Project Manual

Aquaculture Facilities at WSU Pullman and Puyallup

Washington State University
Pullman and Puyallup, WA

Program No. 1T01645
Issued October 15, 2026
Washington State University
Facilities Services, Capital

CONDITIONS OF THE CONTRACT

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Completion Deliverables Exhibit
00 72 00 General Conditions for Washington State Facilities Construction with Washington State University Amendments
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Attachment B: Puyallup Salmon Lab Good Faith Hazardous Material Survey
Attachment C: Puyallup Screenhouses Good Faith Hazardous Material Survey

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Aquaculture Facilities at WSU Pullman and Puyallup

Agreement between Owner and Design-Builder

(Cost-Plus Fee with a Guaranteed Maximum Price)

This AGREEMENT is made by and between the following parties, for design and construction services, in connection with the Project identified below.

OWNER: Washington State University
c/o Facilities Services, Capital
P.O. Box 641150
Pullman, WA 99164-1150

DESIGN-BUILDER: [To be determined]

PROJECT: Aquaculture Facilities at WSU Pullman and Puyallup
Eastlick Hall
300 NE Veterans Mall
Pullman, WA 99164

Carver Farm
1805 SE Olympia Ave
Pullman, WA 99164

Puyallup Research and Extension Center
1606 Pioneer Ave
Puyallup, WA 98372

In consideration of the mutual covenants and obligations contained herein, Owner and Design-Builder agree as set forth herein.

Article 1
The Work of the Design-Build Contract

1.1 Design-Builder to fully execute the Work. Design-Builder will fully execute the entire Work, including design and construction services, in strict accordance with the Contract Documents, and will provide all material, equipment, tools, labor, and design services necessary to timely complete the Work described in and reasonably inferable from the Contract Documents, except to the extent specifically indicated to be the responsibility of others.

1.2 Design-Builder to further Owner's interests. Design-Builder accepts the relationship of trust and confidence established by the Design-Build Contract and covenants with Owner to cooperate with Owner and others involved with the Project and to exercise Design-Builder's best skill and judgment; to furnish efficient, professional and competent design services and construction administration, management and supervision with sufficient quantities of fully qualified, competent and experienced

personnel; and to perform the Work in an expeditious and economical manner consistent with Owner's interests. The parties will endeavor to promote harmony, cooperation and mutual respect among Project participants to the fullest extent possible in order to further the success of the Project and to effect prompt and successful completion of the Project within the requirements of the Contract Documents, the Contract Time and the Guaranteed Maximum Price (or "GMP").

Article 2
Contract Documents

2.1 The Contract Documents. The "Contract Documents" form the "Design-Build Contract." The Contract Documents consist of this Agreement (Agreement between Owner and Design-Builder or the "Agreement"); any attached Exhibits and other documents listed in the Contract Documents; the General Conditions; other documents listed in Article 13 of this Agreement; and written modifications, amendments and Change Orders to the Design-Build Contract issued after execution of this Agreement. If authorized representatives of both parties execute the Agreement, the Design-Build Contract is effective as of the date of first signature.

2.2. The Design-Build Contract is a complete and integrated agreement. The Design-Build Contract represents the entire, complete, and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. No oral representations or other agreements have been made by the parties except as specifically established in the Design-Build Contract.

2.3 The Design-Build Contract is between only Owner and Design-Builder. The Design-Build Contract will not be construed to create a contractual relationship of any kind between any Persons other than Owner and Design-Builder.

2.4 General Conditions modified. The General Conditions and Division 01 define the term "A/E" and identify certain responsibilities of the A/E. In the Design-Build Contract, however, Design-Builder retains the A/E and is responsible for both design and construction of the Work. The following provisions of the General Conditions are hereby modified:

1.01B	A/E does not represent Owner.
1.01K	The Contract Time is defined in Section 4.2
1.02.1	Signed Agreement includes Design-Builder's final Proposal and presentation materials.
2.06A	The builder's risk insurance will cover the interests of Design-Builder's A/E.
2.06B	A/E's services and expenses may not be covered. Refer to policy.
3.04B	Replace "A/E" with "Owner's consultants."
4.01C	Design-Builder to report discrepancies to Owner.
4.01F	Questions to be referred to Owner.
4.02C	Final Project Record to be submitted to Owner.
4.03	Submittals will be submitted to and reviewed by Owner, not A/E. Replace "A/E" with "Owner" throughout.
4.03E	Design-Builder and Owner may agree on the number of copies of Submittals to be submitted to Owner. If no such agreement is reached, Design-Builder will submit five (5) copies.

4.05	See Article 11 of this Agreement related to the instruments of service. Article 11 of this Agreement will apply in the event of any inconsistency with Section 4.05 of the General Conditions.
5.07A	Replace "A/E" with "Owner's consultants."
5.07H	Replace "A/E" with "Owner's consultants."
5.13A	Owner must approve substitutions. Replace "A/E" with "Owner."
5.22	Design-Builder has no obligation under this Agreement to defend, indemnify, or hold harmless Design-Builder's A/E.
6.06A	Completion of the Contract Work for purposes of RCW Chapters 39.08 and 60.28 will occur upon Final Acceptance.
10.04	Strike "or A/E."
10.08	Strike "A/E and Contractor."

Article 3
Definitions

3.1 Terms, words and phrases to have ordinary meanings. Terms, words and phrases used in the Contract Documents will have the meanings given them in this Agreement and in the General Conditions or, if not defined, in a manner consistent with construction and design industry standards. In the event of any inconsistency in such definitions, the definitions in this Agreement will control.

3.2 Confirmation of GMP Funding. Not used.

3.3 Design-Builder. "Design-Builder" is the Person identified as such in the Agreement and identified as "Contractor" in the General Conditions. The terms "Design-Builder" and "Contractor" are used interchangeably to identify the Person that is a party to this Agreement. Design-Builder must be licensed, bonded, and insured as a contractor, and legally permitted to do business, in the State of Washington. Design-Builder's authorized representative, including its Designated Representative, will be authorized to act on Design-Builder's behalf with respect to the Project.

3.4 Design-Builder's A/E. "Design-Builder's A/E" or "A/E" is a Person lawfully licensed to practice architecture or engineering in the State of Washington that has a direct contract or employment relationship with Design-Builder to perform design, architecture and/or engineering services for all or a portion of the Work. Although Design-Builder's A/E is referred throughout the Contract Documents as if singular in number, Design-Builder's A/E may be multiple Persons. The "Design-Builder's A/E" means Design-Builder's A/E or Design-Builder's A/E's authorized representative, and includes any architect or engineer contracted or employed by Design-Builder to perform design Work for the Project.

3.5 Transition to Sustainable Occupancy Program Payment (TSO Program Payment). Not Used

3.6 Transition to Sustainable Occupancy Reviews (TSO Reviews). Not Used

3.7 Post-Completion Performance Period. Not Used

3.8 Project Execution Plan. The Project approach proposed by Design-Builder in response to Owner's Request for Proposals. Following execution of this Agreement, the Project Execution Plan may be adjusted by mutual agreement.

3.9 The Project Criteria. The Project Criteria may consist of preliminary engineering and architectural drawings and other information intended to convey Owner's initial concepts for the facility, the expected programmatic, functional and operational elements of the facility, and the expected net and gross areas of the buildings. Any drawings and other information included with the Project Criteria are not for construction but will be considered and used by Design-Builder to complete the design and prepare Construction Documents for the Project. Design-Builder or its A/E will be the designer of record for the Project, will take full responsibility for the design, and will produce Construction Documents for permit submission, Owner acceptance, Subcontractor procurement, and construction.

3.10 Design Review Packages. The Project will have regular in-progress design reviews and Design-Builder will submit Design Review Packages to Owner at the (1) Project Confirmation, (2) Detailed Design Documents, and (3) Construction Documents milestones as agreed in the Project Execution Plan developed during project confirmation to convey Design-Builder's plan and design for the Work, consistent with the Contract Documents, including the Project Criteria. When accepted by Owner, these Design Review Packages will establish Project baselines from which future submissions will be evaluated.

Each Design Review Package will be complete upon the earlier of (1) Owner's written acceptance of the package or (2) termination of the Design-Build Contract. Owner is obligated to pay no more than the amount authorized through each Design Review Package milestone and has no obligation to authorize Design-Builder to proceed further with design or construction under the Agreement if it does not accept any of Design-Builder's Design Review Packages.

3.10.1 Project Confirmation. The point in time where the intent of the Project, concept, program, goals, priorities, GMP, and schedule have been established. The GMP identified in this Agreement will be reaffirmed by Owner and Design-Builder through the Project Confirmation submittal accepted by Owner. Design-Builder's submittal will identify any changes to the Project Execution Plan since execution of this Agreement.

3.10.2 Detailed Design Documents. The point in time where the design has been sufficiently completed, to the satisfaction of Owner, to identify Design-Builder expected scope of Work, appropriate trade partners are engaged, and cost, scope, deviation log and schedule have been defined. The GMP identified in the accepted Project Confirmation submittal will be reaffirmed by Owner and Design-Builder through the Detailed Design Documents submittal accepted by Owner. Design-Builder's submittal will also identify any changes to the Project Confirmation since acceptance of that submittal.

3.10.3 Construction Documents. "Construction Documents" are prepared by Design-Builder and accepted by Owner to convey Design-Builder's final design for the Work, consistent with the Contract Documents and permit requirements. The Construction Documents are identified in the General Conditions and other Contract Documents

as Drawings and Specifications but do not include shop drawings or other Submittals. When complete, Owner will accept Design-Builder's Construction Documents Design Review Package, which will identify the final design for the Work. The Construction Documents Design Review Package may be accepted by Owner in phases. The GMP identified in the accepted Detailed Design Documents submittal will be reaffirmed by Owner and Design-Builder through the Construction Documents submittal accepted by Owner. Design-Builder's submittal will also identify any changes to the Detailed Design Documents since acceptance of that submittal.

Article 4
Notice to Proceed and Substantial Completion

4.1 Notice to Proceed. Notices to Proceed will be issued by Owner. Owner may issue separate Notices to Proceed for Design-Builder's design phase services and for construction.

4.2 Contract Time. The Contract Time will be measured from the effective date of the Agreement date to the contractual date of Substantial Completion established in Section 4.3, subject to adjustments as provided in the Contract Documents. Time is of the essence in completion of the Work.

4.3 Substantial Completion and Final Completion. Subject to adjustment and confirmation at Project Confirmation, Design-Builder will achieve Substantial Completion of the Contract by March 31, 2029 subject to adjustments as provided in the Contract Documents, and will achieve Final Completion not later than 90 Days thereafter. Design-Builder represents to Owner that the Contract Time is adequate for full performance of the Work. Design-Builder will also achieve any interim milestones and phasing requirements set forth in the Contract Documents.

4.3.1 Design-Build and Owner shall agree to subproject milestone substantial completion(s) at Project Confirmation, which will begin warranties for the Work of the subproject. Such subproject milestone substantial completion(s) shall not be subject to Liquidated Damages unless specifically set forth in this Agreement.

4.4 Post-Completion Performance Period. Not Used

4.5 Liquidated damages. Owner will assess, and Design-Builder will be responsible for, liquidated damages in the amount of two thousand eight hundred eighty-four dollars and forty-four cents ($2,884.44) per Day for each Day beyond the contractual date for Substantial Completion that Substantial Completion is not timely achieved, and an additional one thousand eight hundred ninety-six dollars thirty cents ($1,896.30) per Day for each Day beyond the time period established in Section 4.3 that Final Completion of the entire Work is not achieved. Design-Builder and Owner agree that any liquidated damages established by this Agreement are not penalties and are a reasonable estimation of actual damages to Owner, as of this date of Agreement, based on the inherent uncertainty and difficulty in calculating and quantifying damages caused by delays in the construction of university facilities.

Article 5
Design-Builder's Design and Preconstruction Services

During the design and preconstruction phase, Design-Builder will perform services as provided in this Agreement and the Contract Documents.

5.1 Design Review Package Obligations.

5.1.1 Design-Builder is not authorized to proceed with, and Owner is not required to pay for, design or construction beyond each Design Review Package milestone until Owner provides written acceptance of Design-Builder's submittal.

5.2.2 If Owner and Design-Builder are unable to finalize any Design Review Package, Owner may terminate the Design-Build Contract as provided in the Contract Documents. If Design-Builder does not provide a Design Review Package submittal acceptable to Owner or otherwise declines or is unable proceed, Design-Builder will receive no payment beyond amounts already paid. In addition, Owner will have the right to seek damages from Design-Builder in accordance with the dispute resolution procedures set forth in the Contract Documents.

5.3 Design Obligations.

5.3.1 During the design and preconstruction phase, Design-Builder will advise and work with Owner and its representatives to make recommendations for alternate or substitute technologies, construction techniques, methods and practices based on maintainability and durability as well as cost savings, time saving and/or other related efficiencies.

5.3.2 The agreements between Design-Builder and Design-Builder's A/E, other design professionals retained by Design-Builder, and Subcontractors will be in writing. These agreements, including services with respect to this Project, will be promptly and fully disclosed to Owner upon Owner's written request after the effective date of the Design-Build Contract.

5.3.3 Design-Builder will be responsible for ensuring that the Construction Documents are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations, and lawful orders of public authorities, including, but not limited to, the latest adopted versions of:

.1 International Building Code with State of Washington Administrative Code Amendments

.2 International Mechanical Code with State of Washington Administrative Code Amendments

.3 Uniform Plumbing Code with State of Washington Administrative Code Amendments

.4 International Energy Conservation Code-Commercial with State of Washington Administrative Code Amendments

.5 International Fire Code with State of Washington Administrative Code Amendments

.6 National Electric Code with Washington State Administrative Code Amendments – Regulated by State of Washington Department of Labor and Industries

.7 ADA Title II for Public Buildings in conjunction with the IBC and ICC A-117.1

.8 ASME A17.1 with State of Washington Administrative Code Amendments for elevators – Regulated by State of Washington Department of Labor and Industries

.9 State of Washington Safety Codes for workers per Washington Administrative Code

.10 Asbestos regulations per Washington Administrative Code

5.3.4 Owner and Design-Builder will mutually agree on a schedule for in-progress design meetings. The design meetings will address the requirements for construction of the Project, including but not limited to 30, 60 and 90% drawings necessary to satisfy the NIST Grant processes and other details that establish the quality levels of materials and systems proposed, and will identify any deviations from the Project Criteria, Proposal including the Project Execution Plan, or design documents included in a previously approved Design Review Package. During the design process, Design-Builder will document for Owner's benefit all decisions made. Design Review Packages will be authorized by written acceptance by Owner.

5.3.5 Not Used.

5.3.6 Upon Owner's written authorization, Design-Builder, with the assistance of Owner, will prepare and file design documents, including Construction Documents, required to obtain necessary approvals of governmental authorities having jurisdiction over the Project. This will include any specific approval processes necessary to satisfy the NIST Grant obligations.

5.3.7 Design-Builder will obtain from each of its design professionals, including Design-Builder's A/E, and will provide Owner with certifications with respect to the documents and services provided by these professionals (a) that, to the best of their knowledge, information and belief, the documents or services to which such certifications relate (i) are consistent with the Project Criteria and Proposal (unless specifically modified through an approved Design Review Package) and (ii) comply with applicable laws, ordinances, codes, rules and regulations governing the design of the Project; and (b) that Owner and its consultants will be entitled to rely upon the accuracy of the representations and statements contained in such certifications.

5.3.8 Design-Builder's design services will result in a Project design in accordance with the Contract Documents, including the Project Criteria, and suitable for its intended purpose. At the time of performance, Design-Builder's design professionals will be properly licensed in the State of Washington, equipped, organized and financed to perform the services. Each Person who performs the services will be experienced and qualified to perform the services he or she performs, and Owner will be entitled to rely upon any assistance, guidance, direction, advice or other services provided by any such Person.

5.3.9 Design-Builder will, at no cost to Owner, promptly and satisfactorily correct any of Design-Builder's design services that are defective or not in conformity with the requirements of the Design-Build Contract. The obligations of Design-Builder to correct defective or non-conforming design services will not in any way limit any other obligations of Design-Builder or other rights and remedies available to Owner under the Design-Build Contract or otherwise by law.

5.3.10 When the Contract Documents require or Design-Builder causes a Subcontractor of any tier to provide professional design services or certifications related to systems, materials or equipment, Design-Builder will cause design services or certifications to be provided by properly licensed design professionals and will ensure that all documents bear such design professional's written approval. Owner will be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals.

5.4 Supplemental Preconstruction Obligations.

5.4.1 Design-Builder will include in the in-progress meetings with Owner such matters as procedures, progress, coordination, and scheduling of the Work. Design-Builder will actively and cooperatively advise Owner on proposed site use and improvements, selection of materials, and building systems and equipment. Design-Builder will also actively and collaboratively provide recommendations consistent with the Project requirements to Owner regarding constructability; availability of materials and labor; time requirements for procurement, installation and construction; phasing and site work planning; sequencing and scheduling for procurement, installation and construction; traffic planning; factors related to construction quality, maintainability and durability; and factors related to construction cost including, but not limited to, costs of alternative designs and materials, preliminary budgets, life-cycle data, and possible cost reductions.

5.4.2 Design-Builder will work with Owner to prepare a constructability plan for the Project to reduce cost, save time, improve quality, reduce risk and improve the overall process of Project delivery. Key objectives of the constructability program will include creation and maintenance of a well-planned, safe, effective, cooperative and mutually beneficial work environment for all participants. A primary objective of these efforts will be to ensure that the final Cost of the Work does not exceed the GMP and the Project is completed on time. Design-Builder will minimize adverse effects of labor or material shortages or delays; time requirements for procurement, installation and construction; and construction cost.

5.4.3 Design-Builder will perform site investigations, including but not limited to utility locates, to assist in development of the design and construction planning. Any investigations of hidden or subsurface conditions have been made only for purposes of developing the Project Criteria. The results of these investigations are available for the convenience of Design-Builder but they are not Contract Documents. There is no guarantee, express or implied, that the conditions indicated are representative of those existing throughout the site or that unforeseen developments may not occur. Design-Builder is solely responsible for interpreting the information and extrapolating beyond the testing location, including each individual boring, test pit or other location. Design-Builder will undertake any further investigation that Design-Builder believes necessary for design or construction.

5.4.4 Design-Builder will provide recommendations with regard to accelerated or fast-track scheduling, procurement, or phased construction. Design-Builder will take into consideration occupancy needs, cost reductions, cost information, constructability, provisions for temporary facilities and procurement and construction scheduling issues.

5.4.5 Design-Builder will maintain, for Owner's review and acceptance, and update at least monthly, a procurement schedule for long lead items. Design-Builder will expedite and coordinate the ordering and delivery of long lead materials. If Owner agrees to procure any items prior to the establishment of the GMP, such items will be identified in the Contract Documents and Owner will assign contracts for these items to Design-Builder. Thereafter, Design-Builder will accept responsibility for them.

5.4.6 Design-Builder will prepare an estimate of the Cost of the Work or the cost of program requirements using area, volume or similar conceptual estimating techniques for Owner's review and approval. Thereafter, Design-Builder will collaborate with Owner on cost estimates throughout the preconstruction phase as the design is completed, and will prepare detailed cost estimates with its Detailed Design Documents and Construction Documents Design Review Packages. Estimates will include increasing detail and refinement and allow for the further development of the design. Design-Builder will inform Owner when estimates of the Cost of the Work exceed the latest approved Project budget and make recommendations for corrective action. Design-Builder will also prepare other necessary cost studies, comparative estimates, and comparative schedules to evaluate alternatives and options.

5.4.7 Owner, Design-Builder, and their consultants may participate in value engineering prior to completion of the design. Changes may be proposed to the drawings as a result of these processes. Design-Builder will make changes requested by Owner after consultation with Design-Builder's A/E. At the completion of its review(s), Design-Builder will provide Owner with a formal record of its findings and recommendations. Value engineering will include selecting building systems, with final selection of systems to occur prior to completion of Construction Documents.

5.4.8 Design-Builder will prepare promptly following execution of this Agreement (and prior to submitting any Application for Payment) and periodically update an overall Project schedule consistent with the requirements of the Contract Documents. This schedule will identify all major Project milestones and coordinate and integrate Design-Builder's services with Owner's responsibilities. The Progress Schedule will include all major components of the Work; expected commencement and completion dates for the Work and for each Subcontractor; major milestones; dates for ordering and the delivery of major products, including those that are long lead; expected Submittal submission dates; occupancy requirements of Owner; and all other information required by the General Conditions and other Contract Documents. Design-Builder will be responsible for updating the Progress Schedule during construction as set forth in the General Conditions and other Contract Documents.

5.4.9 Design-Builder will prepare and submit a subcontracting plan to Owner that identifies Design-Builder's intended scopes of work, the timing of solicitation of Subcontractor bids and proposals, major coordination issues, and means to enhance the opportunity for local businesses to participate in performing the Work. Design-

Builder will use its best efforts to develop Subcontractor interest in the Project and competition for each scope of work. Unless otherwise approved by Owner, Design-Builder will solicit at least three (3) bids or proposals for each component of the Work. Design-Builder will only self-perform Work when such Work is competitively bid by Design-Builder and Design-Builder can perform the Work at the lowest net cost to Owner.

Article 6
Design-Builder's Obligations During Construction

During the construction phase, Design-Builder will perform services as provided in this Agreement and the other Contract Documents, including Section 01 11 00, Summary of Work, and the General Conditions.

6.1 Owner to review and accept Construction Documents. Design-Builder will perform no construction Work prior to Owner's review and acceptance of Design-Builder's Construction Documents via one or more Construction Documents Design Review Submittal. Review and acceptance of Construction Documents by Owner is subject to the limitations of the Contract Documents and will not constitute an approval of Design-Builder's means and methods or a waiver or modification of any requirement of the Contract Documents.

6.2 Design-Builder to provide Submittals. Owner and Design-Builder will mutually agree on a schedule for Design-Builder to deliver Submittals for Owner review and comment. Owner will have at least fourteen (14) Days to review Submittals unless otherwise agreed. Design-Builder will perform no portion of the construction Work for which the Contract Documents require Submittals until Owner has accepted and taken action on each required Submittal in accordance with the procedure set forth in the Contract Documents. However, Submittals are not Contract Documents. Their purpose is to demonstrate for those portions of the Work for which Submittals are required the way that Design-Builder proposes to conform to the Contract Documents. Review and acceptance of Submittals by Owner is subject to the limitations of the Contract Documents and will not constitute an approval of Design-Builder's means and methods or a waiver or modification of any requirement of the Contract Documents. Design-Builder will resolve all Owner Submittal review comments prior to commencement of the Work.

6.3 Design-Builder to provide Project staff. Design-Builder will provide experienced staff through Final Completion consistent with or in excess of that specified in the Proposal. Design-Builder's Project staff will not be changed without the written permission of Owner. The staff will include necessary and appropriate design, construction management personnel and administrative staff, including, at a minimum, a qualified Project Manager, a full-time Superintendent, a full-time Project Engineer, a Contractor Quality Control ("CQC") Manager, a scheduler, and an estimator. Design-Builder's staff will be sufficient to ensure that:

.1 Responses to all correspondence are provided within seven (7) Days of receipt;

.2 Submittals are reviewed for completeness and forwarded to Owner within three (3) Days of receipt;

.3 Design-Builder's Project staff remains dedicated to the Project through Final Completion at no additional cost to Owner; and

.4 Responses, Notices, substantiation, Rejections, and Claims as required by Parts 7 and 8 of the General Conditions are provided to Owner within the time periods required by the Contract Documents.

6.4 Design-Builder to conduct meetings. Unless otherwise determined by Owner, Design-Builder will schedule and conduct weekly Project review meetings to discuss such matters as procedures, progress, coordination, scheduling, and status of the Work, and will prepare and promptly distribute written minutes from the meetings.

6.5 Design-Builder to actively manage and supervise Subcontractors. Design-Builder will coordinate and review and inspect the Work of Subcontractors. Design-Builder will provide notification at regularly scheduled meetings of any major defects or deficiencies and recommend remedial action. Design-Builder will take the lead role in negotiating and resolving any disputes with Subcontractors and obtain Owner's concurrence or approval of all settlements before executing change orders with Subcontractors.

6.6 Progress reports. Design-Builder will record the progress of the Project. On a monthly basis, or otherwise as agreed by Owner, Design-Builder will submit with its Application for Payment written progress reports to Owner, showing percentages of completion and other information required by Owner. The reports will:

.1 Include information about Subcontractor buyout, as applicable.

.2 Identify variances between scheduled and probable completion dates for major components of the Work. Recommend action required to meet scheduled completion dates.

.3 Provide summary reports of each Progress Schedule update to document all significant changes and the reasons for them.

.4 Record in writing and by photographs the progress of the Project.

.5 Maintain and report a QC log.

.6 Document any outstanding questions and risks associated with delayed responses.

.7 List outstanding Submittals and risks associated with delayed responses.

.8 Describe the status of outstanding Contract Change Proposals and Change Proposal Requests, and any risks associated with delayed responses.

.9 List all unresolved issues and Claims.

.10 Identify the status of permits that Design-Builder is required to obtain or assist in obtaining.

.11 Provide report to include in quarterly NIST Grant Progress Report.

Design-Builder will also keep, and make available to Owner with its monthly Application for Payment or more often as requested by Owner, a daily log containing a record for each Day of weather, Subcontractors working on the site, deliveries,

Work accomplished, portions of the Work in progress, number of workers on site, identification of equipment on site, problems that might affect progress of the Work, accidents, injuries, and other information required by Owner. The information on the log does not constitute Notice of a potential or actual Claim to Owner.

Design-Builder will maintain, in good order and on a current basis, a record copy of all subcontracts, purchase orders, Addenda, Unilateral and Bilateral Change Orders, Submittals, inspection reports, maintenance and operating manuals and instructions, and Project Record. These records will be available to Owner, and, at completion of the Project, delivered to Owner.

6.7 Financial reporting and forecasting: Design-Builder will develop and maintain a system of cost control and accurate financial reporting capabilities during the Project, keep full and detailed records and accounts, and exercise such controls as necessary for proper financial management under this Agreement and to substantiate all costs incurred. At least monthly and as otherwise requested, Design-Builder will report to Owner any variances between actual and estimated costs. Design-Builder's financial reporting will include but not necessarily be limited to:

.1 Subcontractor and supplier buyout status;

.2 Expenditures to date and forecasted costs to complete the Work (including projected savings or overruns) allocated by Schedule of Values line item with variances explained;

.3 Projected cash flow;

.4 Contingency use log;

.5 Change Order log (pending and/or approved Unilateral and Bilateral Change Orders); and

.6 Risk and issues log identifying estimated costs for each identified risk and issue.

6.8 Quality control and assurance and Owner's right to inspect the Work: Design-Builder will develop and submit an overall Quality Control and Assurance Plan administered by Design-Builder's CQC Manager to ensure that the Work is inspected by qualified members of Design-Builder's staff or third parties. The Quality Control and Assurance Plan must be acceptable to Owner. Owner expressly reserves the right to inspect any and all portions of the Work at any time during the Project. Design-Builder will provide access to the Work as needed by Owner or its representatives, including the use of scaffolding, platforms, or lifts. All corrections or observations noted by Owner will be logged by Design-Builder on a QC log for correction, tracking and documentation to the satisfaction of Owner. Neither Design-Builder nor its Subcontractors will intentionally install Work that does not meet applicable requirements.

6.9 Survey and layout obligations. Owner may provide survey benchmarks within or near the construction limits for the Project. Once benchmarks are established by Owner, it will be Design-Builder's responsibility to re-establish them if they are disturbed. Design-Builder will be responsible to Owner for general building layout from established benchmarks, for the detailed layout of individual Work, and for the

coordination of Work between Subcontractors to ensure that no conflicts exist.

6.10 Special inspection and testing. Certain special inspection and testing may be provided by Owner per Section 01 45 23, Testing Laboratory Services. Design-Builder will provide inspectors and testers furnished by Owner adequate advance notice and timely and appropriate access to the Work.

Article 7
Design-Builder Obligations During the Post-Completion Performance Period
Not Used

Article 8
Contract Sum and Guaranteed Maximum Price

8.1 Contract Sum. Following execution of the Agreement, and to the extent funding has been approved, Owner will pay the Contract Sum to Design-Builder for Design-Builder's performance of the Design-Build Contract. The Contract Sum is the sum of the Cost of the Work and Design-Builder's Fee; the Contract Sum will not exceed the GMP. The Contract Sum does not include Washington State sales tax due on progress payments on account of the Contract Sum.

8.2 Design-Builder's Fee. Design-Builder's Fee shall be a lump sum amount of TBD ($TBD), which is calculated and fixed based upon the established GMP by multiplying TBD percent (TBD%) times the estimated sum of the Cost of the Work. The Design-Builder's Fee covers all of Design-Builder's profit and home office overhead as well as all other costs not reimbursable under this Agreement, including but not limited to costs of principal participation, home office administrative support, taxes, financing costs, and profit. The insurance rates and bond premium used to calculate the GMP will not increase during the term of this Agreement. The fee for changed Work for Design-Builder and Subcontractors shall be as specified in this Agreement. Design-Builder shall not separately mark-up the Design-Builders fee by the fee of the General Conditions.

8.3 Guaranteed Maximum Price. The sum of the Cost of the Work and Design-Builder's Fee for the Project, for all design and construction services required by the Contract Documents, is guaranteed by Design-Builder not to exceed the guaranteed maximum price of twenty-five million, six hundred thousand dollars and zero cents ($25,600,000.00), subject to additions and deductions for changes in the Work as provided in the Contract Documents. The GMP may be adjusted by mutual agreement during the Project and is expected to be confirmed in writing by Owner and Design-Builder through Owner's written acceptance of each Design Review Package. Owner must approve explicitly in writing any changes to the GMP. The GMP includes by way of example and not limitation all design and construction Costs of the Work; all taxes except Washington State sales tax due on the Contract Sum; Design-Builder's contingency; any approved Allowances; all insurance, including liability and E&O coverage; overhead; and Design-Builder's Fee. Costs that would cause the GMP to be exceeded will be paid by Design-Builder without reimbursement by Owner.

8.3.1 Apprenticeship Utilization Requirements. Design-Build will meet mandatory apprentice utilization of at least fifteen percent (15%) of the total labor hours worked on the Design-Build Contract unless Owner provides written determination otherwise per the Contract Documents. Design-Builder acknowledges that apprenticeship utilization goals should be met, and that Owner has determined monetary incentives for meeting the goals, and monetary penalties for not meeting the goals. Therefore, Owner may retain the sum of five hundred dollars and zero cents ($500.00) as a monetary penalty for not meeting the apprenticeship utilization goals. Or, Owner will pay, by issuance of a Change Order upon Substantial Completion, the sum of five hundred dollars and zero cents ($500.00) as an incentive for meeting the apprenticeship utilization goals.

8.4 Contingency. The GMP includes all Design-Builder contingencies. The contingency is a sum established for Design-Builder's use to cover costs that are properly reimbursable as Cost of the Work but not the basis for a Change Order, such as, for example, design omissions, buyout error, scope gaps, failure of a Subcontractor of any tier, or expediting costs for critical materials. Design-Builder will use the contingency only with Owner's consent. Unused contingency will revert to Owner at Final Completion of the Project. For contingency within the GMP, Design-Builder will apply no additional fee for use of contingency.

8.5 Unit Prices. Any Unit Prices are as follows:

Description	Units	Price ($0.00)
None		

Unit Prices as set forth in the Contract Documents are "all in." They include all material, equipment, labor, delivery, installation, and Subcontractor costs, any overhead and profit not included in Design-Builder's Fee, and any other costs or expenses in connection with, or incidental to, the performance of that portion of the Work to which such Unit Prices apply.

8.6 Allowances. Allowances included in the GMP are as follows:

Allowance	Amount	Included Items
None		

A limited number of Allowances may be included in the GMP due to uncertainty in scope, price and/or quantity at the time this Agreement is executed. Whenever actual costs are more or less than an Allowance, the GMP will be appropriately adjusted. Design-Builder must provide Owner with written Notice of its intent to expend an Allowance amount (providing Owner with the opportunity to approve or reject the cost) before expending an Allowance amount.

8.7 Assumptions. Assumptions or qualifications, if any, on which the GMP is based, are:

Completion Deliverables Exhibit dated 10/15/2026
Project Execution Plan Exhibit dated TBD

8.8 Changes in the Work.

8.8.1 Owner may, without invalidating the Design-Build Contract, order changes in the Work consisting of additions, deletions or other revisions. Owner will issue such changes in writing.

8.8.2 Adjustments of the GMP on account of changes in the Work will be determined by the methods specified in this Agreement.

8.8.3 In the event a Change Order is issued for a Change in the Work, Design-Builder and Subcontractors of any tier may only apply fee for changed Work, including overhead and profit, as specified in this Agreement.

8.8.4 It is the intent of the parties that when the GMP is set, the GMP will include all elements necessary to design, construct, and complete the Project in accordance with the Contract Documents, and that Change Orders adjusting the GMP will therefore not be necessary except in limited circumstances. Accordingly, the GMP will be adjusted only for the following events:

.1 Scope changes.

.2 Concealed or unknown conditions.

.3 Regulatory agency changes.

.4 Changes required by an inspector beyond those contained in regulations.

.5 Allowance adjustments.

8.8.5 Events for which the GMP will not be adjusted include but are not limited to:

.1 Gaps in coverage between Subcontractors, including self-performed Work by Design-Builder, that occur after the GMP is negotiated.

.2 An item indicated in the Contract Documents that was not picked up in the GMP.

.3 Errors, omissions, or ambiguities in the design documents, including Construction Documents, prepared by Design-Builder.

.4 Coordination inconsistencies between design disciplines that Design-Builder knew of, caused, or reasonably should have known of.

.5 Failure or bankruptcy of a Subcontractor.

.6 Escalation of materials, equipment or labor prices.

.7 Estimating errors.

.8 Expediting costs for critical materials.

.9 Costs related to Subcontractor charges that result from mistakes or omissions in Subcontractor buyout, or coordination issues between Subcontractors, or interference between Subcontractor and Design-Builder or among Subcontractors.

Article 9
Cost of the Work

9.1 Costs to be Reimbursed.

9.1.1 Definition. The term Cost of the Work will mean the actual costs reasonably and necessarily incurred by Design-Builder in the proper performance of the Work, without overhead, profit, mark-up or fee, and at rates not higher than the standard paid at the place of the Project except with prior consent of Owner. The Cost of the Work will include only items reimbursable as set forth in this Article 9. If any cost is subject to Owner's prior approval, Design-Builder will obtain this approval in writing prior to incurring the cost. Whenever the Contract Documents state that Design-Builder will perform any Work or incur any expense, it will be understood to mean, in the absence of language to the contrary, that the cost will be a Cost of the Work payable by Owner, not to exceed the GMP.

The following Sections identify the categories of costs to be reimbursed as Costs of the Work.

9.1.2 Construction and Supervision Labor Costs.

9.1.2.1 Wages of construction workers, including working foremen, directly employed by Design-Builder to perform the construction of the Work at the site or, with Owner's approval, at off-site locations in the performance of the Work. Wages of construction workers will not be less than the prevailing rate of wage required by RCW 39.12, "Prevailing Wages on Public Works."

9.1.2.2 Wages or salaries of Design-Builder's supervisory and administrative personnel pre-approved in writing by Owner when stationed at or away from the site, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of time required for the Work and directly involving the Project. The project superintendent, project manager, and estimator are included under this Section, regardless of whether they are or are not working from the field office, for that portion of their time spent working on the Project. Design-Builder will not bill Owner for wages or salaries of these supervisory and administrative personnel in excess of eight (8) hours per day and forty (40) hours per week.

9.1.2.3 Costs paid or incurred by Design-Builder for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary annualized benefits such as sick leave, medical and health benefits, vacation, holidays and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Sections 9.1.2.1 through 9.1.2.3. Costs paid or incurred by Design-Builder for bonuses, stock options, deferred compensation, or discretionary payments to employees are not reimbursable Costs of the Work unless included in agreed burden rates. Owner and Design-Builder reserve the right to establish potential performance bonuses that can benefit Owner by reducing the overall cost of the Project.

9.1.2.4 The parties may establish fully burdened wage rates when establishing the GMP. Any agreed wage and burden rates are subject to Owner's audit and may be adjusted to reflect actual charges.

9.1.3 Subcontract Costs.

9.1.3.1 Payments made by Design-Builder to Subcontractors will be in accordance with the requirements of their subcontracts. The costs in any cost-plus subcontracts must conform to the requirements of this Article 9. Design-Builder will maintain a procedure for the review, processing and payment of Subcontractor payment applications. Design-Builder will verify the completeness of all Subcontractor payment applications and assemble and check all supporting documentation required by the Contract Documents or by the subcontracts, including receipt of all lien waivers and releases.

9.1.3.2 Payments made to subsidiaries or affiliates of Design-Builder must be approved by Owner. Owner expressly reserves the right to require Design-Builder to utilize independent Subcontractors rather than Design-Builder's subsidiaries or affiliates. Any Work subcontracted to a Design-Builder subsidiary or affiliate will be executed on a lump sum or cost-reimbursable basis as pre-approved by Owner.

9.1.4 Costs of Materials and Equipment Incorporated in the Completed Construction.

9.1.4.1 Costs, including transportation and storage, of materials and equipment incorporated or to be incorporated in the completed construction.

9.1.4.2 Costs of materials described in Section 9.1.4.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, if any, will become Owner's property at the completion of the Work or, at Owner's option, will be sold or returned to the supplier by Design-Builder. Any amounts realized from such sales or returns will be credited to Owner as a deduction from the Cost of the Work.

9.1.5 Costs of Other Materials and Equipment, Temporary Facilities and Related Items.

9.1.5.1 Costs of consumables, including transportation, storage, installation, maintenance, dismantling and removal, of materials, supplies, temporary facilities, machinery, and equipment, that are provided by Design-Builder at the site and fully consumed in the performance of the Work.

9.1.5.2 Rental charges (not to exceed the local fair market rental costs) actually paid to unrelated third parties for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by Design-Builder at the site, and the costs of transportation, installation, minor repairs and replacements, dismantling and removal.

.1 Rates and quantities of equipment rented will be an itemization of the actual length of time that construction equipment necessary and appropriate for the Work is used at the site times the applicable rental cost. Rentals from Design-Builder or any entity in which Design-Builder or one or more of its owners has a direct or indirect ownership interest ("CM Equipment") will be pre-approved by Owner and separately accounted for. The rental cost for CM Equipment, as well as all other rental charges, will not exceed rates listed in the Rental Rate Blue Book by Data Quest, San Jose, California, or fair market rental costs, whichever are lower. If more than one rate is applicable, the best available rate will be utilized. The rates in effect at the time of the performance of the Work are the

maximum rates allowable for equipment of modern design and in good working condition and include full compensation for furnishing all fuel, oil, lubrication, repairs, maintenance, and insurance. No gas surcharges will be charged. Equipment not of modern design and/or not in good working condition will have lower rates. Hourly, weekly, and/or monthly rates, as appropriate, will be applied to yield the lowest total cost. The total cost of rental allowed will not exceed the cost of purchasing the equipment outright. Owner, at its option, may direct Design-Builder to purchase tools and equipment specifically for the Project, which will become Owner's possession upon completion of the Work. If equipment is required for which a rental rate is not established by the Rental Rate Blue Book, an agreed rental rate will be established for the equipment, which rate and use must be approved by Owner prior to performing the Work. Design-Builder will separately account for rentals from itself or any Person in which Design-Builder or one or more of its owners has a direct or indirect ownership interest.

9.1.5.3 Costs of street cleaning, if any, and for removal and disposal of debris and rubbish from the site.

9.1.5.4 Cost of document reproductions, telephone service including long-distance telephone calls, Internet service, postage and parcel delivery charges, and other technology-related costs incurred by Design-Builder related to the Project and approved by Owner, including the cost of computers, other hardware, and software, as well as reasonable petty cash expenses of the Project.

9.1.5.5 the reasonable travel expenses, based upon most current Washington State travel per diem guideline rates, of Design-Builder's personnel incurred while traveling in connection with the Work with Owner's prior written approval and vehicle expenses which are not related to travel expenses but are assignable to the worksite for Design-Builder's personnel (Superintendent, Project Manager, Project Engineer and Quality Control Staff). Commuting-related travel is not reimbursable.

9.1.5.6 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, if approved in advance by Owner and meeting the other requirements for payment of off-site materials and equipment.

9.1.6 Design and Other Consulting Services.

9.1.6.1 Compensation, including fees and reimbursable expenses, paid by Design-Builder for design and design-related consulting services required by the Contract Documents, including but not limited to services to produce Construction Documents and Submittals needed for permitting, final Owner approval, Subcontractor bidding purposes, and construction.

9.1.7 Miscellaneous Costs.

9.1.7.1 That portion of insurance and bond premiums that are directly attributed to the Design-Build Contract. Costs for self-insurance are not reimbursable without Owner's prior written approval.

9.1.7.2 Use or similar taxes (but not income or B&O taxes) imposed by a governmental authority that are related to the Work and for which Design-Builder is liable. Sales tax due on the Contract Sum will be paid by Owner with each progress payment.

9.1.7.3 Project-specific fees and assessments for permits, license fees, inspections that Design-Builder is required by the Contract Documents to pay, but not for the cost of any re-inspection fees or penalties.

9.1.7.4 Fees of laboratories for tests required of Design-Builder by the Contract Documents and not paid for by Owner, except those related to defective or non-conforming Work for which reimbursement is excluded by the Contract Documents.

9.1.7.5 Royalties and license fees paid for the use of a particular design, process or product explicitly required by the Contract Documents. The Cost of the Work will not include, and Design-Builder will be responsible for, any costs of defending suits or claims for infringement of patent rights, or payments made resulting from such suits or claims, resulting from any design or other Work provided by Design-Builder or its A/E, consultants, or Subcontractors of any tier.

9.1.7.6 The cost of warehousing pre-approved in writing by Owner for stored materials or equipment subsequently incorporated into the Work.

9.1.7.7 Costs incurred by Design-Builder in preparing and maintaining the Progress Schedule, scheduling plots, correspondence, and reports, so long as such costs are specific to this Project and were not incurred to prepare for, submit or prove a Claim.

9.1.7.8 Premium costs to provide a retainage bond for the project.

9.1.8 Other Costs and Emergencies.

9.1.8.1 Other costs reasonably incurred in the performance of the Work if and to the extent approved in advance and in writing by Owner.

9.1.8.2 Costs incurred in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property, as provided in the Contract Documents.

9.1.8.3 Cost of repairing or correcting, prior to Final Completion, damaged Work executed by Design-Builder, Subcontractors or suppliers, provided that such damaged Work was not caused by Design-Builder's negligence or failure to fulfill a specific responsibility of the Design-Build Contract, and only to the extent that the cost of repair or correction is not recoverable by Design-Builder from insurance, sureties, Subcontractors of any tier or suppliers. Design-Builder will take reasonable action to recover and, to the extent it has failed to recover, will assign its rights to pursue and collect to Owner upon request.

9.2 Costs Not to Be Reimbursed.

The Cost of the Work will not include:

9.2.1 Salaries and other compensation of Design-Builder's personnel stationed at Design-

Builder's principal office or offices other than the site office, including all administrative and accounting personnel, except as specifically provided in Sections 9.1.2.

9.2.2 Expenses of Design-Builder's principal office and offices other than the site office.

9.2.3 Overhead and general expenses, except as may be expressly included in Section 9.1.

9.2.4 Design-Builder's capital expenses, including interest on Design-Builder's capital employed for the Work.

9.2.5 Rental costs of machinery and equipment, except as specifically provided in Section 9.1.5, or costs or losses resulting from lost, damaged or stolen machinery or equipment or negligent or improper use of machinery or equipment.

9.2.6 Costs due to the negligence or failure of Design-Builder, Subcontractors and/or suppliers or anyone directly or indirectly employed by any of them, or for whose acts any of them may be liable, to fulfill a specific responsibility of the Contract Documents.

9.2.7 Costs, other than costs included in Change Orders approved by Owner that would cause the GMP to be exceeded.

9.2.8 Penalties, extensions, fines, and re-inspection fees imposed by governmental entities to the extent caused by Design-Builder or a Subcontractor of any tier.

9.2.9 Safety costs expressed as a percentage or as any other calculated expression.

9.2.10 Legal, consultant, or claims-related expenses, except as specifically provided in Section 9.1.7.8.

9.2.11 Accounting in Design-Builder's main or home office.

9.2.12 Warehousing in Design-Builder's facility, except as approved under Section 9.1.7.6.

9.2.13 Daily commuting to the jobsite.

9.2.14 Business license(s).

9.2.15 Testing and inspection of rejected Work.

9.2.16 Home office data processing, software, hardware or computer-related costs.

9.2.17 Insurance or bonding costs except as specifically required and reimbursable under the Contract Documents.

9.2.18 Overtime wages unless pre-approved by Owner.

9.2.19 Any cost not specifically and expressly described in Section 9.1.

9.3 Discounts, Rebates and Refunds.

9.3.1 Trade discounts, rebates, refunds and amounts received from sales of surplus materials and equipment will accrue to Owner and Design-Builder will make provisions so that they can be obtained. If Design-Builder is offered discounts and/or rebates based upon prompt payment, Design-Builder will offer Owner the opportunity to take advantage of such discount and/or rebate, and if Owner makes prompt payment then Owner will only be charged the price as reduced by the discount and/or rebate. If Owner declines the opportunity, Design-Builder may keep any such discounts and/or rebates it achieves through its own prompt payment. If Design-Builder does not provide Owner the opportunity to participate then Design-Builder may only charge the net costs after consideration of discounts and rebates. Design-Builder will notify Owner in a timely manner of the availability of such cash discounts, rebates, or refunds.

9.3.2 Amounts that accrue to Owner in accordance with the provisions of Section 9.3.1 will be credited to Owner as a deduction from the Cost of Work.

9.4 Related Party Transactions.

9.4.1 For purposes of Section 9.4, the term “related party” will mean a parent, subsidiary, affiliate or other entity having common ownership or management with Design-Builder; any entity in which any stockholder in, or management employee of, Design-Builder owns any interest in excess of ten percent in the aggregate; or any Person or entity which has the right to control the business or affairs of Design-Builder. The term “related party” includes any member of the immediate family of any Person identified above.

9.4.2 If any of the costs to be reimbursed arise from a transaction between Design-Builder and a related party, Design-Builder will notify Owner of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If Owner, after such notification, authorizes the proposed transaction, then the cost incurred will be included as a cost to be reimbursed, and Design-Builder will procure the Work, equipment, goods or service from the related party. If Owner fails to authorize the transaction, Design-Builder will procure the Work, equipment, goods or service from some Person or entity other than a related party according to the terms of the Contract Documents.

9.5 Accounting Records. Design-Builder and its Subcontractors will keep full and detailed records and accounts related to the Cost of the Work and exercise such controls as may be necessary for proper financial management under the Design-Build Contract and to substantiate all costs incurred. The accounting and control systems will be satisfactory to Owner. Owner will usually conduct, at a minimum, a pre-construction audit conference, an interim audit and a final audit of the Project, however Owner reserves the right to conduct an audit at any time. Owner and Owner’s auditors will, during regular business hours and upon reasonable notice, be afforded access to, and will be permitted to audit and copy (including electronically), Design-Builder’s and Subcontractors’ original records and accounts, including complete documentation supporting accounting entries, books, ledgers, computerized records, daily reports, correspondence, instructions, drawings,

receipts, subcontracts, Subcontractor's proposals, purchase orders, vouchers, invoices of Subcontractors of any tier, memoranda and other data relating to this Project or any Claim. Design-Builder and its Subcontractors will preserve these records for a period of six (6) years after Final Completion, or for such longer period as may be required by law.

Article 10
Payments

10.1 Applications for Payment.

10.1.1 The Contract Documents detail the requirements for Applications for Payment. Based upon Applications for Payment that Design-Builder submits to Owner, Owner will make progress payments to Design-Builder on account of the Contract Sum.

10.2 Progress Payments.

10.2.1 Subject to other provisions of the Contract Documents, the amount of each progress payment will be computed as follows and in accordance with Section 01 29 00, Applications for Payment:

.1 Take that portion of the GMP properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the GMP allocated to that portion in the Schedule of Values. Pending final determination of the cost to Owner of changes in the Work, amounts not in dispute may be included as provided in the General Conditions unless Owner requires that actual cost records be provided;

.2 Add that portion of the GMP 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 Owner, suitably stored and insured off the site at a location agreed upon in writing);

.3 Add Design-Builder's Fee. Design-Builder's Fee will be prorated to equal the percentage of the Cost of the Work described in .1 and .2 as compared to the GMP;

.4 Subtract the aggregate sum of previous payments made by Owner;

.5 Subtract amounts, if any, for which Owner has withheld payment; and

.6 Subtract the statutory retainage of five percent (5%) of the above amount as a fund for the protection and payment of the claims of any Person arising out of the Work and the State of Washington with respect to taxes.

10.3 Final Accounting.

10.3.1 Following Substantial Completion and Final Completion, and when Design-Builder believes that all Work required by the Contract Documents has been fully performed, Design-Builder will deliver to Owner a final accounting of the Cost of the Work with its final Application for Payment.

10.3.2 Owner will review and report in writing on Design-Builder's final accounting within thirty (30) Days after delivery, provided that Owner is given prompt access to Design-Builder's records. Design-Builder will promptly make available at its office all accounting documents related to the Project. Based upon such Cost of the Work as Owner reports to be substantiated by Design-Builder's final accounting, and provided the other conditions of the Contract Documents have been met, Owner will notify Design-Builder in writing of Owner's intention to make final payment or to withhold payment. Owner's final accounting will not preclude or in any way limit Owner from exercising its rights of audit under other provisions of the Design-Build Contract.

10.3.3 If Owner reports that the Cost of the Work as substantiated by Design-Builder's final accounting to be less than claimed by Design-Builder, Design-Builder will be entitled to invoke the dispute resolution procedure of the Design-Build Contract with respect to the disputed amount. If Design-Builder fails to so initiate resolution of the dispute within the time specified in Article 8 of the General Conditions following Owner's delivery of the accounting to Design-Builder, the substantiated amount reported by Owner will become final and binding. Pending a final resolution pursuant to the Contract Documents, Owner will pay Design-Builder any undisputed amount determined by Owner to be due Design-Builder, not to exceed the GMP, in response to Design-Builder's final Application for Payment.

10.3.4 If, subsequent to final payment and at Owner's request, Design-Builder incurs costs in connection with the correction or completion of Work as described as reimbursable in Article 9, Owner will reimburse Design-Builder such costs and Design-Builder's Fee applicable thereto on the same basis as if such costs had been incurred prior to final payment, not to exceed the GMP.

10.4 Final Payment.

10.4.1 Final payment, constituting the entire unpaid balance of the Contract Sum, less retainage, will be made by Owner to Design-Builder no later than thirty (30) Days after Design-Builder has fully performed the Design-Build Contract and Final Completion has occurred (except for Design-Builder's responsibility to correct non-conforming Work discovered after final payment or to satisfy other requirements, if any, that extend beyond final payment), Design-Builder has submitted a final Application for Payment, and Owner has substantiated Design-Builder's final accounting.

10.4.2 Owner will release retainage to Design-Builder in accordance with RCW Chapter 60.28 and the Contract Documents.

10.5 Subcontractor Payment Reporting.

10.5.1 All contract payments are subject to compliance tracking using the Washington State Office of Minority & Women's Business Enterprise's business diversity management system, Access Equity (B2Gnow). Contractor and all subcontractors (regardless of certification) will register and report all progress payments made utilizing the system. The Owner reserves the right to withhold payments from the Contractor for non-compliance with this requirement.

Article 11
Instruments of Service

11.1 Instruments of service. The Drawings (including original Construction Documents), Specifications, materials, models, sketches, renderings, surveys, reports, and other documents, including those prepared as 3D electronic models, using CAD, and existing in other electronic formats, prepared or provided by Design-Builder's A/E and/or Design-Builder are instruments of service intended for use solely with respect to the Project. Owner will own any instruments of service prepared during the design, and will be permitted to retain copies, including reproducible and originally stamped copies, of all other instruments of service. For all instruments of service, including those prepared during the design, Owner is granted an unlimited and royalty free license to utilize the instruments of service to communicate about the Project, complete or expand the Project, correct any deficiencies, make any renovations or repairs to the Project, or for future projects other than the construction of another building.

Owner agrees to indemnify and hold Design-Builder harmless from any subsequent modification of the instruments of service by Owner and from Owner's use of the instruments of service on other projects not involving Design-Builder.

11.2 Design-Builder to convey instruments of service to Owner. Upon Owner's request if made during the Project or within five (5) years of Substantial Completion, each of Design-Builder's design professionals, including Design-Builder's A/E, will be contractually required to convey to Owner in whatever format Owner may designate that design professional's instruments of service for the completion, use, updating, modernizing, and maintenance of the Project, conditioned upon Owner's agreement to indemnify and hold harmless the design professional as set forth above. Design-Builder's design professionals, including Design-Builder's A/E, will be permitted to remove all indications of their ownership and/or involvement from instruments of service provided in electronic format. Design-Builder will incorporate the requirements of this Section in all agreements with design professionals.

11.3 Submission of instruments of service does not waive rights. Submission or distribution of Design-Builder's instruments of service to meet official regulatory requirements or for similar purposes in connection with the Project will not be construed as publication in derogation of any rights reserved in this Section.

Article 12
Miscellaneous Provisions

12.1 Design-Builder's A/E. Design-Builder's A/E and other design professionals and consultants engaged by Design-Builder are listed below:

Name and Address	License Number	Relationship to Design-Builder	Other Information
TBD			

12.2 Owner's Consultants. Consultants, if any, engaged directly by Owner, as well as their professions and responsibilities, are listed below:

Name and Address	Responsibilities to Owner	Other Information
None		

12.3 Separate Contractors. Separate contractors, if any, engaged directly by Owner and known by Owner as of the date of this Agreement, as well as their trades and responsibilities, are listed below:

Name and Address	Responsibilities to Owner	Other Information
None		

12.4 Designated Representatives.

12.4.1 Owner's Designated Representative, designated below, will be authorized to act on Owner's behalf with respect to the Project:

Cynthia Arbour
Project Manager
Facilities Services

Tyler Lincoln
Construction Manager
Facilities Services

12.4.2 Design-Builder's Designated Representative, identified below, will be authorized to act on Design-Builder's behalf with respect to the Project:

_____
_____
_____

12.4.3 Neither Owner's nor Design-Builder's Designated Representatives will be changed without ten (10) Days' written Notice to the other party.

12.5 Interest. Payments due and unpaid under the Contract Documents will bear interest as specified by RCW 39.76, not to exceed the Bank of America prime plus two percent (2%) per annum.

12.6 Information to CPARB. Design-Builder and all Subcontractors will submit Project information required by the state Capital Projects Advisory Review Board (CPARB).

12.6.1 Design-Builder will submit to Owner the complete project specific diverse business inclusion plan summarized in Design-Builder's Proposal. At a minimum, the plan must address inclusion of underutilized firms as Subcontractors and suppliers including, but not limited to, the office of minority and women's business enterprises certified businesses, veteran certified businesses, and small business. Design-Builder will track and report to the public body and to the office of minority and women's business enterprises its utilization of the office of minority and women's business enterprises certified businesses and veteran certified businesses.

12.7 Insurance.

12.7.1 In addition to the insurance requirements imposed in the General Conditions and other Contract Documents, Design-Builder and Design-Builder's A/E, other design consultants, and any design-build Subcontractors of any tier will purchase and maintain for at least six (6) years after Substantial Completion Professional

Liability/Errors and Omissions Liability insurance in an amount of not less than two million dollars ($2,000,000) per claim and annual aggregate (deductible of up to fifty thousand dollars ($50,000) permitted). If design consultants or design-build Subcontractors of any tier have a contract value of less than two million dollars ($2,000,000), they may purchase and maintain for at least six (6) years after Substantial Completion Professional Liability/Errors and Omissions Liability insurance in an amount of not less than one million dollars ($1,000,000) per claim and annual aggregate (deductible of up to fifty thousand dollars ($50,000) permitted) in lieu of the requirements above. Design consultants or design-build Subcontractors of any tier whose contract value is greater than two million dollars ($2,000,000.00) but would like the reduced Professional Liability/Errors and Omissions Liability insurance requirements must receive Owner's written approval. Design-Builder, Design-Builder's A/E, other design consultants, and any design-build Subcontractors of any tier will promptly notify Owner of any material changes to, interruption of, or termination of this insurance, and will immediately procure replacement coverage. Design-Builder, Design-Builder's A/E, other design consultants, and any design-build Subcontractor of any tier will either maintain active policy coverage or secure an extended reporting period, providing coverage for claims first made and reported to the insurance company within six (6) years of Substantial Completion or termination of the Work under the Contract Documents, whichever occurs first.

12.8 Payment and performance bonds. Payment and performance bonds will be provided by Design-Builder. The amounts of such payment and performance bonds will equal or exceed the GMP plus Washington State sales tax.

12.9 National Institute of Sciences and Technology (NIST) Grant Obligations. Design-Builders will comply will all terms and conditions of the NIST Grant funding this project, which include, but are not limited to: Comply with all reporting requirements required by State and Federal contracts pertaining to this project to include but not limited to regular performance reports (2 CFR 200.329), financial reports (2 CFR 200.328), property reports (2 CFR 200.330), and other required records requests (2 CFR 200.337); Build America, Buy America (BABA) requirements and waiver provisions in 2 CFR 184 will be followed; Design compliant with Executive Order 13717 and 40 USC 3312; Subcontracting compliant with 2 CFR 200.317 through 2 CFR 200.327.

Article 13
Enumeration of the Contract Documents

13.1 The Contract Documents. The Contract Documents, except for modifications issued after execution of this Agreement, are enumerated as follows:

13.1.1 This executed Agreement, any attached Exhibits and other documents listed in this Agreement.

13.1.2 The General Conditions and any Supplementary Conditions of the Design-Build Contract.

13.1.3 Owner's Project Criteria.

13.1.4 The Addenda, if any, are as follows:

Number	Date	Pages

13.1.7 Design-Builder's Proposal including the Project Execution Plan dated [date], and Statement of Qualifications dated [date] (together, the "Proposal"), to the extent consistent with or which represent enhancements to Owner's Project Criteria. Design-Builder's submission and identification of proposed design features to Owner are to be provided by Design-Builder within the GMP. Proposal and Construction Documents prepared by Design-Builder and accepted by Owner in accordance with the Contract Documents. Acceptance by Owner of each of the following Design Review Packages will establish baseline Construction Documents from which future submissions will be evaluated:

.1 Project Confirmation Submittal

.2 Detailed Design Documents Submittal

.3 Construction Documents Submittal

All Submittals will include updated deviation log(s) noting variances from previous Submittals, proposal criteria and standards for review and approval.

13.1.8 Other documents ("Exhibits"), if any, forming part of the Contract Documents are as follows:

Project Manual dated 10/15/2025
WSU Request for Qualifications dated 10/15/2026
WSU Request for Proposals dated 12/1/2026
Department of Labor and Industries Prevailing Wage Rates.

OWNER:
WASHINGTON STATE UNIVERSITY

(Signature) (Date)

(Printed Name)
(Title)

DESIGN-BUILDER:
FIRM NAME
WA CONTRACTOR LICENSE NUMBER

(Signature) (Date)

(Printed Name)
(Title)

END OF SECTION 00 50 00

COMPLETION DELIVERABLES EXHIBIT
Aquaculture Facilities at WSU Pullman and Puyallup

This Attachment lists the deliverables specific to Design-Build required in addition to (or specifically altering) the established deliverables of the completion milestones of the Contract Documents.

Substantial Completion	
	Provide a Substantial Completion Submittal inclusive of all documentation required to achieve Substantial Completion as described in the Agreement, the General Conditions and Section 01 70 00. In additional, Design-Builder shall also provide:
	1. Record of Design-Builder's A/E Certification of review of the draft O&M Manual.
	2. Scheduled prior and submitted upon Substantial Completion provide Owner with the A/E developed punch list inspection report. Architect of record and Engineer of record must conduct the punchlist inspection accompanied by Owner's Repesentative.
Final Completion	
	Provide a Final Completion Submittal inclusive of all documentation required to Achieve Final Completion as described in the Agreement, the General Conditions and Section 01 70 00. In addition, Design-Builder shall also provide:
	1. In lieu of the Project Record as described in 00 72 00, Article 4.02, Design-Builder shall maintain the Project Record electronically in Bluebeam or approved equivalent. Design-Builder shall upon Final Completion provide a hyperlinked PDF that includes tracked changes showing all changes to the Project Documents throughout the project, and is bookmarked for all divisions.
	2. Design-Builder shall compile a final Conformed Record Drawing with revision date in native format, as a converted CAD sheet set in DWG format, as a text searchable PDF format, one no larger than 30" X 42" paper set drawing, and one set of 4-mil single sided Mylar Drawings no larger than 30" X 42". For the CAD drawings: Adhere to the National CAD Standars. Do not provide multiple tab layout in a a single file. Bind all .xrefs prior to submitting. Purge all files prior to submission. Must be viewable in native format without any add-ons.
	3. Provide an Excel or CSV drawing index.
	4. Provide any 3D Models in native format, if created.
	5. Provide any additional surveys or geotechnical reports obtained by Design-Builder.
	6. Provide a minimum of 2 Final O&M Manuals per the requirements of Section 01 78 39, as well as a text searchable
	7. Provide LEED submittal documentation.
	8. Provide the termination of stormwater permit.
Final Acceptance	
	Provide a Final Acceptance Submittal inclusive of all documentation required to Achieve Final Acceptance as described in the Agreement, the General Conditions and Section 01 70 00.
Retention Release	
	No deliverables required.

End of Attachment Completion Deliverables Exhibit

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WSU amendments to the Washington State Facility Construction
General Conditions are identified by a bar on the right hand side of modified paragraphs

PART 1 - GENERAL PROVISIONS

1.01 DEFINITIONS

A. "Application for Payment" means a written request submitted by Contractor to Owner for payment of Work completed in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner may require.

B. "Architect," "Engineer," or "A/E" means a person or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.

C. An "Allowance" is an amount included in the Contract Sum for a stated part of the Work that is not fully defined and/or quantified at the time the Contract Sum is established. When that part of the Work is adequately defined and/or quantified, the Contract Sum will be adjusted to account for the difference between the Allowance and the actual cost of the item. Following the adjustment, that part of the Work will no longer be an Allowance item. Although not capitalized in Section 5.02B, "allowance" shall mean "Allowance."

D. "Change Order" means a written instrument signed by Owner and Contractor stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any, and (3) the extent of the adjustment in the Contract Time, if any.

E. "Claim" means Contractor's exclusive remedy for resolving disputes with Owner arising out of or relating to the Contract Documents or the breach thereof or requesting an adjustment in the Contract Sum or Contract Time, as more fully set forth in Part 8. As used in the Contract Documents, the exclusive meaning of "equitable adjustment" is the ability of Contractor to follow the contractual dispute resolution process in Part 8, including the requirement for submitting a timely Notice, substantiation, and Claim.

F. The "Contract" is the agreement between Owner and Contractor and is formed by the Contract Documents. The Contract represents the entire and integrated agreement between Owner and Contractor and supersedes prior negotiations, representations or agreements, either written or oral.

G. "Contract Award Amount" is the sum of the Base Bid and any accepted Alternates, if any, for Design-Bid-Build projects and is the accepted initial Guaranteed Maximum Price for Design-Build and GC/CM projects.

H. "Contract Documents" means the General Conditions, modifications to the General Conditions, Supplemental Conditions, Agreement, Drawings and Specifications, and all addenda and modifications thereof.

I. "Contract Sum" is the total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents, including all taxes imposed by law and properly chargeable to the Work, except Washington State sales tax.

J. "Contract Time" is the number of Days or other time period allotted in the Contract Documents from the Notice to Proceed for achieving Substantial Completion of the Work.

K. "Contractor" means the person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.

L. "Day(s)" means calendar day(s) unless otherwise specified.

M. "Drawings" are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans, elevations, sections, details, schedules, and diagrams.

N. "Final Acceptance" means the written acceptance of the Work by Owner, as more fully set forth in Section 6.08B.

O. "Final Completion" means that the Work is fully and finally complete in accordance with the Contract Documents and Contractor has submitted its final Application for Payment, as more fully set forth in Section 6.09A.

P. "Force Majeure" means those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in paragraph 3.05A.

Q. "Notice" means a written notice which has been delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice. Although not capitalized in the following provisions, "notice" shall mean "Notice" in Sections 3.03B, 3.03C, 3.06A, 5.01D, 5.02C, 5.03, 5.09A, 5.10A, 5.15A, 5.16F, 5.17, 9.01A, 9.02A, and 9.02B.

R. "Notice to Proceed" means a written Notice from Owner to Contractor that permits pre-construction and construction activities to commence upon specified terms and defines the date on which the Contract Time begins to run.

S. "Owner" means the Washington State University Board of Regents, which has the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents. Owner shall designate in writing a Representative who shall have authority to bind Owner with respect to all matters requiring Owner's approval or authorization. A/E does not have such authority.

T. "Person" means a corporation, partnership, business association of any kind, trust, company, or individual.

U. "Prior Occupancy" means Owner's use of all or parts of the Project before Substantial Completion, as more fully set forth in Section 6.08A.

V. "Progress Schedule" means a schedule of the Work, in a form satisfactory to Owner, as further set forth in Section 3.02.

W. "Project" means the total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.

X. "Project Record" means the separate set of Drawings and Specifications as further set forth in paragraph 4.02A.

Y. "Schedule of Values" means a written breakdown allocating the total Contract Sum to each principal category of Work, in such detail and format as requested by Owner.

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

AA. "Subcontract" means a contract between Contractor and a Subcontractor for the purpose of obtaining supplies, materials, equipment, work or services of any kind for or in connection with the Work. Although not capitalized in the following provisions, "subcontract" shall mean "Subcontract" in Sections 5.10A, 5.20E, 9.01B, and 9.02B.

BB. "Subcontractor" means any Person of any tier, other than Contractor, who agrees to furnish or furnishes by contract with, or through Contractor, any supplies, materials, equipment, or services of any kind in connection with the Work. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor. Although not capitalized in the following provisions, "subcontractor" shall mean "Subcontractor" in Sections 5.04B, 5.04C, 5.04G, 5.20A, and 5.21B.

CC. "Substantial Completion" means that stage in the progress of the Work (or portion of the Work designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so that Owner can fully occupy or utilize the Work (or portion designated by Owner) for its intended use, as more fully set forth in Section 6.07. There may be separate dates of Substantial Completion specified in the Contract Documents for various phases or portions of the Work.

DD. "Work" means the construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents. Although not capitalized in the following provisions, "work" shall mean "Work" in Sections 3.02D, 5.04B, 5.04C, 5.07D, 5.12A, 6.02 and 7.02A.

EE. A "Work Directive" ("WD") is a binding written order prepared by Owner that directs Work prior to total agreement on adjustment, if any, in the Contract Sum or Contract Time, or both.

FF. "Work Site" means the space identified and circumscribed on construction documents. The work site is controlled by the Contractor and the Contractor is responsible for compliance to regulatory requirements within the circumscribed area. Changes to the work site shall be submitted by Contractor and approved by Owner.

1.02 ORDER OF PRECEDENCE

Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order, with a revision to a Contract Document having precedence over the original document and a later document having precedence over an earlier document:

1. Signed Agreement, with any Change Orders having precedence.

2. Supplemental Conditions.

3. Modifications to the General Conditions.

4. General Conditions.

5. Specifications and Drawings. The Specifications and Drawings are complementary and shall have equal precedence. Thus, anything mentioned in the Specifications but not shown on the Drawings, or shown on the Drawings but not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both. If there is any inconsistency between the Specifications and Drawings, Contractor will make an inquiry to Owner to determine how to proceed. Unless otherwise directed, Contractor will provide the better quality or greater quantity of any Work or materials, as reasonably interpreted by Owner, at no change in the Contract Sum or Contract

Time. In case of conflict within the Specifications, provisions in Division 1 shall take precedence over provisions of any other Division. In case of conflict within the Drawings, large scale Drawings shall take precedence over small scale Drawings.

1.03 EXECUTION AND INTENT

Contractor Representations: Contractor makes the following representations to Owner:

1. Contract Sum and Contract Time reasonable: The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents;

2. Contractor familiar with project: Contractor has carefully reviewed the Contract Documents, visited and examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof;

3. Contractor financially capable: Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents; and

4. Contractor can complete Work: Contractor is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform the obligations required by the Contract Documents and has sufficient experience and competence to do so.

PART 2 - INSURANCE AND BONDS

2.01 CONTRACTOR'S LIABILITY INSURANCE

General insurance requirements: Prior to commencement of the Work, Contractor shall obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Owner that such insurance has been procured, including but not limited to (1) Certificates of Insurance on ACORD Form 25, and/or ACORD Form 27 or their equivalents, and which shall list any applicable self-insured retentions, (2) the actual costs (expressed as a percentage) of Contractor's liability insurance under Section 2.01A.1 below, (3) applicable endorsements evidencing proof of compliance with the requirements listed below, (4) evidence of State Workers' Compensation coverage, and (5) a copy of any builder's risk policy required by the Contract Documents. All policies, endorsements and certificates must be signed copies and shall contain a provision that policies will not be cancelled without first giving thirty (30) days (or in the event of non-payment of premium, ten (10) days) prior written Notice to Owner. Contractor shall furnish to Owner copies of any subsequently issued endorsements amending, modifying, altering or restricting coverage terms or limits. Review of Contractor's insurance by Owner shall not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by Part 2 shall be licensed to do business under Chapter 48 RCW or comply with the Surplus Lines Law of the State of Washington. Contractor shall include in the Contract Sum the cost of all insurance and bond costs required for the Work. Insurance carriers providing insurance shall be acceptable to Owner, and its A. M. Best rating shall be indicated on the insurance certificates.

A. Term of insurance coverage: Contractor shall maintain the following insurance coverage during the Work and for one year after Substantial Completion. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by Section 5.16.

1. General Liability Insurance: Commercial General Liability (CGL) on an occurrence-based ISO Form CG 00 01 or broader, including products and completed operations, personal and advertising injury, bodily injury and property damage liability arising from Contractor's operations or Work, including operations or Work Contractor may subcontract or sublet to others.

   The policy shall be purchased from a company or companies lawfully authorized to do business in the State of Washington possessing an A.M. Best's policyholder's rating of A or better and a financial rating of no less than XI.

   Contractor's policy shall be designated primary and non-contributory to Owner's policies, and shall include a waiver of subrogation against Owner. Any self-insured retentions or deductibles must be disclosed and approved by Owner, and Contractor agrees to be responsible for payment of any and all self-insured retentions or deductibles.

2. Automobile Liability Insurance: Automobile liability on ISO Form CA 00 01 covering Code 1 (any auto).

3. Stop Gap Liability Insurance for damages because of bodily injuries to Contractor's employees.

B. Industrial Insurance compliance: Contractor shall comply with the Washington State Industrial Insurance Act and, if applicable, the Federal Longshoremen's and Harbor Workers' Act and the Jones Act.

C. Insurance to protect for the following: All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Contractor or any Subcontractor.

D. Owner as Additional Insured: All insurance coverages shall be endorsed to include Owner, its officers, and employees, and any required governmental agencies as additional named insureds with coverage at least as broad as ISO Forms CG 20 10, CG 20 37, and CA 20 48, with no self-insured retentions applicable to the additional insureds.

E. Subcontractor Coverage: Contractor shall ensure and require that Subcontractors have insurance coverage to cover bodily injury and property damage on all operations and all vehicles owned or operated by Subcontractors. Subcontractors shall name Contractor and Owner, any required governmental agencies, and others designated in the Contract Documents as well as their officers and employees, as additional insureds and give at least thirty (30) Days' Notice of cancellation.

2.02 COVERAGE LIMITS

Insurance amounts: The coverage limits shall be not less than the amounts specified in the Agreement; if limits are not specified in the Agreement, coverage limits shall be not less than as follows:

A. $1,000,000 per occurrence for bodily injury, property damage, personal and advertising injury.

B. $2,000,000 general aggregate to apply separately to each project or location.

C. $2,000,000 annual aggregate for products and completed operations.

D. $1,000,000 combined single limit each automobile accident or loss.

E. $1,000,000 per accident for bodily injury or occupational disease of Contractor's employees

Coverages and Minimums: Owner's review, specification or approval of the insurance in this Contract or of its coverage or amount shall not relieve or decrease the liability of Contractor under the Contract Documents or otherwise. Coverages are the minimum to be provided and are not limitations of liability under the Contract, indemnification, or applicable law provisions. Contractor may, at its expense, purchase larger coverage amounts.

2.03 PROOF OF INSURANCE COVERAGE

A. Certificate & endorsements required: Prior to commencement of the Work, Contractor shall furnish to Owner completed certificates of insurance coverage and endorsements evidencing compliance with the additional insured, cancellation, and waiver of subrogation requirements..

B. List Project info: All insurance certificates shall name Owner's Project number and Project title.

C. Policy: In the event of a claim or loss, Contractor shall promptly provide Owner with a complete copy of all applicable policies.

2.04 PAYMENT AND PERFORMANCE BONDS

Conditions for bonds: Payment and performance bonds for 100% of the Contract Award Amount, plus Washington State sales tax, shall be furnished for the Work, using the current version of the Payment Bond and Performance Bond form published by and available from the American Institute of Architects (AIA) – form A312. No payment or performance bond is required if the Contract Sum is $150,000 or less and Contractor requests and the Owner agrees that Owner may, in lieu of the bond, retain 10% of the Contract Sum for the period specified in RCW 39.08.010.

2.05 ALTERNATIVE SURETY

When alternative surety required: Contractor shall promptly furnish payment and performance bonds from an alternative surety if:

A. Owner has a reasonable objection to the surety; or

B. Any surety fails to furnish reports on its financial condition if required by Owner.

2.06 BUILDER'S RISK

A. Owner to buy builder's risk insurance: Owner shall purchase and maintain builder's risk insurance in the amount of the Contract Sum, including all Change Orders, for the Work on a replacement cost basis until Substantial Completion. For projects not involving new building construction, an "Installation Floater" is an acceptable substitute for the builder's risk insurance. The insurance shall cover the interests of Owner, Contractor, and any Subcontractors, as their interests may appear.

B. Losses covered: Builder's risk insurance shall be placed on an "all risk" basis or equivalent policy form and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, temporary buildings, debris removal including demolition, wind, and at Owner's option may include flood and/or earthquake. The policy shall cover reasonable compensation for A/E's services and expenses required as a result of an insured loss. Losses up to the deductible amount shall be the responsibility of Contractor.

C. Waiver of subrogation rights: Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/E's subconsultants, separate contractors described in Section 5.19, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this Section 2.06 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a Person or entity even though that Person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the Person or entity had an insurable interest in the property damaged.

PART 3 - TIME AND SCHEDULE

3.01 PROGRESS AND COMPLETION

Contractor to meet schedule: Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within the time period specified in the Contract Documents. If Contractor fails to perform in a timely manner in accordance with the Contract Documents and, through the fault of Contractor or Subcontractor(s), fails to meet the Progress Schedule, Contractor shall be in default and shall take such steps as may be necessary to immediately improve its progress without change in the Contract Sum or Contract Time.

3.02 CONSTRUCTION SCHEDULE

A. Preliminary Progress Schedule: Unless otherwise provided in Division 1, Contractor shall, within 14 Days after issuance of the Notice to Proceed, submit a preliminary Progress Schedule consistent with the requirements of the Contract Documents. The Progress Schedule shall not exceed time limits specified by the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work, and shall show the sequence in which Contractor proposes to perform the Work, and the dates on which Contractor plans to start and finish major portions of the Work, including dates for submission of Submittals per Section 4.03, which shall be coordinated with the Progress Schedule and identify dates for Owner review, and for acquiring materials and equipment.

B. Form of Progress Schedule: Unless otherwise provided in Division 1, the Progress Schedule shall be in the form of a bar chart, or a critical path method analysis, as specified by Owner. The preliminary Progress Schedule may be general, showing the major portions of the Work, with a more detailed Progress Schedule submitted as directed by Owner.

C. Owner comments on Progress Schedule: Owner shall return comments on the preliminary Progress Schedule to Contractor within 14 Days of receipt. Review by Owner of Contractor's schedule does not constitute an approval or acceptance of Contractor's construction means, methods, logic or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold a portion of progress payments until a Progress Schedule has been submitted that meets the requirements of this Section 3.02.

D. Monthly updates and compliance with Progress Schedule: Contractor shall utilize and comply with the Progress Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Progress Schedule at its own expense to Owner indicating actual progress. If, in the opinion of Owner, Contractor is not in conformance with the Progress Schedule for reasons other than acts of Force Majeure as identified in Section 3.05, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Progress Schedule, and if directed by Owner, Contractor shall submit a

corrective action plan or revise the Progress Schedule to reconcile with the actual progress of the Work.

E. Contractor to notify Owner of delays: Contractor shall perform the Work in accordance with the most recent Progress Schedule submitted to Owner. Contractor shall promptly notify Owner in writing of any actual or anticipated event that is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Progress Schedule, and the action being or to be taken to correct the problem. Provision of such Notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.

3.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE

A. Owner may suspend Work: Owner may, at its sole discretion, order Contractor, in writing, to suspend all or any part of the Work for up to 90 Days, or for such longer period as mutually agreed.

B. Compliance with suspension; Owner's options: Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 Days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed, Owner shall either:

1. Cancel the written notice suspending the Work; or

2. Terminate the Work covered by the notice as provided in the termination provisions of Part 9.

C. Resumption of Work: If a written notice suspending the Work is cancelled or the period of the notice or any extension thereof expires, Contractor shall resume Work.

D. Equitable Adjustment for suspensions: Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance directly attributable to such suspension, provided Contractor complies with all requirements set forth in Part 7.

3.04 OWNER'S RIGHT TO STOP AND/OR CARRY OUT THE WORK FOR CAUSE

A. Owner may stop Work for Contractor's failure to perform: If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order Contractor, in writing, to stop the Work, or any portion thereof, until Owner has accepted satisfactory corrective action.

B. Owner may carry out the Work after Contractor's failure to perform: If Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a 14-Day period after receipt of written Notice from Owner to commence and continue to make reasonable progress toward the correction of such default or neglect with diligence and promptness, Owner may, without prejudice to other remedies Owner may have, correct such deficiencies, and an appropriate Change Order shall be issued deducting from payments then or thereafter due Contractor the reasonable cost of correcting the deficiencies, including Owner's expenses and compensation for A/E's additional services made necessary by the default, neglect or failure. If payments then or thereafter due Contractor are not sufficient to cover such amounts, Contractor shall pay the difference to Owner.

C. No equitable adjustment for Contractor's failure to perform: Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

3.05 DELAY

A. Force Majeure actions not a default; Force Majeure defined: Any delay in or failure of performance by Owner or Contractor shall not constitute a default if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party. Acts of Force Majeure include, but are not limited to:

1. Acts of God or the public enemy;

2. Acts or omissions of any government entity not the fault of Owner or Contractor;

3. Fire or other casualty for which Contractor is not responsible;

4. Quarantine or epidemic;

5. Industry-wide strike or defensive lockout;

6. Unusually severe weather conditions which could not have been reasonably anticipated; and

7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Owner was available.

    a. "Unusually severe weather" shall mean weather conditions that are abnormal for the period of time for which Force Majeure is claimed, that could not reasonably have been anticipated or avoided, and that had an adverse effect on the Progress Schedule. Neither the Contract Time nor the Contract Sum will be adjusted for normal inclement weather or if the Work was behind schedule (unless behind schedule for a reason not the responsibility of the Contractor) at the time the unusually severe weather occurred. The Contractor shall be entitled to a change in the Contract Time only (but not a change in the Contract Sum) if the Contractor can substantiate to the reasonable satisfaction of the Owner that there was unusually severe weather as compared to normal using a ten (10) year average of accumulated record mean values from climatological data compiled by the U.S. Department of Commerce National Oceanic and Atmospheric Administration for the locale closest to the Project, and that the abnormal inclement weather actually impacted and extended the critical path of the Work. Unusual is defined as a 10-year weather event of either or both precipitation or temperature extremes that fall outside the upper and lower ranges within a 10-year periodicity

B. Contract Time adjustment for Force Majeure: Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of Force Majeure, provided it makes a request for equitable adjustment. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of Force Majeure.

C. Contract Time or Contract Sum adjustment if Owner at fault: Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in

Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request for equitable adjustment.

D. No Contract Time or Contract Sum adjustment if Contractor at fault: Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.

E. Contract Time adjustment only for concurrent fault: To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment, but shall not be entitled to an adjustment in Contract Sum.

F. Contractor to mitigate delay impacts: Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of Force Majeure or otherwise. Contractor shall not recover damages, an equitable adjustment or an increase in the Contract Sum or Contract Time from Owner where Contractor could have reasonably avoided the delay by the exercise of due diligence.

G. Types of damages permitted: If Contractor and its Subcontractors are entitled to a change in the Contract Sum, the amount of the change shall be the actual costs incurred by the Contractor and Subcontractors directly related to the change calculated in accordance with Section 7.02. Contractor and its Subcontractors shall not otherwise (not reflected by the actual costs incurred as calculated in accordance with Section 7.02) be entitled to damages arising out of actual or alleged loss of efficiency; morale, fatigue, attitude, or labor rhythm; constructive acceleration; home office overhead; expectant underrun; trade stacking; reassignment of workers; rescheduling of Work, concurrent operations; dilution of supervision; learning curve; beneficial or joint occupancy; logistics; ripple; season change; extended overhead; profit upon damages for delay; impact damages including cumulative impacts; or similar damages. Any effect that such alleged events may have on Contractor or its Subcontractors, to the extent not otherwise paid, is subsumed in and fully compensated through the percentage Fee on Change Orders paid through Section 7.02A.3.e and any liquidated damages paid hereunder.

3.06 NOTICE TO OWNER OF LABOR DISPUTES

A. Contractor to notify Owner of labor disputes: If Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.

B. Pass through notification provisions to Subcontractors: Contractor agrees to insert a provision in its Subcontracts and to require insertion in all sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

3.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION

A. Liquidated Damages:

1. Reason for Liquidated Damages: Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence.

Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Consequently, provisions for liquidated damages are included in the Contract Documents.

2. Calculation of Liquidated Damages amount: The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.

3. Contractor responsible even if Liquidated Damages assessed: Assessment of liquidated damages shall not release Contractor from any obligations or liabilities pursuant to the Contract Documents. If Contractor substantially fails to perform in a timely manner in accordance with the Contract Documents and, through the fault of Contractor or Subcontractor(s), fails to achieve Substantial Completion within the Contract Time, Contractor shall be in default.

B. Actual Damages: If no liquidated damages are established, actual damages may be assessed for failure to achieve both Substantial Completion and Final Completion within the time provided. Actual damages will be calculated on the basis of direct architectural, administrative, and other related costs attributable to the Project from the date when Substantial and/or Final Completion should have been achieved, as applicable. Owner may offset these costs against any payment due Contractor.

PART 4 - SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

4.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW

A. Specifications and Drawings are basis of the Work: The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.

B. Parts of the Contract Documents are complementary: The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.

C. Contractor to report discrepancies in Contract Documents: Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If, during the performance of the Work, Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby, report such conflict, error, inconsistency, or omission to A/E in writing.

D. Contractor knowledge of discrepancy in documents – responsibility: Contractor shall do no Work without applicable Drawings, Specifications, and, where required, accepted shop drawings and other Submittals, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or reasonably should have known that any of the Contract

Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.

E. Contractor to perform Work implied by Contract Documents: Contractor shall provide any work or materials the provision of which is clearly implied and is within the scope of the Contract Documents even if the Contract Documents do not mention them specifically.

F. Interpretation questions referred to A/E: Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

4.02 PROJECT RECORD

A. Contractor to maintain Project Record Drawings and Specifications: Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction, including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, changes made to the building enclosure, and Change Order Proposals. This separate set of Drawings and Specifications shall be the "Project Record." The Project Record shall include all Architectural, Mechanical, Electrical, Structural and Civil as-built drawings, whether or not any changes occur and shall also include Addenda, Change Orders, WDs and other modifications to the Contract, in good order and marked currently to indicate field changes and selections made during construction, as well as one copy of accepted shop drawings, product data, samples and other required Submittals.

B. Update Project Record weekly and keep on site: The Project Record shall be maintained on the Project site throughout the construction and shall be clearly labeled "PROJECT RECORD." The Project Record shall be available to A/E and Owner at all times. The Project Record shall be updated at least weekly noting all changes and shall be available to Owner at all times.

C. Final Project Record to A/E before Final Acceptance: Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.

4.03 SUBMITTALS

A. Definition of Submittals: "Submittals" means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. Submittals can include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents. For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its own expense. Owner may duplicate, use, and disclose Submittals provided in accordance with the Contract Documents.

B. Approval of Submittals by Contractor and A/E: Contractor shall coordinate all Submittals with the Progress Schedule per Section 3.02A, shall review them for accuracy, completeness, and compliance with the Contract Documents, and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, Submittals shall be stamped by an appropriate professional licensed by the state of Washington. Submittals submitted to A/E without evidence of Contractor's approval shall be returned for resubmission. Contractor shall

review, approve, and submit Submittals with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor's submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the Submittals. Contractor shall perform no portion of the Work requiring submittal and review of Submittals until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to Submittal with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed Submittals. Submittals made by Contractor which are not required by the Contract Documents may be returned without action.

C. Contractor not relieved of responsibility when Submittals approved: Approval, or other appropriate action with regard to Submittals, by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such Submittals, nor from responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction, or constitute an approval of Contractor's means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.

D. Variations between Submittals and Contract Documents: Submittals, including product data, samples and similar submissions, are not Contract Documents. If Submittals vary from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the Submittals, at the time it submits the Submittals containing such variations. If Owner approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be approved by Owner in writing and recorded upon the Project Record. Approval for substitutions shall not be sought and shall not be approved through the submission of Submittals.

E. Contractor to submit 5 copies of Submittals: Unless otherwise provided in Division 1, Contractor shall submit to A/E for approval 5 copies of all Submittals. Unless otherwise indicated, 3 sets of all Submittals shall be retained by A/E and 2 sets shall be returned to Contractor.

4.04 ORGANIZATION OF SPECIFICATIONS

Specification organization by trade: Specifications are prepared in sections which conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

4.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS

A. A/E, not Contractor, owns Copyright of Drawings and Specifications: The Drawings, Specifications, and other documents prepared by A/E are instruments of A/E's service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.

B. Drawings and Specifications to be used only for this Project: The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on

other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner and A/E. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.

C. License granted to Owner: Contractor and all Subcontractors grant a non-exclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all Submittals, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing Submittals, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the Submittals, and that such license is not in violation of any copyright or other intellectual property right. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in Section 5.03 and 5.22 from any violations of copyright or other intellectual property rights arising out of Owner's use of the Submittals hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this section.

D. Submittals to be used only for this Project: Submittals prepared by Contractor, Subcontractors of any tier, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor of any tier, or material or equipment supplier, on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Submittals appropriate to and for use in the execution of their Work under the Contract Documents.

E. Electronic Files: If the parties intend to transmit the instruments of service or any other information or documentation in digital form (other than PDF), they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Contract Documents.

PART 5 - PERFORMANCE

5.01 CONTRACTOR CONTROL AND SUPERVISION

A. Contractor responsible for Means and Methods of construction: Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. 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, unless the Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.

B. Competent superintendent required: Contractor, as soon as practicable after award of the Contract, shall furnish in writing to Owner the name and qualifications of its proposed superintendent. Owner may reply within 14 Days to Contractor in writing stating (1) whether Owner has reasonable objection to the proposed superintendent or (2) that Owner requires additional time to review. Failure of Owner to reply within the 14-Day period shall constitute Notice of no reasonable objection. The superintendent shall not be employed on any other project during the course of the Work. Unless approved by the Owner's representative and only when overseeing projects on the same campus or location where oversite and supervision will not be degraded. Performance of the Work shall be directly supervised by a competent superintendent who shall be in attendance at the Project site during performance of the Work and who has authority to act on behalf of Contractor. Communications given to the superintendent shall be as binding as if given to Contractor. The superintendent must be satisfactory to Owner and shall not be changed without the prior written consent of Owner. Owner may require

Contractor to remove the superintendent from the Work or Project site, if Owner reasonably deems the superintendent incompetent, careless, or otherwise objectionable, provided Owner has first notified Contractor in writing and allowed a reasonable period for transition.

C. Contractor responsible for acts and omissions of self and agents: Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.

D. Contractor to employ competent and disciplined workforce: Contractor shall enforce strict discipline and good order among all of the Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor's employees shall at all times conduct business in a manner which assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.

E. Contractor to keep project documents on site: Contractor shall keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed Submittals, and permits and permit drawings.

F. Contractor to comply with ethical standards: Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the Ethics in Public Service Act RCW 42.52, which, among other things, prohibits state employees from having an economic interest in any public works contract that was made by, or supervised by, that employee. Contractor shall remove, at its sole cost and expense, any of its, or its Subcontractors' employees, if they are in violation of this act.

5.02 PERMITS, FEES, AND NOTICES

A. Contractor to obtain and pay for permits: Unless otherwise provided in the Contract Documents, Contractor shall secure and pay for the building, any land use permits and all other permits, licenses, and inspections necessary for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.

B. Allowances for permit fees: If allowances for permits or utility fees are called for in the Contract Documents and set forth in Contractor's bid, and the actual costs of those permits or fees differ from the allowances in the Contract Documents, the difference shall be adjusted by Change Order.

C. Contractor to comply with all applicable laws: Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.

D. Taxes: Contractor shall pay sales, consumer, use, business and occupation, income and similar taxes for the Work that are legally enacted when the initial Contract Sum is agreed.

5.03 PATENTS AND ROYALTIES

Payment, indemnification, and notice: Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

5.04 PREVAILING WAGES

A. Contractor to pay Prevailing Wages: Contractor shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the rules and regulations of the Department of Labor and Industries. The schedule of prevailing wage rates for the locality or localities of the Work, is determined by the Industrial Statistician of the Department of Labor and Industries. It is the Contractor's responsibility to verify the applicable prevailing wage rate.

B. Statement of Intent to Pay Prevailing Wages: Before payment is made by the Owner to the Contractor for any work performed by the Contractor and subcontractors whose work is included in the application for payment, the Contractor shall submit, or shall have previously submitted to the Owner for the Project, a Statement of Intent to Pay Prevailing Wages, approved by the Department of Labor and Industries, certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate.

C. Affidavit of Wages Paid: Prior to release of retainage, the Contractor shall submit to the Owner an Affidavit of Wages Paid, approved by the Department of Labor and Industries, for the Contractor and every subcontractor that performed work on the Project.

D. Disputes: Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of the Department of Labor and Industries. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by RCW 39.12.060.

E. Statement with pay application; Post Statements of Intent at job site: Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefiled statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of the Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made.

F. Contractor to pay for Statements of Intent and Affidavits: In compliance with chapter 296-127 WAC, Contractor shall pay to the Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Department of Labor and Industries for certification.

G. Certified Payrolls: Consistent with WAC 296-127-320, the Contractor and any subcontractor shall submit a certified copy of payroll records if requested.

5.05 HOURS OF LABOR

A. Overtime: Contractor shall comply with all applicable provisions of RCW 49.28 and they are incorporated herein by reference.

5.06 NONDISCRIMINATION

A. Discrimination prohibited by applicable laws: Discrimination in all phases of employment is prohibited by, among other laws and regulations, Title VII of the Civil Rights Act of 1964, the Vietnam Era Veterans Readjustment Act of 1974, Sections 503 and 504 of the Vocational Rehabilitation Act of 1973, the Equal Employment Act of 1972, the Age Discrimination Act of 1967, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, Presidential Executive Order 11246, Executive Order 11375, the Washington State Law Against Discrimination, RCW 49.60, and Gubernatorial Executive Order 85-09. These laws and

regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.

B. During performance of the Work:

1. Protected Classes: Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, citizenship or immigration status, sex, sexual orientation, gender identity, religion, immigration/citizenship status, genetic information, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, honorably discharged veteran or military status, or the use of a trained dog guide or service animal by a person with a disability, nor commit any other unfair practices as defined in RCW 49.60 and other state and federal antidiscrimination laws and regulations.

2. Advertisements to state nondiscrimination: Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that all qualified applicants will be considered for employment, without regard to race, creed, color, national origin, citizenship or immigration status, sex, sexual orientation, gender identity, age, marital status, or the presence of any physical, sensory, or mental disability, honorably discharged veteran or military status, or the use of a trained dog guide or service animal by a person with a disability.

3. Contractor to notify unions and others of nondiscrimination: Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers' representative of Contractor's obligations according to the Contract Documents and RCW 49.60.

4. Owner and State access to Contractor records: Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.

5. Pass through provisions to Subcontractors: Contractor shall include the provisions of this section in every Subcontract.

5.07 SAFETY PRECAUTIONS

A. Contractor responsible for safety: Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work. Contractor shall be solely and completely responsible for conditions of the Project site, including safety of all persons and property, during performance of the Work. Contractor shall maintain the Project site and perform the Work in a manner that meets statutory and common-law requirements for the provision of a safe place to work. This requirement shall apply continuously and not be limited to working hours. Any review by Owner or A/E of Contractor's performance shall not be construed to include a review of the adequacy of Contractor's safety measures in, on or near the site of the Work.

B. Contractor safety responsibilities: In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether on site or stored off-site; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect

them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work may affect them.

C. Contractor to maintain safety records: Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.

D. Contractor to provide HazMat training: Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.

1. Information. At a minimum, Contractor shall inform persons working on the Project site of:

a. WAC: The requirements of chapter 296-62 WAC, General Occupational Health Standards;

b. Presence of hazardous chemicals: Any operations in their work area where hazardous chemicals are present; and

c. Hazard communications program: The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by chapter 296-62 WAC.

2. Training. At a minimum, Contractor shall provide training for persons working on the Project site which includes:

a. Detecting hazardous chemicals: Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);

b. Hazards of chemicals: The physical and health hazards of the chemicals in the work area;

c. Protection from hazards: The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and

d. Hazard communications program: The details of the hazard communications program developed by Contractor, or its Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

E. Hazardous, toxic or harmful substances: Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:

1. Illegal use of dangerous substances: Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site, any substances now or hereafter

designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or harmful by any federal, state or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances"), in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 Days on the Project site.

2. Contractor notifications of spills, failures, inspections, and fines: Contractor shall promptly notify Owner of all spills or releases of any hazardous substances which are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.

F. Public safety and traffic: All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.

G. Contractor to act in an emergency: In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.

H. No duty of safety by Owner or A/E: Nothing provided in this Section 5.07 shall relieve Contractor of sole and complete responsibility for safety at the Project site, for sole and complete responsibility for any violation of safety or property protection requirements or the correction thereof, or impose any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public. Any Notice Owner or A/E gives to Contractor of a safety or property protection violation will not: (1) relieve Contractor of sole and complete responsibility for the violation and the correction thereof, or for sole liability for the consequences of said violation; (2) impose any obligation upon Owner or A/E to inspect or review Contractor's safety program or precautions or to enforce Contractor's compliance with the requirements of this Section 5.07; or (3) impose any continuing obligation upon Owner or A/E to provide such Notice to Contractor or any other persons or entity.

5.08 OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS

A. Limited storage areas: Contractor shall confine all operations, including storage of materials, to Owner-approved areas.

B. Temporary buildings and utilities at Contractor expense: Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall be removed by Contractor at its expense upon completion of the Work.

C. Roads and vehicle loads: Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by federal, state, or local law or regulation.

D. Ownership and reporting by Contractor of demolished materials: Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.

E. Contractor responsible for care of materials and equipment on-site: Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.

F. Contractor responsible for loss of materials and equipment: Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.

5.09 PRIOR NOTICE OF EXCAVATION

A. Excavation defined; Use of locator services: "Excavation" means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line. Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities or utilities, through locator services.

5.10 UNFORESEEN PHYSICAL CONDITIONS

A. Notice requirement for concealed or unknown conditions: If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which 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, then Contractor shall give written notice to Owner promptly and in no event later than 7 Days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.

B. Adjustment in Contract Time and Contract Sum: If such conditions differ materially and cause a change in Contractor's cost of, or time required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum, or both, provided it makes a request therefore as provided in Part 7.

5.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES AND IMPROVEMENTS

A. Contractor to protect and repair property: At all times until Owner's occupancy of the Work or a designated portion of the Work, Contractor shall protect the Work from damage, weather, deterioration, theft, vandalism and malicious mischief and shall bear the risk of any uninsured loss or destruction of, or injury or damage to, all materials, equipment, tools, and other items

incorporated or to be incorporated in the Work or designated portion, or consumed or used in the performance of the Work or designated portion, including all Work in process and completed Work. Contractor shall protect from damage all existing structures, equipment, improvements, utilities, streets, curbs, walks and vegetation at or near the Project site or on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Contractor. If a governmental authority having jurisdiction requires that the repairing and patching be done with its own labor and/or materials, Contractor shall abide by such regulations, and it shall pay for this work at no additional cost to Owner.

B. Tree and vegetation protection: Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.

C. Special site conditions: If, in the course of the Work, Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, Contractor shall immediately suspend any operations that would affect them and shall notify Owner and A/E. Upon receipt of such Notice, Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. Contractor shall continue to suspend these operations until otherwise instructed by 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 Part 8.

5.12 LAYOUT OF WORK

A. Advanced planning of the Work: Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.

B. Layout responsibilities: Contractor shall lay out the Work from Owner-established baselines and bench marks indicated on the Drawings, and shall be responsible for all field measurements in connection with the layout. Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the Work. Contractor shall be responsible for executing the Work to the lines and grades that may be established. Contractor shall be responsible for maintaining or restoring all stakes and other marks established.

5.13 MATERIAL AND EQUIPMENT

A. Contractor to provide new and equivalent equipment and materials: All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of A/E and after submittal and approval of a substitute request, is equal to that named in the Specifications, unless otherwise specifically provided in the Contract Documents.

B. Contractor responsible for fitting parts together: Contractor shall do all cutting, fitting, or patching that may be required to complete the Work or to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonably implied by, the Contract

Documents. Contractor shall not damage or endanger any work of Owner or separate contractors by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner. Contractor shall restore all areas requiring cutting, fitting and patching to the condition existing prior to the cutting, fitting and patching, unless otherwise required by the Contract Documents.

C. Owner may reject defective Work: Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this Work, in whatever stage of completion, may be rejected by Owner. However, neither this authority of Owner nor a decision made either to exercise or not to exercise such authority shall give rise to a duty or responsibility of Owner or its representatives to Contractor, Subcontractors, their agents or employees, or other persons or entities performing portions of the Work.

5.14 AVAILABILITY AND USE OF UTILITY SERVICES

A. Owner to provide and charge for utilities: Owner shall make all reasonable utilities available to Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless otherwise provided in the Contract Documents, the utility service consumed shall be charged to or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by Owner, at reasonable rates determined by Owner. Contractor will carefully conserve any utilities furnished.

B. Contractor to install temporary connections and meters: Contractor shall, at its expense and in a skillful manner satisfactory to Owner, install and maintain all necessary temporary connections and distribution lines, together with appropriate protective devices, and all meters required to measure the amount of each utility used for the purpose of determining charges. Prior to the date of Final Acceptance, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

5.15 TESTS AND INSPECTION

A. Contractor to provide for all testing and inspection of Work: Contractor shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. Contractor shall give Owner timely notice of when and where tests and inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.

B. Owner may conduct tests and inspections: Owner may, at any reasonable time, conduct such inspections and tests as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:

1. Constitute or imply acceptance;

2. Relieve Contractor of responsibility for providing adequate quality control measures;

3. Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment;

4. Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents; or

5. Impair Owner's right to reject defective or nonconforming items, or to avail itself of any other remedy to which it may be entitled.

C. Inspections or inspectors do not modify Contract Documents: Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.

D. Contractor responsibilities on inspections: Contractor shall promptly furnish, without additional charge, all facilities, labor, material and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes reinspection or retest necessary. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.

5.16 CORRECTION OF NONCONFORMING WORK

A. Work covered by Contractor without inspection: If a portion of the Work is covered contrary to the request of Owner or the requirements in the Contract Documents or a governmental authority having jurisdiction, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at Contractor's expense and without change in the Contract Sum or Contract Time.

B. Payment provisions for uncovering covered Work: If, at any time prior to Final Completion, Owner desires to examine the Work, or any portion of it, which has been covered, Owner may request to see such Work and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and, if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes such a request as provided in Part 7. If such Work is not in accordance with the Contract Documents, the Contractor shall pay the costs of examination and reconstruction.

C. Contractor to correct and pay for non-conforming Work: Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.

D. Contractor's compliance with correction and warranty provisions: If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or within one year after the date for commencement of any system warranties established under Section 6.08, or within the 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, Contractor shall correct it promptly after receipt of written Notice from Owner to do so. Owner shall give such Notice promptly after discovery of the condition. This period of one year 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 performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced shall run for one year from the date of repair or replacement. Obligations under this Section 5.16D shall survive Final Acceptance and are in addition to other warranties provided by contract or law.

E. Contractor to remove non-conforming Work: Contractor shall remove from the Project site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.

F. Owner may charge Contractor for non-conforming Work: If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.

G. Contractor to pay for damaged Work during correction: Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

H. No Period of limitation on other requirements: Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations which Contractor might have according to the Contract Documents. Establishment of the time period of one year as described in Section 5.16D relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.

I. Owner may accept non-conforming Work and charge Contractor: If Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract Sum may be reduced as appropriate and equitable.

5.17 CLEAN UP

Contractor to keep site clean and leave it clean: Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

5.18 ACCESS TO WORK

Owner and A/E access to Work site: Contractor shall provide Owner and A/E access to the Work in progress wherever located.

5.19 OTHER CONTRACTS

Owner may award other contracts; Contractor to cooperate: Owner may undertake or award other contracts for additional work at or near the Project site. Owner shall help coordinate the activities of Owner's own forces and of each separate contractor engaged by Owner with the Work of Contractor, who shall reasonably cooperate with the other contractors and with Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with these Contract Documents to reasonably accommodate the other work.

5.20 SUBCONTRACTORS AND SUPPLIERS

A. Subcontractor Responsibility: The Contractor shall include the language of this paragraph in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this paragraph apply to all subcontractors regardless of tier. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;

2. Have a current Washington Unified Business Identifier (UBI) number;

3. If applicable, have:

   a. Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;

   b. A Washington Employment Security Department number, as required in Title 50 RCW;

   c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;

   d. An electrical contractor license, if required by Chapter 19.28 RCW;

   e. An elevator contractor license, if required by Chapter 70.87 RCW.

4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).

5. On a project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the date of the Owner's first advertisement of the project.

6. Meet all supplemental responsibility criteria set forth in the Contract Documents.

B. Provide names of Subcontractors and use qualified firms: Before submitting the first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of $2,500. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any Subcontractor or supplier to whom Owner has a "reasonable objection," and shall obtain Owner's written consent before making any substitutions or additions. A "reasonable objection" shall include without limitation:

.1 a proposed Subcontractor differing from the entity listed with a proposal or bid,

.2 lack of "responsibility" of the proposed Subcontractor, as defined in RCW 39.04.350 or otherwise in the Contract Documents, or

.3 lack of qualification, including technical qualification, as required by the Specifications.

C. Subcontracts in writing and pass through provision: All Subcontracts must be in writing. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.

D. Coordination of Subcontractors; Contractor responsible for Work: Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.

E. Automatic assignment of subcontracts: Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Owner provided that:

1. Effective only after termination and Owner approval: The assignment is effective only after termination by Owner for cause pursuant to Section 9.01 and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and

2. Owner assumes Contractor's responsibilities: After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor which Contractor assumed in the Subcontract.

3. Impact of bond: The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

5.21 WARRANTY OF CONSTRUCTION

A. Contractor warranty of Work: In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed by Contractor.

B. Contractor responsibilities: With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor shall:

1. Obtain warranties: Obtain, assign if requested, and furnish directly to Owner, all warranties that would be given in normal commercial practice or that are required by the Contract Documents, first executed by the applicable Subcontractor and those suppliers and manufacturers furnishing materials for the Work, and subsequently countersigned by Contractor, which shall extend to Owner all rights, claims, benefits and interests that Contractor may have under express or implied warranties or guarantees against the Subcontractor, supplier or manufacturer for defective or non-conforming Work;

2. Warranties for benefit of Owner: Require all warranties to be executed, in writing, for the benefit of Owner;

3. Enforcement of warranties: Enforce all warranties for the benefit of Owner, if directed by Owner; and

4. Contractor responsibility for subcontractor warranties: Be responsible to enforce any subcontractor's, manufacturer's, or supplier's warranties should they extend beyond the period specified in the Contract Documents.

C. Warranties beyond Final Acceptance: The obligations under this section shall survive Final Acceptance.

5.22 INDEMNIFICATION

A. Contractor to indemnify Owner: To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold Owner and A/E, their consultants, and agents and employees, directors, officers, lenders, successors and assigns of any of them (collectively, the "Indemnified Parties"), harmless from and against all third-party claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, direct and indirect, or consequential (including but not limited to costs and attorneys' fees incurred on such claims or in proving the right to indemnification), arising out of, caused by or resulting from:

1. Sole negligence of Contractor: The sole negligence or willful misconduct of Contractor or any of its Subcontractors, their agents and anyone directly or indirectly employed by them or anyone for whose acts they may be liable ("Indemnitor");

2. Concurrent negligence: The concurrent negligence of Indemnitor, but only to the extent of the negligence of Indemnitor; and

3. Patent infringement: The use of any design, process, or equipment that constitutes an infringement of any United States patent presently issued, or violates any other proprietary interest, including copyright, trademark, and trade secret, unless specifically directed to use such design, process, or equipment by Owner.

The obligations of Contractor under this Section 5.22 shall not be construed to negate, abridge, or otherwise reduce any other right or obligations of indemnity that would otherwise exist as to any party or person described in this Section. To the extent the wording of this Section 5.22 would reduce or eliminate the insurance coverage of Owner or Contractor, this Section 5.22 shall be considered modified to the extent that such insurance coverage is not affected. To the extent that any portion of this Section 5.22 is stricken by a court or arbitrator for any reason, all remaining provisions shall retain their vitality and effect. The provisions of this Section 5.22 shall survive completion, acceptance, final payment and termination of the Contract.

B. Employee action and RCW Title 51: In any action against Owner and any other entity indemnified in accordance with this section, by any employee of Contractor, its Subcontractors, Sub-subcontractors, agents, or anyone directly or indirectly employed by any of them, the indemnification obligation of this section shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under RCW Title 51, the Industrial Insurance Act, or any other employee benefit acts. In addition, Contractor waives immunity as to Owner and A/E only, in accordance with RCW Title 51.

PART 6 - PAYMENTS AND COMPLETION

6.01 CONTRACT SUM

Owner shall pay Contract Sum: Owner shall pay Contractor the Contract Sum plus Washington State sales tax for performance of the Work, in accordance with the Contract Documents.

6.02 SCHEDULE OF VALUES

Contractor to submit Schedule of Values: Before submitting its first Application for Payment, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principal category of work, in such detail as requested by Owner ("Schedule of Values"). The approved Schedule of Values shall allocate at least the percentage of the original Contract Sum so designated in the Contract Documents to that portion of the Work between Substantial Completion and Final Completion to recognize not-yet-earned costs for demobilization, Project Record, O&M manuals, and any other requirements for Project closeout and in advancing the Work from Substantial Completion to Final Completion. The approved Schedule of Values shall be used by Owner as a basis for reviewing progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

6.03 APPLICATION FOR PAYMENT

A. Monthly Application for Payment with substantiation: At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work (using Owner's form) completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.

B. Contractor certifies Subcontractors paid: By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.011, as their interests appeared in the last preceding Application for Payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in Section 1.03 are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment. Owner has the right to request written evidence from Contractor that Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by Owner to Contractor for subcontracted Work. Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Owner shall not have an obligation to pay or to see to the payment of money to a Subcontractor, except as may otherwise be required by law.

C. Reconciliation of Work with Progress Schedule: At the time it submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Progress Schedule. The submission of an Application for Payment constitutes a certification that the Work is current on the Progress Schedule.

D. Payment for material delivered to site or stored off-site: If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:

1. Suitable facility or location: The material will be placed in a facility or location that is structurally sound, dry, lighted and suitable for the materials to be stored or otherwise approved by Owner;

2. Facility or location within 10 miles of Project: The facility or location is located within a 10-mile radius of the Project. Other locations may be utilized, if approved in writing, by Owner;

3. Facility or location exclusive to Project's materials: Only materials for the Project are stored within the facility or location (or a secure portion of a facility or location set aside for the Project);

4. Insurance provided on materials in facility or location: Contractor furnishes Owner a certificate of insurance extending Contractor's insurance coverage for damage, fire, and theft to cover the full value of all materials stored, or in transit;

5. Facility or location locked and secure: The facility or location (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access;

6. Owner right of access to facility or location: Owner shall at all times have the right of access in company of Contractor;

7. Contractor assumes total responsibility for stored materials: Contractor and its surety assume total responsibility for the stored materials; and

8. Contractor provides documentation and Notice when materials moved to site: Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish Notice to Owner when materials are moved from storage to the Project site.

6.04 PROGRESS PAYMENTS

A. Owner to pay within 30 Days: Owner shall make progress payments, in such amounts as Owner determines are properly due, within 30 Days after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with chapter 39.76 RCW if the Application for Payment does not comply with the requirements of the Contract Documents.

B. Withholding retainage; Options for retainage: Owner shall retain 5% of the amount of each progress payment until 45 Days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including, at Owner's request, consent of surety to release of the retainage. In accordance with chapter 60.28 RCW, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor. Owner may permit Contractor to provide an appropriate bond in lieu of the retained funds.

C. Title passes to Owner upon payment: Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Contractor with the Contract Documents. A progress payment, or partial or entire use or occupancy of the Project by Owner, shall not constitute acceptance of Work.

D. Interest on unpaid balances: Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in chapter 39.76 RCW.

6.05 PAYMENTS WITHHELD

A. Owner's right to withhold payment: Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:

1. Non-compliant Work: Work not in accordance with the Contract Documents;

2. Remaining Work to cost more than unpaid balance: Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum;

3. Owner correction or completion of Work: Work by Owner to correct defective Work or complete the Work in accordance with Section 5.16;

4. Third party claims for which Contractor may be responsible: Claims (except where an insurer has unconditionally accepted coverage without prior payment of any deductibles or self-insured retentions) filed or reasonable evidence indicating probable filing of such claims unless Contractor provides security acceptable to Owner;

5. Failure to pay Subcontractor: The failure of Contractor to make payments to Subcontractors for labor, materials or equipment;

6. Damages: Damage to Owner or a separate contractor (except where an insurer has unconditionally accepted coverage);

7. Affidavits of Wages Paid: Failure to submit affidavits pertaining to wages paid as requested or otherwise required by statute;

8. Progress Schedule: Failure to submit a properly updated Progress Schedule;

9. Maintenance of Project Record: Failure to properly maintain as the Project Record;

10. Other construction records: Failure to properly submit any other required construction reports or records;

11. Certified payrolls: Failure to properly submit certified payrolls when requested;

12. Contractor's failure to perform: Contractor's failure otherwise to perform in accordance with the Contract Documents; or

13. Contractor's negligent acts or omissions: Cost or liability that may occur to Owner as the result of Contractor's fault or negligent acts or omissions.

B. Owner to notify Contractor of withholding for unsatisfactory performance: In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with chapter 39.76 RCW.

6.06 RETAINAGE, BOND CLAIM RIGHTS, AND LIENS

A. Chapters 39.08 RCW and 60.28 RCW incorporated by reference: Chapters 39.08 RCW and 60.28 RCW, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.

B. Liens: Contractor shall promptly pay (and secure the discharge of any liens asserted by) all persons properly furnishing labor, equipment, materials or other items in connection with the performance of the Work (including, but not limited to, any Subcontractors) to the extent that Owner has paid Contractor for this Work. Owner may, at its option, withhold payment, in whole or in part, to Contractor until lien and claim releases are furnished. Contractor may provide other security acceptable to Owner, such as a bond, in lieu of paying disputed liens or claims. Contractor shall defend, indemnify, and hold harmless Owner from any liens, including all expenses and attorneys' fees, except to the extent a lien has been recorded because of a failure of payment by Owner for the Work implicated in any such lien.

6.07 SUBSTANTIAL COMPLETION

A. Substantial Completion defined: Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner has full and unrestricted use and benefit of the facilities (or portion thereof designated and approved by Owner) for the use for which it is intended, the Project has been constructed in substantial accordance with the Contract Documents, and at a minimum the following elements have been accomplished (see also, Section 01 70 00 Project Completion):

1. A written punch list has been prepared;

2. The Authority Having Jurisdiction has granted a certificate of occupancy; and

3. The first final draft of the Operation and Maintenance manuals has been submitted to Owner.

All Work other than incidental corrective or punch list work shall be completed. Substantial Completion shall not have been achieved if the Work cannot achieve Final Completion within the time specified in the Agreement. The date Substantial Completion is achieved shall be established in writing by Owner. Contractor may request an early date of Substantial Completion which must be approved by Change Order. Owner's occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved.

B. Contractor to provide weekly reports before Substantial Completion: Beginning at least 30 Days before the scheduled date of Substantial Completion, Contractor shall prepare reports weekly, identifying items to be completed in order to obtain necessary occupancy certificates and permits, and make recommendations to Owner for effectuating the earliest possible completion. When Contractor considers that the Work, or a portion thereof that Owner agrees to accept separately, has achieved Substantial Completion, Contractor shall prepare and submit to Owner a comprehensive list of items to be completed or corrected prior to final payment. Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on the list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents.

C. Owner to determine if Work is complete: Upon receipt of Contractor's list, Owner will make an inspection to determine whether the Work or designated portion thereof has achieved Substantial Completion. If Owner's inspection discloses any item, whether or not included on Contractor's list, that is not sufficiently complete in accordance with the Contract Documents so that Owner can occupy or utilize the Work or designated portion thereof for its intended use, Contractor shall, before the occurrence of Substantial Completion, complete or correct the item upon notification by Owner, and Contractor shall then submit a request for another inspection by Owner to determine Substantial Completion. If Owner determines that the Work or designated portion has not achieved Substantial Completion, Contractor shall expeditiously complete the Work or

designated portion, again request an inspection, and pay the costs associated with the re-inspection.

D. Owner may take over punch list: If, at 30 Days after the date of Substantial Completion, Owner considers that the remaining items on its list ("punch list") are unlikely to be completed within the time period specified in the Contract Documents for Final Completion, Owner may, upon seven Days' written Notice to Contractor, take over and perform some or all of the punch list items. If Contractor fails to correct the deficiencies within the time period specified, Owner may deduct the actual cost of performing this punch list work, including any design costs, plus ten 10% to account for Owner's transaction costs, from the Contract Sum.

E. Owner to establish date of Substantial Completion: When the Work or designated portion thereof has achieved Substantial Completion, Owner shall establish the date of Substantial Completion in writing, establish responsibilities of Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and fix the time within which Contractor shall finish all items on the list accompanying the document. The writing establishing Substantial Completion shall be submitted to Contractor for its written acceptance of the responsibilities assigned to it. Any items not included in the document but required or necessary for Final Completion of the Work shall be supplied and installed by Contractor as a part of the Contract Sum, notwithstanding their not being included in the punch list. Upon written acceptance of the writing establishing Substantial Completion by Contractor and Owner, and upon Contractor's Application for Payment, Owner shall make payment as provided in the Contract Documents. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents. No further payment will be due or owing until the payment following Final Completion.

F. Contractor to complete punch list in timely manner: Contractor shall prepare, continue to monitor, and cause to be completed, all punch lists with respect to the activity of each Subcontractor and report weekly to Owner on outstanding punch list items.

6.08 PRIOR OCCUPANCY

A. Prior Occupancy defined; Restrictions: Owner may, when legally permissible to do so and upon written Notice to Contractor, take possession of or use any completed or partially completed portion of the Work ("Prior Occupancy") at any time prior to Substantial Completion, and Contractor shall cooperate with such occupancy and use and the establishment of a punch list. Unless otherwise agreed in writing, Prior Occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the obligations established by the Contract Documents; establish a date of Substantial or Final Completion; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.

B. Damage; Duty to repair and warranties: Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss of or damage to the Work resulting from Prior Occupancy. Contractor's one year duty to repair any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

6.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT

A. Final Completion defined: Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing, but in no case shall it constitute Final Acceptance, which is a subsequent, separate, and distinct action (see also, Section 01 70 00 Project Completion).

B. Final Acceptance defined: Unless otherwise determined by Owner, Final Acceptance shall be achieved after Contractor has completed all the requirements of the Contract Documents. The date Final Acceptance is achieved shall be established by Owner in writing. Pursuant to RCW 60.28, "Lien for Labor, Materials, Taxes on Public Works," completion of the Contract Work shall occur upon Final Acceptance. Neither Final Acceptance nor final payment shall release Contractor or its sureties from any obligations of these Contract Documents or the payment and performance bonds, or constitute a waiver of any claims by Owner arising from Contractor's failure to perform the Work in accordance with the Contract Documents (see also, Section 01 70 00 Project Completion).

C. Final payment waives Claim rights: Acceptance of final payment by Contractor or any Subcontractor shall constitute a waiver and release to Owner of all claims by Contractor or any such Subcontractor for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in Part 8.

PART 7 - CHANGES

7.01 CHANGE IN THE WORK

A. Changes in the Work: Changes in the Work may be accomplished after execution of the Contract without invalidating the Contract. Changes in the Work that adjust the Contract Sum and/or Contract Time are incorporated into the Contract solely by Change Order and are subject to the limitations stated in this Part 7 and elsewhere in the Contract Documents. A Change Order may be bilateral or unilateral, as described below. Change Orders may be initiated by mutual agreement or through a Contract Change Proposal ("CCP") or Work Directive ("WD").

B. Change Orders:

1. A Bilateral Change Order is signed by Owner and Contractor to record their agreement on the terms of a change in the Work. A Bilateral Change Order may reflect the agreement of Owner and Contractor on a standalone issue, or it may incorporate one or more mutually agreed upon CCPs or WDs. A Bilateral Change Order shall constitute full payment and final settlement of all claims for time and cost, including direct, indirect, impact and consequential costs, related to the Change Order and Work covered by, affected by and related to the events giving rise to the Change Order.

2. A Unilateral Change Order is initially signed only by Owner to set forth, subject to the Contract, the terms of a change in the Work based upon one or more CCPs and/or WDs to which the parties have not yet fully agreed. Within 7 Days of its receipt of a Unilateral Change Order, Contractor shall notify Owner in writing either (a) of its acceptance of its terms, in which case the Unilateral Change Order will automatically become a Bilateral Change Order, or (b) of Contractor's rejection, in which case Contractor must submit a written rejection within 14 Days after Contractor delivered written Notice of rejection to Owner as noted above. The written rejection must fully explain the reasons for rejecting the Unilateral Change Order and include all necessary supporting documentation. The rejection will then be considered in accordance with Section 8.02 (Informal Resolution of Disputes). Failure to submit a written Notice of rejection within 7 Days of Contractor's receipt of a Unilateral Change Order or a written rejection with 14 Days shall constitute Contractor's acceptance of the terms of the Unilateral Change Order.

C. Change Orders via Contract Change Proposal:

1. Contractor shall be responsible for maintaining an Issues Log. If Contractor at any time believes that a change in the Work has or may have occurred, Contractor shall add such item to the Issues Log. At a minimum, the Issues Log shall identify:

   a. Detailed scope of the change in the Work;

   b. Contract Time impact noting specifically how it impacted the critical path of the project, if any;

   c. The amount of any anticipated, proposed, or approved change in the Contract Sum;

   d. Date first included on the Issues Log;

   e. Owner-initiated or Contractor-initiated; and

   f. Action status.

2. If the Contractor believes an item on the Issues Log warrants a CCP, Contractor shall provide written Notice to Owner in accordance with Section 8.02, and shall submit a written CCP in accordance with this Section. All CCPs shall be substantiated and submitted within 7 Days of being added to the Issues Log along with a revised progress schedule identifying the time impact affecting the critical path, if any. The CCP shall identify the proposed full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time. Upon receipt of the CCP, Owner may accept the proposal and incorporate it into a Bilateral Change Order, reject the proposal and either issue a WD or elect not to proceed with the proposal, request further documentation, or negotiate acceptable terms with Contractor.

D. Work Directives:

1. A WD is a written order prepared by Owner that directs Contractor to perform Work prior to total agreement on an adjustment, if any, in the Contract Sum and/or Contract Time. Owner may direct Contractor, at any time and without invalidating the Contract, through a WD to proceed with a change in the Work or to perform Work that Contractor contends to be a change in the Work, with or without the agreement of Contractor and prior to agreement of the basis for adjustment, if any, to the Contract. Owner's use of a WD does not constitute agreement that the directive constitutes a change in the Work, the Contract Sum or the Contract Time.

2. A WD normally includes:

   a. The scope of the directed Work,

   b. Any proposed adjustment to the Contract Sum or not-to-exceed amount,

   c. Any proposed change to the Contract Time,

   d. The proposed method of determining any change in the Contract Sum and/or Contract Time, and

e. The supporting data that Contractor must submit in accordance with the requirements of Part 7 of the General Conditions.

3. Upon receipt of a WD, Contractor shall promptly commence and proceed diligently with performance of the directed Work. Within 7 Days of its receipt of a WD, Contractor shall notify Owner in writing either (a) of its acceptance of its terms, in which case the terms will become effective, and the WD will be incorporated into a Bilateral Change Order, or (b) of Contractor's rejection of the terms, in which case Contractor must submit a written rejection within 14 Days after Contractor delivered written Notice to Owner as noted above. The written rejection must fully explain the reasons for rejecting the WD and include all necessary supporting documentation. The rejection will then be considered in accordance with Section 8.02. Contractor's rejection of a WD shall not relieve Contractor of its obligation to comply promptly with the WD.

E. Contractor fault or negligence alleged as basis for change in Contract Sum: No change in the Contract Sum shall be allowed to the extent Contractor's changed cost of performance is due to the fault or negligence of Contractor or anyone for whose acts Contractor is responsible; or to the extent Contractor is responsible for change concurrently caused by Contractor and Owner; or to the extent the change is caused by an act of Force Majeure as defined in Section 3.05.

7.02 CHANGE IN THE CONTRACT SUM

A. General Application

1. Contract Sum changes only by Change Order: The Contract Sum shall only be changed by a Change Order.

2. Allowances: Any Allowances stated in the Contract Documents shall be included in the Contract Sum. Items covered by Allowances shall be supplied for such amounts and by such persons or entities as Owner may direct, but Contractor shall not be required to employ persons or entities to whom Contractor has made reasonable and timely objection. Owner shall select materials and equipment under an Allowance with reasonable promptness. Allowances shall cover the net cost to Contractor of materials and equipment delivered and/or installed at the site, as identified in the Allowance, and all required taxes, less applicable trade discounts. Whenever actual 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 the difference between actual, reasonable costs and the Allowances.

3. Pricing Components: Contractor shall maintain and submit a complete itemization of the costs incurred as a result of any change in the Work, including labor, material, Subcontractor costs, and fee. The total cost of any change in the Work or of any other increase or decrease in the Contract Sum, including a Claim, shall be limited to the actual, reasonable amounts for the following components, itemized in the manner set forth below and submitted on breakdown sheets in a form approved by Owner. If the total cost of the change in the Work does not exceed $5,000.00, Contractor shall not be required to submit a breakdown if the description of the change in the Work is sufficiently definitive for Owner to determine fair value.

   a. Labor costs: The labor cost component is determined by multiplying the estimated or actual additional number of hours needed to perform the change in the Work by the fully burdened hourly labor costs. The fully burdened hourly costs shall include the following:

(1) Basic wages and benefits: Hourly rates and benefits as stated on the Department of Labor and Industries approved "Statement of Intent to Pay Prevailing Wages" shall be applicable unless a high, documented amount is actually paid by a contractor for the laborers, apprentices, journeymen, foremen, and other staff performing and/or directly supervising the change in the Work at the site. Any amount in excess of approved "Statement of Intent to Pay Prevailing Wages" shall be substantiated and subject to audit.

(2) Worker's insurance: Direct contributions to the State of Washington for industrial insurance; medical aid; and supplemental pension, by the class and rates established by the Department of Labor and Industries.

(3) Federal insurance: Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.

(4) Supervision: The labor cost component may include the actual, demonstrated additional supervision hours (not already compensated by Owner) directly related to a change in the Work.

(5) Travel and Per Diem allowance: Travel allowance and/or subsistence, if applicable, required by regional labor union agreements, which are itemized and identified separately.

b. Material costs: The material cost component must be itemized and include material invoices or reasonable lump-sum estimates of the quantity and cost of additional materials needed to perform the change in the Work. Material costs shall be developed first from actual known costs; second from supplier quotations; and, if neither of these is available, then from standard industry pricing guides acceptable to Owner. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges shall be itemized.

c. Equipment costs: The equipment cost component must be itemized by the type of equipment and include the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work on site. Costs will be allowed for construction equipment only to the extent used solely for the changed Work, or for additional rental costs actually incurred by Contractor solely for the changed Work. Equipment charges shall be computed on the basis of actual invoice costs or, if owned, from the current edition of the Associated General Contractors Washington State Department of Transportation (AGC WSDOT) Equipment Rental Agreement current edition as of the Contract execution date. The EquipmentWatch Rental Rate Blue Book shall be used as a basis for establishing rental rates of equipment not listed in the above source. The maximum rate for standby equipment shall not exceed that shown in the AGC WSDOT Equipment Rental Agreement. The rate for Contractor-owned equipment necessarily standing by for future use on the changed Work shall be no more than 50% of the rate established above unless otherwise approved by Owner. The total rental cost shall not exceed the cost of purchasing the equipment outright.

d. Subcontractor costs: The Subcontractor cost component consists of payments Contractor makes to Subcontractors for the cost of changed Work performed by

Subcontractors. Subcontractors' costs shall be calculated and itemized in the same manner as prescribed herein for Contractor.

e. Fee: The Fee component is compensation for all items and costs not listed in subparagraphs a through d above, and is added to the total cost to Owner of the sum of these items. The Fee shall compensate Contractor, Subcontractor and suppliers for, among other things, combined overhead, profit and other costs, including all office, home office and site overhead, employee per diem, subsistence and travel costs not separately reimbursable under subparagraph a above, warranty, safety costs, printing and copying, quality control/assurance, purchasing, small or hand tool (a tool that costs $250 or less and is normally furnished by the performing contractor) or expendable charges, temporary construction facilities, field engineering, schedule updating, Project Record, home office cost, taxes (including all taxes except B&O tax and Washington State sales tax payable based on the amount of the approved Application for Payment), office engineering, estimating costs, additional overhead because of extended time, Claim and change preparation, direct and indirect delay, acceleration or impact, and any other cost incidental to the change in the Work. The Fee shall be strictly limited in all cases to the rates below.

(1). Contractor markup on Contractor Work: Contractor is allowed a Fee for any Work actually performed by Contractor's own forces of 16% of the first $50,000 of the cost of such Work and 4% of the remaining cost, if any.

(2). Subcontractor markup for Subcontractor Work: Each Subcontractor (including lower-tier Subcontractors) is allowed a Fee for any Work actually performed by its own forces of 16% of the first $50,000 of the cost of such Work and 4% of the remaining cost, if any.

(3). Contractor markup for Subcontractor Work: Contractor is allowed a Fee for any Work performed by its Subcontractor(s) of 6% of the first $50,000 of the amount due each Subcontractor for such Work and 4% of the remaining amount, if any.

(4). Subcontractor markup for lower-tier Subcontractor Work: Each Subcontractor is allowed a Fee for any Work performed by its Subcontractor(s) of any lower-tier of 4% of the first $50,000 of the amount due the lower-tier Subcontractor for such Work and 2% of the remaining amount, if any.

(5). Basis of cost applicable for markup: The cost of the Work to which the Fee is to be applied shall be based on the cost components in subparagraphs 7.02.A 3.a – d.

(6). Application of Fee: The Fee shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by Contractor or the same Subcontractor, the Fee as well as bond and insurance markups will apply to the net difference.

f. Insurance and bond premiums: The cost of any change in insurance or bond premium is added to the sum of the cost components in subparagraphs 7.02.A 3.a – e and is limited to the following:

(1) Contractor's liability insurance: The cost of any changes in Contractor's contractually required liability insurance arising directly from the Change Order; and

(2) Payment and Performance Bond: The cost of any additional premium for Contractor's contractually required bond arising directly from the Change Order.

g Tax: Washington State sales tax and B&O tax arising directly from the Change Order shall be added to the cost of the Change Order.

h. Unit Prices: If Unit Prices, including pre-agreed rates for material quantities, are applicable to a change in the Work, the Unit Prices shall be applied to the quantities of the items involved as determined in Section 7.02A. Quantities must be supported by field measurement statements signed by Owner. Owner shall be afforded access and be permitted to measure quantities. Contractor shall not exceed any cost limit(s) without Owner's prior written approval. Unit Prices shall include reimbursement for all direct and indirect costs of the Work, but exclude Fee (7.02 A.e), bond, and insurance costs (7.02 A.f.).s.

7.03 CHANGE IN THE CONTRACT TIME

A. Changes in Contract Time: The Contract Time shall only be changed by a Change Order.

B. Time extension permitted only if delay is not Contractor's fault: If Contractor is delayed at any time in the commencement or progress of the Work (1) by an act or neglect of Owner or anyone for whose acts Owner is responsible; or (2) by changes ordered by Owner in the Work; or (3) by Force Majeure; or (4) by delay authorized by Owner pending dispute resolution; or (5) by other causes that Owner determines may justify delay, then Contractor shall reasonably attempt to mitigate the delay, and the Contract Time shall be extended by Change Order for such reasonable time as Owner may reasonably determine consistent with the provisions of the Contract Documents. No adjustment in the Contract Time shall be allowed to the extent Contractor's changed time of performance is due to the fault or negligence of Contractor or anyone for whose acts Contractor is responsible.

C. Contractor must demonstrate impact on critical path of schedule: Any change in the Contract Time covered by a Change Order or Claim shall be limited to the change in the critical path of the Work attributable to the change or event(s) giving rise to the Change Order or Claim. Contractor shall be responsible for showing clearly on the Progress Schedule that the change or event had a specific impact on the critical path and, except in case of concurrent delay, was the sole cause of such impact, and could not have been avoided by resequencing of the Work or other reasonable alternatives in accordance with Section 01 32 13 Project Schedule.

D. Cost arising from change in Contract Time: Contractor is entitled to compensation for the cost of a change in Contract Time only if all the following conditions are met:

1. Must be solely fault of Owner: The change in Contract Time must solely be caused by the fault or negligence of Owner or others for whom Owner is responsible;

2. Procedures: Contractor must follow the procedure set forth in Section 7.03B and Section 8.02;

3. Demonstrate impact on critical path: Contractor must establish the extent of the change in Contract Time in accordance with Section 7.03C and Section 01 32 13 Project

Schedule. Owner is not obligated directly or indirectly for damages or an increase in the Contract Sum for any delay suffered by a Subcontractor that does not increase the Contract Time; and

4. Cost measured exclusively by the pricing components of Section 7.02A.3: If Contractor or a Subcontractor of any tier is entitled to compensation arising from or related to a change in Contract Time, the pricing components of Section 7.02A.3 shall exclusively be used to measure the actual costs incurred as a result of the change in Contract Time. Neither Contractor nor a Subcontractor of any tier is entitled to payment for costs arising out of actual or alleged loss of efficiency; morale, fatigue, attitude, or labor rhythm; home office overhead; expectant underrun; trade stacking; reassignment of workers; rescheduling of work; concurrent operations; dilution of supervision; learning curve; beneficial or joint occupancy; logistics; ripple; season change; extended overhead; profit upon damages for delay; impact damages, including cumulative impact; or similar damages.

PART 8 - CLAIMS AND DISPUTE RESOLUTION

8.01 CLAIMS

A. Definition: A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of the Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract Documents. The term “Claim” also includes other disputes and matters in question between Owner and Contractor arising out of or relating to the Contract Documents. Claims must be initiated in writing and be made in accordance with the Contract Documents. Neither a CCP, a Request for Information, a Bilateral or Unilateral Change Order, a reservation of rights, minutes of a meeting, a daily report, or a log entry shall constitute a Claim or Notice of a Claim. However, Owner and Contractor may agree in a signed writing to supplement how Contractor can provide a Notice of Claim as specified in this Part 8.

B. Continuing Contract performance: Pending final resolution of a Claim, including the dispute resolution process in Part 8, and except as otherwise agreed in writing or in the Contract Documents, Contractor shall proceed diligently with performance of the Work and maintain the Progress Schedule, and Owner shall continue to make payments of undisputed amounts in accordance with the Contract Documents.

C. Claims for additional cost: If Contractor wishes to make a Claim for an increase in the Contract Sum, written Notice as provided herein shall be given before proceeding to execute the Work, and written Notice and a written Claim must be made in accordance with this Part 8, or it will be waived.

D. Claims for additional time: If Contractor wishes to make a Claim for an increase in the Contract Time, written Notice as provided herein shall be given, and a written Claim must be made in accordance with this Part 8, or it will be waived.

E. Claims for consequential damages: Contractor and Owner waive certain Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes damages incurred by Owner for profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and damages incurred by Contractor for principal and home office overhead and expenses including but not limited to the compensation of personnel stationed there, for loss of financing, business and/or reputation, for losses on other projects, for loss of profit, and for interest or financing costs. This mutual waiver is applicable, without limitation, to all consequential damages due to either party’s termination. Nothing contained in this subparagraph E, however, shall be deemed to preclude an

award of liquidated or other delay damages, when applicable, in accordance with the Contract Documents, or to preclude or limit Contractor's obligation to procure and maintain the insurance policies required by this Contract or indemnify Owner for damages, including direct, indirect or consequential damages, alleged by a third party.

8.02 INFORMAL RESOLUTION OF DISPUTES

A. Procedure to reduce disputes: In an effort to reduce the incidence and cost to all parties of extended disputes, all disputes, direct or indirect, arising out of or relating to the Contract Documents or the breach thereof, except those that have been waived under the terms of the Contract Documents, shall be decided exclusively by the dispute resolution procedure of Part 8 unless the parties mutually agree in writing otherwise. To the extent that Owner and Contractor agree to a partnering or dispute review process to help address disputes, these processes shall be in addition to, and not in place of, the mandatory contractual dispute resolution procedures.

B. Notice: Except for disputes requiring Notice before proceeding with the affected Work as otherwise described in the Contract Documents, Contractor shall submit a written Notice of any Claim to Owner's Project Manager, consistent with the requirements of the Contract Documents, within 7 Days of the occurrence of the event giving rise to a dispute. If Contractor did not have actual knowledge of such an event, the written Notice shall be submitted within 7 Days of the date that Contractor reasonably should have been aware of the event. The Notice shall set forth, at a minimum, a description of the event(s) leading to or causing the dispute, the nature of the impacts to Contractor and its Subcontractors, if any, and an estimate of any claimed adjustments in the Contract Sum and/or Contract Time. Without waiving any rights, Owner and Contractor may discuss and attempt to resolve a dispute identified in a Notice of Claim directly with each other or with a third-party neutral or dispute review board if utilized on a Project.

C. Substantiation: If an issue remains unresolved, Contractor shall submit timely written substantiation to support Contractor's position relating to the Notice of Claim. Such substantiation, which shall include an explanation of Contractor's position and any supporting documentation, shall be provided within 30 Days of submitting a Notice. Contractor may delay submitting data by an additional 14 Days if it notifies Owner that substantial data must be assembled.

D. Owner's Project Manager to make initial decision on all disputes: After Contractor has submitted written substantiation to Owner that complies with all applicable provisions of Parts 7 and 8, as well as Section 01 32 13, Project Schedule, Owner's Project Manager will endeavor to respond, in writing, to Contractor within 7 Days of the date substantiation is received, or with Notice to Contractor of the date by which Owner's Project Manager expects to render a decision. If necessary to fully and fairly evaluate an issue, the Project Manager may request additional information or extend the time in which to respond. If the issue is not resolved, or if Project Manager does not respond within the later of 7 Days of the date written substantiation is received or the date specified for rendering a decision, the dispute may be escalated by Contractor to Owner's Assistant Vice President, Facilities Services, Capital as set forth in Section 8.02E below.

E. Contractor may respond to initial decision: The initial decision of the Project Manager will be final and conclusive unless, within 7 Days of the date Contractor receives the initial decision or the date specified for rendering a decision, Contractor notifies Owner's Project Manager in writing of Contractor's disagreement with the initial decision, in which case Contractor must then submit a written rejection to Owner's Assistant Vice President, Facilities Services, Capital within 14 Days. The written rejection must attach the submitted Notice and substantiation and fully explain the reasons for Contractor's disagreement with the initial decision. It must also include all applicable supporting documentation. Failure to submit a written rejection to Owner's Assistant Vice

President, Facilities Services, Capital within 14 Days shall constitute Contractor's acceptance of the initial decision.

F. Assistant Vice President, Facilities Services, Capital decision: Following Contractor's full compliance with the procedure above, Owner's Assistant Vice President, Facilities Services, Capital will endeavor to respond in writing to Contractor with a decision within 7 Days of delivery of the Contractor's rejection or with Notice to Contractor of the date by which Owner's Assistant Vice President, Facilities Services, Capital expects to render a decision. If Owner's Assistant Vice President, Facilities Services, Capital does not respond within the later of 7 Days after delivery of the rejection or the date specified to render a decision, the dispute will be deemed denied and Contractor may further escalate the dispute as set forth in Section 8.02G below.

G. Claim: If Contractor disagrees with the decision of the Assistant Vice President, Facilities Services, Capital, or if no decision is timely received, Contractor shall timely submit a Claim if it wishes to pursue formal dispute resolution or seek additional relief against Owner of any kind. A Claim must be consistent with the Notice, substantiation and rejection previously provided, be submitted to Owner in writing within 14 Days of the date the decision of the Assistant Vice President, Facilities Services, Capital is received by Contractor or due, and comply with Section 8.04. Any claim of a Subcontractor of any tier may be brought only through, and after review by, Contractor. Contractor acknowledges and agrees that no additional documentation from what was submitted to Owner's Assistant Vice President, Facilities Services, Capital (per part 'F' of this section) may be submitted and considered in any subsequent dispute resolution proceeding. Contractor's failure to provide timely information for Owner's consideration during the dispute resolution procedure of Part 8 has a substantial impact upon and prejudices Owner, including but not limited to its inability to fully investigate or verify a Claim, mitigate damages, choose alternative options, adjust the budget, delete or modify the impacted Work, and/or monitor time, cost and quantities.

8.03 FORMAL RESOLUTION OF CLAIMS

A. Option for direct discussions: At any time following Contractor's initiation of formal dispute resolution, Owner may require that an officer of Contractor and Owner's Assistant Vice President, Facilities Services, Capital (all with authority to settle) meet, confer, and attempt to resolve the Claim. If the Claim is not resolved during such meeting, or if no such meeting is requested, Contractor may bring no litigation against Owner unless Contractor complies with the procedures described in Sections 8.03B and C. This requirement cannot be waived except by an explicit written waiver signed by Owner and Contractor.

B. Mediation:

1. Mediation required: Claims, disputes, or other matters in controversy arising out of or related to the Contract shall be subject to mediation as a condition precedent to the initiation of binding dispute resolution. This requirement cannot be waived except by an explicit written waiver signed by both Owner and Contractor. Unless Owner and Contractor mutually agree in writing otherwise, all unresolved Claims shall be considered at a single mediation session that shall occur after Substantial Completion and prior to Final Acceptance by Owner.

2. Mediation procedure: The parties shall endeavor to resolve Claims by mediation. A request for mediation shall be delivered in writing to the other party to the Contract, and the parties shall promptly attempt to mutually agree on a mediator. If the parties do not agree on a mediator within 30 Days of a party's demand, the mediation, 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. Mediation shall proceed in advance of binding dispute resolution proceedings.

3. Mediation fee to be shared: The parties to the mediation 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.

4. Representatives with authority must attend mediation: Representatives of Contractor and Owner must attend the mediation session in person with authority to settle the Claim. To the extent there are other parties in interest, such as A/E, insurers or Subcontractors, their representatives, also with authority to settle the Claim, shall also attend the mediation session in person.

C. Litigation: Contractor may bring no litigation on a Claim unless the Claim has been raised and considered in accordance with the procedures of this Part 8, including mandatory mediation. Contractor shall have the burden to demonstrate in any litigation that it has complied with all requirements of this Part 8. All unresolved Claims of Contractor shall be waived and released unless Contractor has complied with the time limits of the Contract Documents, and litigation is served and filed within 180 Days after the Date of Substantial Completion approved in writing by Owner. This requirement cannot be waived except by an explicit, written waiver signed by Owner and Contractor. The pendency of a mediation, which shall mean the time period between a party's receipt of a written mediation demand and the date of the initial mediation session, shall stay this deadline for serving and filing a lawsuit. The deadline may also be stayed for an additional period by agreement of the parties or court order. Neither Contractor nor a Subcontractor, whether claiming under a bond or lien statute or otherwise, shall be entitled to attorneys' fees directly or indirectly from Owner (but may recover attorneys' fees from the bond or statutory retainage fund itself to the extent allowable under law).

8.04 CLAIMS PROCESS

A. Notice and Claims: Any Notice and any Claim of Contractor, whether under the Contract or otherwise, must be made pursuant to and in strict accordance with the applicable provisions of the Contract Documents. No act, omission, or knowledge, actual or constructive, of Owner or anyone for whose acts Owner is responsible shall in any way be deemed to be a waiver of the requirement for timely written Notice and a timely written Claim unless Owner and Contractor sign an explicit, unequivocal written waiver. The fact that Owner and Contractor may consider, discuss, or negotiate a Claim that has or may have been procedurally or substantively defective or untimely under the Contract shall not constitute a waiver of the provisions of the Contract Documents unless Owner and Contractor sign an explicit, unequivocal written waiver. Contractor acknowledges and agrees that Contractor's failure to timely submit required Notices and/or timely submit Claims has a substantial impact upon and prejudices Owner, including but not limited to its inability to fully investigate or verify the Claim, mitigate damages, choose alternative options, adjust the budget, delete or modify the impacted Work, and/or monitor time, cost and quantities.

B. Claim must cover all costs and be documented: A Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor (and Subcontractors) may be entitled and may not contain reservations of rights without Owner's written approval; any such unapproved reservations of rights shall be without effect. Any requests by Contractor for an adjustment in both the Contract Sum and Contract Time that arise out of the same event(s) shall be submitted together. A Claim must be fully substantiated and documented. At a minimum, a Claim shall contain the following information:

1. Factual statement of Claim: A detailed factual statement of the Claim for additional compensation and/or time, if any, providing all necessary dates, locations, and items of Work affected by the Claim, that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of;

2. Dates: The date on which event(s) arose which gave rise to the Claim;

3. Owner and A/E employee's knowledgeable about Claim: The name of each employee of Owner and/or A/E believed to be knowledgeable about the Claim;

4. Support from Contract Documents: The specific provisions of the Contract Documents that support the Claim;

5. Identification of other supporting information: The identification of any documents and the substance of any oral communications that support the Claim;

6. Copies of supporting documentation: Data and copies of any identified documents, other than the Contract Documents, that support the Claim, including without limitation a complete explanation as to why the relief sought is not within the scope of the Contract Documents;

7. Details on Claim for Contract Time: If an adjustment in the Contract Time is sought, the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted, and Contractor's analysis of its Progress Schedule to demonstrate the reason for the extension in Contract Time showing cause and analysis of the resultant delay to the critical path and other information required by the Contract Documents and Section 01 32 13, Project Schedule;

8. Details on Claim for adjustment of Contract Sum: If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories and with the detail required by Section 7.02; and

9. Statement certifying Claim: A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes Owner is responsible.

C. False Claims: Contractor shall not make any negligent or fraudulent misrepresentations, concealments, errors, omissions, or inducements to Owner in the formation or performance of this Contract. If Contractor or a Subcontractor submits false or frivolous substantiation or a Claim to Owner, which for purposes of this Section 8.01C is defined as substantiation or a Claim based in whole or in part upon a materially incorrect fact, statement, representation, assertion, or record, Owner shall be entitled to collect from Contractor by offset or otherwise (without prejudice to any right or remedy of Owner) any and all costs and expenses, including investigation and consultant costs, incurred by Owner in investigating, responding to, and defending against such false or frivolous substantiation or Claim.

D. Notification of surety: Owner may, but is not obligated to, notify Contractor's surety, if any, of the nature and amount of any claim it may assert against Contractor. If the claim relates to a possibility of Contractor's default, Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

E. Liens: If a Claim relates to or is the subject of a lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice and filing deadlines.

F. All Claims must be submitted for final resolution within the time period specified by applicable law: Owner and Contractor shall commence all Claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of this Part 8 and within the time period specified by applicable law.

G. Waiver of rights: Any Claim of Contractor against Owner shall be conclusively deemed to have been waived by Contractor unless made in accordance with the requirements of Part 8.

H. Owner may investigate: To assist in the review of a Claim, Owner may at any time visit the Project site, communicate directly with Subcontractors, or request additional information (including requesting an audit as authorized below) in order to fully evaluate the issues raised by the Claim.

I. Owner may audit Claims: All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor or Subcontractors of any tier to permit Owner access to the books and records of Contractor or Subcontractors of any tier, or to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim, shall constitute a waiver of the Claim and shall bar any recovery.

J. Contractor to make documents promptly available: In support of Owner's audit of any Claim, Contractor and any Subcontractor shall, upon request, promptly make available to Owner within seven Days of Owner's request, at the office of Contractor or any requested Subcontractor during normal business hours, at least the following documents and other documents requested by Owner; failure to fully comply with this requirement shall constitute a material breach of contract and waiver of any Claim:

1. Daily time sheets and supervisor's daily reports;
2. Collective bargaining agreements;
3. Insurance, welfare, and benefits records;
4. Payroll registers;
5. Earnings records;
6. Payroll tax forms;
7. Material invoices, requisitions, and delivery confirmations;
8. Material cost distribution worksheet;
9. Equipment records (list of company equipment, rates, etc.);
10. Vendors', rental agencies', Subcontractors', and agents' invoices;
11. Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts;
12. Subcontractors' and agents' payment certificates;

13. Cancelled checks (payroll and vendors);

14. Job cost reports, including job cost summary and job cost detail reports, related labor and equipment reports, and monthly totals;

15. Job payroll ledger;

16. Planned resource loading schedules and summaries;

17. General ledger;

18. Cash disbursements journal;

19. Financial statements for all years during performance of the Work. In addition, Owner may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work;

20. Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others;

21. If a source other than depreciation records is used to develop costs for Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents;

22. All non-privileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in the Contract Sum or Contract Time sought by each Claim;

23. Work sheets or software used to prepare and establish the cost components for items of the Claim, including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents that establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals;

24. Work sheets, software, and all other documents used by Contractor to prepare its bid;

25. The above items for its Subcontractors; and

26. Any other information in any form or media not expressly protected from discovery by applicable law.

K. Contractor to cooperate and provide facilities for audit: The audit may be performed by employees or representatives of Owner. Contractor and its Subcontractors shall provide adequate facilities acceptable to Owner for the audit during normal business hours. Contractor and all Subcontractors shall make a good faith effort to cooperate with Owner's auditors.

L. Reciprocal RCW 42.56 rights: Contractor agrees, on behalf of itself and Subcontractors, that any invocation of RCW 42.56 at any time by Contractor or a Subcontractor, or their respective representatives, shall initiate an equivalent right to disclosures from Contractor and Subcontractors for the benefit of Owner. Failure to fully comply with these requirements shall constitute a material breach of the Contract and shall constitute a waiver of all Claims by Contractor and any Subcontractor that does not fully comply.

PART 9 - TERMINATION OF THE WORK

9.01 TERMINATION BY OWNER FOR CAUSE

A. 7 Day Notice to Terminate for Cause: Owner may, upon 7 Days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for cause upon the occurrence of any one or more of the following events:

1. Contractor fails to prosecute Work: Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time;

2. Contractor bankrupt: Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency;

3. Contractor fails to correct Work: Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents;

4. Contractor fails to supply workers or materials: Contractor repeatedly fails to supply skilled workers or proper materials or equipment;

5. Contractor failure to pay Subcontractors or labor: Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor;

6. Contractor violates laws: Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or

7. Contractor in material breach of Contract: Contractor is otherwise in material breach of any provision of the Contract Documents.

B. Owner's actions upon termination: Upon termination, Owner may at its option:

1. Take possession of Project site: Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of, and to finish, the Work;

2. Accept assignment of Subcontracts: Accept assignment of subcontracts pursuant to Section 5.20; and

3. Finish the Work: Finish the Work by whatever other reasonable method it deems expedient.

C. Surety's role: Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

D. Contractor's required actions: When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in paragraph 9.02B, and shall not be entitled to receive further payment until the Work is accepted.

E. Contractor to pay for unfinished Work: Contractor shall not be entitled to receive further payment until the Work is finished. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E's services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of

Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.

F. Contractor and Surety still responsible for Work performed: Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.

G. Conversion of "Termination for Cause" to "Termination for Convenience": If Owner terminates Contractor for cause and it is later determined that none of the circumstances set forth in paragraph 9.01A exist, then such termination shall be deemed a termination for convenience pursuant to Section 9.02.

9.02 TERMINATION BY OWNER FOR CONVENIENCE

A. Owner Notice of Termination for Convenience: Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for the convenience of Owner.

B. Contractor response to termination Notice: Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:

1. Cease Work: Stop performing Work on the date and as specified in the notice of termination;

2. No further orders or Subcontracts: Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;

3. Cancel orders and Subcontracts: Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;

4. Assign orders and Subcontracts to Owner: Assign to Owner all of the right, title, and interest of Contractor in all orders and subcontracts;

5. Take action to protect the Work: Take such action as may be necessary or as directed by Owner to preserve and protect the Work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest; and

6. Continue performance not terminated: Continue performance only to the extent not terminated.

C. Terms of adjustment in Contract Sum if Contract terminated: If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination, plus reasonable allowance for overhead and profit on Work performed prior to termination, plus the reasonable administrative costs of the termination, but shall not be entitled to any other costs or damages, whatsoever, provided however, the total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of Part 7.

D. Owner to determine whether to adjust Contract Time: If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

9.03 TERMINATION BY CONTRACTOR FOR CAUSE

A. Contractor termination: Except as provided by RCW 60.28.080, Contractor may terminate the Contract 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 permanently;

2. An act of government, such as a declaration of national emergency, that requires all Work to be stopped permanently;

3. Because Owner has improperly not made payment of undisputed amounts within the time stated in the Contract Documents; or

4. The Work is stopped for a period of 60 consecutive Days through no act or fault of Contractor, a Subcontractor, or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with Contractor,

B. Contractor termination procedure: If one of these reasons exists, Contractor may, upon seven Days' written Notice to Owner (during which period Owner has the opportunity to cure), terminate the Contract and recover from Owner payment for Work executed in accordance with the Contract Documents, including reasonable overhead and profit on Work executed and costs incurred by reason of such termination. The total recovery of Contractor shall not exceed the unpaid balance of the Contract Sum.

PART 10 - MISCELLANEOUS PROVISIONS

10.01 GOVERNING LAW

Applicable law and venue: The Contract Documents and the rights of the parties herein shall be governed by the internal laws of the state of Washington, without regard to its choice-of-law provisions. Venue shall be in the county in which the Project is located, unless otherwise specified.

10.02 SUCCESSORS AND ASSIGNS

Bound to successors; Assignment of Contract: Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to the partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Contract without written consent of the other, except that Contractor may assign the Work for security purposes to a bank or lending institution authorized to do business in the state of Washington. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents. If a majority of the ownership or the control of Contractor is acquired by a third party, and such acquisition reasonably imperils performance or creates a conflict of interest that Owner, in its sole discretion, cannot reasonably reconcile, then Owner may terminate this Contract at any time for cause under Section 9.01.

10.03 MEANING OF WORDS

Meaning of words used in Contract Documents: 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. Reference to standard Specifications, manuals, or codes of any technical society, organization, or association, or to the code of any governmental authority, whether such reference is specific or by implication, shall be to the latest

standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Wherever in the Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such items as are shown on the Drawings, or required to complete the installation.

10.04 RIGHTS AND REMEDIES

A. No waiver of rights: Waiver of any provisions of the Contract Documents must be in writing and authorized by Owner. No other waiver is valid on behalf of Owner. No action, delay in acting, or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded under the Contract Documents, nor shall action, delay in acting, or failure to act constitute approval or an acquiescence in a breach therein, or otherwise prejudice the right of Owner to enforce a right or remedy at any subsequent time, except as may be specifically agreed in writing.

B. Rights under Contract do not limit other rights: 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.

C. If portion of Contract is void, remainder is enforceable: If any portion of this Contract is held to be void or unenforceable, the remainder of the Contract shall be enforceable without such portion.

10.05 CONTRACTOR REGISTRATION AND COMPLIANCE

A. Contractor must be registered and licensed: Pursuant to RCW 39.06, Contractor shall be registered and licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27. Contractor shall also have a current state unified business identifier number; have industrial insurance coverage for Contractor's employees working in Washington as required in Title 51 RCW; have an employment security department number as required in Title 50 RCW; have a state excise tax registration number as required in Title 82 RCW; and not be disqualified from bidding on any public works contract under RCW 39.06.010 (unregistered or unlicensed contractors) or RCW 39.12.065(3) (prevailing wage violations).

B. Employer contributions: Pursuant to RCW 50.24, "Contributions by Employers," in general and RCW 50.24.130 in particular, Contractor shall pay contributions for wages for personal services performed under this Contract or arrange for a bond acceptable to the Commissioner.

C. Apprenticeship requirements: If the Contract Sum for the Project exceeds one million dollars, Contractor shall comply with all applicable apprenticeship requirements.

10.06 TIME COMPUTATIONS

Computing time: When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

10.07 RECORDS RETENTION

Six year records retention period: The wage, payroll, and cost records of Contractor, and its Subcontractors, and all records subject to audit in accordance with Section 8.03, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

10.08 THIRD-PARTY AGREEMENTS

No third party relationships created: The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

10.09 ANTITRUST ASSIGNMENT

Contractor assigns overcharge amounts to Owner: Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges which result from antitrust violations commencing after the Contract Sum is established and which are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts, and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

10.10 HEADINGS AND CAPTIONS

Headings for convenience only: All headings and captions used in these General Conditions are only for convenience of reference, and shall not be used in any way in connection with the meaning, effect, interpretation, construction, or enforcement of the General Conditions, and do not define the limit or describe the scope or intent of any provision of these General Conditions.

10.11 INDEPENDENT CONTRACTOR

Contractor is independent contractor: Contractor shall be and operate as an independent contractor in the performance of the Work and shall have complete control over and responsibility for all personnel performing the Work. Contractor is not authorized to enter into any agreements or undertakings for or on behalf of Owner or to act as or be an agent or employee of Owner.

10.12 OWNER'S ROLE

Owner's role is limited. Owner 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 Contractor's responsibility under the Contract Documents. The presence of Owner at the Project site shall not in any manner be construed as assurance that the Work is being completed in compliance with the Contract Documents, nor as evidence that any requirement of the Contract Documents of any kind, including Notice, has been met or waived. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Owner will not have control over or charge of and will not be responsible for acts or omissions of Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

END OF SECTION 00 72 00

WASHINGTON STATE UNIVERSITY

Environmental Health and Safety

Good Faith Survey
Eastlick Hall (0082A)
Washington State University
Pullman, Washington



April 14, 2016

Prepared by:

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WSU Environmental Health and Safety
AHERA Building Inspector #151417 (exp. April 30, 2016)

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1 INTRODUCTION

Washington State University (WSU) Environmental Health and Safety (EH&S) conducted a good faith asbestos and limited lead in painted coatings survey of Eastlick Hall in February of 2016. Eastlick Hall is a three-story building constructed in 1977 as a biosciences building located at the center of WSU's Pullman campus. This survey was conducted to meet good faith survey requirements for construction, renovation, demolition, and maintenance projects at Eastlick Hall with the following limitations.

1.1 Limitations of the Assessment

The conclusions within this report are professional opinions based solely upon visual site observations and interpretations of analytical data as described in this report. The survey excluded areas of the building which were inaccessible and would have caused damage to the building if sampled. Locations where inspectors would have been exposed to chemical or physical hazards were not tested (e.g., inside fume hoods with active experiments, operating HVAC or building mechanical systems, etc). Typical construction techniques can render portions of the structure inaccessible. As a result, additional asbestos-containing materials (ACM) may be present in inaccessible areas (e.g., wall cavities, within energized systems). Suspect regulated materials within inaccessible areas should be presumed to contain asbestos until characterized. The following specific areas were excluded from this survey:

- Roof exhaust fans (interior areas)
- Elevator shaft and pit
- Vertical duct shafts
- Locked rooms: B56, B74, B80M, B90-99
- Coolers rooms B56, B74, B80, B90, G63B, G69, G84, G90, G93, G99, 164, 194, 272, 288, 296A
- Plant growth chambers in rooms B91, B97, B99
- Elevator mechanical room

The opinions presented herein apply to the site conditions existing at the time of the investigation, and interpretation of current regulations pertaining to asbestos and lead. Opinions and recommendations provided herein may not apply to future conditions that may exist at the site. Regulatory requirements in effect at the time of the work should be verified prior to any work that impacts regulated materials. This report represents the findings of this survey only, and is not intended to establish scope or contractual terms supporting regulated material abatement.

2 METHODOLOGY

This good faith survey was conducted by Matthew McKibbin and Stephan Gilley with EH&S, AHERA Building Inspector #151417 and #150008 (exp. April 14, 2016 and October 14, 2016) in February and March of 2016. Our asbestos survey was performed in accordance with good faith survey requirements outlined in WAC 296-62-07721.

In order to identify suspect ACM, EH&S conducted a walk-through survey of accessible portions of Eastlick Hall. However, not all concealed areas or sub-surface suspect materials may have been surveyed (see Limiting Conditions in Section 1.1). Approximate quantities of suspect materials were estimated by field observations, measurements and scaled building drawings provided by WSU Facilities Services. Quantities given are intended for order of magnitude information only.

2.1 Asbestos Bulk Sampling

Suspect ACM was grouped into homogeneous sampling areas (HSA) and categorized according to 40 CFR 763, as thermal systems insulation (TSI), surfacing material, or miscellaneous material. The sampling plan included, at a minimum, the collection and analysis of samples as follows:

Thermal System Insulation

- In a distributive manner, a minimum of three samples of each HSA that was not presumed to contain asbestos.
- At least one bulk sample from each homogeneous area of patched TSI if the patch was less than 6 square feet.
- In a manner sufficient to determine whether the material is ACM, samples were collected from plaster/mudded pipe fitting insulation.

Surfacing Material

- In a distributive manner, a minimum of three samples collected from each homogeneous area that was 1,000 square feet or less.
- A minimum of five samples collected from each homogeneous area that was greater than 1,000 square feet but less than or equal to 5,000 square feet.
- A minimum of seven samples collected from each homogeneous area that was greater than 5,000 square feet.

Miscellaneous Material

- In a distributive manner as deemed sufficient by the Inspector. At least one sample was collected of each suspect miscellaneous material not presumed to contain asbestos.

Non-Suspect Materials

- Fiberglass, wood, metal, or other generally recognized non-ACM were not sampled.

Asbestos bulk samples and chain-of-custody forms were delivered to NVL Laboratories (NVL) in Seattle, Washington for analysis. In addition, quality control samples were delivered to Environmental Hazard Services, LLC (EHS) in Richmond, Virginia. Each sample was analyzed by Polarized Light Microscopy (PLM)/dispersion staining in accordance with EPA Method 600/R-93/116. The detection limit for this type of analysis is approximately one percent (by volume). Materials containing more than one percent asbestos are considered ACM.

2.2 Limited Lead Paint/Coatings Sampling

This lead survey was performed to assist employers in efforts to comply with the Washington Labor and Industries (LNI) lead standard for the construction industry (WAC 296-155-176) during renovation/demolition activities. Paint evaluation was limited to large homogeneous surfaces. Representative paints were analyzed by a Niton portable x-ray fluorescence (XRF) spectrometer. Calibration was conducted per manufacturer's guidance. XRF results are reported in milligrams per square centimeter (mg/cm^2). Any detection of lead in paint is reported as a lead-containing paint.

3 RESULTS

The following section details the results of asbestos sampling and lead in painted coatings sampling conducted by WSU EH&S. Asbestos and lead sample locations are provided on Figures 1 through 8.

3.1 Visual Inspection

Eastlick Hall is a rectangular shaped three-story reinforced concrete structure built in 1977 for bioscience laboratories and research. Eastlick is interconnected at each floor with Heald Hall to the east. The sub-grade basement level and ground levels encompass the entire footprint of the building, which totals approximately 46,000 square-feet on each floor. A concrete tile roof forms a courtyard on the west portion of the first floor and the building extends upward with a smaller footprint through the third floor.

The sub-basement mechanical room houses the main supply fans and steam distribution lines, both of which branch out to the duct and pipe risers located at the four corners of the building in mechanical rooms labeled “MA”.

Interior finishes are generally homogeneous throughout the building. Vinyl asbestos floor tiles and suspended ceilings are found throughout offices, laboratories and corridors. Interior partition walls are constructed with gypsum wallboard systems, the exception being interior concrete structural walls which are finished with plaster. Additional finishes include: a concealed spline ceiling in room 171, ceramic tile systems in restrooms, poured epoxy flooring in the basement vivarium, and walk-in coolers scattered throughout the building. The exterior is finished with concrete and brick facades.

3.2 Asbestos

Table 1 provides a list of confirmed ACMs and assumed ACMs identified during the survey.

Photographs referenced in the tables are provided in Appendix A. Quantities are estimated for order of magnitude information only and not intended for bidding purposes or fee estimates for construction or renovation projects.

Table 1 – ACMs and Assumed ACMs

Material	Location(s) of ACM	Photo #	Approximate Quantity
Class I - Thermal Systems Insulation and Surfacing Materials			
Pipe insulation (8” diameter with larger valves)	High pressure steam lines from utility tunnel and associated manifold along west wall of sub-basement mechanical room M2	1 and 2	150 LF
White sound dampener paper	HVAC mixing boxes found throughout ceiling spaces	6	114 EA
Class II - Miscellaneous Materials			
12” White/tan marbled pattern floor tile and associated black mastic	Throughout Eastlick Hall as noted in Figures 1 through 8	3	67,000 SF
Joint compound on gypsum wallboard system (contains <1% as a wallboard composite)	Partition walls throughout and ceilings in restrooms and basement vivarium	4	60,000 SF
Built-up roofing (under newer rubber membrane roofing)	Throughout roof (see note below)	5	19,000 SF
White pegboard	Sub-basement mechanical room M1/M2 divider wall	7	2,300 SF
Metal sink units with black undercoating	G66, G88, 170A, 192, 196, 286, 370, 390	8	10 EA

Material	Location(s) of ACM	Photo #	Approximate Quantity
Black laboratory glassware drying racks (mounted on walls)	Mounted on walls in rooms G94, G96, G88, G95B, G81, 170A, 192, 196, 162, 264, 268, 276, 298, 298A, 290, 286, 364, 366, 368, 370, 378, 380, 384, 390, 392, 396, 398	9	35 EA
Black/silver seam gasket putty	Mechanical penthouse level cooling tower unit	10	75 LF
Fire rated doors (assumed)	Interior stairwells and entrance doors (ground level) labeled with fire rating	--	14 EA
Laboratory hood - cement board lining (assumed)	Laboratory fume hoods in rooms G81, G88, G95, 162, 264, 276, 292, 370, 392, 396	11	10 EA
Asphaltic damp proofing (assumed)	Applied to concrete walls behind exterior brick fascia	-	60,000 SF
Perforated cement board (assumed)	Sub-grade foundation vapor barrier	-	Unknown

Appendix B details asbestos survey sample numbers, material descriptions, sample locations and laboratory analytical results. A summary of homogeneous building materials observed is provided in Appendix C. Specific observations concerning ACMs are discussed below.

Mixing box paper

The HVAC system includes variable air volume (VAV) mixing boxes located throughout the ceiling spaces of the basement through 3rd floors. An asbestos-containing white sound dampener paper is attached to the base of the each mixing box (see Photo #6). The dampener paper was observed at the junction of two supply ducts on the exterior of each mixing box.

Thermal System Insulation

Pipe insulation located in the sub-basement mechanical room (8-inch diameter hard magnesia block type) associated with the steam supply piping which originates from the utility tunnel and including the adjacent supply manifold contains up to 56% chrysotile asbestos (see Photo #1). Approxomately 150 linear feet of ACM pipe insulation along the west wall. Asbestos-containing valves greater than 8 inches are also present in the manifold areas (see Photo #2). Pipes and tanks located elsewhere in the sub-basement mechanical room are insulated with fiberglass or a plaster/mudded insulation which do not contain asbestos.

Pipe insulation located within the vertical riser closets in each corner of the basement through 3rd floors also does not contain asbestos. The 4 to 6 inch diameter high pressure steam and condensate risers colored red and yellow are insulated with mudded/plaster at elbows and “tee” locations and hard magnesia-type insulation on straight runs, both of which do not contain asbestos. Pipe insulation and associated mudded/plaster fittings (4-inch diameter) from the corner riser closets to adjacent laboratories (within plenum space) also do not contain asbestos.

Wall systems

Joint compound on gypsum wallboard systems contains up to 3% asbestos throughout Eastlick Hall. The asbestos-containing joint compound is located at partition walls, hallways, and the basement vivarium ceiling (see Photo #4).

Joint compound was generally applied to joints and seams; however, in some corner locations and inside metal door frames, joint compound appears to have been applied as a filler or surfacing material. A WSU approved and EPA accredited Building Inspector must evaluate the original wallboard/joint compound systems in order to classify work under WAC 296-62-07712 for specific construction, renovation or demolition activities. Reference WISHA Regional Directive 23.30 – Asbestos-Containing Joint Compound in Wallboard Systems.

Plaster with skim coat was observed at the centrally located interior structural concrete walls and elevator shaft on the ground, 1st, 2nd, and 3rd floors. The plaster with skim coat wall system does not contain asbestos.

Roofing
The original asbestos-containing built-up roofing system is overlayed with a newer rubber membrane system (see Photo#5). Layers of the roofing system was observed as follows:

1. Rubber membrane top layer
2. Gypsum insulation board
3. Yellow foam insulation
4. Asbestos-containing built-up roofing felts and tar (several layers)
5. Perlite insulation board
6. Asbestos-containing black asphaltic vapor barrier
7. Lightweight concrete (assumed to contain asbestos)

Although two samples of lightweight concrete were collected and found not to contain asbestos, this material is considered a surfacing material and five additional samples must be collected to characterize the material.

3.3 Lead Paints and Coatings

The lead paint/coatings survey included testing large homogeneous interior and exterior components of Eastlick Hall. Eighteen representative areas were analyzed by a Niton portable x-ray florescence (XRF) spectrometer. Lead was detected in one sample from the brown painted door of a mechanical room.

Table 2 – Lead-containing Paints and Coatings

Color	Substrate	Component	Locations
Brown	Metal	Mechanical room door	Mechanical room doors throughout
Red	Metal	Fire hose housing	Metal fire hose housing units throughout

Table 2 provides a general overview of lead-containing paint and coating found in Eastlick Hall during the survey. Appendix D details lead paint/coatings sample numbers, descriptions, locations, XRF and laboratory analytical results collected during the survey.

4 CONCLUSIONS

A copy of this report must be provided to any entity bidding on work in Eastlick Hall. A copy of this report must also be on site during any demolition, renovation and/or construction activities at the site.

4.1 Asbestos-containing Materials

Regulated ACMs are identified in Table 1. Construction, renovation and maintenance activities involving the disturbance or removal of ACM must be conducted in accordance with WAC 296-62-077. Asbestos abatement must be performed by a Washington State licensed asbestos abatement contractor.

Materials that contain <1% asbestos

Although not regulated under the asbestos rule as an asbestos project, disturbing materials with <1% asbestos require the use of basic asbestos work practices outlined in WAC 296-62-017712(2); asbestos awareness training for workers outlined in WAC 296-62-07722(5); and use of respiratory protection in the absence of a negative exposure assessment to comply with the permissible exposure limit (PEL). A competent person must also be assigned and trained under the requirements of WAC 296-62-07728. For wallboard/joint compound systems, reference WISHA Regional Directive 23.30 – Asbestos-Containing Joint Compound in Wallboard Systems.

Contractors should use caution during construction even after asbestos abatement activities, as concealed ACM that has not previously been evaluated for asbestos may be encountered. Inaccessible concealed spaces (e.g., wall and ceiling spaces enclosed by wallboard, internal components of energized systems etc. that have not been surveyed for ACM, and should be presumed to contain asbestos until destructive sampling is performed in those areas.

4.2 Lead-containing Paints/Coatings

Materials that have been shown to contain detectable levels of lead are regulated by LNI due to the potential for occupational exposure to lead if these materials are disturbed. Projects that may disturb lead require employers to evaluate worker/project personnel exposure to lead and prevent exposure above the permissible exposure limit (PEL).

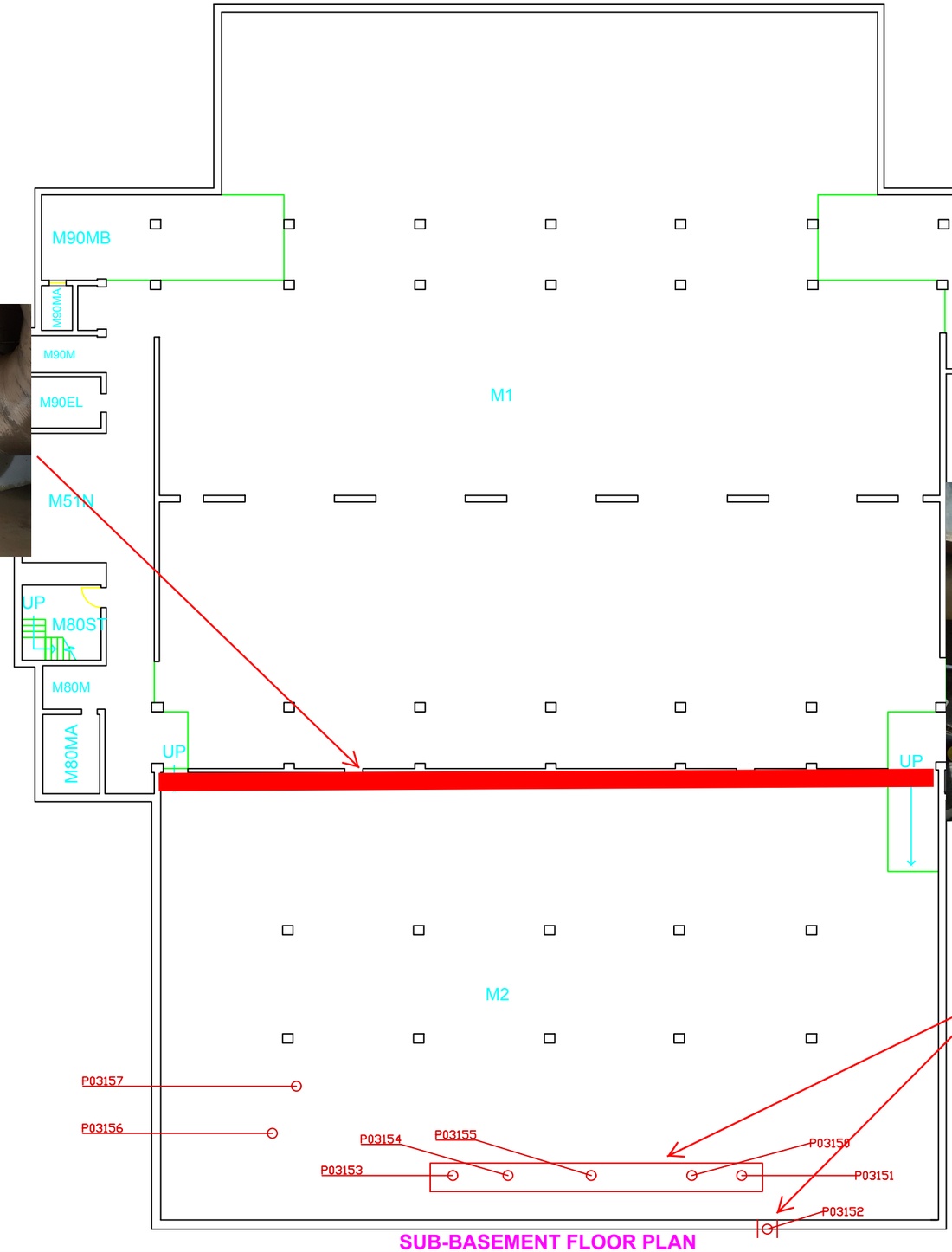
FIGURES

LEGEND

○ = Sample location



Asbestos-containing white pegboard wall panels are located on M1/M2 divider wall



SUB-BASEMENT FLOOR PLAN



Asbestos-containing pipe insulation is located on high pressure steam and condensate pipes in utility tunnel and steam manifold (pictured above).

Pipes are insulated with fiberglass and mudded/plaster fitting insulation which does not contain asbestos in all other locations in the M2 mechanical room

Note: Sample P03152 taken from steam tunnel accessed by ladder.

BUILDING SQUARE FOOTAGE	
SUB-BASEMENT	25,695
BASEMENT	18,406
GROUND FLOOR	27,375
FIRST FLOOR	17,207
SECOND FLOOR	15,711
THIRD FLOOR	15,711
FOURTH FLOOR	2,606
MECH PENTHOUSE	530
TOTAL	123,241

GROSS SQUARE FEET

25,695

BLDG. TOTAL: 123,241 S.F.

EASTLICK HALL

FIGURE 1 - ACM AND SAMPLE LOCATIONS

NORTH

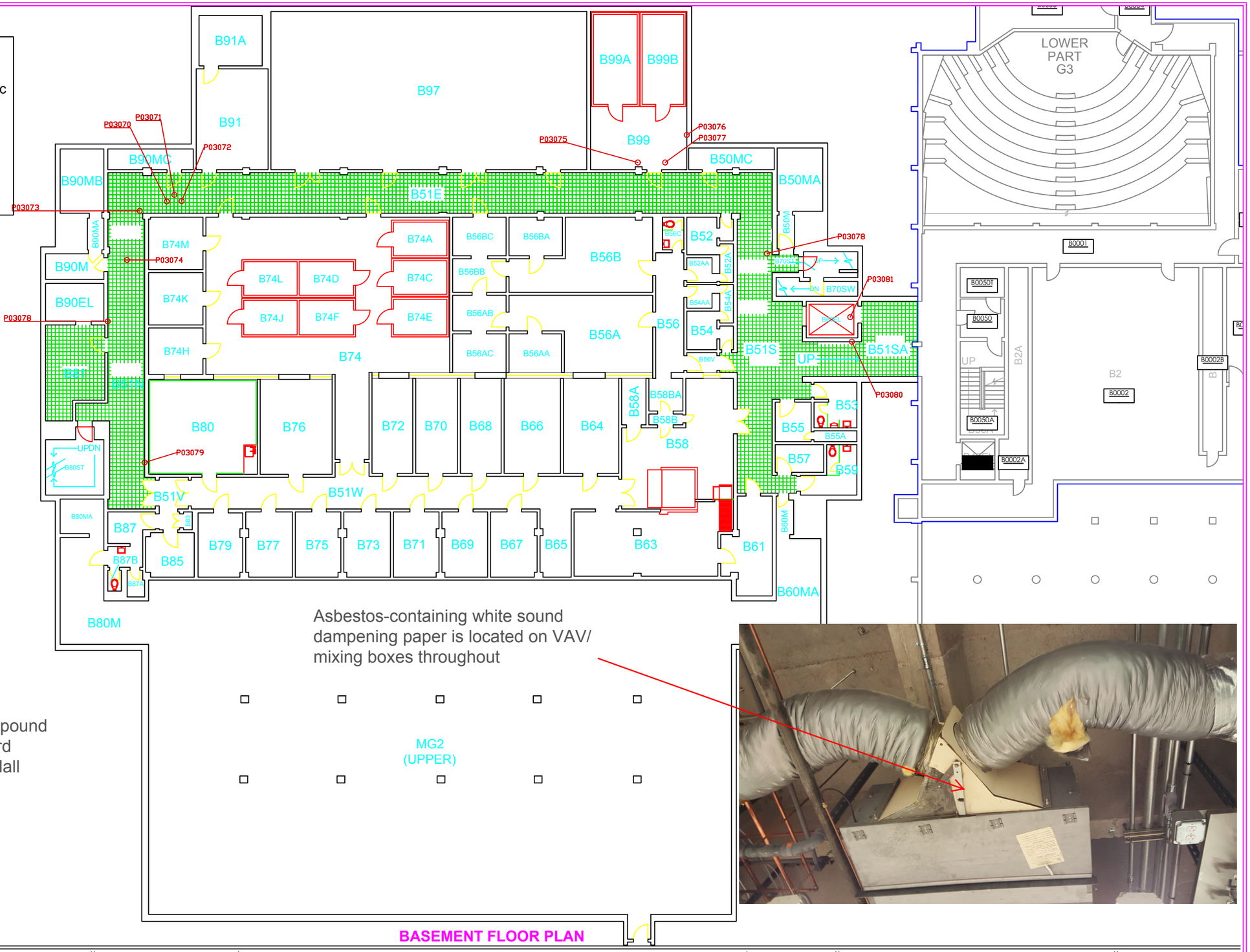
WASHINGTON STATE UNIVERSITY

BLDG. NO. **82A**

SHEET NO. **R-1**

LEGEND

- 12" tan/brown VAT and mastic
- Sample location
- Fire door



Asbestos-containing white sound dampening paper is located on VAV/ mixing boxes throughout

Asbestos-containing joint compound is located on gypsum wallboard systems throughout Eastlick Hall

BASEMENT FLOOR PLAN

GROSS SQUARE FEET
18,406
BLDG. TOTAL: 123,241 S.F.

EASTLICK HALL

FIGURE 2 - ACM AND SAMPLE LOCATIONS

NORTH

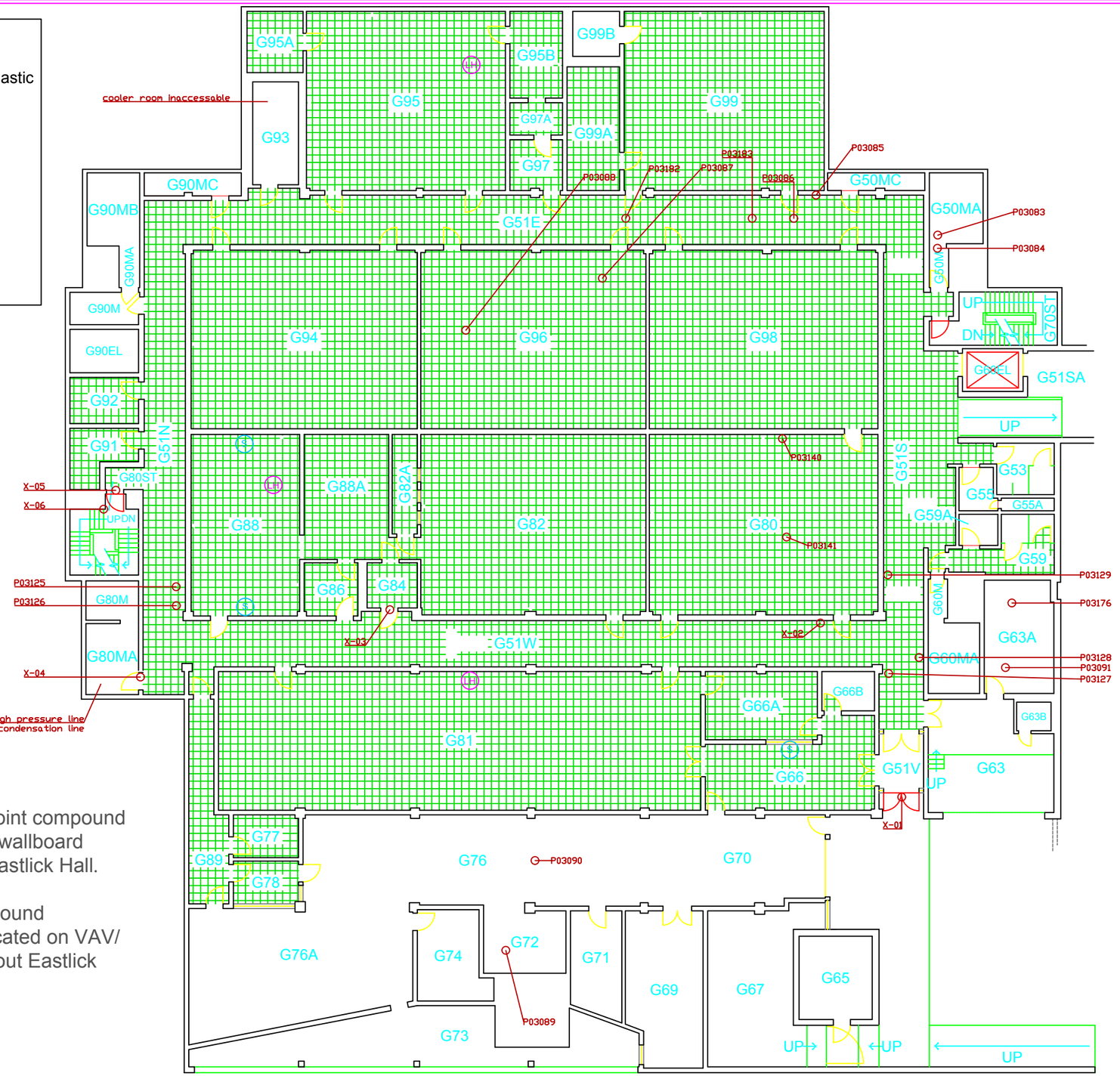
WASHINGTON STATE UNIVERSITY

BLDG. NO. **82A**

SHEET NO. **R-2**

ACM LEGEND

- 12" tan/brown VAT and mastic
- Sample location
- LH — Lab hood
- DR — Drying rack
- S — Sink
- Fire door



ACM Notes:

Asbestos-containing joint compound is located on gypsum wallboard systems throughout Eastlick Hall.

Asbestos-containing sound dampener paper is located on VAV/ mixing boxes throughout Eastlick Hall

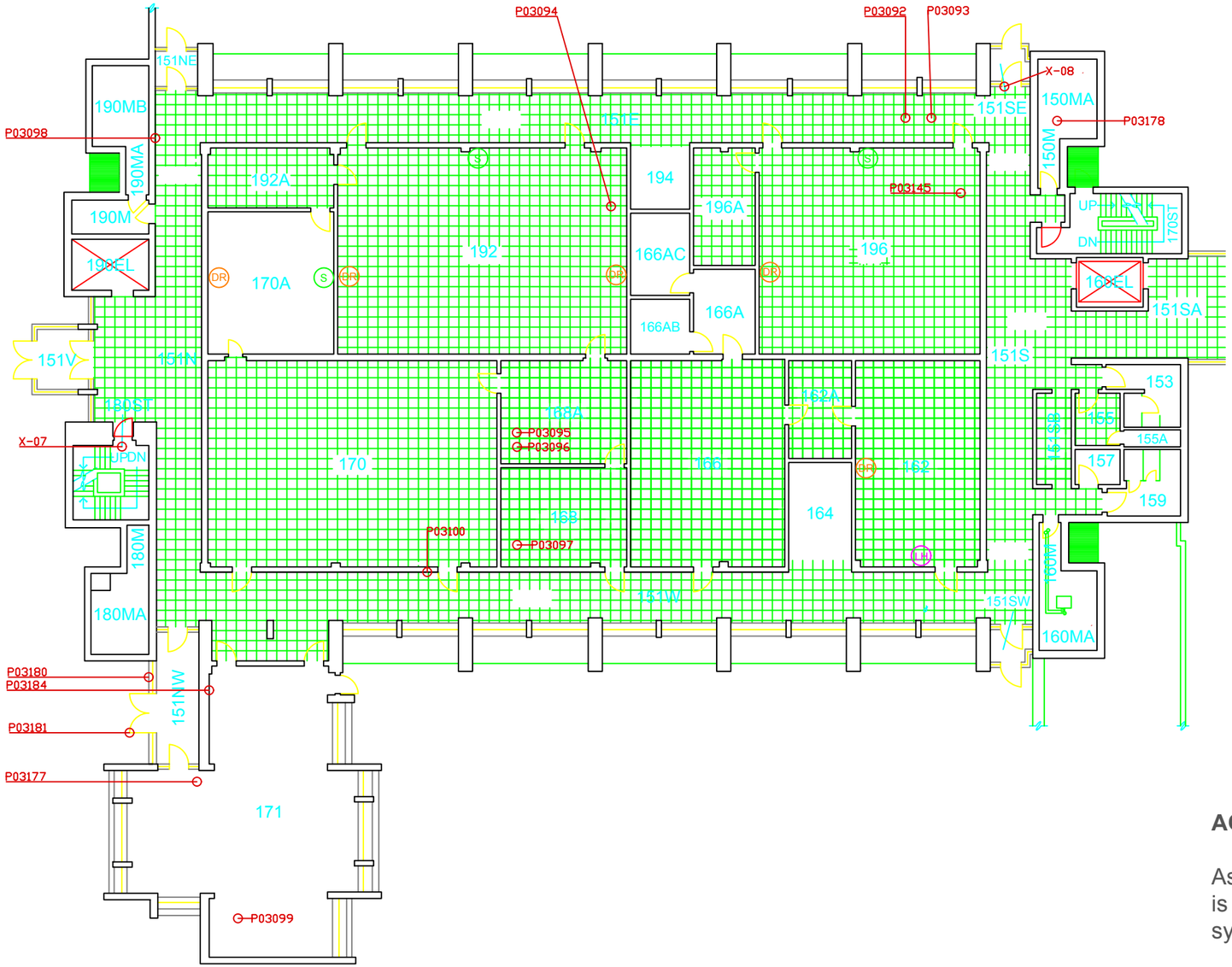
GROUND FLOOR PLAN

GROSS SQUARE FEET	REVISION DATES		SCALE: 1" =20'	EASTLICK HALL		BLDG. NO.
27,375	06-10-1986	02-09-2001	0 5 10 20	FIGURE 3 - ACM AND SAMPLE LOCATIONS	NORTH	82A
BLDG. TOTAL: 123,241 S.F.	08-14-1996	02-11-2015				SHEET NO. R-3
	01-19-1999					
	WSU FILE NO.	0082A_R03				

WASHINGTON STATE UNIVERSITY

ACM LEGEND

- Vinyl floor tile
- Sample location
- DR — Drying Rack
- S — Sink
- LH — Lab Hood
- Fire Door



ACM Notes:

Asbestos-containing joint compound is located on gypsum wallboard systems throughout Eastlick Hall.

Asbestos-containing sound dampener paper is located on VAV/ mixing boxes throughout Eastlick Hall

FIRST FLOOR PLAN

GROSS SQUARE FEET
17,207
BLDG. TOTAL: 123,241 S.F.

EASTLICK HALL
FIGURE 4 - ACM AND SAMPLE LOCATIONS

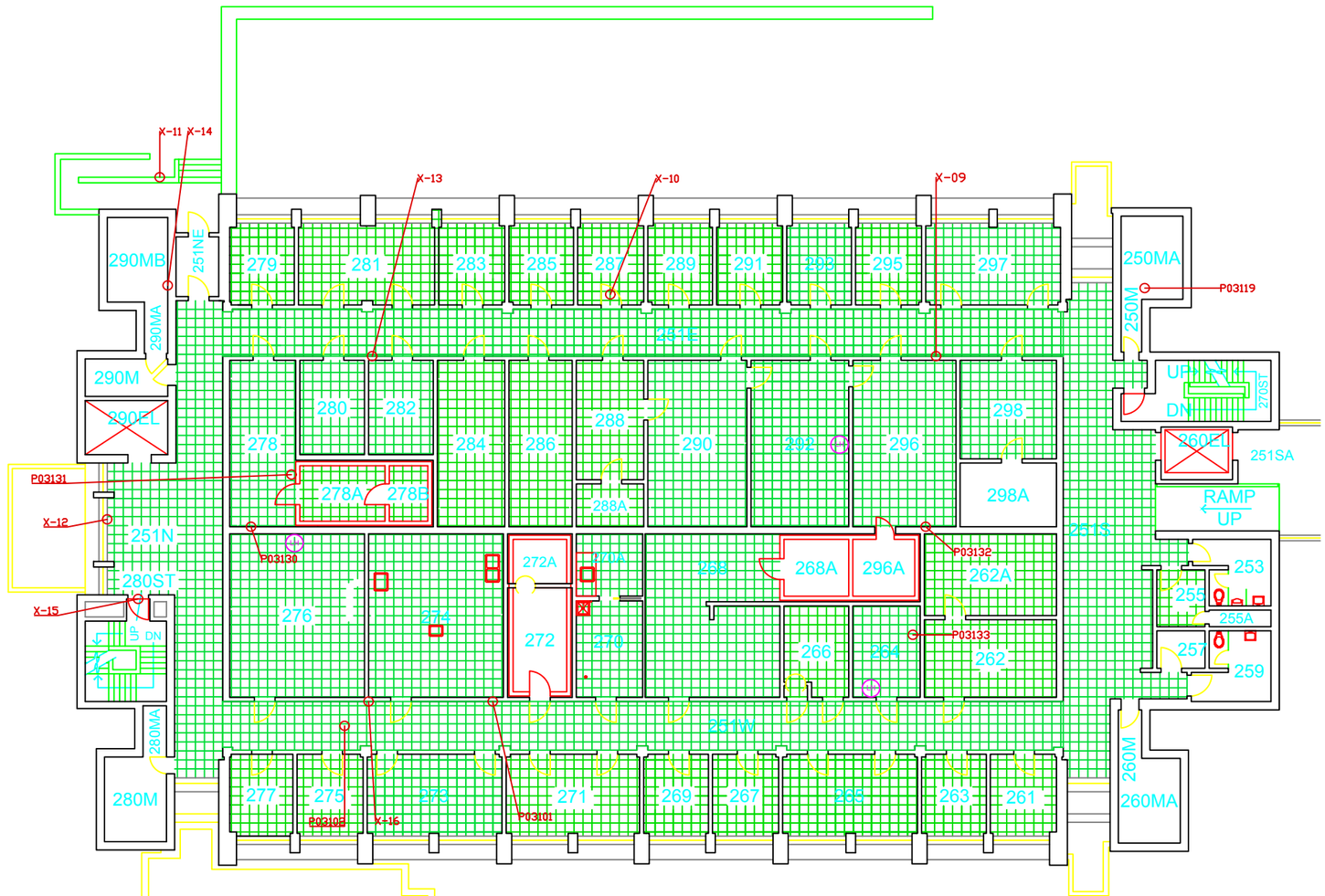
NORTH

WASHINGTON STATE UNIVERSITY

BLDG. NO. 82A
SHEET NO. R-4

ACM LEGEND:

- Vinyl floor tile.
- Sample location
- DR — Drying Rack
- S — Sink
- LH — Lab Hood
- Fire Door



ACM Notes:

Asbestos-containing joint compound is located on gypsum wallboard systems throughout Eastlick Hall.

Asbestos-containing sound dampener paper is located on VAV/ mixing boxes throughout Eastlick Hall

Asbestos-containing built-up roofing located under newer rubber membrane roof

SECOND FLOOR PLAN

GROSS SQUARE FEET
15,711
BLDG. TOTAL: 123,241 S.F.

EASTLICK HALL
FIGURE 5 - ACM AND SAMPLE LOCATIONS

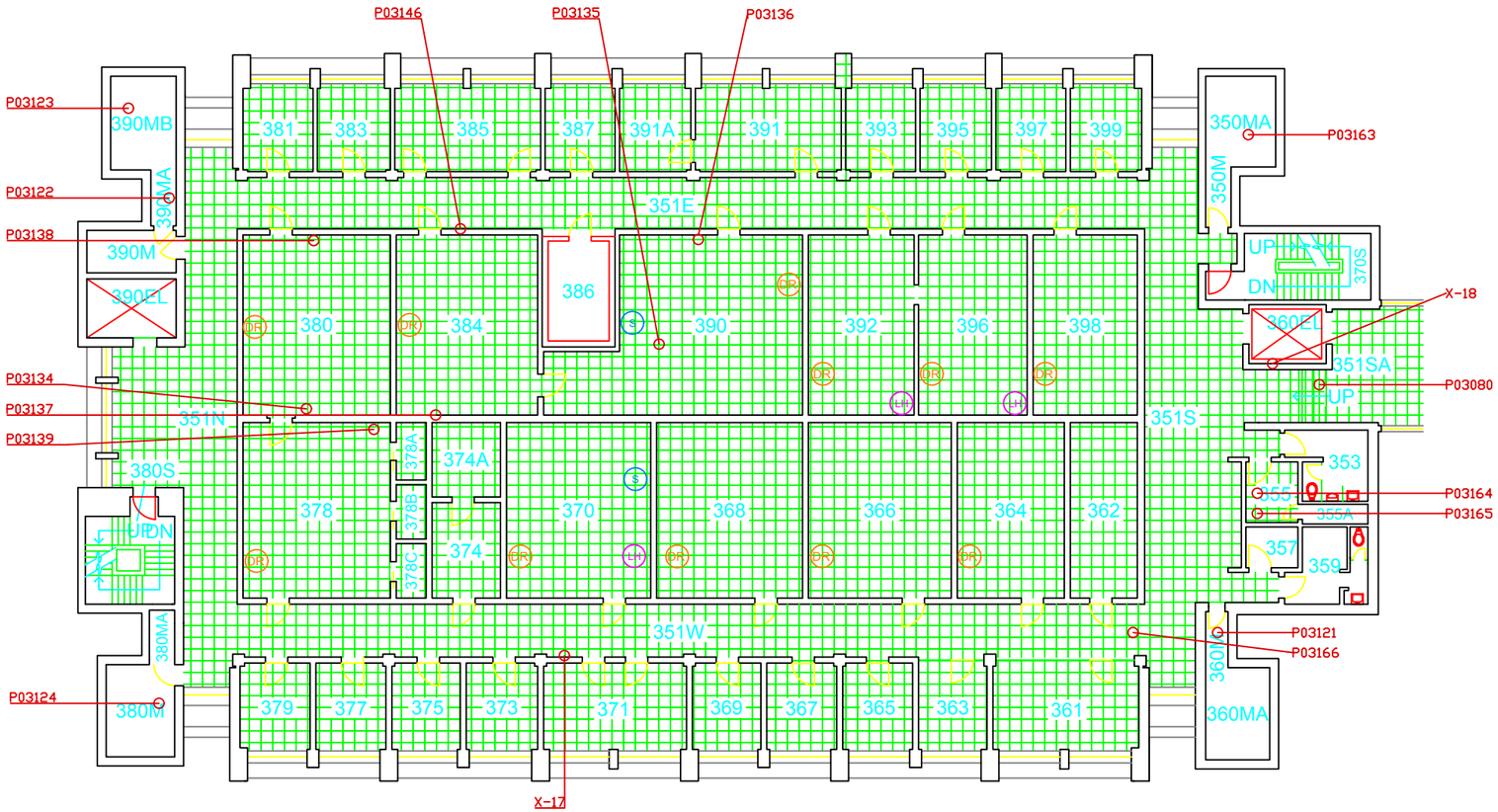
NORTH

WASHINGTON STATE UNIVERSITY

BLDG. NO. **82A**
SHEET NO. **R-5**

ACM LEGEND:

- Vinyl floor tile
- Sample location
- DR — Drying Rack
- LH — Lab Hood
- S — Sink
- Fire Door



ACM Notes:

Asbestos-containing joint compound is located on gypsum wallboard systems throughout Eastlick Hall.

Asbestos-containing sound dampener paper is located on VAV/ mixing boxes throughout Eastlick Hall

THIRD FLOOR PLAN

GROSS SQUARE FEET
15,711
BLDG. TOTAL: 123,241 S.F.

EASTLICK HALL
FIGURE 6 - ACM AND SAMPLE LOCATIONS

NORTH

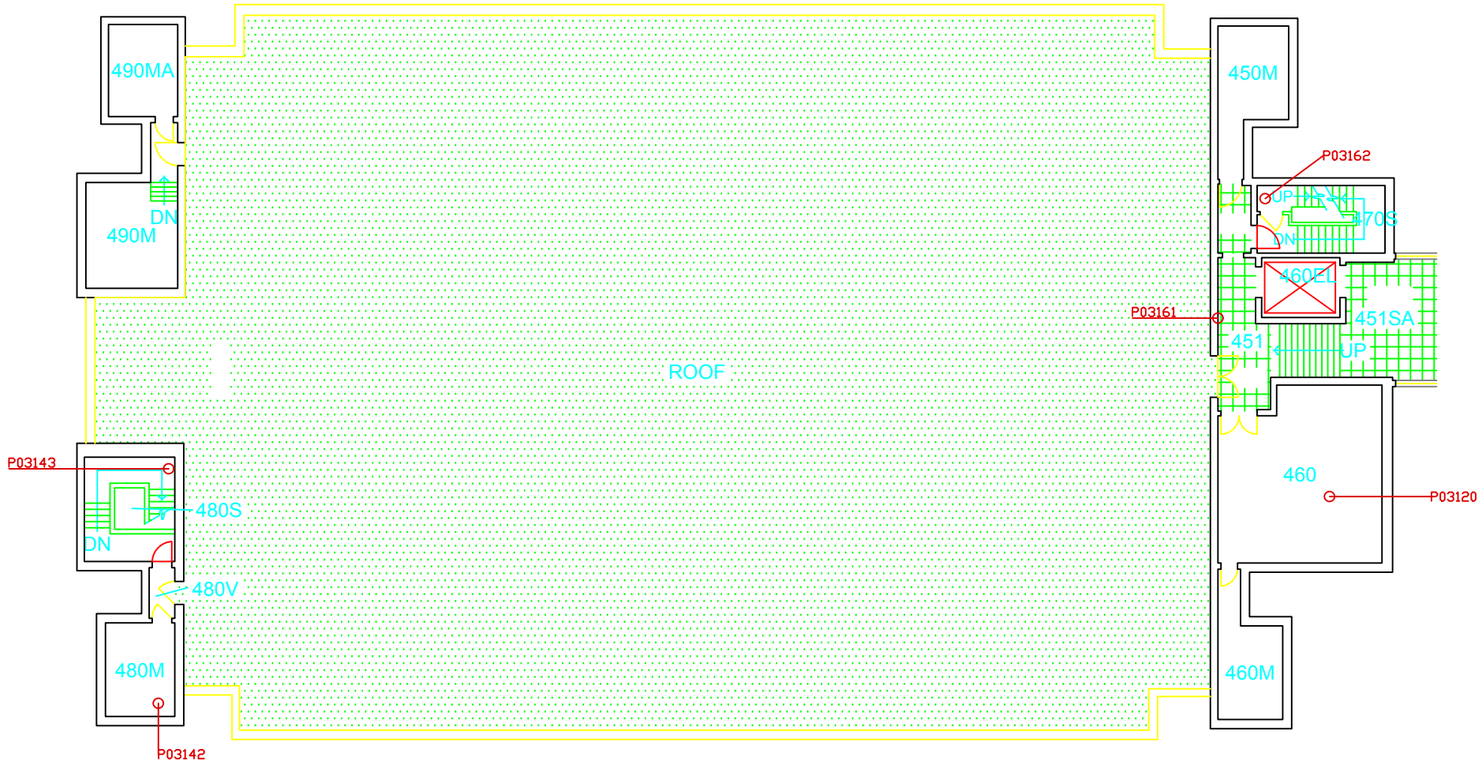
WASHINGTON STATE UNIVERSITY

BLDG. NO. 82A

SHEET NO. R-6

LEGEND:

- Vinyl floor tile
- Sample location
- Fire door
- Roofing material



ACM Notes:

Asbestos-containing joint compound is located on gypsum wallboard systems throughout Eastlick Hall.

Asbestos-containing sound dampener paper is located on VAV/ mixing boxes throughout Eastlick Hall

FOURTH FLOOR PLAN

GROSS SQUARE FEET 2,606 BLDG. TOTAL: 123,241 S.F.	EASTLICK HALL FIGURE 7 - ACM AND SAMPLE LOCATIONS	NORTH	WASHINGTON STATE UNIVERSITY	BLDG. NO. 82A SHEET NO. R-7

LEGEND:

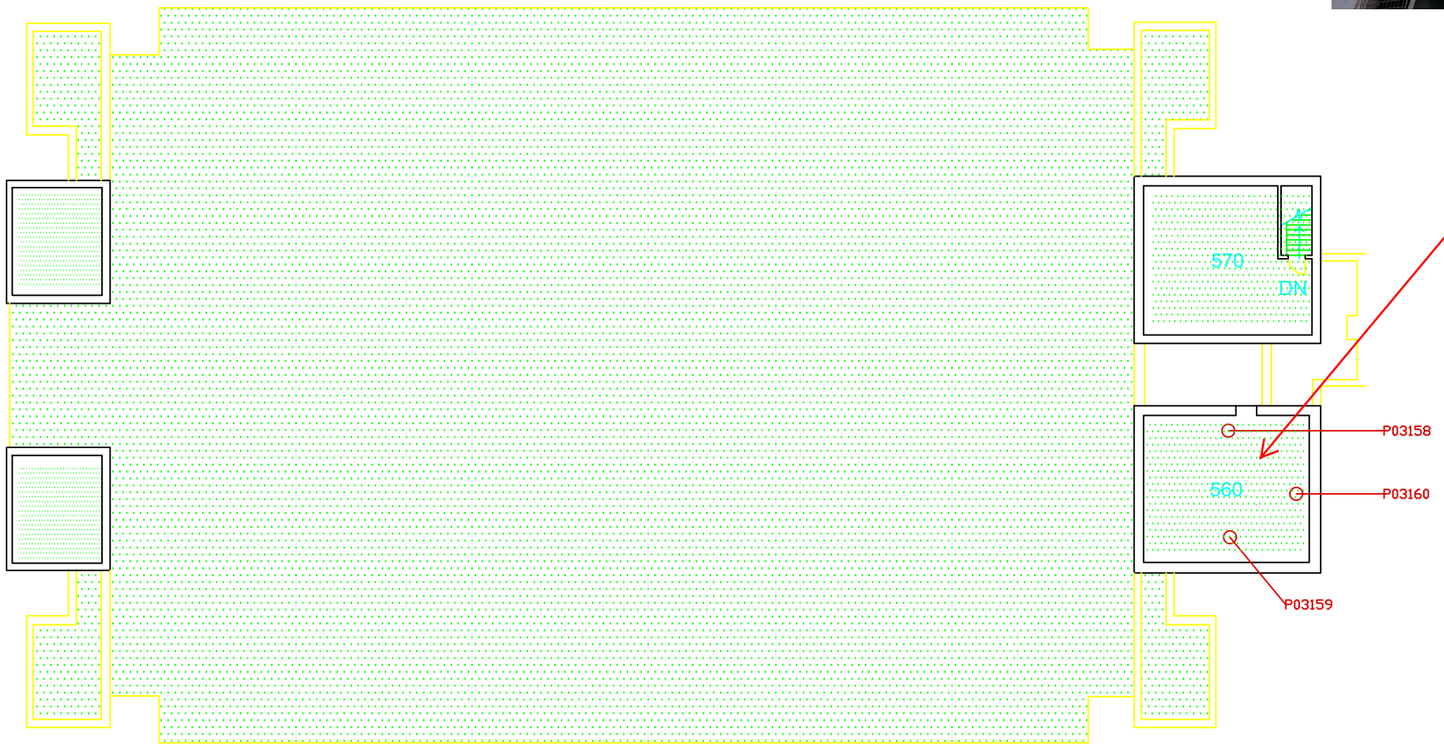
Sample location

Roofing material

Asbestos-containing gasket putty is located on cooling tower

Asbestos-containing roofing is located under the cooling tower.





MECHANICAL PENTHOUSE FLOOR PLAN

GROSS SQUARE FEET

530

BLDG. TOTAL: 123,241 S.F.

EASTLICK HALL
FIGURE 8 - ACM AND SAMPLE LOCATIONS

NORTH

WASHINGTON STATE UNIVERSITY

BLDG. NO. 82A

SHEET NO. R-8

APPENDIX A
Photographic Log

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Eastlick Hall	**Date:** March 18, 2016

Photo No.
1

Location:

West wall of sub-basement mechanical room M2

Description:

Asbestos-containing pipe insulation is located on high pressure steam lines from utility tunnel and adjacent manifold in room M2. Insulation is hard magnesia block type, 8 to 10-inches in diameter with larger valves.



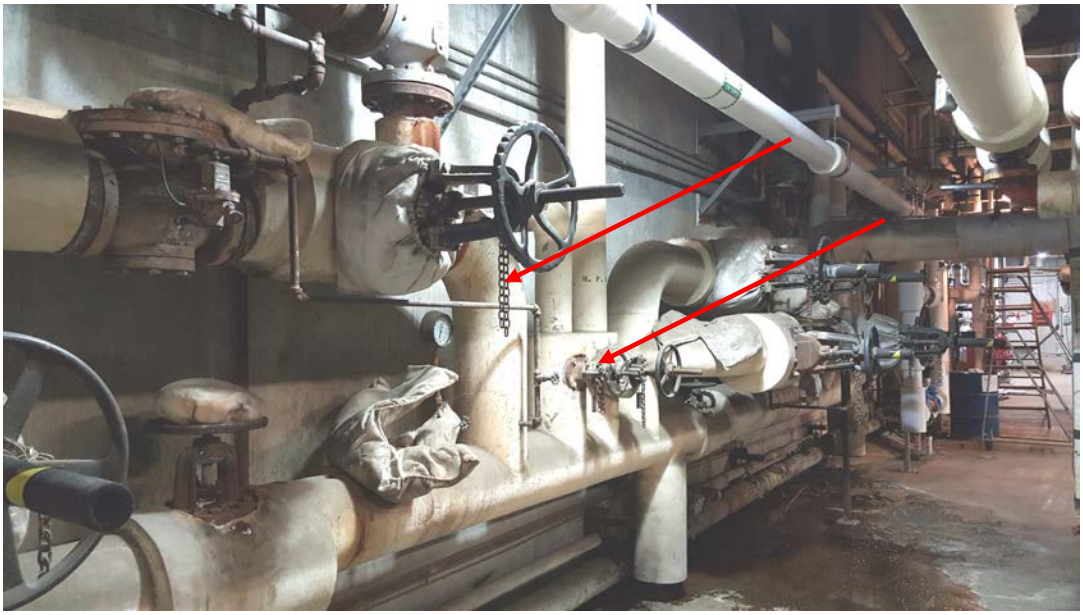
Photo No.
2

Location:

West wall of sub-basement mechanical room M2

Description:

Closer view of the steam manifold as seen on the lower half of Photo #1. Asbestos-containing pipe insulation is present on steam lines throughout the manifold.



Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Eastlick Hall	**Date:** March 18, 2016

Photo No. **3**

Location:

Throughout Eastlick Hall as noted in Figures 1 through 8



Description:

Asbestos-containing 12-inch white/tan marbled pattern floor tile and associated black mastic

Photo No. **4**

Location:

Partition walls throughout, ceilings in restrooms, and basement vivarium



Description:

Gypsum wallboard/joint compound system (joint compound contains up to 3% asbestos)

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Eastlick Hall	**Date:** March 18, 2016

Photo No.
5

Location:

Roof



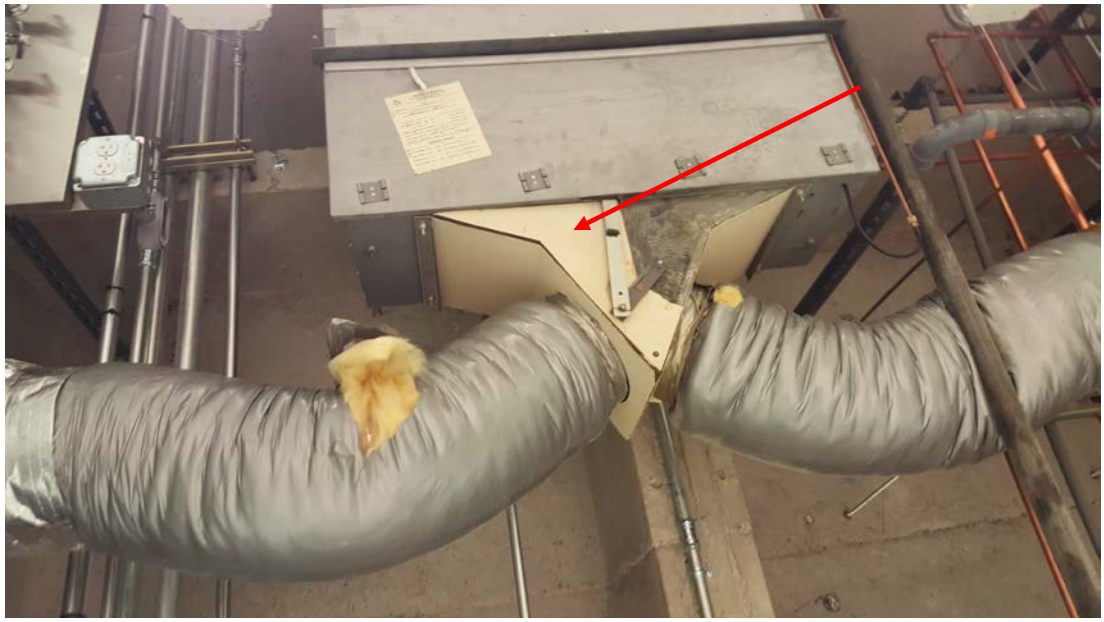
Description:

Newer black rubber membrane roof is overlayed on the original asbestos-containing built-up roof.

Photo No.
6

Location:

HVAC mixing boxes found throughout ceiling spaces



Description:

White asbestos-containing sound dampener paper is found on the mixing boxes throughout Eastlick Hall.

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Eastlick Hall	**Date:** March 18, 2016

Photo No. **7**

Location:

Sub-basement mechanical room M1/M2 divider wall



Description:

White asbestos-containing pegboard

Photo No. **8**

Location:

Laboratories/classrooms: G66, G88, 170A, 192, 196, 286, 370, 390



Description:

Metal sink units with asbestos-containing black undercoating

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Eastlick Hall	**Date:** March 18, 2016

Photo No.
9

Location:

Labs/classrooms, mounted on walls: G94, G96, G88, G95B, G81, 170A, 192, 196, 162, 264, 268, 276, 298, 298A, 290, 286, 364, 366, 368, 370, 378, 380, 384, 390, 392, 396, 398

Description:

Black asbestos-containing laboratory glassware drying racks

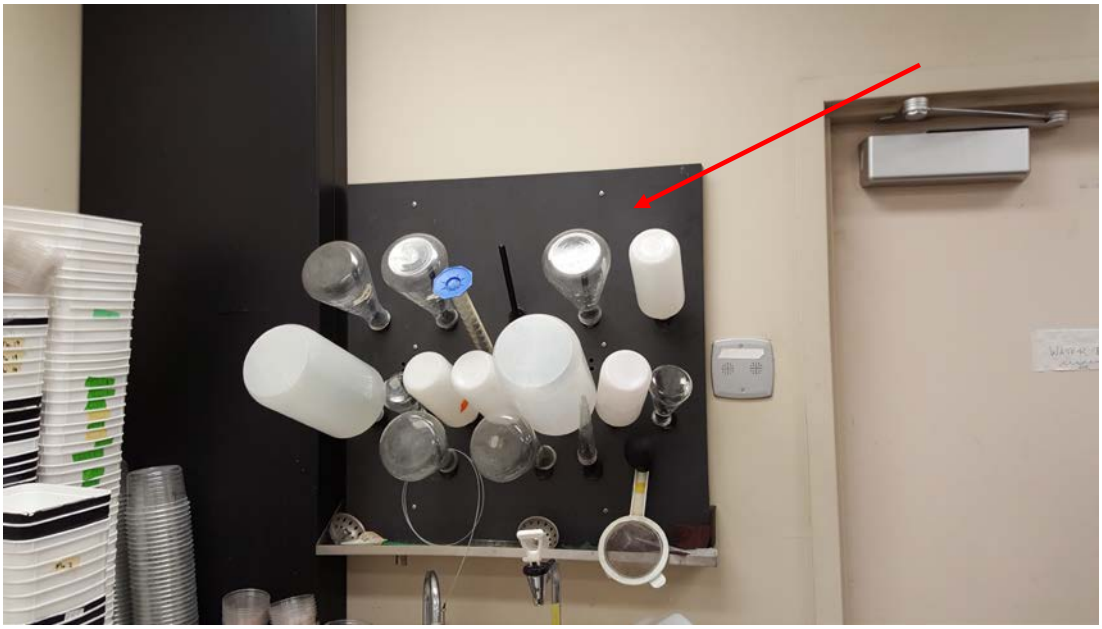


Photo No.
10

Location:

Mechanical penthouse level cooling tower unit

Description:

Asbestos-containing black/silver gasket putty is located on metal seams throughout the cooling tower.

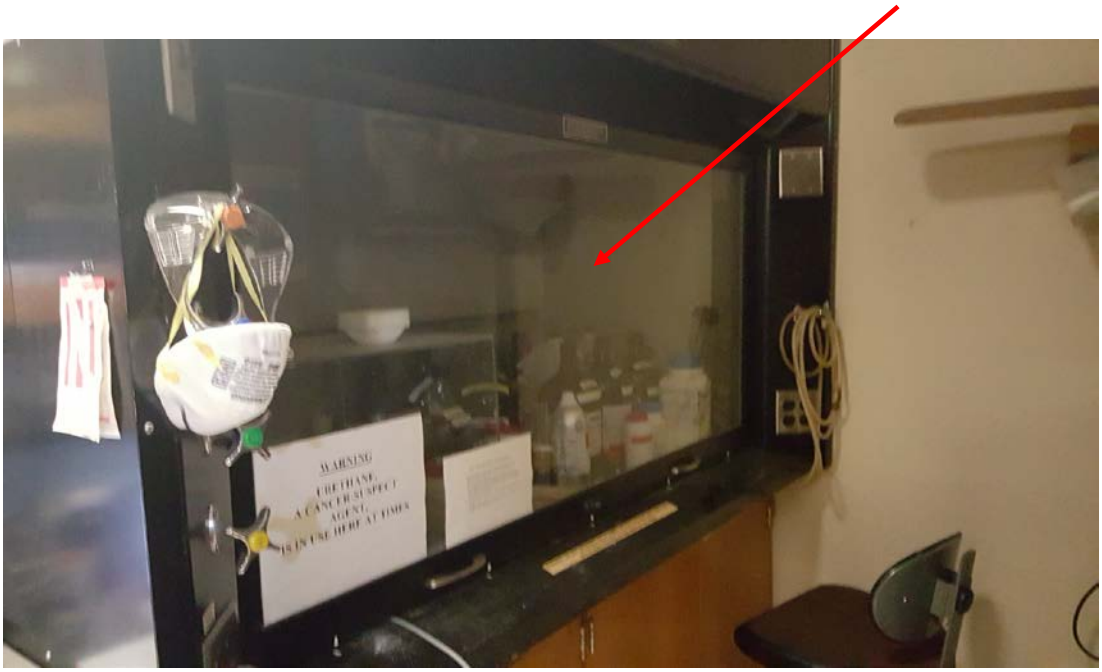


Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG	
Good Faith Survey	Eastlick Hall	**Date:** March 18, 2016

Photo No.
11

Location:

Laboratory fume hoods in rooms G81, G88, G95, 162, 264, 276, 292, 370, 392, 396



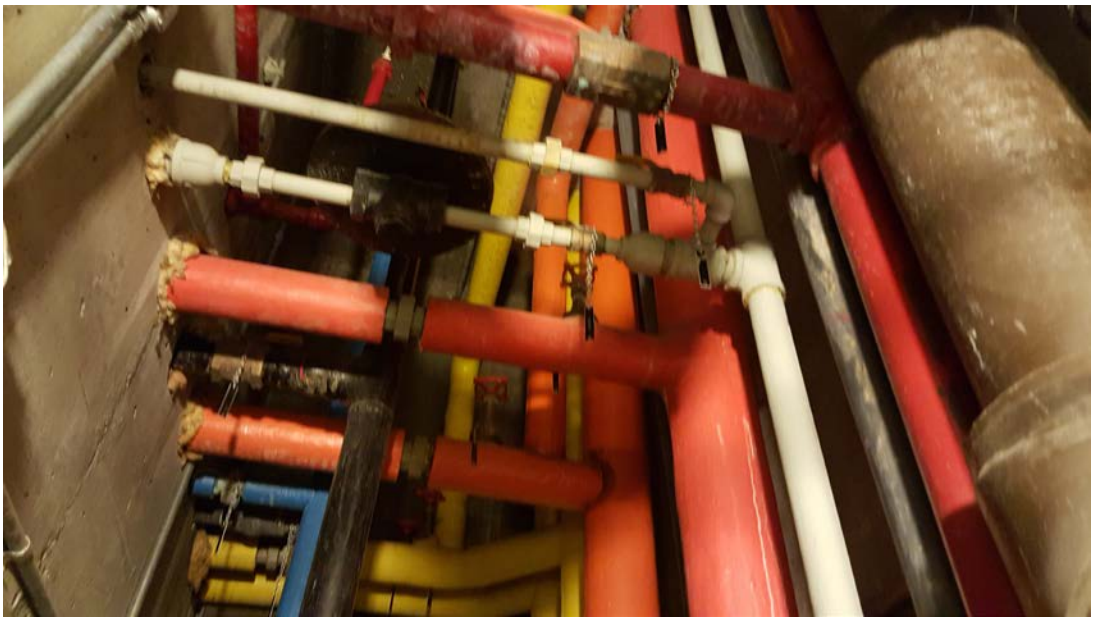
Description:

Laboratory hood – Cement asbestos board lining (assumed)

Photo No.
12

Location:

G90MA



Description:

Low pressure steam lines (painted orange) and steam condensate lines (painted yellow) are insulated with a magnesia block-type pipe insulation and mudded/plaster fitting insulation that does not contain asbestos. Photos are typical of pipe riser closets labeled with room #'s "MA".

APPENDIX B

Table Summary of Asbestos Sampling and Analytical Results

TABLE SUMMARY OF ASBESTOS SAMPLING AND ANALYTICAL RESULTS
EASTLICK HALL

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P03058	**Eastlick Hall**	**0082A**	**Roof**	**Roofing**	Layer 1: White gypsum insulation board Layer 2: Silver coat paint **Layer 3: Black asphaltic roofing felts with tar**	**Misc.**	**19,000**	**SF**	**Top layers of roofing**	Layer 1: ND Layer 2: ND **Layer 3: 35% CHR**	**Yes**	**Roof**
P03059	**Eastlick Hall**	**0082A**	**Roof**	**Roofing**	Layer 1: White gypsum insulation board Layer 2: Silver coat paint Layer 3: Yellow foam **Layer 4: Black asphaltic roofing felts with tar**	**Misc.**	**19,000**	**SF**	**Top layers of roofing**	Layer 1: ND Layer 2: ND Layer 3: ND **Layer 4: 28% CHR**	**Yes**	**Roof**
P03060	**Eastlick Hall**	**0082A**	**Roof**	**Roofing**	**Layer 1: Black asphaltic felt adhered to deck (vapor barrier)** Layer 2: Gray lightweight concrete	**Misc.**	**19,000**	**SF**	**Bottom layers of roofing**	**Layer 1: 25% CHR** Layer 2: ND	**Yes**	**Roof**
P03061	**Eastlick Hall**	**0082A**	**Roof**	**Roofing**	**Layer 1: Black asphaltic felt adhered to deck (vapor barrier)** Layer 2: Gray lightweight concrete Layer 3: Brown fibrous filler on yellow foam	**Misc.**	**19,000**	**SF**	**Bottom layers of roofing**	**Layer 1: 28% CHR** Layer 2: ND Layer 3: ND	**Yes**	**Roof**
P03070	**Eastlick Hall**	**0082A**	**B51E (corridor)**	**HVAC mixing box**	**White mixing box paper (Tuttle & Bailey)**	**Surf.**	**114**	**EA**	**Tacked on paper at base of mixing box**	**51% CHR**	**Yes**	**Throughout basement, 1st floor, 2nd floor, 3rd floor HVAC systems**
P03071	Eastlick Hall	0082A	B51E (corridor)	Ceiling tile	White 2' x 4' suspended ceiling tile with random etch pinhole pattern	Misc.	-	SF	-	ND	No	Dominant ceiling tile throughout Eastlick Hall
P03072	Eastlick Hall	0082A	B51E (corridor	HVAC system	Layer 1: White mastic (insulated duct) Layer 2: Yellow paper Layer 3: Yellow fibrous material	Surf.	4,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Found on insulated ductwork throughout
P03073	Eastlick Hall	0082A	B51E (corridor)	Ceiling tile	White 2' x 4' suspended ceiling tile with random etch pinhole pattern	Misc.	-	SF	Painted black	ND	No	Dominant ceiling tile throughout
P03074	Eastlick Hall	0082A	B51N	HVAC system	Gray duct mastic	Misc.	-	SF	Throughout ductwork	ND	No	Throughout HVAC system
P03075	**Eastlick Hall**	**0082A**	**B99**	**Sink**	**Black sink undercoating**	**Misc.**	**10**	**EA**	**Thick black coating**	**3% CHR**	**Yes**	**B99, G66, G88 , 170A, 192, 196, 286, 370, 390**
P03076	**Eastlick Hall**	**0082A**	**B99**	**Drying rack**	**Black glassware drying rack**	**Misc.**	**35**	**EA**	**Dense laminate**	**50% CHR**	**Yes**	**G94, G96, G88, G95B, G81, 170A, 192, 196, 162, 264, 268, 276, 298, 298A, 290, 286, 364, 366, 368, 370, 378, 380, 384, 390, 392, 396, 398**
P03077	Eastlick Hall	0082A	B99	Lab counter top	Black lab counter top	Misc.	-	EA	Resin based	ND	No	Throughout laboratories
P03078	Eastlick Hall	0082 A	B51N	Wallboard system	Layer 1: Brown cove base mastic Layer 2: White gypsum wallboard	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Dominant wallboard system throughout Eastlick Hall

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P03079	Eastlick Hall	0082 A	B51N	Wallboard system	Layer 1: 4-inch beige vinyl cove base Layer 2: Yellow/brown mastic Layer 3: White joint compound	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Dominant wallboard system throughout Eastlick Hall
P03080	Eastlick Hall	0082 A	B51SA	Plaster wall	Layer 1: White plaster base coat Layer 2: White plaster skim coat	Surf.	3,200	SF	-	Layer 1: ND Layer 2: ND	No	Interior structural walls, stairwells, and elevator shaft
P03081	Eastlick Hall	0082 A	360EL	Flooring	Layer 1: Gray mastic Layer 2: Tan fibrous material	Misc.	-	SF		Layer 1: ND Layer 2: ND	No	Elevator flooring (360)
P03082	Eastlick Hall	0082 A	351SA	Flooring	Layer 1: Black stair mastic Layer 2: Yellow mastic Layer 3: White joint compound	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	3rd floor stairs
P03083	Eastlick Hall	0082 A	G50MA	Pipe Insulation	Layer 1: Canvas insulation wrap with paint Layer 2: Mudded/plaster pipe fitting insulation	TSI	500	LF	Mudded elbow	Layer 1: ND Layer 2: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03084	Eastlick Hall	0082 A	G50MA	Pipe Insulation	Layer 1: Canvas insulation wrap with paint Layer 2: Magnesia-type pipe insulation	TSI	500	LF	Pipe insulation straight run	Layer 1: ND Layer 2: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03085	**Eastlick Hall**	**0082 A**	**G51E**	**Wallboard system**	**Layer 1: Joint compound** Layer 2: White gypsum wallboard	**Misc.**	**60,000**	**SF**	**-**	**Layer 1: 2% CHR** Layer 2: ND	**Yes**	**Dominant wall finish throughout Eastlick Hall**
P03086	Eastlick Hall	0082 A	G51E	Ceiling tile	White 2' x 4' suspended ceiling tile with random etch pinhole pattern	Misc.	-	SF	-	ND	No	Dominant ceiling tile throughout Eastlick Hall
P03087	Eastlick Hall	0082 A	G96	Lab counter top	Black lab counter top	Misc.	-	EA	Resin based	ND	No	Throughout laboratories
P03088	Eastlick Hall	0082 A	G96	Duct mastic	Tan duct mastic	Misc.	-	SF	Located on metal ductwork	ND	No	Found on uninsulated ductwork throughout
P03089	Eastlick Hall	0082 A	G72	Duct mastic	Tan duct mastic	Misc.	-	SF	Located on metal ductwork	ND	No	Found on uninsulated ductwork throughout
P03090	Eastlick Hall	0082 A	G76	Duct tape	Layer 1: Gray duct tape Layer 2: Gray mastic	Misc.	-	SF	-	ND	No	G76
P03091	Eastlick Hall	0082 A	G63A	Flooring	Layer 1: 12-inch blue with light gray streaked vinyl tile Layer 2: Yellow mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	G63A
P03092	Eastlick Hall	0082 A	151E	Ceiling tile	2'x4' Suspended ceiling tile with random etch pinhole pattern	Misc.	-	SF	Painted black	ND	No	Dominant ceiling tile throughout
P03093	Eastlick Hall	0082 A	151E	Duct mastic	White/tan duct mastic	Misc.	-	SF	-	ND	No	Found on uninsulated ductwork throughout
P03094	**Eastlick Hall**	**0082 A**	**192**	**Sink**	**Black sink undercoating**	**Misc.**	**10**	**EA**	**Thick black coating**	**3% CHR**	**Yes**	**B99, G66, G88 , 170A, 192, 196, 286, 370, 390**
P03095	Eastlick Hall	0082 A	168A	Flooring	Gray epoxy flooring	Misc.	800	SF	-	ND	No	168 and 168A
P03096	Eastlick Hall	0082 A	168A	Flooring	Gray epoxy flooring	Misc.	800	SF	-	ND	No	168 and 168A
P03097	Eastlick Hall	0082 A	168	Flooring	Gray epoxy flooring	Misc.	800	SF	-	ND	No	168 and 168A

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P03098	Eastlick Hall	0082 A	151 N	Brick system	Gray brick mortar	Misc.	-	SF	-	ND	No	Interior hallways and exterior walls
P03099	Eastlick Hall	0082 A	171	Ceiling tile	White 1 ft. by 1 ft. splined ceiling tile	Misc.	-	SF	-	ND	No	Room 171
P03100	**Eastlick Hall**	**0082 A**	**151W**	**Wallboard system**	**Layer 1: White joint compound** Layer 2: White gypsum wallboard	**Misc.**	**60,000**	**SF**	-	**Layer 1: 3% CHR** Layer 2: ND	**Yes**	**Dominant wall finish throughout Eastlick Hall**
P03101	**Eastlick Hall**	**0082 A**	**251W**	**Wallboard system**	**Layer 1: White joint compound** Layer 2: White gypsum wallboard	**Misc.**	**60,000**	**SF**	-	**Layer 1: 2% CHR** Layer 2: ND	**Yes**	**Dominant wall finish throughout Eastlick Hall**
P03102	Eastlick Hall	0082 A	251 W	Ceiling tile	White 2' x 4' suspended ceiling tile with random etch pinhole pattern	Misc.	-	SF	-	ND	No	Dominant ceiling tile throughout Eastlick Hall
P03120	Eastlick Hall	0082 A	460	Duct mastic	Yellow-green duct mastic	Misc.	-	SF	-	ND	No	Located on metal ductwork throughout
P03121	Eastlick Hall	0082 A	360 MA	Pipe Insulation	Layer 1: White magnesia-type pipe insulation Layer 2: White fabric Layer 3: White non-fibrous material	TSI	500	LF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03122	Eastlick Hall	0082 A	390 MA closet	Pipe Insulation	Layer 1: White magnesia block type pipe insulation Layer 2: Canvas insulation wrap	TSI	500	LF	-	Layer 1: ND Layer 2: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03123	Eastlick Hall	0082 A	390 MB closet	Pipe Insulation	Layer 1: White magnesia-type pipe insulation Layer 2: Canvas insulation wrap Layer 3: White non-fibrous material Layer 4: Paint	TSI	500	LF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03124	Eastlick Hall	0082 A	380 M	Pipe Insulation	Layer 1: White magnesia-type pipe insulation Layer 2: Canvas insulation wrap Layer 3: White powder material	TSI	500	LF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03125	Eastlick Hall	0082 A	G51N	Pipe Insulation	Layer 1: Canvas insulation wrap Layer 2: Mudded/plaster pipe fitting insulation	TSI	1	EA	-	Layer 1: ND Layer 2: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03126	Eastlick Hall	0082 A	G51N	Pipe Insulation	White magnesia-type block insulation	TSI	25	LF	5" diameter on low pressure steam line	ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03127	Eastlick Hall	0082 A	G51S	Ceiling tile	White 2 ft. by 4 ft. dotted ceiling tile	Misc.	-	SF	Replacement tile (dense material)	ND	No	Replacement tile in Corridor G51S
P03128	Eastlick Hall	0082 A	G51S	Brick system	Layer 1: Red brick mortar Layer 2: Gray sand	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Exterior facade
P03129	Eastlick Hall	0082 A	G51S	Pipe Insulation	White magnesia block type pipe insulation	TSI	500	LF	-	ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03130	Eastlick Hall	0082A	278	Plaster wall	Layer 1: White plaster Layer 2: White skim coat	Surf.	3,200	SF	-	Layer 1: ND Layer 2: ND	No	Interior structural walls, stairwells, and elevator shaft

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P03131	Eastlick Hall	0082A	278	Cove base	Layer 1: Brown cove base mastic Layer 2: White mastic with yellow paint Layer 3: Brown mastic	Misc.	-	SF	4-inch brown cove base	Layer 1: ND Layer 2: ND Layer 3: ND	No	Dominant wallboard system throughout Eastlick Hall
P03132	Eastlick Hall	0082A	296	Plaster wall	Layer 1: White plaster Layer 2: White skim coat	Surf.	3,200	SF	-	Layer 1: ND Layer 2: ND	No	Interior structural walls, stairwells, and elevator shaft
P03133	Eastlick Hall	0082A	264	Duct mastic	Yellow-green duct mastic	Misc.	-	SF	-	ND	No	Metal ductwork throughout
P03134	Eastlick Hall	0082A	384	Plaster wall	Layer 1: White plaster Layer 2: White skim coat	Surf.	3,200	SF	-	Layer 1: ND Layer 2: ND	No	Interior structural walls, stairwells, and elevator shaft
P03135	Eastlick Hall	0082A	390	Pipe Insulation	Mudded/plaster pipe fitting insulation	TSI	500	LF	Fiberglass pipe run	ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03136	Eastlick Hall	0082A	390	Cove base	Layer 1: 4-inch black vinyl cove base Layer 2: Brown mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Dominant cove base throughout Eastlick Hall
P03137	Eastlick Hall	0082A	380	Plaster wall	Layer 1: White plaster Layer 2: White skim coat	Surf.	3,200		-	Layer 1: ND Layer 2: ND	No	Interior structural walls, stairwells, and elevator shaft
P03138	Eastlick Hall	0082A	380	Cove base	Layer 1: 4-inch black vinyl cove base Layer 2: Brown mastic	Misc.	-	SF	4-inch brown cove base	Layer 1: ND Layer 2: ND	No	Dominant cove base throughout Eastlick Hall
P03139	Eastlick Hall	0082A	378	Plaster wall	Layer 1: White plaster Layer 2: White skim coat	Surf.	3,200	SF	-	Layer 1: ND Layer 2: ND	No	Interior structural walls, stairwells, and elevator shaft
P03140	Eastlick Hall	0082A	G80	Plaster wall	Layer 1: White plaster Layer 2: White skim coat	Surf.	3,200	SF	-	Layer 1: ND Layer 2: ND	No	Interior structural walls, stairwells, and elevator shaft
P03141	Eastlick Hall	0082A	G80	Duct insulation mastic	Layer 1: White duct coating Layer 2: Tan paper and mesh Layer 3: Fiberglass duct insulation	Misc.	-	SF	Found on fiberglass ductwork insulation	Layer 1: ND Layer 2: ND Layer 3: ND	No	Found on insulated ductwork throughout
P03142	Eastlick Hall	0082A	480M	Duct mastic	Yellow-green duct mastic	Misc.	-	SF	On metal ductwork	ND	No	Found on uninsulated ductwork throughout
P03143	Eastlick Hall	0082A	480S	Plaster wall	White plaster	Surf.	3,200	SF	-	ND	No	Interior structural walls, stairwells, and elevator shaft
P03144	Eastlick Hall	0082A	171	Flooring	Yellow carpet mastic	Misc.	-	SF	-	ND	No	Room 171
P03145	Eastlick Hall	0082A	196	Laboratory counter top	Black laboratory counter top	Misc.	-	EA	-	ND	No	Laboratories throughout
P03146	Eastlick Hall	0082A	351E	Flooring	Layer 1: Black stair tread Layer 2: Yellow mastic Layer 3: White leveling compound	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	351E
P03150	**Eastlick Hall**	**0082A**	**M2**	**Pipe Insulation**	**Layer 1: Gray block insulation** Layer 2: White canvas insulation wrap Layer 3: White binder material	**TSI**	**150**	**LF**	**8-inch magnesia block**	**Layer 1: 56% CHR** Layer 2: ND Layer 3: ND	**Yes**	**West wall of sub-basement mechanical room M2**
P03151	**Eastlick Hall**	**0082A**	**M2**	**Pipe Insulation**	Layer 1: White canvas insulation wrap **Layer 2: Gray block insulation**	**TSI**	**150**	**LF**	**8-inch magnesia block**	Layer 1: ND **Layer 2: 6% CHR**	**Yes**	**West wall of sub-basement mechanical room M2**

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P03152	**Eastlick Hall**	**0082A**	**M2**	**Pipe Insulation**	**Layer 1: Gray block insulation** Layer 2: White canvas insulation wrap Layer 3: White binder	**TSI**	**150**	**LF**	**8-inch magnesia block (At tunnel access entrance)**	**Layer 1: 52% CHR** Layer 2: ND Layer 3: ND	**Yes**	**West wall of sub-basement mechanical room M2**
P03153	**Eastlick Hall**	**0082A**	**M2**	**Pipe Insulation**	Layer 1: White canvas insulation wrap **Layer 2: Gray block insulation** Layer 3: White binder material	**TSI**	**8**	**EA**	**8-inch mudded fitting**	Layer 1: ND **Layer 2: 52% CHR** Layer 3: ND	**Yes**	**West wall of sub-basement mechanical room M2**
P03154	Eastlick Hall	0082A	M2	Pipe Insulation	Layer 1: Mudded/plaster fitting insulation Layer 2: White canvas insulation wrap	TSI	4	EA	8-inch mudded fitting	Layer 1: ND Layer 2: ND	No	Piping section north of tunnel access
P03155	Eastlick Hall	0082A	M2	Pipe Insulation	Layer 1: Mudded/plaster fitting insulation Layer 2: White canvas insulation wrap	TSI	4	EA	8-inch mudded fitting	Layer 1: ND Layer 2: ND	No	Piping section north of tunnel access
P03156	Eastlick Hall	0082A	M2	Tank insulation	Layer 1: Mudded/plaster fitting insulation Layer 2: White canvas insulation wrap	TSI	35	SF	18-inch relief valve- overflow vessel, hard cap vessel	Layer 1: ND Layer 2: ND	No	M2 – Pressure relief vessel
P03157	Eastlick Hall	0082A	M2	Duct mastic	Gray duct mastic (supply fan)	Misc.	50	SF	-	ND	No	North end of M2
P03158	**Eastlick Hall**	**0082A**	**560**	**Cooling tower**	**Black/silver seam gasket putty**	**Misc.**	**75**	**LF**	**Putty on all seam edges**	**2% CHR**	**Yes**	**Roof cooling tower unit**
P03159	**Eastlick Hall**	**0082A**	**560**	**Cooling tower**	**Black/silver seam gasket putty**	**Misc.**	**75**	**LF**	**Putty on all seam edges**	**2% CHR**	**Yes**	**Roof cooling tower unit**
P03160	**Eastlick Hall**	**0082A**	**560**	**Cooling tower**	**Black/silver seam gasket putty**	**Misc.**	**75**	**LF**	**Putty on all seam edges**	**2% CHR**	**Yes**	**Roof cooling tower unit**
P03161	Eastlick Hall	0082A	451	Wallboard system	Layer 1: Brown cove base mastic Layer 2: White joint compound	Misc.	-	SF	4-inch yellow cove base	ND	No	Dominant wallboard system throughout Eastlick Hall
P03162	Eastlick Hall	0082A	470S	Wallboard system	White plaster	Surf.	3,200	SF	-	ND	No	Stairwell (470S)
P03163	Eastlick Hall	0082A	350MA	Pipe Insulation	Mudded/plaster pipe fitting insulation	TSI	16	EA	Red colored low pressure steam line	ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03164	**Eastlick Hall**	**0082A**	**355**	**Wallboard system**	Layer 1: White gypsum wallboard **Layer 2: White joint compound**	**Misc.**	**60,000**	**SF**	**Joint compound applied as a miscellaneous material**	Layer 1: ND **Layer 2: 2% CHR**	**Yes**	**Dominant wallboard system throughout Eastlick Hall**
P03165	**Eastlick Hall**	**0082A**	**355**	**Flooring**	**Layer 1: 12-inch white with gray streaks** **Layer 2: Black mastic**	**Misc.**	**66,700**	**SF**	**-**	**Layer 1: 2% CHR** **Layer 2: 6% CHR**	**Yes**	**Throughout most of Eastlick Hall**
P03166	Eastlick Hall	0082A	351W	Ceiling tile	White 2 ft. by 4 ft. suspended ceiling tile with pinholes	Misc.	-	SF	**-**	ND	No	Dominant ceiling tile throughout Eastlick Hall
P03176	Eastlick Hall	0082A	G63A	Flooring	Layer 1: 12-inch blue streaked vinyl tile Layer 2: Yellow mastic	Misc.	-	SF	**-**	Layer 1: ND Layer 2: ND	No	G 63 A
P03177	Eastlick Hall	0082A	150MA	Pipe Insulation	Mudded/plaster pipe fitting insulation	TSI	500	LF	Condensate line elbow near ceiling	ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P03178	Eastlick Hall	0082A	250MA	Pipe Insulation	Mudded/plaster pipe fitting insulation	TSI	500	LF	Condensate line elbow near ceiling	ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03179	Eastlick Hall	0082A	171	Flooring	Gray carpet mastic	Misc.	-	SF	-	ND	No	171
P03180	Eastlick Hall	0082A	150MA	Pipe Insulation	Layer 1: Magnesia-type pipe insulation Layer 2: Canvas insulation wrap	TSI	500	LF	Condensate line	Layer 1: ND Layer 2: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03181	Eastlick Hall	0082A	250MA	Pipe Insulation	Layer 1: Magnesia-type pipe insulation Layer 2: Canvas insulation wrap	TSI	500	LF	Condensate line	Layer 1: ND Layer 2: ND	No	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and ceiling spaces throughout Eastlick Hall
P03182	Eastlick Hall	0082A	1st floor exterior	Brick system	Layer 1: Red brick mortar Layer 2: Gray sand	Misc.	-	SF		Layer 1: ND Layer 2: ND	No	Interior hallways and exterior walls
P03183	Eastlick Hall	0082A	1st floor exterior door	Caulk	Gray caulk	Misc.	-	LF	Exterior building caulk	ND	No	Exterior sealant along all door frames
P03184	Eastlick Hall	0082A	G51E	Duct mastic	Layer 1: Tan paper and foil Layer 2: White duct insulation mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Throughout HVAC system
P03185	Eastlick Hall	0082A	G51E	Duct mastic	Layer 1: Tan paper and foil Layer 2: White duct insulation mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Throughout HVAC system
PREVIOUS SAMPLING: WSU EH&S – January 14, 2013												
P00001	**Eastlick Hall**	**0082A**	**Sub-basement mechanical M1/M2 divider wall**	**Pegboard**	**White pegboard wall**	**Misc.**	**2,300**	**SF**	**Tacked on over gypsum wallboard divider wall**	**18% CHR**	**Yes**	**Sub-basement (M1/M2)**
P00002	Eastlick Hall	0082A	Sub-basement mechanical M1	Tank Insulation	Gray insulation with canvas wrap on tank ends	TSI	35	SF	-	ND	No	Sub-basement (M1)
P00003	Eastlick Hall	0082A	Sub-basement mechanical M1	Tank Insulation	Gray insulation with canvas wrap on tank ends	TSI	35	SF	-	ND	No	Sub-basement (M1)
P00004	Eastlick Hall	0082A	Sub-basement mechanical M1	Tank Insulation	Gray insulation with canvas wrap on tank ends	TSI	35	SF	-	ND	No	Sub-basement (M1)
P00005	**Eastlick Hall**	**0082A**	**Sub-basement mechanical M1**	**Pipe insulation**	**Pipe insulation on steam line**	**TSI**	**2**	**SF**	**-**	**2% CHR**	**Yes**	**Sub-basement (M1)**

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P00006	Eastlick Hall	0082A	Sub-basement mechanical M1	Pipe insulation	Steam line pipe insulation with canvas lagging	TSI	3	SF	-	ND	No	Sub-basement (M1)
P00007	Eastlick Hall	0082A	Sub-basement mechanical M2	Duct mastic	Green duct mastic on uninsulated metal ducting	Misc.	3	SF	-	ND	No	Sub-basement (M2)
P00008	Eastlick Hall	0082A	Sub-basement mechanical M2	Duct mastic	White duct mastic on insulated metal ducting	Misc.	10	SF	-	ND	No	Sub-basement (M2)
P00009	Eastlick Hall	0082A	Sub-basement mechanical M1/M2 divider wall	Gypsum wallboard	Gypsum wallboard (no joint compound) behind pegboard sample P00001	Misc.	1,700	SF	-	ND	No	Sub-basement (M1/M2)
P00010	**Eastlick Hall**	**0082A**	**Basement B63**	**Paper sound dampener**	**White sound dampener paper**	**Surf.**	**4**	**SF/per mixing box**	**Tacked on paper at base of mixing box**	**12% CHR**	**Yes**	**Basement B63**

Notes:
CHR = Chrysotile asbestos
ND = Asbestos was not detected in sample
SF = Square feet
EA = Each
LF = Linear feet
Misc. = Miscellaneous material
Surf. = Surfacing material
TSI = Thermal systems insulation
ACM = Asbestos-containing material
Bold = Sample contains asbestos

APPENDIX C

Table Summary of Homogeneous Sampling Areas

TABLE SUMMARY OF HOMOGENEOUS SAMPLING AREAS

HSA	Sample #'s	Homogenous Material Description	Location(s)
Ceiling Finishes			
1	P03071 P03073 P03086 P03092 P03166	2' by 4' White suspended ceiling tile with pinhole pattern	Throughout hallways of basement, 1st floor, 2nd floor, and 3rd floor
2	P03127	2' by 4' White ceiling tile with dot pattern (replacement tiles)	G 51 S
3	P03099	12" White concealed spline ceiling tile	171
Wall Finishes			
4	P03078 P03131 P03161	4-inch brown vinyl cove base with white gypsum wallboard	Throughout hallways and offices on ground floor, 1st floor, 2nd floor, and 3rd floor
5	P03130 P03132 P03134 P03137 P03139 P03140 P03143	Plaster/skim coat	North-south interior concrete structural wall near center of ground floor, 1st floor, 2nd floor, and 3rd floor
6	P03079	4-inch beige vinyl cove base with yellow-brown mastic and white joint compound	B51N (hallway) and some areas as replacement cove base
7	**P03085** **P03100** **P03101** **P03164**	**Joint compound and gypsum wallboard**	**Dominant wall finish throughout Eastlick Hall**
8	P03098 P03128 P03182	Brick and mortar	151 N and G 51 S

HSA	Sample #'s	Homogenous Material Description	Location(s)
9	P03136	4-inch black vinyl cove base with brown mastic	390 (elevator area)
Floor Finishes			
11	P03082 P03146	Black stair mastic/Yellow mastic/White joint compound	3rd floor stairwell
12	P03081	Gray vinyl elevator flooring squares with gray mastic	Elevator
13	P03095 P03096 P03097	Gray epoxy flooring	168A and 168
14	P03091 P03176	12-inch blue with light gray streaks vinyl tile with yellow mastic	G 63 A
15	P03144 P03179	Yellow carpet mastic	171
16	P03165	12-inch white with gray streaks vinyl tile with black mastic	355
Thermal System Insulation			
17	P03084 P03121 P03122 P03123 P03124 P03126 P03129 P03180 P03182	Pipe insulation – 3-6" diameter (magnesia-block type insulation on straight pipe runs)	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and feeder lines in ceiling spaces throughout Eastlick Hall
18	P03083 P03125 P03135 P03163 P03177 P03178	Mudded pipe fitting insulation associated with HA#17 above	Steam and condensate piping in corner mechanical rooms labeled M, MA, MB and feeder ceiling spaces throughout Eastlick Hall
20	**P03150** **P03151** **P03152**	**Pipe insulation – 4-8" diameter (magnesia-block type insulation)**	**High pressure steam lines from utility tunnel and associated manifold along west wall of sub-basement mechanical room M2**
21	P00002 P00003 P00004 P03156	Tank insulation	M2 – Hard caps on vessel/tank insulation

Other Building Materials			
23	**P03070**	**White mixing box paper (Tuttle & Bailey)**	**B51E (corridor)**
	P00010		
24	**P03075**	**Black sink undercoating**	**G66, G88 (2 sinks), B99, 170A, 192, 196, 286, 370, 390**
	P03094		
25	P00008	White mastic applied to fiberglass duct insulation	On insulated ductwork located in ceiling spaces throughout
	P03072		
	P03093		
	P03184		
	P03185		
26	**P03076**	**Black glassware drying rack (mounted on walls)**	**G94 (4 racks), G96 (4 racks), G88, G95B, G81, 170A, 192 (2 racks), 196, 162, 264, 268, 276 (2 racks), 298, 298A, 290, 286, 364, 366, 368, 370, 378, 380, 384, 390, 392, 396, 398**
27	P03077	Black laboratory counter top (resin based)	Laboratories throughout
	P03087		
	P03145		
28	P03074	Yellow-green duct mastic	On metal ductwork located in ceiling spaces and mechanical rooms throughout
	P03088		
	P03089		
	P03120		
	P03133		
	P03142		
	P03157		
29	P03090	Gray duct tape	G76
30	**P03158**	**Black cooling tower mastic**	**560**
	P03159		
	P03160		
31	P03183	Gray door caulk	1st floor door (exterior)

Note: **Bold** type indicates sample/material that contains asbestos

APPENDIX D

Table Summary of Lead Paint Sampling

TABLE SUMMARY OF LEAD PAINT SAMPLING
EASTLICK HALL

Sample #	Building Name	Building #	Sample Location (Room #)	Paint Color	Substrate	Component	XRF Results (mg/cm^2)	Lead-containing
X-01	**Eastlick Hall**	**0082A**	**G51V (fire door)**	**Brown**	**Metal**	**Fire door**	**0.04**	**Yes**
X-02	Eastlick Hall	0082A	G 80 (hallway)	White	Gypsum wallboard	Wall	0.00	No
X-03	Eastlick Hall	0082A	G 84	White	Metal	Door	0.01	No
X-04	Eastlick Hall	0082A	G 80 MA	Brown	Metal	Door	0.00	No
X-05	Eastlick Hall	0082A	G 80 ST	White	Metal	Door frame	0.00	No
X-06	Eastlick Hall	0082A	G 80 ST	Black	Metal	Handrail	0.02	No
X-07	**Eastlick Hall**	**0082A**	**180 ST**	**Red**	**Metal**	**Fire nozzle frame**	**0.08**	**Yes**
X-08	Eastlick Hall	0082A	151 SE	Black	Metal	Door frame	0.00	No
X-09	Eastlick Hall	0082A	251 E (hallway)	White	Gypsum wallboard	Wall	0.0	No
X-10	Eastlick Hall	0082A	287	White	Metal	Door frame	0.00	No
X-11	Eastlick Hall	0082A	251 NE (exterior)	Red/rust	Metal	Handrail	0.01	No
X-12	Eastlick Hall	0082A	251 N	Black	Metal	Window frame	0.00	No
X-13	Eastlick Hall	0082A	251 E	White	Gypsum wallboard	Wall	0.0	No
X-14	**Eastlick Hall**	**0082A**	**290 MB**	**Brown**	**Metal**	**Door**	**0.15**	**Yes**
X-15	Eastlick Hall	0082A	280 ST	White	Metal	Door	0.0	No
X-16	Eastlick Hall	0082A	251 W	White	Gypsum wallboard	Wall	0.0	No
X-17	Eastlick Hall	0082A	351 W	White	Gypsum wallboard	Wall	0.0	No
X-18	Eastlick Hall	0082A	351 S	White	Gypsum wallboard	Wall	0.0	No

Notes:

a) Results by x-ray fluorescence (XRF) analysis are reported in milligrams per square centimeter (mg/cm^2)

b) **Bold** type indicates samples that contain lead

APPENDIX E

Asbestos Chain of Custody Forms and Laboratory Analytical Results

February 2, 2016

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1602327.00

Client Project: 8475-2015
Location: Eastlick Hall: Roofing

Dear Mr. McKibbin,

Enclosed please find test results for the 4 sample(s) submitted to our laboratory for analysis on 1/26/2016.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample Results

NVLAP Lab Code: 102063-0

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall: Roofing

Batch #: 1602327.00
Client Project #: 8475-2015
Date Received: 1/26/2016
Samples Received: 4
Samples Analyzed: 4
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16169101 **Client Sample #: P03058**

Location: Eastlick Hall: Roofing

Comments: No silver coating present.

Layer 1 of 3	**Description:** White chalky material with fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Gypsum/Binder	Glass fibers	35%	**None Detected ND**
Layer 2 of 3	**Description:** Brown fibrous material (on yellow foamy material)			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Synthetic foam	Cellulose	56%	**None Detected ND**
		Glass fibers	11%	
Layer 3 of 3	**Description:** Multi-layered black asphaltic fibrous felt with brown fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Binder/Filler	Cellulose	12%	**Chrysotile 35%**

Lab ID: 16169102 **Client Sample #: P03059**

Location: Eastlick Hall: Roofing

Layer 1 of 4	**Description:** White chalky material with fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Gypsum/Binder	Glass fibers	39%	**None Detected ND**
Layer 2 of 4	**Description:** Yellow foamy material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Synthetic foam	None Detected	ND	**None Detected ND**
Layer 3 of 4	**Description:** Silver paint with asphaltic tar			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Metallic paint, Asphalt/Binder	Cellulose	3%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/02/2016
Reviewed by: Nick Ly **Date:** 02/02/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall: Roofing

Batch #: 1602327.00
Client Project #: 8475-2015
Date Received: 1/26/2016
Samples Received: 4
Samples Analyzed: 4
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 4 of 4 **Description:** Multi-layered black asphaltic fibrous felt with brown fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Binder/Filler	Cellulose 15%	**Chrysotile 28%**

Lab ID: 16169103 **Client Sample #: P03060**

Location: Eastlick Hall: Roofing

Layer 1 of 2 **Description:** Black asphaltic material with brown fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Binder/Filler	Cellulose 4%	**Chrysotile 25%**

Layer 2 of 2 **Description:** Gray soft powdery material with micaceous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous binder, Calcareous particles, Vermiculite	Glass fibers 3%	**None Detected ND**
	Cellulose 2%	

Lab ID: 16169104 **Client Sample #: P03061**

Location: Eastlick Hall: Roofing

Layer 1 of 3 **Description:** Black asphaltic material with brown fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Binder/Filler	Cellulose 5%	**Chrysotile 28%**

Layer 2 of 3 **Description:** Gray soft powdery material with micaceous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous binder, Calcareous particles, Vermiculite	Glass fibers 7%	**None Detected ND**
	Cellulose 3%	

Layer 3 of 3 **Description:** Brown fibrous material (on yellow foamy material)

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Synthetic foam	Cellulose 55%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/02/2016
Reviewed by: Nick Ly **Date:** 02/02/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall: Roofing

Batch #: 1602327.00
Client Project #: 8475-2015
Date Received: 1/26/2016
Samples Received: 4
Samples Analyzed: 4
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Glass fibers 14%

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/02/2016
Reviewed by: Nick Ly **Date:** 02/02/2016

Nick Ly, Technical Director

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1602327.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 2/2/2016 **Time** 10:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 335-4442

Project Name/Number: 8475-2015 **Project Location:** Eastlick Hall: Roofing

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 4 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	16169101	P03058		A
2	16169102	P03059		A
3	16169103	P03060		A
4	16169104	P03061		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Justin Shearer		NVL	1/26/16	1000
Analyzed by	Lori Tseng		NVL	2/2/16	2:34 PM
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 1/26/2016
Time: 2:05 PM
Entered By: Maxwell Raymond

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1602327

ASBESTOS CHAIN OF CUSTODY

❑ 1 Hour ❑ 24 Hours ❑ 4 Days
❑ 2 Hours ❑ 2 Days ☑ 5 Days
❑ 4 Hours ❑ 3 Days ❑ 10 Days
Please call for TAT less than 24 Hours

Company Washington St. University EH&S
Address PO Box 641172
Pullman, WA 99164
Phone 509-335-5604

Project Manager Matt McKibbin
Cell (509) 730 - 5548
Email mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax ( ) -

Project Name/Number 8475-2015
Project Location Eastlick Hall: roofing

❑ PCM Air (NIOSH 7400) ❑ TEM (NIOSH 7402) ❑ TEM (AHERA) ❑ TEM (EPA Level II Modified)
☑ PLM (EPA 600/R-93-116) ❑ EPA 400 Points (600/R-93-116) ❑ EPA 1000Points (600/R-93-116)
❑ PLM Gravimetry (600/R-93-116) ❑ Asbestos in Vermiculite (EPA 600/R-04/004) ❑ Asbestos in Sediment (EPA 1900 Points)
❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116) ❑ Other

Reporting Instructions email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email

Total Number of Samples _____

	Sample ID	Description	A/R
1	P03058-P03061	see sampling data sheet	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Stephan Gilley		WSU EH&S	1-22-16	13:15
Relinquish by	Stephan Gilley		WSU EH&S	1-25-16	08:21

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	L. Shewmaker		NVL	1-26-16	1000 Fed Ex
Analyzed by					
Called by					
Faxed/Email by					

WSU EH&S

Asbestos Sampling Data Sheet

Sheet 1 of 1

Project Name/Job Number: Full Building Survey
Project Manager: Matt M.
Building: EASTLICK HALL
Inspector: Stephan Gilley
Client Contact: 8475-2015
Date:
Signature:
5-day

Sample No.	Material Type	Sample Location	Condition	Friable	Est. Quantity	Lab Results (%)
P03058	Layer 1: Gypsum Insulation Board Layer 2: Silver coat on roofing felts Layer 3: Roofing felts/tar	*Under black rubber membrane Roof	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03 059	Layer 1: Layer 2: Same as P03058 Layer 3:	Roof	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03 060	Layer 1: Black asphaltic vapor barrier Layer 2: Lightweight concrete (soft) Layer 3:	Roof	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03 061	Layer 1: Black asphaltic vapor barrier Layer 2: Lightweight concrete (soft) Layer 3:	Roof	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF	

1602327

February 10, 2016

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

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RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1603030.00

Client Project: 8475-2015
Location: Eastlick

Dear Mr. McKibbin,

Enclosed please find test results for the 33 sample(s) submitted to our laboratory for analysis on 2/5/2016.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample Results

NVLAP Lab Code: 102063-0

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick

Batch #: 1603030.00
Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16173222 **Client Sample #: P03070**
Location: Eastlick

Layer 1 of 1	**Description:** White paper with trace mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder	Cellulose	5%	**Chrysotile 51%**

Lab ID: 16173223 **Client Sample #: P03071**
Location: Eastlick

Layer 1 of 1	**Description:** Gray fibrous material with white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Paint, Perlite	Cellulose	56%	**None Detected ND**
		Glass fibers	12%	

Lab ID: 16173224 **Client Sample #: P03072**
Location: Eastlick

Layer 1 of 3	**Description:** White brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder	Cellulose	4%	**None Detected ND**
Layer 2 of 3	**Description:** Yellow paper with mastic, foil and interwoven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder, Metal foil	Cellulose	56%	**None Detected ND**
		Glass fibers	14%	
Layer 3 of 3	**Description:** Yellow fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	Glass fibers	56%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Attention: Mr. Matt McKibbin
Project Location: Eastlick

Batch #: 1603030.00
Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16173225 **Client Sample #: P03073**
Location: Eastlick
Layer 1 of 1 **Description:** Gray fibrous material with black paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Perlite	Cellulose 56%	**None Detected ND**
	Glass fibers 14%	

Lab ID: 16173226 **Client Sample #: P03074**
Location: Eastlick
Layer 1 of 1 **Description:** Gray brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Fine grains	Cellulose 3%	**None Detected ND**

Lab ID: 16173227 **Client Sample #: P03075**
Location: Eastlick
Layer 1 of 1 **Description:** Black soft flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Binder/Filler	Cellulose 3%	**Chrysotile 3%**

Lab ID: 16173228 **Client Sample #: P03076**
Location: Eastlick
Layer 1 of 1 **Description:** Black compressed fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Cellulose 5%	**Chrysotile 50%**

Lab ID: 16173229 **Client Sample #: P03077**
Location: Eastlick

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016

Nick Ly, Technical Director

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Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 1	**Description:** Black hard brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler	None Detected	ND	**None Detected ND**

Lab ID: 16173230 **Client Sample #: P03078**
Location: Eastlick
Comments: No joint compound present

Layer 1 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Wollastonite	6%	**None Detected ND**
Layer 2 of 2	**Description:** White chalky material with paper and paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Gypsum/Binder, Paint	Cellulose	21%	**None Detected ND**
		Glass fibers	4%	

Lab ID: 16173231 **Client Sample #: P03079**
Location: Eastlick

Layer 1 of 3	**Description:** Beige vinyl			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Brown/yellow soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Cellulose	4%	**None Detected ND**
Layer 3 of 3	**Description:** White compacted powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler	Cellulose	3%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016

Nick Ly, Technical Director

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Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16173232 **Client Sample #: P03080**
Location: Eastlick

Layer 1 of 2	**Description:** White brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Calcareous particles	Cellulose	2%	**None Detected ND**
Layer 2 of 2	**Description:** Gray brittle skim coat material with sand			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Calcareous particles, Sand	Cellulose	3%	**None Detected ND**

Lab ID: 16173233 **Client Sample #: P03081**
Location: Eastlick
Comments: No sheet vinyl present.

Layer 1 of 2	**Description:** Gray soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Fine grains	Cellulose	5%	**None Detected ND**
Layer 2 of 2	**Description:** Tan compressed fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Wood flakes	Cellulose	45%	**None Detected ND**
		Wood fibers	14%	

Lab ID: 16173234 **Client Sample #: P03082**
Location: Eastlick

Layer 1 of 3	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Rubber/Binder	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016

Nick Ly, Technical Director

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Attention: Mr. Matt McKibbin
Project Location: Eastlick

Batch #: 1603030.00
Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 3	**Description:** Yellow soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Cellulose	4%	**None Detected ND**
Layer 3 of 3	**Description:** White compacted powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler	Cellulose	3%	**None Detected ND**

Lab ID: 16173235 **Client Sample #: P03083**
Location: Eastlick

Layer 1 of 2	**Description:** White paper with foil, paint and interwoven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Metal foil, Paint	Cellulose	55%	**None Detected ND**
		Glass fibers	13%	
Layer 2 of 2	**Description:** Gray powdery/fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Calcareous particles, Glass beads	Glass fibers	21%	**None Detected ND**
		Cellulose	2%	

Lab ID: 16173236 **Client Sample #: P03084**
Location: Eastlick

Layer 1 of 2	**Description:** White woven fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Paint	Synthetic fibers	62%	**None Detected ND**
Layer 2 of 2	**Description:** White powdery/fibrous material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Calcareous particles	Cellulose	33%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick

Batch #: 1603030.00
Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16173237 **Client Sample #: P03085**
Location: Eastlick

Layer 1 of 2	**Description:** White compacted powdery material with paint and paper			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Paint, Binder/Filler	Cellulose	24%	**Chrysotile 2%**
Layer 2 of 2	**Description:** White chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Gypsum/Binder	Cellulose	21%	**None Detected ND**
		Glass fibers	5%	

Lab ID: 16173238 **Client Sample #: P03086**
Location: Eastlick

Layer 1 of 1	**Description:** Gray fibrous material with white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Paint, Perlite	Cellulose	56%	**None Detected ND**
		Glass fibers	12%	

Lab ID: 16173239 **Client Sample #: P03087**
Location: Eastlick

Layer 1 of 1	**Description:** Black hard brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine grains	None Detected	ND	**None Detected ND**

Lab ID: 16173240 **Client Sample #: P03088**
Location: Eastlick

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016



Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick

Batch #: 1603030.00
Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 1	**Description:** Tan soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Cellulose	2%	**None Detected ND**

Lab ID: 16173241 **Client Sample #: P03089**
Location: Eastlick

Layer 1 of 1	**Description:** Brown brittle mastic with woven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Mastic/Binder	Synthetic fibers	55%	**None Detected ND**

Lab ID: 16173242 **Client Sample #: P03090**
Location: Eastlick

Layer 1 of 2	**Description:** Gray soft tape with paint and interwoven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Plastic, Binder/Filler, Paint	Synthetic fibers	55%	**None Detected ND**
Layer 2 of 2	**Description:** Gray soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Cellulose	2%	**None Detected ND**

Lab ID: 16173243 **Client Sample #: P03091**
Location: Eastlick

Layer 1 of 2	**Description:** Blue/light gray vinyl tile with gray streaks			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder, Mineral grains	Cellulose	2%	**None Detected ND**
Layer 2 of 2	**Description:** Yellow soft mastic with fibrous mesh			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Fine particles/Binder	Cellulose	3%	**None Detected ND**
		Synthetic fibers	2%	

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick

Batch #: 1603030.00
Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16173244 **Client Sample #: P03092**
Location: Eastlick

Layer 1 of 1 **Description:** Gray fibrous material with black/white paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Plastic	Cellulose 46%	**None Detected ND**
Glass beads	Glass fibers 21%	

Lab ID: 16173245 **Client Sample #: P03093**
Location: Eastlick

Layer 1 of 1 **Description:** Tan brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Fine grains	Cellulose 4%	**None Detected ND**

Lab ID: 16173246 **Client Sample #: P03094**
Location: Eastlick

Layer 1 of 1 **Description:** Black soft flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Binder/Filler	Cellulose 2%	**Chrysotile 3%**

Lab ID: 16173247 **Client Sample #: P03095**
Location: Eastlick

Layer 1 of 1 **Description:** Gray brittle/sandy material with paint and mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Sand, Paint	Cellulose 2%	**None Detected ND**
Mineral grains, Mastic/Binder	Synthetic fibers 1%	

Lab ID: 16173248 **Client Sample #: P03096**
Location: Eastlick

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick

Batch #: 1603030.00
Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 1 **Description:** Gray brittle/sandy material with paint and mastic

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Sand, Paint	Cellulose	3%	**None Detected ND**
Mineral grains, Mastic/Binder	Synthetic fibers	2%	

Lab ID: 16173249 **Client Sample #: P03097**
Location: Eastlick

Layer 1 of 1 **Description:** Gray brittle/sandy material with paint and mastic

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Sand, Paint	Cellulose	2%	**None Detected ND**
Mineral grains, Mastic/Binder	Synthetic fibers	1%	

Lab ID: 16173250 **Client Sample #: P03098**
Location: Eastlick

Layer 1 of 1 **Description:** Gray sandy/brittle material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Sand, Mineral grains	Cellulose	2%	**None Detected ND**

Lab ID: 16173251 **Client Sample #: P03099**
Location: Eastlick

Layer 1 of 1 **Description:** Gray fibrous material with white paint

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Paint, Perlite	Cellulose	56%	**None Detected ND**
Glass beads	Glass fibers	12%	

Lab ID: 16173252 **Client Sample #: P03100**
Location: Eastlick

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016

Nick Ly, Technical Director

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick

Batch #: 1603030.00
Client Project #: 8475-2015
Date Received: 2/5/2016
Samples Received: 33
Samples Analyzed: 33
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** White compacted powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler	Cellulose	3%	**Chrysotile 3%**
Layer 2 of 2	**Description:** White chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Gypsum/Binder	Cellulose	21%	**None Detected ND**
		Glass fibers	4%	

Lab ID: 16173253 **Client Sample #: P03101**
Location: Eastlick

Layer 1 of 2	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Paint	Cellulose	3%	**Chrysotile 2%**
Layer 2 of 2	**Description:** White chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Gypsum/Binder	Cellulose	22%	**None Detected ND**
		Glass fibers	5%	

Lab ID: 16173254 **Client Sample #: P03102**
Location: Eastlick

Layer 1 of 1	**Description:** Gray fibrous material with white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Paint, Perlite	Cellulose	55%	**None Detected ND**
		Glass fibers	11%	

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 02/09/2016
Reviewed by: Nick Ly **Date:** 02/10/2016



Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1603030.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 2/12/2016 **Time** 11:15 AM
Email mrmckibbin@wsu.edu
Fax (509) 335-4442

Project Name/Number: 8475-2015 **Project Location:** Eastlick

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 33 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	16173222	P03070		A
2	16173223	P03071		A
3	16173224	P03072		A
4	16173225	P03073		A
5	16173226	P03074		A
6	16173227	P03075		A
7	16173228	P03076		A
8	16173229	P03077		A
9	16173230	P03078		A
10	16173231	P03079		A
11	16173232	P03080		A
12	16173233	P03081		A
13	16173234	P03082		A
14	16173235	P03083		A
15	16173236	P03084		A
16	16173237	P03085		A
17	16173238	P03086		A
18	16173239	P03087		A

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

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	2/5/16	1115
Analyzed by	Lori Tseng		NVL	2/9/16	3:09 PM
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 2/5/2016
Time: 11:53 AM
Entered By: Maxwell Raymond

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1603030.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 2/12/2016 **Time** 11:15 AM
Email mrmckibbin@wsu.edu
Fax (509) 335-4442

Project Name/Number: 8475-2015 **Project Location:** Eastlick

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 33 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	16173240	P03088		A
20	16173241	P03089		A
21	16173242	P03090		A
22	16173243	P03091		A
23	16173244	P03092		A
24	16173245	P03093		A
25	16173246	P03094		A
26	16173247	P03095		A
27	16173248	P03096		A
28	16173249	P03097		A
29	16173250	P03098		A
30	16173251	P03099		A
31	16173252	P03100		A
32	16173253	P03101		A
33	16173254	P03102		A

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

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	2/5/16	1115
Analyzed by	Lori Tseng		NVL	2/9/16	3:09 PM
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 2/5/2016
Time: 11:53 AM
Entered By: Maxwell Raymond

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INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

1603030

❑ 1 Hour ❑ 24 Hours ❑ 4 Days
❑ 2 Hours ❑ 2 Days ☑ 5 Days
❑ 4 Hours ❑ 3 Days ❑ 10 Days
Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 8475-2015
Project Location: Eastlick

❑ PCM Air (NIOSH 7400)
☑ PLM (EPA 600/R-93-116)
❑ PLM Gravimetry (600/R-93-116)
❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
❑ TEM (NIOSH 7402)
❑ EPA 400 Points (600/R-93-116)
❑ Asbestos in Vermiculite (EPA 600/R-04/004)
❑ TEM (AHERA)
❑ Other
❑ TEM (EPA Level II Modified)
❑ EPA 1000Points (600/R-93-116)
❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) -
❑ Fax ( ) -
❑ Email

Total Number of Samples 33

	Sample ID	Description	A/R
1	P03070	see attached sample logs	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15	P03102		

	Print Name	Signature	Company	Date	Time
Sampled by	Stephan Gilley		WSU EH&S	2-1-16	11:30
Relinquish by	Stephan Gilley		WSU EH&S	2-4-16	12:45

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	[illegible]	[illegible]	NVL Labs	2/5/16	11:15 am
Analyzed by					
Called by					
Faxed/Email by					

March 11, 2016

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1605068.00

Client Project: 8475-2015
Location: Eastlick Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 27 sample(s) submitted to our laboratory for analysis on 3/4/2016.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample Results

NVLAP Lab Code: 102063-0

1.888.NVL.LABS
1.888.(685.5227)
www.nvllabs.com

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605068.00
Client Project #: 8475-2015
Date Received: 3/4/2016
Samples Received: 27
Samples Analyzed: 27
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16185733 **Client Sample #: P03120**
Location: Eastlick Hall

Layer 1 of 1	**Description:** Green brittle mastic with trace yellow fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Glass fibers	2%	**None Detected ND**

Lab ID: 16185734 **Client Sample #: P03121**
Location: Eastlick Hall
Comments: Unsure of correct layer sequence.

Layer 1 of 3	**Description:** White woven fibrous material with red paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Paint	Cellulose	90%	**None Detected ND**
Layer 2 of 3	**Description:** White powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler	Synthetic fibers	5%	**None Detected ND**
		Glass fibers	2%	
Layer 3 of 3	**Description:** White fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Adhesive/Binder	Cellulose	98%	**None Detected ND**

Lab ID: 16185735 **Client Sample #: P03122**
Location: Eastlick Hall

Layer 1 of 2	**Description:** White woven fibrous material with red paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Paint	Cellulose	93%	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

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Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605068.00
Client Project #: 8475-2015
Date Received: 3/4/2016
Samples Received: 27
Samples Analyzed: 27
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2	**Description:** White powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler	Synthetic fibers	4%	**None Detected ND**
		Glass fibers	3%	

Lab ID: 16185736 **Client Sample #: P03123**

Location: Eastlick Hall

Comments: Unsure of correct layer sequence.

Layer 1 of 4	**Description:** White fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Adhesive/Binder	Cellulose	98%	**None Detected ND**
Layer 2 of 4	**Description:** White woven fibrous material with red paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Paint	Cellulose	88%	**None Detected ND**
Layer 3 of 4	**Description:** White powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler	Synthetic fibers	5%	**None Detected ND**
		Glass fibers	3%	
Layer 4 of 4	**Description:** Off-white woven fibrous material with mastic and gray thin plastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder, Plastic	Cellulose	65%	**None Detected ND**

Lab ID: 16185737 **Client Sample #: P03124**

Location: Eastlick Hall

Comments: Unsure of correct layer sequence.

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016



Nick Ly, Technical Director

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605068.00
Client Project #: 8475-2015
Date Received: 3/4/2016
Samples Received: 27
Samples Analyzed: 27
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 3	**Description:** White fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Adhesive/Binder	Cellulose	98%	**None Detected ND**
Layer 2 of 3	**Description:** White woven fibrous material with red paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Paint	Cellulose	92%	**None Detected ND**
Layer 3 of 3	**Description:** White powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler	Synthetic fibers	4%	**None Detected ND**
		Glass fibers	3%	

Lab ID: 16185738 **Client Sample #: P03125**
Location: Eastlick Hall

Layer 1 of 2	**Description:** White fibrous mesh with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose	95%	**None Detected ND**
Layer 2 of 2	**Description:** Light gray compressed powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler, Glass beads	Cellulose	8%	**None Detected ND**
		Glass fibers	5%	

Lab ID: 16185739 **Client Sample #: P03126**
Location: Eastlick Hall

Layer 1 of 1	**Description:** White powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler, Glass beads	Cellulose	12%	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016



Nick Ly, Technical Director

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Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605068.00
Client Project #: 8475-2015
Date Received: 3/4/2016
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Method: EPA/600/R-93/116 & EPA/600/M4-82-020

			Glass fibers	3%

Lab ID: 16185740 **Client Sample #: P03127**
Location: Eastlick Hall

Layer 1 of 1 **Description:** Light gray compressed fibrous material with textured paint

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Fine particles, Perlite, Glass beads	Cellulose	45%	**None Detected ND**
Paint	Glass fibers	30%	

Lab ID: 16185741 **Client Sample #: P03128**
Location: Eastlick Hall

Layer 1 of 2 **Description:** Red brick

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Mineral grains	None Detected	ND	**None Detected ND**

Layer 2 of 2 **Description:** Gray sandy material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Sand, Gravel	Cellulose	2%	**None Detected ND**

Lab ID: 16185742 **Client Sample #: P03129**
Location: Eastlick Hall

Layer 1 of 1 **Description:** White powdery material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Fine particles, Binder/Filler, Glass beads	Cellulose	12%	**None Detected ND**
	Glass fibers	4%	

Lab ID: 16185743 **Client Sample #: P03130**
Location: Eastlick Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016

Nick Ly, Technical Director

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Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605068.00
Client Project #: 8475-2015
Date Received: 3/4/2016
Samples Received: 27
Samples Analyzed: 27
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** White powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Off-white sandy material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Sand	Cellulose	2%	**None Detected ND**
		Glass fibers	2%	

Lab ID: 16185744 **Client Sample #: P03131**
Location: Eastlick Hall

Layer 1 of 3	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Rubber/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Trace white mastic with yellow paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Paint	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**

Lab ID: 16185745 **Client Sample #: P03132**
Location: Eastlick Hall

Layer 1 of 2	**Description:** White compressed powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016

Nick Ly, Technical Director

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Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2 **Description:** Off-white sandy material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Sand, Mica	Cellulose	1%	**None Detected ND**
	Glass fibers	3%	

Lab ID: 16185746 **Client Sample #: P03133**
Location: Eastlick Hall

Layer 1 of 1 **Description:** Green brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Mastic/Binder	None Detected	ND	**None Detected ND**

Lab ID: 16185747 **Client Sample #: P03134**
Location: Eastlick Hall

Layer 1 of 2 **Description:** White compressed powdery material with paint

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**

Layer 2 of 2 **Description:** Off-white sandy material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Sand, Mica	Cellulose	<1%	**None Detected ND**
	Glass fibers	2%	

Lab ID: 16185748 **Client Sample #: P03135**
Location: Eastlick Hall

Layer 1 of 1 **Description:** Light gray material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Fine particles, Binder/Filler, Glass beads	Glass fibers	18%	**None Detected ND**
	Cellulose	5%	

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016

Nick Ly, Technical Director

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Project Location: Eastlick Hall

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Date Received: 3/4/2016
Samples Received: 27
Samples Analyzed: 27
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16185749 **Client Sample #: P03136**
Location: Eastlick Hall

Layer 1 of 2	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**

Lab ID: 16185750 **Client Sample #: P03137**
Location: Eastlick Hall

Layer 1 of 2	**Description:** White compressed powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Off-white sandy material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Sand, Mica	Glass fibers	2%	**None Detected ND**

Lab ID: 16185751 **Client Sample #: P03138**
Location: Eastlick Hall

Layer 1 of 2	**Description:** Trace black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016



Nick Ly, Technical Director

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Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

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Client Project #: 8475-2015
Date Received: 3/4/2016
Samples Received: 27
Samples Analyzed: 27
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16185752 **Client Sample #: P03139**
Location: Eastlick Hall

Layer 1 of 2	**Description:** White compressed powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Off-white sandy material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Sand, Mica	Cellulose	<1%	**None Detected ND**
		Glass fibers	1%	

Lab ID: 16185753 **Client Sample #: P03140**
Location: Eastlick Hall

Layer 1 of 2	**Description:** White compressed powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Off-white sandy material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Sand, Mica	Glass fibers	2%	**None Detected ND**

Lab ID: 16185754 **Client Sample #: P03141**
Location: Eastlick Hall

Layer 1 of 3	**Description:** White coating material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Tan paper with mesh, mastic and foil			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Mastic/Binder, Metal foil	Cellulose	48%	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016



Nick Ly, Technical Director

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Samples Analyzed: 27
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

			Glass fibers 10%	
Layer 3 of 3	**Description:** Yellow fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles	Glass fibers 98%		**None Detected ND**

Lab ID: 16185755 **Client Sample #: P03142**
Location: Eastlick Hall

Layer 1 of 1	**Description:** Dark green brittle mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Mastic/Binder	Cellulose <1%	**None Detected ND**

Lab ID: 16185756 **Client Sample #: P03143**
Location: Eastlick Hall

Layer 1 of 1	**Description:** White compressed powdery material with paint		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected ND	**None Detected ND**

Lab ID: 16185757 **Client Sample #: P03144**
Location: Eastlick Hall

Layer 1 of 1	**Description:** Gray crumbly material with clear soft adhesive and thin yellow mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler, Adhesive/Binder	Cellulose 4%	**None Detected ND**
	Mastic/Binder	Synthetic fibers 1%	

Lab ID: 16185758 **Client Sample #: P03145**
Location: Eastlick Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016

Nick Ly, Technical Director

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Layer 1 of 1	**Description:** Black hard material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler	None Detected	ND	**None Detected ND**

Lab ID: 16185789 **Client Sample #: P03146**
Location: Eastlick Hall

Layer 1 of 3	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Rubber/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Yellow soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/10/2016
Reviewed by: Nick Ly **Date:** 03/11/2016



Nick Ly, Technical Director

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1605068.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 3/11/2016 **Time** 9:30 AM
Email mrmckibbin@wsu.edu
Fax (509) 335-4442

Project Name/Number: 8475-2015 **Project Location:** Eastlick Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 27 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	16185733	P03120		A
2	16185734	P03121		A
3	16185735	P03122		A
4	16185736	P03123		A
5	16185737	P03124		A
6	16185738	P03125		A
7	16185739	P03126		A
8	16185740	P03127		A
9	16185741	P03128		A
10	16185742	P03129		A
11	16185743	P03130		A
12	16185744	P03131		A
13	16185745	P03132		A
14	16185746	P03133		A
15	16185747	P03134		A
16	16185748	P03135		A
17	16185749	P03136		A
18	16185750	P03137		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Maxwell Raymond		NVL	3/4/16	0930
Analyzed by	Nadezhda		NVL	3/10/16	7:19 PM
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 3/7/2016
Time: 12:02 PM
Entered By: Justin Shearer

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Direct (509) 335-5311

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TAT 5 Days **AH** No
Rush TAT
Due Date 3/11/2016 **Time** 9:30 AM
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Fax (509) 335-4442

Project Name/Number: 8475-2015 **Project Location:** Eastlick Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 27 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	16185751	P03138		A
20	16185752	P03139		A
21	16185753	P03140		A
22	16185754	P03141		A
23	16185755	P03142		A
24	16185756	P03143		A
25	16185757	P03144		A
26	16185758	P03145		A
27	16185789	P03146		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Maxwell Raymond		NVL	3/4/16	0930
Analyzed by	Nadezhda		NVL	3/10/16	7:19 PM
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 3/7/2016
Time: 12:02 PM
Entered By: Justin Shearer

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

1605068

❑ 2 Hours ❑ 2 Days ❑ 4 Days
❑ 4 Hours ❑ 3 Days ☑ 5 Days
❑ 10 Days
Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 8475-2015
Project Location: Eastlick Hall

❑ PCM Air (NIOSH 7400)
☑ PLM (EPA 600/R-93-116)
❑ PLM Gravimetry (600/R-93-116)
❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
❑ TEM (NIOSH 7402)
❑ EPA 400 Points (600/R-93-116)
❑ Asbestos in Vermiculite (EPA 600/R-04/004)
❑ TEM (AHERA)
❑ Other
❑ TEM (EPA Level II Modified)
❑ EPA 1000Points (600/R-93-116)
❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email

Total Number of Samples _____

	Sample ID	Description	A/R
1	P03070-P03102	33 samples see attached sample logs	
2	P03120-P03136	~~31~~ samples see attached sample logs	
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15	P03		

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	3-3-16	08:15
Relinquish by	Stephan Gilley		WSU EH&S	3-3-16	13:10

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Mayk		NVL	3/4/16	930 Feedback
Analyzed by					
Called by					
Faxed/Emailed by					

March 15, 2016

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

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INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1605155.00

Client Project: 8475-2015
Location: Eastlick Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 11 sample(s) submitted to our laboratory for analysis on 3/7/2016.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample Results

NVLAP Lab Code: 102063-0

1.888.NVL.LABS
1.888.(685.5227)
www.nvllabs.com

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605155.00
Client Project #: 8475-2015
Date Received: 3/7/2016
Samples Received: 11
Samples Analyzed: 11
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 16186662 **Client Sample #: P03150**
Location: Eastlick Hall
Comments: Unsure of correct layer sequence.

Layer 1 of 3	**Description:** Gray fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	Cellulose	12%	**Chrysotile 56%**
Layer 2 of 3	**Description:** White woven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	Cellulose	45%	**None Detected ND**
Layer 3 of 3	**Description:** White crumbly fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder, Binder/Filler	Cellulose	9%	**None Detected ND**
		Glass fibers	2%	

Lab ID: 16186663 **Client Sample #: P03151**
Location: Eastlick Hall

Layer 1 of 2	**Description:** Pink crumbly fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder, Binder/Filler	Cellulose	15%	**None Detected ND**
Layer 2 of 2	**Description:** Gray crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	Cellulose	2%	**Chrysotile 6%**

Lab ID: 16186664 **Client Sample #: P03152**
Location: Eastlick Hall

Sampled by: Client
Analyzed by: Christina Molnar **Date:** 03/14/2016
Reviewed by: Nick Ly **Date:** 03/15/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605155.00
Client Project #: 8475-2015
Date Received: 3/7/2016
Samples Received: 11
Samples Analyzed: 11
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 3	**Description:** Gray fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler	Cellulose 12%	**Chrysotile 52%**
Layer 2 of 3	**Description:** White woven fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler	Cellulose 45%	**None Detected ND**
Layer 3 of 3	**Description:** White crumbly fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous binder, Binder/Filler	Cellulose 12%	**None Detected ND**
		Glass fibers 3%	

Lab ID: 16186665 **Client Sample #: P03153**
Location: Eastlick Hall

Layer 1 of 3	**Description:** Off-white woven fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler	Cellulose 48%	**None Detected ND**
Layer 2 of 3	**Description:** Gray fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler	Cellulose 15%	**Chrysotile 52%**
Layer 3 of 3	**Description:** White crumbly fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous binder, Binder/Filler	Cellulose 15%	**None Detected ND**
		Glass fibers 3%	

Lab ID: 16186666 **Client Sample #: P03154**
Location: Eastlick Hall

Sampled by: Client
Analyzed by: Christina Molnar **Date:** 03/14/2016
Reviewed by: Nick Ly **Date:** 03/15/2016



Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605155.00
Client Project #: 8475-2015
Date Received: 3/7/2016
Samples Received: 11
Samples Analyzed: 11
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** Gray crumbly fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous binder, Binder/Filler	Glass fibers 34%	**None Detected ND**
		Cellulose 11%	
Layer 2 of 2	**Description:** White woven fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler	Cellulose 56%	**None Detected ND**

Lab ID: 16186667 **Client Sample #: P03155**
Location: Eastlick Hall

Layer 1 of 2	**Description:** Gray crumbly fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Calcareous binder, Glass beads	Glass fibers 35%	**None Detected ND**
		Cellulose 4%	
Layer 2 of 2	**Description:** White woven fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler	Cellulose 45%	**None Detected ND**

Lab ID: 16186668 **Client Sample #: P03156**
Location: Eastlick Hall

Layer 1 of 2	**Description:** Gray crumbly fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous binder, Binder/Filler, Glass beads	Glass fibers 25%	**None Detected ND**
		Cellulose 3%	

Sampled by: Client
Analyzed by: Christina Molnar **Date:** 03/14/2016
Reviewed by: Nick Ly **Date:** 03/15/2016



Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Eastlick Hall

Batch #: 1605155.00
Client Project #: 8475-2015
Date Received: 3/7/2016
Samples Received: 11
Samples Analyzed: 11
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2 **Description:** White woven fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Cellulose 47%	**None Detected ND**

Lab ID: 16186669 **Client Sample #: P03157**
Location: Eastlick Hall

Layer 1 of 1 **Description:** Gray brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	Cellulose <1%	**None Detected ND**

Lab ID: 16186670 **Client Sample #: P03158**
Location: Eastlick Hall

Layer 1 of 1 **Description:** Silver soft material with dirt

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Synthetic fibers 2%	**Chrysotile 2%**
	Cellulose 1%	

Lab ID: 16186671 **Client Sample #: P03159**
Location: Eastlick Hall

Layer 1 of 1 **Description:** Silver soft material with dirt

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Synthetic fibers 1%	**Chrysotile 2%**

Lab ID: 16186672 **Client Sample #: P03160**
Location: Eastlick Hall

Layer 1 of 1 **Description:** Silver soft material with dirt

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Synthetic fibers 1%	**Chrysotile 2%**

Sampled by: Client
Analyzed by: Christina Molnar **Date:** 03/14/2016
Reviewed by: Nick Ly **Date:** 03/15/2016

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1605155.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 3/14/2016 **Time** 9:15 AM
Email mrmckibbin@wsu.edu
Fax (509) 335-4442

Project Name/Number: 8475-2015 **Project Location:** Eastlick Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 11 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	16186662	P03150		A
2	16186663	P03151		A
3	16186664	P03152		A
4	16186665	P03153		A
5	16186666	P03154		A
6	16186667	P03155		A
7	16186668	P03156		A
8	16186669	P03157		A
9	16186670	P03158		A
10	16186671	P03159		A
11	16186672	P03160		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Shaista Khan		NVL	3/7/16	0915
Analyzed by	Christina Molnar		NVL	3/14/16	3:24 PM
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 3/7/2016
Time: 5:39 PM
Entered By: Justin Shearer

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ASBESTOS CHAIN OF CUSTODY

Turn Ar
❑ 1
❑ 2
❑ 4

1605155

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 8475-2015
Project Location: Eastlick Hall

- ❑ PCM Air (NIOSH 7400)
- ❑ TEM (NIOSH 7402)
- ❑ TEM (AHERA)
- ❑ TEM (EPA Level II Modified)
- ☑ PLM (EPA 600/R-93-116)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ Asbestos in Sediment (EPA 1900 Points)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ Other

Reporting Instructions: email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email

Total Number of Samples 11

	Sample ID	Description	A/R
1	P03150-P03160	see attached sample logs	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	3-4-16	09:40
Relinquish by	Stephan Gilley		WSU EH&S	3-4-16	13:15

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	CHRISTA THAN		NVL	3/7/16	915 Rcdy
Analyzed by					
Called by					
Faxed/Email by					

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 16-03-00740

Client: Washington State University - Pullman
P.O. BOX 641172
Pullman, WA 99164

Received Date: 03/07/2016
Analyzed Date: 03/07/2016
Reported Date: 03/08/2016

Project/Test Address: Eastlick Hall; 8475-2015; Pullman, WA

Client Number: 49-3308

Fax Number: 509-335-4442

Laboratory Results

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
16-03-00740-001A	P03161	Plaster	Gray/White Granular; Inhomogeneous	NAD	100% Non-Fibrous
16-03-00740-001B	P03161	Mastic	Brown Adhesive; Homogeneous	NAD	1% Cellulose 99% Non-Fibrous
16-03-00740-002	P03162		Gray/White Granular; White Paint; Inhomogeneous	NAD	100% Non-Fibrous
16-03-00740-003	P03163		White Powder; Orange Paint; Inhomogeneous	NAD	2% Fibrous Glass 3% Synthetic 95% Non-Fibrous
16-03-00740-004	P03164		White Powder; Brown Fibrous; White Granular; White Paint; Inhomogeneous	Trace <1% Chrysotile	20% Cellulose 80% Non-Fibrous

Total Asbestos: Trace <1%

2% Chrysotile asbestos is present in the joint compound-like material.

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 16-03-00740

Project/Test Address: Eastlick Hall; 8475-2015; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
16-03-00740-005A	P03165	Tile	Tan Vinyl; Homogeneous	2% Chrysotile	98% Non-Fibrous
			Total Asbestos:	2%	
16-03-00740-005B	P03165	Mastic	Black Tar-Like; Homogeneous	6% Chrysotile	3% Cellulose 91% Non-Fibrous
			Total Asbestos:	6%	
16-03-00740-006	P03166		Gray Fibrous; White Paint; Inhomogeneous	NAD	65% Cellulose 5% Fibrous Glass 30% Non-Fibrous

QC Sample: 88-M22011-4

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Christian H. Schaible

Reviewed By Authorized Signatory: Melissa Kanode

Missy Kanode
QA/QC Clerk

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0 VELAP 460172. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND: NAD = no asbestos detected

6 PLM

Asbestos Chain-of-Custody

16-03-00740

Due Date:
03/08/2016
(Tuesday)
AE M

Environmental Hazards Services, LLC

www.leadlab.com
(800)347-4010
(804)275-4907 (fax)
7469 Whitepine Rd
Richmond, VA
23237

Company Name: Washington State University EH&S Address: P.O. Box 641172 City/State/Zip: Pullman, WA 99164

Phone: (509) 335-5604 Fax: ( ) E-mail: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu Acct. Number:

Project Name / Testing Address: Eastlick Hall 8475- 2015 **City/State (Required):** Pullman, WA

Collected by: Stephan Gilley Purchase Order Number:

Turn Around Times : *If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.*

_____ 1 - Day _____ 2 - Day ✓ 3 - Day _____ Same Day (Must Call Ahead) _____ Weekend (Must Call Ahead)

No.	Client Sample ID	Date Collected	ASBESTOS							AIR					COMMENTS
			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM Chatfield (Bulk)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P03161	3-4-16	✓												
2	P03162	3-4-16	✓												
3	P03163	3-4-16	✓												
4	P03164	3-4-16	✓												
5	P03165	3-4-16	✓												
6	P03166	3-4-16	✓												
7															
8															
9															
10															

Released by: Stephan Gilley	Signature:	Date/Time: 3-4-16 13:15
Received by:	Signature:	Date/Time: 3/7/16

WSU EH&S

Asbestos Sampling Data Sheet

Project Name/Job Number: EASTLICK HALL Project Manager:

Building: Inspector:

Client Contact: Date: 3-4-16 Signature:

Sample No.	Material Type	Sample Location	Condition	Friable	Est. Quantity	Lab Results (%)
P03160	Layer 1: black mastic Layer 2: Layer 3:	[illegible]	☒ GOOD ☐ FAIR ☐ POOR	☐ YES ☒ NO	☐ SF ☐ LF ☐ EA	
P03161	Layer 1: brown cove base mastic Layer 2: white joint compound Layer 3: 4-inch yellow cove base	451	☒ GOOD ☐ FAIR ☐ POOR	☐ YES ☒ NO	☐ SF ☐ LF ☐ EA	
P03162	Layer 1: white plaster Layer 2: Layer 3:	470 S	☒ GOOD ☐ FAIR ☐ POOR	☐ YES ☒ NO	☐ SF ☐ LF ☐ EA	
P03163	Layer 1: TSP low pressure steam Layer 2: Layer 3:	350 MA	☒ GOOD ☐ FAIR ☐ POOR	☒ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P03164	Layer 1: white 9 inch wallboard Layer 2: white joint compound Layer 3:	janitor room 355	☒ GOOD ☐ FAIR ☐ POOR	☐ YES ☒ NO	☐ SF ☐ LF ☐ EA	
P03165	Layer 1: 12-inch white / gray streaks Layer 2: black mastic Layer 3:	janitor room 355	☒ GOOD ☐ FAIR ☐ POOR	☐ YES ☒ NO	☐ SF ☐ LF ☐ EA	
P03166	Layer 1: 2'x4' white SCT - Pinhole Layer 2: Layer 3:	361 exterior 351 W	☒ GOOD ☐ FAIR ☐ POOR	☐ YES ☒ NO	☐ SF ☐ LF ☐ EA	
	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	

740

Tiffany Stone

From: Julie Dickerson [jdickerson@leadlab.com]
Sent: Friday, March 04, 2016 7:16 PM
To: customerservice@leadlab.com
Subject: Fwd: Eastlick Hall Turnaround time

Please be in the lookout for this package

Sent from my iPhone

Begin forwarded message:

> **From:** "Gilley, Stephan Alexis" <stephan.gilley@wsu.edu>
> **Date:** March 4, 2016 at 6:08:11 PM EST
> **To:** "jdickerson@leadlab.com" <jdickerson@leadlab.com>
> **Subject: Eastlick Hall Turnaround time**
>
> I mailed a Fed Ex package today with 1-day air. I would like to change the turnaround time to 1-day from 3-days.
>
> Thanks.....
>
> Stephan Gilley
> Environmental Health and Safety
> Environmental Control Technician-3
> Office: 509-335-5604

APPENDIX F

Laboratory Accreditations and Certificates

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 102063-0

NVL Laboratories, Inc.

Seattle, WA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2015-09-25 through 2016-09-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NVL Laboratories, Inc.
4708 Aurora Avenue N.
Seattle, WA 98103
Mr. Nghiep Vi Ly
Phone: 206-547-0100 Fax: 206-634-1936
Email: nick.l@nvllabs.com
http://www.nvllabs.com

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 102063-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101882-0

Environmental Hazards Services, L.L.C.

N. Chesterfield, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2016-01-01 through 2016-12-31

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Environmental Hazards Services, L.L.C.
7469 Whitepine Road
N. Chesterfield, VA 23237-2261
Ms. Julie Dickerson
Phone: 804-275-4788 Fax: 804-275-4907
Email: jdickerson@leadlab.com
http://www.leadlab.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101882-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

Effective 2016-01-01 through 2016-12-31

APPENDIX G

Building Inspector Training Certificate

Certificate of Completion

This is to certify that

Matthew R. McKibbin

has satisfactorily completed
4 hours of refresher training as an

Asbestos Building Inspector

to comply with the training requirements of
TSCA Title II / 40 CFR 763 (AHERA)

151417
Certificate Number

Instructor
EPA Provider Cert. Number: 1085

ARGUS PACIFIC
TRAINING • CONSULTING

Apr 30, 2015
Date(s) of Training
Exam Score: NA
Expiration Date: Apr 29, 2016

Argus Pacific, Inc. • 1900 W. Nickerson, Suite 315 • Seattle, Washington • 98119 • 206.285.3373 • fax 206.285.3927

MICRIST ENVIRONMENTAL RESOURCE

Recognizes

Stephan A. Gilley



Michael D. Thomas - Administrator

Michael D. Thomas - Principal Instructor

In Successful Course Completion of

AHERA Certified Asbestos Building Inspector Training

In Accordance with TSCA Title II & State of Montana DEQ, Trained: Oct. 12-14, 2015 in Post Falls, ID

Certification Valid through October 14, 2016 Certification Number: BI-15-008

The above student has completed training as required for accreditation under Administrative Rule of Montana Title 17, Chapter 74, Subchapter 3 (ARM 17.74. 368(h))

MICRIST Environmental - P. O. Box 2424, Victorville, CA 92393 (208) 818-0455 Montana DEQ - 1520 East 6th Ave P.O. Box 200901 Helena MT 59620-0901

WASHINGTON STATE UNIVERSITY
Environmental Health and Safety

Good Faith Survey
Salmon Lab & General Storage Building (#1046)
Washington State University
Puyallup, Washington



February 25, 2026

Prepared by:

Ryan Buford
WSU Environmental Health and Safety
AHERA Building Inspector # BIR20250424-03 (exp. April 24, 2026)

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1 INTRODUCTION

Washington State University (WSU) Environmental Health and Safety (EH&S) conducted a "Good Faith" asbestos and limited lead in painted coatings survey of Salmon Lab & General Storage Building in February 2026. Salmon Lab is located at 2606 West Pioneer in Puyallup, Washington. The facility was originally constructed in 1983 and houses WSU's Salmon Lab. This survey was conducted to meet Washington Administrative Code (WAC) 296-62-07721 Good Faith survey requirements for construction, renovation, demolition, and maintenance projects at Salmon Lab & General Storage Building with the following limitations.

1.1 Limitations of the Assessment

The conclusions herein are professional opinions based solely upon visual site observations and interpretations of analytical data as described in this report. The survey excluded areas of the building which were inaccessible or would have caused damage to the building if sampled. Locations where inspectors would have been exposed to hazards were not evaluated (e.g., operating HVAC or building mechanical systems). Typical construction techniques can render building portions inaccessible. As a result, additional asbestos-containing materials (ACM) may be present in inaccessible areas (e.g., wall cavities, within energized systems). Suspect regulated materials within inaccessible areas should be presumed to contain asbestos until characterized.

The opinions presented herein apply to the site conditions existing at the time of the investigation and interpretation of current regulations pertaining to asbestos and lead. Opinions and recommendations provided herein may not apply to future site conditions. Regulatory requirements in effect at the time of the work should be verified prior to any work impacting regulated materials. This report represents the findings of this survey only, and is not intended to establish scope or contractual terms supporting regulated material disturbance, abatement, or disposal.

2 METHODOLOGY

This good faith survey was conducted by Ryan Buford with WSU EH&S, AHERA Building Inspector # BIR20250424-03 (exp. April 24, 2026) in February 2026. The asbestos survey was performed referencing the "Good Faith" survey requirements outlined in WAC 296-62-07721.

To identify suspect ACM, EH&S walked through accessible locations in the Salmon Lab, noting building materials and construction. Not all concealed areas or sub-surface suspect materials may have been surveyed (see Limiting Conditions in Section 1.1). Approximate suspect material quantities were estimated based upon field observations, measurements, and scaled building drawings provided by WSU Facilities Services. Quantities given are intended for order of magnitude information only and must be field verified to support project bidding or estimates.

2.1 Asbestos Bulk Sampling

Suspect ACM was grouped into homogeneous sampling areas (HSA) and categorized referencing 40 CFR 763, as thermal systems insulation (TSI), surfacing material, or miscellaneous material. The sampling plan included, at a minimum, the collection and analysis of samples as follows:

<u>Thermal System Insulation</u>

- In a distributive manner, a minimum of three samples of each HSA that was not presumed to contain asbestos.
- At least one bulk sample from each homogeneous area of patched TSI if the patch was less than 6 square feet.
- In a manner sufficient to determine whether the material is ACM, samples were collected from plaster/mudded pipe fitting insulation.

Surfacing Material

- In a distributive manner, a minimum of three samples were collected from each homogeneous area that was 1,000 square feet or less.
- A minimum of five samples were collected from each homogeneous area that was greater than 1,000 square feet but less than or equal to 5,000 square feet.
- A minimum of seven samples were collected from each homogeneous area that was greater than 5,000 square feet.

Miscellaneous Material

In a distributive manner as deemed sufficient by the Inspector. At least one sample was collected of each suspect miscellaneous material not presumed to contain asbestos.

Non-Suspect Materials

Fiberglass, wood, metal, structural concrete, or other generally recognized non-ACM were not sampled.

Asbestos bulk samples and chain-of-custody forms were delivered to NVL Laboratories (NVL) in Seattle, Washington for analysis. Each sample was analyzed by Polarized Light Microscopy (PLM) with dispersion staining referencing EPA Method 600/R-93/116. The detection limit for this type of analysis is approximately one percent (by visual estimate). Materials containing more than one percent asbestos are considered ACM.

3 RESULTS

The following section details WSU EH&S' asbestos sampling results. Asbestos sample locations are identified in Figure 1.

3.1 Visual Inspection

The Salmon Lab & General Storage Building is a single-story rectangular shaped wood-framed structure built slab-on-grade initially constructed in 1983. The building houses WSU's salmon laboratory which focus on the impact of pesticides and toxins on the salmon in Pacific Northwest surface waters.

Finishes are largely homogeneous. Wood framed partition walls are finished with gypsum wallboard. Offices and attached hallways have suspended ceiling tile grids and vinyl composite tile flooring and ceramic tile on walls and floors in the bathroom. Larger laboratory and storage spaces generally have plywood ceilings and painted concrete slab floors. HVAC systems mounted on or above the ceiling supply air to offices and lab spaces through metal ductwork.

3.2 Asbestos

No asbestos-containing materials were identified in this survey.

Photographs are provided in Appendix A. Appendix B summarizes asbestos sampling including sample identification, homogeneous material, and location of each sample. Quantities are estimated for order of magnitude information only and not intended for bidding purposes or fee estimates for construction or renovation projects.

4 CONCLUSIONS

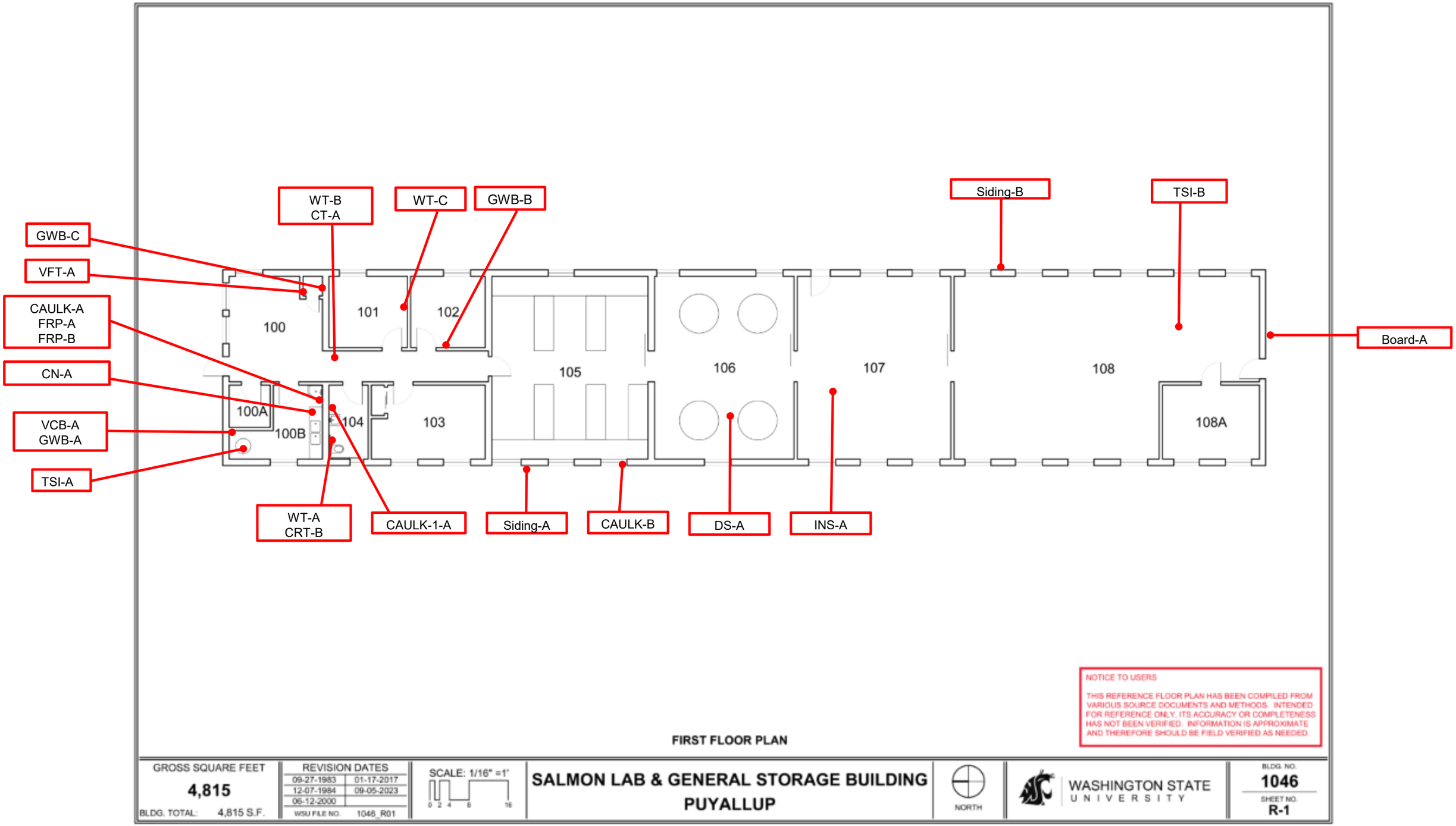
A copy of this report must be provided to any entity bidding on work at the Salmon Lab building. A copy of this report must also be on site during any demolition, renovation, and/or construction activities.

4.1 Asbestos-containing Materials

No regulated ACMs were identified in this survey. Construction, renovation and maintenance activities involving the disturbance or removal of ACM must be conducted in accordance with WAC 296-62-077. Asbestos abatement must be performed by a Washington State licensed asbestos abatement contractor.

Contractors should use caution during construction even after asbestos abatement activities, as concealed ACM that has not previously been evaluated for asbestos may be encountered. Inaccessible concealed spaces (e.g., wall and ceiling spaces enclosed by wallboard, internal components of energized systems etc. that have not been surveyed for ACM, and should be presumed to contain asbestos until destructive sampling is performed in those areas).

FIGURES



Legend

Asbestos sample location (red)

Figure 1
1ST Floor
Sample Locations

Salmon Lab & General Storage Building
Puyallup, Washington

APPENDIX A
Photographic Log

WASHINGTON STATE UNIVERSITY
Environmental Health and Safety

PHOTOGRAPHIC LOG

Good Faith Survey	Salmon Lab & General Storage Building	**Date:** February 2026

Photo No.
1

Location:
Building Exterior Walls

Description:
Plank siding



Photo No.
2

Location:
Lab 106

Description:
Gray Duct
Mastic/Sealant



WASHINGTON STATE UNIVERSITY
Environmental Health and Safety

PHOTOGRAPHIC LOG

Good Faith Survey	Salmon Lab & General Storage Building	**Date:** February 2026

Photo No. **3**

Location:
Throughout

Description:
Attic Insulation



Photo No. **4**

Location:
Room 100B
(Mop sink)

Description:
FRP Adhesive



WASHINGTON STATE UNIVERSITY
Environmental Health and Safety

PHOTOGRAPHIC LOG

Good Faith Survey	Salmon Lab & General Storage Building	**Date:** February 2026

Photo No.
5

Location:
Room 100

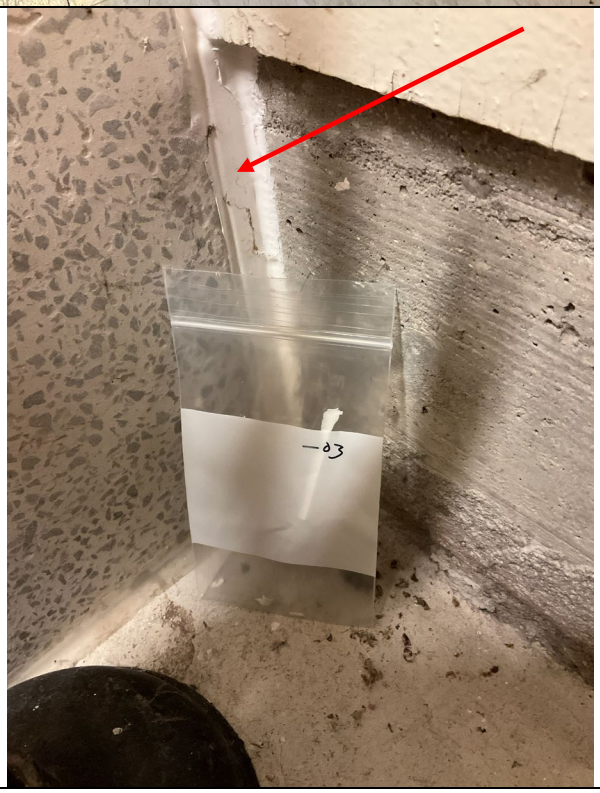
Description:
12” Vinyl Floor Tile with Gold Mastic



Photo No.
6

Location:
Room 100B
(Mop Sink)

Description:
White Caulk



APPENDIX B

Table Summary of Asbestos Sampling and Analytical Results

TABLE SUMMARY OF ASBESTOS SAMPLING AND ANALYTICAL RESULTS
AGRICULTURAL TECHNOLOGY BUILDING

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
CEILING FINISHES												
CT-A	Salmon Lab & General Storage	1046	Hallway	Ceiling tile	2'x4' white ceiling tiles	Misc	-	SF	-	ND	No	Throughout office area
FLOORING FINISHES												
CFT-1-A	Salmon Lab & General Storage	1046	112	Floor tile	12-inch gray flecked ceramic floor tile	Misc.	-	SF	-	ND	No	Throughout bathroom floor
VFT-A	Salmon Lab & General Storage	1046	100 Closet	Floor tile	Layer 1: Speckled gray/white 12x12 vinyl floor tile Layer 2: Gold Mastic	Misc.	-	SF	-	ND	No	Throughout office area except 100A, 100B, 104
WALL FINISHES												
GWB-A	Salmon Lab & General Storage	1046	100A	Wallboard system	Gypsum wallboard	Surf.	-	-	-	ND	No	Partition walls throughout office area
GWB-B	Salmon Lab & General Storage	1046	102	Wallboard system	Gypsum wallboard w/ joint compound	Surf.	-	-	-	Layer 1: ND Layer 2: ND	No	Throughout Offices
GWB-C	Salmon Lab & General Storage	1046	100 (closet)	Wallboard system	Gypsum wallboard w/joint compound	Surf.	-	-	-	Layer 1: ND Layer 2: ND	No	Throughout Offices
WT-A	Salmon Lab & General Storage	1046	104	Wall Texture	Orange Peel Texture	Surf.	11	SF	-	ND	No	104, 100 Hallway, Offices
WT-B	Salmon Lab & General Storage	1046	Hallway	Wall Texture	Orange Peel Texture	Surf.	-	-	-	ND	No	104, 100 Hallway, Offices
WT-C	Salmon Lab & General Storage	1046	101	Wall Texture	Orange Peel Texture	Surf.	-	-	-	ND	No	104, 100 Hallway, Offices
CRT-A	Salmon Lab & General Storage	1046	104	Grout	Grout on 6" ceramic wall tile	Surf.	90	SF	-	ND	No	104
CRT-B	Salmon Lab & General Storage	1046	104	Tile	6" Ceramic wall tile	Surf.	90	SF	-	ND	No	104

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
THERMAL SYSTEM INSULATION (TSI)												
TSI-A	Salmon Lab & General Storage	1046	100B	Water Tank	Yellow tank insulation	TSI	50	SF	-	ND	No	Hot water tank
TSI-B	Salmon Lab & General Storage	1046	108	Insulation	Pipe insulation	TSI	60	LF	-	ND	No	Throughout building
INS-A	Salmon Lab & General Storage	1046	Attic	Insulation	Attic insulation	TSI	-	-	-	ND	No	Throughout attic
MISCELLANEOUS FINISHES												
DS-A	Salmon Lab & General Storage	1046	106	Sealant	Gray duct sealant	Misc.	88	LF	-	ND	No	Metal ductwork joints throughout
FRP-A	Salmon Lab & General Storage	1046	100B	Adhesive	Gold adhesive	Misc.	12	SF	-	ND	No	100B and Fish Room 106A
FRP-B	Salmon Lab & General Storage	1046	106A	Panel	White FRP panel	Misc.	12	SF	-	ND	No	100B and Fish Room 106A
CN-A	Salmon Lab & General Storage	1046	100B	Countertop	White countertop	Misc.	6	SF	-	ND	No	100B
CAULK-A	Salmon Lab & General Storage	1046	100B (Mop Sink)	Caulking	White caulk	Misc.	30	LF	-	ND	No	Exterior of building
CAULK-B	Salmon Lab & General Storage	1046	Exterior Window	Caulking	White caulk	Misc.	-	-	-	ND	No	Exterior of building
VCB-A	Salmon Lab & General Storage	1046	100A	Cove base	Layer 1: 3” Gray cove base Layer 2: Gold mastic	Misc.	-	-	-	Layer 1: ND Layer 2: ND	No	Throughout office area
Siding-A	Salmon Lab & General Storage	1046	Exterior	Siding	Plank siding	Misc.	-	-	-	ND	No	Exterior of building
Siding-B	Salmon Lab & General Storage	1046	Exterior	Siding	Soffit Board	Misc.	-	-	-	ND	No	Exterior of building

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
Board-A	Salmon Lab & General Storage	1046	South Exterior Door	Composite Boards/Sheet	Door made out of composite boards/sheet	Misc.	48	SF	-	ND	No	South end of building

Notes:
ND = Asbestos was not detected in sample
Misc. = Miscellaneous material

APPENDIX C

Asbestos and Lead Chain-of-Custody Forms and Laboratory Analytical Results

March 23, 2026

INDUSTRIAL HYGIENE SERVICES
LABORATORY + MANAGEMENT + TRAINING

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2604240.00

Client Project: 2026-017837
Location: Puyallup Salmon Lab

Dear Mr. McKibbin,

Enclosed please find test results for the 23 sample(s) submitted to our laboratory for analysis on 3/16/2026.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Hilary Crumley, Manager Asbestos Laboratory

NVLAP
Testing
Lab Code: 102063-0

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

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Puyallup Salmon Lab

Batch #: 2604240.00
Client Project #: 2026-017837
Date Received: 3/16/2026
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116

Lab ID: 260025762 **Client Sample #: VCB-A**
Location: Puyallup Salmon Lab

Layer 1 of 2	**Description:** Gray rubbery material with paint and debris			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Paint, Rubber/Binder, Organic debris	Spider silk	1%	**None Detected ND**
Layer 2 of 2	**Description:** Tan brittle mastic with fibrous debris			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Fine particles	Cellulose	3%	**None Detected ND**

Lab ID: 260025763 **Client Sample #: TSI-A**
Location: Puyallup Salmon Lab

Layer 1 of 1	**Description:** Yellow fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler	Glass fibers	42%	**None Detected ND**

Lab ID: 260025764 **Client Sample #: Caulk-A**
Location: Puyallup Salmon Lab

Layer 1 of 2	**Description:** White soft elastic material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Caulking compound, Fine particles	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** White soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler	Cellulose	<1%	**None Detected ND**

Lab ID: 260025765 **Client Sample #: FRP-A**
Location: Puyallup Salmon Lab

Sampled by: Client
Analyzed by: Urooj Yousuf **Date:** 03/23/2026
Reviewed by: Hilary Crumley **Date:** 03/23/2026

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Puyallup Salmon Lab

Batch #: 2604240.00
Client Project #: 2026-017837
Date Received: 3/16/2026
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116

Layer 1 of 1 **Description:** Tan brittle mastic with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Mastic/Binder, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 260025766 **Client Sample #: FRP-B**

Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** White hard brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Wall Board	Glass fibers 4%	**None Detected ND**

Lab ID: 260025767 **Client Sample #: CN-A**

Location: Puyallup Salmon Lab

Layer 1 of 3 **Description:** White soft adhesive

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Adhesive/Binder	None Detected ND	**None Detected ND**

Layer 2 of 3 **Description:** Brown flat hard compressed fibrous material with white sheet surface

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Laminate/binder	Cellulose 18%	**None Detected ND**

Layer 3 of 3 **Description:** Tan adhesive

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Adhesive/Binder	Cellulose <1%	**None Detected ND**

Lab ID: 260025768 **Client Sample #: VFT-A**

Location: Puyallup Salmon Lab

Layer 1 of 2 **Description:** White vinyl tile

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine grains	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Urooj Yousuf **Date:** 03/23/2026
Reviewed by: Hilary Crumley **Date:** 03/23/2026

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Puyallup Salmon Lab

Batch #: 2604240.00
Client Project #: 2026-017837
Date Received: 3/16/2026
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116

Layer 2 of 2 **Description:** Thin layer tan brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 260025769 **Client Sample #: WT-A**

Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** Very thin layer white powdery material with paper and paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 13%	**None Detected ND**

Lab ID: 260025770 **Client Sample #: CRT-A**

Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** Beige crumbly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 260025771 **Client Sample #: CRT-B**

Location: Puyallup Salmon Lab

Layer 1 of 2 **Description:** Gray ceramic tile with white surface

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Ceramic/Binder	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** Beige crumbly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Putty Compound, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 260025772 **Client Sample #: WT-B**

Location: Puyallup Salmon Lab

Sampled by: Client
Analyzed by: Urooj Yousuf **Date:** 03/23/2026
Reviewed by: Hilary Crumley **Date:** 03/23/2026

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Puyallup Salmon Lab

Batch #: 2604240.00
Client Project #: 2026-017837
Date Received: 3/16/2026
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116

Layer 1 of 1 **Description:** Very thin layer white crumbly material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Calcareous binder, Calcareous particles	None Detected ND	**None Detected ND**

Lab ID: 260025773 **Client Sample #: WT-C**

Location: Puyallup Salmon Lab

Layer 1 of 2 **Description:** Very thin layer white material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Calcareous binder, Calcareous particles	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** White chalky material with paper

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Gypsum/Binder, Fine particles	Cellulose 14%	**None Detected ND**
	Glass fibers <1%	

Lab ID: 260025774 **Client Sample #: GWB-A**

Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** White chalky material with paper

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Gypsum/Binder, Fine particles	Cellulose 23%	**None Detected ND**
	Glass fibers 4%	

Lab ID: 260025775 **Client Sample #: TSI-B**

Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** Black foamy material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Synthetic foam	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Urooj Yousuf **Date:** 03/23/2026
Reviewed by: Hilary Crumley **Date:** 03/23/2026

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Puyallup Salmon Lab

Batch #: 2604240.00
Client Project #: 2026-017837
Date Received: 3/16/2026
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116

Lab ID: 260025776 **Client Sample #: INS-A**
Location: Puyallup Salmon Lab

Layer 1 of 2	**Description:** Brown fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Glass beads	Glass fibers 68%	**None Detected ND**
Layer 2 of 2	**Description:** White fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Glass beads	Glass fibers 34%	**None Detected ND**

Lab ID: 260025777 **Client Sample #: DS-A**
Location: Puyallup Salmon Lab

Layer 1 of 1	**Description:** Gary soft material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine particles	Cellulose <1%	**None Detected ND**

Lab ID: 260025778 **Client Sample #: GWB-B**
Location: Puyallup Salmon Lab
Comments: No gypsum present.

Layer 1 of 1	**Description:** White compacted powdery material with paint		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Paint, Calcareous binder, Calcareous particles	Cellulose <1%	**None Detected ND**

Lab ID: 260025779 **Client Sample #: GWB-C**
Location: Puyallup Salmon Lab
Comments: No gypsum present.

Layer 1 of 1	**Description:** White crumbly compacted powdery material with paint		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Paint, Calcareous binder, Calcareous particles	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Urooj Yousuf **Date:** 03/23/2026
Reviewed by: Hilary Crumley **Date:** 03/23/2026

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Puyallup Salmon Lab

Batch #: 2604240.00
Client Project #: 2026-017837
Date Received: 3/16/2026
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116

Lab ID: 260025780 **Client Sample #: Siding-A**
Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** Beige compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 28%	**None Detected ND**

Lab ID: 260025781 **Client Sample #: Siding-B**
Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** Beige compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 16%	**None Detected ND**

Lab ID: 260025782 **Client Sample #: Caulk-B**
Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** White soft material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Caulking compound, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 260025783 **Client Sample #: Board-A**
Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** Beige compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 46%	**None Detected ND**

Lab ID: 260025812 **Client Sample #: CT-A**
Location: Puyallup Salmon Lab

Layer 1 of 1 **Description:** Beige compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 64%	**None Detected ND**

Sampled by: Client
Analyzed by: Urooj Yousuf **Date:** 03/23/2026
Reviewed by: Hilary Crumley **Date:** 03/23/2026

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Puyallup Salmon Lab

Batch #: 2604240.00
Client Project #: 2026-017837
Date Received: 3/16/2026
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116

	Perlite	Glass fibers	23%

Sampled by: Client
Analyzed by: Urooj Yousuf **Date:** 03/23/2026
Reviewed by: Hilary Crumley **Date:** 03/23/2026

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

Company	Washington State University EH&S	**NVL Batch Number**	**2604240.00**
Address	PO Box 641172	**TAT**	5 Days **AH** No
	Pullman, WA 99164-1172	**Rush TAT**	
Project Manager	Mr. Matt McKibbin	**Due Date**	3/23/2026 **Time** 8:50 AM
Phone	(509) 335-3041	**Email**	mrmckibbin@wsu.edu
Direct	(509) 335-5311	**Fax**	(509) 730-5548

Project Name/Number: 2026-017837 **Project Location:** Puyallup Salmon Lab

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 23 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	260025762	VCB-A		A
2	260025763	TSI-A		A
3	260025764	Caulk-A		A
4	260025765	FRP-A		A
5	260025766	FRP-B		A
6	260025767	CN-A		A
7	260025768	VFT-A		A
8	260025769	WT-A		A
9	260025770	CRT-A		A
10	260025771	CRT-B		A
11	260025772	WT-B		A
12	260025773	WT-C		A
13	260025774	GWB-A		A
14	260025775	TSI-B		A
15	260025776	INS-A		A
16	260025777	DS-A		A
17	260025778	GWB-B		A
18	260025779	GWB-C		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Frank Larkin		NVL	3/16/26	0850
Analyzed by	Urooj Yousuf		NVL	3/23/26	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 3/16/2026
Time: 10:09 AM
Entered By: Frank Larkin

ASBESTOS LABORATORY SERVICES

Company	Washington State University EH&S	**NVL Batch Number**	**2604240.00**
Address	PO Box 641172	**TAT**	5 Days **AH** No
	Pullman, WA 99164-1172	**Rush TAT**	
Project Manager	Mr. Matt McKibbin	**Due Date**	3/23/2026 **Time** 8:50 AM
Phone	(509) 335-3041	**Email**	mrmckibbin@wsu.edu
Direct	(509) 335-5311	**Fax**	(509) 730-5548

Project Name/Number: 2026-017837 **Project Location:** Puyallup Salmon Lab

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 23 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	260025780	Siding-A		A
20	260025781	Siding-B		A
21	260025782	Caulk-B		A
22	260025783	Board-A		A
23	260025812	CT-A		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Frank Larkin		NVL	3/16/26	0850
Analyzed by	Urooj Yousuf		NVL	3/23/26	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 3/16/2026
Time: 10:09 AM
Entered By: Frank Larkin

2604240

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

Turn Around Time
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 24 Hours
- ❑ 2 Days
- ❑ 3 Days
- ❑ 4 Days
- ☑ 5 Days
- ❑ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-3041

Project Manager: Matthew McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu
Fax: ( ) -

Project Name/Number: 2026-017837
Project Location: Puyallup Salmon Lab

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email

Total Number of Samples 23

	Sample ID	Description	A/R
1	VCB-A		
2	TSI-A		
3	CAULK-A		
4	FRP-A		
5	FRP-B		
6	CN-A		
7	VFT-A		
8	WT-A		
9	CRT-A		
10	CRT-B		
11	WT-B		
12	WT-C		
13	GWB-A		
14	TSI-B		
15	INS-A		

	Print Name	Signature	Company	Date	Time
Sampled by	Ryan Buford	RB	WSU EH&S	3/10/26	1200
Relinquish by	Matthew McKibbin	MattMcK	WSU EH&S	3/12/26	Fedex

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Frank Lathrop	FL	NVL	3/16/26	0850 FE
Analyzed by					
Called by					
Faxed/Email by					

2604240

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

Turn Around Time
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 24 Hours
- ❑ 2 Days
- ❑ 3 Days
- ❑ 4 Days
- ☑ 5 Days
- ❑ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-3041

Project Manager: Matthew McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu
Fax: ( ) -

Project Name/Number: 2026-017837
Project Location: Puyallup - Salmon Lab

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email

Total Number of Samples 23

	Sample ID	Description	A/R
1	DS-A		
2	GWB-B		
3	GWB-C		
4	Siding-A		
5	Siding-B		
6	Caulk-B		
7	Board-A		
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Ryan Buford		WSU EH&S	3/10/26	1200
Relinquish by	Matthew McKibbin		WSU EH&S	3/12/26	Fedex

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Frank Lathrop		NVL	3/16/26	0850 Fe
Analyzed by					
Called by					
Faxed/Email by					

Kelly Au Vu

From: McKibbin, Matthew Robert <mrmckibbin@wsu.edu>
Sent: Monday, March 16, 2026 10:36 AM
To: Client Services
Subject: RE: Extra Sample with Project 2026-017837

Follow Up Flag: Follow up
Flag Status: Completed

Please log on the CoC and analyze with the rest. Thank you!

Matt McKibbin
Industrial Hygienist
Environmental Health and Safety
Washington State University
Office: 509-335-5311
Mobile: 509-730-5548
Email: mrmckibbin@wsu.edu
ehs.wsu.edu

From: Client Services <ClientServices@nvllabs.com>
Sent: Monday, March 16, 2026 10:22 AM
To: McKibbin, Matthew Robert <mrmckibbin@wsu.edu>
Subject: Extra Sample with Project 2026-017837

[EXTERNAL EMAIL]

Good morning,
We received samples with the attached COC this morning by FedEx. There's one extra sample with the batch, labeled CT-A, which is not on the COC. We will process the rest of the batch and set the extra aside for now, please advise on whether we should analyze it or dispose of it. Thank you!
Thanks & Regards,

Client Services

NVL
INDUSTRIAL HYGIENE SERVICES
LABORATORY + MANAGEMENT + TRAINING

www.nvllabs.com
Your feedback is very important to us!

ph: 206.547.0100 | fax: 206.634.1936

APPENDIX D

Laboratory Accreditations and Certificates

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101882-0

Environmental Hazards Services, L.L.C.

North Chesterfield, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique on ISO/IEC 17025).

2026-01-01 through 2026-12-31

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary
Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Environmental Hazards Services, L.L.C.
7469 Whitepine Road
North Chesterfield, VA 23237-2261
Ms. Julie Dickerson
Phone: 804-275-4788 Fax: 804-275-4907
Email: jdickerson@leadlab.com
www.leadlab.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101882-0**

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX E

Building Inspector Training Certificates

KYRON

Certificate of Completion

Ryan Buford

has successfully completed

4-Hr AHERA Certified Building Inspector Refresher Training

In compliance with TSCA Title II AHERA 40 CFR Part 763

as approved by the State of Missouri

Kyron Environmental Accreditation #MO-129

Date of Training & Exam: April 24, 2025 Via Zoom

Certificate # BIR20250424-03

Timothy S. Lee

Tim Lee, Instructor

Expires: 4/24/2026

PO Box 19214 | Spokane, WA 99219 | **Phone** 509.252.8880 | **Web** Kyronehs.com

WASHINGTON STATE UNIVERSITY
Environmental Health and Safety

Good Faith Survey
Materials Engineering Lab (#1068)
Pot in Pot Shed (#1073)
Greenhouses (#1043, 1044, 1067, 1069, 1070, 1071, 1074, 1075)
Washington State University
Puyallup, Washington



Map data: Google

October 13, 2026

Prepared by:

Matthew McKibbin
WSU Environmental Health and Safety
AHERA Building Inspector # BIR20260422-05 (exp. April 22, 2027)

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2.1 ASBESTOS BULK SAMPLING 1
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4.1 ASBESTOS-CONTAINING MATERIALS 3

FIGURES

Figure 1– Sample Locations

APPENDICES

Appendix A – Photographic Log
Appendix B – Table Summary of Asbestos Sampling and Analytical Results
Appendix C – Asbestos Chain of Custody Forms and Laboratory Analytical Results
Appendix D – Laboratory Accreditations and Certificates
Appendix E – Building Inspector Training Certificate

1 INTRODUCTION

Washington State University (WSU) Environmental Health and Safety (EH&S) conducted a "Good Faith" asbestos and limited lead in painted coatings survey of ten structures (Project area equals WSU building #'s 1043, 1044, 1067, 1068, 1069, 1070, 1071, 1073, 1074, and 1075) in the proposed footprint of the new aquaculture facility in August of 2026. Structures are located at 2606 West Pioneer in Puyallup, Washington. This survey was conducted to meet Washington Administrative Code (WAC) 296-62-07721 Good Faith survey requirements for construction, renovation, demolition, and maintenance projects in the Project Area with the following limitations.

1.1 Limitations of the Assessment

The conclusions herein are professional opinions based solely upon visual site observations and interpretations of analytical data as described in this report. The survey excluded areas of the building which were inaccessible or would have caused damage to the building if sampled. Typical construction techniques can render building portions inaccessible. As a result, additional asbestos-containing materials (ACM) may be present in inaccessible areas (e.g., wall cavities, within energized systems as well as sub grade materials). Suspect regulated materials within inaccessible areas should be presumed to contain asbestos until characterized.

The opinions presented herein apply to the site conditions existing at the time of the investigation and interpretation of current regulations pertaining to asbestos and lead. Opinions and recommendations provided herein may not apply to future site conditions. Regulatory requirements in effect at the time of the work should be verified prior to any work impacting regulated materials. This report represents the findings of this survey only, and is not intended to establish scope or contractual terms supporting regulated material disturbance, abatement, or disposal.

2 METHODOLOGY

This good faith survey was conducted by Matthew McKibbin with WSU EH&S, AHERA Building Inspector # BIR20260422-05 (exp. April 22, 2027) in August of 2026. The asbestos survey was performed referencing the "Good Faith" survey requirements outlined in WAC 296-62-07721.

To identify suspect ACM, EH&S walked through accessible locations in the Project Area, noting building materials and construction. Not all concealed areas or sub-surface suspect materials may have been surveyed (see Limiting Conditions in Section 1.1). Approximate suspect material quantities were estimated based upon field observations, measurements, and scaled building drawings provided by WSU Facilities Services. Quantities given are intended for order of magnitude information only and must be field verified to support project bidding or estimates.

2.1 Asbestos Bulk Sampling

Suspect ACM was grouped into homogeneous sampling areas (HSA) and categorized referencing 40 CFR 763, as thermal systems insulation (TSI), surfacing material, or miscellaneous material. The sampling plan included, at a minimum, the collection and analysis of samples as follows:

<u>Thermal System Insulation</u>

- In a distributive manner, a minimum of three samples of each HSA that was not presumed to contain asbestos.
- At least one bulk sample from each homogeneous area of patched TSI if the patch was less than 6 square feet.
- In a manner sufficient to determine whether the material is ACM, samples were collected from plaster/mudded pipe fitting insulation.

Surfacing Material

- In a distributive manner, a minimum of three samples were collected from each homogeneous area that was 1,000 square feet or less.
- A minimum of five samples were collected from each homogeneous area that was greater than 1,000 square feet but less than or equal to 5,000 square feet.
- A minimum of seven samples were collected from each homogeneous area that was greater than 5,000 square feet.

Miscellaneous Material

In a distributive manner as deemed sufficient by the Inspector. At least one sample was collected of each suspect miscellaneous material not presumed to contain asbestos.

Non-Suspect Materials

Fiberglass, wood, metal, structural concrete, or other generally recognized non-ACM were not sampled.

Asbestos bulk samples and chain-of-custody forms were delivered to EHS Laboratories (EHS) in Richmond, Virginia for analysis. Each sample was analyzed by Polarized Light Microscopy (PLM) with dispersion staining referencing EPA Method 600/R-93/116. The detection limit for this type of analysis is approximately one percent (by visual estimate). Materials containing more than one percent asbestos are considered ACM.

3 RESULTS

The following section details WSU EH&S' asbestos sampling results. Asbestos sample locations are identified in Figure 1.

3.1 Visual Inspection

Screened greenhouses (WSU Building #'s 1043, 1044, 1067, 1069, 1070, 1071, 1074, 1075) are constructed of non-suspect wood, metal, fiberglass and other synthetic materials.

The Materials Engineering Laboratory (#1068) is a single-story rectangular shaped wood-framed structure built slab-on-grade initially and constructed in 2003. The building houses materials engineering research and all suspect materials appear to be for building materials research. The interior of the building is finished with plywood walls/ceilings while the concrete slab was left unfinished.

The Pot in Pot Shed (#1073) is a basic wood framed shed with wood siding and a metal roof. The shed is supported by pre-cast concrete piers and used for material storage. No suspect asbestos materials were identified.

3.2 Asbestos

No asbestos-containing materials were identified in this survey.

Photographs are provided in Appendix A. Appendix B summarizes asbestos sampling including sample identification, homogeneous material, and location of each sample. Quantities are estimated for order of magnitude information only and not intended for bidding purposes or fee estimates for construction or renovation projects.

4

4 CONCLUSIONS

A copy of this report must be provided to any entity bidding on work at WSU building #'s 1043, 1044, 1067, 1068, 1069, 1070, 1071, 1073, 1074, and 1075. A copy of this report must also be on site during any demolition, renovation, and/or construction activities.

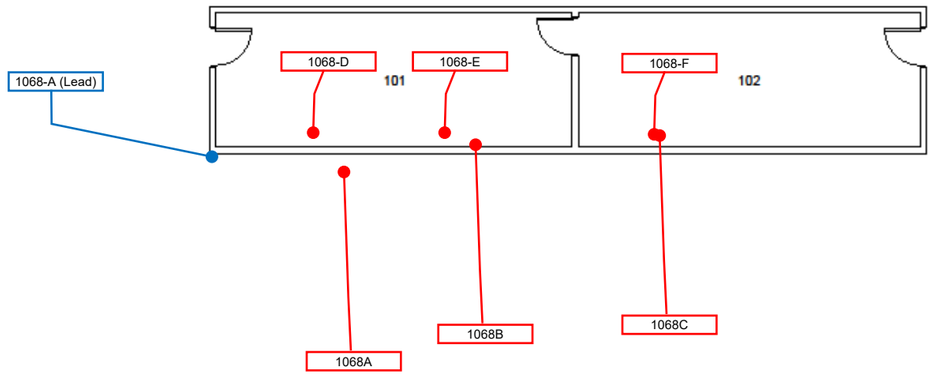
4.1 Asbestos-containing Materials

No regulated ACMs were identified in this survey. Construction, renovation and maintenance activities involving the disturbance or removal of ACM must be conducted in accordance with WAC 296-62-077. Asbestos abatement must be performed by a Washington State licensed asbestos abatement contractor.

Contractors should use caution during construction even after asbestos abatement activities, as concealed ACM that has not previously been evaluated for asbestos may be encountered. Inaccessible concealed spaces (e.g., wall and ceiling spaces enclosed by wallboard, internal components of energized systems etc. that have not been surveyed for ACM, and should be presumed to contain asbestos until destructive sampling is performed in those areas).

FIGURES

submit your markups to WashingtonStateUniversity@redeyedms.com



NOTICE TO USERS

THIS REFERENCE FLOOR PLAN HAS BEEN COMPILED FROM VARIOUS SOURCE DOCUMENTS AND METHODS. INTENDED FOR REFERENCE ONLY, ITS ACCURACY OR COMPLETENESS HAS NOT BEEN VERIFIED. INFORMATION IS APPROXIMATE AND THEREFORE SHOULD BE FIELD VERIFIED AS NEEDED.

FLOOR PLAN

GROSS SQUARE FEET	REVISION DATES		SCALE: 1" =10'	MATERIALS ENGINEERING LAB PUYALLUP	NORTH	WASHINGTON STATE UNIVERSITY	BLDG. NO.
983	10-22-18	-	0 5 10				1068
BLDG. TOTAL: 983 S.F.	-	-					SHEET NO. R-1
	-	-					
	WSU FILE NO.	1068_R01					

Legend

= Asbestos sample location (red)

= Lead paint chip sample location (blue)

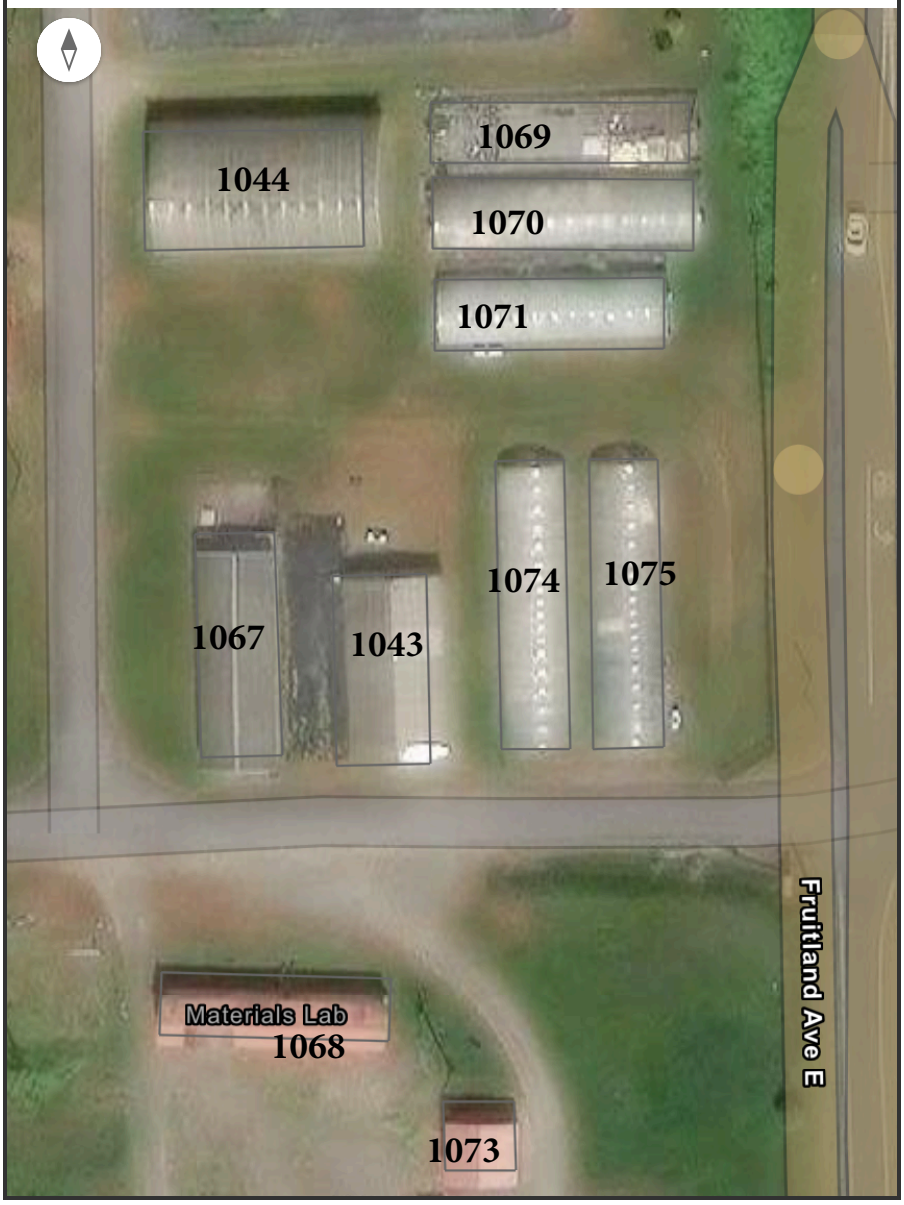
N

Not to scale

Figure 1
Materials Engineering Lab
Sample Locations

WSU- REC
Puyallup, Washington

Aquaculture Building Footprint



Esri Community Maps Contributors | WSU Facilities Services GIS | Microsoft | Vantor | WA State Parks GIS | © OpenStreetMap, Microsoft | Esri | TomTom | Garmin | SafeGraph | GeoTechnologies, Inc | METI/NASA | USGS | Bureau of Land Management | EPA | NPS | US Census Bureau | USDA | USFWS

States

Washington | Other

WSU Facilities

APPENDIX A
Photographic Log

WASHINGTON STATE UNIVERSITY
Environmental Health and Safety

PHOTOGRAPHIC LOG

Good Faith Survey	New Aquaculture Building	**Date:** August 2026

Photo No.
1

Location:
Materials Engineering Lab (#1068)

Description:
Exterior view of building. Architectural shingles and stucco panels used for experimentation were found not to contain asbestos. Lead was not detected in the white exterior paint shown.



Photo No.
2

Location:
Materials Engineering Lab (#1068)

Description:
Interior view of building



WASHINGTON STATE UNIVERSITY
Environmental Health and Safety

PHOTOGRAPHIC LOG

Good Faith Survey	New Aquaculture Building	**Date:** August 2026

Photo No. **3**

Location:
Screen house (#1044)
Hoop house (1071) to right

Description:
No suspect materials were identified. West elevations pictured.



Photo No. **4**

Location:
From left to right:
Hoop house (1075)
Hoop house (1074)
Screen house (1043)
Screen house (1067)_

Description:
No suspect materials were identified in the pictured hoop/screen houses. North and west elevations pictured.



WASHINGTON STATE UNIVERSITY
Environmental Health and Safety

PHOTOGRAPHIC LOG

Good Faith Survey	New Aquaculture Building	**Date:** August 2026

Photo No. **5**

Location:
Pot in Pot Shed (#1073)

Description:
No suspect materials were identified.



Photo No. **6**

Location:
Screen house (1067)
Screen house (1043) in center of frame

Description:
South and west elevations of buildings facing north



APPENDIX B

Table Summary of Asbestos Sampling and Analytical Results

TABLE1
SUMMARY OF ASBESTOS SAMPLING AND ANALYTICAL RESULTS
NEW AQUACULTURE BUILDING CONSTRUCTION

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
Materials Engineering Lab (1068)												
1068-A	Materials Eng. Lab	1068	South exterior	Stucco	Stucco board (research panel)	Surf.	100	SF	-	ND	No	South exterior wall
1068-B	Materials Eng. Lab	1068	South exterior	Stucco	Stucco board (research panel)	Surf.	100	SF	-	ND	No	South exterior wall
1068-C	Materials Eng. Lab	1068	South exterior	Stucco	Stucco board (research panel)	Surf.	100	SF	-	ND	No	South exterior wall
1068-D	Materials Eng. Lab	1068	South exterior	Roofing	Architectural roofing shingle with paper (gray)	Misc.	30	SF	-	ND	No	South roof
1068-E	Materials Eng. Lab	1068	South exterior	Roofing	Architectural roofing shingle with paper (orange)	Misc.	30	SF	-	ND	No	South roof
1068-F	Materials Eng. Lab	1068	South interior wall	Wallboard	Gypsum wallboard (unfinished)	Surf.	10	SF	-	ND	No	Main room near stucco

Notes:
ND = Asbestos was not detected in sample
Misc. = Miscellaneous material

TABLE 2
SUMMARY OF LEAD PAINT SAMPLING
NEW AQUACULTURE BUILDING CONSTRUCTION

Sample #	Building Name	Building #	Sample Location (Room #)	Location Description	Paint Color	Substrate	Component	Result (mg/Kg)	Lead-Containing
1068-A	Materials Eng. Lab	1068	North Wall	Exterior	White/clear	Wood	Siding	<40	No

Notes:
a) All results are reported in milligrams of lead per kilogram (mg/kg) by a FAAS analysis.
b) < indicates sample results below method detection limit

APPENDIX C

Asbestos and Lead Chain-of-Custody Forms and Laboratory Analytical Results

EHS Laboratories
ENVIRONMENTAL HAZARDS SERVICES, LLC
7469 Whitepine Rd
North Chesterfield, VA 23237
Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 26-10-00966

Client: Washington State University - Pullman
P.O. BOX 641172
Pullman, WA 99164

Received Date: 10/06/2026
Analyzed Date: 10/06/2026
Reported Date: 10/06/2026

Project/Test Address: Puyallup; Pullman, WA

Client Number: 49-3308

Fax Number: 509-335-4442

Laboratory Results

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
26-10-00966-001	1068-A		Gray Granular; Homogeneous	NAD	100% Non-Fibrous
26-10-00966-002	1068-B		Gray Granular; Homogeneous	NAD	100% Non-Fibrous
26-10-00966-003	1068-C		Gray Granular; Homogeneous	NAD	100% Non-Fibrous
26-10-00966-004	1068-D		Brown/Black/Orange/Green Aggregate; Black Tar-Like Fibrous; Inhomogeneous	NAD	5% Cellulose 15% Fibrous Glass 80% Non-Fibrous
26-10-00966-005	1068-E		Brown/Black/Orange/Green Aggregate; Black Tar-Like Fibrous; Inhomogeneous	NAD	5% Cellulose 15% Fibrous Glass 80% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 26-10-00966

Project/Test Address: Puyallup; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
26-10-00966-006	1068-F		Green/Brown Fibrous; Gray Chalky; Inhomogeneous	NAD	15% Cellulose 85% Non-Fibrous

QC Sample: 101-M22017-1

QC Blank: Sodium Chloride, ACS, 99.0%

Reporting Limit: 1% Asbestos

Method: App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116

Analyst: Meredith Outlaw

Reviewed By Authorized Signatory: Melissa Kanode

Melissa Kanode
QA/QC Clerk

These results are based on a comparative visual estimate. The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection. . NVLAP #101882-0 VELAP 460172

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.

LEGEND: NAD = no asbestos detected

EHS Laboratories™

Environmental Hazards Services, LLC

www.leadlab.com
(800)347-4010
(804)275-4907 (fax)

7469 Whitepine Rd
Richmond, VA
23237

Asbestos Chain-of-Custody

26-10-00966

Due Date:
10/07/2026
(Wednesday)
AE

6 PLM

Company Name: Washington State University Health and Safety Address: P.O. Box 641172 City/State/Zip: Pullman, WA 99164

Phone: (509) 335-5604 Fax: ( ) E-mail: WSU List Acct. Number: 49-3308 D

Project Name / Testing Address: Puyallup City/State (Required): Pullman, WA

Collected by: Matthew McKibbin Purchase Order Number: 2594-2025

Turn Around Times : *If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.*

✓ 1 - Day _____ 2 - Day _____ 3 - Day _____ Same Day (Must Call Ahead) _____ Weekend (Must Call Ahead)

No.	Client Sample ID	Date Collected	ASBESTOS							AIR					COMMENTS
			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM Chatfield (Bulk)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	1068-A		✓												Stucco board
2	1068-B		✓												↓
3	1068-C		✓												
4	1068-D		✓												Arch shingles Gray
5	1068-E		✓												
6	1068-F		✓												Wallboard - Gyp
7															
8															
9															
10															

Released by: Matt McKibbin	Signature:	Date/Time: 10/5/26 1200 Fedex
Received by: J Dannaud	Signature:	Date/Time: 10/6/26 12:16pm

EHS Laboratories
ENVIRONMENTAL HAZARDS SERVICES, LLC
7469 Whitepine Rd
North Chesterfield, VA 23237
Telephone: 800.347.4010

Lead Paint Chip Analysis Report

Report Number: 26-10-00970

Client: Washington State University - Pullman
P.O. BOX 641172
Pullman, WA 99164

Received Date: 10/06/2026
Analyzed Date: 10/07/2026
Reported Date: 10/07/2026

Project/Test Address: Puyallup; Pullman, WA
Collection Date: 08/18/2026

Client Number: 49-3308

Laboratory Results

Fax Number: 509-335-4442

Lab Sample Number	Client Sample Number	Collection Location	Pb (ug/g) ppm	% Pb by Wt.	Narrative ID
26-10-00970-001	1040-A	WHITE EXT PAINT	540	0.054	
26-10-00970-002	1040-B	WHITE INT PAINT	<36	<0.0036	
26-10-00970-003	1068-A	WOOD GLAZE/COATING	<40	<0.0040	

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 26-10-00970

Project/Test Address: Puyallup; Pullman, WA

Lab Sample Number	Client Sample Number	Collection Location	Pb (ug/g) ppm	% Pb by Wt.	Narrative ID

Preparation Method: ASTM E-1979-17

Analysis Method: EPA SW846 7000B

Reviewed By Authorized Signatory: Melissa Kanode

Melissa Kanode
QA/QC Clerk

The Reporting Limit (RL) for samples prepared by ASTM E-1979-17 is 10.0 ug Total Pb. The RL for samples prepared by EPA SW846 3050B is 25.0 ug Total Pb. Paint chip area and results are calculated based on area measurements determined by the client. All internal quality control requirements associated with this batch were met, unless otherwise noted.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Sample location, description, area, etc., was provided by the client. Results reported above in mg/cm3 are calculated based on area supplied by client. Measurement Uncertainty values are available upon request. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C.

ELLAP Accredtitation through AIHA LAP, LLC (100420), NY ELAP #11714.

LEGEND	Pb= lead	ug = microgram	ppm = parts per million
	ug/g = micrograms per gram	Wt. = weight	

EHS Laboratories™

Environmental Hazards Services, LLC

26-10-00970

Due Date:
10/07/2026
(Wednesday)
AE

Washington State University EH&S | PO Box 641172 | Pullman, WA 99164-3308

509 335-3401 | WSU List

Project Name / Testing Address: Puyallup
Matthew McKibbin

City/State (Required): Pullman, WA

Job # 2594-2025

*** Do wipe samples submitted meet ASTM E1792 requirements?** Yes ☐ No ☐

Turn Around Time (TAT)	Sample Type	Abbreviations	Surface Type for Dust Wipe
☑ 1-Day ☐ 3-Day ☐ Same Day (Must Call Ahead) ☐ Weekend (Must Call Ahead) If no TAT is specified, sample(s) will be processed and charged as 3-Day TAT.	Paint Chip Lead Only		

No.	Sample Type	Date Collected	Client Sample ID	Collection Location	Surface Type	Area	Paint Chip				Volume	Comments
						ft²						
1	PC	8-18-26	1040-A									White Ext paint
2	PC	8-18-26	1040-B									White Int paint
3	PC	8-18-26	1068-A									Wood glaze/coating
4												
5												
6												
7												
8												
9												
10												

Released: Matthew McKibbin — 10/5/2026 1200 Fedex
Received: J Darnall — 10/6/26 12:21pm

APPENDIX D

Laboratory Accreditations and Certificates

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101882-0

Environmental Hazards Services, L.L.C.

North Chesterfield, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique on ISO/IEC 17025).

2026-01-01 through 2026-12-31

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary
Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Environmental Hazards Services, L.L.C.
7469 Whitepine Road
North Chesterfield, VA 23237-2261
Ms. Julie Dickerson
Phone: 804-275-4788 Fax: 804-275-4907
Email: jdickerson@leadlab.com
www.leadlab.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101882-0**

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX E

Building Inspector Training Certificates

KYRON

Certificate of Completion

Matthew McKibbin

has successfully completed

4-Hr AHERA Certified Building Inspector Refresher Training

In compliance with TSCA Title II AHERA 40 CFR Part 763

as approved by the State of Missouri

Kyron Environmental Accreditation #MO-129

Date of Training & Exam: April 22, 2026 in Spokane, WA

Certificate # BIR20260422-05

Timothy S. Lee

Tim Lee, Instructor

Expires: 4/22/2027

PO Box 19214 | Spokane, WA 99219 | **Phone** 509.252.8880 | **Web** Kyronehs.com

PART 1 GENERAL

1.01 SUMMARY

A. Contractor shall perform the entire Work in accordance with the Contract Documents.

B. Without limiting the requirements of the Contract Documents, the Work of the Contract can be summarized as follows:

1. The Aquaculture Facilities at WSU Pullman and Puyallup are intended to advance sustainable aquaculture, improving aquatic animal health (including salmon), and protecting aquatic ecosystems. Central to the program is the existing research laboratories in Pullman and Puyallup that are dedicated to aquatic animal health and provide unique capacity for conducting research on infectious disease, pathology, stormwater pollution, and environmental factors impacting salmon and other aquatic animals. The project proposes renovation and/or new construction at WSU's flagship Pullman campus and at the Puyallup Research and Extension Center.

C. Expected Owner-supplied Contractor-installed Work: None

D. Expected Work by Owner: None

1.02 SCHEDULE OF ALTERNATES - Not Used

1.03 SCHEDULE OF ALLOWANCES – Not Used

1.04 SCHEDULE OF UNIT PRICES – Not Used

1.05 GENERAL INFORMATION

A. Owner and Owner's Designated Representative:

1. Owner: Board of Regents
Washington State University
Pullman, WA 99164-1045

2. Owner's Designated Representative:

a. All Owner capital projects are administered by the Department of Facilities Services, Capital. Project specific designated representatives are listed within the Agreement.

1.06 SPECIAL CONDITIONS

A. Site Access:

1. The Design-Build Team will coordinate site access at each location with campus personnel. The Puyallup campus has a security gate at the main entrances. Access before or after normal hours will be coordinated with Puyallup campus security.

B. Schedule and Phasing:

1. The Design-Build Team will work with WSU to develop the most efficient and effective schedule and phasing for the project. The Design-Build Team should consider cost efficiency, mobilization impacts, long lead items, current research activities, existing building occupants and other relevant issues to determine the schedule and phasing across both the Pullman and Puyallup campuses.

C. Owner Occupancy:

1. Buildings identified for renovation are currently occupied with existing research underway. Eastlick Hall also contains classrooms that will be in use during the project. All work will need to coordinate carefully with existing occupants to minimize disruption to activities within the building.

D. Hazardous Material:

1. See Good Faith Surveys for relevant building information. Three propane tanks are installed on the anticipated site for the new building that currently support the existing greenhouses.

END OF SECTION 01 11 00

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes the administrative and procedural requirements for executing changes in the Work. This Section is subject to and governed by the Agreement and General Conditions. In the event of any conflict, the Agreement and General Conditions will have a higher precedence as established in the General Conditions.

1.02 SUBMITTALS

A. Contractor shall submit a breakdown if its actual design wage rates.

B. Contractor shall submit a breakdown of its actual wage rates prior to commencement of construction activities. The breakdown must show:

1. Basic wage rate (Based on L&I Intent to Pay Prevailing Wages);
2. Fringe Package (Based on L&I Intent to Pay Prevailing Wages);
3. FUI (Federal Unemployment Insurance);
4. FICA (Federal Insurance Compensation Act);
5. SUI (State Unemployment Compensation Act);
6. Medicare; and
7. WC (Workers Compensation).

C. Contractor shall submit detailed supporting documentation to verify the above rates, if requested by Owner. All such rates shall be subject to audit.

D. Contractor shall submit prior to commencement of construction activities a list of all equipment that it anticipates will be used on the Project and the actual operating cost of each piece of equipment. The General Conditions describe allowable equipment charges. All costs shall be subject to audit.

1.03 CONTRACT CHANGE PROPOSAL PROCEDURES

A. Contractor shall maintain an Issues Log/ CCP Log as described in the General Conditions:

1. The action status shall indicate which party is currently responsible and when it is appropriate to submit a CCP to Owner. Contractor shall submit a Contract Change Proposal (CCP) with Substantiating Documentation, as described in subsection C below, to Owner within 7 Days of this action status change.
2. Upon final agreement and authorization by Owner a CCP may be incorporated into the Contract via Change Order and shall be reflected on the Issues Log.

B. Direction to perform Work:

1. Owner may directly order Work by a written Work Directive (WD). WDs may be unilateral or bilateral as described in the General Conditions and may be issued on a fixed price or on a "cost-not-to-exceed" basis. The WD may include the following:

   a. A detailed description of the proposed change, products, and location of modification to the Work;

   b. Supplementary or revised Drawings and/or Specifications; and

   c. Projected time for making the change and a statement as to whether overtime work is, or is not, acceptable.

C. Substantiating Documentation required with all CCPs:

1. Contractor shall provide back-up documentation required to substantiate any proposed change in the following format:

   a. CCP narrative, including:

      1) Description of proposed change. In order to allow for efficient review of a change proposal Contractor shall provide enough narrative to the line item breakdown to allow Owner to properly assess that the change is fair and reasonable;

      2) Cause of or reason for making change with a statement of why proposed change is not covered by Contract Documents

      3) Both credited and additive elements relating to a change in Contract Sum and/or Contract Time;

      4) A specific period of time during which Contractor's pricing will be considered valid;

      5) Any schedule considerations that may trigger further impact to the Contract Time if acceptance of the proposed change if delayed beyond a specific date; and

      6) Date change Work is to be completed.

   b. Owner supplied Change Proposal Submittal Form.

   c. CCP Cost Estimate Detail Sheet(s), or other form acceptable to Owner, including:

      1) Line-item estimate detailing material, labor, equipment, Subcontractor, and supplier costs and quantities; and

      2) Subcontractor and supplier proposals with supporting line-item estimates.

   d. CCP Progress Schedule with Contemporaneous Period Analysis detailing if any impact to the planned progress of the Work and

critical path.

e. Other supporting documentation, as appropriate.

D. Correlation with Contractor's Submittals:

1. Application for Payment forms shall record each Unilateral and Bilateral Change Order as a separate item of Work.
2. The Progress Schedule shall be revised to reflect changes in the Contract Time.
3. Project Record shall incorporate all changed Work.

END OF SECTION 01 26 00

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes procedures for preparation and submittal of Applications for Payment.

1.02 SUBMITTALS

A. Prior to submitting its first Application for Payment, Contractor shall:

1. Submit a preliminary Progress Schedule per Section 01 32 13 – Progress Schedule.
2. If requested, submit a projected monthly cash-flow analysis for the duration of the Project.
3. Submit an approved Intent to Pay Prevailing Wages form prior to commencing the Work. An approved Intent to Pay Prevailing Wages form must be on file with Owner for each classification of laborers, workers, or mechanics employed by Contractor or Subcontractors whose Work is included in an Application for Payment.
4. "Washington State Prevailing Wage Rates for Public Works Contracts/Whitman County and Pierce County" are made a part of the Contract Documents and are included at the end of this Section. It is Contractor's responsibility to verify with the Washington State Department of Labor and Industries the most current and applicable prevailing wage rates for this Project.
5. Submit and receive approval of the Schedule of Values per Section 01 29 73 – Schedule of Values, and the General Conditions. All Applications for Payment shall be in the same format.
6. Submit a list of all Subcontractors with points of contact and other contact information, including phone number, email address, and mailing address.
7. Submit a list of all major material suppliers with points of contact and other contact information, including phone number, email address, and mailing address.
8. Submit Retainage Option Form to Owner for the disposition of retainage funds.
    a. In accordance with Chapter 60.28 of the Revised Code of Washington (RCW), Owner shall reserve retainage not to exceed 5% of the monies earned by Contractor as a trust fund for the protection and payment of:
        1) The claims of any person and/or Owner arising out of or relating to Work performed on the Project; and
        2) The State with respect to taxes, fees, or penalties that may

be imposed and due from Contractor (see General Conditions).

b. Retainage will be released per Section 01 70 00 - Project Close-Out.

c. At the option of Contractor, the moneys reserved by Owner shall be:

1) Retained in a fund by Owner;

2) Bonded for all of the retainage using a bond form acceptable to Owner;

3) Placed in escrow with a bank or trust company by Owner.

a) Escrow: If the retained funds are to be placed in escrow, Contractor will select the escrow agent, subject to approval by Owner. The selected agent must be a bank or trust company in the State of Washington.

b) Escrow Agent: If Contractor elects the escrow option, an escrow agreement shall be executed by Contractor, Owner, and bank or trust company. Three copies of the agreement should be completed and executed by Contractor and returned to Owner for execution; Owner will forward copies to the bank or trust company for receipt, acceptance, and execution. The bank or trust company will retain one copy and return one copy each to Contractor and Owner. A completed and signed escrow agreement must be on file with Owner before Contractor's first Application for Payment is processed.

c) Escrow Investments: The bank or trust company may invest the retained funds in bonds and other securities selected by Contractor, except stocks, subject to the written approval of Owner.

d) The investments selected must mature on or prior to the date 45 Days following Final Acceptance of the Work. Interest on such investments may be paid to Contractor as it accrues.

e) Escrow Costs and Fees: All escrow costs and fees shall be paid by Contractor.

f) Release of Escrow Investments to Contractor: Retainage will be released per Section 01 70 00 - Project Close-Out. Once Contractor has fully complied with the Contract Documents and statute, Owner shall issue written instructions to the bank or trust company to release to Contractor the investment held in escrow.

B. Draft Application for Payment:

1. Contractor shall submit a draft, itemized Application for Payment within the last 7 Days of the month.

2. The draft application does not constitute a payment request and shall not be signed.

3. Contractor shall carefully check all extensions, totals, and required information for accuracy before submittal.

4. Contractor and Owner may meet to confer regarding the current progress of the Work and the amount of payment to which Contractor is entitled. Owner may request that Contractor provide supporting documentation substantiating its right to payment. Contractor is not entitled to make a final payment request, nor is any payment due Contractor, until such data is furnished. Contractor may include in its Application for Payment projected costs to the end of the month.

    a. Fill in the following information within Owner's Application for Payment form:

        1) Percentage of Work completed based upon the approved schedule of values.

        2) List Change Orders approved by Owner prior to submission date. Use Owner's designations. Do not bill for changed Work until a fully executed Change Order has been received.

        3) Certification of Participation WBE and MBEs, all certification types acceptable, supply this regardless of having firms to report upon.

        4) List all Subcontractors that have performed Work at the site during the pay period.

        5) If applicable, Apprentice/Journeyman Participation.

5. Contractor shall submit or make available for review the following prior to the draft Application for Payment:

    a. Project Record; (see Section 01 78 39 – Project Record)

    b. Updated Progress Schedule in native format (see section 01 32 13 – Progress Schedule);

    c. Contractor Quality Control Reports (see Section 01 45 00 - Quality Control); and

    d. Stored Materials: Requests for payment of stored materials may only be made for materials properly stored on or off-site and in full compliance with the General Conditions.

C. Application for Payment:

1. Contractor may not submit the approved Application for Payment (or payment will be withheld) until all requirements of the draft application for payment are met.
2. Upon approval of the Draft Application for Payment, contractor will be authorized to submit the agreed upon Application for Payment for processing and payment. This application for payment shall be signed by hand by a responsible officer of the Contractor and may be submitted in scanned format electronically.
3. Formal submittal must include all parts of the Application for Payment form.
4. Owner shall make progress payments in such amounts as it determines are properly due within 30 Days of receipt of a properly executed Application for Payment.
5. Owner shall notify Contractor in accordance with Chapter 39.76 RCW if the Application for Payment does not comply with the requirements of the Contract Documents.

D. Disputed Amounts: If Contractor believes it is entitled to payment for Work performed during the prior calendar month in addition to the agreed-upon amount, Contractor may, also within the same period, submit to Owner along with the approved Application for Payment a separate, written payment request specifying the exact additional amount claimed due, the category in the Schedule of Values in which the payment is claimed due, the specific Work for which the additional amount is due, and why the additional payment is due. Furthermore, for the submittal to be considered, Contractor and all Subcontractors shall file with Owner by the same date certified copies of all payroll records relating to the additional amount due, pursuant to WAC 296-127-320.

E. Payments to Subcontractors: Contractor shall pay each Subcontractor no later than 10 Days after receipt of payment from Owner the amount to which the Subcontractor is entitled. Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to lower-tier Subcontractors in a similar manner.

1. Applications for Payment shall not request payment for portions of the Work that Contractor does not intend to pay a Subcontractor, unless such Work has been performed by others whom Contractor intends to pay.
2. If, after making an Application for Payment but before paying a Subcontractor for its performance covered by the Application, Contractor discovers that part or all of the payment otherwise due to the Subcontractor is subject to withholding from the Subcontractor under the Subcontract (such as for unsatisfactory performance or non-payment of lower-tier Subcontractors), Contractor may withhold the amount as allowed under the Subcontract, but it shall:
    a. Give the Subcontractor and Owner written notice of the

withholding as soon as practicable once Contractor determines the cause for the withholding but before the due date of the Subcontractor payment;

b. Include the reasons for the withholding and the actions the Subcontractor must take to release the payment; and

c. Once Subcontractor has taken the required remedial actions, pay Subcontractor within 8 Days.

3. Owner may, at its sole option, issue joint checks to Contractor and to any Subcontractor. If Owner makes payments by joint check, such value shall be reflected on the next Application for Payment.

F. Subcontractor Payment Reporting: Contractor and all tiers of subcontractors will utilize Access Equity accessed at https://omwbe.diversitycompliance.com/ to report subcontractor payment information. The Contractor shall:

1. Complete the OMWBE user training.

2. Register and enter all required Subcontractor information into Access Equity upon Owner creation of the contract record.

3. Monitor and report amount and date of all payments:

a. Received from Owner;

4. Made to Subcontractor(s);Resolve any discrepancies between reported and received payments.

5. Require each Subcontractor to:

a. Register in Access Equity and complete the user training.

b. Verify amounts and date of receipt of payments from Prime Contractor or higher tier Subcontractor.

c. Report any payments made to a lower tier Subcontractor.

d. Resolve any discrepancies between reported and received payments.

G. Application for Final Payment:

1. Application for Final Payment will be accepted for processing only after Contractor has completed the requirements of Final Completion as described in Section 01 70 00 – Project Close-Out.

H. Release of Retainage:

1. Retainage will be released per Section 01 70 00 - Project Close-Out.

END OF SECTION 01 29 00

State of Washington
Department of Labor & Industries
Prevailing Wage Section - Telephone 360-902-5335
PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage
The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 12/15/2026

Pierce County

Trade	Job Classification	Wage	Holiday	Overtime	Note	Risk Class
Asbestos Abatement Workers	Journey Level	$71.10	5D	1H		View
Boilermakers	Journey Level	$80.89	5N	1C		View
Brick Mason	Journey Level	$82.00	7E	1N		View
Brick Mason	Pointer-Caulker-Cleaner	$82.00	7E	1N		View
Building Service Employees	Janitor	$28.36	5S	2F		View
Building Service Employees	Traveling Waxer / Shampooer	$28.26	5S	2F		View
Building Service Employees	Window Cleaner (High Time)	$36.19	5S	2F		View
Building Service Employees	Window Cleaner (Non-High Time)	$34.94	5S	2F		View
Cabinet Makers (In Shop)	Journey Level	$28.36		1		View
Carpenters	Acoustical Worker	$87.71	15J	11U		View
Carpenters	Bridge Dock and Wharf Carpenter	$89.38	15J	11U	9L	View
Carpenters	Floor Layer & Floor Finisher	$87.71	15J	11U		View
Carpenters	General Carpenter	$87.71	15J	11U		View
Carpenters	Scaffold Erector	$87.71	15J	11U		View
Cement Masons	Application of all Composition Mastic	$86.70	15J	4U		View
Cement Masons	Application of all Epoxy Material	$86.18	15J	4U		View
Cement Masons	Application of all Plastic Material	$86.70	15J	4U		View
Cement Masons	Application of Sealing Compound	$86.18	15J	4U		View
Cement Masons	Application of Underlayment	$86.70	15J	4U		View
Cement Masons	Building General	$86.18	15J	4U		View
Cement Masons	Composition or Kalman Floors	$86.70	15J	4U		View
Cement Masons	Concrete Paving	$86.18	15J	4U		View
Cement Masons	Curb & Gutter Machine	$86.70	15J	4U		View
Cement Masons	Curb & Gutter, Sidewalks	$86.18	15J	4U		View
Cement Masons	Curing Concrete	$86.18	15J	4U		View
Cement Masons	Finish Colored Concrete	$86.70	15J	4U		View

Cement Masons	Floor Grinding	$86.70	15J	4U		View
Cement Masons	Floor Grinding/Polisher	$86.18	15J	4U		View
Cement Masons	Green Concrete Saw, self-powered	$86.70	15J	4U		View
Cement Masons	Grouting of all Plates	$86.18	15J	4U		View
Cement Masons	Grouting of all Tilt-up Panels	$86.18	15J	4U		View
Cement Masons	Gunite Nozzleman	$86.70	15J	4U		View
Cement Masons	Hand Powered Grinder	$86.70	15J	4U		View
Cement Masons	Journey Level	$86.18	15J	4U		View
Cement Masons	Patching Concrete	$86.18	15J	4U		View
Cement Masons	Pneumatic Power Tools	$86.70	15J	4U		View
Cement Masons	Power Chipping & Brushing	$86.70	15J	4U		View
Cement Masons	Sand Blasting Architectural Finish	$86.70	15J	4U		View
Cement Masons	Screed & Rodding Machine	$86.70	15J	4U		View
Cement Masons	Spackling or Skim Coat Concrete	$86.18	15J	4U		View
Cement Masons	Troweling Machine Operator	$86.70	15J	4U		View
Cement Masons	Troweling Machine Operator on Colored Slabs	$86.70	15J	4U		View
Cement Masons	Tunnel Workers	$86.70	15J	4U		View
Divers & Tenders	Bell/Vehicle/Submersible Operator (not under pressure)	$149.22	15J	11T	9I	View
Divers & Tenders	Dive Supervisor	$150.72	15J	11T	9I	View
Divers & Tenders	Diver	$149.22	15J	11T	9I	View
Divers & Tenders	Diver Tender	$95.55	15J	11T	9I	View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	$120.22	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 30.01-44.00 PSI	$130.16	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	$140.11	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	$150.05	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	$160.00	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	$169.94	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	$179.88	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	$189.83	15J	11U		View
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	$199.77	15J	11U		View
Divers & Tenders	Lead Diver (Dive Master)	$110.01	15J	11T	9I	View

Divers & Tenders	Manifold Operator (Life Support Technician)	$100.55	**15J**	**11U**	**9I**	**View**
Divers & Tenders	Remote Operated Vehicle Operator/Technician	$95.55	**15J**	**11T**	**9I**	**View**
Divers & Tenders	Remote Operated Vehicle Operator/Technician	$95.55	**15J**	**11U**	**9I**	**View**
Divers & Tenders	Remote Operated Vehicle Tender	$89.25	**15J**	**11T**	**9I**	**View**
Divers & Tenders	Stand-by Diver	$105.01	**15J**	**11T**	**9I**	**View**
Dredge Workers	Assistant Engineer	$93.71	**15Q**	**3F**		**View**
Dredge Workers	Assistant Mate (Deckhand)	$92.99	**15Q**	**3F**		**View**
Dredge Workers	Boatmen	$93.71	**15Q**	**3F**		**View**
Dredge Workers	Engineer Welder	$95.52	**15Q**	**3F**		**View**
Dredge Workers	Leverman, Hydraulic	$97.45	**15Q**	**3F**		**View**
Dredge Workers	Mates	$93.71	**15Q**	**3F**		**View**
Dredge Workers	Oiler	$92.99	**15Q**	**3F**		**View**
Drywall Applicator	Journey Level	$84.77	**15O**	**11S**		**View**
Drywall Tapers	Journey Level	$84.77	**15O**	**11S**		**View**
Electrical Fixture Maintenance Workers	Journey Level	$17.76		**1**		**View**
Electricians - Inside	Cable Splicer	$104.37	**5C**	**1G**		**View**
Electricians - Inside	Journey Level	$97.32	**5C**	**1G**		**View**
Electricians - Inside	Lead Covered Cable Splicer	$111.40	**5C**	**1G**		**View**
Electricians - Inside	Welder	$104.37	**5C**	**1G**		**View**
Electricians - Motor Shop	Craftsman	$17.13		**1**		**View**
Electricians - Motor Shop	Journey Level	$17.13		**1**		**View**
Electricians - Powerline Construction	Cable Splicer	$107.31	**5A**	**4D**		**View**
Electricians - Powerline Construction	Certified Line Welder	$98.45	**5A**	**4D**		**View**
Electricians - Powerline Construction	Groundperson	$61.75	**5A**	**4D**		**View**
Electricians - Powerline Construction	Heavy Line Equipment Operator	$98.45	**5A**	**4D**		**View**
Electricians - Powerline Construction	Journey Level Lineperson	$98.45	**5A**	**4D**		**View**
Electricians - Powerline Construction	Line Equipment Operator	$84.94	**5A**	**4D**		**View**
Electricians - Powerline Construction	Meter Installer	$61.75	**5A**	**4D**	**8W**	**View**
Electricians - Powerline Construction	Pole Sprayer	$98.45	**5A**	**4D**		**View**
Electricians - Powerline Construction	Powderperson	$72.81	**5A**	**4D**		**View**
Electronic Technicians	Journey Level	$64.34	**6Z**	**1B**		**View**
Elevator Constructors	Mechanic	$119.17	**7D**	**4A**		**View**
Elevator Constructors	Mechanic In Charge	$128.95	**7D**	**4A**		**View**

Fabricated Precast Concrete Products	Journey Level	$17.13		1		View
Fence Erectors	Fence Erector	$60.82	15J	11X	9N	View
Fence Erectors	Fence Laborer	$60.82	15J	11X	9N	View
Flaggers	Journey Level	$60.82	15J	11X	9N	View
Glaziers	Journey Level	$88.41	7L	1Y		View
Heat & Frost Insulators And Asbestos Workers	Journey Level	$100.83	15H	11C		View
Heating Equipment Mechanics	Journey Level	$107.92	7F	1E		View
Hod Carriers & Mason Tenders	Journey Level	$75.00	15J	11X	9N	View
Industrial Power Vacuum Cleaner	Journey Level	$17.13		1		View
Inland Boatmen	Boat Operator	$71.28	5B	1K		View
Inland Boatmen	Cook	$69.70	5B	1K		View
Inland Boatmen	Deckhand	$70.00	5B	1K		View
Inland Boatmen	Deckhand Engineer	$69.55	5B	1K		View
Inland Boatmen	Launch Operator	$71.23	5B	1K		View
Inland Boatmen	Mate	$89.12	5B	1K		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	CCTV Head Operator	$56.10	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	CCTV Operator	$53.00	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	CCTV Technician	$49.90	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner	$58.16	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Assistant	$50.93	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Combo Unit	$58.16	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Combo Unit Assistant	$50.93	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Foamer	$58.16	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Foamer Assistant	$50.93	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$58.16	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator Assistant	$50.93	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Hydrovac	$58.16	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Hydrovac Assistant	$50.93	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Jetter/Flusher	$58.16	15M	11O		View

Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Jetter/Flusher Assistant	$50.93	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Skid Steer	$50.93	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Sweeper/Broom Operator	$49.90	15M	11O		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Water Truck	$49.90	15M	11O		View
Insulation Applicators	Journey Level	$87.71	15J	11U		View
Ironworkers	Journeyman	$94.82	15K	11N		View
Laborers	Air, Gas Or Electric Vibrating Screed	$71.10	15J	11X	9N	View
Laborers	Airtrac Drill Operator	$73.18	15J	11X	9N	View
Laborers	Ballast Regular Machine	$71.10	15J	11X	9N	View
Laborers	Batch Weighman	$60.82	15J	11X	9N	View
Laborers	Brick Pavers	$71.10	15J	11X	9N	View
Laborers	Brush Cutter	$71.10	15J	11X	9N	View
Laborers	Brush Hog Feeder	$71.10	15J	11X	9N	View
Laborers	Burner	$71.10	15J	11X	9N	View
Laborers	Caisson Worker	$73.18	15J	11X	9N	View
Laborers	Carpenter Tender	$71.10	15J	11X	9N	View
Laborers	Cement Dumper-paving	$73.18	15J	11X	9N	View
Laborers	Cement Finisher Tender	$71.10	15J	11X	9N	View
Laborers	Change House Or Dry Shack	$71.10	15J	11X	9N	View
Laborers	Chipping Gun (30 Lbs. And Over)	$72.33	15J	11X	9N	View
Laborers	Chipping Gun (Under 30 Lbs.)	$71.10	15J	11X	9N	View
Laborers	Choker Setter	$71.10	15J	11X	9N	View
Laborers	Chuck Tender	$71.10	15J	11X	9N	View
Laborers	Clary Power Spreader	$72.33	15J	11X	9N	View
Laborers	Clean-up Laborer	$71.10	15J	11X	9N	View
Laborers	Concrete Dumper/Chute Operator	$73.18	15J	11X	9N	View
Laborers	Concrete Form Stripper	$71.10	15J	11X	9N	View
Laborers	Concrete Placement Crew	$73.18	15J	11X	9N	View
Laborers	Concrete Saw Operator/Core Driller	$72.33	15J	11X	9N	View
Laborers	Crusher Feeder	$60.82	15J	11X	9N	View
Laborers	Curing Laborer	$71.10	15J	11X	9N	View
Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	$71.10	15J	11X	9N	View
Laborers	Ditch Digger	$71.10	15J	11X	9N	View

Laborers	Diver	$73.18	**15J**	**11X**	**9N**	**View**
Laborers	Drill Operator (Hydraulic, Diamond)	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Dry Stack Walls	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Dump Person	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Epoxy Technician	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Erosion Control Worker	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Faller & Bucker Chain Saw	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Fine Graders	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Firewatch	$60.82	**15J**	**11X**	**9N**	**View**
Laborers	Form Setter	$73.18	**15J**	**11X**	**9N**	**View**
Laborers	Gabian Basket Builders	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	General Laborer	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Grade Checker & Transit Person	$75.00	**15J**	**11X**	**9N**	**View**
Laborers	Grinders	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Grout Machine Tender	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Groutmen (Pressure) Including Post Tension Beams	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Guardrail Erector	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Hazardous Waste Worker (Level A)	$73.18	**15J**	**11X**	**9N**	**View**
Laborers	Hazardous Waste Worker (Level B)	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Hazardous Waste Worker (Level C)	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	High Scaler	$73.18	**15J**	**11X**	**9N**	**View**
Laborers	Jackhammer	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Laserbeam Operator	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Maintenance Person	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Manhole Builder-Mudman	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Material Yard Person	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Mold Abatement Worker	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Motorman-Dinky Locomotive	$75.05	**15J**	**11X**	**9N**	**View**
Laborers	nozzleman (concrete pump, green cutter when using combination of high pressure air & water on concrete & rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster)	$75.00	**15J**	**11X**	**9N**	**View**
Laborers	Pavement Breaker	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Pilot Car	$60.82	**15J**	**11X**	**9N**	**View**
Laborers	Pipe Layer (Lead)	$75.00	**15J**	**11X**	**9N**	**View**

Laborers	Pipe Layer/Tailor	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Pipe Pot Tender	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Pipe Reliner	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Pipe Wrapper	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Pot Tender	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Powderman	$73.18	**15J**	**11X**	**9N**	**View**
Laborers	Powderman's Helper	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Power Jacks	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Power Washer	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Railroad Spike Puller - Power	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Raker - Asphalt	$75.00	**15J**	**11X**	**9N**	**View**
Laborers	Re-timberman	$73.18	**15J**	**11X**	**9N**	**View**
Laborers	Remote Equipment Operator	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Rigger/Signal Person	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Rip Rap Person	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Rivet Buster	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Rodder	$73.18	**15J**	**11X**	**9N**	**View**
Laborers	Scaffold Erector	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Scale Person	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Sloper (Over 20")	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Sloper Sprayer	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Spreader (Concrete)	$73.18	**15J**	**11X**	**9N**	**View**
Laborers	Stake Hopper	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Stock Piler	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Swinging Stage/Boatswain Chair	$60.82	**15J**	**11X**	**9N**	**View**
Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Tamper (Multiple & Self-propelled)	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Toolroom Person (at Jobsite)	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Topper	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Track Laborer	$71.10	**15J**	**11X**	**9N**	**View**
Laborers	Track Liner (Power)	$72.33	**15J**	**11X**	**9N**	**View**
Laborers	Traffic Control Laborer	$64.78	**15J**	**11X**	**9P**	**View**
Laborers	Traffic Control Supervisor	$68.42	**15J**	**11P**	**9C**	**View**

Laborers	Traffic Control Supervisor	$68.42	15J	11X	9P	View
Laborers	Truck Mounted Attenuator	$64.78	15J	11X	9P	View
Laborers	Truck Spotter	$71.10	15J	11X	9N	View
Laborers	Tugger Operator	$72.33	15J	11X	9N	View
Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	$254.08	15J	11X	9Q	View
Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	$259.24	15J	11X	9Q	View
Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	$263.01	15J	11X	9Q	View
Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	$268.85	15J	11X	9Q	View
Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	$271.02	15J	11X	9Q	View
Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	$276.25	15J	11X	9Q	View
Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	$278.20	15J	11X	9Q	View
Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	$280.25	15J	11X	9Q	View
Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	$282.30	15J	11X	9Q	View
Laborers	Tunnel Work-Guage and Lock Tender	$75.05	15J	11X	9N	View
Laborers	Tunnel Work-Miner	$75.05	15J	11X	9N	View
Laborers	Vibrator	$73.18	15J	11X	9N	View
Laborers	Vinyl Seamer	$71.10	15J	11X	9N	View
Laborers	Watchman	$55.62	15J	11X	9N	View
Laborers	Welder	$72.33	15J	11X	9N	View
Laborers	Well Point Laborer	$72.33	15J	11X	9N	View
Laborers	Window Washer/Cleaner	$55.62	15J	11X	9N	View
Laborers - Underground Sewer & Water	General Laborer & Topman	$71.10	15J	11X	9N	View
Laborers - Underground Sewer & Water	Pipe Layer	$72.33	15J	11X	9N	View
Landscape Construction	Landscape Construction/Landscaping Or Planting Laborers	$55.62	15J	11X	9N	View
Landscape Construction	Landscape Operator	$92.99	15J	3K	8X	View
Landscape Maintenance	Groundskeeper	$17.13		1		View
Lathers	Journey Level	$84.77	15O	11S		View
Marble Setters	Journey Level	$82.00	7E	1N		View
Metal Fabrication (In Shop)	Fitter	$17.13		1		View
Metal Fabrication (In Shop)	Laborer	$17.13		1		View

Metal Fabrication (In Shop)	Machine Operator	$17.13		1		View
Metal Fabrication (In Shop)	Welder	$17.13		1		View
Millwright	Journey Level	$80.28	15J	4C		View
Modular Buildings	Journey Level	$17.13		1		View
Painters	Journey Level	$58.84	6Z	11J		View
Pile Driver	Crew Tender	$80.50	15J	11U	9L	View
Pile Driver	Journey Level	$89.43	15J	11U		View
Plasterers	Journey Level	$81.34	7Q	1R		View
Plasterers	Nozzleman	$85.44	7Q	1R		View
Playground & Park Equipment Installers	Journey Level	$17.13		1		View
Plumbers & Pipefitters	Journey Level	$99.87	5A	1G		View
Power Equipment Operators	Asphalt Plant Operator	$94.54	15J	3K	8X	View
Power Equipment Operators	Assistant Engineer	$90.77	7A	11H	8X	View
Power Equipment Operators	Barrier Machine (zipper)	$93.71	15J	3K	8X	View
Power Equipment Operators	Batch Plant Operator: Concrete	$93.71	15J	3K	8X	View
Power Equipment Operators	Bobcat	$88.89	15J	3K	8X	View
Power Equipment Operators	Brokk - Remote Demolition Equipment	$88.89	15J	3K	8X	View
Power Equipment Operators	Brooms	$88.89	15J	3K	8X	View
Power Equipment Operators	Bump Cutter	$93.71	15J	3K	8X	View
Power Equipment Operators	Cableways	$94.54	15J	3K	8X	View
Power Equipment Operators	Chipper	$93.71	15J	3K	8X	View
Power Equipment Operators	Compressor	$88.89	15J	3K	8X	View
Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42m	$94.54	15J	3K	8X	View
Power Equipment Operators	Concrete Finish Machine -laser Screed	$88.89	15J	3K	8X	View
Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$92.99	15J	3K	8X	View
Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$93.71	15J	3K	8X	View
Power Equipment Operators	Conveyors	$92.99	15J	3K	8X	View
Power Equipment Operators	Cranes Friction: 200 tons and over	$99.42	7A	11H	8X	View
Power Equipment Operators	Cranes, A-frame: 10 tons and under	$90.77	7A	11H	8X	View
Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$97.46	7A	11H	8X	View
Power Equipment Operators	Cranes: 20 tons through 44 tons with attachments	$95.64	7A	11H	8X	View

Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$98.47	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	$99.42	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	$96.51	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Cranes: Friction cranes through 199 tons	$98.47	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Cranes: through 19 tons with attachments, A-frame over 10 tons	$94.93	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Crusher	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Deck Engineer/deck Winches (power)	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Derricks: on building work	$96.51	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Dozers D-9 & Under	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Drilling Machine	$95.52	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Elevator and man-lift: permanent and shaft type	$90.77	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Forklift: 3000 lbs and over with attachments	$94.93	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Forklifts: under 3000 lbs. with attachments	$90.77	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Grade Engineer: Using Blueprints, Cut Sheets,etc.	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Gradechecker/stakeman	$88.89	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Guardrail punch/Auger	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Hard Tail End Dump Articulating Off-Road Equipment 45 Yards. & Over	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Horizontal/directional Drill Locator	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Horizontal/directional Drill Operator	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Hydralifts/boom trucks: 10 tons and under	$90.77	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Hydralifts/boom trucks: over 10 tons	$94.93	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Loader, Overhead 8 Yards. & Over	$95.52	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Loaders, Overhead Under 6 Yards	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Loaders, Plant Feed	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Loaders: Elevating Type Belt	$92.99	**15J**	**3K**	**8X**	**View**

Power Equipment Operators	Locomotives, All	$93.71	15J	3K	8X	View
Power Equipment Operators	Material Transfer Device	$93.71	15J	3K	8X	View
Power Equipment Operators	Mechanics: all (Leadmen - $0.50 per hour over mechanic)	$97.46	7A	11H	8X	View
Power Equipment Operators	Motor patrol graders	$94.54	15J	3K	8X	View
Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$94.54	15J	3K	8X	View
Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$88.89	15J	3K	8X	View
Power Equipment Operators	Outside Hoists (elevators and manlifts), Air Tuggers, Strato	$94.93	7A	11H	8X	View
Power Equipment Operators	Overhead, bridge type Crane: 20 tons through 44 tons	$95.64	7A	11H	8X	View
Power Equipment Operators	Overhead, bridge type: 100 tons and over	$97.46	7A	11H	8X	View
Power Equipment Operators	Overhead, bridge type: 45 tons through 99 tons	$96.51	7A	11H	8X	View
Power Equipment Operators	Pavement Breaker	$88.89	15J	3K	8X	View
Power Equipment Operators	Pile Driver (other Than Crane Mount)	$93.71	15J	3K	8X	View
Power Equipment Operators	Plant Oiler - Asphalt, Crusher	$92.99	15J	3K	8X	View
Power Equipment Operators	Posthole Digger, Mechanical	$88.89	15J	3K	8X	View
Power Equipment Operators	Power Plant	$88.89	15J	3K	8X	View
Power Equipment Operators	Pumps - Water	$88.89	15J	3K	8X	View
Power Equipment Operators	Quad 9, HD 41, D10 And Over	$94.54	15J	3K	8X	View
Power Equipment Operators	Quick Tower: no cab, under 100 feet in height based to boom	$94.93	7A	11H	8X	View
Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	$94.54	15J	3K	8X	View
Power Equipment Operators	Rigger and Bellman	$90.77	7A	11H	8X	View
Power Equipment Operators	Rigger/Signal Person, Bellman(Certified)	$94.93	7A	11H	8X	View
Power Equipment Operators	Rollagon	$94.54	15J	3K	8X	View
Power Equipment Operators	Roller, Other Than Plant Mix	$88.89	15J	3K	8X	View
Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	$92.99	15J	3K	8X	View
Power Equipment Operators	Roto-mill, Roto-grinder	$93.71	15J	3K	8X	View
Power Equipment Operators	Saws - Concrete	$92.99	15J	3K	8X	View
Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	$93.71	15J	3K	8X	View
Power Equipment Operators	Scrapers - Concrete & Carry All	$92.99	15J	3K	8X	View
Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	$94.54	15J	3K	8X	View
Power Equipment Operators	Service Engineers: equipment	$94.93	7A	11H	8X	View
Power Equipment Operators	Shotcrete/gunite Equipment	$88.89	15J	3K	8X	View

Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$95.52	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$96.49	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Slipform Pavers	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Spreader, Topsider & Screedman	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Subgrader Trimmer	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Tower Bucket Elevators	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	$98.47	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Tower crane: up to 175' in height base to boom	$97.46	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Tower Cranes: over 250' in height from base to boom.	$99.42	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Transporters, All Track Or Truck Type	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Trenching Machines	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Truck Crane Oiler/Driver: 100 tons and over	$95.64	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Truck crane oiler/driver: under 100 tons	$94.93	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Truck Mount Portable Conveyor	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Vac Truck (Vactor Guzzler, Hydro Excavator)	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Welder	$96.51	**7A**	**11H**	**8X**	**View**
Power Equipment Operators	Wheel Tractors, Farmall Type	$88.89	**15J**	**3K**	**8X**	**View**
Power Equipment Operators	Yo Yo Pay Dozer	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operator	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	$90.77	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator: Concrete	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Bobcat	$88.89	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	$88.89	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Brooms	$88.89	**15J**	**3K**	**8X**	**View**

Power Equipment Operators-Underground Sewer & Water	Bump Cutter	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cableways	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Chipper	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Compressor	$88.89	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42m	$94.54	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	$88.89	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Conveyors	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	$99.42	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes, A-frame: 10 tons and under	$90.77	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$97.46	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes: 20 tons through 44 tons with attachments	$95.64	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$98.47	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	$99.42	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	$96.51	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	$98.47	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Cranes: through 19 tons with attachments, A-frame over 10 tons	$94.93	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Crusher	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	$93.71	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Derricks: on building work	$96.51	**7A**	**11H**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	$92.99	**15J**	**3K**	**8X**	**View**
Power Equipment Operators-Underground Sewer & Water	Drilling Machine	$95.52	**15J**	**3K**	**8X**	**View**

Power Equipment Operators-Underground Sewer & Water	Elevator and man-lift: permanent and shaft type	$90.77	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 lbs and over with attachments	$94.93	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Forklifts: under 3000 lbs. with attachments	$90.77	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blueprints, Cut Sheets,etc.	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Gradechecker/stakeman	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Guardrail punch/Auger	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-Road Equipment 45 Yards. & Over	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Locator	$92.99	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Operator	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: 10 tons and under	$90.77	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: over 10 tons	$94.93	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	$95.52	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	$92.99	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Locomotives, All	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Mechanics: all (Leadmen - $0.50 per hour over mechanic)	$97.46	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Motor patrol graders	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators and manlifts), Air Tuggers, Strato	$94.93	7A	11H	8X	View

Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type Crane: 20 tons through 44 tons	$95.64	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 100 tons and over	$97.46	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 45 tons through 99 tons	$96.51	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	$92.99	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Power Plant	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Pumps - Water	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Quad 9, HD 41, D10 And Over	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Quick Tower: no cab, under 100 feet in height based to boom	$94.93	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Rigger and Bellman	$90.77	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman(Certified)	$94.93	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Rollagon	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	$92.99	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	$92.99	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	$92.99	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Service Engineers: equipment	$94.93	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$92.99	15J	3K	8X	View

Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$95.52	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$96.49	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	$92.99	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	$98.47	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Tower crane: up to 175' in height base to boom	$97.46	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom.	$99.42	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	$94.54	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Trenching Machines	$92.99	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/Driver: 100 tons and over	$95.64	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Truck crane oiler/driver: under 100 tons	$94.93	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Vac Truck (Vactor Guzzler, Hydro Excavator)	$93.71	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Welder	$96.51	7A	11H	8X	View
Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	$88.89	15J	3K	8X	View
Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	$93.71	15J	3K	8X	View
Power Line Clearance Tree Trimmers	Journey Level In Charge	$69.62	5A	4A		View
Power Line Clearance Tree Trimmers	Spray Person	$65.89	5A	4A		View
Power Line Clearance Tree Trimmers	Tree Equipment Operator	$69.62	5A	4A		View
Power Line Clearance Tree Trimmers	Tree Trimmer	$62.19	5A	4A		View
Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$45.73	5A	4A		View
Refrigeration & Air Conditioning Mechanics	Journey Level	$106.46	5A	1G		View
Residential Brick Mason	Journey Level	$27.02		1		View

Residential Carpenters	Journey Level	$47.01		1	View
Residential Cement Masons	Journey Level	$45.99		1	View
Residential Drywall Applicators	Journey Level	$51.52	15J	4C	View
Residential Drywall Tapers	Journey Level	$84.37	5P	1E	View
Residential Electricians	Journey Level	$44.11		1	View
Residential Glaziers	Journey Level	$58.75	7L	1H	View
Residential Insulation Applicators	Journey Level	$78.96	15J	4C	View
Residential Laborers	Journey Level	$33.97		1	View
Residential Marble Setters	Journey Level	$29.29		1	View
Residential Painters	Journey Level	$29.33		1	View
Residential Plumbers & Pipefitters	Journey Level	$62.67	5A	1G	View
Residential Refrigeration & Air Conditioning Mechanics	Journey Level	$107.92	7F	1E	View
Residential Sheet Metal Workers	Journey Level	$107.92	7F	1E	View
Residential Soft Floor Layers	Journey Level	$65.72	7C	3J	View
Residential Sprinkler Fitters (Fire Protection)	Journey Level	$57.51		1	View
Residential Stone Masons	Journey Level	$29.29		1	View
Residential Terrazzo Workers	Journey Level	$17.13		1	View
Residential Terrazzo/Tile Finishers	Journey Level	$21.96		1	View
Residential Tile Setters	Journey Level	$25.98		1	View
Roofers	Journey Level	$70.70	5A	3H	View
Roofers	Using Irritable Bituminous Materials	$73.70	5A	3H	View
Sheet Metal Workers	Journey Level (Field or Shop)	$107.92	7F	1E	View
Shipbuilding & Ship Repair	New Construction Boilermaker	$63.08	7X	4J	View
Shipbuilding & Ship Repair	New Construction Carpenter	$51.85	7X	4J	View
Shipbuilding & Ship Repair	New Construction Crane Operator	$44.29	7V	1	View
Shipbuilding & Ship Repair	New Construction Electrician	$63.26	7X	4J	View
Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	$100.83	15H	11C	View
Shipbuilding & Ship Repair	New Construction Laborer	$62.85	7X	4J	View
Shipbuilding & Ship Repair	New Construction Machinist	$63.08	7X	4J	View
Shipbuilding & Ship Repair	New Construction Operating Engineer	$44.29	7V	1	View
Shipbuilding & Ship Repair	New Construction Painter	$62.94	7X	4J	View
Shipbuilding & Ship Repair	New Construction Pipefitter	$64.14	7X	4J	View
Shipbuilding & Ship Repair	New Construction Rigger	$63.08	7X	4J	View

Shipbuilding & Ship Repair	New Construction Sheet Metal	$63.02	7X	4J		View
Shipbuilding & Ship Repair	New Construction Shipwright	$51.85	7X	4J		View
Shipbuilding & Ship Repair	New Construction Warehouse/Teamster	$44.29	7V	1		View
Shipbuilding & Ship Repair	New Construction Welder / Burner	$63.08	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Boilermaker	$63.08	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Carpenter	$51.85	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Crane Operator	$45.06	7Y	4K		View
Shipbuilding & Ship Repair	Ship Repair Electrician	$63.26	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	$100.83	15H	11C		View
Shipbuilding & Ship Repair	Ship Repair Laborer	$62.85	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Machinist	$63.08	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Operating Engineer	$45.06	7Y	4K		View
Shipbuilding & Ship Repair	Ship Repair Painter	$62.94	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Pipefitter	$64.14	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Rigger	$63.08	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Sheet Metal	$63.02	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Shipwright	$51.85	7X	4J		View
Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	$45.06	7Y	4K		View
Sign Makers & Installers (Electrical)	Sign Installer	$26.17		1		View
Sign Makers & Installers (Electrical)	Sign Maker	$20.33		1		View
Sign Makers & Installers (Non-Electrical)	Sign Installer	$33.43		1		View
Sign Makers & Installers (Non-Electrical)	Sign Maker	$22.79		1		View
Soft Floor Layers	Journey Level	$70.17	15J	4C		View
Solar Controls For Windows	Journey Level	$17.13		1		View
Sprinkler Fitters (Fire Protection)	Journey Level	$107.94	5C	1X		View
Stage Rigging Mechanics (Non Structural)	Journey Level	$17.13		1		View
Stone Masons	Journey Level	$82.00	7E	1N		View
Street And Parking Lot Sweeper Workers	Journey Level	$21.69		1		View
Surveyors	Assistant Construction Site Surveyor	$94.93	7A	11H	8X	View
Surveyors	Chainman	$90.77	7A	11H	8X	View
Surveyors	Construction Site Surveyor	$96.51	7A	11H	8X	View
Surveyors	Drone Operator (when used in conjunction with surveying work only)	$90.77	7A	11H	8X	View

Surveyors	Ground Penetrating Radar	$90.77	7A	11H	8X	View
Telecommunication Technicians	Journey Level	$64.34	6Z	1B		View
Telephone Line Construction - Outside	Cable Splicer	$42.62	5A	2B		View
Telephone Line Construction - Outside	Hole Digger/Ground Person	$27.97	5A	2B		View
Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$35.60	5A	2B		View
Telephone Line Construction - Outside	Telephone Lineperson	$40.28	5A	2B		View
Terrazzo Workers	Journey Level	$73.71	7E	1N		View
Tile Setters	Journey Level	$71.71	7E	1N		View
Tile, Marble & Terrazzo Finishers	Finisher	$62.54	7E	1N		View
Traffic Control Stripers	All cleanup required in connection with traffic control stripers work (Group 1)	$98.49	15L	1K		View
Traffic Control Stripers	Handling, painting and installing of all car stops, stop signs and any other type sign (Group 2)	$62.69	15L	1K		View
Traffic Control Stripers	Installation of guard rail and posts and similar protective devices (Group 2)	$62.69	15L	1K		View
Traffic Control Stripers	Installation of parking gates, ticket spitters and other mechanical and automatic control devices (Group 2)	$62.69	15L	1K		View
Traffic Control Stripers	Installation of plastic metal or composition button, or lines used instead of paint (Group 1)	$98.49	15L	1K		View
Traffic Control Stripers	Line removal; chemical sand and hydro-blast, paint and button (Group 1)	$98.49	15L	1K		View
Traffic Control Stripers	Manufacturing and installation of all car stops and control devices and similar traffic regulators (Group 2)	$62.69	15L	1K		View
Traffic Control Stripers	Manufacturing, painting, stenciling, servicing, repairing, placing and removal of traffic safety and control devices/barricades (Group 2)	$62.69	15L	1K		View
Traffic Control Stripers	Painting and installing lines, arrows, bumpers, curbs, etc., on parking lots, air fields, highways, game courts (Group 1)	$98.49	15L	1K		View
Traffic Control Stripers	Preparation and maintenance of all surfaces (Group 1)	$98.49	15L	1K		View
Traffic Control Stripers	Seal coating, slurry coating and other surface protection (Group 2)	$62.69	15L	1K		View
Truck Drivers	Asphalt Mix Over 16 Yards	$86.95	15J	11M	8L	View
Truck Drivers	Asphalt Mix To 16 Yards	$86.11	15J	11M	8L	View
Truck Drivers	Dump Truck	$86.11	15J	11M	8L	View
Truck Drivers	Dump Truck & Trailer	$86.95	15J	11M	8L	View
Truck Drivers	Other Trucks	$86.95	15J	11M	8L	View
Truck Drivers - Ready Mix	Transit Mix	$86.95	15J	11M	8L	View

Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$17.13		1		View
Well Drillers & Irrigation Pump Installers	Oiler	$17.13		1		View
Well Drillers & Irrigation Pump Installers	Well Driller	$18.30		1		View

Whitman County

Trade	Job Classification	Wage	Holiday	Overtime	Note	Risk Class
Asbestos Abatement Workers	Journey Level	$57.75	7B	11Y	8Z	View
Boilermakers	Journey Level	$77.39	5N	1C		View
Brick Mason	Journey Level	$63.84	5A	1M		View
Building Service Employees	Janitor	$17.13		1		View
Building Service Employees	Shampooer	$17.13		1		View
Building Service Employees	Waxer	$17.13		1		View
Building Service Employees	Window Cleaner	$17.13		1		View
Cabinet Makers (In Shop)	Journey Level	$17.13		1		View
Carpenters	Acoustical Worker	$65.89	7E	4X	8N	View
Carpenters	Bridge, Dock & Wharf Carpenter	$69.99	7E	4X	9E	View
Carpenters	Floor Layer & Floor Finisher	$65.89	7E	4X	8N	View
Carpenters	Form Builder	$65.89	7E	4X	8N	View
Carpenters	General Carpenter	$65.89	7E	4X	8N	View
Carpenters	Heavy Construction Carpenter	$69.99	7E	4X	9E	View
Carpenters	Scaffold/Shoring Erecting & Dismantling	$69.99	7E	4X	8N	View
Cement Masons	Journey Level	$60.15	7B	1N		View
Divers & Tenders	Assistant Tender	$72.61	7E	4X	8J	View
Divers & Tenders	Bell/Vehicle or Submersible Operator Not Under Pressure	$77.39	7E	4X	8J	View
Divers & Tenders	Dive Supervisors	$138.55	7E	4X		View
Divers & Tenders	Diver	$137.01	7E	4X	8I	View
Divers & Tenders	Diver on Standby	$77.39	7E	4X	8J	View
Divers & Tenders	Diver Tender	$76.37	7E	4X	8J	View
Divers & Tenders	Diving Master	$90.85	7E	4X	8J	View
Divers & Tenders	Manifold Operator	$76.37	7E	4X	8J	View
Divers & Tenders	Manifold Operator Mixed Gas	$80.47	7E	4X	8J	View
Divers & Tenders	Remote Operated Vehicle Operator	$76.37	7E	4X	8J	View
Divers & Tenders	Remote Operated Vehicle Tender/Technician	$72.61	7E	4X	8J	View

Dredge Workers	Assistant Engineer	$93.71	**15Q**	**3F**		**View**
Dredge Workers	Assistant Mate (Deckhand)	$92.99	**15Q**	**3F**		**View**
Dredge Workers	Boatmen	$93.71	**15Q**	**3F**		**View**
Dredge Workers	Engineer Welder	$95.52	**15Q**	**3F**		**View**
Dredge Workers	Leverman, Hydraulic	$97.45	**15Q**	**3F**		**View**
Dredge Workers	Mates	$93.71	**15Q**	**3F**		**View**
Dredge Workers	Oiler	$92.99	**15Q**	**3F**		**View**
Drywall Applicator	Journey Level	$66.66	**15O**	**11S**		**View**
Drywall Tapers	Journey Level	$66.66	**15O**	**11S**		**View**
Electrical Fixture Maintenance Workers	Journey Level	$17.13		**1**		**View**
Electricians - Inside	Journeyman	$72.39	**7G**	**1E**		**View**
Electricians - Motor Shop	Craftsman	$17.13		**1**		**View**
Electricians - Motor Shop	Journey Level	$17.13		**1**		**View**
Electricians - Powerline Construction	Cable Splicer	$107.31	**5A**	**4D**		**View**
Electricians - Powerline Construction	Certified Line Welder	$98.45	**5A**	**4D**		**View**
Electricians - Powerline Construction	Groundperson	$61.75	**5A**	**4D**		**View**
Electricians - Powerline Construction	Heavy Line Equipment Operator	$98.45	**5A**	**4D**		**View**
Electricians - Powerline Construction	Journey Level Lineperson	$98.45	**5A**	**4D**		**View**
Electricians - Powerline Construction	Line Equipment Operator	$84.94	**5A**	**4D**		**View**
Electricians - Powerline Construction	Meter Installer	$61.75	**5A**	**4D**	**8W**	**View**
Electricians - Powerline Construction	Pole Sprayer	$98.45	**5A**	**4D**		**View**
Electricians - Powerline Construction	Powderperson	$72.81	**5A**	**4D**		**View**
Electronic Technicians	Journey Level	$62.40	**5I**	**1B**		**View**
Elevator Constructors	Mechanic	$119.17	**7D**	**4A**		**View**
Elevator Constructors	Mechanic In Charge	$128.95	**7D**	**4A**		**View**
Fabricated Precast Concrete Products	Journey Level	$17.13		**1**		**View**
Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	$17.13		**1**		**View**
Fence Erectors	Fence Erector	$57.75	**7B**	**11Y**	**8Z**	**View**
Flaggers	Journey Level	$54.42	**7B**	**11Y**	**8Z**	**View**
Glaziers	Journey Level	$48.20	**7L**	**4L**		**View**
Heat & Frost Insulators And Asbestos Workers	Journey Level	$68.80	**5K**	**1U**		**View**
Heating Equipment Mechanics	Journey Level	$85.41	**6Z**	**1B**		**View**
Hod Carriers & Mason Tenders	Journey Level	$59.86	**7B**	**11Y**	**8Z**	**View**
Industrial Power Vacuum Cleaner	Journey Level	$17.13		**1**		**View**

Inland Boatmen	Journey Level	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	$17.13		1		View
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	$17.13		1		View
Insulation Applicators	Journey Level	$65.89	7E	4X	8N	View
Ironworkers	Journeyman	$80.70	15K	11N		View
Laborers	Air And Hydraulic Track Drill	$58.46	7B	11Y	8Z	View
Laborers	Asphalt Raker	$58.46	7B	11Y	8Z	View
Laborers	Asphalt Roller, Walking	$58.11	7B	11Y	8Z	View
Laborers	Brick Pavers	$57.75	7B	11Y	8Z	View
Laborers	Brush Hog Feeder	$57.75	7B	11Y	8Z	View
Laborers	Brush Machine	$58.46	7B	11Y	8Z	View
Laborers	Caisson Worker, Free Air	$58.46	7B	11Y	8Z	View
Laborers	Carpenter Tender	$57.75	7B	11Y	8Z	View
Laborers	Cement Finisher Tender	$58.46	7B	11Y	8Z	View
Laborers	Cement Handler	$58.46	7B	11Y	8Z	View
Laborers	Chain Saw Operator & Faller	$58.46	7B	11Y	8Z	View
Laborers	Clean-up Laborer	$57.75	7B	11Y	8Z	View
Laborers	Compaction Equipment	$58.11	7B	11Y	8Z	View
Laborers	Concrete Crewman	$58.46	7B	11Y	8Z	View
Laborers	Concrete Saw, Walking	$58.46	7B	11Y	8Z	View
Laborers	Concrete Signalman	$58.46	7B	11Y	8Z	View
Laborers	Concrete Stack	$58.46	7B	11Y	8Z	View
Laborers	Confined Space Attendant	$57.75	7B	11Y	8Z	View

Laborers	Construction Specialist	$58.69	**7B**	**11Y**	**8Z**	**View**
Laborers	Crusher Feeder	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Demolition	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Demolition Torch	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Dope Pot Fireman, Non-mechanical	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Driller Helper (when Required To Move & Position Machine)	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Drills With Dual Masts	$58.83	**7B**	**11Y**	**8Z**	**View**
Laborers	Dry Stack Walls	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Dumpman	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Erosion Control Laborer	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Firewatch	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Form Cleaning Machine Feeder, Stacker	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Form Setter, Paving	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	General Laborer	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Grade Checker	$61.06	**7B**	**11Y**	**8Z**	**View**
Laborers	Grout Machine Header Tender	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Guard Rail	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Gunite	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Hazardous Waste Worker (level A)	$58.83	**7B**	**11Y**	**8Z**	**View**
Laborers	Hazardous Waste Worker (level B)	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Hazardous Waste Worker (level C)	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Hazardous Waste Worker (level D)	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Hdpe Or Similar Liner Installer	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	High Scaler	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Industrial Technician	$90.68	**7B**	**11Y**	**8Z**	**View**
Laborers	Jackhammer Operator Miner, Class "b"	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Laser Beam Operator	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Miner, Class "a"	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Miner, Class "c"	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Miner, Class "d"	$58.83	**7B**	**11Y**	**8Z**	**View**
Laborers	Monitor Operator, Air Track Or Similar Mounting	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Mortar Mixer	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Nipper	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Nozzleman	$58.46	**7B**	**11Y**	**8Z**	**View**

Laborers	Nozzleman, Water (to Include Fire Hose), Air Or Steam	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Pavement Breaker, 90 Lbs. & Over	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Pavement Breaker, Under 90 Lbs.	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Pilot Car	$54.42	**7B**	**11Y**	**8Z**	**View**
Laborers	Pipelayer	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Pipelayer, Corrugated Metal Culvert And Multi-Plate	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Pipewrapper	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Plasterer Tenders	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Pot Tender	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Powderman	$60.63	**7B**	**11Y**	**8Z**	**View**
Laborers	Powederman Helper	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Power Buggy Operator	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Power Tool Operator, Gas, Electric, Pneumatic	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Rad-Con Technician	$90.68	**7B**	**11Y**	**8Z**	**View**
Laborers	Railroad Equipment, Power Driven, Except Dual Mobile	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Railroad Power Spiker Or Puller, Dual Mobile	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Remote Equipment Operator	$58.83	**7B**	**11Y**	**8Z**	**View**
Laborers	Remote Equipment Operator (i.e Compaction And Demolition)	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Rigger/signal Person	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Riprap Person	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Rodder & Spreader	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Sand Hogs Under Compressed Air Conditions	$356.26	**7B**	**11Y**	**8Z**	**View**
Laborers	Sandblast Tailhoseman	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Scaffold Erector, Wood Or Steel	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Scaleman	$54.42	**7B**	**11Y**	**8Z**	**View**
Laborers	Stake Jumper	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Structural Mover	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Tailhoseman (water Nozzle)	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Timber Bucker & Faller (by Hand)	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Track Laborer (rr)	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Traffic Control Laborer	$54.42	**7B**	**11Y**	**8Z**	**View**
Laborers	Traffic Control Supervisor	$57.75	**7B**	**11Y**	**8Z**	**View**

Laborers	Trencher, Shawnee	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Trenchless Technology Technician	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Truck Loader	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Truck Mounted Attenuator	$54.42	**7B**	**11Y**	**8Z**	**View**
Laborers	Tugger Operator	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Vibrators, All	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers	Wagon Drills	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Water Pipe Liner	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Welder, Electrical, Manual Or Automatic (hdpe Or Similar Pipe And Liner)	$58.83	**7B**	**11Y**	**8Z**	**View**
Laborers	Well-point Person	$57.75	**7B**	**11Y**	**8Z**	**View**
Laborers	Wheelbarrow, Power Driven	$58.11	**7B**	**11Y**	**8Z**	**View**
Laborers	Window Washer, Cleaner	$54.42	**7B**	**11Y**	**8Z**	**View**
Laborers - Underground Sewer & Water	General Laborer & Topman	$58.46	**7B**	**11Y**	**8Z**	**View**
Laborers - Underground Sewer & Water	Pipe Layer	$58.46	**7B**	**11Y**	**8Z**	**View**
Landscape Construction	Landscape Laborer	$54.42	**7B**	**11Y**	**8Z**	**View**
Landscape Construction	Landscape Operator	$67.64	**7Z**	**11W**	**9M**	**View**
Landscape Maintenance	Groundskeeper	$17.13		**1**		**View**
Lathers	Journey Level	$66.66	**15O**	**11S**		**View**
Marble Setters	Journey Level	$63.84	**5A**	**1M**		**View**
Metal Fabrication (In Shop)	Fitter	$17.13		**1**		**View**
Metal Fabrication (In Shop)	Laborer	$17.13		**1**		**View**
Metal Fabrication (In Shop)	Machine Operator	$17.13		**1**		**View**
Metal Fabrication (In Shop)	Painter	$17.13		**1**		**View**
Metal Fabrication (In Shop)	Welder	$17.13		**1**		**View**
Millwright	Journey Level	$85.80	**5A**	**1B**		**View**
Modular Buildings	Journey Level	$17.13		**1**		**View**
Painters	Commercial Painter	$52.40	**15P**	**11V**		**View**
Painters	Industrial Painter	$59.92	**15P**	**11V**	**9D**	**View**
Pile Driver	Journey Level	$71.63	**7E**	**4X**	**8N**	**View**
Plasterers	Journey Level	$59.83	**7K**	**1N**		**View**
Playground & Park Equipment Installers	Journey Level	$17.13		**1**		**View**
Plumbers & Pipefitters	Journey Level	$103.41	**6Z**	**1Q**		**View**
Power Equipment Operators	Asphalt plant Operators	$68.37	**7Z**	**11W**	**9M**	**View**

Power Equipment Operators	Assistant Engineer	$66.39	7Z	11W	9M	View
Power Equipment Operators	Barrier machine: (Zipper)	$68.01	7Z	11W	9M	View
Power Equipment Operators	Batch Plant Operator: concrete	$68.01	7Z	11W	9M	View
Power Equipment Operators	Bobcat	$66.39	7Z	11W	9M	View
Power Equipment Operators	Brokk: Remote demolition equipment	$66.39	7Z	11W	9M	View
Power Equipment Operators	Brooms	$66.39	7Z	11W	9M	View
Power Equipment Operators	Bump cutter	$68.01	7Z	11W	9M	View
Power Equipment Operators	Cableways	$68.37	7Z	11W	9M	View
Power Equipment Operators	Chipper	$68.01	7Z	11W	9M	View
Power Equipment Operators	Compressor	$66.39	7Z	11W	9M	View
Power Equipment Operators	Concrete Finish Machine: Laser Screed	$66.39	7Z	11W	9M	View
Power Equipment Operators	Concrete Pump: Mounted or trailer high pressure line pump, pump high pressure	$67.64	7Z	11W	9M	View
Power Equipment Operators	Concrete Pump: Truck mount with boom attachment over 42M	$68.37	7Z	11W	9M	View
Power Equipment Operators	Concrete pump: truck mount with boom attachment up to 42M	$68.01	7Z	11W	9M	View
Power Equipment Operators	Conveyors	$67.64	7Z	11W	9M	View
Power Equipment Operators	Cranes Friction: 200 tons and over	$72.52	7Z	11W	9M	View
Power Equipment Operators	Cranes, A-frame: 10 tons and under	$66.39	7Z	11W	9M	View
Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$70.50	7Z	11W	9M	View
Power Equipment Operators	Cranes: 20 tons through 44 tons with attachments	$68.01	7Z	11W	9M	View
Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$71.57	7Z	11W	9M	View
Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	$72.52	7Z	11W	9M	View
Power Equipment Operators	Cranes: 45 tons through 99 tons, under 150' of boom (including jib with attachments)	$68.37	7Z	11W	9M	View
Power Equipment Operators	Cranes: Friction cranes through 199 tons	$71.57	7Z	11W	9M	View
Power Equipment Operators	Cranes: through 19 tons with attachments, A-frame over 10 tons	$67.64	7Z	11W	9M	View
Power Equipment Operators	Crusher	$68.01	7Z	11W	9M	View
Power Equipment Operators	Deck engineer/deck winches (power)	$68.01	7Z	11W	9M	View
Power Equipment Operators	Derricks: on building work	$68.37	7Z	11W	9M	View
Power Equipment Operators	Dozers: D-9 & under	$67.64	7Z	11W	9M	View
Power Equipment Operators	Drill Oilers: auger type, truck or crane mount	$67.64	7Z	11W	9M	View

Power Equipment Operators	Drilling Machine	$70.50	7Z	11W	9M	View
Power Equipment Operators	Elevator and man-lift: permanent and shaft type	$66.39	7Z	11W	9M	View
Power Equipment Operators	Finishing Machine: Bidwell and Gamaco & similar equipment	$68.01	7Z	11W	9M	View
Power Equipment Operators	Forklift: 3000 lbs and over with attachments	$67.64	7Z	11W	9M	View
Power Equipment Operators	Forklifts: under 3000 lbs. with attachments	$66.39	7Z	11W	9M	View
Power Equipment Operators	Grade Engineer: using blue prints, cut sheets, etc.	$68.01	7Z	11W	9M	View
Power Equipment Operators	Gradechecker/Stakeman	$66.39	7Z	11W	9M	View
Power Equipment Operators	Guardrail punch	$68.01	7Z	11W	9M	View
Power Equipment Operators	Hard tail end dump: articulating off-road equipment 45 yards & over	$68.37	7Z	11W	9M	View
Power Equipment Operators	Hard tail end dump: articulating off-road equipment under 45 yards	$68.01	7Z	11W	9M	View
Power Equipment Operators	Helper, Mechanic or Welder, H.D.	$66.39	7Z	11W	9M	View
Power Equipment Operators	Horizontal/directional drill locator	$67.64	7Z	11W	9M	View
Power Equipment Operators	Horizontal/directional drill operator	$68.01	7Z	11W	9M	View
Power Equipment Operators	Hydralifts/boom trucks: 10 tons and under	$66.39	7Z	11W	9M	View
Power Equipment Operators	Hydralifts/boom trucks: over 10 tons	$67.64	7Z	11W	9M	View
Power Equipment Operators	Leverman	$71.57	7Z	11W	9M	View
Power Equipment Operators	Loader: Overhead 6 yards but not including 8 yards	$68.37	7Z	11W	9M	View
Power Equipment Operators	Loader: Overhead 8 yards & over	$70.50	7Z	11W	9M	View
Power Equipment Operators	Loaders: elevating type belt	$67.64	7Z	11W	9M	View
Power Equipment Operators	Loaders: Overhead under 6 yards	$68.01	7Z	11W	9M	View
Power Equipment Operators	Loaders: Plant feed	$68.01	7Z	11W	9M	View
Power Equipment Operators	Locomotives: all	$68.01	7Z	11W	9M	View
Power Equipment Operators	Material Transfer Device	$68.01	7Z	11W	9M	View
Power Equipment Operators	Mechanics: all (Leadmen - $0.50 per hour over mechanic)	$70.50	7Z	11W	9M	View
Power Equipment Operators	Motor patrol graders	$68.37	7Z	11W	9M	View
Power Equipment Operators	Mucking machine, mole, tunnel drill, boring, road header and/or shield	$68.37	7Z	11W	9M	View
Power Equipment Operators	Oil distributors, blower distribution & mulch seeding operator	$66.39	7Z	11W	9M	View
Power Equipment Operators	Outside Hoists (elevators and manlifts), Air Tuggers, Strato	$67.64	7Z	11W	9M	View
Power Equipment Operators	Overhead, bridge type Crane: 20 tons through 44 tons	$68.01	7Z	11W	9M	View

Power Equipment Operators	Overhead, bridge type: 100 tons and over	$70.50	7Z	11W	9M	View
Power Equipment Operators	Overhead, bridge type: 45 tons through 99 tons	$68.37	7Z	11W	9M	View
Power Equipment Operators	Pavement breaker	$66.39	7Z	11W	9M	View
Power Equipment Operators	Piledriver: (other than crane mount)	$68.01	7Z	11W	9M	View
Power Equipment Operators	Plant oiler: asphalt, crusher	$67.64	7Z	11W	9M	View
Power Equipment Operators	Posthole digger: mechanical	$66.39	7Z	11W	9M	View
Power Equipment Operators	Power plant	$66.39	7Z	11W	9M	View
Power Equipment Operators	Pumps: water	$66.39	7Z	11W	9M	View
Power Equipment Operators	Quad 9, HD 41, D10 and over	$68.37	7Z	11W	9M	View
Power Equipment Operators	Quick Tower: no cab, under 100 feet in height base to boom	$68.01	7Z	11W	9M	View
Power Equipment Operators	Remote control operator on rubber tired earth moving equipment	$68.37	7Z	11W	9M	View
Power Equipment Operators	Rigger and Bellman	$66.39	7Z	11W	9M	View
Power Equipment Operators	Rigger/Signal Person, Bellman (Certified)	$67.64	7Z	11W	9M	View
Power Equipment Operators	Rollagon	$68.37	7Z	11W	9M	View
Power Equipment Operators	Roller: other than plant mix	$66.39	7Z	11W	9M	View
Power Equipment Operators	Roller: plant mix or multi-lift materials	$67.64	7Z	11W	9M	View
Power Equipment Operators	Roto-mill, roto-grinder	$68.01	7Z	11W	9M	View
Power Equipment Operators	Saws: concrete	$67.64	7Z	11W	9M	View
Power Equipment Operators	Scraper: self propelled under 45 yards	$68.01	7Z	11W	9M	View
Power Equipment Operators	Scrapers, self-propelled: 45 yards and over	$68.37	7Z	11W	9M	View
Power Equipment Operators	Scrapers: concrete & carry all	$67.64	7Z	11W	9M	View
Power Equipment Operators	Service Engineers: equipment	$67.64	7Z	11W	9M	View
Power Equipment Operators	Shotcrete/gunite equipment	$66.39	7Z	11W	9M	View
Power Equipment Operators	Shovel, excavator, backhoe, tractor: 15 to 30 metric tons	$68.01	7Z	11W	9M	View
Power Equipment Operators	Shovel, excavator, backhoe, tractors: under 15 metric tons	$67.64	7Z	11W	9M	View
Power Equipment Operators	Shovel, excavator, backhoe: over 30 metric tons and up to 50 metric tons	$68.37	7Z	11W	9M	View
Power Equipment Operators	Shovel, excavator, backhoes: over 50 metric tons and up to 90 metric tons	$70.50	7Z	11W	9M	View
Power Equipment Operators	Shovel, excavator, backhoes: over 90 metric tons	$71.57	7Z	11W	9M	View
Power Equipment Operators	Slipform pavers	$68.37	7Z	11W	9M	View
Power Equipment Operators	Spreader: Topsider & Screedman	$68.37	7Z	11W	9M	View
Power Equipment Operators	Subgrader trimmer	$68.01	7Z	11W	9M	View

Power Equipment Operators	Tower Bucket Elevators	$67.64	7Z	11W	9M	View
Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	$71.57	7Z	11W	9M	View
Power Equipment Operators	Tower crane: up to 175' in height base to boom	$70.50	7Z	11W	9M	View
Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	$72.52	7Z	11W	9M	View
Power Equipment Operators	Transporters: all track or truck type	$68.37	7Z	11W	9M	View
Power Equipment Operators	Trenching machines	$67.64	7Z	11W	9M	View
Power Equipment Operators	Truck Crane Oiler/Driver: 100 tons and over	$68.01	7Z	11W	9M	View
Power Equipment Operators	Truck crane oiler/driver: under 100 tons	$67.64	7Z	11W	9M	View
Power Equipment Operators	Truck mount portable conveyor	$68.01	7Z	11W	9M	View
Power Equipment Operators	Vac Truck (Vactor Guzzler, Hydro Excavator)	$68.01	7Z	11W	9M	View
Power Equipment Operators	Welder	$68.37	7Z	11W	9M	View
Power Equipment Operators	Wheel tractors: Farm all type	$66.39	7Z	11W	9M	View
Power Equipment Operators	Yo Yo pay dozer	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Asphalt plant Operators	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Barrier machine: (Zipper)	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator: concrete	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Bobcat	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Brokk: Remote demolition equipment	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Brooms	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Bump cutter	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cableways	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Chipper	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Compressor	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine: Laser Screed	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Mounted or trailer high pressure line pump, pump high pressure	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck mount with boom attachment over 42M	$68.37	7Z	11W	9M	View

Power Equipment Operators-Underground Sewer & Water	Concrete pump: truck mount with boom attachment up to 42M	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Conveyors	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	$72.52	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes, A-frame: 10 tons and under	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$70.50	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes: 20 tons through 44 tons with attachments	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$71.57	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	$72.52	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes: 45 tons through 99 tons, under 150' of boom (including jib with attachments)	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	$71.57	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Cranes: through 19 tons with attachments, A-frame over 10 tons	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Crusher	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Deck engineer/deck winches (power)	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Derricks: on building work	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Dozers: D-9 & under	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Drill Oilers: auger type, truck or crane mount	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Drilling Machine	$70.50	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Elevator and man-lift: permanent and shaft type	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Finishing Machine: Bidwell and Gamaco & similar equipment	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 lbs and over with attachments	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Forklifts: under 3000 lbs. with attachments	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Grade Engineer: using blue prints, cut sheets, etc.	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Gradechecker/Stakeman	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Guardrail punch	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Hard tail end dump: articulating off-road equipment 45 yards & over	$68.37	7Z	11W	9M	View

Power Equipment Operators-Underground Sewer & Water	Hard tail end dump: articulating off-road equipment under 45 yards	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Helper, Mechanic or Welder, H.D.	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Horizontal/directional drill locator	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Horizontal/directional drill operator	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: 10 tons and under	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: over 10 tons	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Leverman	$71.57	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Loader: Overhead 6 yards but not including 8 yards	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Loader: Overhead 8 yards & over	$70.50	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Loaders: elevating type belt	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Loaders: Overhead under 6 yards	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Loaders: Plant feed	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Locomotives: all	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Mechanics: all (Leadmen - $0.50 per hour over mechanic)	$70.50	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Motor patrol graders	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Mucking machine, mole, tunnel drill, boring, road header and/or shield	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Oil distributors, blower distribution & mulch seeding operator	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators and manlifts), Air Tuggers, Strato	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type Crane: 20 tons through 44 tons	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 100 tons and over	$70.50	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 45 tons through 99 tons	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Pavement breaker	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Piledriver: (other than crane mount)	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Plant oiler: asphalt, crusher	$67.64	7Z	11W	9M	View

Power Equipment Operators-Underground Sewer & Water	Posthole digger: mechanical	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Power plant	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Pumps: water	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Quad 9, HD 41, D10 and over	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Quick Tower: no cab, under 100 feet in height base to boom	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Remote control operator on rubber tired earth moving equipment	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Rigger and Bellman	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman (Certified)	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Rollagon	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Roller: other than plant mix	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Roller: plant mix or multi-lift materials	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Roto-mill, roto-grinder	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Saws: concrete	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Scraper: self propelled under 45 yards	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Scrapers, self-propelled: 45 yards and over	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Scrapers: concrete & carry all	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Service Engineers: equipment	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite equipment	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Shovel, excavator, backhoe, tractor: 15 to 30 metric tons	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Shovel, excavator, backhoe, tractors: under 15 metric tons	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Shovel, excavator, backhoe: over 30 metric tons and up to 50 metric tons	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Shovel, excavator, backhoes: over 50 metric tons and up to 90 metric tons	$70.50	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Shovel, excavator, backhoes: over 90 metric tons	$71.57	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Slipform pavers	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Spreader: Topsider & Screedman	$68.37	7Z	11W	9M	View

Power Equipment Operators-Underground Sewer & Water	Subgrader trimmer	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	$71.57	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	$71.57	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Tower crane: up to 175' in height base to boom	$70.50	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom	$72.52	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Transporters: all track or truck type	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Trenching machines	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/Driver: 100 tons and over	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Truck crane oiler/driver: under 100 tons	$67.64	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Truck mount portable conveyor	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Vac Truck (Vactor Guzzler, Hydro Excavator)	$68.01	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Welder	$68.37	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Wheel tractors: Farm all type	$66.39	7Z	11W	9M	View
Power Equipment Operators-Underground Sewer & Water	Yo Yo pay dozer	$68.01	7Z	11W	9M	View
Power Line Clearance Tree Trimmers	Journey Level In Charge	$69.62	5A	4A		View
Power Line Clearance Tree Trimmers	Spray Person	$65.89	5A	4A		View
Power Line Clearance Tree Trimmers	Tree Equipment Operator	$69.62	5A	4A		View
Power Line Clearance Tree Trimmers	Tree Trimmer	$62.19	5A	4A		View
Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$45.73	5A	4A		View
Refrigeration & Air Conditioning Mechanics	Journey Level	$103.41	6Z	1Q		View
Residential Brick Mason	Journey Level	$63.84	5A	1M		View
Residential Carpenters	Journey Level	$30.50		1		View
Residential Cement Masons	Journey Level	$17.13		1		View
Residential Drywall Applicators	Journey Level	$31.28		1		View
Residential Drywall Tapers	Journey Level	$59.18	7E	1P		View
Residential Electricians	Journey Level	$31.82		1		View
Residential Glaziers	Journey Level	$25.90		1		View
Residential Insulation Applicators	Journey Level	$24.70		1		View

Residential Laborers	Journey Level	$22.44		1		View
Residential Marble Setters	Journey Level	$63.84	5A	1M		View
Residential Painters	Journey Level	$30.60		1		View
Residential Plumbers & Pipefitters	Journey Level	$43.33		1		View
Residential Refrigeration & Air Conditioning Mechanics	Journey Level	$18.40		1		View
Residential Sheet Metal Workers	Journey Level (Field or Shop)	$85.41	5I	1B		View
Residential Soft Floor Layers	Journey Level	$22.44		1		View
Residential Sprinkler Fitters (Fire Protection)	Journey Level	$18.40		1		View
Residential Stone Masons	Journey Level	$63.84	5A	1M		View
Residential Terrazzo Workers	Journey Level	$20.61		1		View
Residential Terrazzo/Tile Finishers	Journey Level	$17.92		1		View
Residential Tile Setters	Journey Level	$20.61		1		View
Roofers	Journey Level	$51.61	5I	1R		View
Roofers	Using Irritable Bituminous Materials	$53.61	5I	1R		View
Sheet Metal Workers	Journey Level (Field or Shop)	$80.38	6Z	1B		View
Sign Makers & Installers (Electrical)	Journey Level	$17.13		1		View
Sign Makers & Installers (Non-Electrical)	Journey Level	$17.13		1		View
Soft Floor Layers	Journey Level	$65.72	7C	3J		View
Solar Controls For Windows	Journey Level	$17.13		1		View
Sprinkler Fitters (Fire Protection)	Journey Level	$76.94	7J	1R		View
Stage Rigging Mechanics (Non Structural)	Journey Level	$17.13		1		View
Stone Masons	Journey Level	$63.84	5A	1M		View
Street And Parking Lot Sweeper Workers	Journey Level	$17.13		1		View
Surveyors	Chain Person	$17.13	0	1	9H	View
Surveyors	Instrument Person	$17.13	0	1	9H	View
Surveyors	Party Chief	$17.13	0	1	9H	View
Telecommunication Technicians	Journey Level	$62.40	5I	1B		View
Telephone Line Construction - Outside	Cable Splicer	$42.62	5A	2B		View
Telephone Line Construction - Outside	Hole Digger/Ground Person	$27.97	5A	2B		View
Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$35.60	5A	2B		View
Telephone Line Construction - Outside	Telephone Lineperson	$40.28	5A	2B		View
Terrazzo Workers	Journey Level	$43.81	5A	1M		View
Tile Setters	Journey Level	$43.81	5A	1M		View

Tile, Marble & Terrazzo Finishers	Journey Level	$35.93	**5A**	**1M**		**View**
Traffic Control Stripers	All cleanup required in connection with traffic control stripers work (Group 1)	$95.41	**15L**	**1K**		**View**
Traffic Control Stripers	Handling, painting and installing of all car stops, stop signs and any other type sign (Group 2)	$55.54	**15L**	**1K**		**View**
Traffic Control Stripers	Installation of guard rail and posts and similar protective devices (Group 2)	$55.54	**15L**	**1K**		**View**
Traffic Control Stripers	Installation of parking gates, ticket spitters and other mechanical and automatic control devices (Group 2)	$55.54	**15L**	**1K**		**View**
Traffic Control Stripers	Installation of plastic metal or composition button, or lines used instead of paint (Group 1)	$95.41	**15L**	**1K**		**View**
Traffic Control Stripers	Line removal; chemical sand and hydro-blast, paint and button (Group 1)	$95.41	**15L**	**1K**		**View**
Traffic Control Stripers	Manufacturing and installation of all car stops and control devices and similar traffic regulators (Group 2)	$55.54	**15L**	**1K**		**View**
Traffic Control Stripers	Manufacturing, painting, stenciling, servicing, repairing, placing and removal of traffic safety and control devices/barricades (Group 2)	$55.54	**15L**	**1K**		**View**
Traffic Control Stripers	Painting and installing lines, arrows, bumpers, curbs, etc., on parking lots, air fields, highways, game courts (Group 1)	$95.41	**15L**	**1K**		**View**
Traffic Control Stripers	Preparation and maintenance of all surfaces (Group 1)	$95.41	**15L**	**1K**		**View**
Traffic Control Stripers	Seal coating, slurry coating and other surface protection (Group 2)	$55.54	**15L**	**1K**		**View**
Truck Drivers	Asphalt Mix Over 20 Yards	$66.71	**5D**	**1V**	**8M**	**View**
Truck Drivers	Asphalt Mix To 20 Yards	$66.49	**5D**	**1V**	**8M**	**View**
Truck Drivers	Dump Truck	$66.49	**5D**	**1V**	**8M**	**View**
Truck Drivers	Dump Truck & Trailer	$66.71	**5D**	**1V**	**8M**	**View**
Truck Drivers	Other Trucks	$66.00	**5D**	**1V**	**8M**	**View**
Truck Drivers - Ready Mix	Transit Mixers 20 yards and under	$66.71	**5D**	**1V**	**8M**	**View**
Truck Drivers - Ready Mix	Transit Mixers over 20 yards	$67.09	**5D**	**1V**	**8M**	**View**
Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$17.13		**1**		**View**
Well Drillers & Irrigation Pump Installers	Oiler	$17.13		**1**		**View**
Well Drillers & Irrigation Pump Installers	Well Driller	$18.00		**1**		**View**

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Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.

J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.

K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

1. N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

   O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.

   P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

   Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.

   R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.

   U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

   V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.

   X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.

   Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.

   Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.

   M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.

   R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.

   U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

   H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.

   J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

   K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

Overtime Codes Continued

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage

C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:
On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours

worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.

S. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, work performed in excess of (10) hours shall be paid at one and one half (1-1/2) times the hourly rate of pay. On Monday through Friday, work performed outside the normal work hours of 6:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations).

All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Multiple Shift Operations: When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. Special Shifts: The Special Shift Premium is the basic hourly rate of pay plus $2.00 an hour. When due to conditions beyond the control of the employer or when an owner (not acting as the contractor), a government agency or the contract specifications require more than four (4) hours of a special shift can only be performed outside the normal 6am to 6pm shift then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday).

U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

   The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

   When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

   When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

11. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   C The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage. All non-overtime and non-holiday hours worked between 4:00 pm and 5:00 am, Monday through Friday, shall be paid at a premium rate of 15% over the hourly rate of wage.

   D. All hours worked on Saturdays and holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   E. The first two (2) hours after eight (8) regular hours Monday through Friday, the first ten (10) hours on Saturday, and the first ten (10) hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, and Sundays shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Overtime Codes Continued

11. F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one-half times the hourly rate of wage for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

G. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.

All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of nine (9) hours or more. When an employee returns to work without at least nine (9) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the nine (9) hours rest period.

H. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.

All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of ten (10) hours or more. When an employee returns to work without at least ten (10) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the ten (10) hours rest period.

J. All hours worked on holidays shall be paid at double the hourly rate of wage.

K. On Monday through Friday hours worked outside 4:00 am and 5:00 pm, and the first two (2) hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked over 10 hours per day Monday through Friday, and all hours worked on Saturdays, Sundays, and Holidays worked shall be paid at double the hourly rate of wage.

L. An employee working outside 5:00 am and 5:00 pm shall receive an additional two dollar ($2.00) per hour for all hours worked that shift. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

Overtime Codes Continued

11. M. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 am to 6:00 pm, then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten shifts.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay. All work performed after 6:00 pm Saturday to 5:00 am Monday, all work performed over twelve (12) hours, and all work performed on holidays shall be paid at double the straight time rate of pay.

Shift Pay Premium: In an addition to any overtime already required, all hours worked between the hours of 6:00 pm and 5:00 am shall receive an additional two dollars ($2.00) per hour.

N. All work performed over twelve hours in a shift and all work performed on Sundays and Holidays shall be paid at double the straight time rate.

Any time worked over eight (8) hours on Saturday shall be paid double the straight time rate, except employees assigned to work six 10-hour shifts per week shall be paid double the straight time rate for any time worked on Saturday over 10 hours.

O. All work performed on Saturdays, Sundays, and Holidays shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Overtime Codes Continued

11. P. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 a.m. to 6:00 p.m., then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shifts shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten-hour shifts.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Q. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 35% over the hourly rate of wage. Work performed on Sundays shall be paid at double time. All hours worked on holidays shall be paid at double the hourly rate of wage.

R On Monday through Saturday hours worked outside 6:00 am and 7:00 pm, and all hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

When a holiday falls on a Saturday, the Friday before shall be the observed holiday. When a holiday falls on a Sunday, the following Monday shall be the observed holiday.

S. The first ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. In the event the job is down due to weather conditions, or other conditions beyond the control of the Employer, then Saturday may be worked at the straight time rate, for the first eight (8) hours, or the first ten (10) hours when a four day ten hour workweek has been established.

All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

11. T. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.

All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

U. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.

All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

If, due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift, then a Special Shift may be worked, Monday through Friday, at the straight-time rate. The starting time of work for the Special Shift will be arranged to fit such conditions of work. Such Special Shift shall consist of eight (8) hours of work for eight (8) hours of pay or ten (10) hours of work for ten(10) hours of pay on a four-ten workday schedule.

V. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

W. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 6 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and Holidays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

X. Overtime Calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 a.m. to 6:00 p.m., then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shifts shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten-hour shifts.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Special Shifts: When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift, then a special shift may be worked at the straight time rate. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten- hour shifts.

Y. **Overtime calculations** are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift, then a special shift may be worked at the straight time rate. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay.

Special Shift Premium for Prevailed work in Washington is basic hourly rate plus $2.00 per hour. When conditions

beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that more than four (4) hours of the special shift can only be performed outside the normal 6 a.m. – 6 p.m. shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an Employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. Shift premium will only apply on the second shift of a two-shift operation when the language above is met.

Z. **Overtime calculations** are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

SPECIAL SHIFT: A special shift may be established at any time, at the option of the Employer, on any job or project.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).

C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).

H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).

L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).

N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.

Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).

S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

Holiday Codes Continued

6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).

H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

Holiday Codes Continued

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.

Holiday Codes Continued

7. X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.

Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, Christmas Eve, and Christmas Day (9). Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday. Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Holiday Codes Continued

15. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be

observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

M. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

Holiday Codes Continued

15. N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

O. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, the day before Christmas day, and Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

P. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Note Codes

8. D. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: $1.00, Levels C & D: $0.50.

N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do “pioneer” work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

Note Codes Continued

8. V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, and Class D Suit: $0.50. Special Shift Premium: Basic hourly rate plus $2.00 per hour.

When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay

Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate..

Z. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Note Codes Continued

9. A. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid $0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130’ to 199’ – $0.50 per hour over their classification rate.
(B) – 200’ to 299’ – $0.80 per hour over their classification rate.
(C) – 300’ and over – $1.00 per hour over their classification rate.

B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control

Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

Note Codes Continued

9. F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

H. One (1) person crew shall consist of a Party Chief. (Total Station or similar one (1) person survey system). Two (2) person survey party shall consist of a least a Party Chief and a Chain Person. Three (3) person survey party shall consist of at least a Party Chief, an Instrument Person, and a Chain Person.

I. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

Employees may be required to perform any combination of work within the Diving team/crew, (with the exception of dive Supervisor) provided they are paid at the highest rate at which he/she has worked for the shift.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

M. Certified Crane Operator Premium: Crane operators requiring certifications shall be paid $1.50 per hour above their classification rate.

Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, and Class D Suit: $0.50.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

N. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m.to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

When Laborers are required to work in or with live sanitary sewage, they will receive a premium payoff forty ($40.00) dollars per day above their regular daily classification pay. Further, the employer will pay all necessary inoculations to prevent disease if requested by the employee and as recommended by the Department of Labor and Industries (Industrial Safety and Health Division).

O. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

Any laborer working in Live Sewers shall receive forty dollars ($40.00) per day in addition to regular pay.

P. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

When Laborers are required to work in or with live sanitary sewage, they will receive a premium payoff forty ($40.00) dollars per day above their regular daily classification pay. Further, the employer will pay all necessary inoculations to prevent disease if requested by the employee and as recommended by the Department of Labor and Industries (Industrial Safety and Health Division)

Q. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

When Laborers are required to work in or with live sanitary sewage, they will receive a premium payoff forty ($40.00) dollars per day above their regular daily classification pay. Further, the employer will pay all necessary inoculations to prevent disease if requested by the employee and as recommended by the Department of Labor and Industries (Industrial Safety and Health Division).

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Procedures for preparation and submittal of the Schedule of Values.

1.02 SUBMITTALS

A. Contractor shall submit an initial Schedule of Values per the Pre-Construction Submittal Requirements of Section 01 33 00.

B. Contractor shall submit supporting documentation justifying the amounts in the Schedule of Values if requested by Owner.

1.03 SCHEDULE OF VALUES

A. Contractor shall submit a typed schedule on Owner's form. Once approved, Contractor shall not revise the Schedule of Values without prior approval by Owner.

B. Format:

1. Separate each category of Work into a separate line item.
2. List all major Work activities indicated on the Progress Schedule.
3. Separate floors, phases, and other easily recognized building divisions when appropriate.
4. Separate labor, materials and equipment for each item.
5. Identify site mobilization, demobilization, bonds, and insurance as individual line items.
6. Include a line item for close-out Work between Substantial Completion and Final Completion.
7. If applicable, include a line item for allowances. For unit cost allowances, give quantities measured from the Contract Documents multiplied by the unit cost.
8. When required by Owner, include separate line items for "separately funded Work."

END OF SECTION 01 29 73

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Preconstruction Meeting;
2. Progress Meetings; and
3. Other meetings, as requested by Owner.

1.02 PRECONSTRUCTION MEETING

A. Meeting Location: Owner will schedule a meeting prior to the start of construction. The purpose of this meeting is to review Contract administration requirements and mobilization procedures. Attendance is required for the following:

1. Architect/Engineer and design Subconsultants;
2. Contractor's Superintendent and Project Manager;
3. Representative of major Subcontractors, as appropriate;
4. Others, as appropriate.

B. Owner’s Designated Representative shall:

1. Preside over and conduct meeting.
2. Record, reproduce, and distribute copies of minutes within 7 Days of the meeting to all meeting participants.

C. Agenda for the meeting will include at a minimum:

1. The Work;
2. Progress Schedule, including Work sequence, phasing, and occupancy requirements;
3. Communications chain and persons authorized to direct changes;
4. Use of the Project site;
5. Special Project procedures;
6. Procedures and processing:
    a. Application for Payments and Schedule of Values;
    b. Contract Change Proposals (CCP), Work Directive (WD);
    c. Change Orders (CO);
    d. Requests for Information (RFI);

e. Submittals; and

f. Others as appropriate.

7. Project Record;
8. Construction facilities, controls, and construction aids;
9. Temporary utilities;
10. Security procedures;
11. Safety and first-aid procedures;
12. Environmental Health and Safety;
13. Housekeeping procedures;
14. AHJ representative(s) and inspection procedures;
15. Utility shutdowns;
16. Parking;
17. Existing conditions;
18. Subcontractor list;
19. Emergency phone and keys to site;
20. Progress meeting scheduling;
21. Shipment and deliveries; and
22. Other(s) as appropriate.

1.03 PROGRESS MEETINGS

A. Progress meetings will occur weekly.

B. Meeting Location: Contractor's Project field office, unless otherwise agreed.

C. Attendance: Representatives attending meetings must be qualified and authorized to act on behalf of their firms. Attendance shall include:

1. Architect/Engineer and Subconsultants, as appropriate;
2. Owner’s Designated Representatives;
3. Contractor's Superintendent and Project Manager;
4. Subcontractors, as appropriate;
5. Suppliers, as appropriate; and
6. Others, as appropriate.

D. Owner’s Designated Representative shall:

1. Administer progress and other specially scheduled meetings;

2. Record, reproduce, and distribute copies of minutes within 6 Days of meeting to all meeting participants; and

E. Contractor shall, at each meeting, provide each meeting attendant with:

1. Short-interval (look-ahead) schedule coordinated with the Progress Schedule;
2. Updated Progress Schedule, if appropriate;
3. Updated submittal log and schedules;
4. Updated RFI log;
5. Issues Log;
6. Quality Control Log; and
7. Any applicable tracking mechanisms.

F. Agenda for these meetings will include at a minimum:

1. Project safety;
2. Review and approval of minutes from previous meeting;
3. Review Work progress since previous meeting;
4. Review plans for progress for subsequent Work period and short-interval (look-ahead) schedule;
5. Review Progress Schedule;
6. Present corrective measures and procedures to regain Progress Schedule, as applicable;
7. Present field observations, problems, and conflicts;
8. Discuss RFIs;
9. Review quality control;
10. Review submittal log and schedules and present methods to expedite as required;
11. Review off-site fabrication;
12. Review delivery schedules;
13. Review coordination issues;
14. Review proposed changes for:
    a. Effect on Progress Schedule and on completion date.
    b. Effect on any other contracts of the Project.
15. Review Issues Log;
16. Review draft Application for Payment (at end of month);
17. Review Project Record; and

18. Review any other issues.

1.04 OTHER MEETINGS

A. Owner may call additional Project meetings as appropriate.

B. Meetings as required by other sections.

C. Format and agenda of these meetings will follow that of Progress Meetings unless Owner determines otherwise.

END OF SECTION 01 31 19

PART 1 GENERAL

1.01 GENERAL COMMUNICATION

A. Subcontractors: Informal communication between Owner, Owner's consultants, and other Subcontractors is permitted. If written clarification or direction is required to resolve questions, transmit questions in writing using a Request for Information (RFI) through the Contractor to Owner.

B. In case of an EMERGENCY, dial 9-1-1 if appropriate; otherwise, contact Owner's Designated Representative. If he or she is not available contact Facilities Services, Capital at 509-335-9000.

1.02 CORRESPONDENCE

A. Address all correspondence to Owner's Designated Representative.

B. Contractor shall copy Architect/Engineer on all correspondence to and from Owner.

C. Include Project title and Owner Project number on all correspondence.

1.03 REQUEST FOR INFORMATION

A. When field conditions or Contract Document require clarification, a written Request for Information (RFI) must be submitted per the following:

1. Identify the nature and location of each clarification/verification using a RFI form and provide at least the following information:
    a. Project name and number;
    b. Date;
    c. Date response requested;
    d. RFI number;
    e. Subject;
    f. Initiator of the question;
    g. Indication of costs;
    h. Indication of schedule impact;
    i. Location on site;
    j. Contract Drawing reference;
    k. Contract Specification section and paragraph reference;
    l. Descriptive text;
    m. Recommended solution(s); and

n. Space for reply on same page as questions.

B. Each RFI must be limited to a single issue, but shall reference other related RFI's.

C. Route and copy RFIs in same manner as correspondence.

D. Allow a minimum of 14 Days for Owner response to RFI.

1.04 NONCONFORMANCE REPORT

A. Reference Document: Owner Nonconformance Report (NCR).

B. Procedure: If Contractor proceeds to install deficient Work or fails to correct Work that in the opinion of Owner fails to conform to the Contract Documents, an NCR may be issued. Upon receipt of a NCR, Contractor shall take immediate action to correct nonconforming Work. Correction of nonconforming Work will be reviewed at progress meetings.

1.05 COORDINATION

A. Special Coordination: Contractor shall:

1. Coordinate off-hour access with the Puyallup campus administration. Access to the Puyallup campus is limited during non-office hours via security gates.

2. Consider potential impacts to research and classroom activities and provide accommodations to safely maintain active research projects. Research and classroom activities will be ongoing in existing buildings involved in the project. These research activities include active Vivaria.

3. Assist in the transfer of Electric Lines. On the Puyallup campus, the University is working with Puget Sound Electric (PSE) to transfer the existing WSU overhead electric lines to underground lines owned and managed by PSE. The contractor will work with WSU and PSE to support this transition. WSU will be responsible for PSE fees related to this transition, but the Contractor will need to provide installation services that are typically the responsibility of the Owner.

4. Contractor is responsible to keep elevator clean and in good working order after use. Eastlick Hall is the only multi-story building included in the scope of work. The elevator in Eastlick is available for contractor use.

5. Utilize staging areas and access routes will be determined during the design phase and require approval by WSU prior to use.

B. General Coordination: Contractor shall:

1. Coordinate with Work of other sections to ensure that all fixtures, devices, switches, outlets, ducts, pipes, and similar items can be installed as shown without modifications to framing. Provide all blockouts, raceways and similar framing, as required;

2. Coordinate the Work and not delegate responsibility for coordination to any Subcontractor. Contractor must make available to each Subcontractor, prior to the execution of each Subcontract, copies of the Contract Documents to which the Subcontractor will be bound. Subcontractor will similarly make copies of the Contract Documents available to their respective lower-tier Subcontractors. Contractor must provide Owner copies of the written agreements between Contractor and any Subcontractor upon request;

3. Anticipate interrelationship of all Subcontractors and their relationship with the total Work;

4. Resolve differences or disputes between Subcontractors and materials suppliers concerning coordination, interference, or extent of Work between sections;

5. Be in charge of and responsible for the Work and the Project site, including directing and scheduling all Work; and

6. Cooperate with Separate Contractors. Work by others may be occurring within the building or at locations adjacent or near to the Project site. Contractor must cooperate with all such work.

C. Mechanical and Electrical Coordination: Contractor shall:

1. Resolve all “tight”, restricted, or inaccessible areas involving Work of various disciplines in advance of installation.

2. If necessary, and before Work proceeds in these areas, prepare coordination drawings for review showing all Work in “tight”, restricted, or inaccessible areas.

3. Provide coordination drawings necessary to resolve “tight”, restricted, or inaccessible areas, at no increase in Contract Sum.

D. Job Site Field Measurements and Templates: Contractor shall:

1. Obtain field measurements required for accurate fabrication and installation of Work. Exact measurements are Contractor’s responsibility.

2. Furnish or obtain templates, patterns, and setting instructions as required for installation of all Work. Contractor shall verify in field, as needed.

E. Contractor Employee Identification:

1. Contractor shall ensure that all employees performing Work on the campus of Washington State University shall be clearly identifiable as an employee of the firm. The name of the firm shall be clearly visible. Examples of identification may include, but are not limited to: ID badges, branded clothing, branded high visibility wear, or other.

END OF SECTION 01 31 23

PART 1 GENERAL

1.01 SUMMARY

A. This Section specifies the administrative and procedural requirements to comply with the requirements of the General Conditions regarding preparation of Contractor's Progress Schedules, monthly update to the Progress Schedules, and other schedules as specified herein. The purposes of these schedules and reports are to:

1. Ensure adequate planning and execution of the Work by Contractor;
2. Establish a standard against which progress of the Work can be tracked;
3. Assist in monitoring progress;
4. Evaluate the impact of any changes to the Contract; and
5. Support the basis for progress payments.

B. All schedule submittals including updated Progress Schedules will be reviewed by Owner for compliance with Contract terms and the needs of the University. Review of any schedule does not constitute approval or acceptance of Contractor's construction means, methods, or sequencing, or an assessment by Owner of Contractor's ability to complete the Work within the Contract Time.

1.02 WORK INCLUDED

A. Contractor shall submit a preliminary Progress Schedule, as required by the Pre-Construction Submittal Requirements of Section 01 33 00.

B. Contractor shall prepare and submit Progress Schedules and reports as required by this Section. NOTE: Processing and payment of the second Application for Payment is contingent upon receipt, review, and subsequent acceptance of the updated Progress Schedule.

C. Contractor shall participate in monthly scheduling meetings and provide updated Progress Schedules as require by this Section.

D. Contractor shall perform Contemporaneous Period Analysis (CPA) of any delays associated with the critical path schedule as required by this Section.

E. Contractor shall provide weekly Short-Interval (look-ahead) schedules as required by this Section.

F. Contractor shall submit a Submittal Schedule as required by this Section.

1.03 PRELIMINARY PROGRESS SCHEDULE

A. Contractor shall submit a preliminary Progress Schedule as part of the Pre-Construction Submittal Requirements in Section 01 33 00 - Submittals. This preliminary Progress Schedule shall consist of a narrative description of the Work, a time-scaled logic diagram, and a tabular report identifying planned construction activities for the entire Work. Activities should be sufficiently detailed and no activity should be longer than 14 Days. Together these documents constitute the preliminary Progress Schedule. In the preliminary Progress Schedule, Contractor must emphasize milestone dates, the date of Substantial Completion, and the Work of separate contractors.

B. The preliminary Progress Schedule shall be prepared using the approved software program required by Part 2 of this Section. The time-scaled logic diagram and tabular report will provide similar data, but in an abbreviated form to that specified for the Contractor's Progress Schedule.

C. Contractor shall submit a narrative description of the Work for the 120 Day period following NTP that identifies the critical path and factors that might jeopardize the critical path, achievement of any major milestones, and any unusual circumstances or events upon which the preliminary Progress Schedule relies.

1.04 CONTRACTOR'S PROGRESS SCHEDULE

A. Contractor shall submit a detailed Progress Schedule within 30 Days of receiving Owner’s comments on its preliminary Progress Schedule. This schedule shall be the Contractor's as-planned schedule and shall be used to plan, organize, and execute the Work, record and report actual performance and progress through updates, and show how the Contractor plans to complete all remaining Work. The schedule must clearly identify the critical path.

B. The Contractor shall submit a Progress Schedule for the entire Project with all specified tabular reports and electronic copies for review and comment, with 14 Days submittal review per 01 33 00.

C. The Progress Schedule shall be prepared to show the order in which the Contractor proposes to carry out the Work and to indicate any access or Work area restrictions and planned availability and use of manpower, materials, and equipment. The Progress Schedule must incorporate any Contract-specified limitations and restrictions, contractually specified milestones, and completion date(s). Contractor shall prepare the Progress Schedule in sufficient detail and in compliance with the following factors:

1. The Progress Schedule shall be based upon calendar days;
2. The Progress Schedule shall be based upon retained logic;
3. The Progress Schedule shall be organized into logical subnetworks;
4. The type of Work to be performed and labor trades involved shall be identified;

5. All procurement, manufacture, and delivery activities for all major materials and equipment shall be identified. All long lead items identified by submittal shall be included.;
6. Date(s) when Owner-furnished equipment and material is required;
7. Assignment and coding of all activities by the performing entity such as Subcontractors, Vendors, Owner, etc. must be included;
8. Access to and availability of the Work area shall be considered;
9. Identification of interfaces and dependencies with preceding, concurrent, and succeeding activities shall be indicated;
10. Testing, submission and approval of test results shall be identified;
11. Planning for phased occupancy by Owner, if applicable, shall be included;
12. Dates when approvals are required by regulatory agencies or other third parties shall be indicated;
13. In calculating activity durations, normal inclement weather must be considered;
14. Incorporate the Submittal Schedule; and
15. Contract-stipulated milestones and completion date(s) shall be included.

D. The activities defined in the Progress Schedule shall represent the planned durations in anticipation of normal manpower and equipment utilization in durations of whole working days. No activity durations or nonconstruction activities such as procurement, delivery or submittal activities shall exceed 14 Days unless approved by Owner. Contractor shall schedule the Work to minimize the potential effects of adverse weather. Contractor shall also protect the Project site from the effects of weather and take other necessary measures such that the Work can be completed within the time established in the Contract.

E. Scheduled activities shall be identified by a unique identifier, which shall remain consistent throughout the Project.

1. Activity Description: Provide adequate information to readily identify each activity.
2. The critical path must be clearly identified on all schedules.
3. Furnish a written narrative to explain how durations for critical activities were determined. Such explanation must include the number of crews, crew composition, number of shifts per day, number of hours in a shift, and number of Work days per week, as well as construction equipment and material quantities.
4. Logic constraints are disallowed unless a compelling reason exists for their use.
5. Clearly identify and provide a written narrative for all activities that are planned to be conditioned by use of overtime, double shifts, or work on weekends or holidays, whether critical or not.

6. Each submittal involving graphical and/or tabular reports produced shall be accompanied by a report, which includes an open-end listing, a listing of any out-of-sequence progress, identification of any constrained dates, the schedule calculation mode (retained or logic override), and any other statistics that are normally a part of such a report.

F. Contractor shall provide the following submittals with the initial schedule submission, as applicable, and for each monthly update thereafter:

1. Detail Progress Schedule (baseline schedule);
2. Monthly updated Progress Schedules; and
3. Short-Interval (look-ahead) Schedules.

The above submittals shall be transmitted electronically.

G. The Contractor shall submit the Progress Schedule, consisting of the reports and diagrams as specified by this subsection, in the following formats quantities:

1. Electronic PDF file of all reports, schedules, etc.
2. Native electronic copy of the CPM Progress Schedule.

H. Float: Contractor is not entitled to any adjustment in the Contract Time or the Contract Sum, or to any additional payment or equitable adjustment of any sort, by reason of the loss or the use of any float time, including time between Contractor's anticipated completion date and the end of the Contract Time, whether or not the float time is described as such on the Progress Schedule.

I. Qualifications: Contractor shall submit the resume(s) of the person(s) designated as responsible for schedules and reports (the Contractor's scheduler) Prior to commencing construction activities. Contractor's scheduler shall have demonstrable capability to plan, coordinate, execute, and monitor a CPM schedule as required for this Project. Owner's Designated Representative will approve or disapprove the Contractor's proposed scheduler. In the event of disapproval, a new scheduler shall be proposed within 7 Days and be subject to the same consideration criteria as noted above.

1.05 MONTHLY UPDATES

A. Contractor shall prepare and submit updated Progress Schedules and participate in schedule update meetings with the Owner each month. Participation in the meeting and submission of the monthly update is a condition precedent for payment of the line item value for scheduling Work.

1. Updated monthly schedule submittals:

a. A PDF electronic version of complete Project schedule showing the critical path accompanied by a narrative of any deviations from the previous month.

b. Electronic schedule file in native format.

c. Short-interval schedules or look-ahead schedules shall not be an acceptable submittal.

B. Contractor shall prepare an update of the current Progress Schedule each month to reflect Work progress achieved since the previous update. Progress updating shall be performed without changes to the schedule logic or the original duration of activities. Monthly progress updating is required and necessary prior to performing a Contemporaneous Period Analysis of any change to the calculated completion date from the prior update.

C. Contractor may, in a second report, incorporate any logic and duration changes that represent revised planning. All such changes must be clearly identified and submitted for acceptance.

D. The Progress Schedule must clearly identify the current Substantial and Final Completion dates.

E. Contractor shall account for all adverse weather days and similar excusable noncompensable delays. By whatever method Contractor chooses to account for such delays and events, a narrative description and CPA of the accounting shall be included with the narrative report.

F. Monthly schedule update meetings:

1. Monthly schedule update meetings shall be held at Contractor's Project field office one week prior to the due date of Contractor’s monthly Application for Payment, unless otherwise agreed.
2. The Contractor shall provide updated Project schedule submittals.
3. The Contractor shall also provide a narrative report including:
   a. A description of the Work accomplished during the preceding period;
   b. A discussion of the Work that had been scheduled to be performed during the previous period but was not, and explain why it was not performed; and
   c. A discussion of the Work scheduled for the upcoming period noting any issues or events that could impact this Work. If Contractor intends to make logic or original activity duration changes, the report must specifically identify such changes.
4. Contractor, Owner, and Architect/Engineer will review these reports and will discuss any differences or issues raised. No contractual completion dates will be modified except by approved Change Order.

G. Timely submission of updates is of significant and crucial importance to the Project. Owner may withhold payment as per Section 01 29 00 Applications for Payment.

1.06 THE CONTEMPORANEOUS PERIOD ANALYSIS

A. It is Owner's intent to resolve all issues affecting the Contract completion date in a timely, efficient and effective manner. To achieve this goal, and in addition to contractor's obligation to follow the contractual dispute resolution procedure, Contractor shall analyze any delays to the critical path or completion date by application of the Contemporaneous Period Analysis method. A CPA shall normally coincide with the monthly schedule update meetings.

B. Assessment of impacts due to changes or other events, in accordance with the CPA method, must be based on the most recent accepted updated Progress Schedule. No logic or duration changes shall be made to updates until progress related data has been incorporated into the Progress Schedule and the Progress Schedule is updated to reflect actual progress for the period. All data shall be provided to Owner.

C. Submission of an accurate and properly updated Progress Schedule and completion of the Contemporaneous Period Analysis are conditions precedent to the review and approval of any request for an extension in the Contract Time. Owner may assess liquidated damages, if any, regardless of the status of any requests for time extensions pending, until any such requests are resolved.

D. The process for preparing and submitting a CPA is as follows:

1. Contractor will notify Owner in writing of event(s) or occurrence(s) which constitute a delay of the critical path or completion date affecting progress of the Work.
2. Contractor shall evaluate the event(s) or occurrence(s) and produce a narrative of the resulting delay describing the effect upon concurrent or logically connected subsequent activities.
3. Consistent with the narrative, Contractor shall produce a subnet to graphically describe the event(s) or occurrence(s) and the effect upon the Progress Schedule.
4. Contractor will recalculate the Progress Schedule and provide an updated PDF and Native Progress Schedule.

E. The CPA will be reviewed at the monthly schedule update meeting or at a special meeting scheduled with Owner. At the CPA review meeting, Contractor shall present the CPA and respond to questions.

F. Until and unless substantiated delay is accepted by Owner, the time effect shall not be incorporated into any monthly update. If accepted after a monthly update in which the event(s) or occurrence(s) took place, that monthly update may be recalculated, resubmitted and shall be included in an approved Change Order.

1.07 SHORT-INTERVAL SCHEDULE

A. Prepare a weekly Short-Interval (look-ahead) Schedule based upon the Contractor's Work plan and the updated Progress Schedule.

B. Format for the Short-Interval (look-ahead) Schedule shall be acceptable to Owner. The format shall include comment annotation as necessary.

C. Content of the Short-Interval (look-ahead) Schedule shall include the Work planned for the next 3-week period and the Work that was performed in the previous week.

D. Copies of the Short-Interval (look-ahead) Schedule shall be provided at the weekly progress meetings to be used as a basis for discussion of progress and of planned Work.

1.08 SUBMITTAL SCHEDULE

A. Provide a Submittal Schedule within 10 Days of Owner’s Acceptance of the Project Schedule per Section 01 33 00 - Submittals.

PART 2 PRODUCTS

2.01 SCHEDULING SOFTWARE

A. Contractor shall utilize Primavera P6 unless otherwise agreed to by Owner.

B. Contractor shall provide a licensed and royalty pre-paid copy of the mutually agreed upon scheduling software. The selected software must be capable of performing target-to-current schedule comparisons, cost and resource loading functions and have the option of executing calculations in retained logic. Activities must be able to process lead and lag time relationships, start-to-finish or finish-to-finish relationships, and be capable of being hammocked, if required. The software must be registered with Owner and be provided in a format compatible with Owner's systems.

END OF SECTION 01 32 13

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Preconstruction photography.

B. Construction photography of Work-in-progress.

1.02 GENERAL

A. Contractor shall provide photographs taken from locations coordinated with Owner.

B. Photographer: Experienced in taking construction photography.

C. Equipment: All photos shall be in digital format.

D. Video images may be acceptable for certain operations. Confirm with Owner.

PART 2 PRODUCTS

2.01 PRECONSTRUCTION PHOTOGRAPHS

A. Contractor shall provide electronic files containing photographs of the existing conditions at the site, surroundings, and haul routes per the Pre-Construction Submittal Requirements of Section 01 33 00. Coordinate with Owner the extent of the preconstruction photographic record that is required.

2.02 CONSTRUCTION PHOTOGRAPHS

A. Contractor shall provide electronic files containing photographs of construction progress on a monthly basis.

2.03 PHOTOGRAPHIC SUBMITTALS

A. Photographs shall be submitted each month during the Contract Time, or as otherwise agreed upon by Owner. The number of photographs shall be sufficient to document the site to the satisfaction of the Owner and Contractor.

B. Photographs shall be representative of Project progress, showing all major Work and any critical concealed conditions.

C. The files in each monthly photograph submittal must each be labeled with the Project name, Project number, and submittal date. Additionally, each photograph shall be dated, labeled, and accompanied by a brief description identifying the location and direction the photo was taken. Date stamp using month/date/year format.

PART 3 EXECUTION

3.01 PRECONSTRUCTION PHOTOGRAPHS

A. Coordinate the scope of preconstruction photographic record survey with Owner.

B. Take preconstruction photographs to identify and establish a baseline record of existing conditions.

C. A preconstruction photographic record survey shall include, but not be limited to, all areas that may be impacted or damaged by construction phase activities.

D. The extent or nature of the existing site and adjacent surroundings shall be thoroughly documented.

3.02 CONSTRUCTION PHOTOGRAPHS

A. Contractor shall take construction photographs each month during construction of the Project.

B. Contractor shall document concealed conditions (once exposed) that differ from expectations.

1. It is critical that Contractor photographically document concealed conditions that may benefit Owner's future maintenance and operations activities. Take photographs (with a reference point) prior to cover or concealment. For example:
    a. Underground pipe arrangements/valves/structures.
    b. Under-slab utility rough-in.
    c. Wall cavity utility routing.
    d. Above-ceiling installation after ceiling support system installed, but prior to cover.
2. The photograph record described above shall be considered minimum and shall not be deemed to limit the quantity or quality of the photographic record.

END OF SECTION 01 32 33

PART 1 GENERAL

1.01 SUMMARY

A. This section includes administrative and procedural requirements for submittals required for performance of the Work, including:

1. Pre-Construction Submittal Requirements;
2. Shop Drawings;
3. Product data;
4. Samples; and
5. Mock-ups.

B. Design-Builder shall review all construction phase submittals for compliance with WSU's standards, the contract documents, and the ensuing construction documents prior to issuance to the Owner.

1.02 SUBMITTAL PROCEDURES

A. Provide submittal schedule as required by Section 01 32 13 – Progress Schedule. The Submittal Schedule shall meet all of the requirements below.

B. Design-Builder shall provide a comprehensive submittal register for all deliverables on the project, including design submittals, construction submittals, administrative submittals, and closeout submittals. The comprehensive submittal register will be jointly reviewed by WSU and the Contractor for the purpose of agreeing whether each submittal is to be treated as: "For WSU Action", "For Information Only", "For Concurrent Action" or "For Record".

1. Action submittals requiring review by the Owner:
    a. Submittals for products, systems and equipment that deviate from those indicated in the final, approved Design-Build documents.
    b. Administrative submittals as specified elsewhere in the contract documents (i.e. bonds, insurance, management plans, logistical / site management plans, etc.)
2. Information submittals include all construction phase submittals once they have been processed through to 'approved' by the architect or engineer of record and the Contractor.
3. Concurrent action submittals include those limited submittals identified jointly as needing concurrent 'for approval' review by the architect or engineer of record and the Owner. Examples of concurrent action submittals may include those portions of the Work where Owner Furnished activities must be coordinated simultaneously with the Work (e.g. building controls, access control and door hardware, alarms, etc.).
4. Record submittals may include items such as permits, O&M documents,

warranties, closeout documentation, etc.

C. Coordination: Review of the submittals by Owner is not for the purpose of determining their accuracy and/or completeness, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of Contractor as required by the Contract Documents.

1. Owner reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are provided.

2. Allow at least 14 Days for review of each submittal by Owner. Complex or interrelated submittals, or the submission of multiple submittals at or near the same time, will require additional time. Provide a "priority list" when submitting multiple submittals at or near the same time. Submittal sequencing should coincide with the submittal schedule (see Section 01 32 13 – Progress Schedule).

D. Submittal Preparation: Place a permanent label or title block on each submittal for identification.

1. Include the following information on the label or title block:

a. Project name, Project number, and date;

b. Name and address of Owner;

c. Name and address of Contractor and submitting Subcontractor, if applicable;

d. Name and address of supplier and manufacturer, if applicable;

e. Number and title of appropriate Specification section; and

f. Drawing number and detail references, as appropriate.

2. Provide adequate space for action stamps to record review.

E. Submittal Transmittal: Package submittals in manageable quantities and transmit to Owner and Architect/Engineer, if applicable, simultaneously. Submittals received from sources other than Contractor will be returned without action. By submitting submittals, Contractor represents to Owner that 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 each submittal with the requirements of the Work and of the Contract Documents.

1. Address one topic or related set of topics in each transmittal based upon Specification sections (i.e., mechanical items should not be submitted under same transmittal with electrical items).

2. Clearly call out relevant information, deviations, and requests for data, including minor variations from the Contract Documents on both the transmittal and all copies of a submittal.

3. Shop drawings, product data, samples, and mock-ups shall be submitted to Owner's Designated Representative for review/approval. The minimum number of submittals to be provided are:
    a. Pre-Construction, Shop Drawings, Product Data: Electronic copies.
    b. Samples: As required by the technical Specification section.
    c. Mock-ups: As required by the technical Specification section.
    d. Demonstrations: As required to facilitate installation and inspection.
    e. Reference technical Specifications for additional submittal requirements.
4. Owner may modify the required submittal quantities.

F. Material and Color Submittal: Submit samples of actual colors and/or materials.

G. Number submittals by Specification section number and revision letter.

H. In the event of the need to "revise and resubmit" a submittal, resubmit same in acceptable form/content, clearly identifying deviations from the previous rejected submittal. Contractor shall also keep accurate records of the receipt, review, and delivery of all submittals and shall submit to Owner, as requested, status reports.

I. Provide a final electronic copy of all approved submittals.

1.03 PRE-CONSTRUCTION SUBMITTAL REQUIREMENTS

A. All Pre-Construction Submittals are required before onsite construction activities may commence. Contractor shall submit the following Pre-Construction Submittals. Submittal review for these items only shall be supplied within 14 days of receipt by Owner.

1. Indoor Air Quality Management Plan
2. Site Safety and Health Plan (for information only)
3. Quality Control / Quality Assurance Plan
4. Waste Management Plan
5. Progress Schedule
6. Schedule of Values
7. Pre-Construction Photographs
8. Emergency Points of Contact
9. List of Subs and Suppliers
10. SWPP (Storm Water Pollution Prevention Plan)

11. Demolition Plan
12. Asbestos Safety Plan
13. Traffic Control Plan
14. List of Long Lead Items

1.04 SHOP DRAWINGS

A. Submit Shop Drawings drawn to accurate scale. Do not reproduce Contract Documents or copy standard information for use as Shop Drawings. Standard information prepared without specific references to the Project will not be accepted as a Shop Drawing.

B. Shop Drawings Include: fabrication and installation drawings, setting diagrams, schedules, patterns, templates, and similar drawings. Include the following information:

1. Dimensions;
2. Products and materials;
3. Compliance with specified standards;
4. Coordination requirements;
5. Notation of dimensions established by field measurements;
6. Any deviation from Drawings or Specifications; and
7. Date when review is requested to maintain Progress Schedule.

C. Coordination Drawings:

1. Contractor and Subcontractors shall prepare and submit coordinated Shop Drawings at a scale not less than 1/4" = 1'0". Clearly show how the Work is to be installed or constructed in relation to the Work of other Subcontractors. Required coordinated Shop Drawings shall include but not be limited to the following:

   a. Contractor shall prepare a drawing indicating the reflected ceiling plan, beam soffit elevation, ceiling heights, roof openings, and other items to be installed.

   b. HVAC and controls Subcontractors shall prepare drawings indicating location, size, and elevation of ductwork, hangers, seismic bracing, grilles, registers, equipment, access (clear) areas to service equipment, and ceiling access doors.

   c. Plumbing Subcontractor shall prepare drawings indicating location and elevation of piping, hangers, seismic bracing, valves, cleanouts, access doors, fixtures, and required access (clear) areas for service of fixtures.

   d. Fire sprinkler Subcontractor shall prepare drawings indicating the

layout of the complete sprinkler system including hangers, seismic bracing locations, and pipe runs including branch lines and riser diagrams. Indicate on a separate ceiling plan the location of sprinkler heads.

e. Electrical Subcontractor and fire alarm Subcontractor shall prepare drawings indicating the layout of fixtures, conduit runs 2" in diameter or greater, clearances, pull boxes, junction boxes, sound system speakers, cable trays and hangers, electrical equipment, panels, and access areas for equipment and panels.

2. Contractor shall meet with its Subcontractors to resolve any apparent conflicts in the coordinated Shop Drawings.

3. When these drawings have been coordinated to the satisfaction of Contractor and each applicable Subcontractor, Contractor and the applicable Subcontractor will sign and date a certification indicating that:

   a. all related conditions have been reviewed;

   b. no apparent conflicts exist;

   c. the requirements of the Contract Documents have been complied with; and

   d. all elements of a complete installation are included.

4. Maintain and submit all coordinated Shop Drawings as part of the Project Record (see Section 01 78 39 – Project Record).

5. Owner encourages Contractor to conduct its coordination effort through the use of digital models and Building Information Modeling (BIM) technology. If Owner requests, Contractor must produce submittals acceptable to Owner, but the submittals must satisfy the requirements identified above.

1.05 PRODUCT DATA

A. Product data includes: Manufacturer's printed installation instructions, catalog cuts, standard color charts, rough-in diagrams and templates, standard wiring diagrams, and performance curves.

1. Where product data must be specially prepared because standard printed data is not suitable, the submittal must be provided as a Shop Drawing.

B. Requirements: Mark each copy to show applicable options. Include the following information:

1. Manufacturer's printed recommendations;

2. Compliance with recognized trade-association standards;

3. Compliance with recognized testing-agency standards;

4. Application of testing-agency labels and seals;

5. Notation of dimensions verified by field measurement;
6. Notation of coordination requirements;
7. Any deviation from Drawings or Specifications; and
8. Date when review requested to maintain Progress Schedule.

1.06 SAMPLES AND MOCK-UPS

A. Submit samples and mock-ups that are identical to the material or product proposed. Samples include partial sections of components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern.

1. Package samples to facilitate review. Include the following:

a. Generic description of the sample;
b. Source;
c. Product name or name of manufacturer;
d. Compliance with recognized standards;
e. Availability and delivery time; and
f. Specification section.

B. Requirements: Submit samples and mock-ups for review of kind, color, pattern, and texture for a comparison of these characteristics before actual installation.

1. Where variation in color, pattern, texture or other characteristics are inherent in the material, submit not less than four units to show limits of variation.

C. Submittals: Where samples are for selection of appearance from a range of standard choices, submit a full set of choices for the material or products.

D. Maintain sets of approved samples and mock-ups at the Project site for quality comparisons throughout the course of construction.

E. Demolish and remove all samples and mock-ups prior to Substantial Completion but not sooner than directed by Owner.

1.07 OWNER'S ACTION

A. Review: Except for submittals for information or a similar purpose, Owner will review each submittal, mark to indicate action taken, and return promptly.

B. Owner approval of submittals does not supersede or alter Contract Document requirements.

END OF SECTION 01 33 00

PART 1 GENERAL

1.01 SUMMARY

A. This Section includes the administrative and procedural requirements for any general alterations to be performed during the Project, including but not limited to products, transition and adjustments, cutting, patching, and repair and cleaning.

1.02 SUBMITTALS

A. Contractor shall submit a written request in advance of cutting or alteration that impacts:

1. Structural integrity of any element of Project.
2. Integrity of weather-exposed or moisture-resistant elements.
3. Efficiency, maintenance, or safety of any operational elements.
4. Visual qualities of sight exposed elements.
5. Work of Owner or a separate contractor.

B. Contractor must include in its written request, when required:

1. Identification of Project.
2. Location and description of affected Work.
3. Necessity for cutting or alteration.
4. Description of proposed Work and products to be used.
5. Alternatives to cutting and patching.
6. Effect on Work of Owner or separate contractor.
7. Written permission of affected separate contractor.
8. Date and time Work will be executed.

1.03 QUALITY ASSURANCE

A. Limits of Work:

1. Contractor shall maintain existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and nonstructural roofing material) not indicated to be removed; do not cut such existing conditions beyond indicated limits.
2. Contractor shall maintain existing interior nonstructural elements (interior walls, doors, floor coverings, and ceiling systems) not indicated to be removed; do not cut such existing conditions beyond indicated limits.
3. Contractor shall maintain existing nonshell, nonstructural components (walls, flooring, and ceilings) not indicated to be removed; do not cut such

existing conditions beyond indicated limits.

B. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.

C. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:

1. Primary operational systems and equipment.
2. Air or smoke barriers.
3. Fire-suppression systems.
4. Mechanical systems piping and ducts.
5. Control systems.
6. Communication systems.
7. Conveying systems.
8. Electrical wiring systems.
9. All low voltage systems.
10. Operating systems of special construction in Division 13.
11. Other operating systems as appropriate.

D. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended that result in increased maintenance or decreased operational life or void of warranty, or could adversely affect safety. Miscellaneous elements include the following:

1. Water, moisture, or vapor barriers.
2. Firestopping or fire barriers.
3. Membranes and flashings.
4. Exterior curtain-wall construction.
5. Equipment supports.
6. Piping, ductwork, vessels, and equipment.
7. Noise and vibration-control elements and systems.
8. Other miscellaneous systems as appropriate.

E. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exterior conditions or in occupied spaces in a manner that would, in Owner's opinion, reduce the building's aesthetic qualities. Contractor shall remove and replace conditions that have been cut and patched in a visually unsatisfactory manner.

PART 2 PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK

A. New Materials: Match existing products and Work when patching and extending Work.

B. Type and Quality of Existing Products: Determine by inspection and testing products where necessary; refer to existing Work as a standard.

PART 3 EXECUTION

3.01 EXAMINATION

A. Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents related to that portion of the Work, as well as other information available to Contractor, take field measurements, and inspect any existing conditions, including elements subject to damage or movement during cutting and patching.

B. After uncovering existing Work, inspect conditions affecting performance of Work.

C. By beginning any cutting or patching, Contractor represents and warrants its acceptance of existing conditions.

D. Contractor shall verify that demolition is complete and areas are ready for installation of new Work.

3.02 PREPARATION

A. Contractor shall cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.

B. Contractor shall remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, deteriorated masonry, concrete, and disturbed subgrade material. Replace materials as specified for finished Work.

C. Contractor shall remove debris and abandoned items from area and from concealed spaces.

D. Contractor shall prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.

E. Contractor shall close openings in exterior surfaces to protect existing Work. Contractor shall insulate ductwork and piping to prevent moisture and condensation in exposed areas.

F. Contractor shall provide temporary supports to ensure structural integrity of the Work. Provide devices and methods to protect Work from damage.

3.03 PERFORMANCE

A. Contractor shall coordinate alterations and renovations to expedite completion of the Work.

B. Remove, cut, and patch Work in a manner to minimize damage. Provide a means of restoring products and finishes to their original or specified condition.

C. Refinish remaining existing surfaces in renovated rooms and spaces, to specified condition for each material, with a neat and clean transition to adjacent finishes.

D. In addition to specified replacement of equipment and fixtures, restore existing plumbing, heating, ventilation, air conditioning, and electrical systems to full original operational condition.

E. Install products as specified in individual sections.

F. Remove samples of installed Work for testing when requested.

G. Provide openings in the Work for penetration of mechanical and electrical Work.

H. Cut rigid materials using the appropriate equipment and tool. Pneumatic tools not allowed without prior approval.

1. Concrete Walls: Saw-cut walls using accurately located straight lines, unless directed otherwise. Minimize overcuts.
2. Masonry Walls: Saw-cut along mortar joints, cutting block uniformly in accurately located straight lines, unless otherwise directed. Remove all mortar adhering to edges. Overcuts not allowed.
3. Wood Framed Walls: Demolish plaster or gypsum wallboard, removing wall framing only as required. Cut wall finish materials in straight uniform lines.
4. Concrete Floors: Saw-cut floors and remove. Core drill as required.

I. Restore Work with new products in accordance with requirements of Contract Documents.

J. Fit Work to existing pipes, sleeves, ducts, conduit, and other penetrations through surfaces, while maintaining assemblies.

K. At penetrations of fire rated walls, partitions, ceilings, or floors, completely seal voids with firestopping material to full thickness of the penetrated element, while maintaining assemblies.

L. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 01 35 16

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements pertaining to regulatory requirements.

B. List of regulatory requirements.

1.02 CONTRACTOR RESPONSIBILITY

A. Contractor is solely responsible for compliance with all codes, laws, or regulatory requirements.

B. Inspections performed or not performed by the City of Pullman and the City of Puyallup, Labor and Industries, Owner, Owner Designated Representative, or others who are under contract to Owner do not waive or change Contractor's obligations, nor do such inspections constitute approval or acceptance of portions of the Work.

1.03 CONTRACTOR REQUIREMENTS

A. Contractor shall perform the Work in accordance with the requirements of governing agencies and applicable regulatory requirements, including those included in this Section and elsewhere in the Contract Documents. Contractor must comply with all applicable laws, building codes, regulations, and rules, including, when applicable, the Washington State University campus code.

B. Contractor shall schedule and coordinate inspections and gain approvals required by the City of Pullman and the City of Puyallup and other governing agencies in a timely manner and as required for Owner occupancy of the Project within the Contract Time.

C. Contractor shall inform the City of Pullman and the City of Puyallup Building and Fire Departments, Labor and Industries, and other governing agencies of changes in the Work affecting regulatory requirements in a timely manner.

D. Contractor shall promptly forward to Owner all inspection reports, orders, permits, and other directives and correspondence received from the City of Pullman and the City of Puyallup inspectors or other governing agencies having jurisdiction over the Work.

E. Contractor shall promptly notify Owner when the Contract Documents appear to be in conflict with Regulatory Requirements.

F. Contractor shall, at all times, use its best efforts and exercise its judgment as an experienced contractor to adopt and implement policies and practices designed to avoid work stoppages, slowdowns, disputes, or strikes where reasonably possible and practical under the circumstances, and shall, at all times, maintain Project-wide labor harmony.

1.04 REGULATORY REQUIREMENTS

A. Authority Having Jurisdiction (AHJ) shall be the organization, office, or individual responsible for enforcing the requirements of the applicable code(s) or standard(s), and or for approving equipment, materials, installation(s), or procedure(s).

B. Regulatory authorities establish minimum requirement levels. Where provisions of the Contract Documents and regulatory requirements differ or conflict, the more stringent requirement governs.

C. Regulatory requirements added by other sections of the Contract Documents or otherwise applicable are binding upon the Work in accordance with the provisions of this Section. The regulatory-requirements list provided below is intended to assist Contractor in determining the regulatory requirements for the Project, but neither the inclusion nor omission of any item from the list shall be construed to relieve Contractor of obligations that otherwise exist under the law or the Contract.

1.05 LIST OF REGULATORY REQUIREMENTS

A. International Building Code (IBC), current adopted edition.

B. International Fire Code (IFC), current adopted edition.

C. National Fire Protection Association (NFPA) Codes.

D. American Society of Mechanical Engineers (ASME), ASME A17.1 Safety Code for Elevators and Escalators, current adopted edition.

E. American Society of Mechanical Engineers (ASME), ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts, current adopted edition.

F. State of Washington, WAC-51-50-1101, Accessibility, as adopted by the State of Washington.

G. International Code Council (ICC)/American National Standards Institute (ANSI) A117.1 Accessible and Usable Buildings and Facilities, current adopted edition.

H. State of Washington, WAC Chapters 173, 246, and 296, as applicable.

I. U.S. Environmental Protection Agency 40 CFR, as applicable.

J. U.S. Transportation Department Title 49, Parts Pertaining to Transportation of Hazardous Materials.

K. U.S. Nuclear Regulatory Commission Title 10, Parts Pertaining To Radioactive Materials Management.

L. Washington State Ventilation and Indoor Air Quality Code, WAC 51-13.

M. Washington State Energy Code, WAC 51-11C. Shortened

N. Mechanical Work: International Mechanical Code (IMC), current adopted edition.

O. Plumbing Work: Uniform Plumbing Code (UPC) as amended and adopted by the State of Washington, in the Washington Administrative Code (WAC).

P. Federal Emergency Management Agency (FEMA) requirements for floodway/floodplain development.

Q. Electrical Work:

1. NFPA 70, National Electrical Code (NEC), most recent adopted edition.
2. Underwriters' Laboratories (UL).
3. National Electrical Manufacturer's Association (NEMA).
4. National Electric Safety Code (NESC).

1.06 PERMITS REQUIRED

A. Contractor shall obtain and pay for all required building permits, including any renewals. Contractor shall identify costs for permits on the Schedule of Values for permits obtained.

B. All trade permits (e.g. electrical, pressure vessel, elevator, etc.) must be included in each Subcontractor bid.

C. Owner obtains permits for the following facilities and activities.

1. U.S. Army Corps of Engineers:
   a. Wetlands (404).
2. Permits and/or Approvals from the DOE or local environmental authority:
   a. Stormwater from Construction Sites (Notice of Intent).
   b. Wastewater Discharge Facilities.
   c. Well Construction (including Well Abandonment).
   d. Water Rights.
   e. Notice of Construction (Air Pollution Sources).
   f. SEPA.
   g. Floodway/Floodplain development.

1.07 APPRENTICESHIP REQUIREMENTS

A. Pursuant to RCW 39.04.320, if the Contact Sum exceeds one million dollars no less than fifteen percent of the Labor Hours must be performed by apprentices, unless a different amount is permitted or otherwise required by law.

B. Apprentice hours shall be performed by participants in training programs approved by the Washington State Apprenticeship Council.

C. "Labor hours" means the total hours of workers receiving an hourly wage who are directly employed on the site of the public works project. "Labor hours" includes hours performed by workers employed by Contractor and all Subcontractors working on the Project. "Labor hours" does not include hours worked by foremen, superintendents, owners, and workers who are not subject to prevailing wage requirements of RCW 39.12.

D. During the term of this Contract, the Owner may adjust the apprentice labor hour requirement upon its finding or determination that includes:

1. A demonstration of lack of availability of apprentices in the geographic area of the Project;

2. A disproportionately high ratio of material costs to labor hours that does not make feasible the required minimum levels of apprentice participation;

3. Demonstration by participating contractors of a good faith effort to comply with the requirements of RCW 39.04.300, RCW 39.04.310, and RCW 39.04.320;

4. Small contractors or subcontractors (e.g., small or emerging businesses) would be forced to displace regularly employed members of their workforce;

5. The reasonable and necessary requirements of the Contract render apprentice utilization infeasible at the required level (e.g., the number of skilled workers required and/or limitations on the time available to perform the Work preclude utilization of apprentices); or

6. Other criteria the Owner deems appropriate, which are subject to review by the office of the Governor.

E. Contractor shall report apprentice participation to the Owner monthly via the LnI Contractor's Portal. In addition, copies of certified payroll records may be requested to document the goal.

F. Contractors and subcontractors may not be required to exceed the apprenticeship utilization requirements of RCW 39.04.320.

END OF SECTION 01 41 00

PART 1 GENERAL

1.01 SUMMARY

A. Conduct portions of the Work requiring special procedures due to hazardous materials and conditions in accordance with regulatory standards and guidance provided in this Section.

1.02 SUBMITTALS

A. Contractor shall deliver a current copy of its site specific Health and Safety Plan to the Owner per the Pre-Construction Submittal Requirements of Section 01 33 00. The submittal must include each Subcontractor's site specific Health and Safety Plan. Submittal to Owner is for information only, not for review, acceptance, or approval of the Health and Safety Plan, nor for analysis of content or completeness.

1.03 QUALIFICATIONS OF HEALTH AND SAFETY PERSONNEL

A. Contractor shall employ a competent person for each hazardous construction task in accordance with the requirements of WAC 296-155.

B. Contractor shall submit to Owner the names of its employees performing duties as competent persons, as well as the names of Subcontractor employees performing duties as competent persons.

1.04 HAZARDOUS MATERIALS MANAGEMENT

A. Dangerous Waste Management:

1. Contractor agrees and acknowledges that:

   a. Contractor has direct and exclusive control over the Work and operations at the Project site and is responsible for any Contractor generated, created, or disturbed Washington State dangerous waste and its collection, labeling, accumulation, transportation, and disposal. Owner's EH&S department will provide assistance to Contractor upon request, and will coordinate transportation and disposal of Project-generated Washington State dangerous waste.

   b. Contractor must provide Owner immediate notification of any pre-existing unanticipated Washington State dangerous waste or site contamination.

2. Contractor is responsible for securing its own waste generator identification number, and Contractor shall sign all manifests associated with the Contractor-generated waste.

   a. Contractor shall obtain an EPA/State ID number in accordance with WAC 173-303-360 before conducting activities generating chemical waste designated as Washington State dangerous waste.

b. Contractor shall cancel the EPA/State ID number when:

1) All activities generating or managing waste have ceased;

2) All regulated wastes have been removed from the Project site under proper manifests, and all site contamination is remediated; and

3) All annual dangerous-waste reporting requirements are complete.

c. Contractor may call the Washington State Department of Ecology (DOE) to request a reporting package for early submittal.

d. Contractor shall furnish to Owner's EH&S Department, Pullman, WA, within 3 Days from submittal or receipt, copies of the following documents:

1) Form 2 Notification of Dangerous Waste Activities;

2) All signed Uniform Hazardous Waste Manifests (original copy when shipping wastes and copy returned from the treatment, storage, disposal, or recycling facility), Land Disposal Restriction Notification forms, Certificates of Recycling/Disposal/Destruction, and Exception Reports;

3) All Annual Reports; and

4) All correspondence from the DOE.

3. Owner remains responsible for Washington State dangerous waste and site contamination: (1) pre-existing Contractor's activities at the site, (2) not listed in the Contract Documents, and (3) not disturbed by Contractor through improper construction activities.

4. For waste identified in contract document and for unanticipated Washington State dangerous waste or site contamination discovered during the course of the Work on the site, Contractor shall:

a. Collect, containerize, and accumulate all Washington State dangerous waste or site contamination in accordance with applicable Federal, State, and local regulations.

b. Coordinate all transportation and disposal activities through Owner's EH&S department, who will utilize the Washington State Hazardous Waste Disposal Services contract or equivalent pre-approved contractor. Owner's disposal contractor shall complete all applicable dangerous waste shipping papers including all Uniform Hazardous Waste Manifests, Land Disposal Restriction Notification forms, profiles and barrel packing lists.

B. Hazardous Materials Spills and Releases:

1. Contractor and Subcontractor(s) shall immediately report all hazardous materials spills at the Project site to Owner. If a hazardous material spill occurs at a Project site in Whitman County, and if any individual may be affected by the spill, Contractor and/or Subcontractor(s) must immediately

report the spill to Whitcom (emergency dispatch). In other counties, Contractor and Subcontractor(s) must report spills to the appropriate emergency response agency in that area.

2. Contractor shall be responsible for spill containment, cleanup, decontamination, post-cleanup monitoring, disposal of any wastes generated from cleanup activities, and generation of any reports required by regulatory agencies and/or regulations including, but not limited to, WAC 173-303 and WAC 173-340.

C. Spill Prevention Control and Countermeasures:

1. Owner's EH&S department is responsible for Owner's SPCC Plan. Any of Contractor's on-site activities involving the handling and/or storage of materials meeting the definition of oil per 40 CFR 112 in containers and/or equipment with a capacity greater than 42 gallons must be included in the Owner's SPCC Plan. Contractor shall provide Owner's EH&S department with an inventory of this equipment or containers at least 14 Days prior to the equipment or containers being brought to the Project site.

2. Contractor shall provide and utilize secondary containment for containers and tanks of oil with a capacity greater than 42 gallons. Owner may waive this requirement in its sole discretion upon Contractor's request after Owner reviews Contractor's written explanation as to why secondary containment is unnecessary for a particular container or tank.

D. Asbestos:

1. All Contractor employees involved in excavation or demolition shall be asbestos awareness trained. Contractor shall submit to Owner the name of Contractor's competent trainer, the names of each of Contractor's trained personnel, and the date of each training. Contractor's submittal must also state that the training was conducted for asbestos awareness for the Work.

2. All asbestos abatement Work shall be performed by persons trained in Washington State-approved courses and certified by the State of Washington.

3. All asbestos abatement Work performed shall be overseen by a consultant hired by the Owner to ensure the Work meets regulatory standards and Owner requirements.

4. All asbestos cement pipe Work shall be performed by persons trained in an asbestos cement pipe procedures course whose content is reviewed and approved by the Washington State Department of Labor and Industries, per WAC 296-62-07722(3)(ii)(C).

5. If suspected asbestos-containing material is discovered during Contractor's execution of the Work, and abatement of the material is not a requirement of the Contract, Contractor shall suspend any Work that affects the material and immediately notify Owner. Contractor shall safeguard the area to prevent entry until certified personnel determine

whether the material is non-asbestos containing or the material is abated, at which time the Work in that area may resume.

E. Lead:

1. Owner shall inform Contractor of lead-containing coatings and materials that the Contractor may encounter while performing the Work. These materials or coatings may release lead into the air, soil, or water, or may be a source of contamination due to skin contact. Owner shall provide general data about the percentage of lead content of each suspected lead-containing material or coating and/or provide Contractor with data showing the amount of lead per surface area.
2. Contractor is responsible for protecting its employees from lead exposure, as required by Washington law.
3. Contractor shall manage all paint chips, building components, soil, and/or other material considered by Owner to be dangerous waste according to the Dangerous Waste Management paragraph.

F. Polychlorinated Biphenyls:

1. Owner may survey oil-filled equipment prior to commencement of construction. This equipment includes, but is not limited to, transformers, electrical switches, hydraulic elevators, emergency generators, capacitors and light ballasts. Owner's survey shall usually determine if the equipment is filled with oil containing polychlorinated biphenyl (PCB). Owner shall remove, or arrange for the removal of, any equipment that contains oil in concentrations qualifying the equipment as dangerous waste per WAC 173-303.
2. If oil-filled equipment is discovered during Contractor's execution of the Work, Contractor shall suspend any Work that may affect the equipment and immediately notify Owner. Owner shall test the equipment and determine the appropriate management method for the equipment and the oil it contains.

G. Mercury:

1. Owner may survey all equipment suspected of containing mercury prior to commencement of construction. This equipment includes, but is not limited to, switches and thermostats. Owner's survey shall determine if the equipment contains mercury. Owner shall remove, or arrange for the removal of, any such equipment.
2. If mercury-containing equipment is discovered during Contractor's execution of the Work, Contractor shall suspend any Work that may affect the equipment and immediately notify Owner. Owner shall test the equipment and determine the appropriate management method for the equipment and the mercury it contains.

H. Hazardous Materials or Equipment:

1. Fixed equipment such as fume hoods, safety cabinets, and vacuum systems, and related ductwork, fans, and appurtenances, may contain or be contaminated with hazardous materials. Owner may test this equipment to determine what, if any, hazards are present. If equipment contains a hazard, or if the equipment itself is a dangerous waste, Owner shall inform Contractor of the nature of the hazard including any information necessary for Contractor to protect its workers. If the equipment is a dangerous waste, Contractor shall dispose of, or make arrangements for the disposal of, the equipment per the above Dangerous Waste Management paragraph.

I. Underground Storage Tanks (USTs):

1. Removal of USTs shall be performed in accordance with DOE regulations. Removal of existing USTs shall be performed by a DOE-certified UST removal company following the submittal of required forms. Copies of forms must be provided to Owner's EH&S department at the same time they are submitted to DOE.
2. Installation of any UST must be done by DOE-certified UST installers. The installation shall be permitted by DOE following the submittal of completed UST installation forms. Copies of forms must be provided to Owner at the same time they are submitted to DOE.
3. Retrofits and upgrades of existing USTs must be completed by DOE certified companies. Records of the retrofit or upgrade must be submitted to DOE following the retrofit or upgrade. Copies of such records must be provided to Owner at the same time they are submitted to DOE.
4. If a UST is discovered during Contractor's execution of the Work, Contractor shall suspend any Work that may affect the UST and immediately notify Owner. Owner will determine if UST must be sampled and/or removed. If necessary, Owner shall engage a certified company to remove UST.

J. Department of Homeland Security (DHS) Chemicals of Interest (COI)

1. Contractor and Subcontractors shall report any COI to Owner as required by the DHS. Contractor may contact Owner's Representative in conjunction with the University's EH&S Department for the specific means of reporting.

1.05 WATER AND STORMWATER POLLUTION PREVENTION:

A. Water Pollution:

1. Discharge of any pollutants (including sewage and chlorinated water from water line disinfection) into surface or ground waters of the Sate

(including storm drains, ditches and any other water conveyances) is prohibited.

2. Contractor removal of snow, ice, soil, and mud from roadways and sidewalks shall be accomplished without polluting storm drains or surface waters. Mud and soil removal shall be undertaken on a full-time basis, not just once or twice a day. Soil or mud that is dropped onto streets and sidewalks by vehicles at the Project site shall immediately be cleaned by Contractor. Contractor may not use water to clean streets and sidewalks. Under no circumstances may dust mitigation cause soil erosion or pollution of surface waters.

3. If a discharge to surface or ground waters does occur, Contractor shall immediately notify Owner.

B. Stormwater Pollution Prevention Plan (SWPPP):

1. For projects that disturb a soil surface area of one acre or greater:

a. Contractor shall prepare a written SWPPP that meets DOE regulations and the requirements of Owner's Municipal Stormwater Permit.

b. Owner shall apply for a DOE NPDES Construction Stormwater General Permit for stormwater discharge, and then transfer the permit to Contractor. Contractor shall comply with all provisions of the permit.

c. Contractor shall maintain a copy of the NPDES permit and the SWPPP on-site at all times.

d. Contractor shall maintain on-site or on call, at all times, a Certified Erosion and Sediment Control Lead (CESCL).

e. Contractor's SWPPP shall identify all management practices used to prevent stormwater pollution and the location(s) at which each practice will be utilized on the Project site.

f. Contractor shall obtain approval from Owner of the SWPPP prior to groundbreaking. Contractor shall construct approved BMP's and the site inspected and approved, per permit requirements, prior to groundbreaking.

g. Contractor shall use best management practices (BMPs) and shall inspect BMPs at least once a week. In addition, Contractor shall inspect BMPs immediately following each rainfall event of 0.1 inches or greater.

h. Contractor shall maintain a written log detailing the results of inspections beginning with the first day of construction. Contractor's written log shall describe all erosion control activities resulting from inspections. In addition, the following dates and events shall be included in the written log:

1) The beginning and completion of major grading activities.

2) Rainfall events of 0.1 inches or greater.

3) When construction activities temporarily or permanently cease on-site, or on a portion of the site.

4) When stabilization measures are initiated for portions of the site.

5) Stormwater sampling results.

i. Contractor shall maintain and/or repair all BMPs as necessary to ensure continued performance of their intended function. Contractor's maintenance and repair activities shall include, but are not limited to:

1) Removal of sediment from silt fences before it reaches approximately one third the height of the fence, especially if heavy rains are expected; and

2) Cleaning or removal and replacement of drain inlet protection devices at least once every 7 Days, and once daily during storm events or before 6 inches of sediment can accumulate.

j. Contractor shall remove all temporary erosion and sedimentation control measure from the Project site within 30 Days after final site stabilization is achieved, or after the temporary BMPs are no longer necessary. Contractor shall remove any trapped sediment from the Project site. Contractor shall permanently stabilize any areas of soil disturbed by sediment removal.

k. In addition to sediment control, Contractor shall prevent other pollutant discharges from contaminating stormwater, groundwater, or soils.

1) Any maintenance or repair of heavy equipment and vehicles involving oil changes, hydraulic system draining and removal, solvent and degreasing cleaning operations, fuel tank draining and removal, and other activities that may result in discharge or spillage of pollutants to the ground or into stormwater runoff must be conducted using spill prevention measures, such as drip pans. Contractor shall immediately clean any contaminated surfaces following any discharge or spill incident. Emergency repairs may be performed on-site using temporary plastic placed beneath and, if raining, over the vehicle.

2) Wheel wash or tire bath wastewater shall be discharged to a separate on-site treatment system.

3) Application of agricultural chemicals including fertilizers and pesticides shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' recommendations for application rates and procedures shall be followed.

4) Use of lime, flyash, or other soil amendments that could alter the pH of discharge waters is prohibited.

5) Highly turbid or contaminated dewatering water from construction equipment operation shall be handled separately from stormwater. Management options include infiltration, transportation off-site for legal disposal, or use of a sedimentation bag with outfall to a ditch or swale for small volumes of localized dewatering.

l. Contractor shall provide to Owner all notifications/reports required by permit to DOE.

1) If stormwater sampling results show turbidity greater than or equal to 250 NTU, Contractor shall immediately report to DOE and shall notify Owner of the report.

2) Contractor shall file monthly Discharge Monitoring Reports (DMR's) with DOE as required. Contractor shall provide copies of all DMR's to Owner.

2. For projects that disturb a soil surface area of 5,000 square feet or greater, but less than one acre, provisions shall be made to meet applicable local regulations, as necessary.

a. Contractor shall make provisions for inspection and approval by the local authority prior to groundbreaking.

3. For projects that create additional impervious surfaces, provisions shall be made to meet stormwater flow control and treatment requirements, as applicable.

C. Wetlands:

1. Contractor must follow all Federal, State and local regulations including but not limited to WAC 173-201 regarding protection of wetlands.

1.06 AIR POLLUTION

A. Contractor shall comply with all provisions of the Owner's Air Operating Permit, WAC 173-400 and WAC 173-401 requirements as applicable.

B. Contractor shall control pollutants, such as diesel emissions, chemical emissions, and dust generated by the Project, so that pollutants do not adversely impact the Project site or the surrounding-area air quality.

C. Contractor shall submit to Owner within 30 Days of the Notice to Proceed a list of any stationary air emission-generating equipment included in the Work, such as: fuel-powered electrical generators, internal combustion engines, boilers, paint booths, CFC-containing equipment, or other regulated emission sources. Contractor shall assist Owner in the preparation of necessary permit applications, and Owner shall obtain necessary permits. Contractor shall abide by any conditions or requirements of permits.

D. Per WAC 173-400, Contractor shall mitigate all fugitive emissions (such as dust, vehicle exhausts, and other emissions that do not pass through a stack, chimney, or vent) generated by the Work. Contractor shall mitigate dust at the Project site throughout the entire duration of the Work. Dust mitigation may include application of specific chemical compounds approved by Owner, or may be accomplished with intermittent watering and sprinkling at such a frequency as will satisfactorily settle dust (excluding paved surfaces). Paved surfaces shall be cleaned mechanically without the discharge of water or chemicals to storm drains and/or surface waters. Under no circumstances shall Contractor permit dust mitigation cause soil erosion or pollution of surface waters.

E. No materials shall be burned without required permits. If permitted burning is done, odors shall be minimized in accordance with the Owner's Air Operating Permit.

F. CFCs (chlorofluorocarbons) or HCFCs (hydrochlorofluorocarbons) are not permitted as refrigerants in new or renovation projects. New permanently installed refrigeration equipment, such as chillers, temperature controlled chambers, air conditioning equipment, compressors, etc., must contain HFC (hydrofluorocarbon) refrigerants only (i.e., R-134A, R-404A, or R-507). At the completion of the Project, Contractor must provide detailed documentation to Owner about the refrigeration equipment installed, including identifying markings, capacity, and type of refrigerant. Refrigerant must be installed only by persons certified to do so.

G. Indoor Air Quality:

1. Owner shall notify Contractor of the location of fresh air supply intakes for buildings in the immediate area of the Work, and of fresh air supply intakes for buildings that may be affected by emissions from Contractor operations.
2. Contractor shall notify Owner 3 Days prior to commencing Work in which Contractor must operate vehicles or equipment in areas where fresh air supply intakes are located.
3. Contractor shall notify Owner 3 Days prior to commencing Work in which Contractor will be using solvents or other volatile chemicals, or processes which emit fumes, smoke, or strong odors that may affect fresh air supply intakes, or may enter Owner's buildings through doorways or windows.
4. Contractor shall not allow its activities that emit vapors, fumes, smoke or strong odors to negatively affect fresh air supply intakes.
5. If air releases of hazardous chemicals must occur, Contractor shall submit no later than 30 Days after the Notice to Proceed a chemical release plan detailing how such incidents may adversely affect Owner. Such a plan shall also specify protection to be provided to the employees of Owner and Contractor actions required to minimize chemical overexposure.
6. During welding activity, Contractor shall confine fumes to the Project site, and the fumes must not adversely affect Owner's employees or students.

1.07 PUBLIC HEALTH

A. Solid Waste Disposal:

1. Contractor shall legally dispose of or recycle all solid waste at an off-site location. Contractor shall not burn, dump, or bury waste materials, debris, or rubbish on Owner property. Contractor shall clean the Project site at the end of each work shift. Contractor is liable for any and all damage resulting from improper waste handling and disposal (see Section 07 74 19 - Construction Waste Management).

B. Environmental Noise:

1. Per WAC 173-60, and applicable local requirements, Contractor shall not exceed maximum permissible environmental noise levels for the duration of the Work.

C. General Sanitation:

1. Per WAC 246-203, Contractor shall supply adequate water for drinking and hand washing purposes. The use of common drinking cups or towels is prohibited. For hand washing purposes, Contractor shall supply hot running water, soap, disposable towels, and a waste receptacle.

D. Drinking Water Protection:

1. Per WAC 246-290 and 246-291, Contractor shall protect all public water supplies. No portion of a public water system containing potable water shall be put into service nor shall service be resumed until the facility has been effectively disinfected and a satisfactory bacteriological sample has been obtained from a DOE-certified laboratory. Results of sampling shall be sent to Owner. The procedure used for disinfection shall conform to current standards of the American Water Works Association.
2. A minimum sanitary control area around all wells shall be maintained at all times. The sanitary control area shall extend at least 100 feet from any well. No source of contamination may be constructed, stored, disposed or applied within the sanitary control area.
3. If wells are being constructed or abandoned, Owner shall procure the appropriate water rights and construction permits per WAC 173-160. Owner shall provide copies of these documents to Contractor. Wells shall be constructed/abandoned properly by a licensed well driller. Contractor shall submit a plan to Owner detailing how all disinfection shall be accomplished.
4. Backflow Prevention:
    a. Any connection made by Contractor to Owner's drinking water system, including connection to a fire hydrant, must be made through a backflow prevention assembly approved by a Washington State certified cross connection control specialist

(CCS) engaged by Owner and inspected and tested by a Washington State certified backflow assembly tester (BAT).

b. Contractor shall label all non-potable water outlets, in a manner acceptable to the Owner, “Non-potable Water / Do Not Drink”.

E. Vector Control:

1. Buildings shall be constructed so as to minimize the attraction and/or harborage of pests and vectors such as birds and rodents. Minimize bird roosting areas by not constructing exposed pipes, beams, or flat ledges on openings, especially underneath covered areas directly accessible to the outside. Openings 1/4-inch or larger shall be sealed. Leave a minimum of a 3-foot swath around the building that is bare. Do not plant trees, shrubs and grass immediately adjacent to building.

2. The presence of standing water shall be minimized or eliminated to prevent mosquito breeding.

F. On-Site Sewage Disposal:

1. Contractor is responsible for fully complying with WAC 246-272. A construction permit application shall be submitted to the appropriate jurisdictional authority for approval. The jurisdictional authority shall issue a construction permit prior to the commencement of construction and shall perform pre-opening inspections. Contractor shall ensure that the appropriate authority inspects and approves the site prior to construction and when the project is substantially complete.

G. Water Recreation Facilities:

1. Contractor is responsible for fully complying with WAC 246-260. A construction permit application shall be submitted to the appropriate jurisdictional authority for approval prior to the commencement of construction. WSU EH&S shall be consulted prior to the development of a construction permit application. Contractor shall ensure that the appropriate regulatory authority inspects and approves the site prior to operation.

H. Food Service Facilities:

1. Contractor is responsible for fully complying with WAC 246-215. A construction permit application shall be submitted to the appropriate jurisdictional authority for approval prior to the commencement of construction. WSU EH&S shall be consulted prior to the development of a construction permit application. Contractor shall ensure that the appropriate regulatory authority inspects and approves the food service prior to operation.

1.08 OCCUPATIONAL HAZARD MANAGEMENT

A. Chemical Hazard Communication:

1. If any hazardous chemicals will be used in the Work or present at the Project site, copies of applicable Material Safety Data Sheets (MSDS) shall be made immediately available to Owner prior to use by Contractor and during any use of the hazardous chemicals in the Work.

2. If the use or presence of hazardous chemicals at the Project site may affect the health of individuals outside the Project site, Contractor shall submit a written plan to Owner at least 30 Days prior to such use or presence detailing how Owner can avoid exposure to the products. Contractor shall submit MSDS / SDS to Owner for any hazardous chemical to which persons outside the project site may be exposed. The exposure avoidance plan shall also specify actions that should be taken if inadvertent exposure occurs. Owner shall provide Contractor with a written plan detailing how Contractor employees can avoid exposure to hazardous chemicals used by Owner that may impact the Project site, and shall specify actions which should be taken if inadvertent exposure occurs. Owner shall submit MSDS / SDS to Contractor for any hazardous chemical to which persons inside the project site may be exposed.

B. Lock-Out/Tag-Out:

1. When Owner and Contractor are to be engaged in coordinated activities requiring the control of hazardous energy, Owner and Contractor shall inform each other of their respective lock-out or tag-out procedures.

C. Confined Space:

1. When Contractor employees are to enter permit-required confined spaces, Owner shall:

a. Inform Contractor that the Project site contains permit required spaces and that permit-space entry is allowed only through compliance with a confined-space program meeting WAC 296-809.

b. Inform Contractor of hazards that have been identified.

c. Coordinate entry operations with Contractor when both Owner and Contractor personnel will be working in or near permit spaces.

d. Debrief Contractor at the conclusion of the entry operations regarding any hazards confronted or created in permit spaces during entry operations.

END OF SECTION 01 41 19

PART 1 GENERAL

1.01 SUMMARY

A. Contractor shall perform all Work in a skillful and workmanlike manner. Materials and equipment furnished by Contract and any Subcontractor(s) must be of good quality and new unless the Contract Documents require or permit otherwise. Materials shall conform to the manufacturer's standards in effect at the date of execution of the Contractor and shall be installed in accordance with the manufacturer's instructions, specifications, and directions. Contractor shall, if requested by Owner, furnish satisfactory evidence regarding the kind and quality of any materials identifying thereon the source, and warranting their quality and compliance with the Contract Documents.

B. Section includes:

1. Contractor's Quality Control Program;
2. Field samples;
3. Mock-ups;
4. Manufacturer's instructions;
5. Manufacturer's field services;
6. Testing laboratory services; and
7. Contractor tests and inspections.

1.02 QUALITY CONTROL PROGRAM SUBMITTALS

A. Contractor shall submit a written Quality Control Program for the Project per the Pre-Construction Submittal Requirements of Section 01 33 00. This submittal shall include but not be limited to the following:

1. An overview of Contractor's Quality Control Program.
2. Identification and resume of Contractor's on-site Quality Control Manager (QCM), who may not be Contractor's Superintendent or Project Manager. Resume shall demonstrate a minimum of 5 year experience as a QC Manager, certificate of Certified Quality Manager may be substituted for experience.
3. A description of the activities, record keeping, and correspondence that the QCM will perform and be accountable for throughout the duration of the Project.
4. A description of the quality control meetings to be conducted, sample inspection check lists (i.e., samples of actual inspection check list forms that will be submitted to Owner when scheduling inspections), and Subcontractors' quality control representatives. All forms that Contractor intends to use in its Quality Control Program shall be part of the submittal.
5. A description of the QCM activities when inspections fail to verify

compliance with the Contract Documents.

a. These activities are to include, as a minimum, follow-up with applicable Subcontractors, correction and/or completion of Work required for re-inspection, and the re-inspection.

b. Contractor shall submit its weekly Non-Compliance Logs at least 2 Days prior to each Progress Meeting.

6. A description of the QCM activities to provide the required notifications for inspections.

7. A description of record keeping and information turn-over to Owner as a component of the Operating and Maintenance data (i.e. factory representative's start-up reports and permission to energize, verification of correct voltage and phasing to motors, etc.).

8. Contractor will submit a daily report within 3-business days for any day work is performed. The daily report should include the following information; the list may be adjusted or relaxed with Owners Representative approval depending on size and scope of the project requirements:

a. progress photo's,

b. list of contractor's and work-force #'s for each contractor,

c. RFI's or questions,

d. equipment quantities in use or idle,

e. weather (if work is being performed outside),

f. construction delays or likely delays,

g. 3rd part inspections or city visits,

h. safety issues,

i. meetings conducted,

j. substantive material deliveries, and

k. any other relevant facts occurring on the site.

1.03 CONTRACTOR'S QUALITY CONTROL PROGRAM

A. Contractor shall establish and maintain a written Quality Control Program which shall be issued by Contractor to Subcontractors performing Work on the Project and utilized to verify that the execution of the Work is consistent with the requirements of the Contract Documents.

B. The Quality Control Program shall include, but not be limited to the following:

1. Preparatory Phase:

a. Prior to beginning Work, after all required plans/documents/materials are approved/accepted, and after

copies are at the work site. Contractor shall:

b. Review of each paragraph of applicable specifications, reference codes, and standards. Make a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field at the preparatory inspection. Maintain these copies in the field, available for use by Owner's Designated Representative until final acceptance of the work.

c. Review the Drawings.

d. Check to assure that all materials and/or equipment have been tested, submitted, and approved.

e. Review provisions that have been made to provide required control inspection and testing.

f. Examine the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

g. Perform a physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

h. Review appropriate accident safety procedures.

i. Discuss procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

j. Check to ensure that the portion of the plan for the work to be performed has been accepted by the Owner's Designated Representative.

k. Schedule, manage and record the minutes of each preparatory meeting.

l. Review all RFIs associated with the Work.

2. Initial Phase:

a. At the beginning of the Work, Contractor shall:

b. Check work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.

c. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing. Resolve all differences and deficiencies.

d. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.

e. Check safety to include compliance with and upgrading of the Safety Plan. Review with each worker. Particular attention should be given to high hazard work.

f. Prepare and attach to the daily CQC report separate minutes of

this phase.

g. Repeat the initial phase any time acceptable specified quality standards are not being met.

3. Follow Up Phase:

a. Perform daily checks to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the Work. The checks shall be made a matter of record in the QC documentation. Conduct final follow-up checks and correct deficiencies prior to the start of additional features of work which may be affected by the deficient work. Do not build upon nor conceal non-conforming work.

C. Contractor's Quality Control Program shall be independent of any inspections and testing performed by Owner or by any independent testing and inspection agencies hired by Owner.

D. Within the Quality Control Program, Contractor shall have available on the jobsite at all times a written report of quality control activities. At a minimum, the report shall note Project site quality control inspections, performance of scheduled tests and follow-up testing, other required inspections, deficiency log, and examinations of workmanship and quality.

E. Test results shall identify applicable Contract (including Specification) requirements, the test or analysis procedures used, and the actual test results. A statement shall be included that the item tested or analyzed conforms or fails to conform to the Contract Documents. Each report shall be conspicuously stamped on the cover sheet "CONFORMS" or "DOES NOT CONFORM" as the case may be. All test reports shall be signed by a testing laboratory representative authorized to sign certified test reports. Copies of all test reports shall be available on the jobsite at all times.

F. If the Quality Control Program is found to be defective and Contractor does not promptly correct the deficiency, Owner may:

1. Withhold payment until satisfactory corrective action has been taken, or
2. Issue a stop work order until satisfactory corrective action has been taken.

G. Pre-Inspections: Contractor shall pre-inspect Work that requires normal, special, and additional inspections as indicated in the Contract Documents.

1.04 FIELD SAMPLES

A. Field samples are defined as the partial installation of selected materials at the Project site for Owner's review and acceptance of visual features and workmanship. Generally, accepted field samples are incorporated into the Work.

B. Contractor shall provide field samples as required by the Contract Documents at location acceptable to Owner.

C. Perform Work in accordance with the Contract Documents.

D. Approved samples will serve as an acceptable standard of quality and workmanship.

E. Maintain samples until completion of relevant Work.

F. Upon completion of relevant Work or when directed by Owner, demolish and remove samples from Project site unless sample is accepted as part of completed Work.

1.05 MOCK-UPS

A. Contractor shall provide mock-ups as required by the Contract Documents. Provide additional mock-ups, as required by Owner, until approval is obtained.

B. Do not proceed with subsequent Work until approval of the mock-up is obtained.

C. The approved mock-up shall be the standard of workmanship and materials for the Work that is represented by the mock-up.

D. Maintain mock-up in approved condition, until directed otherwise by Owner.

E. Unless specified otherwise, remove mock-up at completion of the Work or when directed by Owner.

F. Unless specified or approved otherwise, mock-ups shall be completed and approved prior to the pre-installation meeting at which the Work represented by the mock-up will be discussed.

G. Notify Owner a minimum of 7 Days prior to requesting mock-up approval.

1.06 MANUFACTURERS' INSTRUCTIONS

A. Contractor shall comply with manufacturers' instructions in full detail, including each step in sequence. Do not omit preparatory steps or installation procedures unless specifically modified or exempted by Contract Documents.

B. Should instructions conflict with Contract Documents, Contractor shall request clarification before proceeding.

1.07 MANUFACTURERS' FIELD SERVICES

A. When specified, Contractor must require product manufacturer to furnish a qualified representative to observe field conditions and quality of workmanship, and to provide recommendations, certifications, and other specified services.

B. Representative shall submit written report to Owner listing observations and recommendations.

1.08 TESTING LABORATORY SERVICES

A. Owner will arrange for services of an independent Testing Laboratory to inspect and test the Work to verify compliance with Contract Documents.

B. Contractor's Responsibilities:

1. Cooperate with Testing Laboratory personnel, and furnish access, tools, samples, certifications, test reports, design mixes, equipment, storage, and assistance as requested by the Testing Laboratory.
2. Notify Owner and Testing Laboratory a minimum of 7 Days in advance of all required tests and 48 hours in advance of all required inspections. When tests or inspections cannot be performed, through fault of Contractor, Contractor shall reimburse Owner for costs incurred by Owner.
3. Contractor shall remove and replace Work found to not comply with Contract Documents.
4. If initial tests and inspections indicate deficient work, Contractor shall reimburse Owner for costs of all subsequent tests and inspections related to such deficiency.
5. All damage to Work as a result of normal testing operations shall be repaired by Contractor to match surrounding surfaces.
6. Schedule testing and inspection so that work of testing and inspection personnel will be as continuous and brief as possible.
7. Contractor shall reimburse Owner for travel and lodging expenses incurred for testing and inspection services performed outside a radius of 100 miles of the Project site.

1.09 CONTRACTOR TESTS AND INSPECTIONS

A. Inspection and testing performed exclusively for Contractor's convenience shall be the Contractor's sole responsibility.

B. Earthwork Compaction Testing Requirements:

1. Owner will engage the services of a Testing Laboratory to perform all soil and structural fill compaction testing. Compactions of any fill material shall be equal to or exceed the specified percentage of maximum dry density as defined by ASTM test procedure D1557 (modified proctor). Obtaining such specified compaction performance is the sole responsibility of Contractor.
2. During any of Contractor's operations, Owner reserves the right to perform compaction tests for its own information only. At Owner's discretion, copies of such tests may be made available to Contractor. The taking of any such tests by Owner in no way relieves Contractor from testing to assure itself of compliance with the Contract Documents.

C. Approved Structural Steel Fabricators:

1. Contractor shall pay for any required structural steel fabrication special inspections.

D. Cast-in-Place Concrete Strength Testing Requirements:

1. Concrete test cylinders will be made by Owner or Owner's Testing Laboratory. Contractor shall be responsible for proper care of cast cylinders while on the Project site (with respect to temperature, humidity and protection).
2. Contractor is also responsible for timely transportation to the laboratory in Spokane (or closer) on a schedule that will permit adequate laboratory curing before testing.
3. Contractor shall notify the Owner at least 48 hours before any concrete pour to allow time for observation.
4. Frequency and location of tests are to be determined. As a minimum, four test cylinders will be made for each day's pour or for every hundred cubic yards, whichever is greater.
5. The results of Owner's tests will be made available to Contractor.
6. The quality of all concrete is to be the sole responsibility of Contractor. If Contractor feels that additional testing is required to assure continued quality control, the frequency, testing, and payment therefore is Contractor's responsibility.

E. All Other Work Inspection and Testing Requirements:

1. Contractor shall, at no additional cost to Owner, provide all inspections and tests required to assure full compliance with the Contract Documents. Unless specifically required, Contractor is not required to submit copies of such test results to Owner. Contractor, however, shall maintain copies of all testing and inspection reports at the Project site for inspection and copying by Owner.
2. The performance of testing or inspection by Owner or Owner's Testing Laboratory does not relieve Contractor from responsibility for meeting all requirements of the Contract Documents.

END OF SECTION 01 45 00

PART 1 GENERAL

1.01 SUMMARY

A. General: Owner will select and employ an independent testing agency, engineering service, or a special inspector to conduct the tests and inspections to be provided by Owner. Inspections that are normally associated with obtaining State approval (e.g., electrical work as specified in Division 26, etc.) shall be provided and paid for by Contractor. Contractor shall comply with all applicable building codes and provide all testing services required by the Contract Documents unless specifically identified as Owner's responsibility.

B. Owner's testing agency shall prepare test reports, logs and certificates applicable to the Work for which Owner will provide testing and shall deliver the specified number of copies to the designated parties. If any inspection or testing reveals 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 Owner's services and expenses, shall be at Contractor's expense.

1.02 DESCRIPTION

A. Definition: For the purpose of this Section, all references made herein to testing laboratory, testing agency, or special inspector shall refer to as the tests or inspections conducted by a special inspector provided by Owner.

1.03 QUALITY ASSURANCE

A. Qualifications: Contractor's inspection personnel must be approved by Owner and possess certain qualifications as stated in this Section. The testing agency shall comply with all requirements of ASTM E329.

1. The inspector for waterproofing and roofing shall have specialized technical knowledge and experience specific to waterproofing and roofing.
2. The testing agency for concrete testing and inspection services should be an agency other than the agency employed by Contractor for the purpose of establishing concrete mix designs, etc.
3. Geotechnical inspection will be performed by a licensed geotechnical consulting firm.

1.04 DUTIES OF OWNER'S TESTING AGENCY

A. General: Testing agencies shall conduct testing and inspection services, interpret them, evaluate the results for compliance with the Contract Documents, and report the findings to the Owner, Contractor, and local building authority, as applicable. Testing and inspection services shall be performed in accordance with applicable ASTM standard methods or other specified procedures.

B. Testing: Materials to be tested are those so specified and others as Owner or authorities having jurisdiction over the Project may direct.

C. Inspection: Inspections, continuous and special, shall be performed by the inspectors as required by the Contract Documents and authorities having jurisdiction.

D. Rejected Work: Inspectors shall have the right to recommend rejection of materials and workmanship that is defective. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the Project site without charge to Owner. If Contractor does not correct rejected work within a reasonable time, Owner may elect to correct the work and charge the expense to Contractor.

E. Inspectors are not authorized to do the following:

1. Release, revoke, waive, alter, or enlarge on requirements of the Contract Documents;
2. Approve or accept any portion of the Work, except as specified for soil conditions (i.e. bearing capacities, etc.);
3. Perform any duties of Contractor; or
4. Stop Work.

F. Should the Owner elect at any time before Final Acceptance to make an examination of Work already completed by removing or tearing out the same, Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such Work is found to be defective in any respect, Contractor shall be responsible for the cost of such examinations and of satisfactory reconstruction. If such Work is found to meet the requirements of the Contract, however, Owner shall be responsible for the cost of such examinations and of satisfactory reconstruction.

1.05 PAYMENTS

A. Owner shall pay for the cost of initial testing and inspection, except as otherwise specified in the Contract Documents. Initial tests and inspections are defined as the first tests and inspections as hereinafter specified.

B. In the event any test or inspection reveals Work not in compliance with the Contract Documents, Contractor shall pay for or be backcharged for all costs of re-testing and/or re-inspection.

C. Additional tests and inspections not herein specified but requested by Owner shall be paid for by Owner, unless the results of such tests or inspections reveal Work not in compliance with the Contract Documents, in which case Contractor shall pay for or be backcharged for all costs of testing, re-testing, re-inspection, and any related Owner costs.

D. Costs for additional tests or inspections required because of any change in materials or change in the source of supply from that specified shall be paid by or backcharged to Contractor.

E. Contractor is responsible for all work required to correct any deficiencies.

F. Contractor is responsible for the cost of any testing required for the convenience of Contractor in the scheduling and performance of the Work.

G. Contractor is responsible for the cost to verify testing done without prior notice, with improper supervision, or contrary to construction practice, and for testing of materials for which mill reports are required but not furnished.

H. Contractor is responsible for the cost of any testing that is required to be performed by Contractor by the Contract Documents.

1.06 TESTS AND INSPECTION REPORTS

A. Copies of Test and Inspection Reports: Copies of test and inspection reports will be distributed at weekly intervals. Such reports shall include all tests performed, regardless of whether such tests indicate that material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Records of special sampling operations shall also be reported. Test and inspection reports shall be distributed electronically as requested by Owner.

B. Test and inspection reports shall be distributed as follows:

1. Architect/Engineer;
2. Structural Engineer;
3. Geotechnical Engineer or Soil Consultant;
4. Owner; and
5. Contractor.

1.07 CONTRACTOR'S RESPONSIBILITIES

A. Coordination: Contractor shall initiate and coordinate all required tests and inspections, including conforming with requirements of applicable public agencies and authorities. Inspection of the Work does not relieve Contractor of any obligation under the Contract. The Owner's Designated Representative shall have authority to reject Work that is not in compliance with the Contract Documents.

B. Access: Inspectors shall at all times have free access to the Work, wherever the Work is in preparation. Contractor shall at all times provide and maintain proper facilities and safe access for such inspection. Contractor shall also cooperate with testing personnel and furnish access, tools, samples, certifications, test reports, design mixes, equipment, storage, and requested assistance.

C. Storage Facilities: Contractor shall furnish adequate storage facilities for the sole use of the testing laboratory for safe storage of specimens that must remain on the site.

D. Data: Furnish records, drawings, certificates and similar data, including Shop Drawings and Change Orders, as may be required by the testing and inspection personnel to confirm compliance with the Contract Documents.

E. Notice: Contractor shall furnish notice to Owner and inspector at least 48 hours in advance of all required tests and inspections, unless otherwise specified.

F. Defective Work: Contractor shall remove and replace any Work found defective by Owner or not complying with the Contract Documents at no additional cost or Contract Time. Where testing personnel take cores or cut-outs to verify compliance, repair prior to acceptance. Where defective Work requires redesign, any redesign costs shall be paid for by Contractor.

G. Cancellations: Contractor shall give sufficient advance notice to the inspector to allow in the event of any cancellation or rescheduling of a previously scheduled test or inspection. Any charges due to insufficient advance notice of cancellations or delay shall be paid by or backcharged to Contractor.

1.08 TEST FAILURES

A. Where a sample fails to pass a required test, Owner may permit re-testing of the sampled material. In such cases, two samples shall be tested and the material shall be rejected if either of the two subsequent samples fail.

1.09 REPORTING TEST FAILURES

A. Immediately upon inspector’s determination of a test failure, inspector shall notify Owner. On the same day, inspector shall send written test results to those named on the distribution list above.

1.10 REMOVAL OF MATERIALS

A. Unless otherwise directed, materials not conforming to the requirements of the Contract Documents shall be promptly removed from the Project site and properly disposed of without additional expense to Owner.

END OF SECTION 01 45 23

PART 1 GENERAL

1.01 SUMMARY

A. Contractor shall be evaluated on performance throughout the course of the contract to provide past performance documentation for future projects.

B. Section includes:

1. Program Objectives;
2. Performance Categories and Assessment;
3. Evaluation Reports;
4. Notice, Review and Appeal.

1.02 PROGRAM OBJECTIVES

A. The Contract Performance Evaluation Program is intended to improve contractor selection given the following primary objectives:

1. Assist the Owner in evaluating the contractor's qualifications and proven ability to successfully perform future contracts when past performance has been previously documented;
2. Provide the University objective data relating to Contractor responsibility;
3. Provide contractors with a means of enhancing their qualifications and reputation by receiving recognition for exceptional performance;
4. Encourage better working relationships between the University and the Contractor and to provide feedback to the contractor during and after the contract period;

1.03 PERFORMANCE CATEGORIES AND ASSESSMENT

A. Contractor shall be evaluated based upon the following categories:

1. Schedule and Time Management;
2. Quality Management;
3. Communication Effectiveness;
4. Management Approach;
5. Code and Compliance; and
6. Cost.

B. Each of the above categories will be assessed by multiple key project stakeholders and provided one of the following performance levels based upon objective and cumulative data:

1. Outstanding (5): Contractor has exceeded the majority of all of the significant contract criteria and has met or exceeded the Schedule, Quality, Communications, Management, Code Compliance and Cost requirements of the contract. The contractor was extremely or completely knowledgeable of the contract requirements and applicable laws and regulations. A very consistent high level of cooperation, project management, and job site control appreciably contributed to an unusually good result.
2. Very Good (4): Contractor has exceeded many of the significant contract criteria and has met or exceeded some of the Schedule, Quality, Communications, Management, Code Compliance, and Cost requirements of the contract. The contractor was knowledgeable of the contract requirements and applicable laws and regulations. Was generally cooperative and performed their work with minimal prompting. Their performance results were very good.
3. Satisfactory (3): Contractor has satisfactorily met the overall contract criteria and has met the overall Schedule, Quality, Communications, Code Compliance and Cost requirement of the contract. The contractor occasionally had to be prompted or reminded of the contract requirements, but overall the project was acceptable, producing an acceptable result.
4. Marginal (2): Contractor may have met many, but not all, of the contract criteria and failed to meet one or more of the Schedule, Quality, Communications, Code Compliance or Cost performance requirements of the contract. Even though the project may have been accepted, the contractor's performance, as evaluated, was marginal overall. The contractor frequently had to be prompted or reminded of the contract requirements; overall the project was less than satisfactory.
5. Unsatisfactory (1): Contractor failed to meet many or most of the contract criteria and failed to meet the overall Schedule, Quality, Communications, Code Compliance and Cost performance requirements of the contract. While the project may have been accepted by the owner, the effort expended in prompting the contractor to perform was excessive. The contractor's poor or uncooperative performance created serious unnecessary and avoidable difficulties in achieving contract completion.

1.04 EVALUATION REPORTS

A. At the midpoint of project completion, Owner shall provide contractor with a draft Contract Evaluation Report based upon the current performance during the contract. This shall provide the Contractor an opportunity improve performance levels during the contract, and provide an opportunity for Contractor-Owner communication and working relationship.

B. A final Contract Performance Evaluation Report will be completed upon contract completion and shall become the official report of record.

1. A Summary Contract Performance Evaluation will be provided to the Contractor within 30 calendar days after Final Completion.
2. Final Contract Performance Evaluation Reports will remain on record for a minimum of 5 years from date issued.

C. Upon receipt of the Summary Contract Performance Evaluation, Contractor shall review the report and may request a debrief conference within 21 calendar days of receipt.

D. If after the debrief, Contractor would like to dispute the evaluation findings the Contractor shall submit in writing, the specific reasons for disagreement and include the basis for their appeal within 14 calendar days following the debrief.

1. Upon receipt of appeal, Owner shall convene a review with the Assistant Vice President, Facilities Services, Capital to consider the objectivity, accuracy, completeness and fairness of the Contract Performance Evaluation.
2. The Contractor shall be notified and issued a final determination within 30 calendar days of receipt of the appeal.

END OF SECTION 01 45 34

PART 1 GENERAL

1.01 TEMPORARY UTILITIES

A. Owner may furnish to Contractor temporary Owner-owned utilities when available and upon Owner written approval. Owner reserves the right to restrict the use of its utilities if, in its opinion, Contractor fails to adequately conserve utilities or to use utilities appropriately. When using Owner-owned utilities, Contractor is to make metered connections to the nearest available service and disconnect same when no longer needed.

B. If Owner-owned utilities are not available at the Project site, or if Owner restricts use of Owner-owned utilities, Contractor shall obtain required services from commercial sources or public utilities, and Contractor is responsible to pay for all utility costs.

C. Contractor shall field verify the availability of utility services provided by Owner and coordinate the Work accordingly.

D. In remodeling projects where portions of the building are to remain in service, Contractor shall be responsible for coordinating the Work to maintain utility services to the occupied portions of the building.

1.02 TEMPORARY ELECTRICAL SERVICE

A. Contractor shall provide all services required for construction operations and may connect to existing services when available upon Owner approval. .

B. Contractor shall provide lighting for construction operations.

C. Contractor may use existing lighting when available and adequate.

D. Contractor shall maintain site lighting throughout the duration of the Work.

1.03 HEAT AND VENTILATION

A. Contractor shall provide heat and ventilation as required to maintain specified conditions for construction operations and to protect materials and finishes from damage due to temperature or humidity.

B. After a building is substantially enclosed, the permanent heating system or a temporary hook-up of equipment from the permanent system may be used for temporary heat provided that the equipment is properly installed by the responsible electrical and mechanical Subcontractors and available for supplying temporary heat. Owner shall be the sole judge of the adequacy of the building enclosure for temporary heating or cooling purposes.

C. Contractor shall arrange with the electrical and mechanical Subcontractors installing said systems and equipment for the use, operation, and maintenance of

the systems. Contractor shall pay for all connections and attendants for temporary heating, including necessary accessories such as temporary (construction) air filters to protect the air distribution systems from contamination.

D. Contractor shall provide a dust free air distribution system and correct all damage to this system caused by the Work.

E. In existing facilities, Contractor shall coordinate use of the existing systems with Owner. Contractor shall extend and supplement with temporary units as required to maintain specified conditions for construction operations.

F. Use of electric resistance type heating systems for temporary heat is prohibited.

G. The warranty period for any permanent equipment used during construction will not commence until Contractor achieves Substantial Completion.

1.04 TEMPORARY WATER SERVICE

A. Unless available from an Owner-owned utility, Contractor shall provide service required for construction operations. At all times, Contractor shall utilize backflow/cross-connection devices, certified by Owner, to safeguard water supply.

B. For Work in existing facilities, Contractor shall connect to existing services when approved by Owner and extend branch piping with outlets so that water is available for use by all persons associated with the Work.

C. Provide drinking water from a safe source for all those associated with the Work.

1.05 SANITARY FACILITIES

A. Contractor shall provide temporary restroom facilities. Facilities shall not directly or indirectly drain or discharge onto Owner property or any waters of the State. Place where directed at the time Work begins; maintain in sanitary condition. Remove upon completion of the Work and disinfect the premises.

B. Use of permanent and/or existing Owner’s facilities is not allowed.

1.06 BARRIERS

A. Contractor shall provide barriers as required to prevent public entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.

B. When temporary fencing is indicated by the Drawings, or if fencing is provided at Contractor's option, enclosures shall be constructed of 6 feet high commercial grade chain link with vehicular and personnel gates, as required.

1.07 ENCLOSURES

A. Contractor shall provide temporary weather-tight closures of openings to provide acceptable working conditions, protect materials, facilitate temporary heating, and prevent entry of unauthorized persons. Provide doors with self-closing hardware and locks.

B. Contractor shall provide temporary roofing when so indicated by the Drawings or when made necessary by the Project requirements.

C. Contractor shall provide temporary dust-proof partitions when required to confine dust and moisture to the immediate Work area.

D. Contractor shall provide temporary noise-proof partitions when required to confine noise to the immediate Work area.

1.08 PROTECTION OF EXISTING FACILITIES

A. Utility Tunnel Protection: Contractor shall provide adequate planking across any tunnels to distribute loads and prevent damage. If necessary, Contractor shall provide temporary shoring inside tunnel areas.

B. Low Overhead Clearance: Contractor shall be fully responsible for addressing all vehicular limitations caused by low overhead restrictions throughout campus. Route all traffic to avoid damage to overhead structures. Review proposed routing with Owner prior to commencement of construction.

C. Tree and Plant Protection: Contractor shall protect trees and other plants not scheduled for removal; maintain protection until Project completion.

1. In the event that a tree or plant is damaged as a result of the Work that, in the opinion of Owner, requires replacement, Contractor shall be responsible for such replacement.
2. If at any time Contractor judges that the protection of plant materials designated to be saved is incompatible with Work required, or if operations necessarily threaten the health of any plant material, Contractor shall immediately notify Owner and cease Work affecting the area until a written agreement is reached concerning acceptable procedure.

1.09 SECURITY

A. Contractor shall provide security to protect the Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, and theft. Coordinate with Owner's security program.

B. During construction, all openings to Owner's utility tunnel system must be protected against unauthorized entry. Contractor shall provide closures, approved by Owner, including locked doors or hatches at any openings created

by the Work.

1.10 PROTECTION OF INSTALLED WORK

A. Contractor shall provide temporary protection for installed products. Control traffic in immediate area to minimize damage.

B. Contractor shall provide protective coverings for walls, projections elevator cabs, jambs, sills, and soffits of openings. Protect finished floors and stairs from traffic, movement of heavy objects, and storage.

C. Contractor shall prohibit traffic and storage on waterproofed and roofed surfaces and on lawns and landscaped areas.

1.11 CLEANING DURING CONSTRUCTION

A. Contractor shall clean the site each day during construction and shall prevent the accumulation of waste materials and rubbish.

B. Contractor shall clean interior areas prior to the start of finish Work and maintain areas free of dust and other contaminants during finishing operations.

1.12 OFF-SITE CLEAN UP

A. Contractor shall continuously keep sidewalks, lawns, parking areas, and streets clear of construction materials, debris, gravel, rock, and dirt related to the Project.

1.13 LIFTING DEVICES AND HOISTING FACILITIES

A. Contractor shall provide cranes, hoists, towers, and other lifting devices necessary for the proper and efficient movement of materials.

1.14 MECHANICAL AND ELECTRICAL SYSTEM SHUT-DOWNS

A. Any shut-down of mechanical or electrical systems affecting Owner's operations shall be scheduled by Contractor during off-hours. Contractor shall submit a written shut-down request providing at least 14 Days advance notice. Any shut-down must be coordinated with and approved by Owner.

1.15 CONSTRUCTION PARKING

A. Contractor's employees may park only in accordance with campus traffic and parking regulations and pay all required fees.

B. When working in Pullman's central campus, Contractor’s vehicular use will be limited to the following:

1. Delivery of materials to and from Project site;

2. Single vehicle for use by Project supervisor of each major Contractor

(four total vehicles maximum); and

3. Workers' vehicles shall not be allowed to park in the central mall.

1.16 NOISE CONTROL

A. Any construction related noise that interferes or is likely to interfere with normal use of adjacent space(s) shall be scheduled and approved by Owner.

B. Contractor shall restrict any construction related noise to the hours approved by Owner and in accordance with the state and local noise ordinance.

C. Owner may approve Contractor working extended hours. Request any extended hours of operation with Owner.

1.17 TRAFFIC OBSTRUCTIONS

A. Contractor shall submit a written traffic control plan for all traffic obstructions, either pedestrian or vehicular, for approval by Owner, per the Pre-Construction Submittal Requirements of Section 01 33 00.

B. In some cases, it may be necessary to develop special routes for large or unwieldy deliveries that could interfere with pedestrian movement, especially at peak times.

C. Contractor shall avoid deliveries or equipment operations that block street traffic during peak times.

D. Pedestrian Obstructions: Any equipment on sidewalks or other pedestrian ways shall be barricaded. Barricades shall include a horizontal member at a maximum of two feet above the walking surface.

1.18 REMOVAL OF TEMPORARY FACILITIES

A. Contractor shall remove temporary materials, equipment, services, and construction facilities prior to Substantial Completion inspection.

B. Contractor shall clean and repair damage caused by installation or use of temporary facilities.

C. Contractor shall restore existing facilities used during construction to specified or original condition.

END OF SECTION 01 50 00

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Contractor shall furnish, install, and maintain one (1) temporary on-site Project identification sign, and appropriate informational signs to identify Project, Project entrance, Project address, and direct traffic.

B. No other signs may be displayed at the Project site, including:

1. Separate contractor, Subcontractor, or supplier signs or advertisements;
2. Signs that flash, blink, rotate or otherwise draw unusual attention, except where required by safety regulations;
3. Company or agency logos; and
4. Any sign or graphic on equipment that is objectionable to Owner.

1.02 SUBMITTALS

A. Design Data: Contractor shall submit sign construction details. Where text may not be detailed, show layout of required information. Indicate margins, borders, spacing, and similar information.

PART 2 PRODUCTS

2.01 PROJECT IDENTIFICATION SIGN

A. One sign of the size, design, lettering, and construction selected by Owner. Size to be 8'-0" x 4'-0".

B. Graphic design, style of lettering, and colors: As selected and provided by Owner.

2.02 SIGN MATERIALS

A. Sign Surfaces: Exterior MDO plywood, 3/4" thickness, with plastic sealed and sanded edges.

B. Sign Posts: 4x4 pressure treated and painted white.

C. Rough Hardware: Galvanized.

D. Graphics: Owner will supply electronic information for sign graphics and lettering.

2.03 FABRICATION

A. Paint all exposed surfaces of supports, framing, and surface materials. Apply

one coat of primer and one coat of exterior grade white paint.

PART 3 EXECUTION

3.01 INSTALLATION

A. Within one month of pre-construction meeting, erect sign at the site at a location of high public visibility as directed and as approved by Owner. Locate in lighted location, if possible.

3.02 MAINTENANCE

A. Maintain signs and supports in neat, clean condition for the entire construction duration until Substantial Completion. Repair damages.

B. Relocate information signs as required by Work progress.

3.03 REMOVAL

A. Remove signs, framing, and supports following Substantial Completion of the Project.

END OF SECTION 01 58 00

PART 1 GENERAL

1.01 PRODUCTS

A. Products include material, equipment, and systems.

B. Comply with Specifications and referenced standards as minimum requirements.

C. Components required to be supplied in quantity within a specification section shall be the same, and shall be interchangeable.

D. All materials shall be new unless specifically noted otherwise.

1.02 TRANSPORTATION AND HANDLING

A. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.

B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.

C. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

1.03 STORAGE AND PROTECTION

A. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.

B. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.

C. Store loose granular materials on solid surfaces in a well-drained area; prevent mixing with foreign matter.

D. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.

1.04 VARIATION FROM SPECIFIED PRODUCTS

A. Subsequent to Bid Opening/Proposal - Approved Equivalents:

1. Requests for approved equivalents will only be considered when approved equivalent statements, used in reference to product

specifications, are specifically provided for within individual Specification sections.

2. The terms "or an approved equivalent", "approved equivalent", or similar statements, when used herein in connection with manufacturers' products, shall be understood to mean products that are equally effective and suitable for their intended use; based on the judgment of the Owner, whose decision shall be final.

3. Written requests for consideration by the Owner of approved equivalents may be submitted throughout the Project.

4. Time extensions and additional costs resulting from use of approved equivalent products will not be considered.

B. No Substitutions:

1. The terms "No Substitutions", "Alternative Products not Acceptable", or similar statements used in reference to product specifications, shall mean that only the specified product will meet the needs of the University and that no other products will be considered at any time before or during the Project.

C. Requirements and Procedures for Product Variations:

1. The Contract is based on the standards of quality established in the Contract Documents.

2. Substitution or approved equivalent revisions shall be made only with the prior written acceptance of the Owner.

3. All requests for substitutions or approved equivalents must be on the proposer's letterhead and shall be accompanied by complete specifications, samples, records of performance, certified copies of tests by impartial and recognized laboratories, and such other information as the Owner may request to prove the merit of the proposed revisions.

4. The Contractor assumes the responsibility for capacity, dimensions, clearance, etc., of the named manufacturer's particular item to assure that the revision meets the requirements.

5. The Contractor shall assume the cost of any redesign, in the form of changes to the Drawings, or for the Work of any other trades, or any other costs required to properly incorporate any revision associated with substitutions or use of approved equivalent products.

6. Final decisions as to the quality and suitability of proposed revisions will rest solely with the Owner and will be based on proof submitted.

7. When the Owner approves a substitution or approved equivalent proposed by the Contractor, it is with the understanding that the Contractor certifies that the article or material is equivalent to or better than that specified.

END OF SECTION 01 60 00

PART 1 GENERAL

1.01 PURPOSE

A. Provide for an orderly, timely, and efficient completion of the Work for Owner.

1.02 SUBSTANTIAL COMPLETION

A. Requirements for Substantial Completion: Contractor shall comply with all requirements for Substantial Completion identified in the General Conditions and other Contract Documents. Prior to Substantial Completion, Contractor must have constructed the Work in substantial accordance with the Contract Documents, and:

1. Certificate of Occupancy received from the AHJ.
2. All elements of the Work must be operational and in good working order and condition, except for incidental punchlist Work;
3. The fire and life safety systems, if any, must be tested and accepted;
4. Any elevators must be operational, functioning, and in good working order and condition, and be fully approved for use;
5. All mechanical, electrical, plumbing, telecommunications, security, and access control systems must operate and function in good working order and condition, including commissioning;
6. The finish portion of the Work must be complete including but not limited to paint, trim, doors, partitions, cabinetry, floor coverings, ceilings, wall finish, and other finish surfaces, except for incidental punchlist Work;
7. All roadway improvements, paving, sidewalks, parking areas, other street improvements, lighting, landscaping and irrigation must be complete;
8. Utilities must be complete, connected, and operating normally;
9. Contractor must have removed all construction facilities, temporary controls, and construction debris;
10. Contractor must have completed training Owner’s personnel on all operating instructions and submitted training DVDs; and
11. Final cleaning.

B. Prior to Substantial Completion Contractor shall request in writing that Owner grant Substantial Completion. Accompanying the request Contractor submit the following:

1. A list of all items remaining to be completed or corrected;
2. Signed originals from authorities having jurisdiction of all certificates of compliance and final approval, as applicable;
3. All system software files required by the Contract Documents, including

but not limited to lighting and environmental controls;

4. Revised Draft Operation & Maintenance manuals; and

5. Draft Project Record.

C. Upon satisfactory completion of the requirements for Substantial Completion, Owner shall prepare and forward to Contractor a letter of Substantial Completion. The letter will identify the date of Substantial Completion and include a punch list identifying all remaining incomplete Work. Contract warranties shall begin as of the date of Substantial Completion.

1.03 FINAL COMPLETION

A. Requirements for Final Completion: Upon receipt of Contractor's written Notice that Contractor has inspected and completed punch list items and that the Work is ready for final inspection and acceptance, Owner will promptly make such inspection accompanied by Contractor. If Owner determines that some or all of the punch list items are not complete, Contractor shall be responsible to Owner for all costs, including re-inspection fees, for any subsequent inspection to determine completion of the punch list. When Owner finds all punch list items complete and the Work and Contract fully performed, Owner shall establish the date of Final Completion. Owner is not required to establish Final Completion until the following are complete:

1. Complete all requirements listed in the Contract Documents for Substantial Completion of the Work;

2. Complete all remaining punch list items and remaining Work, and obtain approval by Owner that all Work is complete;

3. Obtain permanent occupancy permits (if only a temporary occupancy permit was issued at Substantial Completion);

4. Submit Project Record, any final property survey, and final Operation and Maintenance manuals (if not previously submitted) required by the Contract Documents;

5. Deliver any required tools, spare parts, extra stock of material and similar physical items to Owner as required by the Contract Documents;

6. Complete cleaning after completion of punch list;

7. Submit executed warranties;

8. Complete any required sustainability documentation for which Contractor is responsible;

9. Submit a final comprehensive list of all Subcontractors of all tiers and suppliers for the Project; and

10. Submit certification that materials used in the Work are "asbestos-free" and that all requirements of governing jurisdictions related to the Project have been addressed.

11. Final Project Record.

B. Upon satisfactory completion of the requirements for Final Completion, Contractor shall submit a final Application for Payment.

1.04 FINAL ACCEPTANCE

A. Requirements for Final Acceptance: Final Acceptance shall be established by Owner in writing. Owner shall not be obligated to accept the Project as complete before Final Completion has occurred and Contractor has submitted the following:

1. An affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which Owner or Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, except for any claims that are specifically identified on the affidavit (Affidavit of Payment of Debts and Claims, AIA form G706 or equivalent).
2. A certificate or written statement evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 Days' prior written Notice has been given to Owner.
3. Receipt of consent of surety, if any, to final payment (AIA form G707 or equivalent).
4. If required by Owner, other data establishing payment or satisfaction of obligations, such as receipts, 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. If a Subcontractor refuses to furnish a release or waiver required by Owner, Contractor may furnish a bond satisfactory to Owner to indemnify Owner against such lien. If such lien remains unsatisfied after payments are made, Contractor shall refund to Owner all money that Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.
5. Provide copy to Owner of all "Affidavits of Wages Paid". Pursuant to RCW 39.12.040, an "Affidavit of Wages Paid" from Contractor and from each Subcontractor certified by the Industrial Statistician of the Washington State Department of Labor and Industries, with the fees paid by Contractor or Subcontractor.

B. Contingent upon completion of all Affidavits of Wages Paid, the "Notice of Completion of Public Works Contract" form may be completed by Owner.

1.05 RETAINAGE

A. Retainage must be held at least 45 Days following Final Acceptance. If there are either unpaid taxes or fees, or unsatisfied claims of lien against the retained percentage, disbursement of retainage funds will be made in accordance with Washington law.

B. The retainage will be held and applied by Owner as a trust fund in the manner required by RCW 60.28. Release of the retainage will be processed in the ordinary course of business following Final Acceptance of the Work by Owner, provided no notice of lien has been given as provided in RCW 60.28, no claims have been brought to the attention of Owner, Owner has no claims under the Contract, and the requirements below have been met.

C. Owner shall not release retainage until the following requirements have been satisfied.

1. "Certificate of Payment of State Excise Taxes by Public Works Contractor": Following receipt of Owner's notice of completion and after determining that all taxes, increase and penalties due from Contractor have been paid, the Department of Revenue will issue this certificate to Owner.
2. "Certificate of Payment of Contributions, Penalties and Interest on Public work Contract": Upon receiving a copy of Owner's notice of completion and after determining that Contractor is in compliance with the provisions of the Employment Security Act, the Employment Security Department will issue this certificate to Owner.
3. "Certificate of Release": Upon receipt of Contractor's request for release and verification from its records that required premiums have been paid by Contractor and each Subcontractor, the Department of Labor and Industries will issue a statement to that effect.

END OF SECTION 01 70 00

PART 1 GENERAL

1.01 SUMMARY

A. This Section specifies administrative and procedural requirements for field engineering services, including but not limited to the following:

1. Land survey Work; and
2. Establishment of coordinated reference points for general building layout and location.

1.02 SUBMITTALS

A. Project Record: Contractor shall submit a record of Work performed and record survey data as required by the Contract Documents.

1.03 QUALITY ASSURANCE

A. Surveyor: Contractor shall engage a registered Professional Land Surveyor registered in the State of Washington to perform the required land-surveying services.

B. Owner may furnish surveys describing physical characteristics, legal limitations, utility locations, and a legal description for the Project site. Contractor may rely on the information furnished by Owner but must exercise proper precautions to ensure the safe performance of the Work. Contractor shall assume that the locations of any underground or hidden utilities, underground tanks, plumbing, or electrical runs indicated in the surveys or Contract Documents are shown in approximate locations, but Contractor is responsible for verifying the location of all utilities impacted by the Work. Additionally, Owner may make available to Contractor the results of investigations of hidden or subsurface conditions for the convenience of Contractor. While Contractor may rely upon such investigation results, there is no guarantee, express or implied, that the conditions indicated are representative of those existing throughout the Project site, or that unforeseen developments may not occur. Contractor is solely responsible for interpreting the information and extrapolating beyond the location, including each individual boring, test pit, or other locations.

1.04 EXAMINATION

A. Identification: Contractor shall verify the location of benchmarks and control points provided by Owner.

B. Contractor shall verify layout information on Drawings in relation to the property survey and existing benchmarks before proceeding to layout the Work.

Contractor shall also locate and protect existing benchmarks and control points and preserve permanent reference points during construction.

1. Do not change or relocate benchmarks or control points without prior written approval of Owner. Promptly report lost or destroyed reference points and requests to relocate reference points because of changes in grades or locations.
2. Promptly replace lost or destroyed Project control points. Base replacements on the original survey control points.

C. Contractor shall establish and maintain a minimum of two permanent benchmarks at the Project site.

1. Record benchmark locations, with horizontal and vertical data, on Project Record.

D. Existing utilities and equipment: The existence and location of underground and other utilities are not guaranteed. Before beginning the Work, Contractor shall investigate and verify the existence and location of underground and other utilities (including irrigation and snow melt systems).

1. Prior to construction, verify the locations and invert elevation at points of connection sanitary sewer, storm sewer, and water service piping.

1.05 PERFORMANCE

A. Contractor shall work from lines and levels established by the property survey; establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to locate each element of the Project; and calculate and measure required dimensions within indicated or recognized tolerances. Do not scale Drawings to determine dimensions.

1. Advise entities engaged in Work activities of marked lines and levels provided for their use.
2. As construction proceeds, check every major element for line, level, and plumb.

B. Surveyor's Log: Contractor shall maintain a surveyor's log of control points and other survey Work. Make this log available to Owner for reference.

1. Record deviations from required lines and levels and advise Owner when deviations that exceed indicated or recognized tolerances are detected. On Project Record, record deviations that are accepted and not corrected.
2. Following completion of foundation walls, major site improvements, and other Work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and site Work.

C. Site Improvements: Contractor shall locate and lay out site improvements, including pavement, stakes for grading, fill and topsoil placement, utility slopes, and invert elevations.

D. Existing Utilities: Contractor shall furnish information necessary to adjust, move, or relocate existing structures, utility poles, lines, services, or other appurtenances affected by construction. Contractor shall coordinate with local authorities having jurisdiction.

E. Contractor shall record accurately on the Project Record the principal metes, bounds, lines, and levels of the Project.

END OF SECTION 01 71 23

PART 1 GENERAL

1.01 SUMMARY

A. This Section describes the waste management and recycle management criteria for debris and solid waste generated as part of the Work.

B. Pullman Campus:

1. Contractor shall be responsible for sorting, segregating, and placing designated waste materials into containers provided by Owner. Contractor shall be responsible for segregating and disposing all unacceptable and dangerous wastes as defined below.

2. Owner shall be responsible for furnishing waste collection containers, servicing those containers, and disposing solid waste from the Project, with the exception of unacceptable and dangerous waste.

C. Puyallup Research and Extension Center:

1. Contractor shall be responsible for sorting, segregating waste materials. Contractor shall be responsible for segregating and disposing all unacceptable and dangerous wastes as defined below.

D. Waste that is disposed of by Contractor shall be in accordance with all applicable local, state, and federal regulations, including WAC 173-350, Solid Waste Handling Standards, and WAC 173-303, Dangerous Waste Regulations.

1.02 DEFINITIONS

A. Construction Waste: Waste resulting from the Work.

B. Dangerous Waste: Solid waste designated in WAC 173-303 and/or 40 CFR. As used in this Section, the words “dangerous waste” will refer to the full universe of wastes regulated by WAC 173-303 and 40 CFR.

C. Demolition Waste: Largely inert waste, resulting from the selective demolition of buildings, roads and other man-made structures such as cured concrete, asphaltic compounds, brick and masonry, ceramic, glass, steel, and aluminum, and non-inert materials such as clean wood, composition roofing and roofing paper, and minor amounts of metal. Plaster (i.e., sheetrock or plaster board) or any other material, other than clean wood, that is likely to produce gases or leachate during its decomposition process and asbestos waste are not considered to be demolition waste.

D. Land Clearing Waste: Natural vegetation and clean soils from clearing and grubbing land for development such as stumps, brush, weeds, tree branches, tree bark, mud, dirt, sod and rocks.

E. Recycle/Recycling: The process of separating waste materials for remanufacturing or reprocessing into usable or marketable materials. Examples of recycling include separating wood off-cuts for recycling by a wood processor into paper pulp, or separating cardboard, plastic, beverage containers, or miscellaneous metals for recycling.

F. Reuse: To use a construction waste material again in roughly its same form. Materials can be reused on-site or on other projects off-site. Examples of reuse include removing a hardwood floor and reinstalling it in a new project, or using soil from one site as fill on another site.

G. Salvage: To remove a construction waste material or equipment from an existing building for reuse on-site or reuse on other projects off-site. Items to be salvaged shall be designated by Owner for removal and delivery to Owner.

H. Unacceptable Waste: All waste not authorized for disposal by Owner. This includes any waste that is now or hereafter defined by federal law or by the governing jurisdiction as radioactive, dangerous, hazardous or extremely hazardous waste, unsanitary waste, and vehicle tires in excess or those permitted to be disposed of by the laws of the governing jurisdiction. It does not include any waste destined for salvage, recycling, or general demolition.

I. Waste: All solid waste generated within the limits of the Project, or extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable and recyclable materials, masonry, and concrete.

J. Waste Management Plan: A Project-specific plan for the salvage, collection, transportation, recycling, and disposal of the waste generated at the Project site. A waste management plan includes procedures for separating, storing, and transporting waste and includes methods to assure proper implementation of the plan.

1.03 WASTE MANAGEMENT PLAN

A. Draft Waste Management Plan: Per the Pre-Construction Submittal Requirements of Section 01 33 00, Contractor shall submit to Owner a Draft Waste Management Plan. The Draft Plan shall contain the following:

1. List of materials to be salvaged, materials to be recycled, and materials to be disposed of as solid waste, and dangerous waste.
2. General material handling methods, including segregation and sorting, and placing solid waste into designated containers, on-site storage, and any special procedures for removing and protecting materials.
3. Plan for communicating salvage and recycling requirements on the Project.
4. Dangerous waste identification, accumulation, and disposal management procedures.
5. Materials to be sorted, salvaged, and recycled:

a. At a minimum, the following types of materials in reusable condition shall be salvaged and sorted. Contractor shall remove and deliver to the Owner at designated location on the Pullman campus.

1) Kitchen equipment;

2) Cabinets;

3) Carpet;

4) Dimensional lumber;

5) Lighting fixtures, without asbestos or PCBs;

6) Shelving;

7) Sinks; and

8) Surplus building materials (new, leftover, unwanted). Review with Owner for clarification.

b. At a minimum, the following types of materials shall be sorted and included for recycling:

1) All metals (from banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze);

2) Beverage containers;

3) Cardboard (from supplies and packaging);

4) Clean wood (all unpainted, untreated wood scrap including pallets and engineered wood);

5) Mixed office paper (including blue prints);

6) Film plastic (from shrink wrap and other packaging, and sheeting used as protection or erosion control); and

7) Plate glass.

c. With the exception of unacceptable waste, all materials not designated for salvage or recycle per Paragraph 1.03(A)(5) above, may be co-mingled and disposed of as waste.

B. Dangerous Waste Management:

1. Contractor is responsible for all dangerous waste generated during the Project shall be identified, accumulated and disposed in accordance with WAC 173-303. Contractor generated dangerous waste must be shipped for disposal within 90 Days of generation.

2. Contractor may accumulate dangerous waste in accordance with WAC 173-303 and Washington Department of Ecology Technical Information Memorandum 94-120, Satellite Accumulation. If Contractor accumulates dangerous waste in volume greater than 55 gallons or acutely hazardous waste in a volume greater than one quart, Contractor shall establish and

operate a “90-Day” accumulation area in accordance with WAC 173-303.

3. Contractor shall dispose dangerous waste only through vendor(s) approved by Owner. Contractor shall arrange all dangerous waste shipments. Utilization of the vendor and facilities included in the State of Washington Hazardous Waste Disposal contract is authorized. Any other proposed vendor(s) and/or facilities are subject to audit by Owner, prior to utilization. Contractor shall pay for said audits. Contractor shall coordinate with Owner’s Environmental Health & Safety (EH&S) Department for transportation and disposal of all Project generated dangerous waste. EH&S will sign all Uniform Hazardous Waste Manifests.

C. Final Waste Management Plan: Once Owner has reviewed the draft Waste Management Plan and responded with comments or corrections, Contractor shall submit a final plan within 14 Days.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.01 WASTE CONTAINMENT

A. At the Pullman Campus: Owner will provide and service containers for all wastes, with the exception of unacceptable waste. This service is at no cost to Contractor.

B. At Puyallup Research and Extension Center: Contractor will provide and service containers for all wastes.

C. Contractor shall provide separate waste containers for and properly dispose of all unacceptable waste, including dangerous waste, in accordance with applicable law.

3.02 CONTAMINATION OF WASTE

A. Contractor shall take extraordinary care to ensure construction wastes are properly sorted, segregated, and placed within the correct containers.

B. Should any waste containers designated for salvage, recycle, or general disposal be cross-contaminated with dangerous or unacceptable waste, Contractor shall pay all costs of legally disposing the contaminated waste.

C. Project progress meetings shall include review of construction waste management as an agenda item.

END OF SECTION 01 74 19

PART 1 GENERAL

1.01 PURPOSE

A. Contractor shall submit advance/draft electronic of Operation & Maintenance manuals (O&Ms) at or immediately following the 80% Application for Payment. Subsequent Applications for Payment will not be processed until an advance/draft copy of the O&Ms has been submitted for review.

B. Contractor shall submit a final draft of O&Ms on or before Substantial Completion and provide training of Owner's staff in the operation and maintenance of the facility.

1.02 PROCEDURES

A. Together with a request for Substantial Completion, Contractor shall provide one revised draft electronic version of O&Ms.

B. To achieve Final Completion, Contractor shall submit :

1. Two final copies of O&Ms;
2. A text-searchable PDF electronic file of the O&Ms;
3. Separate Test & Balance Reports and Telecommunications Test Reports in an independent three ring binder;
4. A text-searchable PDF electronic file of the Test & Balance Reports and Telecommunications Test Reports.

PART 2 PRODUCTS

2.01 O&M MANUAL MATERIALS

A. O&M Manuals shall be bound into 3-ring binders (three sets) with the cover and spine to be composed and laid out per the cover page template on the last page of this Section.

B. The maximum thickness for each manual shall be 3". Multiple manual sets shall be organized by:

1. General,
2. Vertical Transportation,
3. Mechanical,
4. Electrical, and
5. Other (Laboratory Equipment, Special Equipment, etc.).

C. Paper shall be 8 1/2" x 11", 20 lb. white paper. Divisions within volumes are to be accomplished and annotated with permanently imprinted tabs (insertable indexes are not permitted) which indicate Specification Section numbers only.

D. Copies must be legible. Facsimile transmission copies are not acceptable. Original equipment manufacturer (OEM) printed material is preferred.

PART 3 EXECUTION

3.01 PRODUCTION

A. O&Ms are to be as follows:

1. Table of Contents – a listing of the contents of all volumes. This table of contents shall be inserted at the beginning of each volume in the set.
    a. Identify Contractor, include name, address, phone and fax number, and provide a contact name.
2. Subcontractor List – a list or spreadsheet, organized by Specification Section, of all suppliers and Subcontractors of all tiers who performed Work on the Project. Include the name, address, phone and fax number of Subcontractor or supplier, the Specification Section, and the description of the Work. When Subcontractors perform Work of more than one Specification Section, provide a separate listing of each Specification Section. This listing shall be at the beginning of volume #1 only.
    a. Written certification from Contractor attesting that no asbestos containing products have been incorporated into the Work.
3. Warranty List – a list or spreadsheet containing Contractor's one-year correction period obligation and all extended (greater than one-year) warranties, organized by Specification Section that indicates:
    a. Item Description (include here special warranty numbers or codes),
    b. Length of warranty,
    c. Specification Section, and
    d. Contractor's contact information, followed by physical copies of the Contractor's one-year correction period obligation and all extended warranties. Note that 1-year warranties from Subcontractors are not to be bound into each volume of the O&Ms. This warranty list and attendant warranties shall be at the beginning of volume #1 only, immediately following the asbestos certification.
4. Provide data as outlined in each specification section.

B. Original equipment manufacturer (OEM) information is required to be a part of all equipment information within the O&Ms.

C. Shop Drawings and product data initially submitted for acceptance are generally not acceptable for O&M use (one notable exception is snow melting cable layout drawing – a manufacturer detailed item). Routine Project components such as asphalt, concrete, pipe, fittings, conduit, etc., are not to be included in O&Ms.

END OF SECTION 01 78 23
(O&M cover and spine data on next page)

Facility No.82A, Eastlick Hall
Facility No.120F, Carver Farms Fish Vivaria
Facility No.1046, Puyallup Salmon Lab

Aquaculture Facilities at WSU Pullman and Puyallup

2029

General
O&M Manual

Vol. X of Y

(Spine and Cover)

PART 1 GENERAL

1.01 DESCRIPTION

A. Owner has set the following indoor air quality requirements for site operations on the Project, within the limits of the Progress Schedule, Contract Sum, and available materials, equipment, products, and services. These include:

1. Protect workers on the site from air quality problems during construction.
2. Prevent indoor air quality problems in the completed facility.
3. Prevent indoor air quality problems in adjacent facilities.

B. To achieve these requirements, Contractor shall develop an “Indoor Air Quality (IAQ) Management Plan” for this Project.

C. Comply with current LEED Reference Guide.

1.02 IAQ MANAGEMENT PLAN MANAGER

A. Contractor shall identify an IAQ Management Plan Manager who will be responsible to monitor construction activities to ensure that the requirements of the IAQ Management Plan are met. The IAQ Manager may also be the Contractor’s Quality Control Manager. The IAQ Manager will be responsible for the following:

1. Draft and submit the IAQ Management Plan to Owner for acceptance.
2. Document IAQ Management Plan progress on a weekly basis.
3. Conduct meetings as required with all participants in the construction process to communicate the IAQ procedures and understand the importance of the requirements of the IAQ Management Plan. If necessary, post signs to ensure workers' safety.
4. Identify IAQ problems and institute remedial action as necessary.
5. Be present at regular Progress Meetings, as appropriate, and be responsible for providing a monthly written status report as it relates to IAQ for the Project and be prepared to discuss construction related IAQ procedures currently in effect.
6. At time of building flush-out, IAQ Manager shall be the contact person and shall be responsible for overseeing the entire flush-out process.

1.03 IAQ MANAGEMENT PLAN

A. Draft IAQ Management Plan: Submit a Draft IAQ Management Plan within 14 Days after Notice to Proceed, which contains preliminary descriptions of the following procedures for which Contractor is responsible (initial installation, verification that element(s) are in place, daily inspection and upkeep, and

removal):

1. List of indoor air quality protective measures to be instituted at Project site, including HVAC system protection during construction and any other control measure applicable to the Project;
2. A plan and schedule for inspection and maintenance of indoor air quality measures;
3. Installation sequencing for porous materials, including paint;
4. Measures to be employed to protect ducts and stored on-site or installed absorptive materials from moisture damage;
5. Type of filtration media used during construction and at time of building flush-out; and
6. Cleanup of contaminated components after construction, but before scheduled flush-out of building ventilation system.

B. Include with the "Draft IAQ Management Plan" written procedures that describe building flush-out process that will be followed upon completion of construction.

C. The Draft IAQ Management Plan shall meet or exceed the minimum requirements of the current Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines.

D. Final IAQ Management Plan: After review and comment on the "Draft IAQ Management Plan," Contractor shall submit a "Final IAQ Management Plan" that includes the finalized written procedures for above noted elements as well as building flush-out. This final plan and written flush-out procedures shall address all review comments noted on the draft submittal and be submitted prior to the commencement of construction.

1.04 BUILDING FLUSH-OUT SCHEDULE

A. Contractor shall include a separate activity on the Progress Schedule, which indicates the targeted start date and duration of the building flush-out process.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.01 IAQ MANAGEMENT PLAN IMPLEMENTATION

A. Contractor shall implement and maintain the approved IAQ Management Plan for the duration of the Project and update procedures at any time due to unanticipated building conditions. Contractor shall:

1. Use temporary filtration media during construction to protect HVAC at each return air grille; filtration media shall have a Minimum Efficiency Reporting Value (MERV) of 8 as determined by ASHRAE 52.2 - 1999.

Isolate the return side of the HVAC system from the surrounding environment as much as possible. Return side shall have the heaviest Work areas dampered off and all return system openings sealed with plastic. Return side shall be shut down and sealed whenever possible.

2. Avoid the use of products, materials and operations that would cause IAQ problems or concerns.

3. Protect the ventilation system components (equipment and ductwork) from contamination, and provide cleaning of the ventilation components, including ductwork exposed to contamination during construction. Protect during transit and installation.

4. Provide ventilation as may be necessary to protect workers' health and avoid the accumulation of volatile compounds, dust and other harmful airborne contamination.

5. Provide weekly reports and photographs of construction IAQ management measures such as protection of ducts and stored or installed absorptive materials. In each report, describe and illustrate IAQ measures (installation, effectiveness, upkeep, etc.) during construction along with a description of the SMACNA approach employed.

6. Provide data sheets of filtration media used during construction and installed immediately prior to building flush-out and prior to building occupancy.

7. During installation of carpet, resilient flooring, paints, furnishings, and other VOC emitting products, provide supplemental (spot) ventilation for at least 72 hours after Work is completed and describe these activities in the weekly reports.

B. Contractor shall conduct regular inspection and maintenance of indoor air quality measures, including ventilation system protection and ventilation rate.

C. Contractor shall use low-toxic cleaning supplies for surfaces and equipment.

D. When dry sanding for gypsum board assemblies, Contractor shall provide the following protection:

1. Isolate the space;

2. Provide plastic sheet separation during sanding;

3. Close and seal all air system devices and ductwork; and

4. Sequence the Work to avoid contamination of other spaces with gypsum dust.

3.02 VENTILATION OF CONSTRUCTION FUMES

A. When hazardous chemicals, mineral-spirit based paints, adhesives, or other similar materials are used, the Contractor shall exhaust toxic, noxious, or odor producing fumes from the building in a manner approved by Owner. Contractor's

method of exhaust shall ensure the safety of building occupants and pedestrians in and around the Project site. All supply and return air ductwork within the construction area shall be capped air-tight to prevent distribution of fumes.

3.03 BUILDING FLUSH-OUT

A. Contractor shall conduct a building flush-out with new filtration media at 100% outside air after construction ends and prior to testing, adjusting and balancing of systems. Filtration media shall have a MERV of 13 as determined by current ASHRAE 52.2. This flush-out is different from and additional to the 72-hour flush-outs described in 3.01.A above.

B. Relocate information signs as required by Work progress.

3.04 COMPLETION PROCEDURES

A. Remove all IAQ measures as well as signs, framing, and supports at completion of Project.

B. All testing, adjusting and balancing of systems, including training of Owner personnel, shall be completed after flush-out. All flush-out filtration media must be replaced with required filtration media prior to testing and adjusting of systems.

C. Actual procedures employed during building flush-out must receive prior approval from Owner.

D. Punch list items that do not affect the mechanical systems may be conducted during flush-out upon approval of the Owner.

E. Upon completion of building flush-out, replace all filtration media. Filtration media shall be the same as used for occupancy.

F. Submit a report upon completion of building flush-out stating that all procedures stated in the approved IAQ Management Plan have been complied with. This report shall contain all weekly reports and photographs, as well as any IAQ management plan activities that occurred during the Project.

END OF SECTION 01 81 19

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. Commissioning is a systematic process of ensuring that all building systems perform interactively according to the design intent and Owner's operational needs. This begins in the design phase and continues through construction. The commissioning process incorporates the traditionally separate functions of system documentation, equipment startup, control system calibrations, testing and balancing, performance testing, and training. Commissioning during the construction phase is intended to achieve the following specific objectives:

1. Verify that applicable equipment and systems are installed according to the Contract, manufacturer's recommendations, and industry accepted standards and that they receive adequate operational checkout by installing contractors.
2. Verify and document proper functional performance of equipment and systems.
3. Document all non-performing equipment and systems and track corrective actions through to final resolution.
4. Ensure compliance with State Energy Code Requirements (WA NREC Latest Revision).

B. Work includes the completion of formal commissioning procedures on selected equipment and systems. Commissioning procedures will be designed and coordinated under the direction of a Commissioning Agent (CA). Contractor is not responsible for hiring the CA. The CA will work directly for Owner. Contractor is responsible for coordinating and cooperating with the CA as necessary to complete the training and commissioning processes.

1.02 DEFINITION OF TERMS

A. Commissioning Agent (CA): Is an independent third-party consultant under contract with Owner. CA responsibilities are listed in Subsection 1.03 for information, reference, and clarification.

B. Installation Verification Audit: Includes the on-site inspection and review of related system components for conformance to the Contract. The CA will check for proper systems installation and verify systems readiness for function testing. Noted deficiencies will be documented and must be satisfactorily resolved prior to continuing with commissioning on the affected component or system.

C. Commissioning Plan: Outlines the commissioning process. Provides a brief overview of each start-up and functional test to be performed and identifies the responsible Contractor and/or supplier. It also outlines the responsibilities of all personnel to the commissioning process, estimates the commissioning schedule and provides sample Installation Verification, Start-Up, and Functional Performance Test Procedures and related documentation for information.

D. Start-Up Testing: Initial test checkout of component or systems completed prior to functional performance testing. The start-up tests verify that the equipment is installed and operating properly per the Contact.

E. Testing, Adjusting and Balancing (TAB): Testing, adjusting and balancing is a process where heating and air conditioning systems are tested against design standards, adjusted for maximum efficiency, and balanced to provide optimum performance. The Work typically covers balancing and adjusting air and water distribution in areas of the building served by an HVAC system, and verification and adjustment of heating and cooling loads to insure proper indoor environmental conditions. Areas that do not meet the design standards are referred to the appropriate party for correction. Reports are prepared documenting performance and compliance with design standards.

F. Function Performance Testing: Includes the documented testing of individual components and equipment under actual operating conditions. Final performance commissioning of systems will begin only after Contractor certifies that system components are 100% complete, start-up test results have been accepted, and the CA agrees that systems are ready for functional testing.

G. Commissioning Issues Log: Generated by the CA, includes deficiencies discovered during the commissioning process. The log identifies the responsible contractor, current disposition of issues, and the date of final resolution as confirmed by the CA. Deficiencies are defined as those issues where products, execution or performance do not satisfy the Contract, the design intent or Owner's need.

H. Final Commissioning Report: Includes the overall final commissioning document, prepared by the CA, which details the actual commissioning procedures performed, inspection and testing results, and the final version of the Commissioning Issues Log indicating that all issues discovered through the commissioning process have been verified as resolved.

1.03 COMMISSIONING AGENT'S DUTIES AND RESPONSIBILITIES

A. Meet and communicate with the Owner's Designated Representative, Contractor, equipment representatives, and others as necessary to facilitate the commissioning process.

B. Write the commissioning plan.

C. Review commissioning-related Specifications, submittals, and Contract Documents. Communicate noted deficiencies and concerns to Owner.

D. Review the Owner Project requirements and Basis of Design documents to insure Owner's intent and design requirements are met.

E. Chair controls integration meetings to ensure acceptance of control strategies and determine methods to achieve the required sequence of operation.

F. Develop installation and start-up checklists from:

1. Information in the Contract Documents; and
2. Information from equipment manufacturers as provided by Contractor.

G. Coordinate functional testing procedures with Contractor and integrate into Progress Schedule.

H. Develop detailed and specific inspection and functional testing procedures for equipment and systems to be commissioned.

I. Confirm completion of all static piping and duct tests and flushing and cleaning as performed by Contractor.

J. Complete a detailed physical inspection and visual checkout of commissioning related equipment and components. Document specific deficiencies for resolution.

K. Confirm completion of equipment and systems start-up procedures as performed by Contractor and equipment representatives. Verify appropriate documentation is completed and provided for inclusion in the final commissioning report. Record noted deficiencies.

L. Schedule and coordinate the final on-site functional testing process. Complete a documented checkout of every specified operating parameter and mode. Document deficiencies and resolutions.

M. Review Contractor-provided O&Ms. Ensure the manuals provide in-depth, Project-specific information. Provide formal comment.

N. Work with Owner, Architect/Engineer, if any, and Contractor to satisfactorily resolve outstanding issues.

O. Provide Owner with final, complete, and documented verification to ensure commissioned systems are 100% operational per Contract, prior to Owner's acceptance. Exceptions may be made for seasonal commissioning.

P. Perform seasonal commissioning as required to verify proper system operation during peak heating and cooling seasons.

Q. Complete all other items noted in Contract as Commissioning Agent responsibilities.

R. Provide a final Commissioning Report to Owner.

1.04 DUTIES AND RESPONSIBILITIES FOR COMMISSIONING

A. The commissioning process will require the active participation of persons qualified to represent the following interests:

1. Owner,
2. Contractor,
3. Equipment manufacturer's representatives,
4. Mechanical Subcontractor,
5. HVAC Subcontractor,
6. Controls Subcontractor,
7. TAB Subcontractor,
8. Electrical Subcontractor, and
9. Others as appropriate.

B. The CA will coordinate, schedule, and oversee the final functional performance commissioning process. Participants shall include in their contracts all costs necessary to participate in and complete the commissioning process.

C. Contractor will assure the participation and cooperation of Subcontractors and coordinate with Owner and Architect/Engineer, as required for the commissioning process.

Owner will assure the participation of its chosen representatives.

PART 2 PRODUCTS − NOT USED

PART 3 EXECUTION

3.01 CONTRACTOR RESPONSIBILITIES FOR COMMISSIONING

A. Contractor shall provide material, equipment, and tools to facilitate completing the functional performance testing process. The CA will provide specialized and calibrated test equipment to perform the calibration and functional performance testing.

B. Contractor shall budget and provide sufficient time and qualified personnel to participate on-site in this process until the process is successfully completed and all deficiencies have been corrected or otherwise revolved.

C. Contractor shall provide training to Owner. Specified training on related systems and equipment operation and maintenance shall only commence after final performance commissioning is successfully completed, and systems are verified by the CA to be 100% complete and functional.

D. Contractor shall reimburse the CA for repeated test failures. After a second failed start-up or functional performance test, the CA and Owner shall be entitled to additional compensation for time and expenses involved with re-testing. The compensation shall be at published company billing rates.

E. Owner will not accept equipment and systems, and Owner will generally not make final payment, until all equipment and systems have been successfully

commissioned and all specified requirements have been satisfied.

F. Include a line item for commissioning in the Schedule of Values. Ensure sufficient costs are included for Contractor's expenses related to all commissioning tasks.

END OF SECTION 01 91 00