMs)

PBS recommends that all exposed and concealed ACMs be removed prior to renovation or demolition activities. A qualified Washington State licensed asbestos abatement contractor should be employed to remove all such ACMs according to applicable local, state, and federal regulations.

The possibility exist that suspect ACMs may be present in concealed locations including equipment, wall and ceiling cavities. These may include, but are not limited to waterproofing membrane, vermiculite, internal gaskets, caulking and sealants of HVAC equipment and construction adhesives, wall mastics and buried asbestos cement pipe. In the event that suspect ACMs that are not included in this survey are discovered during construction, contractors should avoid disturbance of the suspect ACM and inform the owner promptly for confirmation testing. All untested materials should be presumed asbestos-containing or tested for asbestos content prior to impact.

While not observed, additional suspect-ACMs may be present in concealed spaces, which are discussed above. Caution should be exercised during demolition to prevent impact of suspect-ACMs. All suspect ACMs should be presumed asbestos-containing until properly sampled and analyzed.

3.2 Lead-Containing Components

Representative interior and exterior painted coatings were found to contain lead. Impact of painted surfaces with detectable concentrations of lead requires construction activities to be performed according to Washington Administrative Code (WAC) 296-155-176,

Painted coatings may exist in inaccessible areas of the work area or in secondary coatings. Any previously unidentified painted coatings not sampled should be considered lead containing until sampled and proven otherwise.

Lead sheeting on lead lined roof vents and as roof flashing should be removed and handled by trained personnel in accordance with applicable regulations. The lead sheeting/linings should be recycled in a facility designed to handle such materials.

3.3 Mercury-Containing Components

Fluorescent lamps are known to contain mercury vapor. PBS recommends that all fluorescent lamps and mercury switches associated with thermostats be carefully handled and recycled/disposed of in accordance with the contract documents and applicable regulations during construction activities. Breakage of lamps should be avoided to prevent potential exposures to mercury. L&I requires specific training, handling, engineering controls, and disposal practices when performing this work. All waste shall be handled in accordance with WAC 173-303, Washington State Department of Ecology Dangerous Waste Regulations.

3.4 PCB-Containing Components

PBS recommends all light ballasts be inspected prior to disposal. Magnetic ballasts should be presumed to contain PCBs and properly removed, stored, transported and disposed of in accordance with WAC 173-303 and 40 CFR Part 761 Subpart D. Electronic ballasts do not contain PCBs and can be disposed of as general debris in compliance with applicable codes and endpoint facility requirements.

Please do not hesitate to contact us if you have any questions regarding this report or require additional information.

Report prepared by:

Report reviewed by:

Claire Tsai
Project Manager
AHERA Building Inspector
Cert. # IR-21-7316B Exp. 12/10/2022

Mark Hiley
Senior Project Manager

APPENDIX A

PLM Bulk Sampling Information

PLM Bulk Sample Inventory

PLM Bulk Sample Laboratory Data Sheets

PLM Bulk Sample Chain of Custody Documentation

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>
41854.000 -01	Joint compound Gypsum wallboard	Hall near Meeting 108 south wall	Layer 1: White powdery material with paint and paper Layer 2: White chalky material with paper	NAD NAD	SAT
41854.000 -02	Skim coat Plaster	Room 106 northwest restroom	Layer 1: White brittle material Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -03	Skim coat Plaster	Stairs to east basement	Layer 1: White brittle material Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -04	Wall texture	Level 1 central column	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -05	Wall texture	Office 215 south wall	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -06	Wall texture	Level 1 southeast large column	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -07	Wall texture	Level 2 gallery south wall	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -08	Wall texture	Meeting 108 east wall	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -09	Wall texture	Outside 209 east wall	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -10	Wall texture	Work room 109 west wall	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -11	Popcorn ceiling	LV1 west central area	Layer 1: White soft lumpy material	NAD	SAT
41854.000 -12	Popcorn ceiling	LV2 southeast of "open"	Layer 1: White soft lumpy material	NAD	SAT
41854.000 -13	Popcorn ceiling	LV1 east upper skylight area	Layer 1: White soft lumpy material with paint	NAD	SAT
41854.000 -14	Popcorn ceiling	Study 208	Layer 1: White soft lumpy material with paint	NAD	SAT

**Lakewood Library
Pierce County Library System**

**PBS Engineering + Environmental
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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41854.000 -15	Popcorn ceiling	Meeting 108 southeast area	Layer 1: White soft lumpy material with paint	NAD	SAT
41854.000 -16	Popcorn ceiling	Gallery 206 north area	Layer 1: White soft lumpy material with paint	NAD	SAT
41854.000 -17	Popcorn ceiling	LV1 southeast area	Layer 1: White soft lumpy material with paint	NAD	SAT
41854.000 -18	Texture on pole	West basement east open area	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -19	Texture on pole	LV1 southeast area	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -20	Texture on pole	LV2 southeast of "open"	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -21	Texture on pole	West basement west storage	Layer 1: White powdery material with paint Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -22	Texture on pole	LV1 near main northwest entrance	Layer 1: White powdery material with paint	NAD	SAT
41854.000 -23	Fire proofing	West basement south area	Layer 1: Off-white powdery material with fibrous material	NAD	SAT
41854.000 -24	Fire proofing	LV1 west central area	Layer 1: Off-white powdery material with fibrous material	NAD	SAT
41854.000 -25	Fire proofing	Gallery 206	Layer 1: Off-white powdery material with fibrous material	NAD	SAT
41854.000 -26	Fire proofing	West basement southwest mechanical room	Layer 1: Off-white powdery material with fibrous material	NAD	SAT
41854.000 -27	Fire proofing	LV1 east area	Layer 1: Off-white powdery material with fibrous material	NAD	SAT
41854.000 -28	Fire proofing	Lounge 202	Layer 1: Off-white powdery material with	NAD	SAT

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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
			fibrous material		
41854.000 -29	Fire proofing	Meeting 108 northwest area	Layer 1: Off-white powdery material with fibrous material	NAD	SAT
41854.000 -30	12" gray vinyl floor tile black mastic	West basement west storage room	Layer 1: Gray tile Layer 2: Black mastic	NAD 3% Chrysotile	SAT
41854.000 -31	12" gray vinyl floor tile black mastic	West basement custodial room	Layer 1: Gray tile Layer 2: Black mastic	NAD 3% Chrysotile	SAT
41854.000 -32	12" beige vinyl floor tile yellow mastic	LV1 northwest area near interior book drop	Layer 1: Beige tile Layer 2: Yellow mastic	NAD NAD	SAT
41854.000 -33	12" off-white with black marks Brown mastic	Storage 121	Layer 1: Off-white tile Layer 2: Black/brown mastic	NAD NAD	SAT
41854.000 -34	12" off-white with color streaks Brown mastic	Storage 121	Layer 1: Off-white tile Layer 2: Black/brown mastic	NAD NAD	SAT
41854.000 -35	Yellow carpet mastic White leveling compound	LV1 northeast area	Layer 1: Yellow mastic Layer 2: White brittle material	NAD NAD	SAT
41854.000 -36	Green carpet mastic Grey leveling compound White leveling compound	LV1 south central area at concrete seam	Layer 1: Green mastic Layer 2: Gray sandy/brittle material Layer 3: White brittle material	NAD NAD NAD	SAT
41854.000 -37	Green carpet mastic Grey leveling compound Brown leveling compound	LV1 south central area	Layer 1: Green mastic Layer 2: Gray sandy/brittle material Layer 3: Brown brittle material	NAD NAD NAD	SAT
41854.000 -38	4" black vinyl cove base Tan mastic	West basement custodian room	Layer 1: Black rubbery material Layer 2: Tan mastic	NAD NAD	SAT

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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41854.000 -39	Grey pebble sheet vinyl flooring Grey backing and mastic	West basement custodian room	Layer 1: Gray sheet vinyl Layer 2: Gray fibrous material with mastic	NAD NAD	SAT
41854.000 -40	Grey pebble sheet vinyl flooring Grey backing and mastic	West basement women's restroom	Layer 1: Gray sheet vinyl Layer 2: Gray fibrous material with mastic	NAD NAD	SAT
41854.000 -41	Blue/tan sheet vinyl flooring Woven backing	Men 106	Layer 1: Blue/tan sheet vinyl Layer 2: Clear mastic Layer 3: Tan woven fibrous material	NAD NAD NAD	SAT
41854.000 -42	Blue/tan sheet vinyl flooring Woven backing	Toilet 101	Layer 1: Blue/tan sheet vinyl Layer 2: Clear mastic Layer 3: Tan woven fibrous material	NAD NAD NAD	SAT
41854.000 -43	White/grey pebble sheet vinyl flooring Grey backing	Toilet 122	Layer 1: White/gray sheet vinyl Layer 2: Gray fibrous material with mastic	NAD NAD	SAT
41854.000 -44	Pink sheet vinyl flooring Tan backing Cream mastic White leveling compound	Staff toilet 112	Layer 1: Pink sheet vinyl Layer 2: Tan fibrous material with cream mastic Layer 3: White brittle material	NAD NAD NAD	SAT
41854.000 -45	Beige pebble sheet vinyl flooring backing and mastic White leveling compound	Supplies 113	Layer 1: Beige sheet vinyl Layer 2: Gray fibrous material with mastic Layer 3: White brittle material	NAD NAD NAD	SAT
41854.000 -46	Grey grout Cream mastic	Men 106 associated with 4" ceramic wall tile	Layer 1: Gray brittle material Layer 2: Cream mastic	NAD NAD	SAT
41854.000 -47	Hard mudded fitting	Southeast basement	Layer 1: Gray powdery material with fibrous material and woven fibrous material	4% Amosite	SAT
41854.000 -48	Hard mudded fitting	Southeast basement	Sample not analyzed		SAT
41854.000 -49	Hard mudded fitting	Southeast basement	Sample not analyzed		SAT

**Lakewood Library
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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41854.000 -50	Tectum panel	Meeting 108 above drop ceiling	Layer 1: White brittle material with paint Layer 2: Brown wood block	NAD NAD	SAT
41854.000 -51	Tectum panel	Lounge 202 above drop ceiling	Layer 1: White brittle material with paint Layer 2: Brown wood block	NAD NAD	SAT
41854.000 -52	Grey sink undercoating	Meeting 108	Layer 1: Gray soft/loose material	NAD	SAT
41854.000 -53	White sink undercoating	Lounge 202	Layer 1: White soft/loose material	NAD	SAT
41854.000 -54	Black speaker box mastic	West basement northwest speaker box	Layer 1: Black mastic	3% Chrysotile	SAT
41854.000 -55	Black speaker box mastic	Toilet 218	Layer 1: Black mastic	3% Chrysotile	SAT
41854.000 -56	2' x 4' lay-in-ceiling-tile square pattern	LV1 west central area	Layer 1: Gray fibrous material with paint	NAD	SAT
41854.000 -57	2' x 4' lay-in-ceiling-tile fissure pinhole pattern	West basement custodian room	Layer 1: Gray fibrous material with paint	NAD	SAT
41854.000 -58	Grey caulk	Southeast basement on HVAC	Layer 1: Gray soft/elastic material	NAD	SAT
41854.000 -59	Brown caulk	Southeast basement at wire penetration to wall	Layer 1: Brown soft material	3% Chrysotile	SAT
41854.000 -60	Grey doorframe caulk	West basement	Layer 1: Gray soft/elastic material	NAD	SAT
41854.000 -61	White caulk	Men 106	Layer 1: White soft/elastic material	NAD	SAT
41854.000 -62	Expansion joint	West basement open area at crack in concrete	Layer 1: Gray brittle material	NAD	SAT
41854.000 -63	Expansion joint	West basement open area at	Layer 1: Gray brittle material	NAD	SAT

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
		crack in concrete			
41854.000 -64	Gasket	West basement northwest sprinkler system	Layer 1: Gray soft/elastic material with paint	NAD	SAT
41854.000 -65	Red fire stop	West basement elevator mechanical room	Layer 1: Red soft/elastic material Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -66	Hard red fire stop	Southeast basement at wire penetration to wall	Layer 1: Red hard brittle material	NAD	SAT
41854.000 -67	Cement masonry unit associated mortar	Southeast basement	Layer 1: Gray brittle/sandy material Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -68	Cement masonry unit associated mortar	West basement custodian room	Layer 1: Gray brittle/sandy material Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -69	Brick mortar	LV1 southwest elevation	Layer 1: Beige sandy/brittle material Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -70	Brown ceramic tile Grout	North elevation	Layer 1: Brown ceramic Layer 2: White brittle/sandy material	NAD NAD	SAT
41854.000 -71	Brown doorframe caulk	West elevation south door	Layer 1: Brown soft material	NAD	SAT
41854.000 -72	Black doorframe caulk	West elevation north door	Layer 1: Brown soft material	NAD	SAT
41854.000 -73	Tan mastic	West elevation central door behind frame cover	Layer 1: Tan mastic	NAD	SAT
41854.000 -74	Window caulk	West elevation south area frame to sill	Layer 1: Black soft/elastic material	NAD	SAT
41854.000 -75	White texture	West elevation soffit	Layer 1: White powdery material with sand	NAD	SAT

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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
	grey plaster		Layer 2: Gray sandy/brittle material	NAD	
41854.000 -76	White texture grey plaster	Northeast elevation soffit	Layer 1: White powdery material with sand Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -77	White texture grey plaster	Southeast elevation soffit	Layer 1: White powdery material with sand Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -78	Composition shingles Composition shingles Composition shingles Black vapor barrier	Level 1 roof west elevation	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic material with sand Layer 3: Black asphaltic material with sand Layer 4: Black asphaltic material with fibrous material	NAD NAD NAD NAD	SAT
41854.000 -79	Joint compound Gypsum wallboard	West basement northeast restroom	Layer 1: White powdery material with paint and paper Layer 2: White chalky material with paper	NAD NAD	SAT
41854.000 -80	Wallpaper Joint compound Gypsum wallboard	Office 215 northwest corner	Layer 1: White powdery material with paint and paper Layer 2: White chalky material with paper	NAD NAD	SAT
41854.000 -81	Skim coat Plaster	Women 105	Layer 1: White powdery material with paint Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -82	Yellow and blue carpet mastic	Gallery 206	Layer 1: Yellow/blue mastic	NAD	SAT
41854.000 -83	12" beige vinyl floor tile Black mastic	Storage 210	Layer 1: Beige tile Layer 2: Black mastic	NAD 3% Chrysotile	SAT
41854.000 -84	Gray pebble sheet vinyl flooring Backing and mastic 12" beige vinyl floor tile Black mastic		Layer 1: Gray sheet vinyl Layer 2: Gray fibrous material with mastic Layer 3: Beige tile Layer 4: Black mastic	NAD NAD NAD 3% Chrysotile	SAT

**Lakewood Library
Pierce County Library System**

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41854.000 -85	Beige ceramic floor tile Gray grout Gray mortar bed	Men 212	Layer 1: Beige ceramic Layer 2: Gray brittle/sandy material Layer 3: Gray mastic	NAD NAD NAD	SAT
41854.000 -86	Cream mastic, Brown mastic	Office 215 associated with 4" gray vinyl cove base	Layer 1: Cream/brown mastic	NAD	SAT
41854.000 -87	Cream mastic	LV1 work room north area associated with fiberglass reinforced plastic panel	Layer 1: Cream mastic	NAD	SAT
41854.000 -88	Hard mudded fitting ~6"	West basement above ceiling in custodial room	Layer 1: White powdery material with woven fibrous material and fibrous material	NAD	SAT
41854.000 -89	Hard mudded fitting ~4"	West basement above ceiling in custodial room	Layer 1: White powdery material with woven fibrous material and fibrous material	NAD	SAT
41854.000 -90	Cement board relite panel	North elevation east area below windows	Layer 1: Gray cementitious material with paint	15% Chrysotile	SAT
41854.000 -91	Cement board relite panel	South elevation east area	Layer 1: Gray cementitious material with paint	15% Chrysotile	SAT
41854.000 -92	White texture Gray plaster	Level 2 south elevation soffit	Layer 1: White sandy/brittle material with paint Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -93	White texture Gray plaster	Level 2 east elevation soffit	Layer 1: White sandy/brittle material with paint Layer 2: Gray sandy/brittle material	NAD NAD	SAT
41854.000 -94	Marble Crete	Level 2 southwest elevation corner	Layer 1: Gray hard sandy/brittle material	NAD	SAT
41854.000 -95	Marble Crete	Level 2 northeast elevation corner	Layer 1: Gray hard sandy/brittle material	NAD	SAT

**Lakewood Library
Pierce County Library System**

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41854.000 -96	Marble Crete	Level 2 southeast elevation corner	Layer 1: Gray hard sandy/brittle material	NAD	SAT
41854.000 -97	Brick Mortar	LV2 northeast elevation	Layer 1: Gray sandy/brittle material Layer 2: Beige sandy/brittle material	NAD NAD	SAT
41854.000 -98	Gray caulk	North elevation east area between window frame and concrete slab	Layer 1: Gray soft material	3% Chrysotile	SAT
41854.000 -99	Gray sealant Black sealant	Level 2 roof north triangle window frame	Layer 1: Gray soft/elastic material Layer 2: Black soft/elastic material	NAD NAD	SAT
41854.000 -100	White sealant Black sealant	Level 2 north roof vent	Layer 1: White soft/elastic material Layer 2: Black soft/elastic material	NAD NAD	SAT
41854.000 -101	Black sealant	Level 2 roof associated with fibrous skylight	Layer 1: Black asphaltic material	3% Chrysotile	SAT
41854.000 -102	Black flashing sealant	Level 1 roof at east triangle window	Layer 1: Black soft/elastic material	NAD	SAT
41854.000 -103	Gray window putty	Level 1 roof at east triangle window	Layer 1: Gray soft material	NAD	SAT
41854.000 -104	Gray window caulk	Level 1 roof at east triangle window	Layer 1: Gray brittle material	NAD	SAT
41854.000 -105	Fibrous panel	Level 2 roof skylight east side	Layer 1: White fibrous material	NAD	SAT
41854.000 -106	Black asphaltic material	Roof northeast roof drain	Layer 1: Black asphaltic material	NAD	
41854.000 -107	Composition shingles Composition shingles	Level 2 roof east elevation	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic material with sand	NAD NAD	SAT

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
	Composition shingles Asphaltic layer Wood		Layer 3: Black asphaltic material with sand Layer 4: Black asphaltic material Layer 5: Brown wood block	NAD NAD NAD	
41854.000 -108	Black vapor barrier	Level 1 east area below plastic skylight panel	Layer 1: Black asphaltic fibrous material	NAD	SAT
41854.000 -109	Asphaltic built-up roofing	Level 1 central flat roof	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic material Layer 3: Black asphaltic material with fibrous material Layer 4: Black asphaltic material Layer 5: Black asphaltic material with fibrous material	NAD NAD NAD NAD NAD	SAT
41854.000 -110	Asphaltic roofing on parapet	Level 1 center roof	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic material Layer 3: Black asphaltic material with fibrous material Layer 4: Black asphaltic material	NAD NAD NAD NAD	SAT

SEATTLE ASBESTOS TEST, LLC

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Mark Hiley	Date Analyzed: 9/30/2022
Client: PBS Engineering and Environmental, Seattle	Client Job#: 41854.000
Address: 214 E Galer Street, Suite 300, Seattle, WA 98102	Project Location: Lakewood Library
Tel: 206.233.9639	Laboratory batch#: 202211157
Date Report Issued: 9/30/2022	Samples Received: 76

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. If the sample is inhomogeneous the sub-samples of the components are analyzed separately as layers. This report in its entirety consists of this cover letter, the customer sampling COC or data sheet, and the analytical report which is page numbered.

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
Approved Signatory



Project: Lakewood library

Project #: 41854.000 Page 1 of 3

Analysis requested: PLM

Date: 9/29/2022

Relinq'd by/Signature: *Cameron Budnick*

Date/Time: 9/29/2022

Received by/Signature: *[Signature]*

Date/Time: 9/29/22 15:50

Email ALL INVOICES to: seattleap@pbsusa.com

E-mail results to:

- | | | |
|--|---|--|
| <input type="checkbox"/> Willem Mager | <input type="checkbox"/> Allison Welch | <input type="checkbox"/> Cameron Budnick |
| <input type="checkbox"/> Gregg Middaugh | <input type="checkbox"/> Toan Nguyen | <input type="checkbox"/> Mae Reilly |
| <input checked="" type="checkbox"/> Mark Hiley | <input type="checkbox"/> Peter Stensland | <input type="checkbox"/> Nick San |
| <input type="checkbox"/> Tim Ogden | <input checked="" type="checkbox"/> Claire Tsai | <input checked="" type="checkbox"/> Kameron DeMonnin |
| <input type="checkbox"/> Ryan Hunter | <input type="checkbox"/> Holly Tuttle | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Prudy Stoudt-McRae | <input type="checkbox"/> Mike Smith | |
| <input type="checkbox"/> Janet Murphy | <input type="checkbox"/> Ferman Fletcher | |

TURN AROUND TIME:

- | | | |
|----------------------------------|--|--------------------------------------|
| <input type="checkbox"/> 1 Hour | <input checked="" type="checkbox"/> 24 Hours | <input type="checkbox"/> 3-5 Days |
| <input type="checkbox"/> 2 Hours | <input type="checkbox"/> 48 Hours | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> 4 Hours | | |

Composite if positive ***
Stop at first positive for each set: (1) (2) (3) (4) (5) (6)

SAMPLE DATA FORM

Sample #	Material	Location	Lab
41854.000-01	Joint compound/ Gypsum wallboard***	Hall near Meeting 108 south wall	SAT
41854.000-02	Skim coat on plaster	Room 106 northwest restroom	
41854.000-03	Skim coat on plaster	Stairs to east basement	
41854.000-04	Wall texture (1)	Level 1 central column	
41854.000-05	Wall texture (1)	Office 215 south wall	
41854.000-06	Wall texture (1)	Level 1 southeast large column	
41854.000-07	Wall texture (1)	Level 2 gallery south wall	
41854.000-08	Wall texture (1)	Meeting 108 east wall	
41854.000-09	Wall texture (1)	Outside 209 east wall	
41854.000-10	Wall texture (1)	Work room 109 west wall	
41854.000-11	Popcorn ceiling (2)	LV1 west central area	
41854.000-12	Popcorn ceiling (2)	LV2 southeast of "open"	
41854.000-13	Popcorn ceiling (2)	LV1 east upper skylight area	
41854.000-14	Popcorn ceiling (2)	Study 208	
41854.000-15	Popcorn ceiling (2)	Meeting 108 southeast area	
41854.000-16	Popcorn ceiling (2)	Gallery 206 north area	
41854.000-17	Popcorn ceiling (2)	LV1 southeast area	



LABORATORY CHAIN OF CUSTODY

202211157

Project: Lakewood library

Project #: 41854.000

Page 2 of 3

SAMPLE DATA FORM

Sample #	Material	Location	Lab
41854.000-18	Texture on pole (3)	West basement east open area	
41854.000-19	Texture on pole (3)	LV1 southeast area	
41854.000-20	Texture on pole (3)	LV2 southeast of "open"	
41854.000-21	Texture on pole (3)	West basement west storage	
41854.000-22	Texture on pole (3)	LV1 near main northwest entrance	
41854.000-23	Fire proofing (4)	West basement south area	
41854.000-24	Fire proofing (4)	LV1 west central area	
41854.000-25	Fire proofing (4)	Gallery 206	
41854.000-26	Fire proofing (4)	West basement southwest mechanical room	
41854.000-27	Fire proofing (4)	LV1 east area	
41854.000-28	Fire proofing (4)	Lounge 202	
41854.000-29	Fire proofing (4)	Meeting 108 northwest area	
41854.000-30	12" gray vinyl floor tile Black mastic	West basement west storage room	
41854.000-31	12" gray vinyl floor tile Black mastic	West basement custodial room	
41854.000-32	12" beige vinyl floor tile Yellow mastic	LV1 northwest area near interior book drop	
41854.000-33	12" off-white with black marks Brown mastic	Storage 121	
41854.000-34	12" off-white with color streaks Brown mastic	Storage 121	
41854.000-35	Yellow carpet mastic White leveling compound	LV1 northeast area	
41854.000-36	Green carpet mastic Grey leveling compound White leveling compound	LV1 south central area at concrete seam	
41854.000-37	Green carpet mastic Grey leveling compound Brown leveling compound	LV1 south central area	
41854.000-38	4" black vinyl cove base tan mastic	West basement custodian room	
41854.000-39	Grey pebble sheet vinyl flooring Grey backing and mastic	West basement custodian room	
41854.000-40	Grey pebble sheet vinyl flooring Grey backing and mastic	West basement women's restroom	
41854.000-41	Blue/tan sheet vinyl flooring Woven backing	Men 106	
41854.000-42	Blue/tan sheet vinyl flooring Woven backing	Toilet 101	
41854.000-43	White/grey pebble sheet vinyl flooring Grey backing	Toilet 122	
41854.000-44	Pink sheet vinyl flooring Tan backing Cream mastic White leveling compound	Staff toilet 112	
41854.000-45	Beige pebble sheet vinyl flooring White leveling compound	Supplies 113	
41854.000-46	Grey grout Cream mastic	Men 106 associated with 4" ceramic wall tile	
41854.000-47	Hard mudded fitting (5)	Southeast basement	

202211157



LABORATORY CHAIN OF CUSTODY

Project: Lakewood libraryProject #: 41854.000 Page 3 of 3

SAMPLE DATA FORM			
Sample #	Material	Location	Lab
41854.000-48	Hard mudded fitting (5)	Southeast basement	
41854.000-49	Hard mudded fitting (5)	Southeast basement	
41854.000-50	Tectum panel	Meeting 108 above drop ceiling	
41854.000-51	Tectum panel	Lounge 202 above drop ceiling	
41854.000-52	Grey sink undercoating	Meeting 108	
41854.000-53	White sink undercoating	Lounge 202	
41854.000-54	Black speaker box mastic	West basement northwest speaker box	
41854.000-55	Black speaker box mastic	Toilet 218	
41854.000-56	2' x 4' lay-in-ceiling-tile square pattern	LV1 west central area	
41854.000-57	2' x 4' lay-in-ceiling-tile fissure pinhole pattern	West basement custodian room	
41854.000-58	Grey caulk	Southeast basement on HVAC	
41854.000-59	Brown caulk	Southeast basement at wire penetration to wall	
41854.000-60	Grey doorframe caulk	West basement	
41854.000-61	White caulk	Men 106	
41854.000-62	Expansion joint	West basement open area at crack in concrete	
41854.000-63	Expansion joint	West basement open area at crack in concrete	
41854.000-64	Gasket	West basement northwest sprinkler system	
41854.000-65	Red fire stop	West basement elevator mechanical room	
41854.000-66	Hard red fire stop	Southeast basement at wire penetration to wall	
41854.000-67	Cement masonry unit and associated mortar	Southeast basement	
41854.000-68	Cement masonry unit and associated mortar	West basement custodian room	
41854.000-69	Brick and mortar	LV1 southwest elevation	
41854.000-70	Grout and brown ceramic tile	North elevation	
41854.000-71	Brown doorframe caulk	West elevation south door	
41854.000-72	Black doorframe caulk	West elevation north door	
41854.000-73	Tan mastic	West elevation central door behind frame cover	
41854.000-74	Window caulk	West elevation south area frame to sill	
41854.000-75	White texture on grey plaster (6)	West elevation soffit	
41854.000-76	White texture on grey plaster (6)	Northeast elevation soffit	
41854.000-77	White texture on grey plaster (6)	Southeast elevation soffit	
41854.000-78	3 layers composition shingles Black vapor barrier	Level 1 roof west elevation	

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

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

Job#: 41854.000

Batch#: 202211157


Date Received: 9/29/2022

Samples Rec'd: 76

Date Analyzed: 9/30/2022

Samples Analyzed: 76

Project Loc.: Lakewood Library

Analyzed by:  Xu

Approved Signatory: Steve (Fanyao) Zhang, President

SZhang

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	41854.000-01	1	White powdery material with paint and paper		None detected	Binder/filler, Paint	35	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	25	Cellulose, Glass fibers
2	41854.000-02	1	White brittle material		None detected	Filler, Binder	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
3	41854.000-03	1	White brittle material		None detected	Filler, Binder	3	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
4	41854.000-04	1	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
5	41854.000-05	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
6	41854.000-06	1	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
7	41854.000-07	1	White powdery material with paint		None detected	Binder/filler, Paint	6	Cellulose
8	41854.000-08	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
9	41854.000-09	1	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
10	41854.000-10	1	White powdery material with paint		None detected	Binder/filler, Paint	6	Cellulose
11	41854.000-11	1	White soft lumpy material		None detected	Synthetic foam, Filler, Binder	2	Cellulose
12	41854.000-12	1	White soft lumpy material		None detected	Synthetic foam, Filler, Binder	2	Cellulose
13	41854.000-13	1	White soft lumpy material with paint		None detected	Synthetic foam, Filler, Binder, Paint	3	Cellulose
14	41854.000-14	1	White soft lumpy material with paint		None detected	Synthetic foam, Filler, Binder, Paint	4	Cellulose
15	41854.000-15	1	White soft lumpy material with paint		None detected	Synthetic foam, Filler, Binder, Paint	3	Cellulose
16	41854.000-16	1	White soft lumpy material with paint		None detected	Synthetic foam, Filler, Binder, Paint	2	Cellulose
17	41854.000-17	1	White soft lumpy material with paint		None detected	Synthetic foam, Filler, Binder, Paint	4	Cellulose
18	41854.000-18	1	White powdery material with paint		None detected	Binder/filler, Paint, Vermiculite	6	Cellulose
19	41854.000-19	1	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
20	41854.000-20	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

[PLM] EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

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

Job#: 41854.000

Batch#: 202211157


Date Received: 9/29/2022

Samples Rec'd: 76

Date Analyzed: 9/30/2022

Samples Analyzed: 76

Project Loc.: Lakewood Library

Analyzed by: 

Approved Signatory: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
21	41854.000-21	1	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
22	41854.000-22	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
23	41854.000-23	1	Off-white powdery material with fibrous material		None detected	Filler, Fine particles, Vermiculite	17	Cellulose
24	41854.000-24	1	Off-white powdery material with fibrous material		None detected	Filler, Fine particles, Vermiculite	15	Cellulose
25	41854.000-25	1	Off-white powdery material with fibrous material		None detected	Filler, Fine particles, Vermiculite	16	Cellulose
26	41854.000-26	1	Off-white powdery material with fibrous material		None detected	Filler, Fine particles, Vermiculite	14	Cellulose
27	41854.000-27	1	Off-white powdery material with fibrous material		None detected	Filler, Fine particles, Vermiculite	15	Cellulose
28	41854.000-28	1	Off-white powdery material with fibrous material		None detected	Filler, Fine particles, Vermiculite	16	Cellulose
29	41854.000-29	1	Off-white powdery material with fibrous material		None detected	Filler, Fine particles, Vermiculite	17	Cellulose
30	41854.000-30	1	Gray tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	4	Cellulose
31	41854.000-31	1	Gray tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	3	Cellulose
32	41854.000-32	1	Beige tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Yellow mastic		None detected	Mastic/binder	4	Cellulose
33	41854.000-33	1	Off-white tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black/brown mastic		None detected	Mastic/binder	3	Cellulose
34	41854.000-34	1	Off-white tile		None detected	Vinyl/binder, Mineral grains	3	Cellulose
		2	Brown mastic		None detected	Mastic/binder	4	Cellulose
35	41854.000-35	1	Yellow mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

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

Job#: 41854.000

Batch#: 202211157

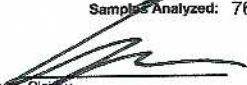
Date Received: 9/29/2022

Samples Rec'd: 76

Date Analyzed: 9/30/2022

Samples Analyzed: 76

Project Loc.: Lakewood Library

Analyzed by:  Steve (Fanyao) Zhang, President

Approved Signatory: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
35	41854.000-35	2	White brittle material		None detected	Filler, Binder	2	Cellulose
36	41854.000-36	1	Green mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
		3	White brittle material		None detected	Filler, Binder	2	Cellulose
37	41854.000-37	1	Green mastic		None detected	Mastic/binder	4	Synthetic fibers, Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
		3	Brown brittle material		None detected	Filler, Binder	3	Cellulose
38	41854.000-38	1	Black rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Tan mastic		None detected	Mastic/binder	2	Cellulose
39	41854.000-39	1	Gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	65	Cellulose
40	41854.000-40	1	Gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	63	Cellulose
41	41854.000-41	1	Blue/tan sheet vinyl		None detected	Vinyl/binder		None detected
		2	Clear mastic		None detected	Mastic/binder	3	Cellulose
		3	Tan woven fibrous material		None detected	Filler, Binder	83	Synthetic fibers
42	41854.000-42	1	Blue/tan sheet vinyl		None detected	Vinyl/binder		None detected
		2	Clear mastic		None detected	Mastic/binder	3	Cellulose
		3	Tan woven fibrous material		None detected	Filler, Binder	84	Synthetic fibers
43	41854.000-43	1	White/gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	65	Cellulose
44	41854.000-44	1	Pink sheet vinyl		None detected	Vinyl/binder		None detected

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200788-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

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

Job#: 41854.000

Batch#: 202211157


Date Received: 9/29/2022


Samples Rec'd: 76

Date Analyzed: 9/30/2022

Samples Analyzed: 76

Project Loc.: Lakewood Library

Analyzed by:  Gao Xu

Approved Signatory:  Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
44	41854.000-44	2	Tan fibrous material with cream mastic		None detected	Binder/filler, Mastic/binder	64	Cellulose
		3	White brittle material		None detected	Filler, Binder	2	Cellulose
45	41854.000-45	1	Beige sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	66	Cellulose
		3	White brittle material		None detected	Filler, Binder	3	Cellulose
46	41854.000-46	1	Gray brittle material		None detected	Filler, Binder	3	Cellulose
		2	Cream mastic		None detected	Mastic/binder	4	Cellulose
47	41854.000-47	1	Gray powdery material with fibrous material and woven fibrous material	4	Amosite	Filler, Fine particles	17	Cellulose
48	41854.000-48		Sample not analyzed					
49	41854.000-49		Sample not analyzed					
50	41854.000-50	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Brown wood block		None detected	Wood aggregates	4	Cellulose
51	41854.000-51	1	White brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Brown wood block		None detected	Wood aggregates	5	Cellulose
52	41854.000-52	1	Gray soft/loose material		None detected	Filler, Fine particles	5	Cellulose
53	41854.000-53	1	White soft/loose material		None detected	Filler, Fine particles	5	Cellulose
54	41854.000-54	1	Black mastic	3	Chrysotile	Mastic/binder	4	Cellulose
55	41854.000-55	1	Black mastic	3	Chrysotile	Mastic/binder	3	Cellulose
56	41854.000-56	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite	65	Cellulose
57	41854.000-57	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite	64	Cellulose
58	41854.000-58	1	Gray soft/elastic material		None detected	Binder, Filler	4	Cellulose
59	41854.000-59	1	Brown soft material	3	Chrysotile	Filler, Binder	3	Cellulose
60	41854.000-60	1	Gray soft/elastic material		None detected	Binder, Filler	5	Cellulose

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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] EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples; EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

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

Job#: 41854.000

Batch#: 202211157

Date Received: 9/29/2022

Samples Rec'd: 76

Date Analyzed: 9/30/2022

Samples Analyzed: 76

Project Loc.: Lakewood Library

Analyzed by: Eric Xu

Approved Signatory: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
61	41854.000-61	1	White soft/elastic material		None detected	Binder, Filler	4	Cellulose
62	41854.000-62	1	Gray brittle material		None detected	Filler, Binder	2	Cellulose
63	41854.000-63	1	Gray brittle material		None detected	Filler, Binder	3	Cellulose
64	41854.000-64	1	Gray soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
65	41854.000-65	1	Red soft/elastic material		None detected	Binder, Filler	4	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
66	41854.000-66	1	Red hard brittle material		None detected	Filler, Binder	2	Cellulose
67	41854.000-67	1	Gray brittle/sandy material		None detected	Binder, Sand	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
68	41854.000-68	1	Gray brittle/sandy material		None detected	Binder, Sand	3	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
69	41854.000-69	1	Beige sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
70	41854.000-70	1	Brown ceramic		None detected	Ceramic/binder		None detected
		2	White brittle/sandy material		None detected	Binder, Sand	2	Cellulose
71	41854.000-71	1	Brown soft material		None detected	Filler, Binder	3	Cellulose
72	41854.000-72	1	Black soft material		None detected	Filler, Binder	4	Cellulose
73	41854.000-73	1	Tan mastic		None detected	Mastic/binder	3	Cellulose
74	41854.000-74	1	Black soft/elastic material		None detected	Binder, Filler	5	Cellulose
75	41854.000-75	1	White powdery material with sand		None detected	Filler, Binder, Sand	3	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
76	41854.000-76	1	White powdery material with sand		None detected	Filler, Binder, Sand	4	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
77	41854.000-77	1	White powdery material with sand		None detected	Filler, Binder, Sand	3	Cellulose

SEATTLE ASBESTOS TEST, LLC

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Mark Hiley	Date Analyzed: 10/4/2022
Client: PBS Engineering and Environmental, Seattle	Client Job#: 41854.000
Address: 214 E Galer Street, Suite 300, Seattle, WA 98102	Project Location: Lakewood Library
Tel: 206.233.9639	Laboratory batch#: 202211187
Date Report Issued: 10/4/2022	Samples Received: 32

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. If the sample is inhomogeneous the sub-samples of the components are analyzed separately as layers. This report in its entirety consists of this cover letter, the customer sampling COC or data sheet, and the analytical report which is page numbered.

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
Approved Signatory

20221187



LABORATORY CHAIN OF CUSTODY

Project: Lakewood library

Project #: 41854.000 Page 1 of 2

Analysis requested: PLM

Date: 10/3/2022

Relinquished by/Signature: *[Signature]*

Date/Time: 10/3/2022

Received by/Signature: *[Signature]*

Date/Time: 10/4/22 13:30

Email ALL INVOICES to: seattleap@pbsusa.com

E-mail results to:

- Willem Mager
- Gregg Middaugh
- Mark Hiley
- Tim Ogden
- Ryan Hunter
- Prudy Stoudt-McRae
- Janet Murphy

- Allison Welch
- Toan Nguyen
- Peter Stensland
- Claire Tsai
- Holly Tuttle
- Mike Smith
- Ferman Fletcher

- Cameron Budnick
- Mae Reilly
- Nick San
- Kameron DeMonnin
- _____

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours

- 24 Hours
- 48 Hours

- 3-5 Days
- Other _____

Composite if positive ***

SAMPLE DATA FORM

Sample #	Material	Location	Lab
41854.000-79	Joint compound/ Gypsum wallboard***	West basement northeast restroom	SAT
41854.000-80	Wallpaper Joint compound/ Gypsum wallboard***	Office 215 northwest corner	
41854.000-81	Skim coat on plaster	Women 105	
41854.000-82	Yellow and blue carpet mastic	Gallery 206	
41854.000-83	12" beige vinyl floor tile Black mastic	Storage 210	
41854.000-84	Grey pebble sheet vinyl flooring 12" beige vinyl floor tile Black mastic	Lounge kitchen 202	
41854.000-85	Beige ceramic floor tile Grey grout Grey Mortar bed	Men 212	
41854.000-86	Cream mastic Brown mastic	Office 215 associated with 4" grey vinyl cove base	
41854.000-87	Cream mastic	LV1 work room north area associated with fiberglass reinforced plastic panel	
41854.000-88	Hard mudded fitting ~6"	West basement above ceiling in custodial room	
41854.000-89	Hard mudded fitting ~4"	West basement above ceiling in custodial room	
41854.000-90	Cement board relite panel	North elevation east area below windows	
41854.000-91	Cement board relite panel	South elevation east area	
41854.000-92	White texture on grey plaster	Level 2 south elevation soffit	
41854.000-93	White texture on grey plaster	Level 2 east elevation soffit	
41854.000-94	Marble Crete	Level 2 southwest elevation corner	



202211187
LABORATORY CHAIN OF CUSTODY

Project: Lakewood library

Project #: 41854.000 Page 2 of 2

SAMPLE DATA FORM

Sample #	Material	Location	Lab
41854.000-95	Marble Crete	Level 2 northeast elevation corner	
41854.000-96	Marble Crete	Level 2 southeast elevation corner	
41854.000-97	Brick and mortar	LV2 northeast elevation	
41854.000-98	Grey caulk	North elevation east area between window frame and concrete slab	
41854.000-99	Grey sealant on Black sealant	Level 2 roof north triangle window frame	
41854.000-100	White sealant on Black sealant	Level 2 north roof vent	
41854.000-101	Black sealant	Level 2 roof associated with fibrous skylight	
41854.000-102	Black flashing sealant	Level 1 roof at east triangle window	
41854.000-103	Grey window putty	Level 1 roof at east triangle window	
41854.000-104	Grey window caulk	Level 1 roof at east triangle window	
41854.000-105	Fibrous panel	Level 2 roof skylight east side	
41854.000-106	Black asphaltic material	Roof northeast roof drain	
41854.000-107	Composition shingles on asphaltic layer on wood	Level 2 roof east elevation	
41854.000-108	Black vapor barrier	Level 1 east area below plastic skylight panel	
41854.000-109	Asphaltic built-up roofing	Level 1 central flat roof	
41854.000-110	Asphaltic roofing on parapet	Level 1 center roof	

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

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

Job#: 41854.000

Batch#: 202211187

Date Received: 10/4/2022

Samples Rec'd: 32

Date Analyzed: 10/4/2022

Samples Analyzed: 32

Project Loc.: Lakewood Library

Analyzed by: Cui Xu

Approved Signatory: Steve (Fanyao) Zhang, President



Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	41854.000-79	1	White powdery material with paint and paper		None detected	Binder/filler, Paint	35	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	25	Cellulose
2	41854.000-80	1	White powdery material with paint and paper		None detected	Binder/filler, Paint	34	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	24	Cellulose
3	41854.000-81	1	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
4	41854.000-82	1	Yellow/blue mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose
5	41854.000-83	1	Beige tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black mastic	3	Chrysotile	Mastic/binder	4	Cellulose
6	41854.000-84	1	Gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	65	Cellulose
		3	Beige tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		4	Black mastic	3	Chrysotile	Mastic/binder	3	Cellulose
7	41854.000-85	1	Beige ceramic		None detected	Ceramic/binder		None detected
		2	Gray brittle/sandy material		None detected	Binder, Sand	2	Cellulose
		3	Gray mastic		None detected	Mastic/binder	2	Cellulose
8	41854.000-86	1	Cream/brown mastic		None detected	Mastic/binder	4	Cellulose
9	41854.000-87	1	Cream mastic		None detected	Mastic/binder	3	Cellulose
10	41854.000-88	1	White powdery material with woven fibrous material and fibrous material		None detected	Binder/filler	36	Cellulose
11	41854.000-89	1	White powdery material with woven fibrous material and fibrous material		None detected	Binder/filler	35	Cellulose

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

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

Job#: 41854.000

Batch#: 202211187

Date Received: 10/4/2022

Samples Rec'd: 32

Date Analyzed: 10/4/2022

Samples Analyzed: 32

Project Loc.: Lakewood Library

Analyzed by: Cici Xu

Approved Signatory: Steve (Fanyao) Zhang, President



Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
12	41854.000-90	1	Gray cementitious material with paint	15	Chrysotile	Cement/binder, Paint	5	Cellulose
13	41854.000-91	1	Gray cementitious material with paint	15	Chrysotile	Cement/binder, Paint	4	Cellulose
14	41854.000-92	1	White sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
15	41854.000-93	1	White sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	4	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
16	41854.000-94	1	Gray hard sandy/brittle material		None detected	Sand, Filler, Cement/binder	3	Cellulose
17	41854.000-95	1	Gray hard sandy/brittle material		None detected	Sand, Filler, Cement/binder	4	Cellulose
18	41854.000-96	1	Gray hard sandy/brittle material		None detected	Sand, Filler, Cement/binder	2	Cellulose
19	41854.000-97	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
		2	Beige sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
20	41854.000-98	1	Gray soft material	3	Chrysotile	Filler, Binder	3	Cellulose
21	41854.000-99	1	Gray soft/elastic material		None detected	Binder, Filler	4	Cellulose
		2	Black soft/elastic material		None detected	Binder, Filler	4	Cellulose
22	41854.000-100	1	White soft/elastic material		None detected	Binder, Filler	3	Cellulose
		2	Black soft/elastic material		None detected	Binder, Filler	5	Cellulose
23	41854.000-101	1	Black asphaltic material	3	Chrysotile	Asphalt/binder	3	Cellulose
24	41854.000-102	1	Black soft/elastic material		None detected	Binder, Filler	3	Cellulose
25	41854.000-103	1	Gray soft material		None detected	Filler, Binder	3	Cellulose
26	41854.000-104	1	Gray brittle material		None detected	Filler, Binder	2	Cellulose
27	41854.000-105	1	White fibrous material		None detected	Filler	90	Glass fibers
28	41854.000-106	1	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
29	41854.000-107	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	25	Glass fibers

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn: Mark Hiley Client: PBS Engineering and Environmental, Seattle Address: 244 E Galer Street, Suite 300, Seattle, WA 98102
Job#: 41854.000 Batch#: 202211187 Date Received: 10/4/2022
Samples Rec'd: 32 Date Analyzed: 10/4/2022 Samples Analyzed: 32
Project Loc.: Lakewood Library

Analyzed by:  Steve Xu

Approved Signatory:  Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
29	41854.000-107	2	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	24	Glass fibers
		3	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	26	Glass fibers
		4	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		5	Brown wood block		None detected	Wood aggregates	4	Cellulose
30	41854.000-108	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	67	Cellulose
31	41854.000-109	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	24	Glass fibers
		2	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose
		3	Black asphaltic material with fibrous material		None detected	Asphalt/binder, Filler	30	Glass fibers, Cellulose
		4	Black asphaltic material		None detected	Asphalt/binder	4	Cellulose
		5	Black asphaltic material with fibrous material		None detected	Asphalt/binder, Filler	30	Glass fibers, Cellulose
32	41854.000-110	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	25	Glass fibers
		2	Black asphaltic material		None detected	Asphalt/binder	4	Cellulose
		3	Black asphaltic material with fibrous material		None detected	Asphalt/binder, Filler	28	Glass fibers, Cellulose
		4	Black asphaltic material		None detected	Asphalt/binder	3	Cellulose

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

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>
41854.000 -Pb01	Brown / Metal / Doorframe	West basement custodian room	<98	<0.0098	NVL
41854.000 -Pb02	Beige / Wood frame / Column	Level 1 central area	<54	<0.0054	NVL
41854.000 -Pb03	Orange / Gypsum wallboard / Wall	Level 1 west wall of open area	<50	<0.0050	NVL
41854.000 -Pb04	Brown / Metal / Door	Book drop 110	<55	<0.0055	NVL
41854.000 -Pb05	Off-white / Gypsum wallboard / Wall	Gallery 206	<77	<0.0077	NVL
41854.000 -Pb06	Brown / Metal / Handrail	Level 2 at top of curved stairs	<48	<0.0048	NVL
41854.000 -Pb07	White / Cement board / Relite panel	South elevation east area	570	0.057	NVL
41854.000 -Pb08	Brown / Metal / Flashing	Level 2 roof east elevation	<110	<0.011	NVL

mg/kg = Milligrams per kilogram
< = Less than the Limit of Detection

October 4, 2022

Mark Hiley

PBS Environmental - Seattle

214 E Galer St. Suite. 300

Seattle, WA 98102



NVL Batch # 2217820.00

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

Client Project: 41854.000

Location: Lakewood Library

Dear Mr. Hiley,

NVL Labs received 8 sample(s) for the said project on 10/4/2022. 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, Manager Metals Lab

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 #: 2217820.00

Matrix: Paint
 Method: EPA 3051/7000B
 Client Project #: 41854.000
 Date Received: 10/4/2022
 Samples Received: 8
 Samples Analyzed: 8

Attention: Mr. Mark Hiley
 Project Location: Lakewood Library

Lab ID	Client Sample #	Sample Weight (g)	RL in mg/Kg	Results in mg/Kg	Results in percent
22411520	41854.000-Pb01	0.1024	98	< 98	<0.0098
22411521	41854.000-Pb02	0.1856	54	< 54	<0.0054
22411522	41854.000-Pb03	0.1994	50	< 50	<0.0050
22411523	41854.000-Pb04	0.1821	55	< 55	<0.0055
22411524	41854.000-Pb05	0.1303	77	< 77	<0.0077
22411525	41854.000-Pb06	0.2063	48	< 48	<0.0048
22411526	41854.000-Pb07	0.1838	54	570	0.057
22411527	41854.000-Pb08	0.0897	110	< 110	<0.011


Sampled by: Client

Analyzed by: Yasuyuki Hida

Reviewed by: Shalini Patel

Date Analyzed: 10/04/2022

Date Issued: 10/04/2022


 Shalini Patel, Manager Metals Lab

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: 2022-1004-02

FAA-02

LEAD LABORATORY SERVICES



Company PBS Environmental - Seattle	NVL Batch Number 2217820.00
Address 214 E Galer St. Suite. 300 Seattle, WA 98102	TAT 2 Days AH No
Project Manager Mr. Mark Hiley	Rush TAT
Phone (206) 233-9639	Due Date 10/6/2022 Time 10:40 AM
Office: (800) 628-9639	Email mark.hiley@pbsusa.com
	Fax (866) 727-0140

Project Name/Number: 41854.000 **Project Location:** Lakewood Library

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	22411520	41854.000-Pb01	A
2	22411521	41854.000-Pb02	A
3	22411522	41854.000-Pb03	A
4	22411523	41854.000-Pb04	A
5	22411524	41854.000-Pb05	A
6	22411525	41854.000-Pb06	A
7	22411526	41854.000-Pb07	A
8	22411527	41854.000-Pb08	A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Courier				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Rachelle Miller		NVL	10/4/22	1040
Analyzed by	Yasuyuki Hida		NVL	10/4/22	
Results Called by					
<input type="checkbox"/> Faxed <input type="checkbox"/> Emailed					

Special Instructions: _____

Date: 10/4/2022
 Time: 10:56 AM
 Entered By: Rachelle Miller



Project: Lakewood library

Project #: 41854.000 Page 1 of 1

Analysis requested: FAA

Date: 10/3/2022

Relinqu'd by/Signature: Claire Tsai

Date/Time: 10/3/2022

Received by/Signature: Rachelle Miller

Date/Time: 10/4/22 10:40
carson

Email ALL INVOICES to: seattleap@pbsusa.com

E-mail results to:

- Willem Mager
- Gregg Middaugh
- Mark Hiley
- Tim Ogden
- Ryan Hunter
- Prudy Stoudt-McRae
- Janet Murphy

- Allison Welch
- Toan Nguyen
- Peter Stensland
- Claire Tsai
- Holly Tuttle
- Mike Smith
- Ferman Fletcher

- Cameron Budnick
- Mae Reilly
- Nick San
- Kameron DeMonnin
- _____

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours

- 24 Hours
- 48 Hours

- 3-5 Days
- Other _____

SAMPLE DATA FORM			
Sample #	Material	Location	Lab
41854.000-Pb01	Brown/ metal/ doorframe	West basement custodian room	NVL
41854.000-Pb02	Beige/ wood frame/ column	Level 1 central area	
41854.000-Pb03	Orange/ gypsum wallboard/ wall	Level 1 west wall of open area	
41854.000-Pb04	Brown/ metal/ door	Book drop 110	
41854.000-Pb05	Off-white/ gypsum wallboard/ wall	Gallery 206	
41854.000-Pb06	Brown/ metal/ handrail	Level 2 at top of curved stairs	
41854.000-Pb07	White/ cement board/ relite panel	South elevation east area	
41854.000-Pb08	Brown/ metal/ flashing	Level 2 roof east elevation	

APPENDIX C

PCB Sampling Information

PCB Sample Inventory

PCB Laboratory Data Sheets

PCB Chain of Custody Documentation

PCB SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material</u>	<u>Sample Location</u>	<u>Analyte</u>	<u>Lab Results (mg/kg)</u>	<u>Lab</u>
41854.000 -PCB01	Cream caulk	West basement mechanical room AHU #2	Aroclor 1016	<9.2	NVL
			Aroclor 1221	<9.2	
			Aroclor 1232	<9.2	
			Aroclor 1242	<9.2	
			Aroclor 1248	<9.2	
			Aroclor 1254	<9.2	
			Aroclor 1260	<9.2	
			Total PCBs	<9.2	
41854.000 -PCB02	Cream caulk	Southeast basement mechanical room on HVAC	Aroclor 1016	<4.5	NVL
			Aroclor 1221	<4.5	
			Aroclor 1232	<4.5	
			Aroclor 1242	<4.5	
			Aroclor 1248	<4.5	
			Aroclor 1254	<4.5	
			Aroclor 1260	<4.5	
			Total PCBs	<4.5	
41854.000 -PCB03	Black window caulk	West elevation south area frame to building	Aroclor 1016	<1.7	NVL
			Aroclor 1221	<1.7	
			Aroclor 1232	<1.7	
			Aroclor 1242	<1.7	
			Aroclor 1248	<1.7	
			Aroclor 1254	<1.7	
			Aroclor 1260	<1.7	
			Total PCBs	<1.7	
41854.000 -PCB04	Black doorframe caulk	West elevation north door	Aroclor 1016	<0.87	NVL
			Aroclor 1221	<0.87	
			Aroclor 1232	<0.87	
			Aroclor 1242	<0.87	

mg/kg = Milligrams per kilogram
< = Less than the Limit of Detection

<u>PBS Sample #</u>	<u>Material</u>	<u>Sample Location</u>	<u>Analyte</u>	<u>Lab Results (mg/kg)</u>	<u>Lab</u>
			Aroclor 1248	<0.87	
			Aroclor 1254	<0.87	
			Aroclor 1260	<0.87	
			Total PCBs	<0.87	

October 5, 2022



Mr. Mark Hiley

PBS Environmental
214 E Galer St. Suite 300
Seattle, WA 98102

Re: **NVL Batch 2217822.00**

Project Name/Number: 41854.000

Project location: Lakewood Library

Dear Mr. Hiley,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

- Case Narrative & Definition of Data Qualifiers
- Analytical Test Results
- Applicable QC Summary
- Client Chain-of-Custody (CoC)
- NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: 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



Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from PBS Environmental - Seattle for Project Number BPO 41854.000. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported in milligram per kilogram (mg/kg) for PCB samples as shown on the analytical reports.



Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology



Definition Appendix

Terms

PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.
R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
mg/Kg	milligram per kilogram



ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Client	PBS Environmental	Samples Received*	4
SDG Number	2217822.00	Analyzed By	Evelyn Ahulu
Date Reported	10/05/2022	Samples Analyzed*	4
Project Number	41854.000	Analysis Method	8082A
Location	Lakewood Library	Preparation Method	3546PR (PCB)

* for this test only

Sample Number	41854.000-PCB01	Received	10/04/2022
Lab Sample ID	22411532	Matrix	Material
Initial Sample Size	2.1814 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	9.2	< 9.2	10/04/2022
Aroclor-1221	9.2	< 9.2	10/04/2022
Aroclor-1232	9.2	< 9.2	10/04/2022
Aroclor-1242	9.2	< 9.2	10/04/2022
Aroclor-1248	9.2	< 9.2	10/04/2022
Aroclor-1254	9.2	< 9.2	10/04/2022
Aroclor-1260	9.2	< 9.2	10/04/2022
PCBs, Total	9.2	<9.2	

Comments: Reporting limit raised due to dilution (matrix interference).

Sample Number	41854.000-PCB02	Received	10/04/2022
Lab Sample ID	22411533	Matrix	Material
Initial Sample Size	2.2277 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	4.5	< 4.5	10/04/2022
Aroclor-1221	4.5	< 4.5	10/04/2022
Aroclor-1232	4.5	< 4.5	10/04/2022
Aroclor-1242	4.5	< 4.5	10/04/2022
Aroclor-1248	4.5	< 4.5	10/04/2022
Aroclor-1254	4.5	< 4.5	10/04/2022
Aroclor-1260	4.5	< 4.5	10/04/2022
PCBs, Total	4.5	<4.5	

Comments: Reporting limit raised due to dilution (matrix interference).

ANALYSIS REPORT



Polychlorinated Biphenyls by Gas Chromatography

Sample Number	41854.000-PCB03	Received	10/04/2022
Lab Sample ID	22411534	Matrix	Material
Initial Sample Size	1.1985 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	1.7	< 1.7	10/04/2022
Aroclor-1221	1.7	< 1.7	10/04/2022
Aroclor-1232	1.7	< 1.7	10/04/2022
Aroclor-1242	1.7	< 1.7	10/04/2022
Aroclor-1248	1.7	< 1.7	10/04/2022
Aroclor-1254	1.7	< 1.7	10/04/2022
Aroclor-1260	1.7	< 1.7	10/04/2022
PCBs, Total	1.7	<1.7	

Comments: Reporting limit raised due to small sample size.

Sample Number	41854.000-PCB04	Received	10/04/2022
Lab Sample ID	22411535	Matrix	Material
Initial Sample Size	2.306 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.87	< 0.87	10/04/2022
Aroclor-1221	0.87	< 0.87	10/04/2022
Aroclor-1232	0.87	< 0.87	10/04/2022
Aroclor-1242	0.87	< 0.87	10/04/2022
Aroclor-1248	0.87	< 0.87	10/04/2022
Aroclor-1254	0.87	< 0.87	10/04/2022
Aroclor-1260	0.87	< 0.87	10/04/2022
PCBs, Total	0.87	<0.87	

Quality Control Results

Project Number:	41854.000	SDG Number:	2217822
		Project Manager:	Mark Hiley
QC Batch(es):	Q1716	Analysis Method:	8082A
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	10/04/2022		
Blank: MBLK-2217822			

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1	1.0	
Aroclor-1221	ND	mg/Kg	1	1	1.0	
Aroclor-1232	ND	mg/Kg	1	1	1.0	
Aroclor-1242	ND	mg/Kg	1	1	1.0	
Aroclor-1248	ND	mg/Kg	1	1	1.0	
Aroclor-1254	ND	mg/Kg	1	1	1.0	
Aroclor-1260	ND	mg/Kg	1	1	1.0	
PCBs, Total	ND	mg/Kg	1	1	1.0	
<i>Surrogates:</i>				% Rec		
Tetrachloro-m-xylene			1		93	40-140
Decachlorobiphenyl			1		105	40-140

Lab Control Sample: LCS-2217822

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	19	mg/Kg	1	20.0	95	40-140	
<i>Surrogates:</i>							
Tetrachloro-m-xylene			1		70	40-140	
Decachlorobiphenyl			1		104	40-140	

Lab Control Sample: LCS-1016+1260-2217822

Lab Control Sample Duplicate: LCS Dup-1016+1260-2217822

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	16.6	mg/Kg	1	20.0	83	40-140			
	16.8			20.0	84	40-140	1.2	50	
Aroclor-1260	19.6	mg/Kg	1	20.0	98	40-140			
	19.4			20.0	97	40-140	0.9	50	
<i>Surrogates:</i>									
Tetrachloro-m-xylene			1		95	40-140			
					92	40-140			
Decachlorobiphenyl			1		108	40-140			
					108	40-140			



Surrogate Recovery Summary Report

Client		SDG Number		
PBS Environmental		2217822		
Project				
41854.000				
Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
41854.000-PCB01-DL	22411532DL1	Decachlorobiphenyl	76%	40-140
41854.000-PCB01-DL	22411532DL1	Tetrachloro-m-xylene	52%	40-140
41854.000-PCB02-DL	22411533DL1	Decachlorobiphenyl	100%	40-140
41854.000-PCB02-DL	22411533DL1	Tetrachloro-m-xylene	101%	40-140
41854.000-PCB03	22411534	Decachlorobiphenyl	94%	40-140
41854.000-PCB03	22411534	Tetrachloro-m-xylene	77%	40-140
41854.000-PCB04	22411535	Decachlorobiphenyl	115%	40-140
41854.000-PCB04	22411535	Tetrachloro-m-xylene	95%	40-140
LCS Dup-1016+1260-2217822	LCS Dup-1016+1260-2217822	Decachlorobiphenyl	108%	40-140
LCS Dup-1016+1260-2217822	LCS Dup-1016+1260-2217822	Tetrachloro-m-xylene	92%	40-140
LCS-1016+1260-2217822	LCS-1016+1260-2217822	Decachlorobiphenyl	108%	40-140
LCS-1016+1260-2217822	LCS-1016+1260-2217822	Tetrachloro-m-xylene	95%	40-140
LCS-2217822	LCS-2217822	Decachlorobiphenyl	104%	40-140
LCS-2217822	LCS-2217822	Tetrachloro-m-xylene	70%	40-140
MBLK-2217822	MBLK-2217822	Decachlorobiphenyl	105%	40-140
MBLK-2217822	MBLK-2217822	Tetrachloro-m-xylene	93%	40-140

* Recovery outside limits



INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **2217822**

Contract: **N/A**

Determination: **8082 PCB Aroclors <Material>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R001709	CCV1 1016-1260	PCB_2022-1-2	10/04/2022	Aroclor-1016	5	5	ug/mL	100	80-120
		PCB_2022-1-2	10/04/2022	Aroclor-1260	5	5	ug/mL	100	80-120
	CCV1 1254	PCB_2022-1-3	10/04/2022	Aroclor-1254	5	5	ug/mL	100	80-120
	ICV 1016-1254- 1260	PCB_2022-1-4	10/04/2022	Aroclor-1016	5	4.998	ug/mL	100	85-115
		PCB_2022-1-4	10/04/2022	Aroclor-1254	5	5.191	ug/mL	104	85-115
		PCB_2022-1-4	10/04/2022	Aroclor-1260	5	5.585	ug/mL	112	85-115
	CCV2 1016-1260	PCB_2022-1-2	10/04/2022	Aroclor-1016	5	5.258	ug/mL	105	80-120
		PCB_2022-1-2	10/04/2022	Aroclor-1260	5	5.353	ug/mL	107	80-120
	CCV2 1254	PCB_2022-1-3	10/04/2022	Aroclor-1254	5	5.126	ug/mL	103	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

ORGANICS LABORATORY SERVICES



Company PBS Environmental - Seattle
Address 214 E Galer St. Suite 300
 Seattle, WA 98102
Project Manager Mr. Mark Hiley
Phone (206) 233-9639
Office: (800) 628-9639

NVL Batch Number 2217822.00
TAT 3 Days **AH No**
Rush TAT
Due Date 10/7/2022 **Time** 10:40 AM
Email mark.hiley@pbsusa.com
Fax (866) 727-0140

Project Name/Number: 41854.000 **Project Location:** Lakewood Library

Subcategory Quantitative analysis

Item Code ORG-05 **Method** 8082 PCB Aroclors <Bulk>

Total Number of Samples 4 **Rush Samples**

	Lab ID	Sample ID	Description	A/R
1	22411532	41854.000-PCB01		A
2	22411533	41854.000-PCB02		A
3	22411534	41854.000-PCB03		A
4	22411535	41854.000-PCB04		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Courier				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Rachelle Miller		NVL	10/4/22	1040
Analyzed by	Evelyn Ambr		NVL	10/4/22	16:00
Results Called by					
<input type="checkbox"/> Faxed <input type="checkbox"/> Emailed					

Special Instructions:

APPENDIX D

PBS Inspector Certifications

THIS IS TO CERTIFY THAT

CLAIRE TSAI

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 12/10/2021

Course Location: Online,

Certificate: IR-21-7316B



CCB #SRA0615 4-Hr Training

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

Expiration Date: 12/10/2022

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, Oregon 97239
503.248.1939

A handwritten signature in black ink that reads "Andy Fridley".

Andy Fridley, Instructor



Transmittal

DATE: November 27, 2023

TO: Christina Neville-Neil
Pierce County Library System

FROM: Claire Tsai/Mark Hiley

PROJECT: 41854.000

REGARDING: Lakewood Library Elevator Hydraulic Oil Sampling
Lakewood, Washington

Dear Mrs. Neville-Neil,

PBS Engineering and Environmental Inc. (PBS) collected a sample of the Elevator Hydraulic Oil in the Lakewood Library at 6300 Wildaire Rd SW, Lakewood, WA 98499 on November 16, 2023.

The sample was assigned a unique identification number and transmitted to NVL Laboratories, Inc. in Seattle, Washington under chain-of-custody protocols for analysis. The sample was analyzed by EPA Method 8082.

Polychlorinated Biphenyls (PCBs) were not detected by laboratory analysis in the sample collected.

- Elevator oil – West basement elevator mechanical room

Attachment(s): Laboratory Analysis Report and Chain-of-Custody Documentation

November 21, 2023

Mark Hiley

PBS Environmental - Seattle

214 E Galer St. Suite. 300

Seattle, WA 98102



NVL Batch # 2318254.00

RE: Organics PCB
Method: 8082 PCB Aroclors <liquid>
Item Code: ORG-06

Client Project: 41854.000

Location: Lakewood Library

Dear Mr. Hiley,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

- Case Narrative & Definition of Data Qualifiers
- Analytical Test Results
- Applicable QC Summary
- Client Chain-of-Custody (CoC)
- NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

A handwritten signature in black ink, appearing to read "Nick Ly".

Nick Ly, Technical Director

Enc.: Sample results



NVL Batch # 2318254.00

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from PBS Environmental - Seattle for Project Number 41854.000. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported in milligrams per kilogram (mg/kg) for PCB samples as shown on the analytical reports.



NVL Batch # 2318254.00

Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology



NVL Batch # 2318254.00

Definition Appendix

Terms

PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.
R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SSMI	Surrogate has matrix interference.
Spike Conc	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m ³	Micrograms per cubic meter.
ug/100cm ²	Micrograms per hundred square centimeter.



Quality Control Results

Client Project #: 41854.000	Batch #: 2318254.00
	Project Manager: Mr. Mark Hiley

Preparation Method: EPA 3580A Preparation Date: 11/20/2023	Analysis Method: EPA 8082 Analysis Description: Polychlorinated Biphenyls by Gas Chromatography
---	--

Blank: 2318254

Analyte	Blank Results	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1.00	1.00	
Aroclor-1221	ND	mg/Kg	1	1.00	1.00	
Aroclor-1232	ND	mg/Kg	1	1.00	1.00	
Aroclor-1242	ND	mg/Kg	1	1.00	1.00	
Aroclor-1248	ND	mg/Kg	1	1.00	1.00	
Aroclor-1254	ND	mg/Kg	1	1.00	1.00	
Aroclor-1260	ND	mg/Kg	1	1.00	1.00	
PCBs, Total	ND	mg/Kg	1			
<i>Surrogates:</i>					% Rec	
Tetrachloro-m-xylene			1		110	40-140
Decachlorobiphenyl			1		110	40-140

Lab Control Sample: LCS 1254-2318254

Analyte	Blank Spike Results	Units	DF	Spike Conc	% Rec	Limits	Qualifiers
Aroclor-1254	20	mg/Kg	1	20.00	100	40-140	
<i>Surrogates:</i>							
Tetrachloro-m-xylene			1		120	40-140	
Decachlorobiphenyl			1		66	40-140	

Lab Control Sample: LCS 1016+1260-2318254
Lab Control Sample Duplicate: LCS Dup 1016+1260

Analyte	Blank Spike Results	Units	DF	Spike Conc	% Rec	Limits	RPD %	RPD Limit	Qualifiers
Aroclor-1016	21	mg/Kg	1	20.00	110	40-140			
	20			20.00	100	40-140	7	50%	
Aroclor-1260	23	mg/Kg	1	20.00	120	40-140			
	25			20.00	130	40-140	5	50%	
<i>Surrogates:</i>									
Tetrachloro-m-xylene			1		110	40-140			
					110	40-140			
Decachlorobiphenyl			1		100	40-140			
					110	40-140			

*** Recovery outside of control limits**



Surrogate Recovery Summary Report

Client PBS Environmental - Seattle

Batch # 2318254.00

Project 41854.000

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
41854.000-PCB1	23109519	Decachlorobiphenyl	65%	40-140
41854.000-PCB1	23109519	Tetrachloro-m-xylene	88%	40-140

*Recovery outside of the limits



NVL Batch # 2318254.00

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Sample	Analyzed	Analyte	Target	Solution Conc	Unit	% Rec	Limits
ICV-1016	11/20/2023	Aroclor-1016	5.0	4.90	ug/mL	98	85-115
ICV-1254	11/20/2023	Aroclor-1254	5.0	5.31	ug/mL	106	85-115
ICV-1260	11/20/2023	Aroclor-1260	5.0	5.14	ug/mL	103	85-115
CCV1-1016	11/20/2023	Aroclor-1016	5.0	5.21	ug/mL	104	80-120
CCV1-1254	11/20/2023	Aroclor-1254	5.0	5.39	ug/mL	108	80-120
CCV1-1260	11/20/2023	Aroclor-1260	5.0	5.08	ug/mL	102	80-120

% Rec - Percent recovery

* Percent recovery not within control limits

Bench Run No: 2023-1120-1

ORG-06

ORGANICS LABORATORY SERVICES



Company PBS Environmental - Seattle	NVL Batch Number 2318254.00
Address 214 E Galer St. Suite. 300 Seattle, WA 98102	TAT 3 Days AH No
Project Manager Mr. Mark Hiley	Rush TAT
Phone (206) 233-9639	Due Date 11/22/2023 Time 12:40 PM
Office: (800) 628-9639	Email mark.hiley@pbsusa.com
	Fax (866) 727-0140

Project Name/Number: 41854.000 **Project Location:** Lakewood Library

Subcategory Quantitative analysis

Item Code ORG-06 8082 PCB Aroclors <liquid>

Total Number of Samples 1 **Rush Samples**

Lab ID	Sample ID	Description	A/R
1	23109519	41854.000-PCB1	A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Courier				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	11/17/23	1240
Analyzed by	Shalini Patel		NVL	11/20/23	
Results Called by					
<input type="checkbox"/> Faxed <input type="checkbox"/> Emailed					

Special Instructions:

Date: 11/17/2023
 Time: 1:41 PM
 Entered By: Rachelle Miller

