Lewis County

LEWIS COUNTY PERMANENT SHELTER

Chehalis, WA

PROJECT MANUAL

Specification Divisions 00 – 33

Date: October 4, 2024

BID SET

bcra

Lewis County

Lewis County Permanent Shelter

Chehalis, WA

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Capital Facilities

Call for Bids

31-2408 Construction

LEWIS COUNTY PERMANENT SHELTER

Lewis County

Project: Lewis County Permanent Shelter, 31-2408 Construction

1. Introduction

Project Description

1.1. Summary

This is a call for bids for a building renovation to finalize a permanent night-by-night homeless shelter. The renovation in this bid includes work for a new entryway, construction of a fire sprinkler riser room, and construction/finalization of some interior walls and doors. This is a public work subject to apprenticeship and prevailing wage laws, as well as other state funding requirements including compliance with Evergreen Sustainable Design Standards. The work is to be completed by the end of 2024.

1.2. Background

Lewis County is renovating a former bank and office building into a permanent night-by-night shelter for people experiencing homelessness. The building needs installation of fire sprinklers and fire alarms, frontage work, fencing, and a building renovation including light non-structural framing work to meet the needs of a different use. This call for bids is for the building renovation, consisting of some work for a new entryway, construction of a fire sprinkler riser room, and construction/finalization of some interior walls and doors. This is a public work subject to apprenticeship and prevailing wage laws, as well as other state funding requirements including compliance with Evergreen Sustainable Design Standards. The work is to be completed by December 31, 2024; the contractor will have to coordinate with the firms installing fire sprinklers and fire alarms, at a minimum, because that work will be happening in the same time span.

1.3. Contact Information

Project Contact:
Matt Patana
Consultant
2690 NE Kresky Ave
Chehalis, WA 98532
Email: matt.patana@lewiscountywa.gov
Phone: (360) 219-6147

Procurement Contact:
Matt Patana
Consultant
2690 NE Kresky Ave
Chehalis, WA 98532
Email: matt.patana@lewiscountywa.gov
Phone: (360) 219-6147

Department:
Capital Facilities

Department Head:
Doug Carey
Capital Facilities Manager

1.4. Timeline

Release Project Date	October 9, 2024
Site Visit (Mandatory)	October 22, 2024, 9:00am 2015 NE Kresky Ave, Chehalis, WA
Question Submission Deadline	October 24, 2024, 6:00pm
Proposal Submission Deadline	October 30, 2024, 6:00pm
Completion of Work	December 31, 2024

2. Call for Bids (Formal)

NOTICE
CALL FOR BIDS
For
Lewis County Permanent Shelter (Internal tracking number: 31-2408 Construction)

Lewis County is soliciting bids from qualified firms to provide bids for the Lewis County Permanent Shelter (Internal tracking number: 31-2408 Construction), located in Chehalis WA.

Firms desiring consideration shall submit a complete bid package based on the plans and specifications on file at https://procurement.opengov.com/portal/lewiscountywa

Lewis County has partnered with OpenGov and is excited to announce that as of August 2023, we transitioned to OpenGov Procurement/ProcureNow, a fully automated web-based electronic

bidding and vendor management system. To continue to receive bid notifications, you will want to register for a FREE account today at https://procurement.opengov.com/portal/lewiscountywa.

SEALED BIDS MUST BE DELIVERED BY OR BEFORE 6:00PM ON OCTOBER 30, 2024
(Bids submitted after 6 PM Pacific Time will not be considered for this project.)

Bids must be submitted electronically through the procurement portal at https://procurement.opengov.com/portal/lewiscountywa no later than and be in accordance with the plans, specifications, and other contract documents available through the procurement portal.

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful bidder fail to enter into such contract and furnish satisfactory contract bond within the time stated in the specifications, the bid proposal deposit shall be forfeited to the Lewis County Capital Fund 3010. This bid proposal deposit is to be submitted through the OpenGov portal AND mailed or hand delivered no later than the bid due date and time to Matt Patana and Alex Murray at 571 NW Prindle St, Chehalis, WA 98532.

Informational copies of maps, plans, and specifications are on file for inspection online through the project portal at https://procurement.opengov.com/portal/lewiscountywa. All Contractor questions and Lewis County clarifying answers will be posted on the OpenGov website. Plan or specification changes shall be accomplished through official project addendums on OpenGov. Both questions/answers and addenda shall be posted without additional newspaper publication.

The Lewis County Internal Services Department in accordance with Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. 2000d to 2000d-4) and the Regulations, herby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Lewis County is an equal opportunity and affirmative action employer. Minority, veteran and women-owned firms are encouraged to submit bids.

3. Instructions To Bidders

FOR LEWIS COUNTY Capital Facilities CONSTRUCTION PROJECTS
PART 0 - GENERAL CONDITIONS

FOR LEWIS COUNTY FACILITIES CONSTRUCTION PROJECTS

EXPLANATION TO PROSPECTIVE BIDDERS
A. Any prospective bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must submit a request in writing to the owner six (6) calendar days before the bid due date. Oral explanations or instructions given before the award of a contract

will not be binding. Any information given a prospective bidder concerning a solicitation will be furnished promptly to all other prospective bidders by addendum to the solicitation, if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective bidders.

B. In accordance with the legislative findings and policies set forth in Chapter 39.19 RCW, the State of Washington encourages participation in all of its contracts by Minority and Women's Business Enterprises (MWBE) firms certified by the Office of Minority and Women's Business Enterprises (OMWBE). Participation may be either on a direct basis in response to this invitation or as a subcontractor to a bidder. However, unless required by federal statutes, regulations, grants, or contract terms referenced in the contract documents, no preference will be included in the evaluation of bids, no minimum level of MWBE participation shall be required as a condition for receiving an award, and bids will not be rejected or considered non-responsive on that basis.

C. Any affirmative action requirements set forth in federal regulations or statutes included or referenced in the contract documents will apply.

D. This project is funded by the Housing Trust Fund through a legislative appropriation, and is subject to several state funding requirements including prevailing wage, 20% apprenticeship labor hours, compliance with Evergreen Sustainable Design Standards, and other requirements. **Bidders are instructed to review "Attachment J - State Funding Conditions" carefully to inform their bids.**

MANDATORY SITE VISIT

A. All prospective bidders must attend the mandatory site visit on Tuesday, October 22, 2024 at 9a.m. at 2015 NE Kresky Ave, Chehalis, WA. Failure to attend will render bidders ineligible and their bids nonresponsive. Lewis County reserves the right to waive the mandatory nature of this site visit and allow bids from those who did not attend if too few prospective bidders attend the site visit. If this waiver occurs, Lewis County will announce it to bidders via an addendum to this call for bids.

PREPARATION OF BIDS – CONSTRUCTION

A. Bids must be: (1) submitted on the bid proposal forms, or copies of forms, furnished by the Owner or the Owner's agent, and (2) signed in ink. The person signing a bid must initial each change appearing on any bid form. If the bid is made by a corporation, it shall be signed by the corporation's authorized designee. The address of the bidder shall be typed or printed on the bid form in the space provided.

B. The bid form may require bidders to submit bid prices for one or more items on various bases, including: (1) lump sum base bid; (2) lump sum bid alternate prices; (3) unit prices; or (4) any combination of items (1) through (3) above.

C. If the solicitation includes alternate bid items, failure to bid on the alternates may disqualify the bid. If bidding on all items is not required, bidders should insert the words "no bid" in the space provided for any item on which no price is submitted.

D. Substitute bid proposals will not be considered unless this solicitation authorizes their submission.

BID GUARANTEE

A. All bid proposals shall be accompanied by a bid proposal guarantee in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful bidder fail to enter into such contract and furnish satisfactory contract bond within the time stated in the specifications, the bid proposal guarantee shall be forfeited to the Lewis County Capital Fund 3010. Failure of the bidder to provide bid guarantee shall render the bid non-responsive.

B. Acceptable forms of bid guarantee are: Cash, a bid bond or postal money order, or certified check or cashier's check made payable to the Lewis County Treasurer. The Owner will return bid guarantees (other than bid bond) to unsuccessful bidders as soon as practicable, but not sooner than the execution of a contract with the successful bidder. The successful bidder's bid guarantee will be returned to the successful bidder with its official notice to proceed with the work of the contract.

C. The bidder will allow up to 30 days from bid opening date for acceptance of its bid by the Owner, although it may happen much sooner. The bidder will return to the Owner a signed contract, insurance certificate and bond or bond waiver within 15 days after award of the contract. If the apparent successful bidder fails to sign all contractual documents or provide the bond and insurance as required or return the documents within 15 days after award of the contract, the Owner may terminate the award of the contract.

D. In the event a bidder discovers an error in its bid following the bid opening, the bidder may request to withdraw its bid under the following conditions:

1. Written notification is received by the Owner within 24 hours following bid opening.
2. The bidder provides written documentation of the claimed error to the satisfaction of the Owner within 72 hours following the bid opening. The Owner will approve or disapprove the request for withdrawal of the bid in writing. If the bidder's request for withdrawal of its bid is approved, the bidder will be released from further obligation to the Owner without penalty. If it is disapproved, the Owner may retain the bidder's bid guarantee.

ADDITIVE OR DEDUCTIVE BID ITEMS

A. The low bidder, for purposes of award, shall be the responsive bidder offering the low aggregate amount for the base bid item, plus additive or deductive bid alternates selected by the Owner, and within funds available for the project. The bidder agrees to hold all bid alternate prices until bid award and contract execution.

ACKNOWLEDGEMENT OF ADDENDA

A. Bidders shall acknowledge receipt of all addenda to this solicitation by identifying the addenda numbers in the space provided for this purpose on the bid proposal form. Failure to do so may result in the bid being declared non-responsive.

SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK

A. The bidder acknowledges that it has taken steps necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and road; (3) uncertainties of weather, river stages, tides, or similar

physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during the work. The bidder also acknowledges that it has satisfied itself as to character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the Owner, as well as from the drawings and specifications made a part of this contract. Any failure of the bidder to take the actions described and acknowledged in this paragraph will not relieve the bidder from responsibility for estimating properly the difficulty and cost of successfully performing the work.

BID AMOUNTS

A. The bid prices shown for each item on the bid proposal shall include all labor, material, equipment, overhead and compensation to complete all of the work for that item.

B. The actual cost of building permit (only) and the public utility hookup fees will be a direct reimbursement to the Contractor or paid directly to the permitting agency by the Owner. Fees for these permits should not be included by the Bidder in the bid amount.

C. The Bidder agrees to hold the base bid prices until bid award and contract execution.

TAXES

A. The bid amounts shall not include Washington State Sales Tax (WSST). All other taxes imposed by law shall be included in the bid amount. The Owner will include WSST in progress payments. The Contractor shall pay the WSST to the Department of Revenue and shall furnish proof of payment to the Owner if requested. [NOTE: Contractor must bond for contract amount plus the WSST.]

SUBMISSION OF BIDS

A. Bid Proposals must be submitted on or before the time specified in the Advertisement for Bids.

B. If the base bid and the sum of the additive alternates is one million dollars or more, the Bid Proposal shall comply with the following requirements:

1. Pursuant to RCW 39.30.060, if the base bid and the sum of the additive alternates is one million dollars or more, the Bidder shall provide names of the Subcontractors with whom the Bidder will subcontract for performance of heating, ventilation and air conditioning (HVAC), plumbing, and electrical.
2. The Bidder can name itself for the performance of the work.
3. The Bidder shall not list more than one Subcontractor for each category of work identified UNLESS Subcontractors vary with bid alternates, in which case the Bidder must indicate which Subcontractor will be used for which alternate.
4. Failure of the Bidder to submit as part of the bid the NAMES of such Subcontractors or to name itself to perform such work shall render the Bidder's bid nonresponsive and, therefore, void.

C. The Bid Proposal shall be submitted through the OpenGov.com portal https://procurement.opengov.com/portal/lewiscountywa

D. Prior to the bid opening, the Owner’s representative will designate the official bid clock.

Any part of the bid proposal or bid modification not received prior to the times specified, per the designated bid clock, will not be considered and the bid will be returned to the bidder unopened.
E. A bid may be withdrawn in person by a bidder's authorized representative before the opening of the bids. Bidder(s) representative will be required to show ID and sign on bid summary sheet before it will be released.
F. People with disabilities who wish to request special accommodation, (e.g., sign language interpreters, Braille, etc.) need to contact the Owner ten (10) working days prior to the scheduled bid opening.

BID RESULTS
A. After the Bid Opening, a tabulation of the bids will be posted as a notice for the project in the OpenGov portal. Bidders may obtain the tabulation of apparent bids from Lewis County by Contacting the procurement contact listed in the bid documents.

LOW RESPONSIBLE BIDDER
A. If applicable, it is the intent of the Owner to award a contract to the low responsible bidder. In determining the bidder's responsibility, the Owner shall consider an overall accounting of the attached "BIDDER RESPONSIBILITY CRITERIA". Upon Owner's request, the apparent low bidder must supply the requested information within two (2) business days of request by Owner. Withholding information or failure to submit all the information requested within the time provided shall render the bid nonresponsive. If the Owner determines that the apparent low bidder is not responsible, the Owner will notify the bidder of its preliminary determination in writing. Within three (3) days after receipt of the preliminary determination, the bidder may withdraw its bid or request a hearing. The Owner will schedule a hearing within three (3) working days of receipt of the bidder's request. The hearing members will include the Internal Services Director, Public Works Director and Capital Facilities Manager. The Owner will issue a Final Determination after reviewing information presented at the hearing. The Owner's Final Determination is specific to this project, and will have no effect on other or future projects.

B. "SUBCONTRACTOR RESPONSIBILITY CRITERIA" In accordance with SHB 2010 amending RCW 39.04 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. 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; and if applicable, have:
a. Have 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.
f. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).

CONTRACT AWARD
The Owner will evaluate bid responsiveness and bidder responsibility.

A bid will be considered responsive if it meets the following requirements:
1. It is received at the proper time and place.
2. It meets the stated requirements of the bid proposal.
3. It is submitted by a licensed/registered contractor within the State of Washington at the time of bid opening and is not banned from bidding by the Department of Labor and Industries.
4. It is accompanied by a bid guarantee and non-collusion affidavit.

A bid will be considered responsible if it meets the following requirements:
1. It meets an overall accounting of the responsibility criteria established for the project, as reflected in the "Bidder Responsibility Criteria."
2. All required documents are completed and signed by a individual with such authority.
3. It is submitted by a licensed/registered contractor within the State of Washington at the time of bid opening and is not banned from bidding by the Department of Labor and Industries.

The Owner reserves the right to accept or reject any or all bid proposals and to waive informalities that do not affect the essential fairness of the bidding process.

The apparent low bidder, for purpose of award, shall be the responsive bidder offering the low aggregate amount for the base bid plus selected additive or deductive bid alternates and meeting all other bid submittal requirements.

The Owner may negotiate bid price adjustments with the low responsive bidder, including changes in the contract documents, to bring the bid within the available funding per RCW 39.04.015.

The Contract will only become effective when signed by the Owner. Prior to the Owner's signature, any and all costs incurred shall be the sole responsibility of the bidder.

It is the intent of the Owner to award a contract to the low responsible bidder.

Public Agency Debarment Debarment by any Public agency within the last two (2) years may render bid non-responsive.

4. Scope of Work

4.1. Scope of Work

The Scope of Work is fully described in the plans, specifications, and attachments included with this call for bids. But, a summary of the scope of work is building renovations consisting of work

for a new entryway, construction of a fire sprinkler riser room, and construction/finalization of some interior walls and doors.

5. Specifications

Please see Attachment D - Project Plans and Attachment E - Project Specifications. For reference, please note that Division 00 1000 of the specifications duplicates this Call for Bids.

6. Prevailing Wage

Notice

Prevailing Wage Requirement

This project has been determined to be "Public Works" as defined by RCW 39.04 and WAC 296-127 and is subject to Washington State Prevailing Wage Laws. Current Prevailing Wage Rates for work performed in Lewis County is attached hereinto and can also be found at https://secure.lni.wa.gov/wagelookup/. The bid date used is Wednesday, October 30, 2024. These rates apply to Lewis County and may not apply to work performed outside Lewis County.

Per RCW 39.12.017(3)(a)-(b), the appropriate wage rates for this project are under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing

A printed copy is available in the issuing office and a printed copy may be mailed upon request. An electronic copy is included as an attachment.

In addition, successful Contractor and any subcontractors are required to file Statement of Intent to Pay Prevailing Wages, Affidavits of Wages Paid and file Certified Payroll Records as per L&I requirements.

7. Bid Form

Bid Form

7.1. Bid Form - Webform Submission (There is also a downloadable submission -- do both)

Project Name: Lewis County Permanent Shelter (Internal tracking number:31-2408 Construction)

Name of Firm: _____

CAPITAL FACILITIES DIVISION
351 NW NORTH ST.
CHEHALIS, WA 98532

B I D P R O P O S A L

In compliance with the contract documents, the following bid proposal is submitted:

7.2. Base Bid

Print Dollar Amount

7.3. Trench Safety

Trench Safety Provisions	
	Included in Base Bid

If the bid amount contains any work which requires trenching exceeding a depth of four feet, all costs for trench safety shall be included in the Base Bid and indicated above for adequate trench safety systems in compliance with Chapter 39.04 RCW. 49.17 RCW and WAC 296-155-650. Bidder must include a lump sum dollar amount in blank above (even if the value is $0.00) to be responsive.

7.4. Bid Alternates [Not Used]

[Not used]

7.5. Time for Completion

The undersigned hereby agrees to complete all the work under the Base Bid (and accepted alternates) within 60 calendar days after the date of Notice to Proceed or by December 31, 2024, whichever is sooner.

8. Vendor Questionnaire

8.1. Are you licensed to do this type of work in the State of Washington?*

☐ Yes
☐ No

*Response required

8.2. Non-Collusion Affidavit*

Please download the below documents, complete, and upload.

- Non_Collusion_Affidavit.pdf

*Response required

8.3. Bid Bond*

Please upload your bid bond.

Original shall be mailed or hand delivered no later than the bid due date and time. Envelope shall be clearly marked and delivered to:

Matt Patana and Alex Murray

571 NW Prindle St

Chehalis, WA 98532

*Response required

8.4. Bid Form*

Please download the below documents, complete, and upload. Fill out and submit this bid form even though you also submitted a webform version of the bid form. (This form has more information on it, but the other form works in OpenGov's system.)

- Bid_Form_Blank.docx

*Response required

9. Sample Lewis County Contract

9.1. Scope of Contractors Services

The Contractor agrees to provide to the County services and any material set forth in the project narrative identified as Exhibit "A" during the agreement period. **[Exhibit A will consist of the call for bids and other plans, specifications, and materials herein.]** No material, labor, or facilities will be furnished by the County, unless otherwise provided for in the Agreement.

9.2. Accounting and Payment for Contractor Services

Payment to the Contractor for services rendered under this Agreement shall be as set forth in Exhibit "B". **[Exhibit B will consist of the successful bid documents specifying the work and price for performance, consistent with the County's contract award prerogatives specified in the call for bids and under state law.]** Where Exhibit "B" requires payments by Lewis County, payment shall be based upon billings, supported unless otherwise provided in Exhibit "B", by documentation of units of work actually performed and amounts earned, including where appropriate, the actual number days worked each month, total number of hours for the month, and total dollar payment requested. Unless specifically stated in Exhibit "B" or approved in writing in advance by the official executing this Agreement for Lewis County (hereinafter referred to as the "Contracting Officer"), the County will not reimburse the Contractor for any costs or expenses incurred by the Contractor in the performance of this contract.

Where required, the County shall, upon receipt of appropriate documentation, compensate the Contractor, no more often than weekly; through the County voucher system for the Contractor's service pursuant to the fee schedule set forth in Exhibit "B".

9.3. Assignment and Subcontracting

No portion of this contract may be assigned or subcontracted to any other individual, firm or entity without the express and prior written approval of the Contracting Officer or as set forth in Exhibit "A" and Exhibit "B". County understands that building renovations are a frequently subcontracted type of work and will approve subcontracting when reasonable by industry standards.

9.4. Labor Standards and Contract Assistance

The Contractor shall comply with the provisions of the Lewis County Contract and Procurement Assistance Program as applicable, attached hereto as "Special Conditions".

9.5. Independent Contractor

The Contractor's services shall be furnished by the Contractor as an independent Contractor and nothing herein contained shall be construed to create a relationship of employer-employee or master-servant, but all payments made hereunder and all services performed shall be made and performed pursuant to this Agreement by the Contractor as an independent Contractor. The Contractor acknowledges that the entire compensation for this Agreement is specified in Exhibit "B" and the Contractor is not entitled to any County benefits including, but not limited to: vacation pay, holiday pay, sick leave pay, medical, dental, or other insurance benefits, or any other rights or privileges afforded to Lewis County employees.

Contractor will defend, indemnify and hold harmless the County, its officers, agents or employees from any loss or expense, including but not limited to settlements, judgments, setoffs, attorneys' fees or costs incurred by reason of claims or demands because of breach of the provisions of this paragraph.

9.6. Safety; Familiarity with Site

Contractor understands that safety is a high priority. Prior to the commencement of work or providing services, Contractor will, at its own expense and to the extent it determines is necessary to safeguard itself and its employees and agents, become familiar with the Site, its operations, and any safety rules or guidelines. In addition, Contractor will meet all OSHA, WISHA, and other applicable Federal and State requirements regarding safety. County shall not be responsible for the manner in which Contractor (1) provides and completes its work; and (2) analyzes the need for and implements safety procedures. County delegates to Contractor, and Contractor agrees to assume, any duty County has to exercise reasonable care to make the premises and work area safe, and Contractor agrees to: abide by all applicable laws, be solely responsible for health and safety of all persons providing service, and create and post a site-specific worker safety plan in advance of gaining access to the work area. Contractor represents that it is a professional company with the knowledge and experience to reasonably assume such a

delegation and to work in the presence of any known or obvious dangers by taking appropriate precautions and by using and providing proper equipment for itself and its employees

9.7. No Guarantee of Employment

The performance of all or part of this contract by the Contractor shall not operate to vest any employment rights whatsoever and shall not be deemed to guarantee any employment of the Contractor or any employee of the Contractor or any subcontractor or any employee of any subcontractor by the County at the present time or in the future.

9.8. Taxes

The Contractor understands and acknowledges that the County will not withhold Federal or State income taxes. Where required by State or Federal law, the Contractor authorizes the County to make withholding for any taxes other than income taxes (i.e., Medicare). All compensation received by the Contractor will be reported to the Internal Revenue Service at the end of the calendar year in accordance with the applicable IRS regulations. It is the responsibility of the Contractor to make the necessary estimated tax payments throughout the year, if any, and the Contractor is solely liable for any tax obligation arising from the Contractor's performance of this Agreement. The Contractor hereby agrees to indemnify the County against any demand to pay taxes arising from the Contractor's failure to pay taxes on compensation earned pursuant to this Agreement.

The County will pay sales and use taxes imposed on goods or services acquired hereunder as required by law. The Contractor must pay all other taxes including, but not limited to: Business and Occupation Tax, taxes based on the Contractor’s gross or net income, or personal property to which the County does not hold title. The County is exempt from Federal Excise Tax.

9.9. Regulations and Requirement

This Agreement shall be subject to all laws, rules, and regulations of the United States of America, the State of Washington, and political subdivisions of the State of Washington, and to any other provisions set forth in Special Conditions.

9.10. 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. Per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing. A reference prevailing wage table for Lewis County wages effective on the bid due date for this project, October 30, 2024, is included as an attachment.

Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the pre-filed 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.

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.

In addition, the Contractor shall file weekly certified payroll records with the Department of Labor and Industries, as required by RCW 39.12.120

9.11. Right to Review

This contract is subject to review by any Federal or State auditor. The County or its designee shall have the right to review and monitor the financial and service components of this program by whatever means are deemed expedient by the Contracting Officer. Such review may occur with or without notice, and may include, but is not limited to, on-site inspection by County agents or employees, inspection of all records or other materials which the County deems pertinent to the Agreement and its performance, and any and all communications with or evaluations by service recipients under this Agreement. The Contractor shall preserve and maintain all financial records and records relating to the performance of work under this Agreement for 3 years after contract termination, and shall make them available for such review, within Lewis County, State of Washington, upon request.

9.12. Modifications

Either party may request changes in the Agreement. Any and all agreed modifications shall be in writing, signed by each of the parties.

9.13. Termination for Default

If the Contractor defaults by failing to perform any of the obligations of the contract or cannot perform because of regulatory order or failure to comply with regulatory requirements, including but not limited to applicable licensing laws, or becomes insolvent or is declared bankrupt or commits any act of bankruptcy- or insolvency or make an assignment for the benefit of creditors, the County may, by depositing written notice to the Contractor in the U.S. mail, postage prepaid, terminate the contract, and at the County's option, obtain performance of the work elsewhere. If the contract is terminated for default, the Contractor shall not be entitled to receive any further payments under the contract until work called for, as may be applicable under Exhibit “A”, has been fully performed. Any extra cost or damage to the County resulting from such default(s) shall be deducted from any money due or coming due to the Contractor. The Contractor shall bear any extra expenses incurred by the County in completing the work, as may be applicable under Exhibit “A”, including all increased costs for completing the work, and all damage sustained, or which may be sustained by the County by reason of such default.

If a notice of termination for default has been issued and it is later determined for any reason that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the Termination for Public Convenience paragraph hereof.

9.14. Termination for Public Convenience

The County may terminate the contract in whole or in part whenever the County determines, in its sole discretion, that such termination is in the interests of the County. Whenever the contract is terminated in accordance with this paragraph, the Contractor shall be entitled to payment for actual work performed at unit contract prices for completed items of work. An equitable adjustment in the contract price for partially completed items of work will be made, but such adjustment shall not include provision for loss of anticipated profit on deleted or uncompleted work. Termination of this contract by the County at any time during the term, whether for default or convenience, shall not constitute a breach of contract by the County.

9.15. Insurance Coverage

INSURANCE REQUIREMENTS

Without limiting Contractor's indemnification of County, and prior to commencement of Work, Contractor shall obtain, provide and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to County.

General Liability Insurance, using a standard ISO CG 00 01 occurrence form, including premises, operations, products and completed operations, contractual liability with limits not less than $1,000,000. per occurrence, $2,000,000 General Aggregate and $2,000,000 Products–Completed Operations Aggregate for bodily injury, personal injury, and property damage. Coverage shall include Employers Liability (stop gap).

The Commercial General Liability Coverage shall include the following endorsements:

The County, its Board, officers, agents and employees shall be included as Additional Insureds either by specific endorsement naming these parties or a blanket additional insured endorsement applicable "when required by written contract or agreement"

Primary, Non-contributory endorsement, both in favor of the County, its Board, officers, agents and employees or a blanket waiver of subrogation endorsement applicable "when required by written contract or agreement".

The Commercial General Liability Coverage shall not include the following endorsements:
i) Amendment of Contractual Liability
ii) Total Pollution Exclusion
iii) Cross Suits Liability Exclusion

Automobile liability insurance. Contractor shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage

for all activities of the Contractor arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident.

Umbrella or excess liability insurance. Contractor shall obtain and maintain an umbrella or excess liability insurance policy with limits of not less than $4,000,000 that will provide bodily injury, personal injury and property damage liability coverage at least as broad as the primary coverages set forth above, including commercial general liability and employer's liability Such policy or policies shall include the following terms and conditions:

• A drop down feature requiring the policy to respond in the event that any primary insurance that would otherwise have applied proves to be uncollectable in whole or in part for any reason;
• Pay on behalf of wording as opposed to reimbursement;
• Concurrency of effective dates with primary policies; and
• Policies shall "follow form" to the underlying primary policies.
• Insureds under primary policies shall also be insureds under the umbrella or excess policies.

Workers' compensation insurance. Contractor shall maintain Workers' Compensation Insurance (Statutory Limits) and Employer's Liability Insurance (with limits of at least $1,000,000) for Contractor 's employees in accordance with the laws of the State of Washington. In addition, Contractor shall require each subcontractor to similarly maintain Workers' Compensation Insurance and Employer's Liability Insurance in accordance with the laws of the State of Washington for all of the subcontractor's employees .

Contractor shall submit to County, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of County, its officers, agents, employees and volunteers.

Pollution liability insurance. [If required]

Builder's risk insurance. Upon commencement of construction and with approval of County, Contractor shall obtain and maintain builder's risk insurance as specified below.

The named insureds shall be Contractor, all Subcontractors (excluding those solely responsible for design Work) of any tier, suppliers, and County and its officers, officials, employees, and agents. Contractor shall not be required to maintain property insurance for any portion of the Project following transfer of control thereof to County.

Policy shall be provided for replacement value on an "all risk" basis. There shall be no coinsurance penalty provision in any such policy. Policy must include: (1) coverage for any ensuing loss from faulty workmanship, Nonconforming Work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the Project; (4) transit coverage, including ocean marine coverage (unless insured by the supplier), with sub-limits sufficient to insure the full replacement value of any key equipment item; and (5) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the Site. Such insurance shall be on a form acceptable to County to ensure adequacy of terms and sublimits.

Proof of insurance. Contractor shall provide certificates of insurance to County as evidence of the insurance coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsement must be approved by County prior to commencement of performance. Current certification of insurance shall be kept on file with County at all times during the term of this contract. County reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Work hereunder by Contractor, his agents, representatives, employees or subcontractors. Contractor must maintain general liability and umbrella or excess liability insurance for as long as there is a statutory exposure to completed operations claims. County and its officers, officials, employees, and agents shall continue as additional insureds under such policies.

County's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these requirements or is canceled and not replaced, County has the right but not the duty to obtain the insurance it deems necessary and any premium paid by County will be promptly reimbursed by Contractor or County will withhold amounts sufficient to pay premium from Contractor payments. In the alternative, County may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance in the State of Washington, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the County.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against County, its elected or appointed officers, agents, officials, employees and volunteers or shall specifically allow Contractor or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Contractor hereby waives its own right of recovery against County, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non estoppel). Contractor acknowledges and agrees that any actual or alleged failure on the part of the County to inform Contractor of non-compliance with any requirement imposes no additional obligations on the County nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type.

Notice of cancellation. Contractor agrees to oblige its insurance agent or broker and insurers to provide to County with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

Additional insured status. General liability policies shall provide or be endorsed to provide that County and its officers, officials, employees, and agents shall be additional insureds under such policies. This provision shall also apply to any excess liability policies.

County's right to revise requirements. The County reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Contractor a ninety (90)-day advance written notice of such change. If such change results in substantial additional cost to the Contractor, the County and Contractor may renegotiate Contractor's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by County. County reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by County.

Timely notice of claims. Contractor shall give County prompt and timely notice of claims made or suits instituted that arise out of or result from Contractor's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Contractor shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the Work.

9.16. Defense & Indemnity Agreement

To the fullest extent permitted by law, the Contractor agrees to indemnify, defend and hold the County and its departments, elected and appointed officials, agents, and volunteers, harmless from and against any and all claims, damages, losses and expenses, including but not limited to court costs, attorney's fees and alternative dispute resolution costs which 1) are caused in whole or in part by any act or omission, negligent or otherwise, of the Contractor, its employees, agents or volunteers, and/or Contractor's subcontractors and their employees, agents or volunteers; or 2) are directly or indirectly arising out of, resulting from or in connection with performance of this Agreement; or 3) are based upon the Contractor's or its subcontractors' use of, presence upon or proximity to the property of the County. Contractor's indemnity obligations shall extend to, but shall not be limited to, claims for any personal injury, for any bodily injury, sickness, disease or death and for any damage to or destruction of any property (including the loss of use resulting therefrom).

This indemnification obligation of the Contractor shall not apply if the claim, damage, loss or expense is caused by the sole negligence of the County. In the event of the concurrent negligence of the Contractor, its subcontractors, employees or agents, and the County, its employees or agents, this indemnification obligation of the Contractor shall be valid and enforceable only to the extent of the negligence of the Contractor, its subcontractors, employees and agents. This

indemnification obligation shall not be limited in any way by the Washington State Industrial Insurance Act, RCW Title 51, or by application of any other workmen's compensation act, disability benefit act or other employee benefit act, and the Contractor hereby expressly waives any immunity afforded by such acts. The foregoing indemnification obligations of the Contractor are a material inducement to County to enter into this Agreement, are reflected in the Contractor's compensation, and have been mutually negotiated by the Parties.

9.17. Participation by County – Right to participate; Survival of Contractor's Indemnity Obligations; Indemnity for Subcontractors

The County reserves the right, but not the obligation, to participate in the defense of any claim, damages, losses or expenses and any such participation shall not constitute a waiver of Contractor's indemnity obligations under this Agreement.

The Contractor agrees all Contractor's indemnity obligations shall survive the completion, expiration or termination of this Agreement.

In the event the Contractor enters into subcontracts to the extent allowed under this Agreement, the Contractor shall include as a requirement in each such contract that Contractor's subcontractors shall indemnify the County on a basis equal to or exceeding Contractor's indemnity obligations to the County.

9.18. Venue and Choice of Law

In the event that any litigation should arise concerning the construction or interpretation of any of the terms of this Agreement, the venue of such action of litigation shall be in the courts of the State of Washington in and for the County of Lewis. This Agreement shall be governed by the law of the State of Washington.

9.19. Withholding Payment

In the event the Contractor has failed to perform any substantial obligation to be performed by the Contractor under this Agreement and said failure has not been cured within the times set forth in this Agreement, then the County may, upon written notice, withhold all monies due and payable to Contractor, without penalty, until such failure to perform is cured or otherwise adjudicated.

9.20. Liquidated Damages (Not a Penalty)

Because breach and/or non-performance by Contractor may cause County to incur economic damages and losses of types and in amounts which are incapable or very difficult to ascertain with certainty in advance as a basis for recovery of actual damages, in the event Contractor has not fully completed work pursuant to and by the deadline set forth in this Agreement, Contractor shall pay County liquidated damages in the amount of $1000.00 per day for every day past the agreed end date of December 31, 2024. The parties believe said amount represents a fair, reasonable, and appropriate forecast of just compensation for the harm caused by a breach. Such liquidated damages are intended to represent estimated actual damages as contemplated by the parties at the time of entering into this Agreement and are not intended as a penalty. For avoidance of doubt, one such source of actual damages would be the need to obtain substitute

premises for a homeless shelter on short notice, since the shelter will not likely receive a certificate of occupancy in time if the services under this Agreement are not timely completed.

9.21. Payment and Performance Bond

Payment and performance bonds for 100% of the Contract Sum, including all Change Orders and state sales tax, shall be furnished for the Work, and shall be in a form acceptable to the County. No payment or performance bond is required if the Contract Sum is $150,000 or less and Contractor agrees that the County may, in lieu of the bond, retain an additional 10% of the Contract Sum, beyond any other retainage provided for in this Agreement, for the period allowed by RCW 39.08.010.

9.22. Retainage

Pursuant to RCW 60.28.011, the County shall retain 5% of the contract sum for the period of time set forth in that statute.

9.23. Future Non-Allocation of Funds

If sufficient funds are not appropriated or allocated for payment under this contract for any future fiscal period, the County will not be obligated to make payments for services or amounts incurred after the end of the current fiscal period. No penalty or expense shall accrue to the County in the event this provision applies.

9.24. Nature of the Work

County delegates to Contractor, and Contractor agrees to assume, any duty County has to exercise reasonable care to make the premises and work area safe, and Contractor agrees to: abide by all applicable laws, be solely responsible for health and safety of all persons providing service, and create and post a site-specific worker safety plan in advance of gaining access to the work area. Contractor represents that it is a professional company with the knowledge and experience to reasonably assume such a delegation and to work in the presence of any known or obvious dangers by taking appropriate precautions and by using and providing proper equipment for itself and its employees.

9.25. Contractor Commitments, Warranties and Representations

Any written commitment received from the Contractor concerning this Agreement shall be binding upon the Contractor, unless otherwise specifically provided herein with reference to this paragraph. Failure of the Contractor to fulfill such a commitment shall render the Contractor liable for damages to the County. A commitment includes, but is not limited to any representation made prior to execution of this Agreement, whether or not incorporated elsewhere herein by reference, as to performance of services or equipment, prices or options for future acquisition to remain in effect for a fixed period, or warranties.

9.26. Authority

Contractor acknowledges, represents, and warrants that it has the full right, power, and authority to enter into this agreement. Each person signing this agreement on behalf of an entity represents and warrants that he or she has the full right, power, and authority to bind their respective entity,

their respective entity has approved this Agreement and authorized them to sign it, and their respective entity is duly formed and in good standing.

9.27. Patent/Copyright Infringement

Contractor will defend and indemnify the County from any claimed action, cause or demand brought against the County, to the extent such action is based on the claim that information supplied by the Contractor infringes any patent or copyright. The Contractor will pay those costs and damages attributable to any such claims that are finally awarded against the County in any action. Such defense and payments are conditioned upon the following:

A. That Contractor shall be notified promptly in writing by County of any notice of such claim.

B. Contractor shall have the right, hereunder, at its option and expense, to obtain for the County the right to continue using the information in the event such claim of infringement is made, provided no reduction in performance or loss results to the County.

9.28. Disputes

A. General

Differences between the Contractor and the County, arising under and by virtue of the Contract Documents shall be brought to the attention of the County at the earliest possible time in order that such matters may be settled or other appropriate action promptly taken. Except for such objections as are made of record in the manner hereinafter specified and within the time limits stated, the records, orders, rulings, instructions, and decisions of the Contracting Officer, shall be final and conclusive.

B. Notice of Potential Claims

The Contractor shall not be entitled to additional compensation which otherwise may be payable, or to extension of time for (1) any act or failure to act by the Contracting Officer or the County, or (2) the happening of any event or occurrence, unless the Contractor has given the County a written Notice of Potential Claim within 10 days of the commencement of the act, failure, or event giving rise to the claim, and before final payment by the County. The written Notice of Potential Claim shall set forth the reasons for which the Contractor believes additional compensation or extension of time is due, the nature of the cost involved, and insofar as possible, the amount of the potential claim. Contractor shall keep full and complete daily records of the Work performed, Labor and material used, and all costs and additional time claimed to be additional.

C. Detailed Claim

The Contractor is not entitled to claim any such additional compensation, or extension of time, unless within 30 days of the accomplishment of the portion of the work from which the claim arose, and before final payment by the County, the Contractor has given the County a detailed written statement of each element of cost or other compensation

requested and of all elements of additional time required, and copies of any supporting documents evidencing the amount or the extension of time claimed to be due.

9.29. Attorneys Fees, Expenses, and Costs

Should any legal proceeding be commenced between or by the Parties concerning or related to this Agreement or the rights and duties of either in relation to this Agreement, the Party prevailing in such proceeding shall be entitled, in addition to such other relief as may be granted, to a reasonable sum as and for such Party's reasonable attorneys' fees, expenses, and costs actually incurred and paid.

9.30. Ownership of Items Produced

All writings, programs, data, public records or other materials prepared by the Contractor and/or its consultants or subcontractors, in connection with the performance of this Agreement shall be the sole and absolute property of the County.

9.31. Confidentiality

In the event that the Contractor comes in contact with or obtains knowledge of confidential information, the Contractor shall maintain the confidentiality of all obtained information provided by the County or acquired by the Contractor in performance of this Agreement, except upon the prior written consent of the Lewis County Prosecuting Attorney or an order entered by a court after having acquired jurisdiction over the County. Contractor shall immediately give to the County notice of any judicial proceeding seeking disclosure of such information. Contractor shall indemnify and hold harmless the County, its officials, agents or employees from all loss or expense, including, but not limited to settlements, judgments, setoffs, attorneys' fees and costs resulting from Contractor's breach of this provision.

9.32. Public Records Law and Records Maintenance

The Contractor shall assist the County in timely and fully fulfilling all of County's obligations under the Washington Public Records Act and/or any other authority by timely and fully responding and providing documents and records in response to County's request for the same. In the event that Contractor fails to fully fulfill its obligations pursuant to this section and should a court impose a fine, penalty, sanction, and/or judgment against County for violation of said law, Contractor shall indemnify the County for the same, immediately pay County to satisfy the same together with all costs and attorney's fees incurred by County. The obligations created by this section shall survive the termination of this agreement.

The Contractor shall keep and maintain all books, records, documents, data, and other evidence relating to this contract and performance of the services described herein, including but not limited to, accounting procedures and practices which sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this contract ("Records"). Contractor shall permit County to review the Records at Contractor's place of business during normal working hours. Contractor shall retain such Records for a period of seven (7) years following the date of final payment.

If any litigation, claim, or audit is commenced, Contractor shall cooperate with County and assist in the production of all such Records. If any litigation, claim, or audit is started before the expiration of the seven- (7) year period, Contractor shall retain the Records for a period of seven (7) years after all litigation, claims, or audit findings involving the Records have been finally resolved.

For purposes of this AGREEMENT, Records includes every writing or record of every type and description including electronically stored information ("ESI") that is in Contractor's possession, control, or custody, including, without limitation, any and all correspondences, contracts, agreements, appraisals, plans, designs, data, surveys, maps, spreadsheets, memoranda, stenographic or handwritten notes, reports, records, telegrams, schedules, diaries, notebooks, logbooks, invoices, accounting records, work sheets, charts, notes, drafts, scribblings, recordings, visual displays, photographs, minutes of meetings, telephone conversations, and any and all other taped, recorded, written, printed, or typed matters of any kind or description; and every copy of the foregoing whether or not the original is in Contractor's possession, custody, or control, and every copy of any of the foregoing, whether or not such copy is a copy identical to an original, or whether or not such copy contains any commentary or notation whatsoever that does not appear on the original.

For purposes of this AGREEMENT, "ESI" means any and all computer data or electronic recorded media of any kind, including "Native Files", that are stored in any medium from which it can be retrieved and examined, either directly or after translation into a reasonably useable form. ESI may include information and/or documentation stored in various software programs such as: Email, Outlook, Word, Excel, Access, Publisher, PowerPoint, Adobe Acrobat, SQL databases, or any other software or electronic communication programs or databases that the Contractor may use in the performance of its operations. ESI may be located on network servers, backup tapes, smart phones, thumb drives, CDs, DVDs, floppy disks, work computers, cell phones, laptops, or any other electronic device that Contractor uses in the performance of its work or services hereunder, including any personal devices used by the Contractor or any sub-consultant at home.

"Native files" are a subset of ESI and refer to the electronic format of the application in which such ESI is normally created, viewed, and /or modified.

Contractor shall include this section "Records Maintenance" in every subcontract it enters into in relation to this Agreement and bind the sub-contract to its terms.

9.33. Notice

Except as set forth elsewhere in the Agreement, for all purposes under this Agreement, except service of process, notice shall be given by the Contractor to the Contract Manager for whom services are rendered, to wit: Doug Carey, Capital Facilities Manager, 351 NW North Street, Chehalis, Washington 98532-1900. Notice to the Contractor for all purposes under this Agreement shall be given to the address reflected above. Notice may be given by delivery or by depositing in the US Mail, first class, postage prepaid.

9.34. Severability

If any term or condition of this contract or the application thereof to any person(s) or circumstances is held invalid, such invalidity shall not affect other terms, conditions or applications which can be given effect without the invalid term, condition or application. To this end, the terms and conditions of this contract are declared severable.

This Agreement does not violate any known federal or state statute, rule, regulation, or common law. However, any provision that is found to be invalid or in violation of any statute, rule, regulation, or common law shall be considered null and void, with the remaining provisions remaining viable and in effect.

9.35. Waiver

Waiver of any breach or condition of this contract shall not be deemed a waiver of any prior or subsequent breach. No term or condition of this contract shall be held to be waived, modified or deleted except by an instrument, in writing, signed by the parties hereto.

9.36. Survival

The provisions of this Agreement which by their nature are reasonably intended to survive the expiration of this Agreement shall so survive, including paragraphs 5, 10, 11, 15, 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 29, and 30, notwithstanding the termination or invalidity of any other portion of this Agreement for any reason.

9.37. Time

With regard to all dates and time periods set forth or referred to in this Agreement, time is of the essence.

9.38. Entire Agreement

This written contract, including all special provisions and attachments, represents the entire Agreement between the parties and supersedes any prior oral statements, discussions or understandings between the parties.

9.39. Interpretation of the Agreement

This agreement was negotiated and drafted jointly by the parties, and it shall not be construed against either party in case of any dispute.

9.40. Special Conditions

In addition to the General Conditions of Lewis County contracts provided herein, Contractor shall comply with the special conditions included in Attachment F.

9.41. State Funding Conditions

This project is funded through a grant contract with the Department of Commerce using the Housing Trust Fund. The Contractor shall comply with all state funding conditions set forth in Attachment J.

Vendor Questionnaire: Downloadable Non-Collusion Affidavit

NON-COLLUSION AFFIDAVIT

STATE OF WASHINGTON

COUNTY OF Lewis County

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

Project Title: Lewis County Permanent Shelter

Further, that this bid is not a sham or collusion, and in no respect or degree is the bid made in the interest or on behalf of any person, firm, or corporation not named in the Proposal containing such bid.

(CORPORATE SEAL)
Name of Firm _____

Signature of Authorized Member

SWORN to before me this _____ day of _____, 20_____.

(SEAL) _____
Notary Public in and for the State of Washington

Residing at: _____

My commission expires: _____

Vendor Questionnaire: Downloadable Bid Form

Project Name: Lewis County Permanent Shelter

Name of Firm: _____

LEWIS COUNTY
DEPARTMENT OF INTERNAL SERVICES
CAPITAL FACILITIES DIVISION
351 NW NORTH ST.
CHEHALIS, WA 98532

B I D P R O P O S A L

In compliance with the contract documents, the following bid proposal is submitted:

1) BASE BID (*Including Trench Excavation Safety Provisions)*

_____ $_____

(Please print dollar amount in space above) **(do not include Washington State Sales Tax)**

TRENCH EXCAVATION SAFETY PROVISIONS $

(Included also in Base Bid)

If the bid amount contains any work which requires trenching exceeding a depth of four feet, all costs for trench safety shall be included in the Base Bid **and indicated above** for adequate trench safety systems in compliance with Chapter 39.04 RCW. 49.17 RCW and WAC 296-155-650. Bidder must include a lump sum dollar amount in blank above (even if the value is $0.00) to be responsive.

---

2) BID ALTERNATES Not Used

Time for Completion

The undersigned hereby agrees to complete all the work under the Base Bid (and accepted alternates) within 60 calendar days after the date of Notice to Proceed or not later than December 31, 2024, whichever is sooner.

UNIT PRICES Not Used

Project Name: Lewis County Permanent Shelter

Name of Firm: _____

Subcontractor Listing – RCW 39.30.060

If the base bid and the sum of the additive alternates is one million dollars or more the bidder shall provide names of the subcontractors with whom the bidder will **directly** subcontract for performance of the following work. If the bidder intends to perform the work, the bidder must enter its name for that category of work.

The bidder shall not list more than one subcontractor for each category of work identified UNLESS subcontractors vary with bid alternates, in which case the bidder must indicate which subcontractor will be used for which alternate.

Failure of the bidder to submit the NAMES of such subcontractors or to name itself to perform such work shall render the bidder's bid nonresponsive and, therefore, void.

	Designated Work	Firm Name
1.	Heating Ventilation Air Conditioning (HVAC)	_____
1.a.	HVAC Alternate Bid #____ (if applicable)	_____
2.	Plumbing	_____
2.a.	Plumbing Alternate Bid #____ (if applicable)	_____
3.	Electrical	_____
3.a.	Electrical Alternate Bid #____ (if applicable)	_____

Bidder may attach a separate sheet for additional alternate bid subcontractors.

Project Name: Lewis County Permanent Shelter

Name of Firm: _____

Apprenticeship Requirements

The apprentice labor hours required for this project are 20% of the total labor hours. The undersigned agrees to utilize this level of apprentice participation. Voluntary workforce diversity goals for this apprentice participation are identified in the Instructions To Bidders and Supplemental Conditions.

Liquidated Damages

The undersigned agrees to pay the Owner as liquidated damages the sum of $1000 for each consecutive calendar day that is in default after the Contract Time. Liquidated damages shall be deducted from the contract by change order.

Receipt of Addenda

Receipt of the following addenda is acknowledged:

Addendum No. ___	Addendum No. _____
Addendum No. ___	Addendum No. _____
Addendum No. ___	Addendum No. _____

Name of Firm _____

NOTE: *If bidder is a corporation, write State of Incorporation; if a partnership, give full names and addresses of all parties below.*

Signed by _____, Official Capacity ___

Print Name _____

Address

City _____ State _____ Zip Code _____

Date _____ Telephone _____ FAX _____

State of Washington Contractor's License No. _____

Federal Tax ID # _____ e-mail address: _____

Attachment A:
Insurance Requirements

EXHIBIT C -- INSURANCE COVERAGE REQUIREMENTS

✓ **INDICATES WHAT TYPE OF INSURANCE IS REQUIRED**

	TYPE OF INSURANCE		LIMITS OF LIABILITY	
			Each Occurrence	Aggregate
	GENERAL LIABILITY			
✓	Comprehensive Form	Bodily Injury	$1,000,000	$2,000,000
✓	Premises - Operations	Property Damage	$1,000,000	$2,000,000
	Explosion & Collapse Hazard			
	Underground Hazard			
	OR			
✓	Products/Completed Operations Hazard			
✓	Contractual Insurance	Bodily Injury and Property Damage Combined Single Limit	$1,000,000	$2,000,000
✓	Broad Form Property Damage, Incl. Care, Custody Control			
✓	Independent Contractors			
✓	Personal Injury	Personal Injury	$1,000,000	$2,000,000
	AUTOMOBILE LIABILITY			
✓	Comprehensive Form	Bodily Injury (Each Person)	$1,000,000	
✓	Owned	Bodily Injury (Each Accident)	$1,000,000	
✓	Hired	Property Damage OR	$1,000,000	
✓	Non-Owned	Bodily Injury & Property Damage Combined Single Limit	$1,000,000	
	EXCESS LIABILITY (Over and above automobile and general liability			
✓	Umbrella Form	Bodily Injury/Property Damage Combined	$4,000,000 **OR**	$4,000,000
✓	Excess Liability Gap Layer		$4,000,000	$4,000,000
✓	**WORKER'S COMPENSATION and**		Statutory	
✓	**EMPLOYER LIABILITY**		$1,000,000	
	OTHER			
	Builder's All Risk	Amount of Contract Price	$_____	
	Errors & Omissions (Professional Liability)		$1,000,000	$2,000,000

Please indicate: Claims-Made Form:_____, Occurrence Form:_____,
Extending Reporting Provisions Avail. _____

The Contractor's insurance company must provide a certificate of insurance on acceptable form showing the above required coverage and modified to conform to the following endorsement. The following endorsement must also be signed by the insurer. ACCORD 20 Form 2004 or later

Attachment B: Bidder Responsibility Criteria

Bidder Responsibility Criteria

Low Responsible Bidder

It is the intent of the Owner to award a contract to the low responsible bidder. In determining the bidder's responsibility, the Owner shall consider an overall accounting of the items listed below. The bidder must submit the following information, demonstrating that they meet the listed criteria:

1. Capacity

Category	Required Information / Criteria
❒ Current Workload	On a separate sheet, list all the major projects your firm has in progress or are projected to commence during the next 6 months, giving the name of project, Owner, architect, contract amount, percentage complete and scheduled completion date. Failure to list all major projects shall render the bid non-responsive. List the current or projected workload for the next 12 months including this Contract, expressed in total contract value. $_____ List actual contracted workload for the previous 12 months, expressed in total contract value. $_____ The bidder's current or projected workload, during the life of this contract, shall not exceed 150% of the actual contracted workload over the previous 12 months unless the bidder can demonstrate to the Owner's satisfaction that it has the capacity to assume the additional work of this project, provide adequate staffing, and meet project demands.

2. Previous Experience

	Category	Required Information / Criteria
❒	List of Completed Projects (Use Form 1)	On a separate sheet, list all the major projects ($75,000 and above) your firm has completed in each of the past five (5) years, giving the name of project, Owner (contact name and phone numbers, architect (contact name and phone numbers), contract amount, date of completion and percentage of the cost of the work performed with your own forces. This information will be used for references.
	Experience of Superintendent or Project Manager (Use Form 2)	Submit resume and references if different than above, of the person proposed by the bidder to superintend the work. This person shall have managed projects of similar complexity and similar size, and successfully completed the project within the last three (3) years. Superintendent and/or Project Manager shall not be replaced on the project without full consent of the Owner.
❒	Equipment	Submit affidavit that firm has equipment necessary to perform all phases of work, including HMA pavers, planning or grinding machines, asphalt saws, etc.

3. Ability to Perform Within Time Specified

	Category	Required Information / Criteria
❒	Contractor's Ability to Meet the Project Schedule	On a separate sheet, list the project titles, original contract time, and change order time extensions for three specific projects. Bidder shall document that it achieved substantial completion of three previous projects of similar size and scope within no more than 105% of the final contracted time for completion (including change ordered adjustments).

4. References

	Category	Required Information / Criteria
❒	References from Owners of Previous Projects	Owner will check references by contacting owners of previous projects on bidder's performance over the last five years. On average, such references shall be satisfactory or better on a five category scale with "satisfactory" at mid scale. A reference score sheet will be utilized for rating completed projects of similar scope and value.
❒	Public Agency Debarment	Bidder shall not have been debarred by any Public agency within the last two (2) years.

The apparent low bidder must provide the above required information within two (2) working days of receiving Owner notification. Failure to submit such information to the satisfaction of the Owner within the time provided shall render the bid non-responsive.

If the Owner determines that the apparent low bidder is not responsible, the Owner will notify the bidder of its preliminary determination in writing. Within three (3) days after receipt of the preliminary determination, the bidder may withdraw its bid or may request a hearing. The Owner will schedule a hearing within three (3) working days of receipt of the bidder's request. The Owner will issue a Final Determination after reviewing information presented at the hearing. The Owner's Final Determination is specific to this project and will have no effect on other or future projects.

Bidder Responsibility
Form 1 - Contractor Experience Detail
Project: Lewis County Community Development Tenant Improvements

Business Contact Information

Contractor Name:		Total years in Business:
Mailing Address:		
Business Phone:		Former business name(s) & Dates:
Contact Name and Title:		
Contact Phone:	Contact Email:	Reason for name change(s):

*List Projects Completed Within The Time Specified By Division 00, or Are In Progress

* Project Name & Location:	Description Of Project:	Owner:	Architect:	Project Manager Name:	Original Contract Amount:	$	Is this project relevant to proposed project?
					Final Contract Amount:	$	
		Address:	Address:		Original Contract Days		**Yes** ☐
				Superintendent Name:	Time Extensions Granted Days		**No** ☐
		Phone:	Phone:		Completion Date:		
	As Prime ☐ Or Sub: ☐	Email:	Email:		**1. Did this project require Apprenticeship Participation?** **Yes** ☐ **No** ☐ **(If NO, stop here).** **2. If yes, what was the Apprenticeship %?** ____ **%** **3. What was the actual % achieved?** ____ **%** **4. Was the apprenticeship requirement met?** **Yes** ☐ **No** ☐ If **NO** to question 4 attach separate sheet to explain **Why**.		

Bidder Responsibility
Form 2 - Resume of Key Personnel for Proposed Contract
Project: Lewis County Community Development Tenant Improvements

Name:	Role in this Contract:	Years Experience	
		Total	With Current Firm
Firm Name and Location (City and State):			
Training/Education/Specialization:			
Years of Experience in the Proposed Role:			

RELEVANT PROJECTS	
Project Title:	Year Completed
Project Owner:	
Brief Description (Brief scope, size, cost, etc.) and specific role:	Check if project performed with current firm. ☐ If performed with different firm list the firm name
Reference Name & Contact Information:	
Project Owner:	Project Architect:
Name:	Name:
Phone:	Phone:
E-mail	E-mail:

RELEVANT PROJECTS	
Project Title:	Year Completed
Project Owner:	
Brief Description (Brief scope, size, cost, etc.) and specific role:	Check if project performed with current firm. ☐ If performed with different firm list the firm name
Reference Name & Contact Information:	
Project Owner:	Project Architect:
Name:	Name:
Phone:	Phone:
E-mail	E-mail:

RELEVANT PROJECTS		
Project Title:		Year Completed
Project Owner:		
Brief Description (Brief scope, size, cost, etc.) and specific role:		Check if project performed with current firm. ☐ If performed with different firm list the firm Name
Reference Name & Contact Information:		
Project Owner:	Project Architect:	
Name:	Name:	
Phone:	Phone:	
E-mail	E-mail:	

RELEVANT PROJECTS		
Project Title:		Year Completed
Project Owner:		
Brief Description (Brief scope, size, cost, etc.) and specific role:		Check if project performed with current firm. ☐ If performed with different firm list the firm Name
Reference Name & Contact Information:		
Project Owner:	Project Architect:	
Name:	Name:	
Phone:	Phone:	
E-mail	E-mail:	

RELEVANT PROJECTS		
Project Title:		Year Completed
Project Owner:		
Brief Description (Brief scope, size, cost, etc.) and specific role:		Check if project performed with current firm. ☐ If performed with different firm list the firm Name
Reference Name & Contact Information:		
Project Owner:	Project Architect:	
Name:	Name:	
Phone:	Phone:	
E-mail	E-mail:	

Attachment C:
Lewis County Prevailing Wages Table

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Asbestos Abatement Workers	Journey Level	$63.87	5D	1H	
Lewis	Boilermakers	Journey Level	$81.48	5N	1C	
Lewis	Brick Mason	Journey Level	$71.82	7E	1N	
Lewis	Brick Mason	Pointer-Caulker-Cleaner	$71.82	7E	1N	
Lewis	Building Service Employees	Janitor	$16.28		1	
Lewis	Building Service Employees	Shampooer	$16.28		1	
Lewis	Building Service Employees	Waxer	$16.28		1	
Lewis	Building Service Employees	Window Cleaner	$16.28		1	
Lewis	Cabinet Makers (In Shop)	Journey Level	$23.17		1	
Lewis	Carpenters	Acoustical Worker	$78.96	15J	11U	
Lewis	Carpenters	Bridge Dock and Wharf Carpenter	$80.50	15J	11U	9L
Lewis	Carpenters	Floor Layer & Floor Finisher	$78.96	15J	11U	
Lewis	Carpenters	General Carpenter	$78.96	15J	11U	
Lewis	Carpenters	Scaffold Erector	$78.96	15J	11U	
Lewis	Cement Masons	Application of all Composition Mastic	$77.30	15J	4U	
Lewis	Cement Masons	Application of all Epoxy Material	$76.78	15J	4U	
Lewis	Cement Masons	Application of all Plastic Material	$77.30	15J	4U	
Lewis	Cement Masons	Application of Sealing Compound	$76.78	15J	4U	
Lewis	Cement Masons	Application of Underlayment	$77.30	15J	4U	
Lewis	Cement Masons	Building General	$76.78	15J	4U	
Lewis	Cement Masons	Composition or Kalman Floors	$77.30	15J	4U	
Lewis	Cement Masons	Concrete Paving	$76.78	15J	4U	
Lewis	Cement Masons	Curb & Gutter Machine	$77.30	15J	4U	
Lewis	Cement Masons	Curb & Gutter, Sidewalks	$76.78	15J	4U	
Lewis	Cement Masons	Curing Concrete	$76.78	15J	4U	
Lewis	Cement Masons	Finish Colored Concrete	$77.30	15J	4U	
Lewis	Cement Masons	Floor Grinding	$77.30	15J	4U	
Lewis	Cement Masons	Floor Grinding/Polisher	$76.78	15J	4U	
Lewis	Cement Masons	Green Concrete Saw, self-powered	$77.30	15J	4U	
Lewis	Cement Masons	Grouting of all Plates	$76.78	15J	4U	
Lewis	Cement Masons	Grouting of all Tilt-up Panels	$76.78	15J	4U	
Lewis	Cement Masons	Gunite Nozzleman	$77.30	15J	4U	
Lewis	Cement Masons	Hand Powered Grinder	$77.30	15J	4U	
Lewis	Cement Masons	Journey Level	$76.78	15J	4U	
Lewis	Cement Masons	Patching Concrete	$76.78	15J	4U	
Lewis	Cement Masons	Pneumatic Power Tools	$77.30	15J	4U	
Lewis	Cement Masons	Power Chipping & Brushing	$77.30	15J	4U	
Lewis	Cement Masons	Sand Blasting Architectural Finish	$77.30	15J	4U	
Lewis	Cement Masons	Screed & Rodding Machine	$77.30	15J	4U	
Lewis	Cement Masons	Spackling or Skim Coat Concrete	$76.78	15J	4U	
Lewis	Cement Masons	Troweling Machine Operator	$77.30	15J	4U	
Lewis	Cement Masons	Troweling Machine Operator on Colored Slabs	$77.30	15J	4U	
Lewis	Cement Masons	Tunnel Workers	$77.30	15J	4U	

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Divers & Tenders	Bell/Vehicle/Submersible Operator (not under pressure)	$156.25	15J	11T	9I
Lewis	Divers & Tenders	Dive Supervisor	$157.75	15J	11T	9I
Lewis	Divers & Tenders	Diver	$156.25	15J	11T	9I
Lewis	Divers & Tenders	Diver Tender	$86.86	15J	11T	9I
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	$118.99	15J	11U	
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	$109.76	15J	11U	
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	$128.22	15J	11U	
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	$137.45	15J	11U	
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	$146.67	15J	11U	
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	$155.90	15J	11U	
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	$165.13	15J	11U	
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	$174.36	15J	11U	
Lewis	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	$183.59	15J	11U	
Lewis	Divers & Tenders	Lead Diver (Dive Master)	$101.32	15J	11T	9I
Lewis	Divers & Tenders	Manifold Operator (Life Support Technician)	$86.86	15J	11T	9I
Lewis	Divers & Tenders	Remote Operated Vehicle Operator/Technician	$86.86	15J	11T	9I
Lewis	Divers & Tenders	Remote Operated Vehicle Operator/Technician	$86.86	15J	11T	9I
Lewis	Divers & Tenders	Remote Operated Vehicle Tender	$80.55	15J	11T	9I
Lewis	Divers & Tenders	Stand-by Diver	$96.32	15J	11T	9I
Lewis	Dredge Workers	Assistant Engineer	$83.92	5D	3F	
Lewis	Dredge Workers	Assistant Mate (Deckhand)	$83.28	5D	3F	
Lewis	Dredge Workers	Boatmen	$83.92	5D	3F	
Lewis	Dredge Workers	Engineer Welder	$85.53	5D	3F	
Lewis	Dredge Workers	Leverman, Hydraulic	$87.24	5D	3F	
Lewis	Dredge Workers	Mates	$83.92	5D	3F	
Lewis	Dredge Workers	Oiler	$83.28	5D	3F	
Lewis	Drywall Applicator	Journey Level	$78.76	15O	11S	
Lewis	Drywall Tapers	Journey Level	$78.76	15O	11S	
Lewis	Electrical Fixture Maintenance Workers	Journey Level	$16.28		1	
Lewis	Electricians - Inside	Cable Splicer	$93.48	5C	1G	
Lewis	Electricians - Inside	Journey Level	$87.20	5C	1G	

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Electricians - Inside	Lead Covered Cable Splicer	$99.75	5C	1G	
Lewis	Electricians - Inside	Welder	$93.48	5C	1G	
Lewis	Electricians - Motor Shop	Craftsman	$16.28		1	
Lewis	Electricians - Motor Shop	Journey Level	$16.28		1	
Lewis	Electricians - Powerline Construction	Cable Splicer	$97.76	5A	4D	
Lewis	Electricians - Powerline Construction	Certified Line Welder	$89.71	5A	4D	
Lewis	Electricians - Powerline Construction	Groundperson	$56.79	5A	4D	
Lewis	Electricians - Powerline Construction	Heavy Line Equipment Operator	$89.71	5A	4D	
Lewis	Electricians - Powerline Construction	Journey Level Lineperson	$89.71	5A	4D	
Lewis	Electricians - Powerline Construction	Line Equipment Operator	$77.13	5A	4D	
Lewis	Electricians - Powerline Construction	Meter Installer	$56.79	5A	4D	8W
Lewis	Electricians - Powerline Construction	Pole Sprayer	$89.71	5A	4D	
Lewis	Electricians - Powerline Construction	Powderperson	$66.84	5A	4D	
Lewis	Electronic Technicians	Journey Level	$55.70	6Z	1B	
Lewis	Elevator Constructors	Mechanic	$111.26	7D	4A	
Lewis	Elevator Constructors	Mechanic In Charge	$120.27	7D	4A	
Lewis	Fabricated Precast Concrete Products	Journey Level	$16.28		1	
Lewis	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	$16.28		1	
Lewis	Fence Erectors	Fence Erector	$54.65	15J	11P	8Y
Lewis	Fence Erectors	Fence Laborer	$54.65	15J	11P	8Y
Lewis	Flaggers	Journey Level	$54.65	15J	11P	8Y
Lewis	Glaziers	Journey Level	$82.16	7L	1Y	
Lewis	Heat & Frost Insulators And Asbestos Workers	Journey Level	$91.81	15H	11C	
Lewis	Heating Equipment Mechanics	Journey Level	$99.92	7F	1E	
Lewis	Hod Carriers & Mason Tenders	Journey Level	$67.38	15J	11P	8Y
Lewis	Industrial Power Vacuum Cleaner	Journey Level	$16.28		1	
Lewis	Inland Boatmen	Boat Operator	$61.41	5B	1K	
Lewis	Inland Boatmen	Cook	$56.48	5B	1K	
Lewis	Inland Boatmen	Deckhand	$57.48	5B	1K	
Lewis	Inland Boatmen	Deckhand Engineer	$58.81	5B	1K	
Lewis	Inland Boatmen	Launch Operator	$58.89	5B	1K	
Lewis	Inland Boatmen	Mate	$57.31	5B	1K	

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	$16.28		1	
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$16.28		1	
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$16.28		1	
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$16.28		1	
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	$16.28		1	
Lewis	Insulation Applicators	Journey Level	$78.96	15J	11U	
Lewis	Ironworkers	Journeyman	$87.80	15K	11N	
Lewis	Laborers	Air, Gas Or Electric Vibrating Screed	$63.87	15J	11P	8Y
Lewis	Laborers	Airtrac Drill Operator	$65.75	15J	11P	8Y
Lewis	Laborers	Ballast Regular Machine	$63.87	15J	11P	8Y
Lewis	Laborers	Batch Weighman	$54.65	15J	11P	8Y
Lewis	Laborers	Brick Pavers	$63.87	15J	11P	8Y
Lewis	Laborers	Brush Cutter	$63.87	15J	11P	8Y
Lewis	Laborers	Brush Hog Feeder	$63.87	15J	11P	8Y
Lewis	Laborers	Burner	$63.87	15J	11P	8Y
Lewis	Laborers	Caisson Worker	$65.75	15J	11P	8Y
Lewis	Laborers	Carpenter Tender	$63.87	15J	11P	8Y
Lewis	Laborers	Cement Dumper-paving	$64.98	15J	11P	8Y
Lewis	Laborers	Cement Finisher Tender	$63.87	15J	11P	8Y
Lewis	Laborers	Change House Or Dry Shack	$63.87	15J	11P	8Y
Lewis	Laborers	Chipping Gun (30 Lbs. And Over)	$64.98	15J	11P	8Y
Lewis	Laborers	Chipping Gun (Under 30 Lbs.)	$63.87	15J	11P	8Y
Lewis	Laborers	Choker Setter	$63.87	15J	11P	8Y
Lewis	Laborers	Chuck Tender	$63.87	15J	11P	8Y
Lewis	Laborers	Clary Power Spreader	$64.98	15J	11P	8Y
Lewis	Laborers	Clean-up Laborer	$63.87	15J	11P	8Y
Lewis	Laborers	Concrete Dumper/Chute Operator	$64.98	15J	11P	8Y
Lewis	Laborers	Concrete Form Stripper	$63.87	15J	11P	8Y
Lewis	Laborers	Concrete Placement Crew	$64.98	15J	11P	8Y
Lewis	Laborers	Concrete Saw Operator/Core Driller	$64.98	15J	11P	8Y
Lewis	Laborers	Crusher Feeder	$54.65	15J	11P	8Y
Lewis	Laborers	Curing Laborer	$63.87	15J	11P	8Y
Lewis	Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	$63.87	15J	11P	8Y
Lewis	Laborers	Ditch Digger	$63.87	15J	11P	8Y

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Laborers	Diver	$65.75	15J	11P	8Y
Lewis	Laborers	Drill Operator (Hydraulic, Diamond)	$64.98	15J	11P	8Y
Lewis	Laborers	Dry Stack Walls	$63.87	15J	11P	8Y
Lewis	Laborers	Dump Person	$63.87	15J	11P	8Y
Lewis	Laborers	Epoxy Technician	$63.87	15J	11P	8Y
Lewis	Laborers	Erosion Control Worker	$63.87	15J	11P	8Y
Lewis	Laborers	Faller & Bucker Chain Saw	$64.98	15J	11P	8Y
Lewis	Laborers	Fine Graders	$63.87	15J	11P	8Y
Lewis	Laborers	Firewatch	$54.65	15J	11P	8Y
Lewis	Laborers	Form Setter	$64.98	15J	11P	8Y
Lewis	Laborers	Gabian Basket Builders	$63.87	15J	11P	8Y
Lewis	Laborers	General Laborer	$63.87	15J	11P	8Y
Lewis	Laborers	Grade Checker & Transit Person	$67.38	15J	11P	8Y
Lewis	Laborers	Grinders	$63.87	15J	11P	8Y
Lewis	Laborers	Grout Machine Tender	$63.87	15J	11P	8Y
Lewis	Laborers	Groutmen (Pressure) Including Post Tension Beams	$64.98	15J	11P	8Y
Lewis	Laborers	Guardrail Erector	$63.87	15J	11P	8Y
Lewis	Laborers	Hazardous Waste Worker (Level A)	$65.75	15J	11P	8Y
Lewis	Laborers	Hazardous Waste Worker (Level B)	$64.98	15J	11P	8Y
Lewis	Laborers	Hazardous Waste Worker (Level C)	$63.87	15J	11P	8Y
Lewis	Laborers	High Scaler	$65.75	15J	11P	8Y
Lewis	Laborers	Jackhammer	$64.98	15J	11P	8Y
Lewis	Laborers	Laserbeam Operator	$64.98	15J	11P	8Y
Lewis	Laborers	Maintenance Person	$63.87	15J	11P	8Y
Lewis	Laborers	Manhole Builder-Mudman	$64.98	15J	11P	8Y
Lewis	Laborers	Material Yard Person	$63.87	15J	11P	8Y
Lewis	Laborers	Mold Abatement Worker	$63.87	15J	11P	8Y
Lewis	Laborers	Motorman-Dinky Locomotive	$67.48	15J	11P	8Y
Lewis	Laborers	nozzleman (concrete pump, green cutter when using combination of high pressure air & water on concrete & rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster)	$67.38	15J	11P	8Y
Lewis	Laborers	Pavement Breaker	$64.98	15J	11P	8Y
Lewis	Laborers	Pilot Car	$54.65	15J	11P	8Y
Lewis	Laborers	Pipe Layer (Lead)	$67.38	15J	11P	8Y
Lewis	Laborers	Pipe Layer/Tailor	$64.98	15J	11P	8Y
Lewis	Laborers	Pipe Pot Tender	$64.98	15J	11P	8Y
Lewis	Laborers	Pipe Reliner	$64.98	15J	11P	8Y
Lewis	Laborers	Pipe Wrapper	$64.98	15J	11P	8Y
Lewis	Laborers	Pot Tender	$63.87	15J	11P	8Y
Lewis	Laborers	Powderman	$65.75	15J	11P	8Y
Lewis	Laborers	Powderman's Helper	$63.87	15J	11P	8Y
Lewis	Laborers	Power Jacks	$64.98	15J	11P	8Y

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Laborers	Railroad Spike Puller - Power	$64.98	15J	11P	8Y
Lewis	Laborers	Raker - Asphalt	$67.38	15J	11P	8Y
Lewis	Laborers	Re-timberman	$65.75	15J	11P	8Y
Lewis	Laborers	Remote Equipment Operator	$64.98	15J	11P	8Y
Lewis	Laborers	Rigger/Signal Person	$64.98	15J	11P	8Y
Lewis	Laborers	Rip Rap Person	$63.87	15J	11P	8Y
Lewis	Laborers	Rivet Buster	$64.98	15J	11P	8Y
Lewis	Laborers	Rodder	$64.98	15J	11P	8Y
Lewis	Laborers	Scaffold Erector	$63.87	15J	11P	8Y
Lewis	Laborers	Scale Person	$63.87	15J	11P	8Y
Lewis	Laborers	Sloper (Over 20)"	$64.98	15J	11P	8Y
Lewis	Laborers	Sloper Sprayer	$63.87	15J	11P	8Y
Lewis	Laborers	Spreader (Concrete)	$64.98	15J	11P	8Y
Lewis	Laborers	Stake Hopper	$63.87	15J	11P	8Y
Lewis	Laborers	Stock Piler	$63.87	15J	11P	8Y
Lewis	Laborers	Swinging Stage/Boatswain Chair	$54.65	15J	11P	8Y
Lewis	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	$64.98	15J	11P	8Y
Lewis	Laborers	Tamper (Multiple & Self-propelled)	$64.98	15J	11P	8Y
Lewis	Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	$64.98	15J	11P	8Y
Lewis	Laborers	Toolroom Person (at Jobsite)	$63.87	15J	11P	8Y
Lewis	Laborers	Topper	$63.87	15J	11P	8Y
Lewis	Laborers	Track Laborer	$63.87	15J	11P	8Y
Lewis	Laborers	Track Liner (Power)	$64.98	15J	11P	8Y
Lewis	Laborers	Traffic Control Laborer	$58.20	15J	11P	9C
Lewis	Laborers	Traffic Control Supervisor	$61.47	15J	11P	9C
Lewis	Laborers	Truck Spotter	$63.87	15J	11P	8Y
Lewis	Laborers	Tugger Operator	$64.98	15J	11P	8Y
Lewis	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	$200.40	15J	11P	9B
Lewis	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	$205.43	15J	11P	9B
Lewis	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	$209.11	15J	11P	9B
Lewis	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	$214.81	15J	11P	9B
Lewis	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	$216.93	15J	11P	9B
Lewis	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	$222.03	15J	11P	9B
Lewis	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	$223.93	15J	11P	9B
Lewis	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	$225.93	15J	11P	9B

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

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County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	$227.93	15J	11P	9B
Lewis	Laborers	Tunnel Work-Guage and Lock Tender	$67.48	15J	11P	8Y
Lewis	Laborers	Tunnel Work-Miner	$67.48	15J	11P	8Y
Lewis	Laborers	Vibrator	$64.98	15J	11P	8Y
Lewis	Laborers	Vinyl Seamer	$63.87	15J	11P	8Y
Lewis	Laborers	Watchman	$49.97	15J	11P	8Y
Lewis	Laborers	Welder	$64.98	15J	11P	8Y
Lewis	Laborers	Well Point Laborer	$64.98	15J	11P	8Y
Lewis	Laborers	Window Washer/Cleaner	$49.97	15J	11P	8Y
Lewis	Laborers - Underground Sewer & Water	General Laborer & Topman	$63.87	15J	11P	8Y
Lewis	Laborers - Underground Sewer & Water	Pipe Layer	$64.98	15J	11P	8Y
Lewis	Landscape Construction	Landscape Construction/Landscaping Or Planting Laborers	$49.97	15J	11P	8Y
Lewis	Landscape Construction	Landscape Operator	$82.18	15J	3K	8X
Lewis	Landscape Maintenance	Groundskeeper	$16.28		1	
Lewis	Lathers	Journey Level	$78.76	15O	11S	
Lewis	Marble Setters	Journey Level	$71.82	7E	1N	
Lewis	Metal Fabrication (In Shop)	Fitter	$16.28		1	
Lewis	Metal Fabrication (In Shop)	Laborer	$16.28		1	
Lewis	Metal Fabrication (In Shop)	Machine Operator	$16.28		1	
Lewis	Metal Fabrication (In Shop)	Painter	$16.28		1	
Lewis	Metal Fabrication (In Shop)	Welder	$16.28		1	
Lewis	Millwright	Journey Level	$80.28	15J	4C	
Lewis	Modular Buildings	Cabinet Assembly	$16.28		1	
Lewis	Modular Buildings	Electrician	$16.28		1	
Lewis	Modular Buildings	Equipment Maintenance	$16.28		1	
Lewis	Modular Buildings	Plumber	$16.28		1	
Lewis	Modular Buildings	Production Worker	$16.28		1	
Lewis	Modular Buildings	Tool Maintenance	$16.28		1	
Lewis	Modular Buildings	Utility Person	$16.28		1	
Lewis	Modular Buildings	Welder	$16.28		1	
Lewis	Painters	Journey Level	$51.71	6Z	11J	
Lewis	Pile Driver	Crew Tender	$86.81	15J	11U	9L
Lewis	Pile Driver	Journey Level	$80.50	15J	11U	9L
Lewis	Plasterers	Journey Level	$73.54	7Q	1R	
Lewis	Plasterers	Nozzleman	$77.54	7Q	1R	
Lewis	Playground & Park Equipment Installers	Journey Level	$16.28		1	
Lewis	Plumbers & Pipefitters	Journey Level	$90.87	5A	1G	
Lewis	Power Equipment Operators	Asphalt Plant Operator	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Assistant Engineer	$79.12	7A	11H	8X
Lewis	Power Equipment Operators	Barrier Machine (zipper)	$82.82	15J	3K	8X

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

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County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Power Equipment Operators	Batch Plant Operator: Concrete	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Bobcat	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Brokk - Remote Demolition Equipment	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Brooms	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Bump Cutter	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Cableways	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Chipper	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Compressor	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42m	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Concrete Finish Machine -laser Screed	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Conveyors	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Cranes Friction: 200 tons and over	$86.68	7A	11H	8X
Lewis	Power Equipment Operators	Cranes, A-frame: 10 tons and under	$79.12	7A	11H	8X
Lewis	Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$84.97	7A	11H	8X
Lewis	Power Equipment Operators	Cranes: 20 tons through 44 tons with attachments	$83.38	7A	11H	8X
Lewis	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$85.84	7A	11H	8X
Lewis	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	$86.68	7A	11H	8X
Lewis	Power Equipment Operators	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	$84.12	7A	11H	8X
Lewis	Power Equipment Operators	Cranes: Friction cranes through 199 tons	$85.84	7A	11H	8X
Lewis	Power Equipment Operators	Cranes: through 19 tons with attachments, A-frame over 10 tons	$82.74	7A	11H	8X
Lewis	Power Equipment Operators	Crusher	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Deck Engineer/deck Winches (power)	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Derricks: on building work	$84.12	7A	11H	8X
Lewis	Power Equipment Operators	Dozers D-9 & Under	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Drilling Machine	$84.40	15J	3K	8X
Lewis	Power Equipment Operators	Elevator and man-lift: permanent and shaft type	$79.12	7A	11H	8X
Lewis	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Forklift: 3000 lbs and over with attachments	$82.74	7A	11H	8X

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

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County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Power Equipment Operators	Forklifts: under 3000 lbs. with attachments	$79.12	7A	11H	8X
Lewis	Power Equipment Operators	Grade Engineer: Using Blueprints, Cut Sheets,etc.	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Gradechecker/stakeman	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Guardrail punch/Auger	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Horizontal/directional Drill Locator	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Horizontal/directional Drill Operator	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Hydralifts/boom trucks: 10 tons and under	$79.12	7A	11H	8X
Lewis	Power Equipment Operators	Hydralifts/boom trucks: over 10 tons	$82.74	7A	11H	8X
Lewis	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	$84.40	15J	3K	8X
Lewis	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Loaders, Overhead Under 6 Yards	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Loaders, Plant Feed	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Loaders: Elevating Type Belt	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Locomotives, All	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Material Transfer Device	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Mechanics: all (Leadmen - $0.50 per hour over mechanic)	$84.97	7A	11H	8X
Lewis	Power Equipment Operators	Motor patrol graders	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Outside Hoists (elevators and manlifts), Air Tuggers, Strato	$82.74	7A	11H	8X
Lewis	Power Equipment Operators	Overhead, bridge type Crane: 20 tons through 44 tons	$83.38	7A	11H	8X
Lewis	Power Equipment Operators	Overhead, bridge type: 100 tons and over	$84.97	7A	11H	8X
Lewis	Power Equipment Operators	Overhead, bridge type: 45 tons through 99 tons	$84.12	7A	11H	8X
Lewis	Power Equipment Operators	Pavement Breaker	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Pile Driver (other Than Crane Mount)	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Posthole Digger, Mechanical	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Power Plant	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Pumps - Water	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Quad 9, HD 41, D10 And Over	$83.55	15J	3K	8X

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County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Power Equipment Operators	Quick Tower: no cab, under 100 feet in height based to boom	$79.12	7A	11H	8X
Lewis	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Rigger and Bellman	$79.12	7A	11H	8X
Lewis	Power Equipment Operators	Rigger/Signal Person, Bellman(Certified)	$82.74	7A	11H	8X
Lewis	Power Equipment Operators	Rollagon	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Roller, Other Than Plant Mix	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Roto-mill, Roto-grinder	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Saws - Concrete	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Scrapers - Concrete & Carry All	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Service Engineers: equipment	$82.74	7A	11H	8X
Lewis	Power Equipment Operators	Shotcrete/gunite Equipment	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$84.40	15J	3K	8X
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$85.26	15J	3K	8X
Lewis	Power Equipment Operators	Slipform Pavers	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Spreader, Topsider & Screedman	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Subgrader Trimmer	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Tower Bucket Elevators	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	$85.84	7A	11H	8X
Lewis	Power Equipment Operators	Tower crane: up to 175' in height base to boom	$84.97	7A	11H	8X
Lewis	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom.	$86.68	7A	11H	8X
Lewis	Power Equipment Operators	Transporters, All Track Or Truck Type	$83.55	15J	3K	8X
Lewis	Power Equipment Operators	Trenching Machines	$82.18	15J	3K	8X
Lewis	Power Equipment Operators	Truck Crane Oiler/Driver: 100 tons and over	$83.38	7A	11H	8X
Lewis	Power Equipment Operators	Truck crane oiler/driver: under 100 tons	$82.74	7A	11H	8X
Lewis	Power Equipment Operators	Truck Mount Portable Conveyor	$82.82	15J	3K	8X
Lewis	Power Equipment Operators	Vac Truck (Vactor Guzzler, Hydro Excavator)	$82.82	15J	3K	8X

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County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Power Equipment Operators	Welder	$84.12	7A	11H	8X
Lewis	Power Equipment Operators	Wheel Tractors, Farmall Type	$78.60	15J	3K	8X
Lewis	Power Equipment Operators	Yo Yo Pay Dozer	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operator	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	$79.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator: Concrete	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Bobcat	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Brooms	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cableways	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Chipper	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Compressor	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42m	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Conveyors	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	$86.68	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes, A-frame: 10 tons and under	$79.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$84.97	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 tons through 44 tons with attachments	$83.38	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$85.84	7A	11H	8X

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County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	$86.68	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	$84.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	$85.84	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: through 19 tons with attachments, A-frame over 10 tons	$82.74	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Crusher	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Derricks: on building work	$84.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Drilling Machine	$84.40	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Elevator and man-lift: permanent and shaft type	$79.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 lbs and over with attachments	$82.74	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Forklifts: under 3000 lbs. with attachments	$79.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blueprints, Cut Sheets,etc.	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Gradechecker/stakeman	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Guardrail punch/Auger	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Locator	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Operator	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: 10 tons and under	$79.12	7A	11H	8X

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

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County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: over 10 tons	$82.74	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	$84.40	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Mechanics: all (Leadmen - $0.50 per hour over mechanic)	$84.97	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Motor patrol graders	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators and manlifts), Air Tuggers, Strato	$82.74	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type Crane: 20 tons through 44 tons	$83.38	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 100 tons and over	$84.97	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 45 tons through 99 tons	$84.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Power Plant	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	$78.60	15J	3K	8X

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Power Equipment Operators-Underground Sewer & Water	Quad 9, HD 41, D10 And Over	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Quick Tower: no cab, under 100 feet in height based to boom	$79.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Rigger and Bellman	$79.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman(Certified)	$82.74	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Rollagon	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Service Engineers: equipment	$82.74	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$84.40	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	$82.82	15J	3K	8X

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	$85.84	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Tower crane: up to 175' in height base to boom	$84.97	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom.	$86.68	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	$83.55	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	$82.18	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/Driver: 100 tons and over	$83.38	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Truck crane oiler/driver: under 100 tons	$82.74	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Vac Truck (Vactor Guzzler, Hydro Excavator)	$82.82	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Welder	$84.12	7A	11H	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	$78.60	15J	3K	8X
Lewis	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	$82.82	15J	3K	8X
Lewis	Power Line Clearance Tree Trimmers	Journey Level In Charge	$61.73	5A	4A	
Lewis	Power Line Clearance Tree Trimmers	Spray Person	$58.44	5A	4A	
Lewis	Power Line Clearance Tree Trimmers	Tree Equipment Operator	$61.73	5A	4A	
Lewis	Power Line Clearance Tree Trimmers	Tree Trimmer	$55.14	5A	4A	
Lewis	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$41.68	5A	4A	
Lewis	Refrigeration & Air Conditioning Mechanics	Journey Level	$90.96	5A	1G	
Lewis	Residential Brick Mason	Journey Level	$21.96		1	
Lewis	Residential Carpenters	Journey Level	$24.89		1	
Lewis	Residential Cement Masons	Journey Level	$16.79		1	
Lewis	Residential Drywall Applicators	Journey Level	$36.07		1	
Lewis	Residential Drywall Tapers	Journey Level	$24.48		1	
Lewis	Residential Electricians	Journey Level	$47.93	6Z	1B	
Lewis	Residential Glaziers	Journey Level	$25.40		1	

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Residential Insulation Applicators	Journey Level	$28.53		1	
Lewis	Residential Laborers	Journey Level	$23.10		1	
Lewis	Residential Marble Setters	Journey Level	$21.96		1	
Lewis	Residential Painters	Journey Level	$18.76		1	
Lewis	Residential Plumbers & Pipefitters	Journey Level	$30.02		1	
Lewis	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	$37.18		1	
Lewis	Residential Sheet Metal Workers	Journey Level	$33.28		1	
Lewis	Residential Soft Floor Layers	Journey Level	$16.28		1	
Lewis	Residential Sprinkler Fitters (Fire Protection)	Journey Level	$22.92		1	
Lewis	Residential Stone Masons	Journey Level	$21.96		1	
Lewis	Residential Terrazzo Workers	Journey Level	$16.28		1	
Lewis	Residential Terrazzo/Tile Finishers	Journey Level	$16.28		1	
Lewis	Residential Tile Setters	Journey Level	$16.28		1	
Lewis	Roofers	Journey Level	$64.45	5A	3H	
Lewis	Roofers	Using Irritable Bituminous Materials	$67.45	5A	3H	
Lewis	Sheet Metal Workers	Journey Level (Field or Shop)	$99.92	7F	1E	
Lewis	Sign Makers & Installers (Electrical)	Journey Level	$18.04		1	
Lewis	Sign Makers & Installers (Non-Electrical)	Journey Level	$63.87	15J	11P	8Y
Lewis	Soft Floor Layers	Journey Level	$78.98	15J	4C	
Lewis	Solar Controls For Windows	Journey Level	$16.28		1	
Lewis	Sprinkler Fitters (Fire Protection)	Journey Level	$75.30	7J	1R	
Lewis	Stage Rigging Mechanics (Non Structural)	Journey Level	$16.28		1	
Lewis	Stone Masons	Journey Level	$71.82	7E	1N	
Lewis	Street And Parking Lot Sweeper Workers	Journey Level	$16.28		1	
Lewis	Surveyors	Assistant Construction Site Surveyor	$82.74	7A	11H	8X
Lewis	Surveyors	Chainman	$79.12	7A	11H	8X
Lewis	Surveyors	Construction Site Surveyor	$84.12	7A	11H	8X
Lewis	Surveyors	Drone Operator (when used in conjunction with surveying work only)	$79.12	7A	11H	8X
Lewis	Surveyors	Ground Penetrating Radar	$79.12	7A	11H	8X
Lewis	Telecommunication Technicians	Journey Level	$55.70	6Z	1B	
Lewis	Telephone Line Construction - Outside	Cable Splicer	$41.35	5A	2B	

Prevailing Wages for Lewis County as of October 30, 2024 - Journey Level Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

County	Trade	Job Classification	Wage	Holiday	Overtime	Notes
Lewis	Telephone Line Construction - Outside	Hole Digger/Ground Person	$27.31	5A	2B	
Lewis	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$34.53	5A	2B	
Lewis	Telephone Line Construction - Outside	Telephone Lineperson	$39.07	5A	2B	
Lewis	Terrazzo Workers	Journey Level	$67.51	7E	1N	
Lewis	Tile Setters	Journey Level	$65.51	7E	1N	
Lewis	Tile, Marble & Terrazzo Finishers	Finisher	$56.34	7E	1N	
Lewis	Traffic Control Stripers	Journey Level	$92.44	15L	1K	
Lewis	Truck Drivers	Asphalt Mix Over 16 Yards	$78.65	15J	11M	8L
Lewis	Truck Drivers	Asphalt Mix To 16 Yards	$77.81	15J	11M	8L
Lewis	Truck Drivers	Dump Truck	$77.81	15J	11M	8L
Lewis	Truck Drivers	Dump Truck & Trailer	$78.65	15J	11M	8L
Lewis	Truck Drivers	Other Trucks	$78.65	15J	11M	8L
Lewis	Truck Drivers - Ready Mix	Transit Mix	$78.65	15J	11M	8L
Lewis	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$18.18		1	
Lewis	Well Drillers & Irrigation Pump Installers	Oiler	$16.28		1	
Lewis	Well Drillers & Irrigation Pump Installers	Well Driller	$18.00		1	

Prevailing Wages for Lewis County as of October 30, 2024 - Apprentice Wages

Note: per RCW 39.12.017(3)(a)-(b), work on a homeless shelter is under the residential construction designation, not the commercial designation, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

There is no way to download all of the apprentice level wages for all classifications, as there is for journey level wages.

Wages should be looked up at the URL below for the specific classification needed. The applicable date is the bid due date, October 30, 2024.

https://secure.lni.wa.gov/wagelookup/ApprenticeWageLookup.aspx

Attachment D:
Plans

Placeholder: Plans

Please refer to the project plans included elsewhere in these materials.

Attachment E: Specifications

Placeholder: Specifications

Please refer to the other specifications that follow below.

Attachment F: Sample Contract Special Conditions

9.40 Special Conditions (County Funds) Capital

9.40.1. Definitions

The COUNTY is the recipient of CONTRACTOR'S services, and at all times acts through its Board of County Commissioners. The Contracting Officer of the COUNTY will be the Capital Facilities Manager, or his designee.

9.40.2. Contractor Registration

The CONTRACTOR agrees and covenants to furnish unto the COUNTY proper evidence that the CONTRACTOR has fully complied with the State Licensing Law.

CONTRACTOR shall include his contractor's license number in the space provided for CONTRACTOR INFORMATION this Agreement.

9.40.3. Non-Discrimination (Lewis County Funds)

The CONTRACTOR should be aware that public funds are being used to assist in this project. During the performance of this contract, the CONTRACTOR agrees as follows:

1. The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause.

2. The CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

3. The CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, notice to be provided by the agency contracting officer, advising the labor union or worker's representative of the contractor's commitments under Section 202 or Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in a conspicuous place available to employees and applicants for employment.

4. The CONTRACTOR will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.

5. The CONTRACTOR will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books and records for purposes of investigation to ascertain compliance with such rules, regulations and orders

6. In the event of the CONTRACTOR'S non-compliance with the non-discrimination clauses of this contract or with any such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contract may be declared ineligible for further government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1 965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

7. The CONTRACTOR will include the provisions of Paragraphs (1) through (7) in every sub-contract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1 965, so that such provisions will be binding upon each sub-contract or vendor. The CONTRACTOR will take such action with respect to any sub-contract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for non-compliance: Provided, however, that in the event the CONTRACTOR becomes involved in, or is threatened with litigation with a sub-contractor or vendor as a result of such direction by the contracting agency, the CONTRACTOR may request the United States to enter into such litigation to protect the interest of the United States.

9.40.4. Original Specifications

It is hereby expressly agreed by and between the parties involved that in any matter, dispute, suit, or proceedings arising or in any way growing out of this contract in which it may be necessary to introduce into evidence the original of such specifications, that a printed copy thereof may be used in lieu thereof with like force and effect as though the original was produced.

9.40.5. Eight Hour Law and Payment for Labor

The CONTRACTOR agrees to comply with RCW chapter 49.28 providing that no laborer, workman or mechanic in the employ of the CONTRACTOR, sub-contractor, or other person doing or contracting to do the whole or any part of the work contemplated by this contract, shall be permitted or required to work more than eight (8) hours in any one calendar day, provided that, in cases of extraordinary emergency, such danger to life or property, the hours of work may be extended, but in such cases the rate of pay for time employed in excess of eight (8) hours of each calendar day shall not be less than one

and one-half times the rate allowed for this same amount of time during eight (8) hours' service. Any work necessary to be performed after regular working hours, or Sunday or legal holidays shall be performed without additional expense to the COUNTY.

Notwithstanding the above provisions, a CONTRACTOR may enter into an agreement approved by the employees in which the employees may work up to ten (10) hours in a calendar day for not more than four (4) calendar days in a week.

CONTRACTOR further agrees that said contract is terminable in case the CONTRACTOR violates the provisions of such act.

The CONTRACTOR, and sub-contractors shall further verify that:

1. Contractor had not employed or retained any company or person (other than a full time bona fide employee working solely for the offeror) to solicit or receive this contract; and

2. Contractor has not paid or agreed to pay any company or person (other than a full-time bona .fide employee working solely for the offeror) any fee, commission, percentage, or brokerage fee contingent upon or resulting from the award of this contract; and

3. Contractor has not been asked or otherwise coerced, whether expressed or implied, into contributing funds, for any purpose as a condition to doing business with the COUNTY.

   It is further agreed that in case any dispute arises as to what are the prevailing wages for the work of a similar nature and such dispute cannot be adjusted by the parties involved, the matter shall be referred for arbitration to the Director of the Department of Labor & Industries of the State and his decision therein shall be final, binding, and conclusive on all parties.

4. To the extent applicable, the parties agree that this agreement and CONTRACTOR'S work does not create or imply a license agreement for the use of software, code, or a computer program. CONTRACTOR agrees that COUNTY shall have the sole and exclusive ownership of all rights, title, and interest in all software, written code, computer programs created or written by CONTRACTOR and that COUNTY has the right of unlimited use of the software, code and programs, including reproduction, modification and sale. CONTRACTOR denies any proprietary rights, including copyrights, trademarks, trade secrets, or intellectual property rights, to any software, code or program.

5. To the extent applicable, Contractor warrants that the computer code, software, or computer program installed by CONTRACTOR is not patented or copyrighted. CONTRACTOR will defend and indemnify the COUNTY from any claim, cause or demand brought against the COUNTY

based upon copyright or patent of the software, computer code, or computer program installed by CONTRACTOR.

9.40.6. AMERICANS WITH DISABILITIES ACT (ADA) OF 1990, PUBLIC LAW 101-336, also referred to as the "ADA" 28 CFR Part 35

The CONTRACTOR must comply with the ADA, which provides comprehensive civil rights protection to individuals with disabilities in the areas of employment, public accommodations, state and local government services, and telecommunications.

9.40.7. AUDIT

The CONTRACTOR shall maintain its records and accounts so as to facilitate audits and shall ensure that subcontractors also maintain auditable records.

The CONTRACTOR shall include the above audit requirements in any subcontracts. In any case, the CONTRACTOR's records must be available for review.

9.40.8. RECORDS MAINTENANCE

The CONTRACTOR shall maintain books, records, documents, data and other evidence relating to this Grant and performance of the services described herein, including but not limited to accounting procedures and practices that sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Grant.
CONTRACTOR shall retain such records for a period of six years following the date of final payment. At no additional cost, these records, including materials generated under the Grant, shall be subject at all reasonable times to inspection, review or audit by COMMERCE, personnel duly authorized by COMMERCE, the Office of the State Auditor, and federal and state officials so authorized by law, regulation or agreement. If any litigation, claim or audit is started before the expiration of the six (6) year period, the records shall be retained until all litigation, claims, or audit findings involving the records have been resolved.

Attachment J:
State Funding Conditions

ATTACHMENT J - STATE FUNDING CONDITIONS

This is a government project that includes a public work funded by a state grant contract through the Housing Trust Fund. The CONTRACTOR shall comply with the special conditions below pertaining to requirements of state funding.

1. The CONTRACTOR shall comply with prevailing wage laws and rules as set forth elsewhere in the Agreement. The journey level rates are included as an attachment; contractors will need to verify apprentice level rates by specific trade using the L&I website, since the rates cannot be easily downloaded for all trades in a single table. The CONTRACTOR shall coordinate with COUNTY to ensure that it lists the correct project site owner in L&I submissions (there is more than one listing for "Lewis County"; only one is correct).

2. Notwithstanding anything in this agreement to the contrary, the CONTRACTOR shall not be entitled to any payment for goods not incorporated into the work under this Agreement.

3. The CONTRACTOR shall comply with the Inadvertent Discovery Plan included at the end of this document.

4. This project requires that a minimum of 20% of total labor hours for the work at 2015 NE Kresky Ave itself (i.e., the portion of the project that is a public work on the government building and grounds, as opposed to the design, office, or administrative tasks that are not part of the work on the building or grounds) are to be provided by apprentices from a program registered and approved by the Washington State Apprenticeship and Training Council. For information on available apprenticeship programs, contact the Department of Labor and Industries' Apprenticeship Section at (360) 902-5320 or apprentice@lni.wa.gov. The CONTRACTOR shall comply and demonstrate compliance with this requirement. With each application for any payment, CONTRACTOR shall submit an apprenticeship form in the format required by the Department of Commerce, a sample of which COUNTY is included directly below, and which is available at https://des.wa.gov/sites/default/files/public/documents/Facilities/EAS/StatementOfApprentice-JourneymanParticipation.xlsx. CONTRACTOR shall update the cumulative hour totals with each submittal.

Department of Enterprise Services

STATEMENT OF APPRENTICE/JOURNEYMAN PARTICIPATION

Firm Name, Address, City, State & ZIP+4	Project Name (Title)	Contract No.
contractor firm name	name of project	HFU number
street address	Contract Award Amount:	Notice to Proceed Date
city,state, and zip	$	date

Reporting Period from: beginning date to end date | Required Apprenticeship Percentage: 15%

APPRENTICE SUMMARY

Apprentice Name	Apprentice Registration Number (6 digit)	Craft or Trade	Name of Contractor or Sub-Contractor	Apprentice hours worked this period

JOURNEYMAN SUMMARY

Craft or Trade	Number of Journeyman	Journeyman hours worked this period

Apprentice total hours worked this period:			0
Journeyman total hours worked this period:			0
	Previous Total	New Total	Percentage
Cumulative Apprentice hours total brought forward from last reporting period:	previous total	#VALUE!	#VALUE!
Cumulative Journeyman hours total brought forward from last reporting period:	previous total	#VALUE!	

I, the undersigned, do hereby certify under penalty of perjury that the items listed herein represent the proper hourly totals for Apprenticeship/Journeyman participation during this reporting period.

Printed Name: Signature: _____

Title: Date:

DES Labor Form 110215

5. This project is subject to third-party inspection and verification by the Washington Community Reinvestment Association (WCRA) and its inspection subcontractor, Falkin Associates. The CONTRACTOR shall supply all requested information to WCRA and Falkin and will have to coordinate with those entities to allow them to inspect the work, usually at or close in time to when the work is being done. The CONTRACTOR shall furnish an accurate schedule, based on good-faith expectations, of the project work to facilitate these inspections. In addition, all change orders must be approved by the third-party inspector.

6. The CONTRACTOR shall submit requests for payment using fully completed AIA forms G702 and G703, at CONTRACTOR'S up-front expense (but which can be included in the invoice as a cost to COUNTY). The forms are available here:

    a. G702, https://shop.aiacontracts.com/contract-documents/6404869-application-and-certificate-for-payment-cost-of-the-work-no-gmp; and

    b. G703, https://shop.aiacontracts.com/contract-documents/6404873-continuation-sheet-cost-of-the-work .

7. With each request for payment, the CONTRACTOR shall supply an updated schedule of values for work completed.

8. Upon payment, the CONTRACTOR shall submit lien waiver forms disclaiming any materialmen's lien on the project property.

9. This project is subject to grant requirements instituted by the Washington Department of Commerce. Grant requirements attend payment for the work, including specific contract requirements and specific paperwork requirements for payment. The CONTRACTOR shall submit paperwork sufficient to allow the work to be reimbursed under the grant requirements, as specified by the Department of Commerce or by Lewis County in an attempt to satisfy those requirements. The CONTRACTOR shall further supply all follow-up information required by the Department of Commerce or Lewis County to facilitate reimbursement for the work.

10. This project is subject to Evergreen Sustainable Design Standards (ESDS). The CONTRACTOR shall take all necessary steps to comply with the COUNTY's approved Evergreen Project Plan. As a convenience to the CONTRACTOR to narrow the range uncertainty, COUNTY has supplied below a good-faith listing of the ESDS requirements it believes are relevant to various types of work in the project as a whole below. The CONTRACTOR shall familiarize itself with the ESDS requirements that pertain to all work and the type of work CONTRACTOR will perform in its scope of work. However, the COUNTY and/or the Department of Commerce and/or its third party verification and inspection services may specify other ESDS compliance requirements to which the project must adhere, and CONTRACTOR will comply with such requirements when alerted to them.

a. ESDS 1.01c – for all work: the CONTRACTOR shall consult with COUNTY and/or its contract project manager or consultants and take steps necessary to ensure its work complies with ESDS requirements. This will include preconstruction meeting(s) to note any ESDS compliance issues likely to arise, documentation of some materials used during the work, and documentation of any other design or work relevant to ESDS compliance.

b. ESDS 1.04 & 7.05a – for fencing: the CONTRACTOR shall install a fence so as to connect shelter resident to usable outdoor space. The CONTRACTOR shall designate, within the fenced outdoor area at a location specified by COUNTY, a smoking location at least 25 feet from all building entries or ventilation intakes, including operable windows.

c. ESDS 2.05b & 2.07 – for frontage work: the CONTRACTOR shall all-weather pathways (e.g., sidewalks) that lead to existing pedestrian routes to services and amenities (e.g., the sidewalks north and south of the property) and connect to the hourly bus service adjacent to the site (e.g., via a bus pull out at that location).

d. ESDS 3.02a – for any landscaping installed at the site, the CONTRACTOR shall await COUNTY and the Department of Commerce's approval of a landscaping plan in which 50% of plantings are native and/or adaptive species meeting the requirements of ESDS 3.02a. The CONTRACTOR shall follow that approved plan and document the landscaping with photographs.

e. ESDS 3.03 – for any permanent irrigation installed at the site, the CONTRACTOR shall await COUNTY and the Department of Commerce's approval of an irrigation system plan compliant with ESDS standard 3.03. The CONTRACTOR shall follow that approved plan and document the work with photographs.

f. ESDS 3.04 – for work related to frontage or storm drains: the CONTRACTOR shall label all storm drains and inlets on site to clearly indicate where the drain or inlet leads.

g. ESDS 4.01a-b – for all plumbing work other than that serving fire sprinklers systems: the CONTRACTOR shall ensure that new or replaced toilets and urinals meet 1.28 gpf and .5 gpf flow limits, and new or replaced showerheads meet 1.5 gpm flow limits. Showerheads, kitchen/bathroom faucets, toilets, and urinals must be tested to meet these requirements (or code if none is specified) via bag or bucket testing. For plumping or piping other than fire sprinklers, Commerce may direct that a pressure-regulating valve be installed within or outside the building to cap the pressure at 60 psi, and if Commerce so directs, the CONTRACTOR shall do so. New utility lines that would allow for portable showers,

bathrooms, or kitchen trailers to be used on site must have the pressure-regulating valve.

h. ESDS 4.02a – for all plumbing work: CONTRACTOR shall conduct pressure-loss tests and visual inspections on all plumbing work completed to determine if there are any leaks and fix any leaks found. Visual inspections shall include checking for leaks at all accessible, visible water supply connections, and valves for water-using fixtures, appliances, and equipment.

i. ESDS 5.01b – for all work, although the nature of the work determines the compliance measures as described in this paragraph: If the CONTRACTOR installs or disturbs/reinstalls any attic, roof, exterior wall, or floor insulation (or any insulation for heating, cooling, or ventilation ducts or for hot water piping), comply with the insulation requirements in the Deemed Measures list included at the end of this Attachment, using the multifamily low-rise and pipe/duct rows of the table. If the CONTRACTOR replaces any exterior window or exterior door leading to conditioned space, comply with the multifamily low-rise requirements in the Deemed Measures list. If the CONTRACTOR has been specifically hired to conduct pressure boundary testing and/or improvements, comply with the Pressure Boundary requirements in the Deemed Measures list.

j. ESDS 6.01a – for all work: Follow ESDS mandatory materials limitations shown below. Anytime a material in one of the product categories below is used, CONTRACTOR shall deliver a copy or photo of the cut sheet, label, or other evidence of what material was used to COUNTY's construction manager, Matt Patana, for inclusion in the project binder. CONTRACTOR may contact Matt Patana with questions about whether a product complies with the limitations.

Product Category	**Mandatory**
wet-applied interior paints, coatings, primers*	All products must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by UL GreenGuard Gold, or SCS Indoor Advantage Gold are evidence of compliance; credible laboratory test reports are also acceptable.
Sheet wall coverings (wallpaper, etc.)	All sheet wall coverings must be phthalate-free. Do not install wall coverings containing PVC/Vinyl
interior adhesives and sealants*	All adhesives and sealants must have VOC content less than or equal to the thresholds provided by the SCAQMD Rule 1168 (dated 10/6/2017).

Flooring	All flooring products (whether carpet or hard surface) must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by CRI-Green Label Plus (for carpet and carpet pad) or FloorScore (for resilient floor) are evidence of compliance; credible laboratory test reports are also acceptable. Exception: • Flooring products that are an inherently nonemitting source of VOCs (stone, ceramic, concrete, clay brick, and unfinished or untreated solid wood) and has no binders, surface coatings, or sealants that include organic chemicals. No carpet may be installed within 3 feet of building entryways that are accessible from the ground, or in wet locations such as laundry rooms, bathrooms, kitchens/ kitchenettes, or utility rooms. Exception: • Outdoor-grade carpet tile may be installed within 3 feet of building entryways, but not in other "wet" locations.. No carpet may be installed on slab-on-grade floors. (*see exemption for New Construction Only*) Fluid applied finish floors may only be installed in non-occupied spaces, such as mechanical rooms or garages.
Insulation	Cavity insulation, including spray foam (framed floors, walls, attics, etc.) must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by UL GreenGuard Gold, or SCS Indoor Advantage Gold are evidence of compliance; credible laboratory test reports are also acceptable. If two-part spray polyurethane foam insulation is to be used, both of the following apply: 1. HFC blowing agents must not be used** 2. your Construction Management Plan (see Criterion **1.01c**) must cover all appropriate OSHA approved safety and health measures related to installation – including respirators, PPE, and work area controls.
Composite Wood	Formaldehyde emissions less than or equal to the thresholds provided by CARB Phase 2 and/or TSCA Title IV for plywood, particleboard, MDF, and these materials within other products like cabinets and doors. Exception: The following exterior-grade products are exempt from this requirement: • Wood structural panels manufactured according to PS 1-09 or PS 2-10 (or one of the standards considered by CARB to be equivalent to PS 1 or PS 2) and labeled bond classification Exposure 1 or Exterior • Structural wood products manufactured according to ASTM D 5456 (for structural composite lumber), ANSI A190.1 (for glued laminated timber), ASTM D 5055 (for I-joists), ANSI PRG 320 (for cross-laminated timber), or PS 20-15 (for finger-jointed lumber).

*wet applied within, and not a part of, the weather resistive barrier ("WRB")
**HFC blowing agents are prohibited in WA as of January 1, 2021 by Chapter 70A.45.080 RCW

k. ESDS 6.01b – for all work: (1) Do not use carpet; (2) Do not use two-part foam; and (3) do not use sealants that contain orthophthalate plasticizers. Anytime the CONTRACTOR uses foam or any sealant, CONTRACTOR shall deliver a copy or photo of the cut sheet, label, or other evidence of

what material was used to COUNTY's construction manager, Matt Patana, for inclusion in the project binder. CONTRACTOR may contact Matt Patana with questions about whether a product complies with the limitations.

l. ESDS 7.03 – for finalization/general renovation work: the CONTRACTOR shall create physical barriers to pest intrusion by (1) sealing all wall, floor, and joint penetrations with low-VOC caulking or other appropriate nontoxic sealing methods [bearing in mind the materials limitations listed in ESDS 6.01a-b, above]; and install rodent- and corrosion-proof screens (e.g., copper or stainless steel mesh or rigid metal cloth) on all openings greater than ¼ inch in diameter.

ESDS Deemed Measures List

This Deemed Measures list, cross-referenced above, includes the measures from Appendix B of the ESDS applicable to this rehab project. Measures that apply are enclosed in a red border and have a brief description in red in the rightmost column as to where they apply.

Envelope Efficiency Measures: Mandatory ESDS						
Do?	**Thermal Boundary**			Existing Condition – Effective R-value	Action	
	Multifamily Low-Rise	Attic Insulation		R-19 or below	R-38, or R-49 (depending on attic space)	**No attic**
				R-20 to R-38	R-49	
X	Multifamily Low-Rise	Built up roof		Exterior insulation to code at time of roof cover replacement	For flat vented roofs, assess the viability of changing to a closed insulated cavity+ exterior insulation.	**If any built-up roof insulation is installed, disturbed, or reinstalled**
X	Multifamily Low-Rise	Wall Insulation	Closed Cavity	No insulation	Dense Pack	
				No substantial contact Thermal & Pressure boundaries are not aligned	Dense Pack	
				R-11 or below	Dense Pack (air seal and insulate)	
			Open Cavity	No insulation	Fill Cavity	**For new ingress/egress wall**
				No substantial contact Thermal & Pressure boundaries are not aligned	Fill Cavity	
				No insulation	Fill cavity	**For any new flooring when**

X		Floor Insulation support per Floor Matrix				installing washers/dryers
			No substantial contact Thermal & Pressure boundaries are not aligned		Fill cavity	
			R-12 to R-19		R-30, or Fill cavity	

Envelope Efficiency Measures (Continued): Mandatory ESDS

Do?	**Thermal Boundary**			Existing Condition – Effective R-value		Action	
	Pipe & Duct Insulation	Heating and cooling duct Insulation	Any	Any ducts in Conditioned Space		No DMPL Measure	**Note:** Seal ducts prior to insulation.
			Rigid	...ducts in Unconditioned Space	R-7 or below	R-11	
			Flex		R-7 or below	R-8	
			Any		R-8 or greater	OK	
X		Ventilation Duct Insulation		Uninsulated		When exposed, meet code requirements	**For new ventilation system ducting**
X		Hot Water Distribution Pipe		No pipe insulation		R-3.6	When exposed, insulate to code R403.5.3 or C403.10.3 **If any hot water pipes are installed or if their insulation is disturbed or reinstalled**

Deemed Measures Priority List – Mandatory ESDS				
Done?	**Pressure Boundary**	Existing Condition	Action	Notes
X	Energy Audit Air leakage testing required	All	As part of the audit, establish air building air leakage baseline	**Will comply.**
	Energy Audit, Zonal Pressure boundary test	Buildings with attic or crawl. **[no attic or crawl]**	Using series air leakage testing, determine if there is excessive leakage to the attic or crawl space and verify good alignment of air barrier and insulation	When this test determines there is significant leakage between interior and attic or crawl, It is recommended that insulation be removed prior to air sealing attic or crawl. Then reinstall the insulation.

Deemed Measures Priority List – Mandatory ESDS (Continued)				
Done?	**Pressure Boundary**	Existing Condition	Action	Notes
X	Blower Door Assisted Air Sealing building	Non-obvious Leaks	Post sealing test. 30% reduction or Meet 7ACH (not worse than pre audit)	See detailed note. **Will comply.**
X	Duct Sealing or Performance Tested Comfort Systems (PTCS)	When heating or cooling ducts are located in unconditioned spaces.	Performance Tested Comfort Systems (PTCS)	**No heating or cooling duct work in the project. But, will comply for any heating or cooling ducts in unconditioned spaces if the unconditioned space is altered or added as part of this project.**
	Recessed Can Lights	IC Rated Air Tight Can	No DMPL Measure	Or convert can lights to J-box and air seal a surface mount LED.
		Non-IC Rated Can	IC Rated Air Tight Can	
		Non-IC Rated Can	Build the box	

Heating/Cooling System:
[Redacted – no heating or cooling system work in this project.]

Windows and Doors: ESDS Optional						
Done?				Existing Condition	Action	**Optional ESDS**
X	Single-Family	MF Low-Rise	Prime Window, slider	For energy efficiency. Single pane - any frame. Double pane aluminum without thermal break. Typically U>.65. Other security or durability issues.	U-factor 0.30 or less SHGC 0.40 or less	**For any new or replaced exterior windows**
			Low-E Storm Window		Emissivity 0.22 or less EXTERIOR: Air Leakage Rating 1.5 cfm/sf or less INTERIOR: Air Leakage Rating 0.5 cfm/sf or less	**For any new or replaced exterior windows**
			Insulated Door Exterior		Metal, insulated core minimum R-6, match the style of existing, where practical	**For any new or replaced exterior doors**
	Multifamily Mid/High-Rise		Prime Window		U-factor 0.30 or less SHGC 0.40 or less	**Evergreen Standard Optional 2 credits if all windows are replaced**
			Prime Window, slider		U-factor 0.24 or less SHGC 0.40 or less	**Evergreen Standard Optional 4 credits if all windows are replaced**

PLAN FOR THE INADVERTENT DISCOVERY OF CULTURAL RESOURCES DURING BUILDING RENOVATION AND LANDSCAPING/FENCING INSTALLATION

The building renovation and landscaping/fencing installation will require a small amount of ground disturbance. This plan lays out the procedure if cultural materials are discovered during the project.

1. Recognize Cultural Resources

A cultural resource discovery could be prehistoric or historic and consist of:

- areas of charcoal or charcoal-stained soil with artifacts;
- stone tools or waste flakes (i.e. an arrowhead, or stone chips);
- bones, burned rocks, accumulation of shells or other food related materials in association with stone tools or flakes;
- a cluster of tin cans or bottles, logging or agricultural equipment older than 50 years; or
- buried railroad tracks, decking, or other industrial materials.

If human remains are encountered, treat then with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. **Do not call 911** or speak with the media. Follow the special procedures for the Unanticipated Discovery of Human Skeletal Material.

2. Protect the Site

If any Lewis County employee, contractor, or subcontractor believes that he or she has uncovered any cultural resource at any point in the project, all work adjacent to the discovery shall cease. (Due to the small project scale and area here, work on the entire project shall cease, not merely work in a specific area.) Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material as set forth in this document. All communications between Lewis County and any agency on cultural resource issues will go through Lewis County staff.

3. Notify Appropriate Parties

The Lewis County employee, contractor, or subcontractor, or their appointee, will immediately contact the Environmental Planner and the Project Coordinator.

4. Documentation of Discoveries

Routine documentation of newly discovered cultural material should not impact construction schedules. Where complex or extensive cultural remains are encountered, the contractor/subcontractor, Environmental Planner and qualified archaeological personnel will determine the appropriate level of documentation and treatment of the resource after consultation with DAHP and representatives of affected tribal governments.

SPECIAL PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF HUMAN SKELETAL MATERIAL

Any human skeletal remains regardless of ethnic origin, which may be discovered during this project, will at all times be treated with dignity and respect. In the event that any human remains are discovered and they are determined to be of Native American origin, the affected Native American Tribe(s) will be immediately notified by Lewis County.

1. During this construction project, if any Lewis County employee or any of the contractors or subcontractors believes that he or she has made an unanticipated discovery of human skeletal remains, all excavation adjacent to the discovery shall cease. (Due to the small project scale and area here, work on the entire project shall cease, not merely work in a specific area.) A **100-foot** work stoppage area will be maintained around the discovery to provide for the total security, protection, and integrity of the human skeletal remains, in accordance with Washington State Law. No persons other than the proper law enforcement personnel, Environmental Planner, and DAHP staff will be authorized direct access to the discovery location after the area is secured. If the remains are determined to be of Native American ancestry thorough consultation with DAHP, then tribal access will be allowed when the affected tribe(s) representative(s) are designated. Coordination for tribal member access must go through the designated tribal representative. The strict control of a burial location is mandated to insure the safety and integrity of the burial feature and remains.

2. Following the specific guidance set forth here, the Environmental Planner will immediately call the local law enforcement official (county sheriff or police department; NOT 911) and will ensure an individual competent and qualified to identify human skeletal remains is present. The ethnic origin, or ancestry, of the discovered human remains will be determined through consultation with the Environmental Planner, DAHP, and the affected tribe(s). The local law enforcement official may arrange for a representative of the Lewis County Coroner's office to examine the discovery and determine whether it should be treated as a crime scene, a historic Euro-American burial, or as a burial of Native American ancestry.

3. If the human skeletal remains are determined to be Native American, the participating parties will consult to determine what treatment is appropriate for the human remains. No Native American human remains will be removed from a site without the explicit consent and concurrence of the affected tribe(s) and DAHP.

4. If disinterment of Native American human remains becomes necessary; the consulting parties will jointly determine the final custodian of the human skeletal remains for reinternment.

Contacts for Inadvertent Discovery

Chehalis Police Department
Non-emergency (360) 748-8650

Lewis County
Ann Weckback, Environmental Planner (360) 740-1440 / 520-0692
Doug Carey, Project Coordinator (360) 740-1337

Sheriff's Office
Non-emergency (360) 748-9286

Lewis County Coroner
Warren McLeod (360) 740-1376

Confederated Tribes of the Chehalis Reservation
Dan Penn, Cultural Resources (360) 709-1747

Cowlitz Indian Tribe
Rita Asgeirsson, Cultural Resources (360) 575-6226
James Gordon, Cultural Resources (360) 577-5680

Confederated Tribes of Warm Springs
Christian Nauer, Cultural Resources (541) 553-2026
Robert Brunoe, THPO (541) 553-1161

Nisqually Indian Tribe
Brad Beach, THPO (360) 456-5221 Ext. 2180
Annette Bullchild, THPO (360) 456-5221 Ext. 1106

Confederated Tribes and Bands of the Yakama Nation
Casey Barney, Cultural Resources (509) 865-5121 ext. 4378
Kate Valdez, THPO (509) 865-5121 ext. 4041

Quinault Indian Nation
Lia Frenchman, Interim THPO (360) 276-8215 x7308
Justine James (he/him) (360) 276-8211 ext 7331

Squaxin Island Tribe
Shaun Dinubilo, Cultural Resources (360) 432-3998 / 870-6324

Department of Archaeology and Historic Preservation
Dr. Rob Whitlam, State Archaeologist (360) 586-3080
Lance Wollwage, Assistant State Archaeologist (360) 586-3536
Dr. Guy Tasa, State Physical Anthropologist (360) 586-3534

Department of Commerce
Timi Harris-Leach, Project Manager | Multifamily Housing Unit (360) 725-4008

SECTION 00 3100

INFORMATION AVAILABLE TO BIDDERS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 INFORMATION AVAILABLE TO BIDDERS

A. Purpose: This information is for reference purposes only and does not contain Contract Work. In the event of conflicts between this information and the Contract Documents, the Contract Documents shall govern.

1.03 HAZARDOUS MATERIALS GOOD FAITH LETTER

A. The Hazardous Materials Good Faith Letter from Lewis County is included after this Section:

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

LEWIS COUNTY
Washington's First County
est. 1845

Board of County Commissioners

Lewis County Courthouse • 351 NW North Street • Chehalis, WA 98532-1900

O 360.740.1120
TDD 360.740.1480

bocc@lewiscountywa.gov

September 25, 2024

Re: Good-Faith Letter
Lewis County Homeless Shelter, 2015 NE Kresky Ave, Chehalis, WA

To all Prospective Contractors:

This letter concerns hazardous materials testing and information at 2015 NE Kresky Ave in Chehalis, WA, the site of Lewis County's Homeless Shelter project.

Lewis County obtained a Phase 1 Environmental Site Assessment, Mold Testing, Asbestos Testing, and Lead testing on the property. The results are summarized below:

- The Phase 1 ESA was clean and recommended no further action. It found no evidence of recognized environmental conditions (RECs), controlled RECs (CRECs), or historical RECs (HRECs). It found evidence of one potential area of concern (PAOC) off-site, but concluded that due to remediation at that location and its downgrade away from the shelter, no further action was warranted.
- The Mold testing revealed the presence of mold in one location, without the presence of hyphal fragments indicating active fungal growth nearby. Therefore, it recommended nonprofessional cleaning with hot water and a bristle brush, and general awareness of mold as a potential risk during the renovation. Lewis County staff remediated this mold as instructed.
- Asbestos testing revealed non-friable asbestos black mastic attaching the carpet to floor tiles. Lewis County had this asbestos professionally remediated by a separate company so that the carpet could be removed and a sealed concrete floor used in the shelter.
- Lead testing revealed no lead paint in the building.

Further documentation is available upon request.

Sincerely,

Eric Eisenberg, Consultant
Lewis County Homeless Shelter Project

Ryan Barrett
County Manager

Sean Swope
First District

Lindsey R. Pollock, DVM
Second District

Scott Brummer
Third District

Rieva Lester
Clerk of the Board

SECTION 01 1100

SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. Section Includes:

1. Project Information.
2. Contract Method.
3. Work by Owner (Owner Furnished Owner Installed, OFOI)
4. Owner Furnished / Contractor Installed (OFCI)
5. Building Permit Conditions.
6. Building Permit Fees.
7. Applicable Standards.
8. Evergreen Sustainable Design Standard (ESDS).
9. Objection to Application of Products.
10. Existing Information.
11. Miscellaneous.
12. Site Testing and Inspection.
13. Building Environmental Controls.
14. Regulatory Requirements.
15. Work Restrictions.
16. Utility Interruptions.
17. Contractor Use of Site.

18. Material Safety Data Sheets.

19. Specification And Drawing Conventions.

20. Construction Documents.

1.03 PROJECT INFORMATION

A. Project Identification: Lewis County Permanent Shelter located at 2015 NE Kresky Avenue, Chehalis, WA.

B. Project Owner: Lewis County, 351 NW North Street, Chehalis, WA.

C. Owner Construction Management: The Owner will manage the construction process directly and review submittals, pay applications, changes in the work, any field questions and attend progress meetings. The Architect will not provide any construction administration services unless requested by the Owner.

D. Project Description: Briefly and without force and effect upon the Contract Documents, the Work of this Contract can be summarized as follows:

1. This project involves remodeling and addition on a former bank and office building at 2015 NE Kresky Ave in Chehalis, WA into a permanent night-by-night homeless shelter as shown on the Contract Drawings and Specifications.

2. Owner will be providing the following work performed by separate contractors that will occur concurrent with the work of this project:

   a. Fencing.

   b. Door Hardware.

   c. Fire Sprinkler System.

   d. Fire Water Main Connection To Building.

   e. HVAC System.

   f. Electrical System.

   g. Fire Alarm System.

3. Provide materials, labor, equipment, temporary facilities and construction expertise as required to complete the Project as shown in the Contract Documents.

4. Contractor represents that he has carefully examined prior to bidding, all Contract Documents and site conditions, and understands the character, quality and quantity of work called for and all conditions affecting the

Contract Work.

1.04 CONTRACT METHOD

A. Construct the Work under a single Prime Contract Stipulated Sum.

B. The General Contractor is responsible for coordinating, understanding and directing the work of all trades involved in the Project.

C. General Contractor is responsible for coordinating and scheduling work of each subcontractor to expedite progress of the Project. Cooperate and coordinate with any other separate Contractors under contract with the Owner.

1.05 WORK BY OWNER (OFOI)

A. Work By Owner (Owner Furnished / Owner Installed OFOI): The following work will be provided by Owner's separate contractors:

1. Code Required Special Inspection And Testing: Requirements for code required inspections by special inspection and testing agency are specified in Section 01 4500 and in each applicable specification section.

2. Chain Link Fencing.

3. Door Hardware.

   a. Contractor shall coordinate with Owner's hardware supplier and obtain the door hardware schedule and hardware templates required for door and frame hardware preparation.

4. Fire Water Main Line Between Water Main in ROW and Building.

5. Fire Sprinkler System in Building.

6. HVAC System.

7. Electrical System.

8. Fire Alarm System.

B. Notify Owner of required installation schedule to allow installation in the proper work sequence and to maintain Project schedule.

C. Coordinate with Owner's separate Contractors and suppliers and accommodate their work on site.

1. Schedule separate contractor's work to be accomplished in the normal construction sequence with work of this project.

2. Provide Owner's separate Contractors and suppliers safe access to site

and building during normal working hours and times.

3. Coordinate work times and areas to allow Owner's separate Contractors to complete their work concurrently with the work of this project.

4. Coordinate work of separate contractors with work of this project.

1.06 OWNER-FURNISHED / CONTRACTOR INSTALLED PRODUCTS (OFCI)

A. Work designated on the Drawings as Owner Furnished / Contractor Installed (OFCI) will be furnished by Lewis County, including the following.

1. Sealer for new Concrete Floors.

1.07 BUILDING PERMIT CONDITIONS

A. Conform to permit conditions and requirements imposed by authority(s) having jurisdiction.

B. Maintain the fire hydrants and emergency vehicle access road on Project site in functional condition as required by the City of Chehalis for duration of the Contract.

1.08 BUILDING PERMIT FEES

A. The Contractor shall apply for, obtain and pay for all permits and connection fees required by authorities having jurisdiction for the work of this project. Contractor shall comply with all applicable local, state and national codes and / or ordinances.

1. The actual cost of building permit (only) and the public utility hookup fees will be a direct reimbursement to the Contractor or paid directly to the permitting agency by the Owner. Fees for these permits should not be included by the Bidder in the bid amount (Refer to the Call For Bids, 3. Instruction To Bidders, paragraph B. under BID AMOUNTS).

2. The Owner will secure and pay for the building department plan-checking fee.

1.09 APPLICABLE STANDARDS

A. Prior to commencing construction, Contractor shall contact all reviewing agencies, utility companies, and governmental agencies having jurisdiction over the Project site, and obtain all standards and requirements for work that will satisfy those requirements, including purchasing necessary construction permits and being placed on any approved contractors lists.

1.10 EVERGREEN SUSTAINABLE DESIGN STANDARD (ESDS)

A. *ESDS* Sustainability Design Standard: This Project shall meet the requirements of the *Evergreen Sustainable Development Standard* (*ESDS*); refer to Section 01 8113 - Sustainability Requirements for requirements.

B. Contractor shall comply with the Evergreen Sustainable Design Standards as set forth in Attachment J and in the "Written Instructions for ESDS Compliance - Permanent Shelter" included at the end of Section 01 8113 – Sustainability Requirements.

1. Contractor shall comply with all other state funding conditions set forth in Attachment J.

1.11 OBJECTIONS TO APPLICATION OF PRODUCTS

A. Subcontractors and suppliers submitting a bid for this Project shall thoroughly familiarize themselves with specified products and installation procedures and submit to Owner any objections (in writing) no later than ten days prior to Bid Date. Any response by the Owner shall be by addendum. Submittal of Bid constitutes acceptance of products and procedures specified.

1.12 EXISTING INFORMATION

A. Refer to Section 00 3100 Information Available To Bidders for existing information on the site and building that Owner has made available to Contractor.

B. Existing Site And Building: Subcontractors and suppliers shall verify existing site conditions prior to bidding. Submit any discrepancies between the Contract Documents and existing conditions no later than ten days prior to Bid Date. Any response by the Owner shall be by addendum. Submittal of bid constitutes acceptance of existing conditions.

1.13 MISCELLANEOUS

A. Items include, but are not limited to:

1. Maintain pedestrian and vehicular access to and around site.

2. Do not encumber site access with materials or equipment.

3. Do not overload structure with weight endangering structure.

4. Obtain and pay for use of additional storage or work areas needed for operations.

B. Apprenticeship Requirements: Contractor shall ensure that a minimum of 20% of total labor hours for the work at the premises is provided by apprentices from a program registered and approved by the Washington State Apprenticeship and Training Council. For information on available apprenticeship programs, contact the Department of Labor and Industries' Apprenticeship Section at (360) 902-5320 or apprentice@lni.wa.gov.

1. Contractor shall submit apprenticeship forms as noted in Section 01 2900, below.

1.14 SITE TESTING AND INSPECTION

A. Refer to Section 01 4500 – Quality Control for inspection and testing agency services and requirements.

B. A County representative shall witness and record all required testing and inspections. The Contractor shall notify the County a minimum of 24 hour in advance of all testing and inspections including but not limited to piping pressure test, concrete, compaction, sanitation, moisture, welding and duct leakage.

C. Photo/Video Project Records: The County site representative will be photographing and video recording the construction project. The Contractor shall notify the County site representative in advance of covering, backfilling, or concealing any work including but not limited to: site utilities, wall and roof sheathing, waterproofing, insulation, sub-floors, drywall, and concrete placement.

1.15 BUILDING ENVIRONMENTAL CONTROLS

A. Construction activities shall comply with environmental regulations and practices including but not limited to the following:

1. Potentially hazardous substances must be handled in strict compliance with manufacturer's recommendations and regulatory restrictions. Select the lowest toxicity chemicals and products to perform required tasks.

2. Maintain Material Safety Data Sheets (MSDS) on site for all hazardous chemicals.

3. Do not exceed the Permissible Exposure Limit (PEL) for any potentially hazardous substances.

4. Provide additional ventilation/exhaust where needed.

5. Keep all solvents and adhesives in sealed, airtight, labeled containers. Do not use products containing methylene chloride or trichlorethylene. Comply with limitations on volatile organic compounds (VOC) contained in the *Evergreen Sustainable Development Standard* (*ESDS*), refer to Section 01 8113 – Sustainability Requirements.

6. Do not dispose of any potentially hazardous substance including solvents, adhesives, paints, thinners, etc., on county property.

7. Immediately contain and cleanup chemical spills regardless of size to prevent absorption and potential contamination of building surfaces. As soon as possible notify Owner's site representative.

8. Take special care to avoid contamination of concrete and absorbent building surfaces.

9. To avoid future indoor air quality problems the following steps shall be

taken:

a. Prior to installing insulation or drywall or otherwise covering or concealing building compounds, the cavity or concealed space must be cleaned of debris and dust by wiping, vacuuming, or using compressed air.

b. As soon as possible after installing return ducts and grilles, the opening shall be sealed air tight. All ducts to be sealed with plastic at the end of the work day. The caps/plugs will remain in place during construction and will be removed by the air test and balance Contractor. Filters at supply fans must be checked periodically during construction and changed, if needed, to avoid contamination of supply ducts.

c. The Contractor shall clean, restore, remove, or replace building components or surfaces that have become contaminated and have a potential to degrade building environmental quality.

1.16 REGULATORY REQUIREMENTS

A. Comply with building, fire, mechanical, plumbing, electrical or other codes adopted by the Authorities Having Jurisdiction.

B. Comply with State WAC 296-62-054, Hazardous Communication Program as follows:

1. In order to comply with WISHA WAC 296-62-054, Hazard Communication, Lewis County has established a Hazardous Substance Communication Program. The purpose of the program is to ensure that employees are aware of the substances that they may come in contact with and the associated hazards in dealing with such substances. The program explains training, labeling requirements, documentation, accessing information, accountability and auditing responsibilities. The program recognizes that Contractors and their employees are subjected to special hazards in that they are not familiar with the hazardous substances as part of existing structures or in use at the County. Therefore, the Hazardous Communication Program requires:

a. Prior to commencing work, Contractor and employees must sign an agreement that they acknowledge the County's Hazard Communication Program and have communicated it to their employees.

b. The Lewis County Project Manager may not authorize the work or continued work of a Contractor who fails to comply with the Hazardous Communication Program.

c. The Contractor must notify County Representative of hazardous material used in occupied buildings and provide MSDS sheet for

each material on site.

1.17 WORK RESTRICTIONS

A. Work Restrictions, General: Comply with the following.

1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.

2. Noise Restrictions: Conform to City of Chehalis residential neighborhood noise ordinances.

3. On-Site Work Hours: Monday through Friday between 7:00 AM - 5:00 PM. Coordinate with Lewis County Project Manager.

   a. Off-Hour Work: The Contractor shall notify the County in advance of any work planned for after 5 PM, on weekends, or holidays. Notification shall be a minimum of 2 days in advance of the work.

1.18 UTILITY INTERRUPTIONS

A. Existing Site Utility Interruptions: Conform to requirements of Section 02 1725 – Existing Site Utilities. Contractor shall conform to the following requirements:

1. Make a concerted effort to protect the site utilities during the construction project.

2. Employ a firm specializing in underground utility locates and field mark all existing utilities in the project area.

3. Develop means of preserving and restoring the field marks. A copy of the underground utility site plan showing existing and new utilities shall be sent to all sub-Contractors and shall be posted in a prominent location on site.

4. Notify the County promptly if any utilities are damaged or if uncharted utilities are discovered.

5. Take expeditious action to repair and restore damage to utilities. The Contractor shall pay all cost associated with damage to charted utilities and the County shall pay all cost associated with damage to uncharted utilities.

B. Existing Building Utility Interruptions: The Contractor shall plan and schedule utility interruptions so as not to have an unacceptable impact on County programs and operations.

1. The County representative must be notified a minimum of 72 hours in advance of any scheduled utility outage. The outage request must be in writing and describe the utilities affected, location and scope of outage, proposed work to be accomplished, the estimated time of the outage, and provisions for temporary restoration in the event of problems.

2. The County will make reasonable efforts to accommodate the Contractor's request when there is assurance that the proposed outage planned will not have an unacceptable impact on County operations or programs. The County shall respond to the Contractors written utility outage request within 24 hours.

3. The Contractor shall not cause a utility outage without written consent of the County.

C. Fire Alarm System: The Contractor shall notify the County whenever construction activities may create smoke, dust or vibrations that could trigger the fire alarm system. The County will install a bypass on the zone affected when request to do so by the Contractor. All fire alarm bypasses shall be restored at the end of the work day.

1.19 CONTRACTOR'S USE OF SITE

A. The Contractor has direct responsibility for and control of the construction site for the duration of the Project, subject to the following:

1. Limitations on Use:

a. Contractor's Use of Site and Buildings: Limit use of the site and buildings for work, storage and access only as required to achieve work of this contract. Contractor's personnel shall stay out of areas within the building and on the site where no work is required in this project, except as specifically scheduled with and approved by the Owner.

b. Smoking or open fires will not be permitted on site or in the building.

c. Do not encumber the site with materials or equipment. Confine stockpiling of materials and storage locations to the areas indicated or coordinated with the Owner.

d. Move stockpiled or stored materials under Contractor's control which interfere with operations of Owner or separate contractors.

2. Construction Facilities and Temporary Controls: Refer to Section 01 5000.

3. Emergency Vehicle Access: Maintain access roadway and fire lanes on site for use by emergency vehicles. Coordinate requirements with local authority having jurisdiction.

4. Building Exit Pathways: Maintain building exit pathways for duration of contract. Building exit pathways shall not be blocked or closed.

5. Contractor's Materials / Equipment Staging Area: Limit storage of materials and equipment to within the Contractor occupied construction areas.

6. Access Routes to Construction Areas: Contractor shall maintain site access routes in a clean and safe manner free of construction materials, debris and dirt.

7. Public Safety: Contractor is responsible for performing a safety analysis of their work related to the site and building and implementing conclusions from their analysis and, for maintaining site and building in a manner which prevents any unsafe or potentially unsafe condition.

   a. Implement and enforce conclusions from safety analysis for duration of Project.

   b. Maintain site in a manner that prevents any unsafe or potentially unsafe condition.

   c. Comply with the requirements of IBC Chapter 33 as applicable to project site.

8. Protection of Existing: Protect existing building and improvements, including roadways, utilities, etc. from damage or defacement. Repair / replace any damage to equal or better condition prior to this project.

   a. Refer to Section 02 1700 Existing Building Systems for additional requirements on identification, marking and protection of existing building systems.

9. Building Security: Contractor is responsible for maintaining security of building and site for duration of this project. Conform to the following:

   a. Doors, windows and exterior openings shall be closed and locked at the end of each work shift; do not leave the building open and unattended at any time.

   b. Monitor and prevent unauthorized persons from entering construction site or building during normal work hours.

   c. After work hours leave Contractor’s work area locked and all tools in locked tool boxes. Post "DANGER - KEEP OUT - CONSTRUCTION AREA" signs at construction area entries and around perimeter of construction areas.

   d. Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.

1.20 MATERIAL SAFETY DATA SHEETS

A. Post Material Safety Data Sheets (MSDS) for hazardous materials on site in accordance with the Hazard Communications Standard, WAC 296-62-054 through -05427 (available from the State Department of Labor and Industries).

B. Provide a bulletin board for hazard communications program in location accessible 24 hours a day and convenient to employees, subcontractors and their employees and representatives for Owner and other agencies that may visit Project site and come into contact with hazardous chemical substances.

1.21 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall", "shall be", or "shall comply with", depending on the context, are implied where a colon (:) is used within a sentence or phrase.

2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 1 General Requirements: Requirements of Sections in Division 1 of these specifications apply to the Work of all Sections in these Specifications.

C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the specifications. One or more of the following are used on the Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.

2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.

1.22 CONSTRUCTION DOCUMENTS

A. Contractor is responsible for posting any addendums in the Contract Drawings and Project Manual.

B. Owner will provide the Contractor an electronic copy of the Contract Drawings and Project Manual. The Contractor shall be responsible for printing the documents and distributing copies to their suppliers and subcontractors as required to complete the work and meet the requirements of the Project.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 2600

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

A Procedures for processing Changes in the Work requiring advanced pricing.

1. Exhibit A at the end of this Section contains the following forms:

a. Lewis County Change Order Request form.

b. Lewis County Field Authorization form.

1.02 RELATED REQUIREMENTS

A Agreement Between Lewis County and Contractor Public Works Contract General Conditions

B Section 01 2900 Payment Procedures

1.03 SUBMITTALS

A Submit name of individual authorized to accept changes, and to be responsible for informing other in Contractor's employ of changes in the work.

1.04 GENERAL REQUIREMENTS

A No additional work shall be undertaken without Owner's written approval.

B Written approval authorizing Contractor to undertake additional Work does not authorize automatic extension of Contract Completion time.

1.05 PROPOSED CHANGE PROCEDURES

A For changes requiring advanced pricing, Owner will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications. Contractor shall prepare and submit a detailed cost proposal.

1. Form for Proposal Requests: Owner's Change Order Request Form

B If latent or unforeseen condition, RFI response or Supplemental Instruction is determined to have cost or schedule impacts, Contractor shall prepare and submitted a detailed cost proposal.

1. Form for Proposal Requests: Owner's Change Order Request Form.

C Proposal Request Log: Maintain a current log of all Proposal Requests and submit same at each project meeting and with each Application for Payment. Each Proposal Request shall have a unique number for tracking purposes.

1. The log shall, at a minimum, show the Proposal Request number, date initiated, brief description, reference (RFI or supplemental instruction) estimated cost, estimated time, status and reason for the Proposal Request.

1.06 APPROVAL OR REJECTION OF PROPOSAL

A Submit the following in writing within seven (7) days of date on Proposal Request..

1. Lewis County Change Order Request including Contractor, Subcontractor and tier-Subcontractor cost forms, as applicable.

   a. List all direct and indirect costs

2. Impact on other Work not described. Describe and include all direct and indirect costs of changes to other Work not specified in the Change Order Request.

   a. Quotation shall be guaranteed for a period of 30 days, at a minimum.

   b. Failure of the Contractor to respond with pricing in a timely manner shall not be justification for claims by the Contractor of delay of the project associated with the Changes.

3. Owner will review proposal and respond in writing by one of the following:

   a. Concurring and submitting the proposal to the third-party verification services for review and approval. If approved, Owner will give written authorization to proceed with the work. If not approved, Owner will use option 1.06.A.3.b or 1.06.A.3.c below.

   b. Requesting verification or additional information.

      1) If additional information is requested by Owner, respond in writing within seven days of Owner's request.

c. Rejecting

4. Written authorization by the Owner directs Contractor to proceed with the Work.

EXHIBIT A
LEWIS COUNTY CHANGE ORDER REQUEST FORM

Lewis County
Capital Projects

Capital Facilities

CONTRACT **CO REQUEST**

Lewis County CONTRACT NO. _____
AGENCY

CO _____

COP No. _____

PROPOSAL REQUEST

TO: _____ CONTRACTOR PROPOSAL REQUEST DATE _____

You are directed to prepare a cost proposal for the work described below and/or detailed on the attachments referred to:

REASON FOR CHANGE _____

DATE PROPOSAL REQUIRED _____ CHANGE ORIGINATED BY _____

PROPOSAL REQUESTED BY _____

CONTRACTOR PROPOSAL

WE PROPOSE TO PERFORM ALL CHANGES DESCRIBED IN THE PROPOSAL REQUEST FOR:

TO: _____ (A/E) TO: _____ PM

CONTRACT PRICE CHANGE: ☐ NO CHANGE ☐ INCREASE ☐ DECREASE

OF _____ _____

(Washington State Sales Tax Not Included)

In accordance with the General Conditions, Cost Estimate Detail Sheet(s) are attached hereto

CONTRACT COMPLETION DATE: ☐ NO CHANGE ☐ INCREASE ☐ DECREASE OF _____ CALENDAR DAYS

The foregoing amount covers everything required in connection with the change. All other provisions of the contract remain in full force and effect. We understand that work shall not begin prior to authorization.

_____ CONTRACTOR BY _____ DATE _____

RECOMMENDATION

TO: Lewis County

We have carefully examined this proposal and find the cost to be reasonable. Therefore, we recommend acceptance.

_____ A/E DATE _____ COST VERIFICATION DATE

_____ Lewis County Capital Facilities Manager DATE _____ PROJECT MANAGER DATE

AUTHORIZATION

CONTRACT SUMMARY

ORIGINAL CONTRACT SUM _____ PREVIOUS TOTAL _____

PREVIOUS ADDITIONS _____ CHANGE AMOUNT _____

PREVIOUS DEDUCTIONS _____ **NEW TOTAL** _____

NEW CONTRACT COMPLETION DATE _____ DAYS PERCENT CHANGE FROM ORIGINAL CONTRACT AMOUNT _____

☐ The final amount of this change order differs from the cost proposal. Invoices incorporating this change order constitutes acceptance by the contractor as total reimbursement due in connection with this change order.

Lewis County hereby accepts the foregoing proposal and authorizes the performance of the changes specified. This constitutes a change order to the contract only when authorizing signature is affixed.

_____ COUNTY AUTHORIZING SIGNATURE DATE

FORM GEN-EA-099 (Revised 12/97)

EXHIBIT A
LEWIS COUNTY FIELD AUTHORIZATION FORM

Lewis County
DEPT. OF INTERNAL SERVICES
Capital Facilities

Contract No. _____

FA _____

_____ AGENCY

_____ PROJECT TITLE

CONSTRUCTION **FIELD AUTHORIZATION**

WORK DESCRIPTION AND MAXIMUM COST

TO: _____ DATE _____

When authorized, you are directed to proceed with work as described below and/or detailed on the attachments referred hereto:

REASON FOR CHANGE _____

CHANGE ORIGINATED BY _____
(name) (company)

It is our opinion that this work will result in a change to the contract. You are authorized as follows:

☐ **INCREASE** **TO THE CONTRACT AMOUNT WITHIN THE MAXIMUM COST OF:**

☐ **NO CHANGE**

☐ **DECREASE** _____ $ _____

CONTRACT COMPLETION DATE: ☐ INCREASE ☐ NO CHANGE ☐ DECREASE OF _____ CALENDAR DAYS

Payment for work authorized by this FA will not be made prior to incorporation of this FA into a Change Order.

DATE COST DATA REQUIRED BY (DATE).

COST COLLECTION

Cost data required by one of the following methods in accordance with the General and Supplemental Conditions.

☐ UNIT PRICE _____
(Method of Measurement)

☐ DETAILED COST BREAKDOWN

☐ ACTUAL COST: T&M with daily work sheets that list the name, trade, firm, hours, itemized materials, equipment and other job related costs. Contractor must obtain verification of hours from _____ within _____ days from the day work was performed. (Owner's Rep.)

The above amount covers the maximum amount required in connection with the change.

ACCEPTED BY CONTRACTOR DATE

DIRECTION TO PROCEED

We have carefully examined this proposal and find the maximum cost to be reasonable.

APPROVED BY A/E DATE _____

FUNDING VERIFICATION BY AGENCY DATE _____

AUTHORIZED BY DATE

The final cost breakdown has been examined and is reasonable.

COST VERIFICATION DATE

FORM GEN-EA-001 (Revised 12/97)

SECTION 01 2900

PAYMENT PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 DESCRIPTION

A. Application For Payment:

1. General:

a. Submit itemized payment request as required in General Conditions together with Schedule of Values and other submittals as listed herein.

b. Except as otherwise indicated, sequence of progress payments is to be regular, and each must be consistent with previous applications and payments; it is recognized that certain applications involve extra requirements, including initial application, application at times of substantial completion, and finial payment application.

c. The Contractor certifies that to the best of his knowledge, information, and belief, the work covered by each Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by him for work for which previous Applications for Payment were issued and payments received from the Owner, and that current payment is not due.

d. Contractor shall not "project" work completed beyond the date of Application for Payment submittal for the purpose of payment request.

2. Payment Application Times: The "date" for each progress payment is as indicated in Owner-Contractor Agreement. The period of construction work covered by each payment request is the period indicated on Owner-Contractor Agreement.

3. Payment Application Forms: Submit applications for payment using AIA Document G702 Application and Certificate for Payment, and G703 Continuation Sheet. Follow line items set forth on the Schedule of Values for format and breakdown of costs, and update the Schedule of Values if it is no longer current. Submit an apprenticeship form to accompany the payment application as set forth below.

    a. Contractor may provide a detailed spreadsheet in lieu of G703 Continuation Sheet, subject to approval by Owner's Representative for spreadsheet layout and content, if the spreadsheet contains all of the same information that G703 would.

    b. With each application for any payment, the Contractor shall submit an apprenticeship form in the format required by the Department of Commerce (available at https://des.wa.gov/sites/default/files/public/documents/Facilities/EAS/StatementOfApprentice-JourneymanParticipation.xlsx.) The Contractor shall update the cumulative hour totals with each submittal.

4. Application Preparation:

    a. Except as otherwise indicated, complete every entry provided for on the various forms, including execution by authorized persons; incomplete applications will be returned without action.

    b. Entries shall match current data of schedule of values and progress schedule and report.

    c. Listing shall include amounts of change orders issued prior to first day of the "period of construction" covered by application.

    d. Round off dollar amounts to nearest whole dollar.

5. Initial Payment Application: The principal administrative actions and submittals which must precede or coincide with submittal of first payment application can be summarized as follows, but not necessarily by way of limitation:

    a. Statement of Intent to Pay Prevailing Wages on Public Works Contract.

    b. Schedule of Values, allocated to the various portions of the work; the schedule shall be used as a basis for the Contractor's Application for Payment.

c. List of Subcontractors and major material suppliers.

d. Schedule of Unit Prices, as applicable.

e. Construction Progress Schedule (preliminary if not final).

f. Schedule of Submittals (preliminary if not final).

g. Listing of Contractor's staff assignments and principal consultants.

h. Copies of acquired building permits and similar authorizations and licenses from governing authorities for current performance of the work.

6. Applications Each Month During Construction: Submit itemized applications, AIA Document G702 and G703 in number of copies as specified below.

7. Construction Schedule Updates: Submit with applications for payment a revised updated project schedule for evaluation and measurement of actual work-in-place with said applications for payment.

8. Application at Time of Substantial Completion: See Section 01 7800 for principal administrative actions and submittals which must precede or coincide with such special applications.

9. Final Payment Application: See Section 01 7800 for administrative actions and submittals which must precede or coincide with submittal of final payment application.

10. Application Transmittal:

a. Submit three (3) executed copies of each payment application, one copy of which is completed with waivers of lien and similar attachments.

b. Transmit each copy with a transmittal form listing those attachments, and recording appropriate information related to application in a manner acceptable to Owner.

c. Transmit to Owner by means ensuring receipt within 24 hours.

B. Third-Party Review & Reimbursement of Payment Applications:

1. Owner shall submit each application for payment to the third-party review entities for approval, and then on for reimbursement.

2. The Contractor shall supply all requested information to the third-party review entities or to Owner for supply to those entities.

3. The Contractor shall coordinate with the third-party review entities to allow them to inspect the work, usually at or close in time to when the work is being done, to facilitate payment and reimbursement for the work. The Contractor shall furnish an accurate schedule, based on good-faith expectations, of the project work to enable these inspections.

4. All change orders must be approved by the third-party review entities before signature to allow them to be a basis for payment.

END OF SECTION 01 2900

SECTION 01 3100

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. Administrative and Procedural Requirements for:

1. Project Management.

2. Coordination.

3. Variations, Revisions and Clarifications.

4. Preconstruction Conference.

5. Progress Meetings.

1.03 PROJECT MANAGEMENT

A. General: Provide direct, effective, experienced, cooperative, team-oriented, hands-on management of the Work including the daily construction operations on the Project site and that part of the Work that the Contractor chooses to delegate to Subcontractors / Suppliers.

1. Project management personnel shall be employees of the Contractor and shall not be subcontracted, or delegated to others.

2. Project requires a project manager, site superintendent and support staff as required for construction to be completed on schedule.

B. Submittals:

1. Refer to Section 01 3300 for submittal procedures.

C. Site Superintendent: Employ a Project Superintendent (different person than the Project Manager) housed in a temporary office on the Project site to oversee, direct and manage the construction of the Work and including, but not limited to, the following minimum characteristics and responsibilities:

1. A good communicator, organized, effective and capable of managing

multiple tasks, difficult personalities and tight deadlines without losing self-control or management effectiveness.

2. Trained, knowledgeable and experienced in job site safety and shall be responsible for managing safety issues on site in conformance with Federal, State and Local regulations.

3. Superintendent shall become thoroughly familiar with the requirements of the Contract Documents before work is started.

4. Responsible for executing the Work in conformance with the Construction Schedule specified in Section 01 3215 so that Project is completed on time.

5. Oversee and direct the work of Subcontractors and suppliers and confirm they are conforming to the requirements of the Contract Documents.

6. Jointly with the Project Manager, coordinate the Work of this Project as specified under “Coordination” in this section.

7. Responsible for determining the means and methods used to execute the Work.

8. Responsible for coordinating Work requiring independent inspection with the testing agency(s).

9. Responsible for managing and controlling the quality of the Work (including work by Subcontractors) in conformance with the Contract Documents and good construction practice.

10. Responsible for coordinating with the Authority having jurisdiction and Building Inspector(s) inspections and requirements.

11. Responsible for coordinating work and inspection schedule with the Owner’s testing and inspection agency.

12. Responsible for coordinating with utility providers.

13. Responsible for coordinating the final inspections required by Authorities having jurisdiction required for issuance of the Certificate of Occupancy.

14. Responsible for inspecting the work jointly with the Project Manager and preparing the Punch List of deficiencies in the Work specified in Section 01 7800.

    a. Manage the timely completion of all Punch List items.

    b. Notify Architect that work is substantially complete and ready for Architect’s punch list review.

c. Provide written notification to Architect when deficiencies noted in Punch List have been 100% completed.

15. Provide a Daily Report for each day on which work is performed on the job site on the Daily Report Form included at the end of this section and submit to the Owner the next day.

D. Provide qualified support staff to support the work in the field including, but not limited to, the following minimum project management tasks:

1. Provide any task(s) required to support the construction of the Work and facilitate a planned, orderly and timely management of the Work.

2. Computer Skills: Experienced in using Microsoft Word, Excel, Adobe Acrobat (PDF files) e-mail, and whatever scheduling software is employed.

3. Submittal Review: Manage the submittal process specified in Section 01 3300 so that submittals are reviewed and materials / equipment ordered and delivered so as to avoid delay in the Project Schedule.

a. Review each submittal package for accuracy, completeness and conformance to the requirements of the Contract Documents.

b. Review submittals for the quantity of items, field dimensions, coordination with adjacent work, and coordination of information.

c. Apply Contractor's approval stamp to submittals before sending to Architect for review.

d. Pick up and deliver submittals when required to meet ordering deadlines.

e. Distribute submittals to Subcontractors and suppliers that have work that is affected by or requires coordination with the submittal.

4. Coordination: Jointly with the Project Superintendent, coordinate the Work of this Project as specified under "Coordination" in this section.

5. Field Engineering: Provide coordination drawing, field engineering and detailing services as required to convert the design concept shown on the Drawings and specified into installation drawings required to construct the Work.

a. Drawings may be hand drafted or drafted in AutoCAD / Revit.

b. Maintain a file of completed drawings; enter pertinent data onto as-built drawings.

c. Provide copy of drawings to Architect upon request.

6. Field Quality Control: Manage the various aspects of quality control for the Project including the following:

    a. Inspect materials and equipment daily as they are delivered on site for conformance to the requirements of the Contract Documents and reviewed submittals; provide written notification of any non-conforming items to Subcontractor / Supplier responsible with copy to the Architect.

    b. Inspect, monitor and document the work in progress for compliance with the Contract Documents; provide written notification of any non-conforming Work to Subcontractor / Supplier responsible with copy to the Architect.

    c. Monitor testing agency inspections and reports, take appropriate action to resolve any non-conforming work.

    d. Coordinate and monitor site visits and inspections by manufacturer's representatives; take appropriate action to resolve any non-conforming work or coordination issues.

7. RFI Coordination: Manage the preparation and distribution of RFI including the following:

    a. Review field questions to determine if they require an RFI or field engineering / coordination by Contractor

    b. Assign consecutive number to each RFI issued.

    c. Maintain up to date log of each RFI issued, listing date sent, date answer received and who RFI was distributed to.

8. As-Built Drawings: Manage the preparation of the as-built drawings specified in Section 01 7800.

    a. Coordinate Subcontractor as-built data incorporation into the as-built drawing set.

    b. Maintain up-to-date as-built drawing set in the field office for review by Architect and Engineers upon request or at monthly payment request review.

9. Operation and Maintenance Manual Coordination: Manage the information collection and preparation of the operation and maintenance manuals specified in Section 01 7800.

10. Systems Start-Up / Shakedown: Coordinate the connection and testing of equipment / systems installed in the Project.

    a. Confirm each Subcontractor's work is completed and final

connections / adjustments made.

b. Coordinate connection and testing by Subcontractor responsible for equipment / system.

c. Confirm proper operation of equipment / system including each different option, accessory and feature after start-up.

d. Prepare a list of deficiencies and uncompleted items for equipment / systems and distribute to the Subcontractors responsible with copy to the Architect; manage completion / correction in timely manner.

11. Punch List Review: Together with the Project Superintendent, inspect the completed Work and prepare the Punch List of deficiencies in the Work specified in Section 01 7800.

a. Manage the timely completion of all Punch List items.

1.04 COORDINATION

A. General Coordination:

1. Coordinate the Work of trades and other sections to ensure that elements of the work are installed in their proper sequence, without the need for unplanned modifications to the structure, building systems or work already installed.

2. Provide direct coordination of the Work; do not delegate coordination responsibility to any subcontractor.

3. Plan out the Work in advance and anticipate the interrelationships between each subcontractor and their relationship to the overall Project.

4. Provide the leadership, direction and decisions necessary to prevent subcontractor and supplier problems and disputes from affecting the Project Schedule or the quality of the work.

5. Coordinate scheduling, submittals and work of the various sections of Specifications to assure proper, efficient and orderly sequence of preparation and installation of interdependent construction elements, with provisions for accommodating items installed later.

6. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

7. Coordinate completion and cleanup of Work of separate sections in preparation for Completion and for portions of the work designated for

Owner's occupancy or use.

8. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

9. Coordination Of Mechanical And Electrical Systems: Coordinate the layout and installation of each mechanical and electrical system specified in Divisions 20 through 28 to avoid conflicts during installation. Conduct coordination meetings to review each system with installers / subcontractors and adjust new work / system layout to coordinate each of the systems and resolve conflicts.

   a. Conduct coordination meetings to review the shop drawings with each installer / subcontractor and resolve conflicts prior to installation.

   b. Include coordination with existing work / systems scheduled to remain.

B. Special Coordination Arising from State Funding Conditions:

1. Coordinate with the third-party review entities to allow them to inspect the work, usually at or close in time to when the work is being done, as set forth in Attachment J of Division 00.

2. Coordinate with Owner regarding Evergreen Sustainable Design Standards Compliance, as set forth in Attachment J of Division 00.

1.05 VARIATIONS, REVISIONS AND CLARIFICATIONS

A. Variations, revisions and clarifications to the work not involving an adjustment to the Contract Sum or Contract Time will be confirmed in writing. These written confirmations may be included in the Project minutes, memos to the Contractor and Owner, e-mail correspondence, or in answers to written Requests for Information (RFI).

B. Requests for Information (RFI) shall be submitted on standardized RFI form included at end of this Section. This form must be completely filled out as applicable by the Contractor prior to submission. Submit RFI via e-mail.

C. Requests For Information (RFI) shall be limited to a single subject and discipline, do not submit RFI with multiple unrelated questions.

D. Adhere to the requirements of the General Conditions of the Contract for any variations, revisions and / or clarification to the work that the Contractor believes will involve a change in the Contract Sum or Contract Time.

E. For Shop Drawing variations conform to requirements of the General Conditions of the Contract and Section 01 3300.

1.06 PRECONSTRUCTION CONFERENCE

A. Architect and Owner will schedule a preconstruction conference at start of construction.

B. Attendance Required: Contractor, Owner, Project Manager and Architect / Engineer.

C. Agenda:

1. Designation of personnel representing the parties in Contract and the Architect.

2. Discussion of list of Subcontractors, list of Products, schedule of values and progress schedule.

3. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract closeout procedures.

4. Scheduling.

5. Coordination with Owner.

6. Testing and inspection coordination.

7. Review Evergreen Sustainable Design Standards compliance and Inadvertent Discovery Plan compliance.

8. Procedures for maintaining record documents.

9. Requirements for start-up of equipment.

10. Inspection and acceptance of equipment put into service during construction period.

11. Contractor Safety.

1.07 PROGRESS MEETINGS

A. Progress meetings will be held on a regularly scheduled basis not exceeding once per week.

B. Location of Meeting: Progress meetings will be held at the job site. The contractor shall make physical arrangements for the meeting space.

C. Attendance: Contractor's management team, Owner, Architect and professional Consultants; subcontractors; suppliers and others as appropriate to agenda may attend.

D. Agenda:

1. Review of Work progress since previous meeting.

2. Review work planned.

3. Review Project Schedule (4-week and Master CPM Schedule).

4. Review submittal schedules; expedite as required.

5. Review of Request for Information (RFI).

6. Review deliveries.

7. Review proposed changes.

8. Evergreen Sustainable Design Standards Compliance.

9. Review technical and administrative questions / concerns from Contractor, Owner, Architect, Consultants.

10. Review As-Built Drawings.

11. Field Observations.

E. Four-Week Schedule:

1. Prior to each meeting, prepare a four (4) week schedule showing work completed during the previous week, work that is in progress for the current week and work planned for the following two weeks. This four week schedule, which is revised weekly by the Contractor, will be presented by the Contractor at the progress meeting and a copy will be given to the Architect and to the Owner at that time.

2. In the event that a progress meeting is not scheduled for the current week, prepare the 4 week schedule and forward it to the Architect in the same week.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

REQUEST FOR INFORMATION

TO:

ATTN: _____ **RFI #** _____

PROJECT NAME: _____

PROJECT NUMBER: _____

REFERENCE DRAWING OR SPEC: _____

SUBJECT OF RFI: _____

DESCRIPTION:

CONTRACTOR: _____ **RESPONSE REQUESTED BY (DATE):** _____

BY: _____ **DATE:** _____

RESPONSE:

A/E: _____

BY: _____ **DATE:** _____

COPIES TO: _____

This is not an authorization to proceed with work involving additional cost and / or time. Contractor shall obtain approval / authorization *prior to* proceeding with this work if the response in this RFI will result in additional cost and / or time.

FOUR-WEEK CONSTRUCTION SCHEDULE

PROJECT TITLE: DATE:

FOUR-WEEK SCHEDULE

Period: _____ / _____ / _____ To: _____ / _____ / _____

CONTRACTOR:

SUPT:

PREPARED BY:

ACTIVITY	% COMPL. TO DATE	WHO	DATE DAY	Previous Work Week							Week 1						
				M	T	W	T	F	S	S	M	T	W	T	F	S	S

FOUR-WEEK CONSTRUCTION SCHEDULE

PROJECT TITLE: DATE:

FOUR-WEEK SCHEDULE

Period: _____ / _____ / _____ To: _____ / _____ / _____

CONTRACTOR:

SUPT:

PREPARED BY:

ACTIVITY	% COMPL. TO DATE	WHO	DATE DAY	Week 2							Week 3						
				M	T	W	T	F	S	S	M	T	W	T	F	S	S

SECTION 01 3215

CONSTRUCTION SCHEDULE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. Administrative and Procedural Requirements for the Contractor's Construction Schedule.

1.03 GENERAL

A. The intent of the Construction Schedule is to assist the Contractor in planning and execution of the Work in a timely manner and assist the Contractor, Architect and Owner in monitoring the construction progress for the purpose of coordination, communication, evaluation of Applications and Certificates for Payment, and evaluation of time extension requests.

B. This section supplements the General Conditions and Special Conditions with additional schedule requirements, where conflicts exist, the most restrictive requirement shall govern.

C. Any plan by the Contractor to complete the Work or any part of the Work earlier than any contract required milestone or specific completion date shall not be construed as creating any responsibility or liability for the Owner or Architect should their actions, or lack thereof, prevent the Contractor from achieving the planned early completion. The Owner and Architect shall not be liable to the Contractor for any costs or other damages if the Contractor is unable to achieve early completion of the Work before a milestone or completion date.

D. Time is of the essence; the Owner needs the Work completed within the times listed so that they can occupy the building. Provide the necessary management, equipment and manpower, including any overtime, double-shifting, or special work schedules, required to achieve completion of the Project within the times listed in the Completion Times indicated in Section 01 1100. Costs related to overtime, double-shifting or special work schedules required to complete work by the indicated substantial completion dates shall be included in the Bid amount.

E. Float Time: Float time is the amount of time between the earliest start date and the latest start date, or between the earliest finish date and the latest finish date of a chain of activities on the CPM Schedule. Float time belongs to the Project and is not for the exclusive use or benefit of either the Contractor or the Owner; float

time may be used by either the Contractor or Owner for offsetting delays. Use of float suppression techniques such as preferential sequencing, special lead / lag logic restraints, zero total or free float constraints, extended activity times or imposed dates shall be cause for rejection of the Construction Schedule or any revisions or updates.

F. Scheduling Personnel: Contractor shall employ scheduling personnel or consultant with a minimum of 5 years of experience using the proposed scheduling software on projects of similar size and scope. If requested, provide a list of scheduling experience with copies of the schedules.

G. Schedule shall anticipate and include sufficient float time for weather dependent work tasks to allow for any delays due to normal inclement weather (defined as any inclement weather within the ten-year average of accumulated record mean values from climatological data compiled by the National Oceanic and Atmospheric Administration (NOAA), for the locale of the Project, over the full duration of the Contract Time).

1.04 CONSTRUCTION SCHEDULE

A. Construction Schedule:

1. Schedule Methodology: Critical Path Method (CPM) for the planning, scheduling and reporting of the work required by this contract.

2. Schedule Type: Precedence Diagramming Method (PDM).

3. Acceptable Software Programs:

   a. Microsoft Project.

   b. Primavera Project Planner.

4. Schedule Sheet Size: 11-inches x 17-inches preferred if readable, no larger than 24-inches x 36-inches.

5. Schedule Contents: Schedule shall contain the following information:

   a. Task ID number (numbered in ascending order, (e.g. *1, 2, 3, 4,* etc.)

   b. Task Name (activity), provide a two or three word description of each activity; identify each activity with the applicable Specification Section number (e.g. *Cast-in-Place Concrete – 03 30 00)*.

   c. Task Duration (e.g. *10 days*).

   d. Early Task Start Date (e.g. *5/12/23*).

   e. Late Task Start Date (e.g. *5/29/23*).

f. Early Task Finish Date (e.g. *5/25/23*).

g. Late Task Finish Date (e.g. *6/14/23*).

h. Float Time (e.g. *7 days).*

i. Predecessor Tasks.

j. Successor Tasks.

k. Calendar: List the Weeks, Months and Year(s) across top of each page of the schedule. Show a graphic task duration bar indicating the start and finish date corresponding to the calendar for each task.

B. Schedule Requirements: Include the following requirements:

1. List every work activity required to complete the Work in the Task Name column and include the following:

a. Task Name shall describe individual work activities in a defined area of the Project, not multiple work activities for the entire project, e.g. *underslab plumbing rough-in – west wing* instead of *plumbing* for the entire project. Provide as many activities as necessary to clearly show how the Project will be constructed within the time allowed.

b. Include completion and milestone dates as specified in Section 01 1100.

c. Include dates for submission of each submittal to Architect for review as required to assure materials / products / systems will be on site when required to allow conformance to the Project completion and milestone dates. When Architect's review time is critical to the Project completion schedule, identify the review return dates in the schedule.

d. Indicate date required for selection of colors and finishes as applicable.

e. Include product delivery dates, including those furnished and / or installed by separate contractors or the Owner.

f. Show dates when application for separate permits (i.e. fire alarm, fire sprinkler, etc.) will be made and when permit will be received.

g. Include dates for Punch List review and Contractor's completion of Punch List items.

h. Show dates for pre-cover inspections and final inspections required by authorities having jurisdiction.

i. Include dates for preparation and submission of closeout documents. Show Architect's review time and resubmittal of corrected manuals and drawings. Refer to Section 01 7800 for additional requirements.

j. Include dates for Owner Trainings.

2. Keep individual tasks listed to short durations with limited scope of work (one to two weeks maximum) unless the task is dependent on several activities of longer duration.

3. Each task shall have a corresponding time duration bar to the right of the columns graphically showing the duration of each activity on the calendar.

4. Show complete sequence of construction by activity, identifying work of separate contractors or Owner required to complete the Work.

5. Graphically indicate each task that is on the critical path for completion (by color or pattern) on the task duration bar. Show the interrelationship of each critical path task to other critical path tasks by drawing arrows between the task duration bar finish and start points.

6. Include sufficient additional float time in the duration of those specific activities that are weather dependent (such as: underground utilities, pavement, painting, etc.) to prevent delaying critical path activities due to normal inclement weather based on the time of year the tasks are being accomplished and the corresponding historic weather data averages for those dates.

a. Weather related float time shall be calculated after late task finish date and shall be included in the critical path time calculation.

b. Identify additional weather-related time allowed in the duration or include as a separate task directly under the affected work task.

1.05 UPDATING SCHEDULES

A. Update the Construction Schedules monthly to reflect actual work activity dates accomplished and any revised work activity dates.

B. Maintain Construction Schedules to record actual start and finish dates of activities as they are completed.

C. Indicate progress of each activity at the time of the revision date. Update diagrams to graphically depict current status of Work.

D. Indicate revision date on revised schedule.

E. Show changes occurring since previous Schedule submission such as:

1. Any major changes in scope;

2. Activities modified since previous submission;

3. Revised projections for progress and completion, as applicable;

4. Any other identifiable changes.

F. Provide narrative report as needed to define:

1. Problem areas; anticipated delays; and impact on schedule.

2. Corrective action to be taken by the Contractor to get the Project back on schedule. This report will define how and when the Contractor will accomplish this.

1.06 RECOVERY SCHEDULE

A. Whenever completion of any critical path activity(s) extends beyond its late finish date or in any way jeopardizes timely completion of a Contract milestone date or completion date the Contractor shall prepare a recovery schedule showing how work activity start and finish dates will be revised to allow the completion of milestone and completion dates on schedule.

B. Recovery schedule shall be prepared as soon as possible after discovery of any delay affecting critical path activity(s), but not longer than 7 days.

1.07 SUBMITTALS

A. Prepare and submit proposed Construction Schedule to Owner and Architect as soon as possible after Notice to Proceed and prior to first Application for Payment.

1. Submit schedule in pdf format via email.

B. Submit updated schedule with each Application for Payment or more frequent if required.

C. Applications for Payment will not be processed until schedule is in conformance with requirements of the specifications.

1.08 DISTRIBUTION

A. Distribute copies of Construction Schedule to project site file, subcontractors, suppliers, Owner, Architect and other concerned parties.

B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

C. Construction Office: Post a copy of the current Construction Schedule on the wall in the construction office where the job meetings will be held; suspend a moveable

vertical line on the current date to facilitate review and discussion of schedule progress and issues at weekly job meetings.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 3300

SUBMITTALS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. Administrative and Procedural Requirements for Project Submittals.

1. Subcontractor and supplier list.

2. *ESDS* Sustainability Submittal Documentation.

3. Shop Drawings.

4. Product Data.

5. Samples.

B. Administrative and Procedural Requirements for Obtaining and Using Architect / Engineer BIM / CAD Project Drawing Files.

1.03 SUBMITTAL PROCEDURES

A. Schedule submittals to expedite the Project. Transmit submittals in accordance with Construction Schedule and in such sequence to avoid delay in the Work. Coordinate submission of related items with schedule.

B. Electronic Submittals – Format: Shop Drawings, Product Data, Certificates, Warranties, Substitution Requests and any similar submittals, other than physical samples, shall be provided as digital submittals in PDF format suitable for sending via electronic mail or downloaded from internet file transfer website.

1. Submittal shall be submitted as one PDF and each item bookmarked to allow for efficient review.

2. Organize submittals per specification section. Include all items listed in each specification section to facilitate one review by the Design team per specification section.

a. Partial / incomplete submittals will be returned as “Not Reviewed”.

3. PDF security permissions shall be formatted to allow printing, reviewing and editing functions by Owner using any PDF compatible computer program.

4. When electronic submittals are required to be accompanied by a physical sample, the submittal will not be returned until both the electronic submittal and physical sample are reviewed.

C. Contractor Shall:

1. Review submittal for completeness before sending to Owner for review. Submittal shall have each of the items noted under the Submittals section in each specification section (Product Data, Drawings, Samples, Certifications, etc.).

   a. Incomplete submittals will be returned “Not Reviewed” by Owner.

2. Review and approve each submittal prior to submission to Owner.

3. Include a review priority for Owner if multiple and / or large submittals are transmitted to Owner in the same week.

4. Reproduce and distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions. Pay all costs for reproduction, distribution and materials.

5. Coordinate submittals into logical groupings to facilitate inter-relation of the several items:

   a. Finishes which involve Owner selection of colors, textures or patterns.

   b. Associated items which require correlation for efficient function or for installation.

6. Identify, in writing, variations from Contract Documents and product or system limitations which may be detrimental to successful performance of the completed Work.

7. Accompany submittals with transmittal letter containing:

   a. Date.

   b. Project title and number.

   c. Contractor's name and address.

   d. Number of copies of Shop Drawings, Product Data and Samples submitted.

e. Identification of submittal as it relates to:

1) Subcontractor / Supplier / Manufacturer:

Name.

Address.

Telephone number.

Representative's name.

2) Detail number and location in Construction Documents.

3) Specification reference number and paragraph.

4) Applicable Standards.

5) Finishes.

6) Identification of deviations from Contract Documents.

D. Additional Information Required:

1. Relation to adjacent structure or materials.

2. Fabrication methods, assembly, special installation requirements, accessories, fasteners and other pertinent information.

3. Field dimensions, clearly identified.

4. Coordination with other trades. Stamped and signed by affected trades.

E. Distribution:

1. Send submittals to Owner via electronic mail or from internet file transfer website.

2. Owner will return reviewed submittals to Contractor and Owner via electronic mail or Owner’s internet file transfer system.

3. Send copy of Owner reviewed submittal to Subcontractors / Suppliers.

1.04 SUBCONTRACTOR AND SUPPLIER LIST

A. Prior to submission of First Application for Payment, submit complete list of subcontractors and suppliers to be used for the Work. Provide specification section identification number, addresses and telephone numbers for each listed subcontractor and supplier providing materials.

1.05 *ESDS* SUSTAINABILITY SUBMITTAL DOCUMENTATION

A. Where the specifications call out for *ESDS* submittal documentation, the following shall be acceptable documentation:

1. Product cut sheets with company logo.

2. Material safety data sheets with company logo.

3. Signed attestations (certification) on company letter head.

4. Official literature from manufacturer.

1.06 SHOP DRAWINGS

A. Present in clear and thorough manner. Title each drawing with Project name and number; identify each element of drawings by reference to sheet number and detail, schedule or room number of Contract Documents.

B. Identify field dimensions; show relation to adjacent or critical features or Work or products.

C. Drawings shall be drafted either by hand using pen and a straight edge so that the drawings are clear and easy to read, or by computer using a drafting program like AutoCADD or REVIT. Do not submit freehand drawings.

D. Shop Drawings requiring Code Agency Approval: Submit on format and media required by Approval Agency. Include information required by Project Documents and Approval Agency.

1.07 PRODUCT DATA

A. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.

B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.

1.08 SAMPLES

A. Submit two samples of the specified color and texture for each product unless specified otherwise in individual specification sections; samples will be retained by Owner.

B. Where a specific color has not been specified, submit full range of manufacturer's standard and special finishes except when more restrictive requirements are

specified, indicating colors, textures and patterns, for Owner selection.

C. Label each sample with identification required for transmittal letter.

1.09 MANUFACTURER'S CERTIFICATES

A. When specified in individual specification sections, submit manufacturer's certificate to Owner for review.

B. Indicate material / product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits and certifications as appropriate.

C. Certificates may be recent or previous test results on material / product, but must be acceptable to Owner.

1.10 CALCULATIONS

A. When specified in individual specification sections, submit calculations to Owner for review.

1.11 CONTRACTOR REVIEW

A. Coordinate submittals with requirements of the Work and Contract Documents.

B. Review submittal for accuracy, completeness and compliance with the Contract Documents and coordinate with work of each different trade and subcontractor as applicable.

C. Apply Contractor's stamp with signature. The submittal signed by the Contractor certifies that the Contractor has reviewed the submittal for accuracy, completeness and compliance with the Contract Documents. It also certifies that the Contractor has verified products required, field dimensions, adjacent construction work, and coordination of information, in accordance with the requirements of the Work and Contract Documents. Submittals without Contractor's stamp and signature are rejected. Notify Owner in writing at time of submittal, of any deviations from requirements of Contract Documents.

1.12 RESUBMITTALS

A. Revise and resubmit submittals as required, identify changes made since previous submittal.

B. Shop Drawings, Product Data and Calculations:

1. Revise initial drawings, data or calculations and resubmit as specified for the initial submittal.

2. Indicate any changes which have been made including those requested by the Owner.

C. Samples: Submit new samples as required.

D. Owner reserves the right to charge the Contractor for reviewing non-responsive resubmittals. The charge for time spent reviewing non-responsive resubmittals will be based on the Owner's or their consultant's standard hourly billing rates for the time they spend reviewing the non-responsive submittal. The amount will be charged as a deductive change order.

1.13 OWNER REVIEW

A. Owner or their consultant(s) will review shop drawings, product data, calculations and samples and return submittals to Contractor.

B. Owner's review is qualified by the following language included on the review stamp: "This review is only for general conformance with design concept of the Project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the Contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of his or her Work with that of all other trades; and for performing all work in a safe and satisfactory manner".

1. Any action shown is subject to Contract Document's requirements. Owner will mark the review submittal in one of the following boxes on the review stamp:

   - ❑ Reviewed
   - ❑ Furnish as Corrected
   - ❑ Rejected
   - ❑ Revise and Resubmit
   - ❑ Submit Specified Item

C. Owner review of individual or separate items does not constitute review of assembly in which it functions.

1.14 BIM / CAD PROJECT DRAWING FILES

A. The AutoCAD project files and those portions of the project that have Revit BIM drawing files will be made available to the Contractor after award of Contract if requested. These project files are made available subject to the following conditions of use and upon receipt of Architect's written release form signed by the Contractor and each Subcontractor requesting them:

1. The Revit / CAD Project File(s) are not the Contract Drawings and are not

intended for construction; the hard copy printed paper Contract Drawings and matching pdf copies of the paper copies are the only Contract Drawings.

2. To further project team communication and project success, the Revit / CAD Project File(s) are made available for convenience and information in the preparation of shop drawings and coordination drawings. However, the level of development in these Revit / CAD Project File(s) varies and no representation is made as to their suitability or completeness required for the preparation of shop drawings and coordination drawings.

3. Under no circumstances are the Revit / CAD Project File(s) to be considered a virtual construction model, the Architect and their consultants do not integrate construction staging, methods, or scheduling of the Project as part of the Project Model, and the 3-dimensional model may not include coordination and constructability elements important to the Contractor. As such, the Architect and their consultants shall be held harmless for considerations related to construction staging, methods, scheduling and any inaccuracy or omission of coordination and constructability elements within the Revit / CAD Project File(s).

4. The Revit / CAD project files have been developed for completing the 2-dimensional printed design and construction documents and therefore do not provide an accurate 3-dimensional model.

5. The Revit / CAD Project files shall not be shared with any other party without prior authorization from Architect and prior written approval of the conditions of use by the other party.

6. The design and details contained in these Revit / CAD Project files are the intellectual property of the Architect and their consultants and shall not be copied or reproduced for any commercial purpose without the express written permission of the Architect.

7. The Revit / CAD Project file(s) are Instruments of Service for the Architect and their consultants and contain design concepts and supporting documentation protected by copyright. Use of copyrighted design concepts contained within the Revit / CAD project files for unrelated projects is not permitted unless the Architect has granted specific permission.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 3500

PREVAILING WAGE RATES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 GENERAL REQUIREMENTS

A. This project is subject to the payment of prevailing wages to all workers. It is the Contractor's responsibility to determine and use the most recent set of rates for the appropriate area of the state, as published by the Washington State Department of Labor and Industries. These rates are available on the web at http://www.lni.wa.gov/TradesLicensing/PrevWage/WageRates/.

1. Contractor must include these provisions in all subcontracts for work performed under this Contract.

2. Per RCW 39.12.017(3)(a)-(b), Contractor shall use the residential construction designation, not the commercial designation, for prevailing wage rates, except that the following are under the commercial designation: utilities construction, such as water and sewer lines, or work on streets, or work on other structures unrelated to the housing.

3. Contractor shall use the bid due date as the date for determining applicable wage rates. A sample table of journeyman wage rates from that date are available from Owner upon request. Apprentice wages for all trades are not available in a single table; they must be looked up by trade at: https://secure.lni.wa.gov/wagelookup/ApprenticeWageLookup.aspx .

4. Contractor shall coordinate with Owner to ensure that it lists the correct project site owner in L&I submissions (there is more than one listing for “Lewis County”; only one is correct).

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION 01 3500

SECTION 01 3516

ALTERATION PROJECT PROCEDURES, CUTTING AND PATCHING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. Documenting Existing Conditions.

B. Alteration Project Procedures.

C. Cutting and Patching.

1.03 SUBMITTAL

A. Refer to Section 01 3300 for submittal procedures.

B. Submit the Documentation of Existing Damage and photos in PDF format prior to first Application and Certificate for Payment.

1. Transmit under transmittal letter.

1.04 REGULATORY REQUIREMENTS

A. Obtain required permits from authorities.

B. Do not close or obstruct egress from any building exit.

C. Do not disable or disrupt existing building utilities or fire and life safety systems without prior written notice to the Owner; proceed only after receiving the Owner's confirmation of approval.

D. Conform to procedures and requirements of authorities having jurisdiction when hazardous or contaminated materials are discovered. Notify the Owner and Architect immediately.

1.05 QUALIFICATIONS

A. Contractor's on-site management personnel shall be competent to survey the condition of the building structure and building systems to determine both their condition and the possibility of unplanned structural collapse or failure. Management personnel shall be capable of taking prompt corrective action when necessary to protect the safety of persons and the integrity of the building structure or systems.

B. Definitions:

1. Skilled Craftsman: Someone who has journeyman level abilities in a specific trade or craft and is currently working at that trade or craft on a regular basis, is capable of competently performing all aspects of the specific trade or craft and, if work has special warranties involved, has received special training to qualify their work for warranty.

2. Qualified Installer: Someone who has journeyman level abilities for installing a particular product or system and is currently doing this installation work on a regular basis, is capable of competently performing all aspects of the installation and, if work has special warranties involved, has received special training to qualify their work for warranty.

C. Demolition, moving, removing, cutting and drilling is required to be performed by trades qualified to perform the work in a manner to cause the least damage and disruption to existing structure and finishes. Use skilled craftsmen or qualified installers wherever waterproof integrity, structural integrity, sight-exposed finishes or materials or systems that are under warranty are involved.

D. Patching, repair and restoration work shall be accomplished by skilled craftsmen and qualified installers in those specific trades that normally perform the type of work required (e.g. finish carpentry work by a finish carpenter, plaster work by a plasterer, etc.).

1.06 QUALITY ASSURANCE

A. Assign the specific demolition, cutting and patching work required for the work of this contract to the appropriate skilled craftsman or qualified installer.

B. Lay out, coordinate and direct the demolition and cutting accomplished by the various trades to:

1. Minimize patching work required for restoration.

2. Accommodate the existing conditions.

3. Prevent damage to existing building structure, finishes or equipment / systems.

4. Prevent removal or cutting of existing elements intended to remain.

1.07 PROTECTION

A. Protect and prevent damage to existing finishes, equipment / systems and adjacent work scheduled to remain.

B. Protection shall include, but not be limited to, wood timbers or framing, plywood panels, plastic sheeting, canvas drop cloths, carpet scraps etc. or anything required to protect existing finishes / item(s) / areas from damage.

C. Protection shall be in place prior to specific demolition, cutting or patching work is started.

D. Provide weather protection, waterproofing, heat and humidity control as needed to prevent exposure to the elements or damage to remaining existing work and to new work.

1.08 EXISTING CONDITIONS

A. Documentation of Existing Damage: Prior to the start of any work, identify any existing damage or deficiencies in the existing building finishes, structure or mechanical / electrical systems. Photos of existing conditions are recommended where there are specific concerns on existing conditions.

1. Provide Architect and Owner with a written list of the damage / deficiencies identified on the walkthrough along with any photos taken prior to first Application and Certificate for Payment.

   a. If list of the damage / deficiencies is not provided it will be understood that any damage is resulting from this project and require correction by the Contractor.

2. The list of damage / deficiencies and photos of existing site / building conditions will be used as a means of differentiating between existing damage and problems and damage resulting from this project that require correction by the Contractor.

B. Contractor's Responsibility: After the project has started, the Contractor is responsible for the condition of the structure, finishes and building systems and shall maintain them during the project and restore them to equal or better condition before project completion if damaged by the work of this project.

C. Unforeseen Conditions: Should unforeseen conditions be encountered that affect the design or function of the project or the structural or functional integrity of the structure or any building system, notify the Architect and Owner immediately in writing.

PART 2 - PRODUCTS

2.01 PRODUCTS / MATERIALS FOR PATCHING AND EXTENDING WORK

A. New Products / Materials: As specified in Product sections; match existing products / materials and work for patching and extending work.

B. Type and Quality of Existing Products / Materials: Determine by inspecting and testing Products where necessary, referring to existing Work as a standard.

C. As applicable, salvage sufficient quantities of cut or removed material to replace damaged work of existing construction, when materials are not obtainable on the current market. Do not incorporate salvaged or used materials in new construction except with permission of Architect and Owner. Protect stored salvage items in dry, secure place.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

3.02 ALTERATION PROJECT PROCEDURES

A. Preparation:

1. Plan and coordinate any required demolition / removal work to facilitate / accommodate new work and allow for invisible transition between existing and new finishes.

2. Provide protection for existing finishes / elements / areas scheduled to remain.

3. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals and deteriorated masonry and concrete. Replace materials as specified for finished Work.

4. Remove debris and abandoned items from area and from concealed spaces.

5. Prepare surface and remove surface finishes to provide for proper installation of new work and finishes.

6. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Insulate duct work and piping to prevent condensation in exposed areas.

B. Installation:

1. Coordinate and direct the work of demolition, alterations and renovations to expedite completion sequentially.

2. Remove, cut and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original condition. If original condition is substandard or damaged, restore to level of quality required for new work.

3. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.

4. Install Products as specified in individual sections.

C. Transitions:

1. Where new Work abuts or aligns with existing, perform a smooth and even transition. Patched Work to match existing adjacent Work in texture and appearance.

2. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and provide trim appropriate to new surface or as determined by Architect.

D. Adjustments:

1. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.

2. Where a change of plane occurs, provide a smooth transition.

3. Trim existing doors as necessary to clear new floor finish. Refinish trim as required.

4. Fit work at penetrations of surfaces as described in Cutting and Patching.

E. Repair of Damaged Surfaces:

1. Patch or replace portions of existing surfaces which are damaged, lifted, discolored or showing other imperfections.

2. Repair substrate prior to patching finish.

F. Finishes:

1. Finish surfaces as specified in individual Product sections.

2. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

G. Cleaning:

1. In addition to cleaning specified in Section 01 50 00, immediately clean adjacent areas of the building or site where no work is scheduled which become dirty as a result of construction work.

3.03 CUTTING AND PATCHING

A. Examination:

1. Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching.

2. After uncovering existing work, inspect conditions affecting performance of work.

3. Beginning of cutting or patching means acceptance of existing conditions.

B. Preparation:

1. Layout and coordinate the cutting work so that new work can be completed free from conflicts with work of other trades and existing conditions / systems not scheduled for removal. Do not proceed with cutting work until conflicts are resolved.

2. Provide, erect and maintain temporary barriers and exterior enclosures and protect existing and installed work.

3. Provide temporary supports, braces or shoring to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.

4. Provide protection from elements for areas which may be exposed by uncovering work.

5. Maintain excavations free of water.

C. Cutting and Patching:

1. Provide the tools and equipment best suited for the specific type of cutting and patching required.

2. Plan and execute cutting work in a manner that results in the least negative impact to the surrounding work.

3. Execute cutting, fitting and patching including excavation and fill, wherever necessary to construct the work.

4. Fit products together, to integrate with other work.

5. Uncover work to install ill-timed work.

6. Remove and replace defective or non-conforming work.

7. Remove samples of installed work for testing, when requested.

8. Provide openings in the work for penetration of mechanical and electrical work.

9. Provide access for installation of items too large to fit through permanent openings.

D. Performance:

1. Execute work using methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.

2. Employ skilled craftsmen and / or qualified installer to perform cutting and patching for weather exposed and moisture resistant elements, sight-exposed surfaces and warranted work.

3. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval. Do not overcut corners of materials exposed to view or where overcutting would weaken its structural integrity.

4. Restore work with new products in accordance with requirements of Contract Documents.

5. Fit work tight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.

6. At penetrations of fire rated walls, partitions, ceiling or floor construction, completely seal voids with fire rated material of equal fire rating.

7. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.

3.04 EXISTING ITEMS FOR REUSE

A. Remove the existing item carefully so as not to damage the item.

B. Carefully clean item and store item in a protected location.

C. If the item is damaged during the removal process, replace with new that matches the existing at the Contractor's expense.

D. Reinstall item using procedures for installing new work.

END OF SECTION

SECTION 01 4500

QUALITY CONTROL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. Administrative and Procedural Requirements for Project Quality Control.

1.03 REFERENCES

A. Conform to the requirements of the referenced standards referred to in individual specification sections. Reference standards shall be the edition current as of the date of the Contract Documents.

B. Obtain copies of reference standards that govern work performed on site.

C. Should specified reference standards conflict with Contract Documents, the most stringent and restrictive requirement shall prevail except where Architect / Engineer provides other direction; request clarification from Architect before proceeding.

D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

E. Americans with Disabilities Act (ADA).

F. ICC / ANSI A117.1 – Accessible and Usable Buildings and Facilities.

1.04 CONTRACTOR'S QUALITY ASSURANCE / CONTROL OF CONSTRUCTION

A. Employ / assign quality control personnel to monitor the work of this project for conformance to the requirements of the Contract Documents and to good construction practices.

1. Prior to starting their work, review the scope of work, performance requirements, materials and workmanship requirements with each trade and subcontractor.

2. Review materials when delivered to the site for conformance to the Contract Documents and submittals.

3. Monitor work in progress for conformance to the Contract Documents and submittals.

B. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

C. Monitor quality control over suppliers, manufacturers, products, services, site conditions and workmanship, to produce Work of specified quality.

D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Work shall be performed by trained and experienced workers qualified to produce workmanship of specified quality.

F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion and disfigurement.

G. Inspections and reports issued by special inspector or testing laboratory do not relieve the Contractor from his responsibility to construct Work in conformance with the requirements of the Contract Documents.

H. Contractor is responsible to review and confirm that substrate construction, site conditions and work by others complies with requirements of Contract Documents and manufacturer's requirements for subsequent work prior to installation or cover.

1.05 ACCESSIBILITY REQUIREMENTS

A. Accessibility Requirements: The accessibility requirements shown on the Drawings are required for conformance with the Americans with Disabilities Act (ADA) and ICC / ANSI A117.1. Strict conformance with the accessibility requirements shown on the Drawings is required for this project; non-conforming work will require correction at Contractor's expense.

1. A copy of ICC / ANSI A117.1 shall be kept on the job site for reference during construction and reviewed to provide a full understanding of each accessible design requirement.

B. Submittal Review: Review submittals for conformance with the accessibility requirements of ICC / ANSI A117.1 shown on the Drawings; mark up submittals that have incorrect or missing accessibility requirements.

C. Review with Workers: Review the accessibility requirements of ICC / ANSI A117.1 and the Drawings with workers performing work that is required to conform to the accessibility requirements of ICC / ANSI A117.1.

D. Monitoring: Monitor the work of this project for compliance with the accessibility requirements of ICC / ANSI A117 shown on the Drawings.

E. Inspection: Inspect the completed work that is required to conform to accessibility requirements for conformance with ICC / ANSI A117.1. Inspection shall require accurate measurements to confirm that dimensions, slopes and relationships shown on the Drawings have been constructed in accordance with accessibility requirements.

1.06 INSPECTION AND TESTING AGENCY SERVICES

A. Owner will appoint, employ and pay for services of an independent inspection and testing agency to perform inspection and testing.

B. The inspection and testing agency will perform inspections, tests and other services specified in individual specification sections or as required by the Owner or Architect.

C. Reports will be submitted by the inspection and testing agency to the Authority Having Jurisdiction, Architect, Engineer, Contractor and Owner, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.

D. Contractor's Responsibilities:

1. Cooperate with inspection and testing agency personnel and facilitate their inspection / testing work on the project site.

2. Coordinate the work and inspection / testing schedule directly with inspection and testing agency.

3. Notify inspection and testing agency and Architect 24 hours minimum prior to expected time for operations requiring inspection / testing.

4. Furnish inspection and testing agency with reviewed submittals, including concrete design mix, etc.

5. Furnish safe access to the work requiring testing / inspection, samples of materials, equipment, tools, storage, electrical power and assistance as requested.

6. Make arrangements with inspection and testing agency and pay for additional samples and tests required for Contractor's use.

7. Correct / replace any work found by the inspection and testing agency to be not in conformance with the Contract Documents.

E. Site visits and retesting required because of scheduling problems caused by the Contractor and / or non-conformance to specified requirements shall be performed by the same inspection and testing agency. Payment for retesting will be charged to the Contractor by deducting inspection or testing charges from the Contract Sum / Price.

1.07 MANUFACTURER'S FIELD SERVICES AND REPORTS

A. When specified in individual specification sections or when required by field installation problems, questions or concerns, require material or product suppliers or manufacturers to provide qualified staff personnel to visit the job site and provide technical consultation, observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions.

B. Representative to submit written report to Architect describing testing observations and recommendations. Site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions shall also be included.

C. Submit report in duplicate within 30 calendar days of observation to Architect for review.

1.08 MANUFACTURER'S INSTRUCTIONS

A. Comply with manufacturer's installation / assembly instructions in full detail, including each step-in sequence.

B. Substrates, Site Conditions and Work By Others shall conform to manufacturer's requirements:

1. Inspect substrate, site conditions and work by others for conformance to manufacturer's requirements for material and condition prior to starting any work.

2. Do not start work if substrate construction, site conditions or work by others does not comply with manufacturer's recommendations; report any problems to Contractor and Architect.

3. Start of work / installation indicates installer's acceptance of substrate, site conditions and work by others as meeting manufacturer's requirements.

C. Should manufacturer's instructions conflict with Contract Documents, request clarification from Architect before proceeding.

1.09 MANUFACTURER'S CERTIFICATES

A. When required in individual specification sections, submit manufacturer's certificate. Refer to Section 01 3300, paragraph entitled "Manufacturer's Certificates."

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 5000

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. This section specifies requirements for the Contractor's construction facilities and temporary controls.

1.03 DESCRIPTION

A. This section specifies minimum actions required. Other actions may be specified elsewhere in the Contract Documents, manufacturer's literature, and governing regulations.

B. Nothing in this section is intended to limit types or amounts of construction facilities and temporary controls.

C. No omission from this section will be recognized as a temporary activity that is not required to complete the Work.

1.04 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. Occupational Safety and Health Administration (OSHA).

C. Washington Industrial Safety and Health Act (WISHA).

1.05 PROTECTION OF EXISTING UTILITIES

A. If unknown utilities are encountered in the course of construction, protect them from damage and notify the utility Owner immediately. Do not remove or disable any unknown existing utility without the approval of the utility Owner.

B. In the event utilities are damaged during construction, temporary services and / or repairs must be made immediately to maintain continuity of services at Contractor's expense.

1.06 DISPOSAL OF WASTE MATERIALS

A. Dispose of all refuse and waste material, including excess earth from excavation, off Owner's property. Do not stockpile waste material on Owner's property. Immediately clean up any spilled material.

B. Clean trash and debris from work area daily. Keep work area, site, and adjacent properties free from accumulations of waste materials, rubbish and windblown debris resulting from construction operations.

C. Provide on-site containers for collection of waste materials, debris and rubbish. Periodically remove waste from the site.

D. Waste Construction Liquid Disposal: Provide portable containers for disposal of any waste construction liquids or fluids that are generated by or needed for the construction work. Do not dump any waste construction liquid or fluid (including oil, solvent, cleaning compound, paint, plaster mud, brush and tool cleanup water, etc.) onto the ground or down the building sanitary or storm drain systems or anywhere on the site. Dispose of contents of all portable containers off site daily.

E. Dispose of all flammable, hazardous, and toxic waste materials daily. Storage of these materials will not be permitted on the interior of building.

F. Locate dumpster within the fenced Work Area.

1.07 TEMPORARY ELECTRICITY

A. The Owner will allow the Contractor to use the existing building's electricity for the duration of the construction without charge.

B. Provide temporary feeders from electrical service with branch wiring, distribution boxes and power outlets conforming to code requirements as required for construction operations. Provide OSHA / WISHA approved flexible power cords as needed.

1. Existing permanent convenience receptacles may be utilized during construction provided they are replaced if damaged or defaced in any way.

2. Provide over current protection at convenient locations for large loads on the existing electrical panels.

3. Provide temporary service disconnect and over current protection at convenient location.

1.08 TEMPORARY LIGHTING

A. Provide and maintain temporary lighting for construction operations. Provide sufficient lighting to ensure proper workmanship everywhere.

1. Existing lighting fixtures may be utilized during construction provided they

are replaced if damaged or defaced in any way.

B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required to do the Work safely and at the light levels required by each trade to produce work conforming to the quality specified.

C. Maintain lighting and provide routine repairs.

1.09 TEMPORARY TELEPHONE SERVICE

A. Superintendent shall carry a cellular phone to allow voice communication at all times.

1.10 TEMPORARY WATER SERVICE

A. The Owner will allow the Contractor to use the existing building's water service for the duration of the construction without charge.

1.11 TEMPORARY SANITARY FACILITIES

A. Provide and maintain temporary OSHA / WISHA required portable toilet facilities and enclosures; in sufficient numbers and locations to accommodate the number of workers on site. Maintain daily in clean and sanitary condition.

B. Use of existing toilet room facilities by construction workers is not allowed.

1.12 TEMPORARY HEAT

A. Provide and pay for temporary heat devices and energy source as required to maintain conditions required for construction operations.

1. Use of the permanent HVAC system in the building is permitted subject to Owner's prior notification and approval, and provided that return air duct openings within construction work area are provided with MERV 8 temporary filter media securely sealed to duct inlet to prevent dirt and dust from entering the return air HVAC duct/equipment system.

    a. Review temporary filter media installation on return air ducts prior to starting any dust producing work.

    b. Turn off HVAC system serving work area if serious dust producing work is required.

    c. Failure to protect existing HVAC system from dust and dirt will require duct and equipment cleaning to be performed by a professional HVAC system cleaning company at the Contractor's expense.

2. Direct fired gas / oil heaters are not allowed, combustion / exhaust gases shall be vented to building exterior.

B. Maintain minimum ambient temperature of 60 degrees F in areas where construction is in progress, unless required otherwise by manufacturers, trade associations and / or the specification sections.

1.13 TEMPORARY VENTILATION

A. Provide temporary ventilation equipment to facilitate drying out of materials, to dissipate humidity, to maintain consistent temperature in areas and to prevent accumulation of dust, fumes, vapors, or gases.

1.14 TEMPORARY DEHUMIDIFICATION

A. Provide temporary dehumidification equipment as required to lower the moisture content of the building interior and dry out materials to required levels.

1.15 TEMPORARY BARRIERS

A. Provide barriers to protect the public from any potentially unsafe conditions, and from damage from construction operations.

B. Provide protection for existing plant life designated to remain. Replace damaged plant life.

C. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

1.16 TRAFFIC CONTROL

A. Provide vehicular and pedestrian traffic control as appropriate for the work to prevent any unsafe condition on site; coordinate construction traffic and vehicles with Owner use of site and requirements.

1.17 TEMPORARY STORAGE

A. Make whatever provisions are necessary to ensure the safe and weathertight protection of materials and equipment temporarily stored.

1.18 EXTERIOR ENCLOSURES

A. Provide temporary, weathertight enclosure over any portion of the building open or exposed to the weather to prevent the existing structure and interior finishes from getting wet.

1.19 PROTECTION OF EXISTING AND INSTALLED WORK

A. Protect existing building and finishes from damage or defacement due to construction work; provide temporary protection as required by conditions and work activity.

B. Protect installed work. Provide special protection where specified in individual

specification sections or as required to prevent any type of damage or defacement.

C. Provide temporary and removable protection for existing and installed products. Control activity in immediate work area to minimize damage.

D. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer and install protection. Remove and replace waterproofing or roofing material damaged during the work.

E. Prohibit construction worker access to rooms and areas which do not have construction work. After work in any area or room is complete, prohibit further worker access.

F. Prevent any construction dust and dirt from entering the HVAC equipment and ductwork, computer equipment, electrical switchgear, building systems / equipment, smoke detectors or anything that will be adversely affected.

1.20 SECURITY

A. Provide site and building security as required to prevent unauthorized entry and to protect work in progress, stored materials, tools and equipment from vandalism and theft.

1. Coordinate with and accommodate Owner's security requirements.

B. Lock up or block up all doors, windows and openings in building exterior and lock any gates on the site each day prior to leaving the site to prevent unauthorized entry into the building or site.

C. Maintain site and building security until Substantial Completion when Owner takes responsibility for security.

1.21 ACCESS ROADS

A. Provide and maintain access to fire hydrants, free of obstructions. Do not block access roads or prevent emergency vehicles access to site.

B. Maintain the emergency vehicle access road on the site in good, drivable condition for any type of emergency vehicle as required by the City code and permit conditions.

1.22 PROGRESS CLEANING

A. Provide periodic cleaning to prevent any buildup or accumulation of construction debris in the building or on the site.

B. Pre-Cover Cleaning: Remove construction debris and vacuum clean dirt and dust from concealed spaces that will be enclosed or inaccessible after completion of the work, including concealed spaces within walls, shafts, attics, and void spaces.

C. Maintain building and site in a clean and orderly condition.

D. Remove waste materials, debris, and rubbish from building and site weekly and dispose off-site.

1.23 ENVIRONMENTAL PROCEDURES

A. Comply with all environmental and health safety regulations.

B. Burning on site is not permitted.

1.24 FIELD OFFICE

A. The Owner will allow the Contractor to use one room within the construction work area for the field office for the duration of the construction.

1. Contractor shall protect the existing finishes for the duration of the Project. Provide protection for the flooring to prevent stains and damage.

2. The space shall be turned over to the Owner in the same condition that it was in before the construction project started.

B. Equip with sturdy furniture for meetings, plan rack and drawing display table.

C. Provide enough furniture to comfortably accommodate weekly job site meetings, with table and chairs adequate for all attendees.

D. Provide computer(s) with current versions of Microsoft Word, Excel, and Adobe Acrobat compatible PDF software programs and internet connection for e-mail communication with Superintendent and Field Engineer.

E. Maintain office in organized and clean condition.

1.25 MACHINERY AND EQUIPMENT RESTRICTIONS

A. Equipment and Internal Combustion Engine Noise: The noise level of each vehicle or piece of equipment shall not be greater than 90 DB(A) at a distance of 50 feet as measured under noisiest operating conditions. Mufflers for stationary engines shall be hospital-area quality of silencing.

1.26 REMOVAL OF UTILITIES, FACILITIES AND CONTROLS

A. Remove temporary above grade or buried utilities, equipment, facilities, materials, etc.

B. Clean and repair damage caused by installation or use of temporary work.

1.27 EMERGENCY CONTACTS

A. Provide Owner with two emergency contact names (Superintendent and Project

Manager), with home phone and cell phone numbers.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 6000

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. Administrative and Procedural Requirements for Materials and Equipment related to:

1. Transportation and Handling.

2. Storage and Protection.

3. Product Options.

1.03 PRODUCTS

A. Products: Means new material, machinery, components, equipment, fixtures and systems forming the work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the work. Products may also include existing materials or components required for reuse.

B. Provide interchangeable components of the same manufacturer, for similar components.

C. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

1.04 TRANSPORTATION AND HANDLING

A. Transport and handle products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement or damage.

1.05 STORAGE AND PROTECTION

A. Store and protect products in accordance with manufacturer's instructions, with

seals and labels intact and legible. Store sensitive products in weathertight, climate controlled enclosures.

B. For exterior storage of fabricated products, place on sloped supports, above ground.

C. Provide and pay for off-site storage and protection when site does not permit on-site storage or protection.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement or damage.

G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

1.06 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.

C. Products Specified by naming a Manufacturer “or approved equal”, or with a provision for Substitution Request: Submit a request for substitution for any manufacturer not named.

D. Products Specified by "or approved equal" to a Listed Manufacturer: Products with same function and similar quality and features to listed manufacturer.

E. Products Specified by "Similar To" a Listed Manufacturer: Products with same function and similar quality and features to listed manufacturer.

F. Products in Specified Categories Subject to Evergreen Sustainable Design Standards Limitations: Products compliant with those limitations, documented to be so compliant. Refer to Division 01 8113 Sustainability Requirements for further information.

1.07 SUBSTITUTIONS

A. Architect will consider requests for Substitutions up ten (10) calendar days prior to bid opening date.

B. Substitutions may be considered after contract award only when a product becomes unavailable through no fault of the Contractor, or when the Owner deems it to be in the Owner's best interest to do so.

1. Substitutions proposed to allow timely delivery due to Contractor's failure to order material / equipment on time will not be considered.

C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

D. A request constitutes a representation that the Bidder / Contractor:

1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.

2. Will provide the same warranty for the Substitution as for the specified product.

3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.

4. Waives claims for additional costs or time extension that may subsequently become apparent.

5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.

6. Has investigated and determined that the proposed substitution will have no adverse effect on *ESDS* Point compliance.

7. Has investigated and determined that the proposed substitution will meet code requirements.

E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, if they have not been previously approved.

F. Substitution Submittal Procedure:

1. All substitution requests shall be accompanied with the Substitution Request Form completely filled out. Substitution Request Forms are bound in the Project Manual at the end of this specification section. Limit each request form to one proposed substitution.

2. Submit one complete set of substitution request forms and supporting data via e-mail or as required by the Owner.

3. Clearly indicate with red arrows on the supporting data the proposed substitution and accessories.

G. Substitution Review Procedure: Because of the number of substitution requests

typically received before bidding and the coordination required to review these, the following procedures will apply:

1. Substitution requests received after the time specified in this Section will not be reviewed or listed in addenda.

2. Substitution requests will be evaluated and the request form will be annotated in the column marked "For Use by Architect." It will then be retained in the A / E's file.

3. The Substitution Request Form and submitted data will not be returned to the submitter. These forms are for the A / E's in-house use only.

4. Only approved substitutions will be listed on addenda. All proposed substitutions not listed on addenda shall be considered by the submitter and the Contractor as a non-acceptable substitution and shall not be used.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SUBSTITUTION REQUEST FORM

TO: Alex Murray and Matt Patana
571 NW Prindle Street
Chehalis, WA 98532

PROJECT NAME: Lewis County Permanent Shelter

We hereby submit for consideration, the following product instead of specified item for above project:

Section: _____ **Paragraph:** _____ **Specified Item:** _____

Proposed Substitution: _____

_____

Attach complete dimensional information and technical data including laboratory tests, if applicable.

Include complete information on changes to Drawings and / or specifications which proposed substitution will require for its proper installation.

Submit with request all necessary samples and substantiating data to provide equal quality, performance, and appearance to that which is specified. Clearly mark manufacturer's literature to indicate equality in performance. Differences in quality of materials and construction shall be indicated.

The undersigned states that the following paragraphs are correct:

1. The proposed substitution does not affect dimensions shown on drawings.

2. The undersigned will pay for changes to the building design, including engineering design, detailing and construction costs caused by the requested substitution.

3. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.

4. Maintenance and service parts will be locally available for the proposed substitution.

5. The proposed substitution will have no effect on applicable codes.

6. The proposed substitution will have no adverse effect on *ESDS* Point compliance.

7. The manufacturer's guarantees or warranties of proposed product is equivalent to, or exceeds, that of the specified product.

List name and location of three similar projects on which product was used, date of installation and Architect's name and phone number.

_____

_____

_____

Certification Of Equal Performance And Assumption Of Liability For Equal Performance:

Undersigned attests that the performance, function and quality of this proposed substitution are equal to or superior to the specified item and waives any rights to additional payment and time which may subsequently be necessitated by failure of the substitution to perform adequately, and for the required rework to make corrections thereof:

Submitted By:

_____

Name (type or print neatly)

_____

Signature (*has the authority to legally bind firm to the above terms*) Title

_____

Firm

_____

Address

_____

City, State Zip

_____

Telephone Date

Accept _____ Decline _____

Date _____ Date _____

Required Attachment: *ESDS* Point compliance or non-compliance documentation. (Indicate specific Point(s) and specific compliance data. Substitution Request submitted without this information will not be considered.)

SECTION 01 7000

EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. General Procedural Requirements Governing Execution of the Work including, but not limited to, the following:

1. Construction Layout.
2. General Installation of Products.
3. Progress Cleaning.
4. Starting and Adjusting.
5. Protection of Installed Construction.
6. Correction of the Work.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 EXAMINATION

A. Existing Conditions / Utilities: The existence and location of existing construction / utilities indicated on Drawings as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of existing construction and utilities affecting the Work.

1. Refer to Section 02 1725 for utility location requirements.
2. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, telecommunications, and water-service piping; and underground electrical services.
3. Furnish location data for work related to Project that must be performed by

public utilities serving Project site.

B. Acceptance of Conditions: Start of work / installation indicates acceptance of existing conditions as not conflicting with the requirements of the Contract Documents or the design intent and being acceptable without any modification.

3.02 PREPARATION

A. Coordination: Furnish information to local utility and Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a Request for Information (RFI) to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.03 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify dimensions and layout information shown on Drawings in relation to existing construction and dimensions. If discrepancies are discovered, notify Architect promptly.

3.04 INSTALLATION

A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations so no part of the Work is subjected to damaging

operations or loading in excess of that expected during normal conditions of occupancy.

E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

F. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.

G. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.05 PROGRESS CLEANING

A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.

1. Use low-toxic cleaning supplies.

2. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.

3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

B. Site: Maintain Project site free of waste materials and debris.

C. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.

D. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

E. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

F. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.06 STARTING AND ADJUSTING

A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.

C. Test each installed utility and piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Manufacturer's Field Service: Arrange for a factory-authorized service representative to inspect and repair any piece of equipment that does not function properly or cannot be made to operate as specified.

3.07 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

3.08 CORRECTION OF THE WORK

A. Repair or remove and replace defective construction.

1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

B. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

C. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

END OF SECTION

SECTION 01 7800

CLOSEOUT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

A. This section specifies administrative and procedural requirements for the contract closeout.

1. Final Cleaning.
2. Adjusting.
3. Project Record Documents.
4. AHJ Approved Permit Drawing Set.
5. Operation and Maintenance Data.
6. Spare Parts and Maintenance Materials.
7. Punch List.

1.03 CLOSEOUT PROCEDURES

A. Comply with the General Conditions of the Contract.

1.04 FINAL CLEANING

A. Execute final cleaning prior to Substantial Completion review and during the period between Substantial and Final Completion where punch list work causes waste, rubbish or debris.

B. Clean all surfaces exposed to view, remove temporary labels, stains and foreign substances. Follow manufacturer's recommendations for cleaning installed products.

C. Clean equipment and fixtures to sanitary condition.

D. Clean dirt and debris from drainage systems.

E. Clean site; sweep paved areas, rake clean landscaped surfaces.

F. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.05 ADJUSTING

A. Adjust operating products and equipment in accordance with manufacturer's recommendations and specification section to ensure smooth and unhindered operation.

1.06 PROJECT RECORD DOCUMENTS

A. The Project Record Documents shall consist of the following:

1. Contract Documents (Drawings, Project Manual, Addendums and Change Orders).

2. Drawings of contractor designed systems, (e.g. fire sprinkler system, fire alarm system, controls system, etc.).

B. Maintain on-site throughout the construction period, a dedicated set of the project record documents and record actual revisions to the work on these documents. Project record documents and recordings specified below may be kept in electronic format with on-site access and with off-site weekly backup.

1. Store Record Documents separate from documents used for construction.

2. Record information concurrent with construction progress.

3. Project Manual: Legibly mark, cloud and flag Project Manual changes and include a description of actual Products installed, including the following:

a. Manufacturer's name and product model and number.

b. Product substitutions or alternates utilized.

c. Changes made by Addenda and Change Order.

4. Contract Drawings: Legibly mark, cloud and flag each item to record actual as-built construction including:

a. Surveyed as-built conditions.

b. Measured horizontal and vertical locations of underground utilities referenced to permanent surface improvements.

c. Measured location of internal utilities concealed in construction, referenced to visible and accessible features of the work.

d. Field changes of dimensions and detail.

e. Details not on original Contract Drawings.

f. Transcribe Addenda to Project Record Documents.

g. Transcribe Change Orders to Project Record Documents.

C. Prior to contract closeout, prepare and deliver record documents to Owner as follows:

1. Project As-Built Drawings: Provide a complete set of the Contract Drawings showing as-built conditions, each change order revision and existing conditions uncovered during construction.

a. Mark or stamp bottom of each sheet with:

1) AS-BUILT DRAWINGS,

2) Name of Construction Company,

3) Date.

b. Digital Copy: Provide a digital copy of each sheet of the as-built drawings on a USB compatible flash/thumb drive in PDF format.

2. Project Record Manual: Provide a complete Project Manual showing changes made during construction.

a. Mark or stamp bottom of each page with:

1) RECORD PROJECT MANUAL,

2) Name of Construction Company,

3) Date.

b. Digital Copy: Provide a digital copy of the entire Project Record Manual on a USB compatible flash drive in PDF format.

3. Provide a digital copy of each addendum and each fully executed / signed change order on a USB compatible flash drive in PDF format.

a. Include the RFI / Proposal Request / CCD and cost proposals directly behind each Change Order.

b. Bookmark each addendum and change order in PDF.

1.07 AHJ APPROVED PERMIT DRAWING SET

A. Maintain AHJ approved Permit Set of drawings in good, clean condition, protect from damage or marks.

B. Transmit the AHJ approved Permit Set of drawings to the Owner for their permanent record.

1.08 OPERATION AND MAINTENANCE MANUAL

A. Provide a digital copy of operation and maintenance data in PDF format as follows:

1. Provide a cover page titled "OPERATION AND MAINTENANCE MANUAL"; include the name of project and the year project was completed.

2. Provide a Table of Contents subdivided by each appliable specification section.

3. Provide a directory listing the names, addresses, and telephone numbers of Architect / Engineer, Contractor, Subcontractors, and major equipment suppliers.

4. Submittals: Provide a clear, readable copy of each final reviewed submittal and shop drawing provided for the project.

5. Warranties: Execute and assemble warranty documents specified in the Project Manual from Subcontractors, suppliers, and manufacturers.

6. O & M Information: Provide manufacturer's operation and maintenance instruction for each product and piece of equipment provided in project.

   a. List of equipment.

   b. Parts list for each component.

   c. Operating instructions.

   d. Maintenance instructions for equipment and systems.

   e. Maintenance instructions for special finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.

7. Reports: Provide a copy of the final air and water balance reports.

8. Bookmark each specification section in the PDF.

B. Submit draft copy of completed Manual in final form prior to Substantial Completion for review by Architect and Owner.

1. This draft copy will be returned to Contractor with Architect / Engineer and Owner comments.

2. Revise content of Manual as required by Architect / Engineer and Owner comments.

C. Submit final revised Manual to Architect and Owner for their permanent record.

1.09 SPARE PARTS AND MAINTENANCE MATERIALS

A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.

B. Deliver to project site and place in location as directed. Obtain receipt signed by Owner's representative prior to final payment.

1.10 PUNCH LIST

A. Upon completion of the Work, the Contractor shall walk-through each room / area in the building and around the entire exterior and site and prepare a punch list of each item of work that is not completed or does not conform to the requirements of the Contract Documents.

B. After completion of the punch list by the Contractor, provide written notice that the Work has been substantially completed and schedule a room by room punch list walk-though with the Architect and Owner to review the finished work and Contractor’s punch list items.

1. Any additional items of uncompleted or unacceptable work that are found during this walk-through shall be added onto the Punch List for completion / correction.

C. The project budget provides for two final visits to the project site by the Architect / Engineer for performing a punch list review of the work. The first visit will be in response to the Contractor's notice of substantial completion of the Work and if necessary, the second will be after notification by the Contractor that all punch list items and deficiencies noted during punch list review have been corrected.

D. Should additional reviews by the Architect / Engineer be required due to the Contractor's failure to correct all deficient work, the Owner will deduct the amount of Architect / Engineer compensation for re-review services from final payment to Contractor.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 8113

SUSTAINABILITY REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this Section.

1.02 SECTION INCLUDES

A. Washington State *Evergreen Sustainable Development Standard* (*ESDS*) Requirements for Building and Site.

B. Team Responsibility Assignments for recording and executing mandatory and optional building and site performance criteria.

1.03 REFERENCES

A. Washington State *Evergreen Sustainable Development Standard* (*ESDS*) Version 4.0 (v1.1), established by the Department of Commerce Housing Trust Fund, https://www.commerce.wa.gov/building-infrastructure/housing/housing-trust-fund/housing-trust-fund-evergreen-sustainable-development/.

1.04 *ESDS* PERFORMANCE STANDARD

A. This Project shall meet the requirements of the *Evergreen Sustainable Development Standard* (*ESDS*).

B. The Lewis County Permanent Shelter shall be constructed to meet all performance criteria for mandatory and optional points marked in the “Points Approved” column, refer to attached ESDS Points Checklist. The construction team shall endeavor to obtain the “Optional” points indicated as selected and within the scope of work identified by the Contract Documents.

1.05 CONTRACTOR RESPONSIBILITIES

A. The General Contractor has the primary responsibility for implementing each performance criteria noted as Contractor’s responsibility on the Points Checklist included after this Section. Refer to *Evergreen Sustainable Development Standard* (*ESDS*) Version 4.0 (v1.1) for specific requirements related to materials, work on site, supporting data and documentation for each performance criteria noted on the points Checklist. These general requirements are applied to this project in a detailed Evergreen Project Plan, which after approval by the Washington Department of Commerce has been incorporated into Attachment J

included in Division 00 and "Written Instructions for ESDS Compliance" included at the end of this Section. Attachment J and the Written Instructions are the instructions the Contractor should follow to implement ESDS requirements in this project.

B. The General Contractor shall ensure that all project staff or subcontractors attend pre-work education about ESDS compliance, in which an Owner's representative will go over project-specific compliance information.

1.06 *ESDS* CHECKLIST AND STATE FUNDING CONDITIONS

A. The *ESDS* Points Checklist included at the end of this Section identifies the following:

1. Each Evergreen Point required to achieve the performance standards for new construction

2. Party having the Core Responsibility for each Point.

3. Party having the Support Responsibility for each Point.

4. Party having the Implementation Responsibility for each Point.

B. The *ESDS* Checklist is included for Contractor's use in determining their responsibilities for compliance with Evergreen Sustainable Development Standard. Note that Contractor may have no responsibility for certain tasks, may share responsibility for certain tasks, and may have primary responsibility for certain tasks. The Contractor should take note of which tasks they are being contracted to perform and take responsibility for ESDS requirements associated with those tasks, using the Checklist. Definitions are included in the Checklist.

C. The Attachment J - State Funding Conditions included in Division 00 provide the special conditions pertaining to state funding requiring Contractor compliance. Contractor shall review and comply with each of requirements contained in these special conditions.

D. The document, "Written Instructions for ESDS Compliance," included at the end of this Section, provides task-by-task guidance for ESDS Compliance and is included for Contractor's use in determining their responsibilities for compliance the Evergreen Sustainable Development Standard.

1.07 DEFINITIONS

A. Definitions for words related to Evergreen Sustainable Development Standard throughout the specification sections shall be as defined in Evergreen Sustainable Development Standards, Version 4.0 (v1.1).

B. ESDS: Evergreen Sustainable Development Standard.

C. VOC: Volatile Organic Compounds

D. SCAQMD: South Coast Air Quality Management District

E. BAAQMD: Bay Area Air Quality Management District

1.08 SUBMITTALS

A. Submittal requirements for *ESDS* compliance are specified in each section.

1. Provide *ESDS* documentation submittals in accordance with Section 01 3300 and the specific requirements found in each Section.

B. Project Materials Cost Data: Provide spreadsheet indicating actual material value *ESDS* materials for each material/product used in the Project, excluding mechanical, electrical and plumbing components, and specialty items such as equipment. Values listed shall be exclusive of labor, overhead and profit.

1. Format spreadsheet by Specification Section and list materials in each Section and their material value.

2. Backup Documentation for *ESDS* Credits: Provide backup documentation for each material/product value listed on the spreadsheet by submitting a certification statement on company letterhead or invoice listing the specific material/product supplied on this project that clearly states:

a. Project Name.

b. Applicable Specification Section(s).

c. Cost of Each Material/Product.

d. Product technical data sheet or specifications demonstrating *ESDS* compliance, e.g., demonstrating low VOC content or lack of orthophthalate plasticizers.

C. Contractor *ESDS* Management Plan: Provide preliminary submittals within 14 days of Notice to Proceed indicating how the *ESDS* requirements for the Contractor Mandatory Credits and Contractor Optional Credits will be met. Contractor may employ the *ESDS* Checklist and "Written Instructions for ESDS Compliance" included in this section, together with any punch lists or additional explanation of how those tasks will be accomplished as set forth in Part 3.02.C of this Section below, as such a plan.

D. *ESDS* Progress Reports: Concurrent with each Application for Payment, submit reports comparing actual construction and purchasing activities with *ESDS* Management Plan.

E. *ESDS* Documentation: Provide primary and supporting *ESDS* Documentation for each Contractor Mandatory Credit and each Contractor Optional Credit identified on the *ESDS* Scorecard.

1.09 QUALITY ASSURANCE

A. Except as noted in paragraph B below, Contractor shall assign a project manager to this project who has attended State sponsored education and training seminars for *ESDS* documentation and be fully informed and knowledgeable regarding *ESDS* documentation rationale and requirements.

B. As an alternative to paragraph B, above, Contractor may assign a project manager to this project who as has attended State sponsored education and training seminars for LEED documentation, and be fully informed and knowledgeable regarding LEED documentation rationale and requirements, if the project manager will review ESDS requirements and documentation with the Owner's representative soon after Contractor is hired and be responsible for assimilating this information using their LEED training to fulfill the ESDS requirements of this project.

1.10 SUBSTITUTIONS

A. Refer to Section 01 6000 for substitution procedures and requirements.

1.11 MEETINGS

A. Refer to meeting requirements in Section 01 3100.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 *ESDS* COMPLIANCE, GENERAL

A. For classification as an *ESDS* building, applicant buildings must satisfy all of the prerequisites and the number of credit points defined in the points Checklist.

B. Determine that conditions of construction are acceptable to comply with *ESDS* credit requirements. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to the Owner.

C. Correction of work nonconforming with *ESDS* credit requirements shall be performed at Contractor's expense. Contractor shall provide the necessary documentation to show compliance of corrected work.

3.02 CONTRACTOR REQUIREMENTS FOR *ESDS* COMPLIANCE

A. Contractor shall employ someone on site capable of tracking compliance with subcontractors that they are following the requirements for *ESDS* within their scope of work. The employee shall:

1. Liaise with an Owner representative who acts as *ESDS* compliance monitor

for this project.

2. Be fully knowledgeable regarding *ESDS* terminology, documentation requirements and submission protocol and shall be effective in communicating and enforcing *ESDS* requirements with their subcontractors and suppliers.

3. Be responsible for planning, implementing, managing, directing and documenting the Work of this project in conformance with the requirements of the selected *ESDS* Points noted on the *ESDS* Points Checklist included at the end of this Section.

4. Be experienced and proactive in the planning and implementation of strategies for assuring conformance to *ESDS* certification requirements.

5. Present the Contractor's *ESDS* Management Plan in a Progress Meeting.

6. Attend each weekly progress meeting and present current status report on Implementation and documentation for *ESDS* Contractor Mandatory Points and Contractor Optional Points.

7. Submit documentation acceptable to the Department of Commerce Housing Trust Fund for Contractor Mandatory Credit and respond to the Department of Commerce Housing Trust Fund review comments and audit requirements including preparation of any additional documentation.

8. Prepare and submit appeal and associated documentation acceptable to the Department of Commerce Housing Trust Fund as required to achieve all mandatory requirements and optional points.

B. *ESDS* Documentation and Submission: Contractor shall be responsible for making sure all subcontractors and suppliers meet all *ESDS* requirements as specified within the Contract Documents. The Owner shall use the *ESDS* information provided by the Contractor to prepare and submit documentation required to obtain the *ESDS* Points. The *ESDS* Points Scorecard included at the end of this Section indicates the Points that shall be obtained for this project.

C. Contractor *ESDS* Management Plan: Prepare a written plan outlining the management plan that the Contractor intends to implement for planning, implementing, and documenting *ESDS* compliance for each Contractor Mandatory Point and Contractor Optional Point specifically for this project, and including the following.

1. Plan for posting *ESDS* requirements and plans on site.

2. Address strategy and subcontractor/worker compliance.

3. Address method for submittals and materials tracking.

4. Address Contractor's photo documentation process for documenting *ESDS*

conformance for each different Contractor Mandatory Point and Contractor Optional Point.

5. Address Contractor's plan for informing, monitoring and controlling low VOC products used inside the building envelope in accordance with requirements of *ESDS* Credits 6.01a and 6.01b.

END OF SECTION 01 8113

LEWIS COUNTY HOMELESS SHELTER

EVERGREEN SUSTAINABLE DESIGN STANDARDS RESPONSIBILITY CHECKLIST

Contractor Definitions and Color Coding for Reference:	
Owner:	The Owner and the Owner's representatives, as aided by the architect or other consultants
All Contractors:	Anyone performing any work whatsoever on the Lewis County Homeless Shelter
Frontage:	The contractor, including any subcontractors, who installs the frontage, sidewalks, bus stop, and associated work
Fire Sprinklers:	The contractor, including any subcontractors, who installs the fire sprinkler system and associated fire line
Fire alarms:	The contractor, including any subcontractors, who installs the fire detection system and any associated electrical work
HVAC:	The contractor, including any subcontractors, who installs an outdoor air or ERV system or makes alterations or additions to the HVAC or air ducting, and any associated electrical work
Building Renovations:	The contractor, including any subcontractors, who makes alterations for the new entryway, constructs the riser room, and makes door alterations and similar building renovations noted in the plans and not assigned to the other contractors herein
Plumbing:	This a potential add-on to the Building Renovation contractor's work, and is **not** the Fire Sprinklers contractor or any portion of the work of the Fire Sprinklers contractor
Fencing:	The contractor, including any subcontractors, who installs the fencing adjacent to the building
Energy:	The contractor, including any subcontractors, who performs energy audit air leakage testing and a blower door assisted air sealing of the building

Criteria	**Instructions:** Only criteria applicable to this project are listed. Criteria for which any contractor has responsibiliy contains a summary for reference and is color-coded to match the contractor definition, above.		Points Approved	Responsibility: Core	Responsibility: Support	Responsibility: Implementation
1.01a	**Integrative Process Planning**		Mandatory	Owner	Owner	Owner
1.01b	**Integrative Design: Documentation**		Mandatory	Owner	Owner	Owner
1.01c	**Integrative Design: Construction Management**		Mandatory	Owner	All Contractors	All Contractors
	Summary	This is the requirement that the construction implement ESDS standards and include construction education before work, inclusion of ESDS compliance matters in progress reports, and documentation of ESDS compliance throughout the project. All Contractors support and implement this standard by participating in pre-work ESDS meetings, by implementing and documenting ESDS compliance during the project, and by reporting on ESDS compliance in progress meetings and submittals.				
1.04	**Healing-Centered Design**		8	Owner	Owner	Fencing
	Summary	Owner has mostly already implemented this standard via design. But, the Fencing Contractor will finish the implementation by installing the fence per site plans.				
2.01	**Appropriate Project Siting**		Mandatory	Owner	Owner	Owner
2.04b	**Enhanced Access to Services**		5	Owner	Owner	Owner
2.05b	**Enhanced Access to Transit**		6	Owner	Owner	Frontage
	Summary	The frontage will include a bus stop at which there will be hourly public transit service. The Frontage Contractor implements this standard by constructing the frontage per the plans.				
2.07	**Walkable Neighborhoods - Sidewalks & Pathways**		Mandatory	Owner	Owner	Frontage
	Summary	The frontage will include sidewalks connecting to other public sidewalks and a bus stop. The Frontage Contractor implements this standard by constructing the frontage per the plans.				
2.09	**Greyfield, Brownfield, or Adaptive Reuse Site**		5	Owner	Owner	Owner
2.12a	**Access to Broadband: Broadband Ready**		Mandatory	Owner	Owner	Owner
2.12b	**Access to Broadband: Connectivity**		6	Owner	Owner	Owner
3.01	**Environmental Remediation**		Mandatory	Owner	Owner	Owner
3.02a	**Landscaping**		n/a (Mandatory if added)	Owner (if added)	Owner (if added)	Frontage (if added)
	This would be part of the project only if added via a change order					
	Summary	The project currently has no landscaping. If landscaping is added because the City of Chehalis requires it, a change order will be needed. The Owner will support this standard by preparing a landscaping plan and the Frontage Contractor will implement this standard by installing the landscaping per that plan.				
3.03	**Efficient Irrigation**		n/a (Mandatory if added)	Owner (if added)	Owner (if added)	Frontage (if added)
	This would be part of the project only if added via a change order					
	Summary	The project currently has no irrigation. If irrigation is added because the City of Chehalis requires it, a change order will be needed. The Owner will support this standard by preparing an irrigation plan for the landscaping and the Frontage Contractor will implement this standard by installing the landscaping per that plan.				
3.04	**Storm Drain Labels**		Mandatory	Owner	Frontage	Frontage
	Summary	The Frontage Contractor will support and implement this standard by labelling all storm drains or storm inlets to clearly indicate where the drain or inlet leads.				
4.01a	**Water-Conserving Fixtures**		n/a (Mandatory if added)	Owner (if added)	Owner (if added)	Plumbing (if added)
	This would be part of the project only if added via a change order					
	Summary	No utility hookups are currently part of the project. If utility hookups for restroom or kitchen trailers are added via a change order, the plumbing contractor will implement this standcard by adding pressure-regulating valves to the new hookups to restrict them to 60 psi.				
4.01b	**Advanced Water-Conserving Fixtures**		2	Owner	Owner	Owner
4.02a	**Leak Detection**		Mandatory	Owner	Fire Sprinklers; Building Renovations	Fire Sprinklers; Building Renovations; Plumbing (if added)
	Summary	The fire sprinklers contractor, building renovatrions contractor, and plumbing contractor (if added) will implement this standard by conducting pressure-loss tests and visual inspections on all plumbing work completed to determine if there are any leaks and fixing any leaks found.				
4.03a	**Lead Service Lines in Existing Buildings**		Mandatory	Owner	Owner	Owner
5.01b	**Building Performance Standard - Weatherization**		Mandatory	Owner	Owner; Fire Sprinklers; Fire Alarms, Building Renovations; Plumbing; HVAC; Energy	Owner; Fire Sprinklers; Fire Alarms, Building Renovations; Plumbing; HVAC; Energy
	Summary	This is the requirement that work comply with the ESDS Deemed Measures List for insulation and energy conservation. All of the contractors who may do work in the building (Owner; Fire Sprinklers; Fire Alarms, Building Renovations; Plumbing; HVAC; Energy) will support and implement this standard by complying with the applicable measures depending on the work they do. For example, any contractor who modifies an external wall must comply with the external wall insulation requirements.				
5.03	**Energy Star Appliances**		Mandatory	Owner	Owner	Owner

LEWIS COUNTY HOMELESS SHELTER

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All Contractors:	Anyone performing any work whatsoever on the Lewis County Homeless Shelter
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Fire Sprinklers:	The contractor, including any subcontractors, who installs the fire sprinkler system and associated fire line
Fire alarms:	The contractor, including any subcontractors, who installs the fire detection system and any associated electrical work
HVAC:	The contractor, including any subcontractors, who installs an outdoor air or ERV system or makes alterations or additions to the HVAC or air ducting, and any associated electrical work
Building Renovations:	The contractor, including any subcontractors, who makes alterations for the new entryway, constructs the riser room, and makes door alterations and similar building renovations noted in the plans and not assigned to the other contractors herein
Plumbing:	This a potential add-on to the Building Renovation contractor's work, and is **not** the Fire Sprinklers contractor or any portion of the work of the Fire Sprinklers contractor
Fencing:	The contractor, including any subcontractors, who installs the fencing adjacent to the building
Energy:	The contractor, including any subcontractors, who performs energy audit air leakage testing and a blower door assisted air sealing of the building

Criteria	**Instructions:** Only criteria applicable to this project are listed. Criteria for which any contractor has responsibiliy contains a summary for reference and is color-coded to match the contractor definition, above.		Points Approved	Responsibility: Core	Responsibility: Support	Responsibility: Implementation
5.04	**Central Laundry**		3	Owner	Owner	Owner
6.01a	**Healthier Material Selection**		Mandatory	Owner	All Contractors	All Contractors
	Summary	This is the requirement that all work comply with the materials limitations in ESDS. All contractors will support and implement this requirement by abiding by those materials limitations, and by documenting the materials used within the listed categories so that the documentation can be included in the project's ESDS compliance binder.				
6.01b	**Healthier Material Selection - Advanced**		8	Owner	All Contractors	All Contractors
	Summary	This is another materials limitation requirement. All contractors will support and implement this requirement by using no carpet, two-part foam, or sealants that contain orthophthalate plasticizers anywhere in this project, and by documenting any materials used within the listed categories so that the documentation can be included in the project's ESDS compliance binder.				
7.03	**Integrated Pest Management**		Mandatory	Owner	Owner	Owner
	Summary	Owner will support and implement this requirement by sealing or covering all pest entry points into the building and by preparing an integreated pest management manual for the project's operations. This summary is included to note that this will not be in the Building Renovations contractors' scope.				
7.04	**Lead-Safe Work Practices**		Mandatory	Owner	Owner	Owner
7.05a	**Smoke-Free Units and Common Areas**		Mandatory	Owner	Owner	Fencing
	Summary	The Fencing Contractor will implement this standard by designating, at a location withint he fenced area specified by Owner, a smoking location at least 25 feet from all building entries or ventilation intakes, including operable windows.				
7.09	**Clothes Dryer Exhaust**		Mandatory	Owner	Owner	Owner
7.10	**Mold Prevention: Surfaces**		Mandatory	Owner	Owner	Owner
7.11	**Mold Prevention: Tub & Shower Enclosures**		Mandatory	Owner	Owner	Owner
8.01a	**Building Maintenance Manual - Sustainability Supplement**		Mandatory	Owner	Owner	Owner
8.03	**Walk-Throughs and Orientations to Property Operation**		Mandatory	Owner	Owner	Owner

LEWIS COUNTY
Washington's First County
est. 1845

Board of County Commissioners

Lewis County Courthouse • 351 NW North Street • Chehalis, WA 98532-1900

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Written Instructions for ESDS Compliance
Permanent Shelter – 2015 NE Kresky Ave, Chehalis

A. Purpose

This document contains written instructions for the work to be done on the permanent shelter at 2015 NE Kresky Ave, Chehalis, as it pertains to ESDS requirements.

B. Referenced Materials

If any unfinished work from the Interim Shelter Written Instructions for work is done as part of this permanent shelter work, follow the enclosed Interim Shelter Written Instructions for Work. If there is a conflict between the interim shelter and permanent shelter written instructions, follow the permanent shelter written instructions.

For Permanent Shelter work, please refer to the plans, specifications, and other construction documents accompanying this document to describe the scope of work to which the ESDS standards in this document apply.

All work described in those plans shall be done subject to any ESDS terms or standards set forth in this document.

Attachment J to contracts on the project is the primary means by which work is conformed to ESDS requirements. Titled "State Funding Conditions," Attachment J includes conditions of state funding through the Housing Trust Fund not otherwise included in normal county government contracts. ESDS compliance is such a state funding condition.

Whereas Attachment J lists all ESDS requirements (among others) for the whole project, it does not break down the project into components, listing applicable ESDS requirements for each component. This document does so, and explains how a Contractor should demonstrate compliance with the requirements when completing the work.

C. General Rule: Pay Attention to ESDS and Document Compliance

Part of ESDS compliance is paying attention to ESDS compliance and documenting that you did so. Here is how that is done:

- The work crew is informed of ESDS requirements through a pre-work discussion;
- An ESDS update is a regular feature of any project update meetings;

- The crew must coordinate with third-party verification companies (WCRA and Falkin Associates), who check ESDS compliance as work is done;
- The crew must collect documentation related to some of the work as it is done, such as cut sheets, installation documents or photos of work done, and submit them to Project Manager Matt Patana for inclusion in an ESDS binder;
- Some types of work have performance testing or verification requirements. The crew that does the work needs to document that the work met the benchmark and supply that documentation to Matt Patana for inclusion in the ESDS binder.

Basically, all of the above means that you cannot just do the work for this project. You must do the work *and gather evidence*, as you do it, of what you did and how it met the ESDS requirements. Lewis County will be audited on these requirements by the third-party verification companies as the work occurs and by the Department of Commerce after the fact.

The bottom line: contractors on this project will get instructions on how to comply with ESDS requirements. If the contractor does a task called out in this document, the contractor must comply with those requirements and document that they did so as described below. If there is no description about how to document something, take a photo of the work and send it to Project Manager Matt Patana with a one-paragraph note about how it shows compliance with one of the requirements called out in this document.

D. Work Materials Limitations Applicable to All Work

1. *Standard limitations - ESDS 6.01a*

ESDS Standard 6.01a limits the materials that can be used anywhere in this project.

- Bear these limitations in mind when undertaking any work.
- Also, anytime a material in one of the product categories below is used, keep the cut sheet, label, or other evidence of what material was used and deliver it to Matt Patana for inclusion in the ESDS binder. By showing what material was used, we can demonstrate that we did not use one of the things prohibited below.

Product Category	Mandatory
wet-applied interior paints, coatings, primers*	All products must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by UL GreenGuard Gold, or SCS Indoor Advantage Gold are evidence of compliance; credible laboratory test reports are also acceptable.
Sheet wall coverings (wallpaper, etc.)	All sheet wall coverings must be phthalate-free. Do not install wall coverings containing PVC/Vinyl

interior adhesives and sealants*	All adhesives and sealants must have VOC content less than or equal to the thresholds provided by the SCAQMD Rule 1168 (dated 10/6/2017).
Flooring	All flooring products (whether carpet or hard surface) must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by CRI-Green Label Plus (for carpet and carpet pad) or FloorScore (for resilient floor) are evidence of compliance; credible laboratory test reports are also acceptable. Exception: • Flooring products that are an inherently nonemitting source of VOCs (stone, ceramic, concrete, clay brick, and unfinished or untreated solid wood) and has no binders, surface coatings, or sealants that include organic chemicals. No carpet may be installed within 3 feet of building entryways that are accessible from the ground, or in wet locations such as laundry rooms, bathrooms, kitchens/ kitchenettes, or utility rooms. Exception: • Outdoor-grade carpet tile may be installed within 3 feet of building entryways, but not in other "wet" locations.. No carpet may be installed on slab-on-grade floors. (*see exemption for New Construction Only*) Fluid applied finish floors may only be installed in non-occupied spaces, such as mechanical rooms or garages.
Insulation	Cavity insulation, including spray foam (framed floors, walls, attics, etc.) must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by UL GreenGuard Gold, or SCS Indoor Advantage Gold are evidence of compliance; credible laboratory test reports are also acceptable. If two-part spray polyurethane foam insulation is to be used, both of the following apply: 1. HFC blowing agents must not be used** 2. your Construction Management Plan (see Criterion **1.01c**) must cover all appropriate OSHA approved safety and health measures related to installation – including respirators, PPE, and work area controls.
Composite Wood	Formaldehyde emissions less than or equal to the thresholds provided by CARB Phase 2 and/or TSCA Title IV for plywood, particleboard, MDF, and these materials within other products like cabinets and doors. Exception: The following exterior-grade products are exempt from this requirement: • Wood structural panels manufactured according to PS 1-09 or PS 2-10 (or one of the standards considered by CARB to be equivalent to PS 1 or PS 2) and labeled bond classification Exposure 1 or Exterior • Structural wood products manufactured according to ASTM D 5456 (for structural composite lumber), ANSI A190.1 (for glued laminated timber), ASTM D 5055 (for I-joists), ANSI PRG 320 (for cross-laminated timber), or PS 20-15 (for finger-jointed lumber).

*wet applied within, and not a part of, the weather resistive barrier ("WRB")
**HFC blowing agents are prohibited in WA as of January 1, 2021 by Chapter 70A.45.080 RCW

2. *Project-specific limitations - ESDS 6.01b*

To obtain points needed to fulfill ESDS requirements, this project also involves the following additional limitations on materials.

- Flooring. No carpet will be used in the renovation.
- Insulation. No two-part foam will be used in the renovation.
- Interior adhesives and sealants. The renovation will use sealants that do not contain orthophthalate plasticizers.

Follow these limitations when doing the work. And, if working on flooring, using insulation, or using an interior adhesive or sealant, keep the cut sheet, label, or other evidence of what materials was used and deliver it to Matt Patana for inclusion in the project binder. By showing what material was used, we can demonstrate that we did not use one of the things prohibited above.

E. Fire Sprinklers Installation

This project includes design and construction of a fire sprinkler system within the permanent shelter. This will include work outside the building to run the fire line, the construction of a small riser room on the south side of the building, and installation of the sprinkler system inside the building.

ESDS Compliance for this portion of the work includes the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations in sections C and D, above.
- ESDS 4.02a: Conduct pressure-loss tests and visual inspections on all plumbing work completed to determine if there are any leaks and fix any leaks found. Visual inspections shall include checking for leaks at all accessible, visible water supply connections, and valves for water-using fixtures, appliances, and equipment.
- ESDS 5.01b: If the contractor installs or disturbs/reinstalls any built-up roof, exterior wall, or floor insulation, comply with the insulation requirements in the Deemed Measures list for multifamily low-rise projects as shown in section N, below. This is not anticipated inside the building, based on the nature of the ceiling and roof (and lack of attic), but it may well be needed for the external riser room. If the contractor installs or disturbs/reinstalls any insulation for heating, cooling, or ventilation ducts or for hot water piping—again, not anticipated for this work—comply with the Deemed Measures list's pipe & duct insulation requirements as shown in section N. If the contractor replaces any exterior window or exterior door leading to conditioned space, comply with the multifamily low-rise requirements in the Deemed Measures list as shown in section N.
- Possibly ESDS 4.01a-b: For any plumbing work <u>*other than for the fire sprinkler system*</u> (e.g., if plumbing were damaged by the contractor and needed to be

repaired/replaced), ensure that new or replaced toilets and urinals meet 1.28 gpf and .5 gpf flow limits, and new or replaced showerheads meet 1.5 gpm flow limits. Showerheads, kitchen/bathroom faucets, toilets, and urinals must be tested to meet these requirements (or code if none is specified) via bag or bucket testing. For plumping or piping other than fire sprinklers, Commerce may direct that a pressure-regulating valve be installed within or outside the building to cap the pressure at 60 psi, and if Commerce so directs, the CONTRACTOR shall do so.

F. Fire Alarms Installation

This project includes design and construction of a fire alarm system within the permanent shelter.

ESDS Compliance for this portion of the work includes the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations in sections C and D, above.
- Possibly ESDS 5.01b: If the contractor installs or disturbs/reinstalls any built-up roof, exterior wall, or floor insulation, comply with the insulation requirements in the Deemed Measures list for multifamily low-rise projects as shown in section N, below. If the contractor installs or disturbs/reinstalls any insulation for heating, cooling, or ventilation ducts or for hot water piping—again, not anticipated for this work—comply with the Deemed Measures list's pipe & duct insulation requirements as shown in section N. If the contractor replaces any exterior window or exterior door leading to conditioned space, comply with the multifamily low-rise requirements in the Deemed Measures list as shown in section N. None of this work is specifically contemplated for fire alarm work, but if it occurs it must comply with these requirements.

G. Outdoor Air Ventilation Installation

This project no longer includes design and installation of an outdoor air ventilation system in the building. The building's existing heating and cooling units will remain, although it is possible some additional ductwork will be added to the existing system.

ESDS Compliance for this portion of the work includes the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations in sections C and D, above.
- Possibly ESDS 5.01b: If installing or disturbing/reinstalling any built-up roof, exterior wall, or floor insulation, comply with the insulation requirements in the Deemed Measures list for multifamily low-rise projects as shown in section N, below. If installing or disturbing/reinstalling any insulation for heating, cooling, or ventilation ducts or for hot water piping, comply with the Deemed Measures list's pipe & duct insulation requirements as shown in section N. If replacing any exterior

window or exterior door leading to conditioned space, comply with the multifamily low-rise requirements in the Deemed Measures list as shown in section N.

- Possibly more 5.01b: If pressure-boundary work is assigned to the ventilation-installation portion of the project, conduct pressure boundary testing and/or improvements to comply with the Pressure Boundary requirements in the Deemed Measures list as shown in section N.

H. New Entryway Addition

This project includes fencing in an existing covered area adjacent to the building to create a covered entryway on the north side of the property, including the insertion of an external door.

ESDS Compliance for this portion of the work includes the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations in sections C and D, above.
- ESDS 5.01b: Anticipated: When installing or disturbing/reinstalling any exterior wall, comply with the insulation requirements in the Deemed Measures list for multifamily low-rise projects as shown in section N, below. When installing or replacing any exterior windows or exterior doors, comply with the multifamily low-rise requirements in the Deemed Measures list as shown in section N.
- Possibly more ESDS 5.01b: Not anticipated due to limited nature of work, but included as a precaution: When installing or disturbing/reinstalling any built-up roof or floor insulation, comply with the insulation requirements in the Deemed Measures list for multifamily low-rise projects as shown in section N, below. If installing or disturbing/reinstalling any insulation for heating, cooling, or ventilation ducts or for hot water piping, comply with the Deemed Measures list's pipe & duct insulation requirements as shown in section N.

I. Frontage and Stormwater Improvements

This project includes design and construction of frontage improvements and associated stormwater improvements for right-of-way stormwater. Stormwater improvements for on-site stormwater other than right-of-way stormwater are not anticipated at this time due to the small amount of new or replaced impervious surface. The frontage improvements include curb, gutter, sidewalk, and a bus pull out. The right-of-way stormwater improvements will include drains or means for water to be directed into existing City of Chehalis stormwater conveyances.

ESDS Compliance for this portion of the work includes the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations in sections C and D, above. Please note that many of that 601a-b materials limitations are about *indoor* applications, and so may not apply.

- ESDS 2.05b & 2.07: Install all-weather pathways (here, sidewalks) that lead to existing pedestrian routes to services and amenities (here, the sidewalks north and south of the property) and connect to the hourly bus service adjacent to the site (via a bus pull out).
- ESDS 3.04: Label all storm drains and inlets on site to clearly indicate where the drain or inlet leads.

J. Fencing and (lack of) Landscaping

This project includes installation of a permanent fence around an area behind the shelter building. No landscaping or irrigation is currently anticipated for budget reasons, but this section notes some relevant landscaping and irrigation requirements in case there is budget for either to be included in the project.

ESDS Compliance for this portion of the work includes the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations in sections C and D, above. Please note that many of that 601a-b materials limitations are about *indoor* applications, and so may not apply.
- ESDS 1.04 Option 3: Install the fence so as to connect shelter residents to usable outdoor space (here, a fenced area considered "inside" the shelter for purposes of free movement during the night).
- ESDS 7.05a: Designate, within the fenced outdoor area, a smoking location that is at least 25 feet from all building entries or ventilation intakes, including operable windows.
- Possibly ESDS 3.02a: If landscaping is to be included in the project (not currently anticipated), submit and obtain approval of a landscaping plan in which 50% of plantings are native and/or adaptive species and meet the requirements of ESDS 3.02a. Then, follow that approved plan and document it with photographs.
- Possibly ESDS 3.03: If irrigation is to be included in the project (not currently anticipated) submit and obtain approval of an irrigation system plan compliant with ESDS standard 3.03. Then, follow that approved plan and document it with photographs.

K. Utility hookups

This project may include (still under consideration) the installation of some utility hookups as permanent site improvements.

ESDS Compliance for this portion of the work would include the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations sections C and D, above. Please note that many of that 601a-b materials limitations are about *indoor* applications, and so may not apply.

- ESDS 4.02a: Conduct pressure-loss tests and visual inspections on all plumbing work completed to determine if there are any leaks and fix any leaks found. Visual inspections shall include checking for leaks at all accessible, visible water supply connections, and valves for water-using fixtures, appliances, and equipment.
- ESDS 4.01a: If new utility lines are installed to serve portable restrooms, bathrooms, or kitchen facilities, pressure-regulating valves must be installed to cap the pressure on those lines to 60 psi.

L. Audible Alarm Installation on Operable Windows

This project may include (still under consideration) the installation of audible alarms on operable windows as a security feature.

ESDS Compliance for this portion of the work would include the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations sections C and D, above. Please note that many of that 601a-b materials limitations are about indoor applications, and so may not apply.
- Possibly ESDS 5.01b: If installing or disturbing/reinstalling any exterior wall insulation, comply with the insulation requirements in the Deemed Measures list for multifamily low-rise projects as shown in section N, below. If installing or replacing any exterior windows, comply with the multifamily low-rise requirements in the Deemed Measures list as shown in section N. None of this work is anticipated, but if a window were damaged by the contractor and needed to be repaired/replaced, comply with these requirements.

M. Building Finalization – Pressure Boundary and Pest Management

This project will conclude with pressure boundary measures (if they were not previously completed before finalization) and pest management improvements.

ESDS Compliance for this portion of the work would include the following:

- ESDS 101c, 6.01a-b: Follow the General Rule and Work Materials limitations sections C and D, above. Please note that many of that 601a-b materials limitations are about indoor applications, and so may not apply.
- ESDS 5.01b: Conduct Energy Audit Air leakage testing and a blower door assisted air sealing of the building per section N below and ESDS 5.01 Appendix B instructions. If there are any heating or cooling ducts in unconditioned spaces that are added or altered as part of this project, seal ducts in accordance with section N below and that same appendix.
- ESDS 7.03: Bearing in mind the materials limitations in 6.01a-b, seal all wall, floor, and joint penetrations with low-VOC caulking or other appropriate non-toxic sealing methods and document the method used. Install rodent- and corrosion-proof screens (e.g., copper or stainless steel mesh or rigid metal cloth) on all

openings greater than ¼ inch in diameter. Document and photograph the location of openings sealed or screened. Provide all documentation to Project Manager Matt Patana.

N. Permanent Shelter Deemed Measures List

This Deemed Measures list, cross-referenced above, includes the measures from Appendix B of the ESDS applicable to this rehab project. Measures that apply are enclosed in a red border and have a brief description in red in the rightmost column as to where they apply.

Deemed Measures Priority List as modified for ESDS

Envelope Efficiency Measures: Mandatory ESDS						
Do?	**Thermal Boundary**			Existing Condition – Effective R-value	Action	
	Multifamily Low-Rise	Attic Insulation		R-19 or below	R-38, or R-49 (depending on attic space)	**No attic**
				R-20 to R-38	R-49	
X		Built up roof		Exterior insulation to code at time of roof cover replacement	For flat vented roofs, assess the viability of changing to a closed insulated cavity+ exterior insulation.	**If any built-up roof insulation is installed, disturbed, or reinstalled**
X		Wall Insulation	Closed Cavity	No insulation	Dense Pack	
				No substantial contact Thermal & Pressure boundaries are not aligned	Dense Pack	
				R-11 or below	Dense Pack (air seal and insulate)	
			Open Cavity	No insulation	Fill Cavity	**For new ingress/egress wall**
				No substantial contact Thermal & Pressure boundaries are not aligned	Fill Cavity	
X		Floor Insulation support per Floor Matrix		No insulation	Fill cavity	**For any new flooring when installing washers/dryers**
				No substantial contact Thermal & Pressure boundaries are not aligned	Fill cavity	
				R-12 to R-19	R-30, or Fill cavity	

Envelope Efficiency Measures (Continued): Mandatory ESDS							
Do?	**Thermal Boundary**			Existing Condition – Effective R-value		Action	
	Pipe & Duct Insulation	Heating and cooling duct Insulation	Any	Any ducts in Conditioned Space		No DMPL Measure	**Note:** Seal ducts prior to insulation.
			Rigid	...ducts in Unconditioned Space	R-7 or below	R-11	
			Flex		R-7 or below	R-8	
			Any		R-8 or greater	OK	
X		Ventilation Duct Insulation		Uninsulated		When exposed, meet code requirements	**For new ventilation system ducting**
X		Hot Water Distribution Pipe		No pipe insulation		R-3.6	When exposed, insulate to code R403.5.3 or C403.10.3 **If any hot water pipes are installed or if their insulation is disturbed or reinstalled**

Deemed Measures Priority List – Mandatory ESDS				
Done?	**Pressure Boundary**	Existing Condition	Action	Notes
X	Energy Audit Air leakage testing required	All	As part of the audit, establish air building air leakage baseline	**Will comply.**
	Energy Audit, Zonal Pressure boundary test	Buildings with attic or crawl. **[no attic or crawl]**	Using series air leakage testing, determine if there is excessive leakage to the attic or crawl space and verify good alignment of air barrier and insulation	When this test determines there is significant leakage between interior and attic or crawl, It is recommended that insulation be removed prior to air sealing attic or crawl. Then reinstall the insulation.

LEWIS COUNTY
Washington's First County
est. 1845

Board of County Commissioners

Lewis County Courthouse • 351 NW North Street • Chehalis, WA 98532-1900

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Deemed Measures Priority List – Mandatory ESDS (Continued)				
Done?	**Pressure Boundary**	Existing Condition	Action	Notes
X	Blower Door Assisted Air Sealing building	Non-obvious Leaks	Post sealing test. 30% reduction or Meet 7ACH (not worse than pre audit)	See detailed note. **Will comply.**
X	Duct Sealing or Performance Tested Comfort Systems (PTCS)	When heating or cooling ducts are located in unconditioned spaces.	Performance Tested Comfort Systems (PTCS)	**No heating or cooling duct work in the project. But, will comply for any heating or cooling ducts in unconditioned spaces if the unconditioned space is altered or added as part of this project.**
	Recessed Can Lights	IC Rated Air Tight Can	No DMPL Measure	Or convert can lights to J-box and air seal a surface mount LED.
		Non-IC Rated Can	IC Rated Air Tight Can	
		Non-IC Rated Can	Build the box	

Heating/Cooling System:
[Redacted – no heating or cooling system work in this project.]

Windows and Doors: ESDS Optional						
Done?				Existing Condition	Action	**Optional ESDS**
X	Single-Family	MF Low-Rise	Prime Window, slider	For energy efficiency. Single pane - any frame. Double pane aluminum without thermal break. Typically U>.65. Other security or durability issues.	U-factor 0.30 or less SHGC 0.40 or less	**For any new or replaced exterior windows**
			Low-E Storm Window		Emissivity 0.22 or less EXTERIOR: Air Leakage Rating 1.5 cfm/sf or less INTERIOR: Air Leakage Rating 0.5 cfm/sf or less	**For any new or replaced exterior windows**
			Insulated Door Exterior		Metal, insulated core minimum R-6, match the style of existing, where practical	**For any new or replaced exterior doors**
	Multifamily Mid/High-Rise		Prime Window		U-factor 0.30 or less SHGC 0.40 or less	**Evergreen Standard Optional 2 credits if all windows are replaced**
			Prime Window, slider		U-factor 0.24 or less SHGC 0.40 or less	**Evergreen Standard Optional 4 credits if all windows are replaced**

Enclosure:
Interim Shelter Written Instructions for Work

Written Instructions for Work
Interim Shelter – 2015 NE Kresky Ave, Chehalis

A. Purpose

This document contains written instructions for the work to be done on the interim shelter at 2015 NE Kresky Ave, Chehalis.

B. Visual Materials

Please refer to:

- the Existing Floor plan, showing the structures to be demolished via red line strikes;
- the Floor Plan, which shows the renovation work to be done visually and via notes indicated on the plan.
- the Fenced Outside Area plan, showing the rough location of temporary fencing to be erected; and
- the Frontage Improvements aerial map, showing the rough location (but not finished plans for) curbs, gutter, and sidewalk along Kresky Ave.

All work described in those plans shall be done subject to any ESDS terms or standards set forth in this document.

C. ESDS Compliance Throughout the Project

The work on this project includes a construction education plan, which any crew should receive and review before starting work. It is included as Attachment 4 to the Evergreen Project Plan (of this which work plan is Attachment 3). The construction education plan shows the Evergreen Sustainable Design Standard compliance measures the work crew will need to follow, based on grant funding requirements for the project. Those compliance measures involve the following:

- The opportunity to review some initial design and planning documents, found in Attachment 2 to the Evergreen Project Plan;
- A pre-work discussion with Doug Carey and/or Eric Eisenberg about those documents, the work the crew will do, and the relevant compliance measures the crew will need to undertake;
- Periodic updates on ESDS compliance as part of normal construction meetings;
- Coordination with third-party verification companies (WCRA and Go), who check ESDS compliance as work is done;
- Some performance testing or verification on some of the work done, to meet ESDS-required benchmarks; and

- Collecting documentation related to the work, such as cut sheets, installation documents, photos of work done, results of performance testing, and so on for inclusion in a binder that demonstrates ESDS project compliance.

Basically, all of the above means that you cannot just do the work for this project. You must do the work *and gather evidence*, as you do it, of what you did and how it met the ESDS requirements. We will be audited on it by the third-party verification companies as it happens and by the Department of Commerce after the fact. Please see the construction education plan for more details.

D. Basic Work Material Limitations

ESDS Standard 6.01a imposes limits on materials that can be used anywhere in this project.

- Bear these limitations in mind when undertaking any work.

- Also, anytime a material in one of the product categories below is used, keep the cut sheet, label, or other evidence of what material was used and deliver it to Doug Carey or Eric Eisenberg for inclusion in the project binder. By showing what material was used, we can demonstrate that we did not use one of the things prohibited below.

Product Category	Mandatory
wet-applied interior paints, coatings, primers*	All products must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by UL GreenGuard Gold, or SCS Indoor Advantage Gold are evidence of compliance; credible laboratory test reports are also acceptable.
Sheet wall coverings (wallpaper, etc.)	All sheet wall coverings must be phthalate-free. Do not install wall coverings containing PVC/Vinyl
interior adhesives and sealants*	All adhesives and sealants must have VOC content less than or equal to the thresholds provided by the SCAQMD Rule 1168 (dated 10/6/2017).

Flooring	All flooring products (whether carpet or hard surface) must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by CRI-Green Label Plus (for carpet and carpet pad) or FloorScore (for resilient floor) are evidence of compliance; credible laboratory test reports are also acceptable. Exception: • Flooring products that are an inherently nonemitting source of VOCs (stone, ceramic, concrete, clay brick, and unfinished or untreated solid wood) and has no binders, surface coatings, or sealants that include organic chemicals. No carpet may be installed within 3 feet of building entryways that are accessible from the ground, or in wet locations such as laundry rooms, bathrooms, kitchens/ kitchenettes, or utility rooms. Exception: • Outdoor-grade carpet tile may be installed within 3 feet of building entryways, but not in other "wet" locations.. No carpet may be installed on slab-on-grade floors. (*see exemption for New Construction Only*) Fluid applied finish floors may only be installed in non-occupied spaces, such as mechanical rooms or garages.
Insulation	Cavity insulation, including spray foam (framed floors, walls, attics, etc.) must have been tested and found compliant with the California Department of Public Health Standard (CDPH) Method V1.1 (2010), using CA Section 01350, for school or residential exposure scenarios. (Compliance with v1.2 (2017) is also acceptable). Certification by UL GreenGuard Gold, or SCS Indoor Advantage Gold are evidence of compliance; credible laboratory test reports are also acceptable. If two-part spray polyurethane foam insulation is to be used, both of the following apply: 1. HFC blowing agents must not be used** 2. your Construction Management Plan (see Criterion **1.01c**) must cover all appropriate OSHA approved safety and health measures related to installation – including respirators, PPE, and work area controls.
Composite Wood	Formaldehyde emissions less than or equal to the thresholds provided by CARB Phase 2 and/or TSCA Title IV for plywood, particleboard, MDF, and these materials within other products like cabinets and doors. Exception: The following exterior-grade products are exempt from this requirement: • Wood structural panels manufactured according to PS 1-09 or PS 2-10 (or one of the standards considered by CARB to be equivalent to PS 1 or PS 2) and labeled bond classification Exposure 1 or Exterior • Structural wood products manufactured according to ASTM D 5456 (for structural composite lumber), ANSI A190.1 (for glued laminated timber), ASTM D 5055 (for I-joists), ANSI PRG 320 (for cross-laminated timber), or PS 20-15 (for finger-jointed lumber).

*wet applied within, and not a part of, the weather resistive barrier ("WRB")
**HFC blowing agents are prohibited in WA as of January 1, 2021 by Chapter 70A.45.080 RCW

E. Additional Work Material Limitations

To obtain points needed to fulfill ESDS requirements, this project also involves the following additional limitations on materials.

- Flooring. No carpet will be used in the renovation.
- Insulation. No two-part foam will be used in the renovation.
- Interior adhesives and sealants. The renovation will use sealants that do not contain orthophthalate plasticizers.

Follow these limitations when doing the work. And, if working on flooring, using insulation, or using an interior adhesive or sealant, keep the cut sheet, label, or other evidence of what materials was used and deliver it to Doug Carey or Eric Eisenberg for inclusion in the project binder. By showing what material was used, we can demonstrate that we did not use one of the things prohibited above.

F. Initial Demolition & Asbestos-containing Flooring Abatement

Refer to the Existing Floor Plan and Floor Plan for a sense of how the current building layout will be changed into the new floor plan. This entails the demolition of some internal walls and the removal of flooring.

Note: In a pre-demolition survey for asbestos, asbestos was found in black mastic adhesive under the floor tile in half of the building.

Therefore, the initial demolition will be just of the internal entryway and central internal partition walls. The walls were built after 1997 and therefore do not have lead paint. They can be safely removed without disturbing the carpet and tile. Then, the carpet, tile, and mastic adhesive will be removed by a certified asbestos abatement contractor.

No additional ESDS standards bear upon this initial demolition and flooring abatement. [Lewis County did not opt for certain waste management options that might have affected the demolition.]

G. Further Demolition Dependent on Lead Survey

After the initial demolition and flooring abatement, a survey for lead paint will be conducted. Portions of the building containing lead paint will have to be addressed by an appropriately certified remediation or repair contractor, through both ESDS standards and state law.

Assuming no lead or after remediation of such lead paint, complete the demolition of the structures noted on the Existing Floor Plan with a red strikethrough.

Other than the limitations on materials shown above in sections D and E, no additional ESDS standards attend the demolition. [Lewis County did not opt for certain waste management options that might have affected the demolition.]

H. Renovation per Floor Plan, with Enumerated ESDS Measures

Use the Floor Plan to make the renovations necessary for the interim shelter, as refined by the ESDS compliance notes below for specific aspects of those renovations.

- *All work:*
  - Follow the limitations on materials shown in sections D and E, above.
  - When using a product or material in one of the categories mentioned in D and E, above, document the product or material used via the label, cut sheet, or other paperwork and submit it to Doug Carey or Eric Eisenberg for inclusion in the Project Binder.

- *Safety film on south windows on west face:*
  - Safety film is to be installed on multiple windows (note 17 in the Floor Plan). The film on the southern windows on the west face needs to be clear enough to afford residents a view of the landscaped area and significant tree outside of those windows. Film on the other windows may be frosted.

- *Front door replacement:*
  - The metal doors each must have a minimum R-6 insulated core.
  - Document that the door meets this requirement from purchase orders, cut sheets, or other paperwork and send it to Eric Eisenberg or Doug Carey.

- *Shower installation / alterations to northeast bathroom:*
  - Reminder: follow the limitations on sealants, caulks, insulation, and other materials in sections D and E, above.
  - Any surface materials installed in the bathroom must be durable and cleanable throughout, and not prone to deterioration from moisture or mold growth. Do not use any vinyl wallpaper or unsealed grout.
  - <u>If the shower is one piece fiberglass/plastic</u>, for all walls and ceiling facing the shower, use
    - Non-paper faced backer board;
    - Paper-faced gypsum backer board that meets mold-resistant requirements per ASTM #D3273 with a score of at least 10; or
    - Plywood with an appropriate D3273 complaint coating.
  - <u>If the shower is tiled/grouted or multi-piece</u>, use moisture-resistant backing materials such as cement board, fiberglass faced gypsum board or equivalent behind tiled/grouted or multi-piece shower and tub enclosures.
  - The showerhead installed must be low-flow of under 1.5 gpm. Ensure that the showerhead complies with this gpm limitation through bag or bucket testing in a timed flow-volume test.

- As part of the plumbing work, conduct pressure-loss tests and visual inspections for leaks around the fixture and at any visible water supply connection, and fix any leaks found.
- Insulate the hot water distribution pipe to R-3.6, unless it is exposed, in which case insulate it to R403.5.3 or C403.10.3.
- Document any work addressed in this section using photographs and notes of work done, and supply any manufacturer's materials, cut sheets, or other documentation to Doug Carey or Eric Eisenberg.

- *Washer and dryer installation:*
  - Reminder: follow the limitations on sealants, caulks, insulation, and other materials in sections D and E, above.
  - As part of the plumbing work for the washers, conduct pressure-loss tests and visual inspections for leaks around the appliances and at any visible water supply connection, and fix any leaks found.
  - Insulate the hot water distribution pipe to R-3.6, unless it is exposed, in which case insulate it to R403.5.3 or C403.10.3.
  - The dryers must be exhausted directly to the outdoors using rigid-type ductwork (from the connection point to the exterior exhaust). The ventilation duct must be insulated to code if exposed.
  - For the portion of floor altered for the installation, insulate the area at R-30. Or, if there is R-12 or R-19 insulation already present, it is permissible to fill the cavity in that area with R-12 or R-19, respectively.
  - Document any work addressed in this section using photographs and notes of work done, and supply any manufacturer's materials, cut sheets, or other documentation to Doug Carey or Eric Eisenberg.
- *New ingress/egress on east wall:*
  - The metal door must have a minimum R-6 insulated core.
  - <u>If the small, new external wall is closed-cavity</u>, insulate the wall with Dense Pack by pneumatically installing insulation at high velocity to densities greater than 3.5 pounds per square foot. Use the insulation rating needed per the energy code; the ESDS do not specify the rating.
  - <u>If the small, new external wall is open-cavity</u>, insulate the wall by filling the cavity (i.e., filled, but not dense pack). Use the insulation rating needed per the energy code; the ESDS do not specify the rating.
  - Document any work addressed in this section using photographs and notes of work done, and supply any manufacturer's materials, cut sheets, or other documentation to Doug Carey or Eric Eisenberg.

I. Temporary Fence

Erect the temporary fence as roughly depicted in the Fenced outside Area plan. The location of the connection to the northwest corner of the building is flexible but must at least extend to the edge of the outside roofed area (former bank drive-through). This roofed area will be a designated smoking area. If any windows or window vents allow air into the building through that former drive-through area, seal such windows or window vents to prevent smoke from entering the building.

When erecting the fence or sealing such openings, follow the limitations on materials shown in sections D and E, above. If using a product or material in one of the categories mentioned in D and E, above, document the product or material used via the label, cut sheet, or other paperwork and submit it to Doug Carey or Eric Eisenberg for inclusion in the Project Binder.

J. Pest Management Improvements

- [Redacted – these are to be done as part of the permanent shelter.]

K. Frontage Improvements Per Specifications TBD

[Redacted – these are to be done as part of the permanent shelter.]

SECTION 02 1700

EXISTING BUILDING SYSTEMS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Location, identification and protection of existing site utilities and existing building structural, mechanical, and electrical systems.

B. Compliance with ESDS requirements.

1.03 SCOPE OF WORK

A. Maintain and protect existing building systems that are scheduled to remain and be reused from damage or service disruption during construction.

1. Locate, identify and inspect existing building systems prior to start of construction work.

2. Provide a list of any deficiencies or missing components in existing building systems to Owner prior to start of any construction work.

3. Clearly mark the identity of active and operational existing building systems that must be maintained operational and protected from damage prior to start of construction.

4. Review location and layout of active and operational existing building systems that must be maintained operational and protected from damage with workers on the project prior to starting any demolition or construction work.

5. Install and maintain temporary protection measures as required to protect existing building systems from damage and keep operational.

6. Coordinate and assign protection and demolition responsibilities for existing building system between the various trades and subcontractors employed on the project.

7. Repair or replace any damaged existing building system resulting from the work of this project.

8. Provide daily on-site proactive management oversight and control over construction workers and their means and methods as required to protect and maintain the existing building systems in operational condition during this project.

1.04 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. Deficiencies List: Submit a list of any existing damaged, dirty, missing or non-operable existing building system components to Owner prior to start of work.

1.05 GENERAL

A. Identify and protect the following existing building systems:

1. Existing Site Utilities.

2. Existing Landscape Irrigation System.

3. Existing Building Structural System.

4. Existing Fire Protection Sprinkler System.

5. Existing Plumbing System.

6. Existing HVAC System.

7. Existing Mechanical Controls System.

8. Existing Electrical Power System.

9. Existing Lighting System.

10. Existing Fire Alarm System.

11. Existing Phone / Data System.

12. Existing Security, Camera and Intrusion Alarm Systems.

B. Protection: Protect existing systems from removal or damage and from contamination with dirt, dust or other contaminates due to construction related activities.

C. Existing building systems shall be in fully functional condition at Substantial Completion, equal to or better than their condition prior to start of construction.

1.06 EXISTING BUILDING SYSTEMS - GENERAL

A. Existing building systems shall remain in operation during construction of this project, except for specific short duration shut downs required to complete the work of this project subject to the following:

1. System Shutdown Notification: Shutdowns that require any existing system to be shut down overnight and for more than one work day/shift requires Contractor to provide 72 hour advance written notice to Owner requesting permission; written notice shall outline the following.

   a. Work Plan: Prepare written work plan outlining the preparation, protection, cleaning and restoration of the work areas and procedures for restarting the system.

      1) What existing system(s) will need to be shut down and restarted and the duration of the shutdown.

      2) Include the scope of work and each Owner occupied room / area where work is required.

      3) Include the proposed day and times when the work will be accomplished.

   b. Owner Approval: Do not proceed with shutdown until Owner provides written approval of Contractor shutdown request and work plan; comply with any special requirements noted by Owner for working on the requested existing system or in the Owner occupied room / area.

B. Refer to specific requirements for each existing building system specified herein and as noted on the Drawings.

C. Contractor shall confirm the location and layout of each building system before making any connections or doing any work that could affect any existing system.

D. If unknown systems, components or equipment are encountered in the course of construction, protect them from damage and notify the Owner immediately. Do not remove or disable any unknown existing system, component or equipment without the approval of the Owner.

E. In the event any existing building system that is to remain is damaged or removed during construction, repair or replace the building system using materials and components equal in function, quality and performance to the damaged item to the Owner's satisfaction.

1.07 EXISTING SITE UTILITIES

A. Existing site utilities will remain active and in operation during construction of this project except for specific short duration shut downs required to accommodate the work of this project and coordinated/approved in advance with the Owner and utility service providers.

B. Prior to start of work, review the location and layout of the existing site utilities; refer to Section 02 1725 Site Utilities for additional requirements.

C. Inspect existing site utilities when exposed to view during construction and report any damage in writing to Owner.

D. Mark any existing site utilities components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

E. Protect existing site utilities from damage during construction and from contamination with construction generated dirt, dust or liquids.

F. Replace any site utilities component that is missing, damaged or does not function properly as a result of the work of this project (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new component matching existing and compatible with existing site utility.

1.08 EXISTING LANDSCAPE IRRIGATION SYSTEM

A. Existing irrigation system will remain in operation during construction of this project except for specific short duration shut downs required to accommodate the work of this project and coordinated/approved in advance with the Owner.

B. Any extended shut downs or damage to the existing irrigation system due to construction work resulting in dead plants or grass areas scheduled to remain are the Contractor's responsibility to replace in kind.

C. Prior to start of work, review the location and layout of the irrigation system.

D. Coordinate a full operational review of each zone of existing irrigation system on site with the Owner's grounds-keeping staff prior to start of any site work.

E. Report any damaged or missing components to Owner in writing; this will be used to document pre-existing damage and problems in the existing irrigation system at the completion of the project in the event there is any dispute regarding correction responsibility on existing irrigation system deficiencies.

F. Mark any irrigation system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

G. Protect existing irrigation system from damage during construction.

H. Replace any existing irrigation system component that is missing, damaged or does not function properly as a result of the work of this project (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new component matching existing and compatible with existing irrigation system.

1.09 EXISTING STRUCTURAL SYSTEM

A. Prior to start of work, review the layout and component parts of the existing building structure and identify the building gravity and lateral load paths from the roof down to the foundation in areas where work is to be completed and where new work may conflict with the existing building structure.

1. Inspect existing structural system and report any damage in writing to Owner.

B. Mark any building structural components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

C. Where new work requires cutting, drilling or notching existing building structural elements and no detail or note is included on the Drawings indicating acceptable criteria, confirm requirements with Owner prior to starting this work.

D. Provide bracing, shoring and temporary support as required to prevent movement of any part of the existing building structure due to demolition or construction work.

1.10 EXISTING FIRE PROTECTION SPRINKLER SYSTEM

A. Existing fire protection sprinkler system shall remain in operation during construction of this project except for specific short duration shut downs required to accommodate the work of this project and coordinated/approved in advance with the Owner, local Fire Marshal and fire alarm monitoring company.

1. Provide continuous fire watch on entire building for the duration of any shut down of the existing fire protection sprinkler system.

B. Prior to start of work, review the location and layout of the existing fire protection sprinkler system.

1. Inspect fire protection sprinkler system at beginning of project and report any damage in writing to Owner.

C. Mark any fire protection sprinkler system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

D. Protect existing fire protection sprinkler system from damage during construction.

E. At completion of project, replace any component in existing system that is missing, damaged or does not function properly as a result of the work of this project (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new component matching existing and compatible with existing fire protection sprinkler system.

1.11 EXISTING PLUMBING SYSTEM

A. Prior to start of work, review the location and layout of the existing plumbing system.

1. Inspect plumbing system and report any inoperable, dirty, damaged or missing components in writing to Owner.

B. Mark any plumbing system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

C. No construction generated dirt, chemicals or contaminants shall be allowed to enter the existing plumbing system. Keep ends of water and waste piping capped during construction.

D. Protect plumbing system components from damage and displacement during construction; provide bracing and temporary support as required to accommodate construction work and maintain the integrity of the plumbing system.

E. Replace any component in existing plumbing system that was damaged or missing due to the work of this project with new component matching existing and compatible with existing plumbing system.

1.12 EXISTING HVAC SYSTEM

A. Prior to start of work, review the existing HVAC system.

1. Inspect HVAC ductwork and equipment scheduled to be retained and reused and report any inoperable, dirty, damaged or missing components in writing to Owner.

B. No construction generated dust, dirt or contaminants shall be allowed to enter the existing HVAC system (grilles, ductwork and equipment. Existing HVAC system supply, return, and exhaust openings in work areas shall be completely sealed shut with 6 mil reinforced visqueen with continuous tape around perimeter. Visqueen and tape shall be replaced immediately if damaged.

C. If, for any reason, construction dirt enters the HVAC ductwork or equipment, engage a professional HVAC duct / equipment cleaning service, acceptable to the Owner, to thoroughly clean out the existing HVAC ductwork and equipment to the satisfaction of the Owner.

D. Protect the HVAC system from damage during construction.

E. Replace any component in existing HVAC system that is missing, damaged or does not function properly as a result of the work of this project (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new component matching existing and compatible with existing HVAC system.

1.13 EXISTING MECHANICAL CONTROLS SYSTEM

A. Prior to start of work, review the location and layout of the existing mechanical controls system.

1. Inspect mechanical controls devices at beginning of project and report any inoperable, dirty, damaged or missing devices in writing to Owner.

B. Mark any mechanical control system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

C. Provide temporary covers to protect existing temperature sensing or thermostat devices from damage during construction and from contamination with construction generated dirt, dust or liquids.

D. Replace any device that is damaged, missing or does not function properly as a result of the work of this project (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new device matching existing and compatible with existing HVAC controls system.

1.14 EXISTING ELECTRICAL POWER SYSTEMS

A. Prior to start of work, review the location and layout of the existing electrical power system.

1. Inspect electrical power system at beginning of project and report any inoperable, dirty or damaged panels, devices or components in writing to Owner.

B. Mark any electrical power system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

C. Protect the electrical power system from damage during construction.

D. Replace any component in existing electrical power system that was damaged or missing due to the work of this project with new component matching existing and compatible with existing electrical power system.

1.15 EXISTING LIGHTING SYSTEMS

A. Prior to start of work, review the location and layout of the existing lighting system.

1. Inspect lighting system at beginning of project and report any inoperable, dirty, damaged or missing devices or fixtures in writing to Owner.

B. Mark any lighting system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

C. Protect the lighting system from damage during construction.

D. Replace any component in existing lighting system that was damaged or missing due to the work of this project with new component matching existing and compatible with existing lighting system.

1.16 EXISTING FIRE ALARM SYSTEM

A. Existing fire alarm system will remain in operation during construction of this project except for specific short duration shut downs required to accommodate the work of this project and coordinated/approved in advance with the Owner, local Fire Marshal and fire alarm monitoring company.

1. Provide continuous fire watch on entire building for the duration of any shut down of the existing fire alarm system.

B. Prior to start of work, review the location and layout of the existing fire alarm system.

1. Inspect fire alarm system and specifically existing smoke / heat detection devices at beginning of project and report any inoperable, dirty, damaged or missing devices in writing to Owner.

C. Prior to start of any work on site, contact local Fire Marshal and fire alarm monitoring company and review their procedures / requirements for dealing with fire alarm activation for both actual fire and false alarm conditions during construction work.

1. Review requirements for protection of existing fire alarm system smoke / heat detection devices from construction dust and smoke with local Fire Marshal and comply with his / her requirements. If permitted, provide protective covers for any fire alarm system smoke / heat detection devices located in work areas at beginning of each work shift and remove after work space has been cleaned at end of work shift.

D. Mark any fire alarm system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

E. Protect the fire alarm system from physical damage and contamination with construction generated dust or liquids during construction.

F. At end of project after final cleaning, test and inspect interior of existing smoke / heat detection devices:

1. Test each device for proper operation.

2. Replace any dirty filters.

3. Clean interior of any device that is dirty as a result of construction work.

4. Replace any device that does not function properly (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new device matching existing and compatible with existing fire alarm system.

G. After test and inspection, conduct walk-through inspection and test on detection devices located in work areas with the local Fire Marshal:

1. Test each existing device located in work areas for proper device operation using canned smoke and heat gun as appropriate for type of detection device.

2. Obtain Fire Marshal approval of fire alarm system operation.

H. Replace any existing fire alarm system device damaged or missing due to the work of this project with new device matching existing and compatible with existing fire alarm system.

1.17 EXISTING PHONE / DATA SYSTEM

A. Prior to start of work, review the location and layout of the existing phone / data system.

1. Inspect phone / data system at beginning of project and report any inoperable, dirty, damaged or missing components in writing to Owner.

B. Mark any phone / data system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

C. Protect the phone / data system from damage during construction.

D. Replace any component that is damaged, missing or does not function properly as a result of the work of this project at completion of construction work (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new matching component and compatible with existing phone / data system.

1.18 EXISTING SECURITY, CAMERA, AND INTRUSION ALARM SYSTEMS

A. Prior to start of work, review the location and layout of the existing security, camera, and intrusion alarm system.

1. Inspect security, camera, and intrusion alarm system at beginning of project and report any damaged, missing or inoperable components in writing to Owner.

B. Mark any security, camera, and intrusion alarm system components that may be affected by or located in the path of the work of this project and provide direction to workers and subcontractors on the location and protection requirements.

C. Provide temporary enclosures to protect existing security, camera, and intrusion alarm components from damage during construction and from contamination with construction generated dirt, dust or liquids.

D. Protect the intrusion alarm system from damage during construction.

E. Replace any component that is damaged, missing or does not function properly as a result of the work of this project (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new matching component and compatible with existing intrusion alarm system.

1.19 SYSTEM CHECKOUT AT COMPLETION

A. Review condition and operation of each existing building system prior to Substantial Completion.

B. Repair or replace any existing system component that is damaged, missing or does not function properly as a result of the work of this project at completion of construction work (and is not included on the list of pre-existing deficiencies given to Owner at start of Project) with new matching component and compatible with existing systems.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 02 1725

EXISTING SITE UTILITIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Shutdown requirements for existing site utilities.

B. Location, identification and protection of existing public and private site utilities.

C. Compliance with ESDS requirements.

1.03 ASSIGNMENT OF UTILITY LOCATE RESPONSIBILITY

A. The Owner will not provide any utility location service for existing utilities and assigns this responsibility to the Contractor.

1.04 GENERAL

A. The Contractor shall, as part of the work of this contract, locate, identify and protect the existing site utilities wherever demolition and earthwork is performed for this project.

B. The Owner will provide whatever assistance, records and drawings that they have to the Contractor in locating and identifying existing utilities but assumes no responsibility for determining existing utility locations.

C. Several underground utilities on this site are owned by the Owner and therefore will not be located by the public utility location service and require a private utility location service to assist in determining their location.

1.05 SHUTDOWN OF EXISTING UTILITIES

A. Continuity and function of existing utility services shall be maintained at all times. Utility shutdowns required to facilitate construction work shall be accomplished in accordance with the following requirements.

1. Utility shutdowns shall be scheduled during times dictated by the Utility Owner. Shutdowns shall be limited to 4 hour duration and utility service shall be restored by end of work day and not left shut down overnight or over a weekend/holiday.

2. Schedule shutdown of utilities with the Owner at least fifteen (15) days in advance of shutdown. Owner approval of shutdown, day and time in advance is required.

3. Confirm requests for utility shutdowns in writing with the Owner.

4. Materials and equipment required for the work to be accomplished during shutdown shall be complete and available on the job for review by Owner on the day prior to the shutdown, if requested. If Contractor is not adequately prepared, the shutdown will be canceled and rescheduled.

5. When requested by Owner, the Owner's personnel will take the responsibility for shutting down and restarting equipment and utilities.

1.06 SAFETY CONSIDERATIONS

A. The Contractor is solely responsible for developing a safety plan to protect workers and the public from injury or harm conforming to all Local, State and Federal requirements and for executing and enforcing it on the Project site.

1. Contractor shall consult with their own Geotechnical Engineering expert for determining soil classification relative to safe sloping of soils.

2. Contractor shall determine safe excavation and dewatering methods, monitor excavations and earthwork operations for safety concerns and provide shoring and other protection as required to protect workers.

3. It is not the intent of the Construction Documents to dictate any unsafe construction means or methods; Contractor shall determine means and methods for achieving the work of this section conforming to their safety plan as required to locate and protect existing utilities.

PART 2 - PRODUCTS

2.01 EXCAVATION EQUIPMENT FOR POT HOLING

A. Excavation Equipment: Contractor shall select the most appropriate equipment for pot holing excavation as required to protect existing utilities from damage, including the following:

1. Hand-Digging Equipment: Hand shovels, picks and steel bars as appropriate for conditions.

2. Machine Excavation: Backhoes and other power machine excavation equipment are not suitable for pot holing active utilities that must be protected from damage and maintained operational:

a. Caution: Do not pot hole for active gas, pressurized lines or electrical lines with a backhoe or other power machinery.

3. Hydro Excavation Equipment: High capacity, truck-mounted unit having the following equipment and capabilities:

a. High capacity, high pressure water pump and jetting equipment, including hoses, probes and heads required for high speed hydro excavation in the soil types and conditions found on project site.

b. High capacity bulk debris wet vacuum and collection tank capable of sucking the soil and water muck away from the existing underground utility without damage to the utility.

c. Operator personnel experienced in the safe and proper operation of the equipment.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

3.02 EXISTING UTILITIES – LOCATION, IDENTIFICATION AND PROTECTION

A. This site contains both public and private existing utilities:

1. Public Utilities: Utilities owned and operated by utility companies who have either a franchise or contract to provide service to a given area.

2. Private Utilities: Utilities owned and operated by the project Owner.

B. The street right of way fronting this site contains utilities owned and operated by utility companies who have either a franchise or contract to provide service to this area.

C. Utilities of record are shown on the Drawings insofar as possible to do so based on records available at the time of design.

1. The exact location, configuration and size of existing utilities can differ from the Drawings and will require that the Contractor provide careful site investigation and working with an experienced utility location service to determine their exact locations and what areas / building they serve.

2. The Owner and Architect / Engineer assume no responsibility for improper locations or failure to show existing utility locations on the Drawings.

3. The Contractor is responsible for determining the location of all existing utilities prior to commencing work.

4. Utility location requires careful study of the site along with pot holing.

D. **Prior to excavation / construction work** the Contractor shall:

1. Public Utilities: Call underground utility locate service and request utility locations be marked in all areas to be excavated at least 48 hours prior to starting excavation work. After utilities have been located and marked, carefully expose the utility by pot holing wherever the work of this contract will uncover or cross an existing utility.

   a. Contractor shall determine, with the help of the underground utility locate service, what building or area each utility serves.

   b. Locate, pothole, expose and take measures to protect any existing utilities that cross through or could potentially be exposed by the excavation or trenching work of this project.

2. Private Utilities: Locate existing utilities using the method appropriate for the type of utility, including, but not limited to, any of the various types of electronic locators, flow testing, smoke bombs, dye, witching, and pot holing (excavation) methods.

   a. Use of a private underground utility location service with electronic locating equipment is acceptable provided Contractor confirms the electronic locations by carefully exposing the utility by excavation wherever the work of this contract will uncover or cross an existing utility.

   b. Work with Owner to locate, identify and protect existing private utilities whether shown on the Drawings or not.

   c. Contractor shall determine what building or area each utility serves.

   d. Locate, pothole, expose and take measures to protect any existing utilities that cross through or could potentially be exposed by the excavation or trenching work of this project.

   e. If existing utilities are found that are not shown on the Drawings, determine whether they are active or abandoned. If active, determine what areas / buildings they serve and mark their location in the areas affected by the work of this project.

3. Locate and mark all shutoff valves, vaults, catch basins and other control structures / devices which are a part of the underground utilities within the work area or that control utilities within the work area.

4. Confirm exact location, depth and grade of existing underground utilities by uncovering short sections of each utility wherever the work of this contract will uncover or cross an existing utility.

5. Inform Owner of schedule for work as it will directly affect each utility, building or area of the site for utilities that will be shut down and for utilities that will remain in operation during earthwork operations.

6. Make arrangements to have materials and fittings and equipment required to make immediate repair to any utility that is inadvertently damaged during earthwork operations.

7. Provide temporary cover over, or barrier fence around, any excavations left open to prevent any unsafe or hazardous condition for workers or the public.

E. **During excavation / construction work** the Contractor shall:

1. Make provisions for the immediate containment, collection, pumping and shut off (as appropriate) for all utility lines known or suspected to be in the area to prevent damage to the site or wildlife and to adjacent properties, streams or bodies of water.

2. Provide a shut-off key on each valve on pressurized lines that are located within the excavation work area to allow immediate shut off of any pressurized utility line accidentally damaged during excavation. Remove the shut-off key at end of each work day to prevent unauthorized use. Test the existing valve for proper operation (with utility provider present if required) prior to starting excavation work.

3. Protect and maintain all utilities in operational condition during construction; provide temporary pumps, supports, shoring, etc. required to maintain utility operational during the construction work until the utility can be rerouted and / or abandoned.

4. If existing utilities are uncovered that are not shown on the Drawings, advise the Owner immediately and protect utility from damage; determine whether utility is active or abandoned.

F. At Contractor's expense, repair any utilities damaged by construction operations immediately using materials and methods of the type approved or recommended for the specific use required and equal to or exceeding the existing materials / condition.

G. Pot Hole Excavation Backfill: Fill and compact any pothole excavations with structural fill in accordance with requirements in Section 31 2000.

3.03 EXISTING UTILITIES – AS-BUILT DRAWINGS

A. As-Built Drawings: Record each existing utility on the project as-built drawings and indicate the following:

1. Utility type (water, sewer, phone, gas, etc.).

2. Utility size and material (6" PVC, 12" concrete, etc.).

3. Utility location / layout dimensioned from permanent above grade structures.

4. Utility depth below finish grade (top of utility). Indicate the invert elevation on sewer and storm drainage lines at existing manholes, catchbasins or cleanouts.

5. Whether the utility is active or abandoned.

3.04 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 02 4113

SELECTIVE SITE DEMOLITION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Selective Demolition and Removal of Existing Site Work Items.

B. Backfilling Excavations Resulting From Demolition Work.

C. Compliance with ESDS requirements.

1.03 REGULATORY REQUIREMENTS

A. Conform to applicable code requirements for demolition of existing site work, safety of adjacent structures, dust control.

B. Obtain required permits from authorities having jurisdiction.

C. Notify affected utility companies before starting work and comply with their requirements.

D. Do not close or obstruct roadways without permits.

E. Conform to applicable regulatory procedures when hazardous or contaminated materials are discovered.

1.04 PROJECT CONDITIONS

A. Conduct selective demolition as required to complete the work of this project.

B. Provide, erect, and maintain all temporary barriers and security devices.

C. Do not close or obstruct site traffic.

D. Verify and identify locations of all existing utilities and building systems; remove and terminate as shown on the Drawings.

1.05 SAFETY CONSIDERATIONS

A. The Contractor is solely responsible for developing a site specific safety plan to protect workers and the public from injury or harm conforming to Local, State and Federal regulations and for executing, monitoring and enforcing it on the Project site.

1. Determine safe excavation and dewatering methods, monitor excavations and earthwork operations for safety concerns and provide shoring and other protection as required to protect workers.

2. Determine the means, methods and equipment required to accomplish required demolition work in accordance with the safety plan. It is not the intent of the Construction Documents to dictate any unsafe construction means or methods.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate with Section 02 1725 for marking and locating existing site utilities.

3.02 PREPARATION

A. Inspect site with Owner's Representative and verify extent and location of items designated for removal, disposal, recycling, salvage, and items to remain.

B. Provide, erect, and maintain temporary barriers and security devices.

C. Protect existing appurtenances, structures, site improvements and landscaping that are not scheduled to be demolished.

D. Mark location of utilities, coordinate with Section 02 1725, excavate and remove, cap and / or modify existing utilities to be abandoned as shown on the Drawings.

3.03 DEMOLITION REQUIREMENTS

A. Conduct operations with minimum interference to public or private accesses. Maintain protected egress and access into fenced work area at all times.

B. Sprinkle demolition areas with water to minimize dust. Provide hoses and water connections for this purpose.

3.04 SELECTIVE SITE DEMOLITION

A. Demolish and remove items as indicated on the Drawings.

B. Transport removed materials off site and dispose of in a legal manner at a waste disposal or recycling site.

C. Do not disturb items that are designated to remain in place.

D. Removal of Pavements, Sidewalks, and Curbs:

1. Square up adjacent surfaces to remain in place by saw cutting or other method approved by Owner's Representative.

2. Protect adjacent joints and load transfer devices.

3. Protect underlying and adjacent granular material.

E. Backfill:

1. Coordinate backfilling areas excavated, open pits, and holes caused as a result of selective demolition as to avoid any unsafe conditions.

a. Refer to specification Section 31 2000 for backfill of excavated areas, open pits and holes caused by selective demolition.

F. Restoration:

1. Restore areas and existing works outside areas of demolition to match conditions of adjacent, undisturbed areas.

3.05 CLEAN UP

A. Upon completion of work, remove debris, trim surfaces and leave work site clean.

B. Use cleaning solutions and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.

3.06 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 02 4119

SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Selective Demolition as required for Remodeling / Renovations.

B. Compliance with ESDS requirements.

1.03 SCOPE OF SELECTIVE DEMOLITION WORK

A. Visit the site prior to bid and examine the existing conditions as to materials, character and extent of work involved.

B. Provide selective demolition work as follows:

1. As required to admit, accommodate and complete the work of this project shown on the Contract Documents;

2. As shown on the Drawings;

3. As specified herein;

4. Note: Demolition and removal work not specifically shown on the Drawings but that is required to complete the new Work shown is Contract Work included in the Base Bid and will not be considered as additional work.

C. Carefully remove finishes required to admit and allow new Work; coordinate cut lines and removal techniques with installer doing the finish material patching and repair work so as to minimize patching and repair work.

D. Protect existing building structure and finishes not scheduled for removal from damage during selective demolition.

E. Protect existing mechanical and electrical systems from damage or contamination with demolition dirt / dust or water during selective demolition.

1.04 REGULATORY REQUIREMENTS

A. Conform to applicable codes for demolition work, dust control, products requiring mechanical and electrical disconnection and re-connection.

B. Obtain required permits from authorities having jurisdiction.

C. Do not close or obstruct egress from any building exit or site exit.

D. Conform to applicable codes and ordinances for disposal of construction / demolition debris.

E. Conform to procedures and requirements of authorities having jurisdiction when hazardous or contaminated materials are discovered. Notify the Owner immediately.

1.05 PROJECT CONDITIONS / EXISTING BUILDING SYSTEMS

A. Conduct demolition in a careful manner so as to prevent any damage to existing building finishes, structure, equipment or systems schedule to remain and be reused.

B. Cease operations immediately if structure appears to be in danger and notify Owner. Do not resume operations until directed.

C. Provide, erect and maintain temporary barriers and security devices as necessary to protect the public.

D. Locate and identify layout and path of existing utilities and building systems prior to starting any demolition work.

1. Protect existing utilities and building systems scheduled to remain from damage or removal during demolition work. Refer the Section 02 1700.

1.06 HAZARDOUS MATERIALS

A. The Owner has completed a good faith hazardous materials survey of the building; refer to Owner's Hazardous Materials Good Faith Letter included in Section 00 3100 for summary of findings.

PART 2 - PRODUCTS

2.01 DEMOLITION EQUIPMENT

A. Provide demolition equipment as required to remove existing items from building without damaging existing building elements schedule to remain and be reused.

B. Provide dumpsters or trucks to receive debris.

1. Do not throw debris onto the ground; take measures required to prevent debris from accidentally falling out of truck / dumpster.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate demolition work with other trades to accommodate or admit the work of this Project.

3.02 PREPARATION

A. Existing Building Systems: Refer to Section 02 1700 for requirements related to existing building systems. Coordinate identification, marking and protection of existing building systems with other trades prior to starting any demolition work.

1. Fire Sprinkler System: Existing fire sprinkler system will remain pressurized and operational during this project. Protect existing fire sprinkler system from damage during demolition work.

   a. Identify, mark and protect existing fire sprinkler system prior to starting demolition work.

   b. Mark and protect system from damage or removal. Repair any part of the system damaged by the work of this project immediately at no additional cost to the Owner; repairs shall be made by journeyman workmen skilled in the specific work / system requiring repair.

2. Mechanical / Plumbing Work / Systems: Existing mechanical / plumbing work / systems that are shown to remain shall be protected from damage or removal during demolition work. Mechanical and plumbing systems serving occupied area of building shall remain operational during this project.

   a. Identify, mark and protect existing Mechanical / Plumbing work / systems prior to starting demolition work.

   b. Repair any existing work / system damaged by the work of this project immediately at no additional cost to the Owner; repairs shall be made by journeyman workmen skilled in the specific work / system requiring repair.

3. Electrical Work / Systems: Existing electrical work / systems that are shown to remain shall be protected from damage or removal during demolition work. Electrical systems serving occupied area of building shall remain operational during this project.

a. Identify, mark and protect existing electrical work / systems prior to starting demolition work.

b. Repair any existing work / system damaged by the work of this project immediately at no additional cost to the Owner; repairs shall be made by journeyman workmen skilled in the specific work / system requiring repair.

4. Low Voltage Electrical, Fire Alarm, and Phone / Data Systems: Existing low voltage electrical, fire alarm, and phone / data systems that are shown to remain shall be protected from damage or removal during demolition work. Low Voltage Electrical, Fire Alarm, and Phone / Data Systems serving occupied area of building shall remain operational during this project.

a. Identify, mark and protect existing low voltage electrical, fire alarm, and phone / data systems prior to starting demolition work.

b. Repair any existing work / system damaged by the work of this project immediately at no additional cost to the Owner; repairs shall be made by journeyman workmen skilled in the specific work / system requiring repair.

B. Inspect site and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, salvage and items to remain.

C. Provide bracing, shoring and temporary structures / supports required to prevent any movement of permanent partitions, structure or mechanical / electrical systems due to demolition or construction work.

D. Obtain approval from the Owner prior to demolition, saw-cutting or core drilling of any structural element or part of the existing building structure.

E. Lay out and coordinate the demolition work so that new work can be completed free from conflicts with work of other trades and existing conditions / systems not scheduled for removal. Do not proceed with demolition work until conflicts are resolved.

F. Provide appropriate temporary signage including signage for exit or building egress. Include warning signs to public at perimeter of construction limits to prohibit access to non-authorized personnel.

3.03 PROTECTION

A. Execute demolition work in an orderly and careful manner, with due consideration for any existing structures, including any parts of the surrounding areas which are to remain.

B. Protect adjacent construction to remain from dust and debris resulting from demolition activities.

C. Barricade, brace and cover as necessary to protect the public, workmen and occupants.

D. Wherever necessary for protection of persons or property, brace or shore walls, partitions, or structure as required.

E. Erect and maintain weatherproof, secure temporary closures for exterior openings.

F. Provide means to prevent dust/dirt from exiting work areas and entering adjacent area within the building that are scheduled to remain. Contain dust within each work area or room.

3.04 DEMOLITION

A. The general scope of demolition work includes, but is not limited to the following:

1. Selective demolition required to admit, accommodate and complete the work of this project shown on the Contract Documents.

B. Provide the tools and equipment best suited for the specific type of demolition, cutting, moving or removing required.

C. Plan and execute demolition work in a manner that results in the least negative impact to the surrounding work.

D. Cut, move or remove items as shown on Drawings to provide access for renovation Work and as necessary to admit, conceal or complete the work of this contract.

E. Demolished or removed items and materials are the property of the Contractor, except salvage items claimed by the Owner or shown on the Drawings and shall be removed from the site and disposed of legally. Do not burn or bury materials on site.

F. Remove materials as the work progresses. Upon completion of work, leave areas in clean condition.

G. Remove temporary work.

H. Cease operations and notify Owner immediately if existing demolition items and / or components appear to contain hazardous materials. Promptly notify Owner. Do not resume operations until corrective measures have been taken.

I. Cease operations and notify Owner immediately if existing structural system and / or components appear to be endangered. Do not resume operations until corrective measures have been taken.

J. Remove and promptly dispose of contaminated, vermin infested or dangerous materials encountered.

3.05 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 03 3000

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Cast-in-Place Concrete.

B. Reinforcing Steel.

C. Concrete Formwork, Shoring and Bracing.

D. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ACI CODE-318 - Building Code Requirements for Structural Concrete and Commentary.

C. ACI MNL-66 - ACI Detailing Manual.

D. ACI PRC-211.1 - Selecting Proportions for Normal-Density and High Density-Concrete - Guide.

E. ACI PRC-304 - Guide for Measuring, Mixing, Transporting, and Placing Concrete.

F. ACI PRC-305 - Guide to Hot Weather Concreting.

G. ACI PRC-306 - Guide to Cold Weather Concreting.

H. ACI PRC-308 - Guide to External Curing of Concrete.

I. ACI PRC-347 - Guide to Formwork for Concrete.

J. ACI SPEC-301 - Specifications for Concrete Construction.

K. ADA Standards - 2010 ADA Standards for Accessible Design.

L. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.

M. ASTM C33/C33M - Standard Specification for Concrete Aggregates.

N. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.

O. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete.

P. ASTM C150/C150M - Standard Specification for Portland Cement.

Q. ASTM C231/C231M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.

R. ASTM C989/C989M - Standard Specification for Slag Cement for Use in Concrete and Mortars.

S. CRSI (DA4) - Manual of Standard Practice.

T. IBC - International Building Code.

U. PS 1 - Structural Plywood.

1.04 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Product Data: For each type of manufactured material and product indicated.

D. Design Mixes: For each concrete mix, submit proposed mix designs a minimum of 15 days in advance of placing operations for each type of concrete. The submitted mix designs shall include the following:

1. Supporting test data for mixes that is not more than 12 months old. Include a sufficient number of tests and conduct a statistical analysis in compliance with ACI SPEC-301.

2. Gradation of fine and coarse aggregates not more than 90 days old showing compliance with ASTM C33/C33M.

3. Proportions of ingredients, including admixtures added either at the time of batching or at the job site. Aggregate weights shall be based upon saturated surface dry conditions.

4. Water / cement ratio.

5. Slump as measured according to ASTM C143/C143M. Provide slump test for each mix.

6. Air content of freshly mixed concrete as measured according to ASTM C231/C231M.

7. Strength measured at 7 and 28 days. Provide strength test for each mix at a frequency of both the 7th and 28th day.

8. Locations or intended use of each mix design.

9. Source of materials.

E. Steel Reinforcement Shop Drawings: Details of fabrication, bending, and placement prepared according to ACI MNL-66, "ACI Detailing Manual."

1. Include material, grade, bar schedules, stirrup spacing, bent bar diagrams, arrangement and supports of concrete reinforcement.

2. Include special reinforcement required for openings through concrete structures.

3. Provide placement details for specific reinforcing intersections and clearance conditions not shown by the typical details on the Structural Drawings.

4. Prepare drawings in sufficient detail to resolve reinforcing intersections.

1.05 QUALITY ASSURANCE

A. Perform form work in accordance with ACI PRC-347, ACI SPEC-301, and ACI CODE-318.

B. Perform concrete work in accordance with ACI 301 and ACI CODE-318.

C. Acquire cement from same source and aggregate from same source for entire project.

D. Follow recommendations of ACI PRC-305 when concreting during hot weather.

E. Follow recommendations of ACI PRC-306 when concreting during cold weather.

1.06 DESIGN RESPONSIBILITY – FORMWORK, BRACING AND SHORING

A. Contractor is responsible for designing and engineering the formwork along with the associated bracing and shoring to withstand forces imposed during construction.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 FORM MATERIALS

A. Form Materials (Except at Concrete Exposed to View): Provide per ACI PRC-347 at discretion of Contractor.

B. Form Material for Concrete Exposed to View: APA rated B-B High Density Overlay Concrete Form plywood, Class I, conforming to PS 1.

1. Plywood shall be new or used once with face free of defects and nail holes filled.

2. Thickness shall be adequate to prevent visible deflection of plywood from force of wet concrete and the resulting waviness of the finish wall surface.

2.03 FORMWORK ACCESSORIES

A. Form Ties: Cone type snap ties designed to break off below face of wall after formwork is stripped, galvanized metal, fixed length, free of defects that could leave holes larger than 1-inch in concrete surface.

1. Strength and spacing as required to resist fresh concrete placement and vibration loads.

B. Shoring and Bracing: Provide materials / system designed by Contractor to withstand imposed construction forces.

C. Form Release Agent: Colorless, non-staining, will not adversely affect surface coatings or waterproofing. Provide form release agent that does not contain diesel fuel, petroleum-based lubricating oils, waxes, or kerosene.

D. Corners: Filleted, rigid plastic type; 3/4-inch x 3/4-inch size; maximum possible lengths.

E. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

2.04 REINFORCEMENT

A. Reinforcing Steel: Steel reinforcing bars conforming to ASTM A615/A615M, Grade 60, or as noted on Structural Drawings.

B. Reinforcement Accessories:

1. Tie Wire: Annealed, minimum 16 gauge.

2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.

   a. Provide stainless steel or plastic components for placement within 1-1/2-inches of weathering surfaces.

2.05 REINFORCEMENT FABRICATION

A. Fabricate concrete reinforcing in accordance with CRSI (DA4) Manual of Standard Practice.

B. Locate reinforcing splices not indicated on Drawings at point of minimum stress.

C. No bending or straightening of reinforcing shall be permitted after partial embedment in concrete.

2.06 CONCRETE MATERIALS

A. Concrete Materials: Provide as follows:

1. Cement: Conform to ASTM C150/C150M.

2. Aggregates: Crushed aggregate meeting the requirements of ASTM C33/C33M as specified in Structural General Notes.

3. Water: Potable and complying with ASTM C94/C94M.

2.07 CONCRETE ADMIXTURES

A. Water-Reducing Super-Plasticizer Admixture – Conform to ASTM C494, Type F, provide water reducing, super-plasticizing admixture to concrete mix as required to maintain the water / cement ratio specified herein and improve workability and slump required for proper placement, consolidation and finishing.

2.08 CONCRETE MIX DESIGN

A. Proportioning Normal Weight Concrete: Provide concrete mix design conforming to the following. Comply with ACI PRC-211.1 recommendations.

1. Sacks Of Cement (Minimum): 6 sacks per cubic yard concrete.

2. Admixtures: Water-Reducing Super-Plasticizer Admixture.

3. Minimum Compressive Strength: 4,000 psi at 28 days.

4. Water / Cement Ratio: 0.45.

5. Slump (maximum): 4 inches.

2.09 CONCRETE MIXING

A. Transit Mixers: Comply with ASTM ASTM C94/C94M.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate and facilitate rough-in for mechanical and electrical items in concrete construction with Divisions 21 through 28.

3.02 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.03 FORMWORK – ERECTION

A. Erect formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI SPEC-301.

1. Construct formwork to maintain tolerances required by ACI SPEC-301 unless ADA Standards tolerances are most restrictive. If ADA Standards tolerances are more restrictive, ADA Standards tolerances shall govern.

B. Provide bracing to ensure the stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads to provide support and limit deflection of formwork to specified criteria.

C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping.

D. Obtain approval before framing openings in structural members that are not indicated on Drawings.

E. Coordinate this section with other sections of work that require attachment of components to formwork.

3.04 FORMWORK – FORM RELEASE AGENT

A. Apply form release agent on formwork in accordance with manufacturer's recommendations.

1. Protect reinforcing steel, inserts and bonding surfaces from application of any form release agent.

B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.

C. Do not apply form release agent where concrete surfaces will receive special finishes or applied coverings that are affected by form release agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

3.05 FORMWORK – CLEANING

A. Clean forms as erection proceeds, to remove foreign matter within forms.

B. Clean formed cavities of debris prior to placing concrete.

1. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.

2. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.06 REINFORCEMENT – PLACEMENT

A. Place, support and secure reinforcement against displacement. Do not deviate from required position.

B. Accommodate placement of formed openings.

C. Bend tie wire back behind the line of rebar on weathering surfaces.

D. Conform to applicable code for concrete cover over reinforcement.

3.07 CONCRETE – PREPARATION

A. Verify that forms are clean and free of rust before applying release agent.

3.08 CONCRETE – ADMIXTURES

A. Mix admixtures into concrete mix as recommended by admixture manufacturer.

3.09 CONCRETE – PLACEMENT

A. Place concrete in accordance with ACI PRC-304, vibrate concrete thoroughly to eliminate voids, air pockets and rock pockets.

B. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

C. Do not interrupt successive placement; do not permit cold joints to occur.

3.10 CONCRETE - FINISHING

A. Repair surface defects, including tie holes, immediately after removing formwork.

B. Concrete Finish Where Not Exposed To View: Rub down or chip off fins or other raised areas 1/8-inch or more in height.

3.11 CONCRETE – CURING AND PROTECTION

A. Cure concrete in accordance with ACI PRC-308 ; leave forms in place for as long as practicable after pouring concrete, but in no case less than 3 days.

B. Protect concrete from damage after forms are removed; do not damage surface of concrete during removal of forms.

3.12 WORKMANSHIP

A. Concrete shall be installed using the best workmanship, including the following:

1. Reinforcing steel set back from face of concrete required distance.

2. Surfaces exposed to view free of waviness or deflection from inadequate form construction.

3. No tie wire or reinforcement within 1-inch of any concrete surface.

4. Corners aligned plumb and straight with consistent appearance.

5. Proper consolidation of concrete, free of rock pockets or voids.

6. Edges and ends aligned straight, plumb and in a flat plane.

B. Any part of the concrete work installed with improper or poor workmanship shall be removed and replaced at Contractor's expense.

3.13 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

B. Owner will engage a qualified independent testing and inspection agency to perform field inspections, field quality-control sampling / testing and prepare test reports, in accordance with Section 01 4500 and the testing requirements noted on the Structural Drawings.

1. Contractor shall:

a. Submit proposed concrete mix design of each class of concrete to agency for review prior to commencement of concrete operations.

b. Coordinate and schedule inspection and testing of reinforcing steel and concrete work by the agency at the appropriate times and prior to cover.

c. Provide testing agency with access to the work to allow required inspections and testing.

d. Correct deficiencies or remove and replace any work that inspections and test reports indicate do not comply with specified requirements.

2. Tests taken are spot checks only at a given location and shall not be interpreted as representing the quality or integrity of the concrete work performed.

3. Test data and reviews shall not be construed as acceptance of the work by the testing agency nor shall it relieve the Contractor of his responsibility to replace non-conforming or failed work.

4. Tests of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.

5. Schedule of Required Inspections and Tests: Refer to Structural Drawings for quality assurance and special inspection requirements for field fabrications and as required by requirements of the IBC, including but not necessarily limited to the following:

a. Inspect reinforcing steel materials and placement for conformance to Contract Documents prior to placement of any concrete.

b. Inspect and test concrete for conformance to Contract Documents, including but not necessarily limited to the following:

1) Confirmation of proper design mix.

2) Visual inspection of concrete during placement.

3) Compression testing.

4) Percentage of entrained air testing.

5) Determination / confirmation of water / cement ratio.

c. Slump Testing:

1) Slump: ASTM C143/C143M; provide one test at point of discharge or each day's pour of each type of concrete; additional tests when concrete consistency seems to have changed.

END OF SECTION

SECTION 03 3001

CONCRETE FLOOR SLABS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Formwork, Reinforcing, Placement, Finishing, and Curing for:

1. Concrete Slabs on Grade.

B. Underslab Vapor Retarder Sheet.

C. Moisture Control and Curing Treatment.

D. Floor Sealer (OFCI)

E. Compliance with ESDS requirements.

1.03 RELATED SECTIONS

A. The concrete floor slabs specified in this section shall conform to the requirements of the flooring system manufacturers specified in the following sections:

1. 09 6500 - Resilient Flooring.

2. 09 6800 - Carpet.

3. 12 4813 - Entry Floor Mats.

1.04 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ACI CODE-318 - Building Code Requirements for Structural Concrete and Commentary.

C. ACI MNL-66 - ACI Detailing Manual.

D. ACI PRC-302.1 - Guide to Concrete Floor and Slab Construction.

E. ACI PRC-304 - Guide for Measuring, Mixing, Transporting, and Placing Concrete.

F. ACI PRC-305 - Guide to Hot Weather Concreting.

G. ACI PRC-306 - Guide to Cold Weather Concreting.

H. ACI PRC-347 - Guide to Formwork for Concrete.

I. ACI SPEC-301 - Specifications for Concrete Construction.

J. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.

K. ASTM C33/C33M - Standard Specification for Concrete Aggregates.

L. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.

M. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete.

N. ASTM C150/C150M - Standard Specification for Portland Cement.

O. ASTM C231/C231M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.

P. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete.

Q. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials.

R. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs.

S. ASTM F1249 - Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor.

T. CRSI (DA4) - Manual of Standard Practice.

U. ICC A117.1 - Accessible and Usable Buildings and Facilities.

V. PS 1 - Structural Plywood.

1.05 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Product Data: Submit product data for the following:

1. Concrete design mix(s) from concrete supplier for each different floor slab condition.

2. Moisture Control and Curing Treatment.

3. Underslab Vapor Retarder and its accessories.

D. Design Mixes: For each concrete mix, submit proposed mix designs a minimum of 15 days in advance of placing operations for each type of concrete. The submitted mix designs shall include the following:

1. Supporting test data for mixes that is not more than 12 months old. Include a sufficient number of tests and conduct a statistical analysis in compliance with ACI SPEC-301.

2. Gradation of fine and coarse aggregates not more than 90 days old showing compliance with ASTM C33/C33M.

3. Proportions of ingredients, including admixtures added either at the time of batching or at the job site. Aggregate weights shall be based upon saturated surface dry conditions.

4. Water / cement ratio.

5. Slump as measured according to ASTM C143/C143M. Provide slump test for each mix.

6. Air content of freshly mixed concrete as measured according to ASTM C231/C231M.

7. Strength measured at 7 and 28 days. Provide strength test for each mix at a frequency of both the 7th and 28th day.

8. Locations or intended use of each mix design.

9. Source of materials.

E. Steel Reinforcement Shop Drawings: Details of fabrication, bending, and placement prepared according to ACI MNL-66, “ACI Detailing Manual.”

1. Include material, grade, bar schedules, stirrup spacing, bent bar diagrams, arrangement, and supports of concrete reinforcement.

2. Include special reinforcement required for openings through concrete structures.

3. Provide placement details for all specific reinforcing intersections and clearance conditions not shown by the typical details on the Structural Drawings.

4. Prepare drawings in sufficient detail to resolve reinforcing intersections.

1.06 QUALITY ASSURANCE

A. Perform concrete work in accordance with ACI SPEC-301 and ACI CODE-318.

B. Acquire cement from same source and aggregate from same source for entire project.

C. Follow recommendations of ACI PRC-305 when concreting during hot weather.

D. Follow recommendations of ACI PRC-306 when concreting during cold weather.

1.07 REGULATORY REQUIREMENTS

A. Concrete finished as a walking surface shall comply with the following per ICC A117.1:

1. Have a slip-resistant finish per Sections 302 and 403.

2. Changes in level shall comply with Sections 403.4 and 303.

3. Openings in floor surfaces shall comply with Section 302.3.

1.08 COORDINATION AND SEQUENCING

A. Coordinate schedule with other trades where embedments, attachments or interferences occur.

B. Schedule and sequence concrete work to coordinate with fabrication and delivery schedules for items to be embedded in concrete work.

1.09 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Store materials in accordance with ACI SPEC-301. Admixtures which have been in storage at the project site for longer than 6 months or which have been subjected to freezing shall not be used, unless retested and proven to meet the specific requirements.

B. Deliver, store and handle steel reinforcement to prevent bending and damage.

1.10 CONTRACTOR RESPONSIBILITY

A. Contractor is responsible for designing and engineering the formwork along with the associated bracing and shoring to withstand imposed forces during construction.

B. Contractor is responsible for coordinating and controlling the installation and protection of the entire concrete slab assembly including the capillary break, protection of underslab vapor retarder, selection of concrete design mix conforming to design criteria, control of water added to concrete on the site, placement of concrete, slab finishing methods, slab curing methods and dry-out of the concrete slabs so as to achieve a slab with minimal uncontrolled cracking, and conforming to the finish flooring and coating / sealer manufacturer(s) requirements for successful application of their products.

1.11 WARRANTY – MOISTURE CONTROL AND CURING TREATMENT

A. Manufacturer's Fifteen (15) Year Warranty: Provide the moisture control and curing treatment manufacturer's standard warranty document executed by an authorized company official wherein the manufacturer shall warrant against the adhesive bond of floor coverings / coatings separating from the concrete substrate due to vapor emission rate, relative humidity, water migration or alkalinity of the concrete in the treated areas and shall repair or replace any failed floor moisture control and curing treatment, adhesives, floor coverings and coatings in the failed areas at no expense to the Owner for a period of fifteen (15) years.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 FORMWORK MATERIALS

A. Form Materials (Except at Concrete Exposed to View): Provide per ACI PRC-347 at discretion of Contractor.

B. Form Material for Concrete Exposed to View: APA rated B-B High Density Overlay Concrete Form plywood, Class I, conforming to PS 1.

1. Plywood shall be new, or used once with face free of defects and nail holes filled.

2.03 FORMWORK ACCESSORIES

A. Form Release Agent: Colorless, non-staining, will not adversely affect surface coatings or waterproofing. Provide form release agent that does not contain diesel fuel, petroleum-based lubricating oils, waxes, or kerosene.

B. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

2.04 REINFORCEMENT

A. Reinforcing Steel: Steel reinforcing bars conforming to ASTM A615/A615M, Grade 60.

B. Reinforcement Accessories:

1. Tie Wire: Annealed, minimum 16 gauge.

2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.

a. Where reinforcement is installed over underslab vapor retarder, provide metal or concrete support pads that will not damage the vapor retarder.

b. Provide stainless steel or plastic components for placement within 1-1/2 inches of weathering surfaces.

2.05 REINFORCEMENT FABRICATION

A. Fabricate concrete reinforcing in accordance with CRSI (DA4) Manual of Standard Practice.

B. Locate reinforcing splices not indicated on Drawings at point of minimum stress.

C. No bending or straightening of reinforcing shall be permitted after partial embedment in concrete.

2.06 CONCRETE MATERIALS

A. Concrete Materials: Provide as follows:

1. Cement: Conform to ASTM C150/C150M.

2. Aggregates: Crushed aggregate meeting the requirements of ASTM C33/C33M.

3. Water: Potable and complying with ASTM C94/C94M.

2.07 CONCRETE ADMIXTURES

A. Water-Reducing Super-Plasticizer Admixture – Conform to ASTM C494/C494M, Type F, provide water reducing, super-plasticizing admixture to concrete mix as required to maintain the water / cement ratio specified herein and improve workability and slump required for proper placement, consolidation and finishing.

2.08 CONCRETE MIX DESIGN

A. Proportioning Normal Weight Concrete: Provide concrete mix design conforming to the following. Comply with ACI PRC-211.1 recommendations.

1. Sacks Of Cement (Minimum): 6 sacks per cubic yard concrete.

2. Admixtures: Water-Reducing Super-Plasticizer Admixture.

3. Minimum Compressive Strength: 4,000 psi at 28 days.

4. Water / Cement Ratio: 0.45.

5. Slump (maximum): 4 inches.

2.09 CONCRETE MIXING

A. Transit Mixers: Comply with ASTM C94/C94M.

2.10 VAPOR RETARDER FOR SLAB ON GRADE

A. Performance Requirement: The installed underslab vapor retarder shall provide an airtight and vapor tight sheet barrier under the entire building floor slab conforming to the following:

1. Moisture Vapor Transmission Rate: Less than 0.3 perms when tested in accordance with ASTM E96/E96M and ASTM F1249.

B. Vapor Retarder Sheet: 15 mil polyolefin film manufactured from virgin resins; conforming to ASTM E1745 Class A.

1. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers / products may be provided:

a. Henry; *Moistop Ultra 15.*

b. Poly-America; *Husky Yellow Guard 15 mil Vapor Barrier.*

c. Stego Industries, LLC; *Stego Wrap Vapor Barrier (15-Mil).*

d. W.R. Meadows.; *Perminator 15 Mil.*

e. ISI Building Products; *Viper Vaporcheck II (Viper II) 15-mil.*

f. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements.

C. Accessories For Underslab Vapor Retarder:

1. Tape – Perimeter Attachment To Concrete: Stego Industries, *Crete Claw Tape* or Stego Industries, *StegoTack Tape*, or equal products from the vapor retarder sheet manufacturers specified above.

2. Tape – Seams, Tears and Splices: Stego Industries, *Stego Tape*, or equal products from the vapor retarder sheet manufacturers specified above.

3. Mastic: Stego Industries, *Stego Mastic*, or equal products from the vapor retarder sheet manufacturers specified above.

4. Boots at Pipe / Conduit Penetrations: Factory fabricated pipe boots from vapor retarder material with welded seam vapor tight construction, Stego Industries, *Pre-Cut Pipe Boots* or equal products from the vapor retarder sheet manufacturers specified above.

5. Tie Wraps (Cable Ties): Heavy duty UV stabilized Nylon 6/6, minimum 120 pound working strength, size as required to fit condition; Unicorp, *Cable Ties* or equal.

2.11 SCREED SYSTEM

A. Contractor shall select a screed support system that does not penetrate or damage the underslab vapor retarder while providing the level control required to achieve the floor slab surface tolerances specified.

B. Coordinate flush pipe and conduit penetrations through slab with Divisions 21 through 28 if required to accommodate screed system selected.

2.12 MOISTURE CONTROL AND CURING TREATMENT

A. Moisture Control and Curing Treatment: Liquid field-applied penetrating colloidal treatment that reacts with the free alkali in concrete to form a permanent colloidal gel within the concrete to prevent moisture migration through the concrete, reduce shrinkage cracking and slab curl and seal concrete from the inside out to provide a superior cure and prevent premature dry out of the concrete.

1. Manufacturer / Product: Spray-Lock, *SCP-327* is the basis of design and the standard of quality, function, performance and appearance required for this project.

   a. Spray-Lock; *SCP-327* (specified, basis of design).

   b. Products by other manufacturers may be acceptable, subject to their ability to meet or exceed this standard and provide products conforming with the requirements of the Drawings and this Specification.

   c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance.

2. Treatment Area: Treat entire surface area of concrete floor slabs.

3. Manufacturer Warranty: Provide fifteen (15) year warranty by Spray-Lock on floor covering / sealing installation as specified in Part 1 of this section.

B. Cold Weather Curing: Refer to additional requirements specified in Structural General Notes, including use of insulating blankets to prevent floor slabs from freezing temperatures.

2.13 FLOOR SEALER (OFCI)

A. Floor Sealer: Owner Furnished / Contractor installed (OFCI).

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate and facilitate concrete slab construction to meet requirements of floor covering manufacturers.

C. Coordinate and adjust concrete mix and additives to comply with requirements of manufacturers of coatings, sealants and adhesives applied to concrete.

D. Coordinate and facilitate rough-in for mechanical and electrical items in concrete construction with Divisions 21 through 28.

3.02 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.03 PREPARATION

A. Verify that forms are clean and free of rust before applying release agent.

B. Remove standing water and debris.

C. Utilize screed support system for slabs with underslab vapor retarder that does not penetrate or damage the vapor retarder.

3.04 FORMWORK

A. Edge Forms:

1. Construct edge forms and bracing as required to achieve design requirements, in accordance with requirements of ACI SPEC-301.

2. Arrange and assemble forms to permit dismantling and stripping so as to avoid damage to concrete during stripping.

3. Apply form release agent on forms in accordance with manufacturer's recommendations.

a. Protect reinforcing steel, inserts, and bonding surfaces from application of any form release agent.

B. Screeds: Construct a rigid screed system to facilitate placement of concrete to a uniform flat plane.

1. Slabs with Underslab Vapor Retarder: Use screed support system that does not penetrate or damage the vapor retarder during concrete placement.

C. Inserts, Embedded Parts, and Openings:

1. Locate and set in place items that will be cast directly into concrete.

2. Coordinate with work of other sections in forming and placing openings, slots, recesses, bolts, anchors, other inserts, and components of other work.

3. Install accessories in accordance with manufacturer's instructions, so they are straight, level, and plumb. Ensure items are not disturbed during concrete placement.

3.05 INSTALLATION – UNDERSLAB VAPOR RETARDER

A. Install continuous vapor retarder sheet under interior slabs on grade, place over the capillary break and directly under concrete slab.

1. Extend vapor retarder sheet to top of slab at perimeter of slab and seal to concrete foundation wall with specified tape to achieve air and vapor tight connection.

B. Lap joints minimum 6-inches and seal air and vapor tight by applying continuous tape or a continuous 1/2-inch diameter bead of the specified mastic.

C. Install factory fabricated air and vapor tight "boot" at pipe and conduit penetrations through floor slab. Extend “boot” to top of slab elevation; seal "boot" to vapor retarder watertight using tape or continuous 1/2-inch diameter bead of the specified mastic full circumference of penetration and seal “boot” to pipe / conduit with specified mastic and a nylon tie wrap cinched down tight over top of “boot” to achieve an air and vapor tight seal.

D. Protect vapor retarder from damage during construction.

E. Seal cuts and holes in vapor retarder with a patch of the same material cut 6 inches larger than cut / hole; seal full perimeter of patch to vapor retarder with tape or continuous 1/2-inch diameter bead of the specified mastic to achieve an air and vapor tight seal.

F. The installed vapor retarder installation shall provide a continuous air and vapor tight sheet membrane over the entire building and have a continuous air and vapor tight seal to the foundation walls and any penetrations through the vapor retarder.

3.06 REINFORCING STEEL – PLACEMENT

A. Comply with CRSI (DA4) “Manual of Standard Practice” for placing reinforcement.

B. Clean reinforcement of loose mill scale, earth, ice and other foreign matter.

C. Do not displace or damage underslab vapor retarder.

D. Accurately position, support and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain concrete cover and position.

E. Defective Work: The following reinforcing steel work will be considered defective, and shall be removed and replaced by the Contractor at no additional cost to the Owner:

1. Bars with kinks or bends not shown in the Drawings.

2. Bars damaged due to bending or straightening.

3. Bars heated for bending.

4. Reinforcement not placed in accordance with the Drawings.

F. Bend tie wire back behind the line of rebar on weathering surfaces.

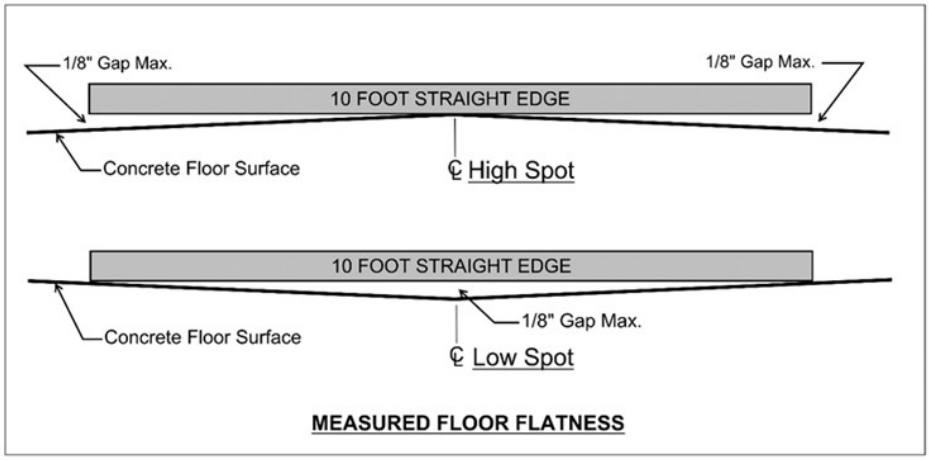
G. Conform to applicable code for concrete cover over reinforcement.

3.07 TOLERANCES

A. Floor Slab Surface Tolerances - General: Floor slabs shall be constructed to achieve the following maximum variation of surface flatness tolerance:

1. Visual Flatness: No rippling, roughness or visible variations in surface flatness.

2. Measured Flatness: 1/4-inch in 10 feet measured in any location, orientation or direction with a 10 foot long straight edge as shown below:



3.08 CONCRETE – PLACEMENT

A. Place concrete in accordance with ACI PRC-304.

B. Place concrete for floor slabs in accordance with ACI PRC-302.1.

C. Notify Owner not less than 24 hours prior to commencement of placement operations.

D. Ensure reinforcement and inserts will not be disturbed during concrete placement.

E. Protect the underslab vapor retarder from damage during concrete placement. Repair vapor retarder damaged during placement of concrete reinforcing or concrete. Repair with vapor retarder material; lap over damaged areas minimum 6-inches and seal watertight.

F. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

G. Place concrete continuously between construction joints.

H. Do not interrupt successive placement; do not permit cold joints to occur.

I. Screed floors to a level flat plane, maintaining specified surface flatness.

3.09 FLOOR FINISHING

A. General: Finish concrete floor surfaces with bull float, wood / magnesium hand floats and steel trowels in accordance with ACI SPEC-301, ACI PRC-302.1 and the finish flooring manufacturer's requirements.

1. Do not sprinkle water on slab while finishing.

2. Do not dust slab with cement powder while finishing.

B. Floors Scheduled to Receive Finish Flooring and Interior Concrete Floors Exposed to View:

1. Steel trowel surfaces to a smooth finish, free of ripples or surface defects and that conforms to the floor covering manufacturer's requirements.

2. If power trowels are used, do a light troweling only, do not over trowel or "burn" the slab surface.

3.10 CONCRETE – CURING

A. Moisture Control and Curing Treatment: Schedule / coordinate application of moisture control and curing treatment to concrete floors by manufacturer's Technical Representative as soon as finishing is completed and concrete is hard enough to support foot traffic without damaging surface in conformance with manufacturer's installation requirements.

3.11 FLOOR SEALER

A. Apply Owner furnished floor sealer onto new concrete floors in accordance with manufacturer's installation instructions.

B. Floors shall be clean and dry

3.12 PROTECTION

A. Protect concrete slabs from stains, contact with oil or grease and damage during construction.

3.13 WORKMANSHIP

A. Concrete floor slabs shall be installed using the best workmanship, including the following:

1. Underslab vapor retarder sheet installed as specified and protected from damage.

2. Conform to specified water / cement ratio.

3. Adequate number of cement finishers on site to finish slab properly.

4. Slab surface flatness finished to within specified tolerances.

5. Steel trowel finish consistently smooth and flat, free of trowel marks, ridges or imperfections.

6. No waviness, ripples or imperfections in smooth trowel finish slab surface.

7. Slab curing method applied and maintained for entire curing time.

8. Minimal uncontrolled cracking and edge curl.

9. Slab finish not “burned” or over-troweled.

10. No water or cement powder added after placement during finishing.

B. Any part of the concrete slabs installed with improper or poor workmanship shall be removed and replaced at Contractor’s expense.

3.14 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

2. Underslab Vapor Retarder Installation: Inspect vapor retarder field, seams / laps, connection to perimeter walls and each penetration for damage; confirm that the vapor retarder installation provides a continuous, unbroken gas and vapor tight barrier.

   a. Confirm that any damaged or non-conforming vapor retarder is repaired prior to placement of concrete.

B. Owner will engage a qualified independent testing and inspection agency to perform field inspections, field quality-control sampling / testing and prepare test reports, in accordance with Section 01 4500 and the testing requirements noted on the Structural Drawings.

   1. Contractor shall:

      a. Submit proposed concrete mix design of each class of concrete to agency for review prior to commencement of concrete operations.

      b. Coordinate and schedule inspection and testing of reinforcing steel and concrete work by the agency at the appropriate times and prior to cover.

      c. Provide testing agency with access to the work to allow required inspections and testing.

      d. Correct deficiencies or remove and replace any work that inspections and test reports indicate do not comply with specified requirements.

C. Coordinate and schedule the work to accommodate inspections and tests of reinforcing steel and concrete construction as specified on the Structural Drawings.

D. Tests taken are spot checks only at a given location and shall not be interpreted as representing the quality or integrity of the concrete work performed.

E. Test data and reviews shall not be construed as acceptance of the work by the testing agency nor shall it relieve the Contractor of his responsibility to replace non-conforming or failed work.

F. Tests of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.

G. Slump Testing: ASTM C143/C143M; provide one (1) test at point of discharge for each day's pour of each type of concrete; additional tests when concrete consistency seems to have changed.

END OF SECTION

SECTION 06 1000

ROUGH CARPENTRY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Rough Carpentry.

B. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. APA - The Engineered Wood Association.

C. AWPA - American Wood Protection Association.

D. AWPA U1 - Use Category System: User Specification for Treated Wood.

E. IBC - International Building Code.

F. PS 1 - Structural Plywood.

G. PS 20 - American Softwood Lumber Standard.

H. WCLIB (GR) - Standard Grading Rules for West Coast Lumber No. 17.

I. WWPA G-5 - Western Lumber Grading Rules.

1.04 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Coordination Drawings: Provide drawings of exterior walls with fiber cement panel siding showing layout of framing that accommodates the joint layout shown on the Drawings in the fiber cement panel siding.

1.05 QUALITY ASSURANCE

A. Lumber: Comply with PS 20 and approved grading rules and inspection agencies.

1. Acceptable Lumber Inspection Agencies: WCLIB (GR) and WWPA G-5.

B. Framing Carpenters: Only skilled, journeyman carpenters, that have successfully completed a four (4) year, state approved apprenticeship program for wood carpentry construction (or equivalent documented experience), and apprentice carpenters working under the direct supervision of an experienced journeyman carpenter, are approved to do the carpentry work for this project.

1.06 DELIVERY, STORAGE AND HANDLING

A. Cover wood products to protect against moisture and growth of mold / mildew.

B. Support stacked products to prevent deformation and to allow air circulation.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 DIMENSION LUMBER

A. Species and Grade: Douglas Fir, No. 2 Grade.

B. Sizes: Nominal sizes as indicated on Drawings, S4S.

C. Moisture Content: Maximum 19 percent, stack or kiln-dried.

D. Backing: 2 x 6 and larger solid lumber, cut from No. 2 Douglas Fir / Larch dimension lumber that is free of large knots, splits or other defects that would reduce the strength of the backing piece.

2.03 CONSTRUCTION PANELS

A. APA Rated Plywood Wall Sheathing: APA rated Fir species plywood C-DX, conform to PS 1. Plywood shall be exterior rated (plies and glue).

1. Thickness / Span Rating: As shown on Drawings.

2. Attachment: 8d common nails.

2.04 ACCESSORIES

A. Fasteners, Anchors, and Anchor Bolts: Galvanized steel, type and size as shown on Drawings.

1. Fasteners on Building Exterior, in High Humidity or in Preservative Pressure Treated Wood: Stainless steel or hot-dipped galvanized.

a. Use only stainless steel fasteners in wood treated with ACZA preservative treatment.

B. Sill Gasket on Top of Foundation Wall: 1/4-inch thick, match width of sill plate, ribbed closed cell plastic foam from continuous rolls; Owens Corning, *FoamSealR* or equal.

2.05 FACTORY WOOD TREATMENT

A. Preservative Pressure Treatment for Wood in the following Categories:

1. Wood in contact with Roofing, Flashing and Waterproofing: AWPA U1, use category UC3B as suitable for above ground use. Use one of the following treatments:

a. Ammoniacal Copper Zinc Arsenate (ACZA) Treatment.

b. Copper Azole (CAC) Treatment.

2. Wood Sill Plates and other Interior Dry and Damp Locations: AWPA U1, use category AWPA UC3A as suitable for above grade use. Use one of the following treatments:

a. Ammoniacal Copper Zinc Arsenate (ACZA) Treatment.

b. Copper Azole (CAC) Treatment.

B. Treatment Identification: Treated lumber members shall have a tag stapled on the end each member identifying the following:

1. Treatment Type.

2. Description of Use.

3. Warranty Statement.

4. Code Report for Treatment.

5. AWPA Code for Use / Exposure Category.

6. Treatment Authority.

7. Third Party Quality Inspection.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate the layout and location of wall framing and solid 2x wood backing required for attachment and support of surface-mounted plumbing items specified in Division 22.

C. Coordinate the layout and location of wall framing and solid 2x wood backing required for attachment and support of surface-mounted electrical items specified in Division 26 through 28.

D. Coordinate the layout and location of wall framing and solid 2x wood backing required for attachment of exterior siding.

3.02 GENERAL

A. Drilling, Notching and Cutting: Coordinate and control drilling, notching and cutting of all framing members required to admit or install work of other trades, do not violate the structural integrity of any wood framed members, comply with restrictions and requirements of Structural Engineer, IBC and local Building Official.

B. Nailing: Nailing shall conform to the size and spacing shown on the Structural Drawings; where nailing is not indicated, provide nailing per IBC Table 2304.6.1. Fastener Schedule.

C. Wood in Contact with Concrete and Masonry shall be preservative pressure treated.

3.03 INSTALLATION – WOOD FRAMING

A. Cut and fit framing members accurately, set members level, plumb, and true to line. Discard bowed, crooked or twisted pieces or with defects that would lower required strength or result in unacceptable appearance of exposed members.

B. Wall Plates: Comply with size(s) shown on Drawings.

1. Bottom plates bearing on concrete or masonry shall be preservative pressure treated.

2. Bore holes of proper diameter for anchor bolts accurately; oversized or elongated holes are not acceptable.

3. Install continuous sill gasket under bottom plates of exterior walls.

C. Wall Framing: Cull out bowed, crooked, twisted or inconsistent width framing, align framing members so that finish walls are straight, free of waviness and within specified tolerances.

D. Make provisions for temporary construction loads, and provide temporary bracing sufficient to maintain structure in true alignment and safe condition until completion of erection and installation of permanent bracing.

E. Install structural members full length without splices.

F. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated on Drawings, but not less than required by applicable codes.

G. Provide framing members at vertical ends / edges of GWB and vertical ends / edges of wall sheathing.

H. Construct headers at wall openings required by the design and work of other trades. Where not shown, provide double joist headers.

I. Frame wall openings required by the design and for work of other trades. Where not shown, provide a minimum two (2) or more studs at each jamb; support headers on cripple studs.

J. Provide blocking between framing members wherever required by Drawings, IBC, Building Official, or good construction practice.

K. Fire Stops: Install solid 2x lumber blocking fire stops (or other approved material) in accordance with the requirements of the IBC and the Building Official including, but not limited to the following locations:

1. In concealed spaces of stud walls and partitions, including furred spaces, at the ceiling and floor levels and at 10-foot intervals both horizontal and vertical.

L. Provide additional framing members and / or modifications required to accommodate work of other trades.

M. Provide backing and miscellaneous members as indicated or as required to support work provided by other trades (finishes, fixtures, specialty items, trim, etc.).

3.04 INSTALLATION – WOOD BACKING

A. Install solid wood backing flush with face of studs for attachment of surface mounted work by other trades, 2 x 6 minimum size.

1. Secure backing in wood framed walls as required to support the following loads imposed by surface mounted items; minimum fastening shall be three 16d power driven nails in each end of backing:

a. Door Wall Stops (250 pound impact load).

b. Other Surface Mounted Work (200 pound load).

B. Casework: Provide solid 2x wood backing for attachment / support of casework.

3.05 INSTALLATION – CONSTRUCTION PANELS

A. Wall Sheathing: Orient sheathing panels with long dimension perpendicular to wall studs and ends over firm bearing, stagger end joints between adjacent panels.

1. Use only full sized panels, cut to fit; do not use cutoff ends pieced together where a full size panel will fit.

2. Edge / End Gap: Install sheathing panels with gap between sheets as recommended by APA.

3. Nail panels to framing at spacing indicated on Drawings.

3.06 INSTALLATION – ACCESSORIES AND MISCELLANEOUS WOOD

A. Install sill gasket directly on concrete foundation under exterior wall plates. Puncture gasket cleanly and fit tightly to protruding foundation anchor.

B. Construct wood curbs at roof openings for roof-mounted mechanical equipment, except where prefabricated curbs are provided.

1. Provide preservative pressure treated wood lumber.

2. Form corners by alternating lapping side members.

3.07 DRILLING, CUTTING AND NOTCHING

A. Do not drill, cut, notch or alter any structural framing, except as noted on the Drawings and in this specification, without the approval of the Structural Engineer.

3.08 SITE APPLIED WOOD TREATMENT

A. Apply preservative treatment compatible with factory applied treatment at site-sawn cuts, complying with manufacturer's instructions.

B. Allow preservative to dry prior to erecting / installing members.

3.09 ALIGNMENT OF WALL FRAMING

A. Finished walls shall be straight and free of waviness when viewed from the side.

B. Using a 10 foot straight edge, check the alignment of wall framing members marking each stud that is out of alignment for correction.

C. Correct misaligned framing that will result in walls appearing to be wavy or crooked.

D. Plane off excess on studs that are bowed or wider than adjacent studs.

E. Shim face of studs that are bowed or narrower than adjacent studs.

F. Install a sister stud alongside to straighten or align a stud.

3.10 WORKMANSHIP

A. Carpentry work shall be accomplished using the best workmanship, including the following:

1. Crooked, bowed, twisted or damaged lumber culled out and used for blocking / backing.

2. End cuts at proper angle and length for tight fit.

3. Nailed connections free of splitting or damage.

4. Framing aligned plumb and square.

5. Framing conforming to specified tolerances.

6. Bolt / anchor holes not oversized or misaligned.

7. Panel ends aligned at center of supporting framing member.

8. Panel ends and edges properly gapped.

9. Consistent nail / screw spacing on panels.

B. Any part of the carpentry work installed with improper or poor workmanship shall be removed and replaced.

3.11 TOLERANCES

A. Framing Members: 1/4-inch from true position, maximum, provided other tolerances are met; does not apply to face alignment of wall framing members.

B. Wall Plane (Flatness): Maximum of 1/4-inch in 10-feet out of plane (this equates to no more than 1/8-inch gap at each end of a 10-foot long straightedge center on high spot in wall, or no more than 1/8-inch gap at center of a 10-foot long straightedge centered on low spot in wall).

C. Wall Out Of Plumb: Maximum 1/8-inch.

D. Variation from Plane (Other than Floors): 1/8-inch in 10-feet maximum, and 1/4-inch in 30-feet maximum.

3.12 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

B. Conduct the following inspections of carpentry work:

1. Inspect framing for conformance to structural requirements as work progresses, including, but not limited to nailing, screwing, blocking, fasteners, hold-downs, framing connectors.

2. Inspect wall framing to confirm walls are straight and plumb in conformance with specified tolerances.

3. Inspect panel nailing / screwing for conformance to specified nailing / screwing schedule as work progresses and prior to cover.

4. Inspect framing prior to cover for damage and any notching, cutting or boring of framing that exceeds Code or structural requirements.

5. Just prior to cover, after building is dried in and framing is dry, inspect wall framing using a 10 foot long straight edge to identify framing members that are out of alignment and require correction prior to cover.

END OF SECTION

SECTION 07 2100

BUILDING INSULATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Thermal Batt Insulation for Thermal Building Envelope.

B. Sound Batt Insulation.

C. Rigid Foam Insulation Board.

1. Wood Header Insulation.

D. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.

C. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.

D. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

E. WSEC - Washington State Energy Code.

1.04 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Product Data: Submit manufacturer's data sheet for each product specified.

D. Certification Letter (As Required by WSEC): Installer shall submit a certification letter listing each type of insulation, manufacturer of each insulation type and the R-value of each insulation type for each type of insulation used in the Building Thermal Envelope. Installer shall sign and date the letter. Post letter on the job site as required by the Building Official.

E. Closeout Documents: Provide manufacturer's product data sheets with documentation for compliance with WSEC.

1.05 REGULATORY REQUIREMENTS

A. Materials and installation shall conform to the WSEC, including but not limited to the following requirements:

1. Identification mark shall be applied to all insulation materials and insulation installed such that the R-value mark is readily observable upon inspection as required by WSEC 3.03.1.2.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in original and unopened packages, containers, or bundles, with brand names and manufacturer's labels intact and legible.

B. Store materials in dry location, fully protected from weather and direct exposure to sunlight.

1.07 ENVIRONMENTAL REQUIREMENTS

A. Interior building insulation shall not be installed until the following conditions have been achieved in areas to be insulated:

1. Initial Building Dry Out of building is complete and operational.

2. Air / water barrier system is installed on exterior walls, exterior openings are watertight, and building interior is thoroughly dried out.

3. Wood framing moisture content shall be at no more than 15%.

4. Concrete floors are dry.

5. Relative humidity level of interior building air is maintained below 60% with adequate temporary heat, exhaust and air circulation to remove construction-produced water vapor and prevent areas of high relative humidity.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 BATT INSULATION MATERIALS

A. Thermal Batt Insulation (Building Thermal Envelope):

1. Foil Faced Batt Insulation: Conform to ASTM C665, Type III, Class C preformed formaldehyde free glass fiber batt type, foil faced one side.

a. R-Value: As noted on Drawings.

b. ICC Building Code Construction Classification: III, IV, V.

c. Perm Rating: 0.5 perm maximum per ASTM E96.

d. Manufacturers:

1) Johns Manville.

2) Knauf.

3) Owens Corning.

4) Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance.

B. Sound Insulation (Glass Fiber): Preformed glass fiber batt; with formaldehyde-free binder, friction fit, unfaced, conforming to ASTM C665, Type I; non-combustible.

1. Batt Thickness: 3.5 inches.

2. ICC Building Code Construction Classification: All types.

3. Flamespread less than 25, smoke developed less than 50 per ASTM E84.

4. Manufacturers:

a. Johns Manville.

b. Knauf.

c. Owens Corning.

d. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance.

2.03 RIGID FOAM INSULATION BOARD

A. Rigid Foam Insulation - Wood Headers: Extruded Polystyrene Board Insulation conforming to ASTM C578, Type IV; extruded cellular type polystyrene board with either natural skin or cut cell surfaces; with the following characteristics:

1. Manufacturers / Products:

a. DuPont *Styrofoam Cavitymate*

b. Kingspan *Green Guard*

c. Owens Corning *Foamular XPS*.

d. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance.

2.04 ACCESSORIES

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Schedule installation of interior insulation to occur after building is fully enclosed and materials dried out.

3.02 EXAMINATION

A. Confirm that building conforms to the environmental requirements specified in Part 1 of this section.

B. Verify that substrate, adjacent materials, and insulation materials are completely dry and that substrates are ready to receive insulation.

1. Do not start installation of any insulation until building structure and interior is dried out and that moisture condensation within the insulation or on interior side of exterior sheathing does not occur.

2. Perform moisture testing on building structure / materials to confirm moisture content.

C. Confirm that plumbing pipes located in insulated spaces allow for installation of insulation on exterior side of pipe.

D. Start of insulation installation indicates approval of substrates, environmental and installation conditions, plumbing pipe installation and proper moisture content of building structure and materials.

3.03 INSTALLATION – THERMAL BATT INSULATION

A. Install insulation in accordance with manufacturer's instructions. Friction fit in cavities and spaces to prevent displacement or sagging.

B. Insulate the entire perimeter of the building exterior without gaps or voids. Do not compress insulation.

C. Staple flange of vapor barrier facing securely to framing.

D. Where wall framing is deeper than the insulation, place the batt tight to the exterior wall sheathing (leaving a void space on the interior, warm side of the batt).

1. Provide supplemental insulation support with wires as required by the insulation manufacturer.

E. Trim insulation neatly to fit spaces. Insulate miscellaneous cavities, gaps and voids.

F. Fit insulation to the exterior side of mechanical and electrical services within the plane of the insulation. Leave no gaps or voids.

1. Where mechanical piping will not allow installation of insulation to the exterior side and prevent freezing, report condition to Division 22 installer for correction before insulating or closing up the space.

3.04 INSTALLATION – SOUND INSULATION

A. Install insulation in accordance with manufacturer's instructions. Friction fit in cavities and spaces to prevent displacement or sagging.

B. Insulate the entire width / height of the wall / floor assembly without gaps or voids. Do not compress insulation.

C. Trim insulation neatly to fit spaces. Insulate miscellaneous cavities, gaps and voids.

D. Coordinate and monitor installation during GWB installation so as to prevent displacement or removal of batts.

3.05 INSTALLATION – RIGID FOAM INSULATION BOARD

A. Install rigid foam insulation at locations shown on Drawings, with the minimum number of joints possible and joints fitted tight free of cracks and voids.

B. Butt edges and ends tight to adjacent boards.

C. Cut insulation tight to adjacent surfaces and to utilities penetrating insulation.

3.06 PROTECTION OF FINISHED WORK

A. Do not permit installed insulation to be damaged prior to its concealment.

3.07 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 07 2719

MECHANICALLY FASTENED SHEET-APPLIED AIR AND WATER BARRIER SYSTEM

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Sheet-Applied Air and Water Barrier System.

B. Compliance with ESDS requirements.

1.03 SYSTEM DESIGN RESPONSIBILITY

A. Provide a complete and fully functional sheet-applied, vapor permeable air and water barrier system conforming to the manufacturer's recommended details for each condition on this project and the Performance Requirements specified herein.

1. The manufacturer is responsible for providing the technical design and details of the System as required to provide a completely integrated airtight and watertight secondary barrier system that accommodates the building materials, conditions and work by other trades.

2. The component materials shown in the manufacturer's recommended system details are the minimum requirement for the similar conditions found on this project whether shown on the Drawings or not.

3. Provide additional materials and conform to special installation requirements as detailed on the Drawings where they modify, expand on, add to or exceed the manufacturer's minimum recommended system details.

4. Where any detail on the Drawings differs with manufacturer's standard published details, consult with the Owner regarding possible special requirements that require manufacturer's review and approval.

1.04 PERFORMANCE REQUIREMENTS

A. Performance Requirements:

1. Provide an Air and Water Barrier System constructed to perform as a continuous air barrier and as a liquid water drainage plane flashed to discharge to the exterior any incidental condensation or water penetration.

   a. Air and Water Barrier System shall accommodate movement of the building materials used on this project by providing for airtight barrier across joints.

   b. Air and Water Barrier System shall accommodate changes in substrate and perimeter sealing conditions.

2. Air and Water Barrier System shall conform to the following requirements:

   a. Continuous System: The System must be continuous, with joints and penetrations made airtight and watertight.

   b. Water (Liquid) Leakage: No visible liquid water leakage when tested per ASTM E331; System shall perform as a liquid water drainage plane flashed to discharge any incidental condensation or water penetration to the exterior.

   c. Vapor Permeable: The System shall be vapor permeable with a water vapor transmission rate of more than 50 perms when tested in accordance with ASTM E96/E96M Method B.

   d. Provide materials and installation methods to bridge across and provide an airtight and watertight connection / seal conforming to the Performance Requirements specified above at the following locations:

      1) Between new and existing air and water barrier systems.

      2) Between air and water barrier system and windows, doors, and louvers.

      3) Between the air and water barrier system and any penetrations (such as piping, conduit, electrical boxes, ducts, structural members, screws / bolts and similar).

1.05 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. AATCC Test Method 127 - Test Method for Water Resistance: Hydrostatic Pressure.

C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.

D. ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting.

E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

F. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials.

G. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.

H. ASTM E1677 - Standard Specification for Air Barrier (AB) Material or Assemblies for Low-Rise Framed Building Walls.

I. ASTM E2178 - Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials.

J. DuPont Tyvek and Flashing Installation Guidelines - DuPont Tyvek Mechanically-Fastened Water-Resistive and Air Barrier (WRB) and DuPont Self-Adhered Flashing Products Installation Guidelines.

K. TAPPI Test Method T 410 - Grams of Paper and Paperboard (Weight per Unit Area).

L. TAPPI Test Method T 460 - Air Resistance of Paper (Gurley Method).

1.06 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Product Data: Submit product data for each component of the sheet-applied air and water barrier system.

1.07 DEFINITIONS

A. Air and Water Barrier System: A continuous secondary barrier installed behind the primary exterior cladding / siding that provides an air and liquid water barrier that reduces air leakage through the building exterior envelope to a defined level and prevents the passage of liquid water to the interior side of the barrier system at any point, including penetrations and interfaces between different materials and systems.

B. Watertight: Installed barrier system able to withstand exposure to continuous wind-driven rainfall concurrent with the positive and negative wind pressures acting on the barrier resulting from the building size and geographic location without allowing leakage of any water to the interior side of the barrier system at any location, penetration or connection.

1.08 QUALITY ASSURANCE

A. Installer: Installer shall have a minimum of five (5) years of experience with the installation of air and water barrier systems and have a thorough understanding of the theory and practical application of secondary barrier systems in exterior cladding / siding applications.

B. Installation: Installation shall be in accordance with System manufacturer's installation guidelines and recommendations.

C. Source Limitations: Sheet-applied air and water barrier system components shall be produced or approved by single manufacturer.

1.09 DELIVERY, STORAGE AND PROTECTION

A. Deliver Barrier System materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact.

B. Store Barrier System materials as recommended by barrier manufacturers.

1.10 SCHEDULING

A. Review requirements for sequencing of installation of sheet-applied air and water barrier systems with installation of windows, doors, louvers, flashings, and work of other trades to provide an airtight and watertight barrier assembly.

B. Schedule installation of sheet-applied air and water barrier system and exterior siding / cladding so that the exterior sheathing and sheet-applied air and water barrier system are not left exposed to the weather longer than recommended by the manufacturer(s).

1.11 GUARANTEE / WARRANTY

A. Contractor Guarantee: Contractor shall guarantee the application of the sheet-applied air and water barrier system to be free from improper installation or workmanship and to remain leak-free for a period of five (5) years and agrees to correct any leaking sheet-applied air and water barrier during the warranty period promptly after notification and at no cost to the Owner, including removal and replacement of any cladding materials necessary to gain access.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 SHEET-APPLIED AIR AND WATER BARRIER SYSTEM

A. Manufacturer / System: Systems by DuPont are the basis of design and the standard of quality, function and performance required for this project.

1. DuPont (specified, basis of design).

2. Products by other manufacturers may be acceptable, subject to their ability to meet or exceed this standard and provide products conforming with the requirements of the Drawings and this Specification.

3. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance.

B. General: Provide components and accessories required for a complete and functional airtight and watertight sheet-applied air and water barrier system supplied by a single manufacturer, complete with manufacturer designed installation details for each condition found on the project.

C. Air and Water Barrier Sheet: High-performance, spunbonded polyolefin, non-woven, non-perforated sheet with the following performance characteristics:

1. Manufacturer / Product: DuPont; *Tyvek® CommercialWrap.*

2. Air Penetration: 0.001 cfm / ft2 at 75 Pa, when tested per ASTM E2178. Type I per ASTM E1677.

3. Water Vapor Transmission: 28 perms, when tested per ASTM E96/E96M, Method B.

4. Water Penetration Resistance: 280 cm when tested per AATCC Test Method 127.

5. Basis Weight: 2.7 oz / yd^2, when tested per TAPPI Test Method T 410.

6. Air Resistance: Air infiltration at >1500 seconds, when tested per TAPPI Test Method T 460.

7. Tensile Strength: 38 / 35 lbs / in., when tested per ASTM D882, Method A.

8. Surface Burning Characteristics: Class A, when tested per ASTM E84.

a. Flame Spread: 10.

b. Smoke Developed: 10.

D. Accessory Products: Provide the following products manufactured by the basis of design manufacturer; provide products recommended by manufacturer for specific substrate materials and condition:

1. Plastic Cap Screws: 2-inch diameter with 1-5/8-inch long drill point screws and high density polyethylene cap. Staples are not permitted.

a. Product: *Tyvek® Wrap Cap Screws.*

2. Seam Tape: 3-inch wide.

   a. Product: *Tyvek® Tape.*

3. Flexible Flashing: Provide the following as recommended by the system manufacturer for the specific application or substrate condition:

   a. Products: *FlexWrap, StraightFlash* and *StraightFlash™ VF.*

4. Sealant: Provide the following sealants that comply with ASTM C920, elastomeric polymer sealant to maintain watertight conditions as recommended by system manufacturer.

   a. Product: DuPont; *Commercial Sealant.*

5. Primers: Provide the specific primer recommended by System manufacturer to assist in adhesion between flexible flashing and each different substrate found on this project:

   a. 3M; *High Strength 90.*

   b. Denso; *Butyl Spray.*

   c. SIA; *655.*

   d. Permagrip; *105.*

   e. ITW; *TACC Sta' Put SPH.*

6. Sheet Metal Back Dam Angle: 20 gauge G90 galvanized sheet steel angle fabricated to configuration shown on drawings and as required by site conditions.

E. Sheet Metal Flashing: Specified in Section 07 4649.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate the installation of the sheet-applied air and water barrier system and sheet metal flashings specified in Section 07 6200 and the exterior siding / cladding so that the exterior sheathing and the sheet-applied air and water barrier system are not left exposed to the weather longer than recommended by the manufacturer(s).

C. Coordinate fabrication and installation of sheet metal flashings with Section 07 62000 as required to achieve a weathertight assembly. Do not install cladding / siding until the flashings have been properly installed.

3.02 EXAMINATION

A. Verify that substrates are ready to receive work.

B. Beginning of installation indicates acceptance of substrate and conditions.

3.03 PREPARATION

A. Substrates shall be clean, dry, and uniform and smooth prior to flashing application. Remove protrusions and fill voids at substrates as necessary. Ensure fastener heads are set flush with substrate surfaces.

B. Allow wet substrates to dry thoroughly. Clean dust and debris from substrates. Wipe metal surfaces with films or coatings interfering with adhesion clean.

C. Prime substrates according to manufacturer's recommendations.

D. Provide solid continuous backing or substrate filler to support portions of self-adhering flashing.

E. Air and substrate surface temperatures for flexible flashing shall be as recommended by manufacturer.

3.04 INSTALLATION – SHEET-APPLIED AIR AND WATER BARRIER SYSTEM

A. General: The sheet-applied air and water barrier system is required to provide a completely airtight and watertight secondary barrier behind the exterior siding / cladding on this building.

1. Install air and water barrier system over surfaces of the exterior walls of the building in a weather lapped, airtight and watertight manner and integrated with the sheet metal flashings around openings and penetrations.

2. Coordinate installation to coincide with siding / cladding installation so that the proper sequence of installation is achieved and so that the air and water barrier system is not left exposed to the weather.

3. Protect air and water barrier system from damage, repair any damaged areas for airtight and watertight installation.

4. Installation Guidelines and Details: Conform to requirements of DuPont Tyvek and Flashing Installation Guidelines and the following:

a. Fastener Spacing: 18-inches on center maximum.

b. No staples allowed for temporary or permanent fastening.

B. Air and Water Barrier System: Install air and water barrier system in accordance with System manufacturer's installation instructions to achieve airtight and watertight assembly.

1. Install barrier sheet with minimum number of end laps possible.

2. Openings: Install flexible flashing at perimeter of doors, windows and louvers in exterior walls to provide an airtight and watertight seal between window or door and the air and water barrier sheet.

   a. Window Openings – Special Requirements:

      1) Secure sheet metal back dam angle with screws to sill framing. Coordinate back dam installation location with window installation so when the sealant applied to the back dam as a part of the window installation creates an airtight and watertight seal.

      2) Install flexible flashing at window sill, jambs and head; extend onto exterior face of sheet metal back dam angle.

3. Penetrations: Install flexible flashing at perimeter of penetrations in exterior siding / cladding (such as electrical boxes, hose bibs, pipes, exhaust ducts / louver assemblies, light fixtures, fire alarm devices, structural members, etc.) to provide an airtight and watertight seal between item penetrating and the barrier sheet.

4. Coordinate installation requirements at non-standard conditions with System manufacturer.

5. Pressure roll flexible flashings per manufacturer’s installation instructions to ensure surface adhesion.

6. Protect barrier system from damage, repair any holes or tears before siding is installed.

7. Do not leave barrier system exposed to the weather, conform to manufacturer's recommendations. Replace any weather exposed or damaged barrier entirely, do not cut wrinkles.

3.05 WORKMANSHIP

A. Barrier systems shall be installed using the best workmanship, including the following:

   1. Barrier sheet installed without any wrinkles, holes, tears, rips or damage.

   2. Edges weather-lapped properly and sealed airtight and watertight.

   3. Barrier system not left exposed to weather beyond maximum exposure time recommended by manufacturer without being covered.

   4. Self-adhered flashings tightly bonded to substrate surface.

   5. Self-adhered flashings installed without winkles, puckers or misfit.

6. Barrier system installation forms an airtight and watertight secondary barrier, free of leaks.

7. Barrier system conforms to Performance Requirements specified herein.

B. Any part of the work of this section installed with improper or poor workmanship shall be removed and replaced at Contractor's expense.

3.06 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

B. Schedule of Contractor Performed Inspections:

1. Inspect installation of sheet-applied air and water barrier system just prior to cover and confirm that sheet-applied air and water barrier system is installed according to System manufacturer's recommendations and installation details and there are no penetrations or damage.

END OF SECTION

SECTION 07 4649

FIBER CEMENT SIDING

PART 1 -GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Fiber Cement Panel Siding.

B. Metal Trims.

C. Rainscreen Batten Furring.

D. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

1.04 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Product Data: Submit product data for each type of fiber cement siding, trim, screws, and sealant.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with a minimum of five (5) years of experience.

B. Installer Qualifications: Experienced in performing work of this section with a minimum of five (5) years documented experience in the installation of work of similar size, scope, complexity.

1.06 DELIVERY, STORAGE AND PROTECTION

A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact

B. Store and handle to keep clean, dry, and protected from damage due to weather and construction activities.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 FIBER CEMENT PANEL SIDING

A. Fiber Cement Panel Siding: Fiber cement panels, noncombustible, factory prime painted ready to field finish.

1. Manufacturer / Product: James Hardie, *Vertical Siding* is the basis of design and the standard of quality, function and performance required for this project.

   a. James Hardie; *Vertical Siding* (specified, basis of design).

   b. Products by other manufacturers may be acceptable, subject to their ability to meet or exceed this standard and provide products conforming with the requirements of the Drawings and this Specification.

   c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance.

2. Style: Smooth.

3. Thickness: 5/16-inch.

4. Width: 4 feet.

5. Length: 8 feet.

6. Fasteners: Architectural exposed panel screws specified herein.

2.03 FIBER CEMENT SIDING ACCESSORIES

A. Metal Trims at Fiber Cement Panel Siding: Aluminum trim pieces designed for 5/16-inch fiber cement panels.

1. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers may provide products:

    a. Easy Trim Reveals.

    b. Fry Reglet.

    c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements.

2. Reveal Trims shall be a 6063 aluminum alloy in T-5 temper with a minimum thickness of 0.050-inch.

3. Reveal Trims shall be 12-feet in length (cut to fit as required).

    a. Provide trim profiles as required for each siding condition and as shown on the Drawings.

4. Finish shall be clear anodized.

B. Fasteners:

1. Fasteners For Panel Siding Attachment: Type 304 stainless steel screw fastener with gimlet point and low profile TORX drive head, length as required to provide minimum 1-inch embedment into wood wall framing or solid wood backing.

    a. Attachment to Wood:

        1) Manufacturer / Product: SFS INTEC, *TW-S-D12* or approved equal.

        2) Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance.

C. Sealant:

1. Manufacturers / Products:

    a. Master Builders; *MasterSeal NP 150*.

    b. OSI; *Quad Max*.

    c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements.

2.04 RAINSCREEN BATTEN FURRING

A. Rainscreen Batten Furring: Preservative pressure-treated 1 x 4 Fir wood lumber, Construction Grade.

1. Preservative Pressure Treatment for Wood Battens: AWPA U1, use category UC4B as suitable for above ground use. Use one of the following treatments:

    a. Ammoniacal Copper Zinc Arsenate (ACZA) Treatment.

    b. Copper Azole (CAC) Treatment.

B. Ventilation Strips: Corrugated plastic vent, 3/4" thick by 3" wide by 4'-0" long, black color.

1. Manufacturer / Product: Cor-A-Vent *SV-5 Rainscreen Siding Vent*, or approved equal.

2. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified products performance.

2.05 AIR AND WATER BARRIER SYSTEMS

A. Sheet-Applied Air and Water Barrier System: Specified in Section 07 2719.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate layout and installation of framing / backing with Section 06 1000 to provide proper support and attachment points in locations required for siding fasteners and rainscreen batten furring based on joint and fastener layout shown on the Drawings.

C. Coordinate fabrication and installation of sheet metal flashings with Section 07 6200 as required to achieve a weathertight assembly. Do not install siding until the flashings have been properly installed.

3.02 WEATHERTIGHT INSTALLATION

A. Siding and air / water barrier and flashing systems installation shall be completely weathertight upon completion, install in a manner that sheds water to exterior of walls and provides a completely weathertight building exterior.

B. Remove, repair and replace any element of the complete siding system that leaks or admits water behind the air and water barrier to provide a weatherproof siding system.

3.03 EXAMINATION

A. Verify that the structure, walls, sheathing, and air and water barrier system is complete and ready to receive work of this section.

B. Confirm that framing, backing, and rainscreen furring are laid out correctly to provide support and secure attachment points for siding, including joints, ends and trim.

C. Confirm that framing / sheathing is plumb and straight, and that surface plane is within 1/4-inch in 10 feet tolerance.

D. Inspect air and water barrier system for proper installation that will provide watertight installation.

E. Report any unacceptable construction or conditions; do not start work until unsatisfactory conditions have been corrected.

F. Start of installation indicates acceptance of substrate, rainscreen batten furring and air and water barrier system and site conditions.

3.04 PREPARATION

A. Protect air and water barrier system from damage.

3.05 INSTALLATION – RAINSCREEN BATTEN FURRING

A. General - Provide the following for furring behind fiber cement siding to create a rainscreen cavity. Furring shall conform to the following:

1. Spacing shall align with 16-inches on center wall stud framing.

2. Conform to siding manufacturer's installation and support requirements for the siding system.

3. Provide furring directly behind each siding fastener and coordinated with required fastener layout.

4. Allow for air movement / ventilation full height inside the rainscreen cavity with continuous insect proof ventilation strip at top and bottom of cavity.

5. Allow for water drainage full height inside the rainscreen cavity.

B. Install batten furring vertically in line with each 16-inches on center wall framing member and fasten securely to solid wall framing / 2x wood backing using 10d hot-dipped galvanized or Type 304 stainless steel nails.

C. Install horizontal ventilation strips at top and bottom of wall between each rainscreen batten to prevent entrance of insects and pests.

D. Protect air / water barrier system from damage, coordinate patching / repair of any damage with barrier system installer.

3.06 INSTALLATION – FIBER CEMENT PANEL SIDING

A. Install panel siding level and plumb in accordance with siding manufacturer's installation instructions.

B. Locate panel joints to match joint layout shown on Drawings.

C. Cuts Exposed To View: Cut panels with diamond blade circular saw to achieve a neat straight cut matching quality and appearance of factory panel edges.

D. Field coat cut ends with manufacturer's recommended sealer / primer.

E. Fastening: Pre-drill holes in panels to match fastener layout shown on Drawings. Fasteners shall be equally spaced with symmetrical pattern and uniform appearance for the panels.

1. Wood Framed Walls: Install screw fasteners into wall framing / backing for 1-inch embedment minimum; fastening into wall sheathing only is not allowed. Set fasteners tight without over-driving.

F. Siding Panel Joints:

1. Install panel using 1/2-inch spacers at horizontal joints. Leave bottom edge of panel above all horizontal trims exposed, no caulking shall be placed at this overlap of trim. Factory primed edge shall always be used.

2. Joints shall be cut square and true.

3. Install metal trims at each siding edge or joint condition and locations shown on the Drawings and per the manufacturer's installation instructions.

4. Locate vertical joints over centerline of wall framing members, joints located at sheathing only are not allowed.

G. Metal Trim: Install metal trim straight and true in locations shown on Drawings; cuts shall be straight and not deform the trim profile.

1. Install vented flashing at top of wall panels to vent the rainscreen cavity.

H. Sealant Installation: Apply sealant neatly in locations shown on the Drawings.

1. Clean siding and trim before applying sealant in accordance with sealant manufacturer's requirements.

I. Remove any dirt on siding as required for field painting specified in Section 09 9000.

3.07 WORKMANSHIP

A. Fiber cement siding installation shall be installed using the best workmanship, including but not limited to the following:

1. Prime painted surfaces of siding shall be undamaged and free of dirt.

2. Siding shall run plumb, level, straight and true, parallel with building lines.

3. Metal trim joints shall be tight and cut straight and square.

4. Metal trim shall be straight and free of damage.

5. Work shall be securely fastened and free of loose fit.

6. Sealant installation shall be neat and free of excess or rough sealant.

7. Installation shall conform to manufacturer's installation instructions.

8. No spalled/ broken panel edges at fasteners.

9. No broken corners or cracked siding panels / boards.

B. Any part of the siding installed with improper or poor workmanship shall be removed and replaced at Contractor's expense.

3.08 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 07 6200

SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Sheet Metal Flashings / Trim.

B. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ASTM A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.

C. ASTM D2244 - Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.

D. ASTM D4214 - Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films.

E. NRCA (RM) - The NRCA Roofing Manual.

F. NRCA (WM) - The NRCA Waterproofing Manual.

G. SMACNA (ASMM) - Architectural Sheet Metal Manual.

1.04 QUALITY ASSURANCE

A. Fabricator / Installer Qualifications:

1. Minimum of five (5) years of experience in fabrication and installation of architectural sheet metal similar in material, design, and scope to this project with a record of successful in-service performance;

2. Qualified Workers: Only skilled, journeyman sheet metal workers that have completed five (5) years of training through a state approved apprenticeship program that is specific to the Sheet Metal Industry are approved to install the work of this section. Provide the names of each sheet metal worker on the project along with documentation of successful completion of a sheet metal training program upon request.

3. Provide list of at least ten (10) recently completed projects with addresses within 150 miles of this project upon request.

B. Workmanship shall be of the best quality; installed work shall be straight and true with neat corners and terminations, free of any visual defects; installation shall be fabricated and installed to inherently shed water without reliance on sealant and be permanently watertight.

1.05 WARRANTY

A. Contractor's Warranty: Warrant the work of this section against defective materials and / or workmanship, to remain watertight and weatherproof with normal usage for three (3) years following Project Substantial Completion date. Correct any flashing or sheet metal item that is defective, improperly installed or leaking at no cost to the Owner.

B. Manufacturer's Forty (40) Year Prefinished Sheet Steel Warranty:

1. Architectural Fluorocarbon Finish Warranty:

a. Will be free of fading or color change in excess of 5 Hunter delta-E units as determined by ASTM D2244.

b. Will not chalk in excess of numerical rating of 8 when measured in accordance with standard procedures specified in ASTM D4214 method A D659.

c. Will not peel, crack, chip, or delaminate.

2. Metal substrate will not rupture, fail structurally, or perforate for period of twenty-five (25) years.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 MATERIALS

A. Prefinished Sheet Metal: Steel sheet conforming to ASTM A792/A792M with minimum yield of 50,000 psi and AZ50 (Zincalume or Galvalume) protective coating.

1. Finish Coating shall be a premium fluoropolymer coating with minimum of 70% Kynar 500 or Hylar 5000 base resin, factory-applied, oven baked and applied under controlled condition; 1 mil dry film thickness minimum (exclusive of primer); thirty (30) year warranty.

2. Color: As selected by Owner.

3. Protective film: Provide strippable plastic film, applied to finish of coil stock before forming, or plastic interleaf, applied to panel after forming.

4. Manufacturer / Product: Products by AEP Span are the basis of design and the standard of quality, function, performance and appearance required for this project.

   a. AEP Span (specified, basis of design).

   b. Products by the following manufacturers may be acceptable, subject to their ability to meet or exceed this standard and provide products conforming with the requirements of the Drawings and this Specification:

      1) Bryer Company.

      2) Metal Sales.

      3) Pac-Clad Petersen.

      4) Taylor Metal Products.

   c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance and colors.

2.03 ACCESSORIES

A. Fasteners: Fasteners shall be manufactured in the United States or Canada.

1. Fasteners for Prefinished Sheet Metal Fabrications:

   a. Exposed Condition – Wood or Sheet Metal Substrate: Provide color coated galvanized fasteners with rubber gasketed self-sealing head, match color of prefinished sheet metal.

   b. Concealed Condition: Hot dipped galvanized nails or screws or expansion anchors with self-sealing neoprene head as appropriate for the substrate.

B. Sealant:

1. Concealed Lap Joint Condition: Butyl, single component, TT-S-001657, Type I.

a. Manufacturer / Product: Tremco, *Butyl Sealant*, or approved equal.

2.04 FABRICATIONS

A. General:

1. Field measure and verify site conditions prior to fabrication, accommodate field conditions.

2. Fabricate in accordance with SMACNA (ASMM), NRCA (RM), NRCA (WM) and as required by roofing manufacturer and siding manufacturer to profiles shown on Drawings (where conflicts exist, the most restrictive requirement shall apply).

3. Form sections true to shape, accurate in size, square, and free from distortion or defects.

4. Furnish in minimum 10 foot lengths.

5. Hem exposed edges 1/2-inch on underside.

6. Lap joints shall be fabricated to allow 6-inches minimum overlap.

7. Shop fabricate items including corners, end terminations and special conditions for neat appearance, field bending and fabrication is not acceptable.

8. Protect prefinished metal from scratches or damage during fabrication.

9. End conditions, corners, transitions, terminations, and changes in the plane or direction of flashings shall be custom fit and fabricated to accommodate field conditions and to provide a weather-lapped, watertight assembly and transition. Workmanship and custom fabrications shall conform to similar conditions found in SMACNA (ASMM) and to good sheet metal fabrication practice and shall not rely solely on sealant for their watertight integrity.

B. Flashing / Trim: Fabricate to match profiles / configurations shown on Drawings from 24 gauge factory prefinished sheet metal.

1. Slope horizontal leg of flashings to provide positive water drainage.

2. Provide end dams at head and sill flashings to prevent water from leaking off end of flashing behind siding / trim.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

3.02 PREPARATION

A. Field verify that existing conditions and substrate layout are acceptable and comply with Drawing layout.

B. Report any variations, unacceptable substrates / conditions and potential problems.

C. Do not start work until unsatisfactory conditions have been corrected.

D. Start of installation indicates acceptance of substrate and conditions.

3.03 INSTALLATION – GENERAL

A. Installation shall conform to this section and the Drawings, the roofing manufacturer's requirements, SMACNA (ASMM) and NRCA (RM) (where conflicts exist, the most restrictive requirement shall apply).

B. Protect prefinished metal from scratches or damage during fabrication.

3.04 INSTALLATION – FLASHINGS

A. Install flashings to achieve a weathertight, leak-free installation.

B. Install flashings straight and true with neat appearance.

C. Lap Joints: Lap 6-inches minimum and seal with two heavy beads of butyl sealant just prior to making lap;

1. Clean metal surfaces to be sealed thoroughly with solvent just prior to sealant application;

2. Trim off back of hem to allow tight interface and proper fit.

3. Flashing shall fit tight to each other, free of any gaps or misfit.

D. Fasten flashings to substrate securely using specified fasteners sized to hold flashings securely and as recommended by manufacturer for substrate and condition.

E. Fasteners shall be concealed wherever possible, seal exposed fasteners watertight.

3.05 INSTALLATION – SEALANT

A. Install sealant as specified in Section 07 9000.

1. Concealed (Lap) Sealant Joints: Clean and prime surfaces to be sealed in accordance with sealant manufacturer's instructions. Install two continuous beads of butyl sealant (primary and secondary) at each lap joint to achieve a watertight connection.

2. Exposed Fastener Heads: Where fastener heads are exposed to the weather, use self-sealing type.

3.06 WORKMANSHIP

A. Sheet metal work shall be installed using the best workmanship, including but not limited to the following:

1. Prefinished surfaces of sheet metal free of scratches, dents or damage.

2. Joints and connections shall not rely on sealant for permanent watertight integrity.

3. Fabricated items fit field conditions exactly without any element requiring force to install or being too large for the condition.

4. Joints shall interlock and align neatly and with tight fit.

5. Edges exposed to view and the weather neatly hemmed.

6. Lap joints tight and free of gapping.

7. Installation shall not trap or pond water.

8. Work securely fastened and free of loose fit or rattling.

B. Any part of the sheet metal work installed with improper or poor workmanship shall be removed and replaced at Contractor's expense.

3.07 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 07 9000

JOINT SEALERS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Interior Joint Sealants.

B. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ASTM C834 - Standard Specification for Latex Sealants.

C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.

D. ASTM C1193 - Standard Guide for Use of Joint Sealants.

E. ASTM D1667 - Standard Specification for Flexible Cellular Materials—Poly (Vinyl Chloride) Foam (Closed-Cell).

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with a minimum of five (5) years of experience.

B. Applicator Qualifications: Company specializing in performing the work of this section with a minimum of five (5) years of experience.

1.05 ENVIRONMENTAL REQUIREMENTS

A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.06 COORDINATION

A. Coordinate the work with all sections referencing this section.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points for Construction Waste Management 6.3, Environmentally Preferable Materials 6.4, and Socially Sustainable Products 6.8 which are the Contractor's responsibility to identify, coordinate and document.

2.02 INTERIOR SEALANTS

A. General Purpose Interior Sealant: Siliconized acrylic emulsion latex; ASTM C834, single component, paintable.

1. Color: Match color of adjacent materials; or as selected by Architect.

2. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers / products may be provided:

a. Pecora; *AC-20+Silicone.*

b. Tremco; *Tremflex 834.*

c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified products performance and colors.

3. Applications: Use for:

a. Joints between interior door and relite frames and wall surfaces.

b. Between GWB and other materials.

c. Joints between counter backsplash and sidesplash and wall.

d. Other interior joints for which no other type of sealant is indicated.

B. Plumbing Fixture Sealant: Neutral-curing silicone; ASTM C920, Class 50; single component, mildew resistant.

1. Color: Match color of plumbing fixture or adjacent materials as approved by Architect.

2. Manufacturer / Product: Pecora, *898 Sanitary Mildew Resistant Silicone Sealant* is the basis of design and the standard of quality, function, performance and appearance required for this project.

a. Pecora; *898 Sanitary Mildew Resistant Silicone Sealant* (specified, basis of design).

b. Products by other manufacturers may be acceptable, subject to their ability to meet or exceed this standard and provide products conforming with the requirements of the Drawings and this Specification.

c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance and colors.

3. Applications: Use for:

a. Joints between plumbing fixtures and counter, floor, and wall surfaces.

2.03 EXTERIOR SEALANTS

A. Exterior sealant at fiber cement siding is specified in Section 07 4649.

2.04 ACCESSORIES

A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.

B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

C. Joint Backing: Round foam rod compatible with sealant of type recommended by sealant manufacturer for type of sealant; ASTM D1667, oversized as recommended by sealant manufacturer.

D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

3.02 EXAMINATION

A. Inspect the substrate surfaces and joint openings and confirm they are ready to receive sealant work.

B. Confirm that joint size, configuration and conditions conform to sealant manufacturer's requirements so as to achieve manufacturer's published sealant performance.

C. Verify that joint backing and release tapes are recommended for use by sealant manufacturer with the specified sealant.

D. Do not start sealant installation until substrate surfaces and joint openings conform to sealant manufacturer’s requirements.

E. Sealant Adhesion Testing: Test adhesion of the sealant to each different substrate material in accordance with manufacturer’s requirements; install primer recommended by sealant manufacturer if any adhesion test fails.

F. Start of sealant installation indicates installer’s acceptance and confirmation that substrate, joint openings and conditions are in conformance with sealant manufacturer’s requirements.

3.03 PREPARATION

A. Thoroughly clean and prepare joint substrate surfaces in accordance with sealant manufacturer's instructions to achieve published sealant performance.

B. Remove loose materials and foreign matter which might impair adhesion of sealant.

C. Clean and prime joints in accordance with manufacturer's instructions.

D. Protect elements surrounding the work of this section from damage or disfigurement.

3.04 INSTALLATION – SEALANTS, GENERAL

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions to achieve published sealant performance.

B. Perform installation in accordance with ASTM C1193.

C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.

D. Install bond breaker where joint backing is not used.

E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.

F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

G. Tool joints concave.

3.05 CLEANING

A. Clean adjacent soiled surfaces.

3.06 PROTECTION OF FINISHED WORK

A. Protect sealants until cured.

3.07 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 08 1100

HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Interior Hollow Metal Doors.

B. Interior Hollow Metal Frames.

C. Exterior Hollow Metal Doors.

D. Exterior Hollow Metal Frames.

E. Compliance with ESDS requirements.

1.03 PERFORMANCE REQUIREMENTS

A. Thermal Performance: The following requirements apply only to exterior hollow metal doors and frames:

1. Doors shall have a U-value of at least 0.37 when tested in accordance with ASTM C1363 and a U-value of at least 0.10 when tested in accordance with ASTM C518.

2. Doors and Frames shall comply with the performance requirements of the Washington State Energy Code (WSEC).

1.04 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ADA Standards - 2010 ADA Standards for Accessible Design.

C. ANSI/SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames.

D. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100).

E. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.

F. ANSI/SDI A250.11 - Recommended Erection Instructions for Steel Frames.

G. ASTM A568/A568M - Standard Specification for Steel, Sheet, Carbon, Structural, and High-Strength, Low- Alloy, Hot-Rolled and Cold-Rolled, General Requirements for.

H. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

I. ASTM A924/A924M - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.

J. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable.

K. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.

L. ASTM C518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.

M. ASTM C591 - Standard Specification for Unfaced Preformed Rigid Cellular Polyisocyanurate Thermal Insulation.

N. ASTM C1363 - Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus.

O. ASTM D3359 - Standard Test Methods for Rating Adhesion by Tape Test.

P. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

Q. ICC - International Code Council.

R. ICC A117.1 - Accessible and Usable Buildings and Facilities.

S. SDI 111 - Recommended Details for Standard Steel Doors, Frames, and Accessories.

T. SDI 111-A - Standard Steel Door Frame Details.

U. SDI 111-D - Door, Frame and Hardware Schedule for Standard Steel Doors and Frames.

V. UL 1715 - Standard for Safety Fire Test of Interior Finish Material.

W. WAC 51-50 - Washington Administrative Code, State of Washington Building Code.

X. WSEC - Washington State Energy Code.

1.05 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Product Data: Provide manufacturer's product literature and standard details.

1. Provide manufacturer’s technical data sheet on each different type of anchor and hardware reinforcement required.

D. Shop Drawings: Provide elevation and details of each different door and frame type, including frame anchors, glass stops, vision panels, and special conditions.

E. Door Schedule: Provide door, frame, and hardware schedule on format matching SDI 111-D in accordance with Door Schedule included on Drawings.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Provide products from a single manufacturer who is a member of the Steel Door Institute.

B. Regulatory Requirements:

1. Code Compliance: Comply with WAC 51-50 amendments to the International Building Code.

2. Accessibility Compliance: Door hardware shall meet the requirements of ADA Standards and ICC A117.1.

1.07 DELIVERY, STORAGE AND HANDLING

A. Protect products from moisture, construction traffic, and damage.

B. Store vertically under cover. Do not use non-vented plastic or canvas shelters. Should wrappers become wet, remove immediately.

C. Place units on 4-inch high wood sills or in a manner that will prevent rust or damage. Provide 1/4-inch space between doors to promote air circulation.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 MANUFACTURERS

A. Manufacturers: Manufacturers shall be a member of Steel Door Institute with products conforming to the requirements of the Drawings and this specification.

2.03 MATERIALS

A. Steel Sheet for Doors and Frames:

1. Cold Rolled Steel: ASTM A1008/A1008M and ASTM A568/A568M.

2. Hot Rolled Steel: Pickled and oiled, ASTM A1011/A1011M and ASTM A568/A568M.

3. Galvanized Steel: ASTM A924/A924M and ASTM A653/A653M; hot-dipped zinc-coated steel.

B. Steel Sheet for Anchors and Accessories: ASTM A653/A653M, hot-dipped zinc-coated steel; with minimum G60 metallic coating.

C. Door Hardware: Owner-Furnished / Owner Installed by separate contractor. Coordinate hardware requirements with Owner's hardware supplier.

D. Spray Foam Fill: Single component polyurethane foam sealant which expands to take the shape of cracks and voids and permanently seals to substrate surfaces.

1. Code Approval: ICC Evaluation Service, Inc. ES Report ESR-1961.

2. Fire Performance:

a. Flame Spread Index Per ASTM E84: 25 or less

b. Smoke Developed Index Per ASTM E84: 450 or less

3. Thermal Barrier: None required when tested in accordance with UL 1715.

4. Manufacturer / Product: Dow Chemical Company, *Great Stuff* is the basis of design and the standard of quality, function and performance required for this project.

a. Dow Chemical Company; *Great Stuff* (specified, basis of design).

1) There are six (6) different products and numerous different canister sizes available. Select the specific product and canister size to best fit the application and site conditions.

b. Products by other manufacturers may be acceptable, subject to their ability to meet or exceed this standard and provide products conforming with the requirements of the Drawings and this Specification.

c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance.

5. Installation: Use Dow foam dispensing guns for installing spray foam, do not install with the disposable plastic straw provided.

2.04 HOLLOW METAL (HM) DOOR FRAMES

A. Frames: ANSI/SDI A250.8 Level 3 – Extra Heavy Duty is the minimum performance standard; provide the following special requirements that exceed this minimum standard:

1. Regular Use Frames: 16-gauge steel sheet, fabricated to size, profile and configuration shown on Drawings.

a. Specialty Exterior Frames:

1) Fabricate frames with thermal break as shown on Drawings. Frames shall be similar to Curries *Mercury Thermal Break Frames*.

2) Continuous exterior flange as shown on the Drawings.

2. Corner Construction: Face weld corners, grind welds flush and smooth.

3. Provide temporary removable spreader bars on bottom of each frame.

4. Reinforcement for Hardware: Conform to ANSI/SDI A250.6 and the following special requirements:

a. Hinge Reinforcement: Provide 7-gauge hinge reinforcement in doors, full width of frame (lesser gauge with equivalent threads is not acceptable). Weld reinforcement securely to frame.

b. Floor Anchors: Provide 14-gauge floor anchors on frames, full width of frame, securely welded to foot of each frame leg, with two (2) holes in each anchor for attachment to floor.

1) Concrete Anchor Bolts: Minimum 1/4-inch x 2-inch steel expansion anchor bolts.

c. Floor Anchors for Thermal Break Frames: Provide 16-gauge floor anchors on frames, two (2) anchors per frame with one (1) anchor on each side of the thermal break, securely welded to foot of each frame leg, with one (1) hole in each anchor for attachment to floor.

1) Concrete Anchor Bolts: Minimum 1/4-inch x 2-inch steel expansion anchor bolts.

d. Closer: Provide reinforcement sleeve full width of frame, formed to match frame profile.

5. Jamb Anchors: Provide jamb anchors per SDI 111-A.

a. Wood Framing: Sheet Metal Wood Stud Anchor with wrap around nail on straps.

6. Holes for Silencers: Drill stops to receive rubber silencers on frames not scheduled for weatherstripping or smoke gasket.

7. Exterior Frames: Galvanized steel.

2.05 HOLLOW METAL (HM) DOORS

A. Doors: ANSI/SDI A250.8 Level 2 – Heavy Duty, Model 2 – Seamless is the minimum performance standard; provide the following special requirements that exceed this minimum standard:

1. Regular Use Doors: 18-gauge sheet steel, fabricated to size and configuration shown on Drawings.

2. Hardware Reinforcement: Conform to ANSI/SDI A250.6.

3. Door Construction:

a. Face: Full flush, no seams.

b. Edge Seam: Seamless, continuous welded and ground smooth.

c. Edge Bevel: Bevel strike side.

d. Hinge Cutouts: Provide handed hinge cutouts for door swing (non-handed doors with hinge fillers are not allowed).

e. Edge Reinforcement Channels: Provide doors with full height 14-gauge steel lock channels (rails) and 12-gauge steel hinge channels (rails) concealed in construction of door and securely welded to both faces.

4. Door Core:

a. Interior Doors: Honeycomb cores.

b. Exterior Doors: Insulated core meeting the requirement listed in "Performance Requirements" in Part 1.

5. Exterior Door Tops: Invert reinforcement channel to prevent place for water to collect and seal the top of door watertight.

6. Door Undercuts: Provide undercuts to accommodate door hardware provided by Section 08 7100 and as required by applicable codes.

7. Door Vision Panels Frames: Fabricated steel frame with mitered corners designed to securely hold glazing, prime painted. Provide glazing tape and wet seal at exterior door vision panels.

8. Exterior Doors: Galvanized steel.

2.06 FABRICATION

A. Confirm field conditions and coordinate depth of each frame throat to match thickness of wall or other configuration shown on Drawings.

B. Fabricate steel doors and frames to sizes and profiles shown on the Drawings in conformance to the requirements of this section, ANSI/SDI A250.6 and ANSI/SDI A250.8.

C. Prepare and reinforce steel doors and frames to receive Owner-Furnished / Owner-Installed door hardware.

D. Finish:

1. Factory Prime Paint Finish: Prime paint surfaces of doors and frames under controlled conditions at the factory.

a. Doors and Frames shall be thoroughly cleaned, and chemically treated to insure maximum paint adhesion.

b. Surfaces of the doors and frames exposed to view shall receive a factory applied coat of rust inhibiting primer, either air-dried or baked-on.

c. The finish shall meet the requirements for acceptance stated in ANSI/SDI A250.10.

2. Shop Prime Paint Touch-Up: Repair any factory applied prime paint damaged by shipping or by shop modifications to doors and frames.

a. Surface preparation, prime paint and application shall conform to factory finishing standards and be compatible with field painting specified in Section 09 9000.

b. The finish shall meet the requirements for acceptance stated in ANSI/SDI A250.10.

3. Performance Requirement: Primer bond to steel substrate shall pass adhesion field testing per ASTM D3359, Type A Cross Hatch.

2.07 DOOR AND FRAME CLEARANCES

A. Door and Frame clearances shall conform to ANSI/SDI A250.8 , 2.06.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate the size and layout of reinforcement and preparation for door hardware with Owner's hardware supplier.

C. Coordinate installation of glazing with Section 08 8000.

3.02 EXAMINATION

A. Verify that substrate and project conditions are suitable before beginning installation of frames.

B. Correct unsatisfactory condition before proceeding with installation.

C. Start of installation indicates acceptance of substrate and conditions.

3.03 PREPARATION

A. Spray Foamed Frames:

1. Confirm that guards at hardware locations will not leak spray foam; install tape over any guards with openings.

2. Plug any holes in the steel framing where spray foam could leak through.

3.04 SPRAY FOAMING FRAMES

A. Before frames are installed, spray foam the frame cavities solid with spray foam. Remove excess foam before installation.

B. After frames are installed, fill cavity between frame and wall opening with spray foam. Remove excess foam.

3.05 INSTALLATION - DOORS AND FRAMES

A. Install frames plumb, level, rigid, and in true alignment as recommended in ANSI/SDI A250.11.

B. Secure floor anchors to floor with steel anchors / screw of size, length and type appropriate for permanently secure attachment to substrate material, two (2) anchors per jamb anchor.

C. Screw jamb anchors securely to wall framing / structure using method recommended by manufacturer for permanently secure installation.

D. Coordinate installation of vision panel frames by Section 08 8000.

E. Install Owner-Furnished / Contractor-Installed door hardware in accordance with manufacturer's installation instructions.

F. Install doors plumb and in true alignment and fasten to achieve the maximum operational effectiveness and appearance of the unit. Maintain clearances specified in ANSI/SDI A250.8 .

G. ADA Accessibility: Comply with requirements of ADA Standards and ICC A117.1.

3.06 ADJUST AND CLEAN

A. Adjust doors for proper operation, free from binding or other defects.

B. Clean and restore soiled surfaces. Remove scraps and debris, and leave site in a clean condition.

3.07 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

3.08 SCHEDULE – REFER TO DRAWINGS

END OF SECTION

SECTION 08 7100

DOOR HARDWARE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES:

A. Coordination With Owner-Furnished / Owner-Installed Door Hardware.

1.03 SUBMITTALS

A. Contractor shall request a Door Harware Schedule and hardware templates and installation instructions from the Owner's hardware supplier for use in hardware preparation of hollow metal doors/frames.

1.04 COORDINATION

A. Distribute hardware templates to the manufacturers / fabricators of doors and frames for their use in factory / shop preparations for door hardware.

PART 2 - PRODUCTS

2.01 DOOR HARDWARE

A. Door Hardware: Owner-Furnished / Owner Installed by separate contractor.

B. Door Hardware Schedule:

1. Door 101:

    a. 3 Hinges

    b. Exit Device with keyed cylinder and exterior door pull.

    c. Door Closer.

    d. Wall Stop.

    e. Threshold.

    f. Set of Weatherstripping.

    g. Door Sweep.

2. Door 102:

   a. 3 Hinges.

   b. Lockset.

   c. Door Closer.

   d. Wall Stop.

   e. Silencers.

3. Door 123:

   a. 3 hinges.

   b. Lockset.

   c. Door Closer.

   d. Threshold.

   e. Set of Weatherstripping.

   f. Extruded Aluminum Drip At Door Head.

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 08 8000

GLASS AND GLAZING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Clear Flat Glass.

B. Low-Emissivity (Low-E) Coating.

C. Glazing Accessories.

D. Insulating Glass Units.

E. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials.

C. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test.

D. ASTM C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers.

E. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass.

F. ASTM C1376 - Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass.

G. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation.

H. CPSC - Consumer Product Safety Commission.

I. GANA (GM) - GANA Glazing Manual.

J. GANA (SM) - GANA Sealant Manual.

1.04 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Product Data: Provide manufacturer's descriptive literature and performance data on each different type of glass and insulated glass unit and insulated composite metal panel unit specified.

D. Energy Performance: Provide energy performance data as required for showing conformance to the energy performance requirements specified for each exterior storefront assembly in Section 08 4113.

1.05 PERFORMANCE REQUIREMENTS

A. Glass Thickness: Except where glass thickness is noted, select thickness of exterior glass to withstand dead loads and positive and negative live loads acting normal to plane of glass at design pressures calculated in accordance with requirements in the International Building Code and State / local codes.

1. Limit glass deflection to 1/200 or flexure limit of glass, whichever is less, with full recovery of glazing materials.

1.06 QUALITY ASSURANCE

A. Perform Work in accordance with GANA (GM) Glazing Manual and GANA (SM) Sealant Manual for glazing installation methods.

B. Fabricator, Sealed Insulating Glass Units: Minimum of five (5) years of documented experience producing sealed insulating glass units specified in this section.

C. Installer Qualifications: Company specializing in the installation of products specified in this section on projects of similar scope and complexity, with a minimum of five (5) years of documented experience. Upon request, provide listing of projects completed within the last two (2) years along names and contact information of general contractors and building owner representative for each project.

1.07 ENVIRONMENTAL REQUIREMENTS

A. Do not install glazing when ambient temperature is less than 50 degrees F.

B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.08 WARRANTY

A. Sealed Insulating Glass Units: Shall be warranted for a period of ten (10) years against seal failure, interpane dusting or misting, and shall include removal of failed unit and replacement with new unit.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 CLEAR FLAT GLASS MATERIALS

A. Clear Heat Tempered Safety Glass: Fully heat tempered with horizontal tempering.

1. Clear tempered float glass complying with ASTM C1048, Type 1 (transparent flat), Class 1 (clear), Quality Q3 (glazing select), Kind HT.

2. Fully heat temper glass to comply with CPSC 16 CFR 1201 and ANSI Z97.1 impact safety standards.

3. Permanently etch one (1) corner of each piece of tempered glazing indicating compliance with ANSI Z97.1, locate etch mark so it is visible after installation.

2.03 LOW-EMISSIVITY (LOW-E) COATING

A. Low-Emissivity (Low-E) Coating: Pyrolytic coating meeting the requirements of ASTM C1376.

B. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers / products may be provided:

1. Cardinal Glass Industries; *LoĒ³-366.*

2. Vitro Architectural Glass; *Solarban 60 Clear.*

3. Guardian; *SN 68.*

4. Viracon; *VE 1-2M.*

5. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified products performance and appearance.

2.04 GLAZING ACCESSORIES

A. Glazing Compound: Silicone sealant single component; chemical curing; capable of water immersion without loss of properties; non-bleeding, non-staining; cured Shore A hardness of 15 to 25; color as selected.

B. Setting Blocks: Neoprene, 80 to 90 Shore A durometer hardness, ASTM C864 Option I. Length of 0.1-inch for each square foot of glazing or minimum 4-inch x width of glazing rabbet space minus 1/16-inch x height to suit glazing method and pane weight and area.

C. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness, ASTM C864 Option I. Minimum 3-inch long x one half the height of the glazing stop x thickness to suit application, self-adhesive on one face.

D. Glazing Tape: Closed cell polyvinyl chloride foam, coiled on release paper over adhesive on two sides, maximum water absorption by volume of 2 percent, designed for compression of 25 percent to effect an air barrier and vapor retarder seal.

E. Glazing Gaskets for Aluminum Storefront and Entrances: Specified in Section 08 4113.

2.05 FABRICATION

A. Heat-Tempered Glass:

1. Cut float glass materials to indicated sizes and provide cut-outs and holes, if indicated, before heat strengthening.

2. Fully temper float glass materials in accordance with ASTM C1048, Kind FT.

3. Comply with CPSC 16 CFR 1201 and ANSI Z97.1.

4. Permanently etch one (1) corner of each piece of tempered glazing indicating compliance with ANSI Z97.1, locate etch mark so it is visible after installation.

B. Low-Emissivity Coated Glass: Fabricate using methods and equipment recommended by manufacturer; protect coating from damage.

2.06 FABRICATION – INSULATING GLASS UNITS

A. Sealed Insulating Glass Units:

1. Fabricate units in accordance with ASTM E2190 with components and performance characteristics specified in Schedule paragraph at the end of this section.

2. Components:

a. Glass Type and Heat Treatment: As specified in Schedule paragraph at the end of Part 3.

b. Air Space: Hermetically sealed, dehydrated air filled. Type of air specified in Schedule paragraph at the end of Part 3.

c. Performance Characteristics: As specified in Schedule paragraph at the end of Part 3.

3. Provide unit edge seals meeting requirements of ASTM E2190, with aluminum spacers having mitered corners, and silicone sealant for glass-to-spacer seals.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate the installation of glazing in hollow metal doors with Section 08 1100.

3.02 EXAMINATION

A. Verify that openings for glazing are correctly sized and within tolerance.

B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and ready to receive glazing.

C. Beginning of installation indicates acceptance of openings, substrate and conditions.

3.03 PREPARATION

A. Clean contact surfaces with solvent and wipe dry.

3.04 INSTALLATION – GENERAL

A. Install glazing in conformance with GANA (GM) Glazing Manual.

3.05 INSTALLATION – EXTERIOR STEEL DOORS – EXTERIOR WET / DRY METHOD (PREFORMED TAPE AND SEALANT)

A. Cut glazing tape to length and set against permanent stops, 3/16-inch below sight line. Seal corners by butting tape and dabbing with butyl sealant.

B. Apply heel bead of butyl sealant along intersection of permanent stop with frame ensuring full perimeter seal between glass and frame to complete the continuity of the air and vapor seal.

C. Place setting blocks at 1/4 points with edge block no more than 6-inches from corners.

D. Rest glazing on setting blocks and push against tape and heel bead of sealant with sufficient pressure to attain full contact at perimeter of pane or glass unit.

E. Place glazing tape on glazing pane or unit with tape 1/4-inch below sight line.

F. Apply cap bead of silicone type sealant along void between the stop and the glazing, to uniform line, flush with sight line. Tool or wipe sealant surface smooth.

3.06 INSTALLATION – INTERIOR STEEL DOORS – INTERIOR DRY METHOD (TAPE AND TAPE)

A. Cut glazing tape to length and set against permanent stops straight and true to line, do not project above sight line.

B. Place setting blocks at 1/4 points with edge block no more than 6-inches from corners.

C. Rest glazing on setting blocks and push against tape for full contact at perimeter of pane or unit.

D. Place glazing tape on free perimeter of glazing in same manner described above.

E. Install removable stop without displacement of tape. Exert pressure on tape for full continuous contact.

F. Knife trim protruding tape.

G. Workmanship: Glazing tape shall not extend beyond edge of stop or be installed crooked or wavy; remove and reglaze.

3.07 CLEANING

A. Remove glazing materials from finish surfaces.

B. Remove labels after Work is complete.

C. Clean glass and adjacent surfaces.

3.08 PROTECTION

A. Protect installed products until completion of project.

B. Repair or replace damaged products before Substantial Completion.

3.09 GLAZING TYPE SCHEDULE (REFER TO DRAWINGS FOR LOCATIONS)

A. **GL-1:** 1-inch insulating glass unit with Clear Heat Tempered Safety Glass exterior pane (with Low-E coating on the number 2 surface) and Clear Heat Tempered Safety Glass interior pane. Center of glass values shall be as follows:

1. Visible Light Transmittance: 70% or better.

2. Shading Coefficient: 0.44 or better.

3. Solar Heat Gain Coefficient: 0.39 or better.

4. Air Space: 100% Argon.

B. **GL-2:** Single pane of 1/4-inch thick Clear Heat Tempered Safety Glass.

3.10 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 09 2900

GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Interior Gypsum Board, Type X (GWB).

B. Finishing Gypsum Board.

C. Gypsum Board Assembly Cutting and Patching.

D. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.

C. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board.

D. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.

E. ASTM C1396/C1396M - Standard Specification for Gypsum Board.

F. GA-214 - Levels of Finish for Gypsum Panel Products.

G. GA-216 - Application and Finishing of Gypsum Panel Products.

1.04 QUALITY ASSURANCE

A. Applicator Qualifications: Company specializing in performing the work of this section with a minimum of five (5) years of consecutive, successful experience.

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in original and unopened packages, containers, or bundles, with brand names and manufacturer's labels intact and legible.

B. Store materials in dry location, fully protected from weather and direct exposure to sunlight.

C. Stack gypsum board products flat and level, properly supported to prevent sagging or damage to ends and edges.

D. Store corner bead and other metal and plastic accessories to prevent bending, sagging, distortion, or other mechanical damage.

1.06 PROJECT CONDITIONS

A. Environmental Conditions: Establish and maintain environmental conditions for applying and finishing gypsum board to comply with ASTM C840 requirements, gypsum board manufacturer's recommendations, and the following; where requirements conflict, the most stringent requirement shall govern:

1. Wood Framing Moisture Content: Moisture content of wood-framing shall be 15% or less before starting GWB installation.

2. GWB Moisture Content: Do not begin taping and finishing of GWB until temperature of at least 50 degrees has been maintained for a period of 48 hours, and a GWB moisture content of 0.4% on a gypsum scale (12% on a wood scale) or less is achieved.

3. Lighting Level: Minimum of 15 candle power per square foot to be provided and maintained to assure quality workmanship.

4. Ventilation: Provide controlled ventilation during joint finishing operations, to eliminate excessive moisture. Avoid drafts during hot, dry weather to prevent finishing materials from drying too quickly.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor’s responsibility to identify, coordinate and document.

2.02 GYPSUM BOARD MATERIALS

A. Interior Gypsum Board, Type X (GWB): Conform to ASTM C1396/C1396M.

1. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers / products may be provided:

    a. CertainTeed; *Type X Gypsum Board*.

    b. GP Gypsum; *ToughRock Fireguard X*.

    c. National Gypsum; *Gold Bond Brand Fire-Shield X Gypsum Board*.

    d. U.S. Gypsum; *Sheetrock Firecode X Gypsum Panels*.

2. Thickness: As noted on the Drawings.

3. Edges: Tapered.

4. Size: Largest size practicable to minimize joints in place and for least number of butt joints.

5. Ends: Square cut.

6. Location: Standard interior gypsum board used throughout the Project unless noted otherwise.

2.03 ACCESSORIES

A. Acoustic Sealant: Non-hardening, non-skinning, for use in conjunction with gypsum board.

1. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers / products may be provided:

    a. Hilti; *CP 506 Smoke and Acoustic Sealant*.

    b. Tremco; *Acoustical Sealant*.

    c. U.S. Gypsum; *Sheetrock Brand Acoustical Sealant*.

    d. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified products performance.

B. Metal Beads And Trim: Galvanized metal corner bead factory clad with paper tape.

1. Manufacturer / Product: USG Beadex *Paper-Face Metal Drywall Bead and Trim*, or approved equal.

    a. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance and appearance.

2. Provide the following USG Beadex style of bead or trim for each different site condition:

   a. 90° Outside Corner Bead: *Micro Bead* style.

   b. 45° - 180° Angled Outside Corners: *B1 Beaded Flex* style.

   c. GWB Abuts Dissimilar Material and Is Exposed to View: *Premasked L* style.

C. Control Joint: GA 216; roll-formed metal control joint with removable strip.

   1. Manufacturer / Product: USG *Control Joint No. 93*, or approved.

      a. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance and appearance.

D. Joint Materials: Provide products by manufacturer of gypsum board. Conform to ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.

   1. Interior Applications – Gypsum Board (except Water Resistant Panels): Ready-mixed vinyl-based joint compound:

      a. Taping Compound: Type specifically formulated for embedding tape and accessories and for pre-filling.

      b. Topping Compound: Type specifically formulated for finishing drywall over taping compound.

      c. Joint Tape: Gypsum Board manufacturer's standard paper reinforcing tape.

E. Screws:

   1. Interior Application: Conform to ASTM C1002; bugle-head steel, self-drilling type, black phosphate finish.

F. Nails: Not allowed.

G. Sealer for Textured Finish: Flat latex paint or similar product specifically recommended by gypsum board manufacturer for sealing gypsum board prior to texturing.

   1. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers / products may be provided:

      a. Hamilton Drywall Products; *Hamilton Prep Tex*.

      b. U.S. Gypsum; *Sheetrock Brand First Coat*.

c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance and appearance.

H. Textured Finish Materials: Unaggregated texture or similar product specifically recommended by gypsum board manufacturer for spray applied texture.

1. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers / products may be provided:

a. Hamilton Drywall Products; *Hamilton Wall Textures*.

b. U.S. Gypsum; *Sheetrock Brand Wall and Ceiling Spray Texture*.

c. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance and appearance.

I. Sealer: Primer / Surfacer:

1. Manufacturers / Products:

a. CertainTeed; *Level V Wall and Ceiling (Primer / Surfacer with M^2Tech)*.

b. Hamilton *Drywall Products; Prep Coat (Level 5 Drywall Completion System)*.

c. U.S. Gypsum; *Primer-Surfacer Tuff-Hide*.

d. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements. Proposed substitutions must match specified product performance and appearance.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate installation of sound insulation by Section 07 2100.

C. Coordinate location of backing for supporting ends of GWB, control joints and reveals with Section 06 1000.

D. Inspect finished surfaces with Section 09 9000 painting applicator and project superintendent, mark areas that require additional finishing.

3.02 EXAMINATION

A. Confirm that the installation area(s) conform to the environmental conditions specified in Part 1 of this section.

B. Verify that project conditions are appropriate for work of this section to commence.

C. Confirm that the framing is straight, is within specified tolerances and meets minimum allowable deflection requirements.

D. Confirm that utility rough-in fits properly within framing width and will not prevent GWB from fitting tight to face of framing members.

E. Confirm that there is adequate temporary heat and light.

F. Do not start GWB installation until the conditions conform to requirements.

G. Beginning of installation indicates acceptance of framing and conditions.

3.03 FLOOR PROTECTION

A. Protect unsealed concrete floors from contact with GWB dust, taping mud and primer / surfacer and texture material using heavy paper or other method.

3.04 INSTALLATION – GYPSUM BOARD

A. Install GWB in conformance with ASTM C840, ASTM C1280, GA-216, and manufacturer's installation instructions.

1. Install in longest lengths possible for minimum number of joints.

2. Install to minimize butt end joints, especially in highly visible locations.

3. Use screws for attachment of all gypsum board.

B. Install full width panels with cut pieces only at top of wall (no "belly bands").

C. Place wrapped edges adjacent to one another; do not place cut edges or butt ends adjacent to wrapped edges.

D. Maintain 1/4-inch maximum gap between bottom of gypsum board and floor.

E. Single-Layer Installation: Install gypsum board, with edges and ends occurring over firm bearing.

F. Acoustic Sealant: Install at perimeter of all sound walls in accordance with manufacturer's instructions and as follows:

1. Place continuous bead at perimeter of each layer of gypsum board.

2. Seal around all penetrations by conduit, pipe, ducts, rough-in boxes, and at other similar penetrations.

G. Run gypsum board full depth behind steel door frames.

H. Dust and Debris: Remove GWB dust and debris from concealed spaces and from interior spaces inside of walls, shafts and ceiling assemblies prior to covering.

3.05 INSTALLATION – TRIM AND ACCESSORIES

A. General: Set corner beads and edge trim in continuous bed of taping compound free of voids and air pockets.

1. Align bead straight and plumb.

2. Align juncture with other corner bead flush.

B. Corner Beads: Install at external corners in a single full length piece free of butt joints, using longest practical lengths, no short pieces; place into a solid bed of soft joint compound for secure installation.

1. Align bead straight and plumb.

2. Align juncture with other corner bead flush.

3. Finish beads and trim flush and smooth.

C. L-Shaped Edge Trim: Install at any exposed to view location where gypsum board abuts any dissimilar material or ends with exposed edge (around window frames, exposed structure, etc.).

3.06 GYPSUM BOARD LEVEL OF FINISH

A. Finish gypsum board (whether exposed to view or not) in accordance with GA-214 to the following minimum level of finish:

1. Painted Finish Exposed to View: Level 4, match existing wall finish texture.

2. Surfaces Concealed from View with Thick Adhered Surface Finish (sheet vinyl or rubber base, plastic sheet wainscots, stainless steel wall panels etc.): Level 3, no texture.

3. Concealed from View without Surface Finish Above Suspended Lay-In Ceilings: Level 1.

B. Tape, fill and sand exposed joints, edges and corners to produce smooth surface ready to receive finishes.

1. Feather coats of joint compound so that camber is maximum 1/32-inch.

3.07 APPLICATION – SEALER FOR TEXTURED FINISH

A. Apply sealer to properly finished gypsum board scheduled to receive spray texture finish in accordance with manufacturer's instructions to match approved texture sample.

3.08 INSPECTION WITH PAINTER AND PROJECT SUPERINTENDENT

A. After sealer application and prior to application of spray texture, coordinate an inspection walkthrough of all finished GWB surfaces with the painter and project superintendent using a 500 watt lamp aimed from side; mark any defects in the surface finish.

1. Repair all defective areas not conforming to specified level of finish and seal repaired areas.

2. Do not proceed with spray texture until defective, nonconforming areas have been refinished correctly.

3.09 APPLICATION – SPRAY TEXTURE FINISH

A. Apply light orange peel finish texture coating by means of spraying apparatus in accordance with manufacturer's instructions to match the approved mock-up.

3.10 INSPECTION WITH PAINTER AND PROJECT SUPERINTENDENT

A. After taping and finishing is completed, coordinate an inspection walkthrough of all finished GWB surfaces with the painter and project superintendent using a 500 watt lamp aimed from side; mark any defects in the surface finish.

1. Repair defective areas not conforming to specified level of finish and seal repaired areas.

2. Do not proceed with application of Primer / Surfacer until defective, nonconforming areas have been refinished correctly.

3.11 APPLICATION – PRIMER / SURFACER

A. Apply Primer / Surfacer to surfaces exposed to view in accordance with manufacturer’s installation instructions and at recommended application rate to achieve GA-214 Level 5 Smooth appearance, free of visible tape joint lines after finish painting is completed.

1. Spray-apply Primer / Surfacer to 15 - 20 mil wet film thickness applied in two (2) separate passes at 90 degrees to each other for proper coverage.

2. Sand surface of Primer / Surfacer lightly after it has dried to eliminate any unwanted stipple pattern or texture.

B. After application of Primer / Surfacer, carefully inspect walls with 500 watt lamp aimed from side and mark any defects in surface finish.

1. Fill / sand defective areas in surface finish and recoat with primer / surfacer.

3.12 CUTTING AND PATCHING – GYPSUM BOARD ASSEMBLIES

A. Coordinate with the work of other trades to minimize the cutting and patching work required and to avoid damaging existing finish surfaces not scheduled for replacement.

B. Cutting: Provide openings, cut holes, install corner bead or trim, etc. as required to accommodate the work of other trades and complete the work of this Project. Cut tight to items which penetrate gypsum board for minimum gap.

C. Patching: Edges of gypsum board patches shall be supported on wood framing or wood backing, cut existing gypsum board back to framing members where openings are required. Finish as specified herein and blend in with existing surface so that patched areas are not visible and match adjacent finish. Install acoustic sealant at perimeter of penetrations and finish tape tight to eliminate gaps and openings.

3.13 TOLERANCES

A. Gap between Bottom of GWB and Floor: 1/4-inch maximum.

B. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8-inch in 10 feet in any direction.

C. Butt Joint Finishing: Not readily visible under the normal lighting conditions found for any given area / surface.

D. Finishing Tolerances: All exposed surfaces shall be smooth and free from visible ridges, waves, ripples, holes, defects, delamination, roughness, depressions, screw pops, etc. Taped joints shall not be visible after finish paint application.

3.14 CLEAN UP

A. Remove excess gypsum board and finishing materials from the site.

B. Remove gypsum board scraps and dust from all concealed spaces including interior spaces of wall framing.

C. Remove gypsum dust, taping mud and primer / surfacer completely from window frames, door frames, subfloor surfaces and any surface / material exposed to view.

1. Subfloor cleanliness / condition shall conform to floor covering installation requirements.

3.15 WORKMANSHIP

A. Gypsum wallboard shall be installed and finished using the best workmanship, including the following:

1. No damaged board or paper face.

2. Ends centered on framing.

3. GWB tucked full depth behind hollow metal door frames.

4. Gap at bottom of GWB 1/4-inch or less.

5. Cut-outs for outlets and devices cut neatly with saw or router.

6. GWB fastened tight to face of studs to eliminate screw pops.

7. Acoustic sealant consistently applied to all openings and perimeters.

8. All screws that do not engage framing removed.

9. Taped joints full bedded in taping compound and free of air pockets.

10. Butt joints finished with minimal thickness and tapered out for flat appearance.

11. Taped joints smooth and flat so as to disappear after painting.

12. Paper face not roughened by sanding.

13. Bottom of GWB behind rubber base properly finish smooth and free of roughness.

14. Consistent texture application .

B. Gypsum wallboard installed and finished with improper or poor workmanship shall be removed and replaced at Contractor's expense.

3.16 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

B. Schedule of Required Inspections by Contractor; confirm installation and workmanship are as shown / specified:

1. Inspect framing for conformance to specified surface tolerances.

2. Confirm that batt insulation and sound insulation are installed in the proper locations and conform to specification requirements.

3. Inspect GWB installation.

4. Inspect trim installation.

5. Inspect taping and finish application.

6. Inspect finish on bottom of walls with rubber base and coved base.

7. Inspect finished GWB surfaces after sealer is applied with painter and GWB finish applicator to identify any finishing defects requiring correction prior to finish application and painting.

END OF SECTION

SECTION 09 5100

ACOUSTICAL CEILINGS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Suspended Acoustical Ceiling Tiles (ACT).

B. Ceiling Grid Suspension Systems.

C. Compliance with ESDS requirements.

1.03 PERFORMANCE REQUIREMENTS

A. Provide suspended ceiling systems conforming to the following performance requirements:

1. Materials, Design and Installation: Conform to the applicable requirements of following reference standards:

a. International Building Code (IBC).

b. ASCE Chapter 13 for Seismic Design Requirements for Non-Structural Components.

c. ASTM C635/C635M.

d. ASTM C636/C636M.

e. ASTM E580/E580M.

f. CISCA (AC).

g. NWCB Technical Bulletin No. 401.

h. Suspended Ceiling System manufacturer's installation instructions and requirements for the specific products specified in this section.

2. Seismic Restraint Design: Conform to the requirements of the IBC for the seismic design category and geographic region in which the project is located by prescriptive requirements:

   a. Prescriptive Requirements: Conform to the prescriptive requirements found in NWCB Technical Bulletin No. 401.

3. Work of Other Trades: Coordinate with and accommodate the work of other trades wherever conflicts exist with the suspended ceiling system and / or associated seismic restraint components.

   a. Review work of other trades in advance of installation and resolve conflicts prior to fabrication and installation.

   b. Provide additional support and seismic restraint components as required to allow suspended ceiling system to be installed around work of other trades.

   c. Provide additional hangar wire and anchors to building structure as required to provide support for work of other trades, including any lighting or mechanical components, which are intended to be supported on, or interface with, the suspended ceiling system in conformance with requirements of referenced standards.

1.04 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ASCE - American Society of Civil Engineers.

C. ASTM C635/C635M - Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.

D. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels.

E. ASTM E580/E580M - Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions.

F. CISCA (AC) - Acoustical Ceilings: Use and Practice.

G. IBC - International Building Code.

H. NWCB Technical Bulletin No. 401 - Suspension Systems for Acoustical Lay-In Ceilings.

1.05 QUALITY ASSURANCE

A. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with a minimum of five (5) years of documented experience.

B. Installer Qualifications: Experienced in performing work of this section with a minimum of five (5) years documented experience in the installation of work similar to that required for this project.

1.06 ENVIRONMENTAL REQUIREMENTS

A. Maintain uniform temperature and maximum humidity as recommended by manufacturer prior to, during, and after acoustical unit installation.

1.07 PROJECT CONDITIONS

A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.

B. Install acoustical units after interior wet work is dry and building temperature and humidity has been stabilized at normal levels for at least one week.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 SUSPENDED ACOUSTICAL CEILING TILES (ACT)

A. ACT- 1: Match existing acoustical ceiling tile material, thickness, color and pattern.

1. Tile Size: 24-inch x 24-inch.

2. Tile Edge Profile: Match existing ceiling tile.

3. Tile Color: Match existing ceiling tiles.

4. Acoustic Rating: Match existing ceiling tiles.

5. Suspended Grid Tee Face Size / Application: Match existing grid.

2.03 CEILING GRID SUSPENSION SYSTEM

A. Suspension System: Match existing ceilng grid suspension system.

B. Suspension Systems – General: ASTM C635/C635M; die cut and interlocking components, with stabilizer bars, clips, splices, and perimeter moldings as required for a complete installation.

1. Structural Classification: Heavy Duty in accordance with ASTM C635/C635M.

2. Hangar Wire: 12 gauge (minimum) steel wire conforming to performance requirements specified herein.

C. Exposed Steel Suspension System: Formed steel, commercial quality cold rolled, with factory painted finish; heavy-duty.

1. Profile: Tee.

2. Construction: Double web.

3. Interior Applications: Hot dipped galvanized.

4. Finish: Match existing.

D. Perimeter Moldings / Wall Angle: Match existing, same material and finish as suspension system.

1. At Exposed Grid: Provide 7/8-inch wide wall angle molding matching color of suspension system.

E. Materials for Lateral Force Bracing: Conform to performance requirements specified herein.

1. Perimeter Seismic Clip: Install at end of each main runner and cross runner where they abut wall.

a. Manufacturer / Product: Armstrong, *BERC2 – 2" Beam End Retaining Clip*, or approved equal.

F. Accessories:

1. Support Channels, Braces, Struts and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness and deflection requirement specified.

2. Trapeze Bars: Provide back to back 1-1/4-inch cold-rolled steel channels or Unistrut trapeze support channels supported from structural members to span below non-structural work by other trades that prevents installation of support wires plumb, do not support ceiling from non-structural items.

a. Gauge, size and configuration of cold-rolled steel channels or Unistrut channel shall be as required to limit deflection to less than L / 360 when a 250 pound load is applied to each hanger.

3. Hangar Wire Support Anchors: Conform to Performance Requirements specified herein. Select the following methods as appropriate for conditions / construction:

   a. Wood Structure: Carbon steel lag eye bolt, 1/4-inch diameter, 3-inch minimum length.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate layout, placement and installation of HVAC ducts / grills, piping and equipment with Divisions 21 through 25 to avoid conflicts with ceiling installation.

C. Coordinate the weight and location of HVAC terminals, grills or other services that are ceiling supported with Division 23.

D. Coordinate the weight, layout, placement and installation of lighting fixtures, fire alarm devices, speakers, etc. with Divisions 26 through 28 to avoid conflicts with ceiling installation and to allow installation of required support wires and anchors.

E. Coordinate required tolerances for wall and ceiling framing and GWB tape joint flatness with Section 06 1000 and Section 09 2900 to avoid gaps behind perimeter molding.

F. Schedule ceiling installation to follow completion of dust producing work, above-ceiling work and interior painting, but prior to installation of finish flooring.

3.02 EXAMINATION

A. Inspect building conditions and work by other affecting ceiling installation before starting work.

B. Verify that walls are straight and within flatness tolerance so that perimeter molding will lie flat against wall.

C. Verify that mechanical, electrical and other above ceiling items are mounted high enough to allow installation of ceiling at specified height; do not lower any ceiling without consulting the Owner first.

D. Verify that layout of hangers will not interfere with other work.

E. Do not start installation until conflicts with work by others have been corrected.

F. Start of installation indicates installer’s acceptance of conditions and work by others affecting the ceiling installation.

3.03 PREPARATION - SUSPENSION SYSTEM

A. Lay out suspended ceiling grid in each room as shown on the Drawings prior to starting installation.

1. Consult with Owner on any rooms where proposed ceiling layout cannot be accomplished.

2. Consult with Owner on any rooms where proposed ceiling layout will result in edge borders of less than 6-inch width and adjust ceiling layout as directed.

3. Border tile less than 6-inches wide or T-bar laying on or immediately adjacent to wall angle are not acceptable unless specifically approved by the Owner.

3.04 INSTALLATION – SUSPENSION SYSTEM

A. Install suspension system in accordance with manufacturer's installation instructions, ASTM C636/C636M, ASTM E580/E580M, CISCA (AC) and NWCB Technical Bulletin No. 401 and as supplemented in this section.

1. Suspension system shall be installed as a flat, level plane, with runners aligned straight and square with building lines.

2. Support ceiling system, including integral mechanical and electrical components, so that deflection of any member or the whole does not exceed 1:360.

B. Install support anchors for each hanger / brace wire securely to floor / roof structural member above.

1. Locate so that hangar wires hang plumb.

2. Perform random field tests on the pull-out value of powder actuated pins to confirm that the pin and charge being used conforms to the required value.

C. Locate ceiling grid on room axis according to reflected ceiling plan.

D. Coordinate the location of hangers with other work.

E. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.

F. Where ducts or other equipment obstruct the regular spacing of hanger wire in plumb alignment, install trapeze bar channel(s) under obstruction to span between closest hangar wires and provide a bridge for support of hangar wire at required spacing.

G. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.

H. Ceiling Supported Loads: Add supplementary hanger wire located within 6-inches of each corner to support light fixtures or other ceiling grid supported loads, or support components independently.

I. Isolate hangar wires away from ducts and / or equipment that could conduct vibration, movement or noise into the ceiling grid or cause it to move slightly.

J. Do not eccentrically load system or induce rotation of runners.

K. Lateral Force Bracing: Conform to the Performance Requirements specified herein.

L. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.

1. Fasten securely to wall at spacing recommended by manufacturer.

2. Use longest practical lengths for minimum number of joints possible.

3. Miter corners neatly, align edges flush and free of gaps or misfit.

4. Do not cut molding to fit crooked walls (crooked walls require correction).

M. Light Fixtures and Mechanical Services: Provide support in accordance with NWCB Technical Bulletin No. 401.

3.05 INSTALLATION – ACOUSTICAL CEILING TILES (ACT- 1) IN SUSPENSION SYSTEM

A. Install acoustical units in accordance with manufacturer's installation instructions.

1. Install units after above-ceiling work is complete.

B. Cutting Acoustical Tiles:

1. Cut accurately to fit irregular grid and perimeter edge trim.

2. Make field cut edges of same profile as factory edges.

3. Make field cuts as required to accommodate work of other trades.

C. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.

D. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.

3.06 INSTALLATION TOLERANCES

A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.

B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

3.07 WORKMANSHIP

A. Acoustical ceilings shall be installed and finished using the best workmanship, including the following:

1. Ceiling grid layout matching layout shown on Drawings, or as directed by Owner.

2. Suspended grid installed flat and level at height shown on Drawings.

3. Suspended grid members free from damage, deformation, bends or twists.

4. Mechanical and electrical items supported on suspended grid are properly supported with additional hanger wires and support members.

5. No angled hanger support wires; trapeze bar channel(s) installed where mechanical or electrical work above ceiling prevents installation of plumb hanger wire at required spacing.

6. No hanger wires touching ductwork of piping.

7. No main runners installed on or immediately adjacent to wall angle.

8. No borders panels on suspended acoustical ceilings less than 6-inches wide.

9. Acoustical panels cut accurately to size.

10. No damaged or scarred faces on acoustical panels.

B. Acoustical ceilings installed and finished with improper or poor workmanship shall be removed and replaced at Contractor's expense.

3.08 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 09 9000

PAINTS AND COATINGS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Surface Preparation.

B. Gypsum Wall Board (GWB) Finish Inspection.

C. Field Applied Paints and Coatings.

D. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association.

C. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual.

1.04 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Paint Schedule:

1. Provide schedule of proposed paint products for the items to be painted in format matching the Schedule found in Part 3 of this section.

2. Provide product data for each paint and coating material included in the submittal. **Do not include MSDS sheets for each product.**

3. Submittals that do not include a Paint Schedule matching the specified format will be returned without review and will be marked as “Revise and Resubmit.”

D. Paint Draw Down Samples: Submit two (2) painted samples, illustrating selected colors and sheens for each color and system selected. Submit on heavy paper card stock, 8-inch x 10-inch in size.

1.05 QUALITY ASSURANCE

A. Single Source Responsibility: Paint products used for painting a given material / surface shall be manufactured by the same company unless noted differently in Part 3 of this section.

B. Applicator Qualifications: Company specializing in performing the work of this section with a minimum of five (5) years of successful experience.

1.06 REGULATORY REQUIREMENTS

A. Conform to applicable code for flame and smoke rating requirements for products and finishes.

1.07 DELIVERY, STORAGE AND PROTECTION

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and or as required by manufacturer's instructions and / or MPI (APSM) MANUAL.

1.08 ENVIRONMENTAL REQUIREMENTS

A. Environmental Requirements: Conform to MPI (APSM), product manufacturer and the following requirements; where conflicts exist, the manufacturer’s requirements shall govern:

1. Unless specifically pre-approved by the applied product manufacturer in writing, perform no painting work when the ambient air and substrate temperatures are below 50° F for both interior and exterior work.

2. Perform no exterior painting work unless environmental conditions conform to MPI (APSM) and paint manufacturer's requirements or adequate weather protection and temporary heat is provided. Suitable weatherproof covering and sufficient heating facilities shall be in place to maintain minimum ambient air and substrate temperatures for 24 hours before, during and after paint application.

3. Perform no interior painting work unless adequate continuous ventilation and sufficient heating facilities are in place to maintain ambient air and substrate temperatures above minimum requirements for 24 hours before, during and after paint application.

4. Perform no painting work when the relative humidity is above 85% or when the dew point temperature is less than 5° F variance between the air / surface temperature.

5. Perform no painting work when the maximum moisture content of the substrate exceeds:

   a. 12% for gypsum board.

6. Apply paint only to dry, clean, properly cured and adequately prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.

7. Perform no painting or decorating work unless a minimum lighting level of 50 foot candles is provided on surfaces to be painted.

1.09 EXTRA MATERIALS

A. Supply one (1) gallon container of paint for each color and type of paint used on project; store where directed. Containers to be new and unopened.

B. Mark top and side of each container clearly with color designation in addition to the manufacturer's label.

1.10 GUARANTEE / WARRANTY

A. Contractor Guarantee: Upon completion of the work required by this section, the Contractor guarantees the application of the paints and coatings to be free from improper installation or workmanship for a period of two (2) years. Contractor agrees to correct any failed coating promptly after notification by Owner and at no cost to the Owner.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 PAINTS AND COATINGS - GENERAL

A. Paint and Coating Manufacturers and Products by MPI (APL) Number: Provide manufacturers and products listed on MPI (APL) Approved Products List:

1. Website: www.specifypaint.com/APL/paintinfo_APL_new/manuf.asp

B. Paint and Coating Manufacturers and Products by Proprietary Products: Provide the products from the specified manufacturers.

1. Substitutions: Refer to Section 01 6000 for substitution procedures and requirements.

C. Paints and Coatings: Ready mixed, select products from the MPI Manual Manufacturer's Product List for Manufacturers listed above which installer has used on other projects and are known to provide excellent performance including:

1. A soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.

2. Good hiding characteristics.

3. Good flow and brushing properties.

4. Good mildew-resistance.

5. Capable of drying or curing free of streaks or sags.

D. Certain manufacturer's products may not provide adequate hiding ability with the number of coats specified. Contractor may be required to provide additional coats at no additional cost if products are selected that do not provide adequate hiding ability.

2.03 ACCESSORY MATERIALS

A. Accessory Materials: materials not specifically indicated but required to achieve the finishes specified; commercial quality.

B. Patching Material: Latex-based filler.

C. Sealant: Silicon-latex acrylic sealant as specified in Section 07 9000.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate selection of paint products to be applied over prime coats applied by others for compatibility and good adhesion.

C. Coordinate inspection of finish GWB surfaces with Section 09 2900 prior to start of any painting work; identify and mark any defective areas for correction.

D. Schedule work to follow completion of dust / dirt producing work.

3.02 GWB FINISH INSPECTION

A. Prior to applying paint to GWB surfaces, inspect finished GWB surfaces with Section 09 2900 installer and Project Superintendent using a 500 watt lamp aimed from side; mark any defects in the surface finish for correction by Section 09 2900.

3.03 EXAMINATION

A. Verify that surfaces are clean and ready to receive paint as required by the product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application or performance.

C. Measure moisture content and pH level of surfaces. Do not apply finishes unless moisture content and pH level of surfaces conforms to the recommendations of the MPI (APSM) Manual and paint manufacturer.

D. Do not start paint application until problems with substrate surfaces, GWB finish, and shop-applied primer / paint have been satisfactorily resolved.

E. Start of installation indicates acceptance of substrate, finish and conditions and responsibility for proper finish, performance and appearance.

3.04 SURFACE PREPARATION

A. Conform to MPI (APSM) Manual surface preparation recommendations, paint manufacturer's recommendations and the following for preparation of each different surface scheduled to be painted.

B. Substrate: Clean substrate surfaces thoroughly before applying any primer or paint following paint manufacturer's cleaning recommendations; allow substrate to dry thoroughly before starting paint application.

C. Surface Appurtenances: Remove electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.

D. Marks: Seal with shellac those which may bleed through surface finishes.

E. Mildew: Remove mildew by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

F. Factory Primed / Painted Items to be Painted: Hand sand factory finished surfaces to provide proper tooth for good adhesion of finish coats.

G. Existing Gypsum Board Surfaces:

1. Remove existing nails, screws, tacks, staples, etc. and any other items noted on the Drawings.

2. Clean existing walls.

3. Lightly sand walls as necessary to achieve a good bond between existing and new paint coatings (new paint coatings shall not be stripped off when standard masking tape is applied to walls and immediately removed). Paint test patch to determine bond of paint to existing surface prior to applying finish paint.

4. Fill minor defects, holes and damaged areas in previously painted surfaces with vinyl base spackle.

5. Match adjacent existing finish and appearance on repaired areas.

6. Prime bare and newly textured areas to receive paint.

H. Previously Painted Surfaces:

1. Surface Preparation: Determine a MPI (APSM) DSD Assessment of each existing surface to be painted / repainted and comply with the MPI (APSM) Surface Preparation Requirements relating to the assessments.

2. Paint Compatibility:

a. Select a paint system compatible with existing paint system.

b. Test compatibility and adhesion of proposed paint products over existing paint system prior to application.

c. Paint failure due to incompatibility between different products is Contractor's responsibility to correct.

3. Previously painted materials / surfaces scheduled hereinafter shall be painted as follows:

a. Wherever existing work / items are removed, and surface will be exposed to view.

b. Wherever existing surfaces are damaged, disturbed, or modified by the work of this project.

c. When repainting existing surfaces, repaint the entire item, plane or length of the existing surface to the closest corner or natural break. Spot painting of small areas on a larger plane is not permitted.

3.05 PROTECTION

A. Protect finish surfaces, landscaping, adjacent property, vehicles, and elements surrounding the work of this section from overspray, damage or disfiguration.

B. Maintain subfloor surfaces free from paint and spills using heavy paper or other method.

3.06 APPLICATION

A. Apply products in accordance with manufacturer's instructions and MPI (APSM) Manual.

B. Apply sufficient wet film thickness to provide good hiding, do not thin product.

C. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.

D. Do not apply finishes to surfaces that are not dry.

E. Allow applied coats to dry completely before next coat is applied.

F. Vacuum clean surfaces of loose particles. Remove dust and particles just prior to applying next coat.

G. Interior Gypsum Board: After paint has been spray or roller applied to uniform wet film thickness, backroll entire surface in same direction to provide uniform texture, reflective value and appearance, free of roller marks or lines.

3.07 CLEANING

A. Collect waste material which may constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.08 SURFACES THAT DO NOT REQUIRE PAINT FINISH

A. The following work is not field painted or finished by this section:

1. Pavement markings.

2. Site furnishings.

3. Exterior masonry veneer.

4. Concrete floors.

5. Fire rating labels, equipment serial numbers and capacity labels.

6. Door hardware.

7. Glazing.

8. Acoustical ceiling tile and grid.

3.09 SURFACES THAT REQUIRE PAINT FINISH

A. Paint materials / surfaces described below under SCHEDULE - PAINT SYSTEMS.

B. Hollow metal doors and frames.

C. Exterior fiber cement panel siding.

D. Interior gypsum wallboard walls and ceilings.

E. Metal trims located within the fiber cement siding shall be painted with the siding.

3.10 SCHEDULE – PAINT SYSTEMS (WORK IS MPI PREMIUM GRADE)

A. Materials / surfaces scheduled hereinafter shall be painted in accordance with designated MPI (APL) or proprietary systems and product requirements.

1. Sheen on finish coats shall be as selected by Owner from manufacturer's paint sheen samples.

2. Use the same manufacturer for each coat specified for a given system, do not intermix different manufacturer's products within the same paint system unless specifically approved by manufacturer(s) and products are known to be compatible for use together.

a. Where primer is applied by others:

1) Select paint system compatible with primer installed by others.

2) Test compatibility and adhesion of proposed paint products over primer prior to application.

b. Repainting existing painted surface:

1) Test compatibility and adhesion of new paint over existing paint.

2) Test adhesion 5 days or more after applying paint to existing painted surface using standard masking tape (not blue tape) applied firmly to test area in 3 separate locations and leave for one hour; removing tape quickly shall not remove any new paint.

c. Paint failure due to incompatibility between different manufacturer's products are Contractor's responsibility to correct.

B. Ferrous Metal and Galvanized Steel: Finish every surface.

1. Interior and Exterior Hollow Metal Doors, Hollow Metal Frames, and Vision Control Glass Unit Frames: Proprietary System.

    a. Factory Prime / Finish Coat: Damaged factory primer / finish coat requires touch up of bare areas with Sherwin Williams; *Pro-Cryl Primer.*

    b. First Coat: Sherwin Williams; *Pro Industrial Waterbased Alkyd Urethane Enamel.*

    c. Second Coat: Sherwin Williams; *Pro Industrial Waterbased Alkyd Urethane Enamel.*

    d. Application: Spray.

    e. MPI Gloss Level 5.

C. Fiber Cement Siding and Associated Trims and Flashings: Finish every surface.

1. Exterior: MPI EXT 3.3A.

    a. First Coat: 100% Acrylic Latex, MPI Product #15.

        1) Factory primed siding / trim requires only touch up of bare spots with primer and second and third coats.

    b. Second Coat: 100% Acrylic Latex, MPI Product #15.

    c. Third Coat: 100% Acrylic Latex, MPI Product #15.

    d. Application: Spray and backbrush.

    e. MPI Gloss Level 3.

D. Gypsum Board:

1. Interior: MPI INT 9.2.A.

    a. First Coat: Waterborne primer / sealer, MPI Product #50.

    b. Second Coat: Interior latex, MPI Product #43.

    c. Third Coat: Interior latex, MPI Product #43.

    d. Application: Spray and backroll.

    e. MPI Gloss Level: MPI Gloss Level 2 or 3 or as selected by Owner for specific use areas.

E. Gypsum Board (Previously Painted):

1. Interior: MPI RIN 9.2A.

a. Surface Preparation: Field verify existing conditions and prepare as recommended by MPI (APSM) and paint manufacturer.

b. First Coat: Field verify existing conditions and provide prime coat as recommended by MPI (APSM) and paint manufacturer.

c. Second Coat: Interior latex, MPI Product #43.

d. Third Coat: Interior latex, MPI Product #43.

e. Application: Spray and backroll.

f. MPI Gloss Level: MPI Gloss Level 2 or 3 or as selected by Owner for specific use areas.

3.11 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

3.12 SCHEDULE – PAINT COLORS

A. Interior Paints:

1. General Wall Color: Match existing wall paint color.

2. Interior Hollow Metal Doors and Frames:

a. Hollow Metal Doors: Match existing.

b. Hollow Metal Door Frames: Match existing.

B. Exterior Paints:

1. FC-_____ Fiber Cement Panel Siding: Match existing cement plaster.

2. Exterior Hollow Metal Doors and Frames:

a. Hollow Metal Doors: Match existing.

b. Hollow Metal Door Frames: Match existing.

1) Exterior Face: EPT-_____.

2) Interior Face: EPT- _____.

END OF SECTION

SECTION 10 4400

FIRE EXTINGUISHERS AND CABINETS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Fire Extinguishers.

B. Fire Exinguisher Mounting Brackets.

C. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. UL (DIR) - Online Certifications Directory.

C. UL 299 - Dry Chemical Fire Extinguishers.

D. UL 711 - Rating and Fire Testing of Fire Extinguishers.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 FIRE EXTINGUISHER MANUFACTURERS

A. Manufacturers / Products: Subject to their ability to conform to the requirements of the Drawings and this Specification, the following manufacturers may provide products:

1. Badger Fire Protection, Inc.

2. J.L. Industries, Inc.

3. Kidde Fire Extinguishers.

4. Larsen's Manufacturing Company.

5. Potter-Roemer.

2.03 FIRE EXTINGUISHERS

A. Extinguishers: Dry chemical, multi-purpose, 5-pound capacity.

1. Minimum UL (DIR) Rating: 2A:10B:C.

2. Tested to UL 711 and UL 299 requirements.

3. Extinguisher Finish: Steel, Red Enamel, Factory Finish.

4. Extinguishers shall be fully charged.

B. Labels: Attach manufacturer's standard metal foil label to cylinder, with printing and graphics indicating information and instructions required by local authorities having jurisdiction.

2.04 FIRE EXTINGUISHER MOUNTING BRACKET

A. Extinguisher Mounting Bracket: Plated steel bracket for mounting on wall, with quick release metal retaining strap to hold extinguisher securely to bracket.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

B. Coordinate backing in walls for extinguisher mounting brackets with Section 06 1000.

3.02 EXAMINATION

A. Verify that backing is correctly installed and in the correct locations for extinguisher mounting brackets.

3.03 INSTALLATION

A. Install extinguisher mounting bracket securely to wall framing or solid wood backing.

B. Install fire extinguishers at locations shown on Drawings.

3.04 ADJUSTING

A. Immediately prior to Substantial Completion, ensure extinguishers are fully charged and bear tag recording date of charging and signature of verifying entity.

3.05 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 32 1100

BASE COURSE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Aggregate Base for Cement Concrete Sidewalks.

B. Compliance with ESDS requirements.

1.03 REFERENCES

A. References shall be the edition current as of the date of the Contract Documents.

B. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).

C. ASTM D2922 - Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

D. WSDOT 9-03.9(3) - WSDOT STD SPEC - Crushed Surfacing.

1.04 WEATHER LIMITATIONS

A. Do not place aggregate when base surface temperature is less than 35 degrees F, nor when air temperature is below 35 degrees F. Do not place aggregate when surface is wet or frozen. Do not place aggregate when weather conditions are unfavorable otherwise.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 AGGREGATE BASE COURSE

A. Crushed Surfacing Base Course (CSBC) conforming to WSDOT 9-03.9(3).

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

3.02 EXAMINATION

A. Verify that compacted subgrade is dry, firm and unyeilding and ready to support paving and imposed loads.

B. Proof-roll subgrade to check for unstable areas or areas requiring additional compaction.

C. Verify gradients and elevations of base are correct.

D. Placement of base course indicates acceptance of the subgrade by installer.

3.03 INSTALLATION – BASE COURSE

A. Place granular base course over properly compacted subgrade to 6 inch compacted thickness.

B. Grade crushed surfacing base course accurately for proper slope and elevation.

C. Compact crushed surfacing base course to 95% of maximum dry density as determined by ASTM D1557 (Modified Proctor).

D. Check the elevation, surface tolerances and slopes of compacted crushed surfacing base course using a level and 10' straightedge to confirm proper flatness and drainage. Regrade and recompact any areas that do not conform at the Contractor's expense.

3.04 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

2. Contractor shall rely on his own testing, experience and skill in determining what means and methods to employ to achieve specified compacted density and other requirements of this section and not rely solely on test data from Testing Agency.

B. Owner will engage an independent testing and inspection agency to perform field inspections and tests and prepare test reports, in accordance with Section 01 4500 and the testing requirements noted on the Contract Documents and the Contractor will engage a qualified Geotechnical Engineer to perform periodic field quality-control testing and review of Contractor's work.

1. Tests taken are spot checks only at a given location and shall not be interpreted as representing the quality or integrity of all of the work performed.

2. Test data and reviews shall not be construed as acceptance of the work by the testing agency nor shall it relieve the Contractor of his responsibility to replace non-conforming or failed work.

C. Coordinate and schedule the work to accommodate inspections and testing as follows:

1. Testing Agency shall inspect and test the following:

a. Subgrade prior to placement of base course or paving.

b. Base course compaction density.

D. Testing agency will test compaction of base course in place according to ASTM D1557 and ASTM D2922, as applicable. Tests will be performed at the following locations and minimum frequencies:

1. Base Course under Pavement: At each compacted layer, at least one test for every 1,000 sq. ft. or less, but in no case fewer than three tests.

E. When testing agency reports that base coauhas not achieved degree of compaction density specified, regrade and recompact any areas that do not conform at the Contractor's expense.

END OF SECTION

SECTION 32 1123

UNDERSLAB CAPILLARY BREAK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Underslab Capillary Break under Concrete Slabs on Grade.

B. Compliance with ESDS requirements.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 MATERIALS

A. Capillary Break Material: Clean washed crushed rock supplied by Miles Sand And Gravel Company *Product #1242* or similar equivalent material and conforming to the following gradation (percentages are by weight):

100% passing the 3/4-inch screen

96% maximum passing the 5/8-inch screen

66% maximum passing the 1/2-inch screen

27% maximum passing the 3/8-inch screen

6% maximum passing the 1/4-inch screen

4% maximum passing the #4 screen

1% maximum passing the #200 screen

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other sections that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

3.02 EXAMINATION

A. Identify required lines, levels, contours, and datum locations.

B. Inspect subgrade for conformance with specified compaction and required surface elevation.

C. Do not start installation until underslab electrical conduit has been installed.

D. Do not start installation of capillary break until subgrade condition is acceptable, start of installation indicates acceptance of subgrade.

3.03 PREPARATION

A. Prior to placing any capillary break, remove any standing water and unsuitable wet subgrade soil (soil that is over optimum moisture content and has become plastic, mushy or disturbed and cannot be recompacted to specified density). Remove unsuitable soil off site.

B. Until ready to place capillary break, maintain excavations and prevent loose soil from falling into excavation.

3.04 CAPILLARY BREAK PLACEMENT

A. Fill to depth indicated on Drawings, but not less than 4-inches (depth indicated is the compacted depth).

B. Employ placement and compaction methods that do not disturb or damage other work.

1. Compact with minimum three (3) passes of a vibration plate compactor or until gravel is tightly interlocked and surface is firm and unyielding.

3.05 PROTECTION

A. After placement, keep capillary break clean and protect from contamination with site soil or construction debris.

3.06 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

END OF SECTION

SECTION 32 1613

CONCRETE SIDEWALKS AND CURBS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

B. ESDS REQUIREMENTS: The work of this Section is part of the overall requirements to comply with a level of achievement as defined by the Evergreen Sustainable Development Standard (ESDS). Comply with Section 01 8113 – Sustainability Requirements; refer to ESDS Project Plan in Section 01 8113 for ESDS Version and identification of Criteria and Points required for this project.

1.02 SECTION INCLUDES

A. Concrete Sidewalks.

B. Compliance with ESDS requirements.

1.03 REFERENCES

A. ACI 301 - Specifications for Concrete Construction.

B. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete.

C. ACI 305R - Guide to Hot Weather Concreting.

D. ACI 306R - Guide to Cold Weather Concreting.

E. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.

F. ASTM C33/C33M - Standard Specification for Concrete Aggregates.

G. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.

H. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete.

I. ASTM C231/C231M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.

J. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.

K. ASTM C1260 - Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method).

L. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).

M. ASTM D2922 - Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

N. WSDOT 5-05.3(13) - Curing.

O. WSDOT 8-14 - Cement Concrete Sidewalks.

P. WSDOT 9-04.1(2) - Premolded Joint Filler for Expansion Joints.

Q. WSDOT 9-04.2 - Joint Sealants.

R. WSDOT 9-07.7 - Welded Wire Reinforcement.

S. WSDOT 9-23 - Concrete Curing Materials, Bonding Agents, and Admixtures.

T. Americans with Disabilities Act (ADA).

U. International Code Council (ICC):

1. ICC / ANSI A117.1 – Accessible and Usable Buildings and Facilities.

1.04 SUBMITTALS

A. Refer to Section 01 3300 for submittal procedures.

B. ESDS Documentation: Provide applicable ESDS documentation related to ESDS criteria and points compliance according to the requirements of Section 01 8113.

C. Product Data: For each type of manufactured material and product indicated.

D. Design Mixes: For each concrete mix, submit proposed mix designs a minimum of 15 days in advance of placing operations for each type of concrete. The submitted mix designs shall include the following:

1. Supporting test data for mixes that is not more than 12 months old. Include a sufficient number of tests and conduct a statistical analysis in compliance with ACI 301.

2. Gradation of fine and coarse aggregates not more than 90 days old showing compliance with ASTM C33/C33M.

3. Proportions of all materials fine and course aggregate and water, including all admixtures added either at the time of batching or at the job site. Aggregate weights shall be based upon saturated surface dry conditions.

4. Water / cement ratio.

5. Slump as measured according to ASTM C143/C143M. Provide slump test for each mix.

6. Air content of freshly mixed concrete as measured according to ASTM C231/C231M.

7. Range of ambient temperature and humidity for which design is valid.

8. Strength measured at 7 and 28 days. Provide strength test for each mix at a frequency of both the 7th and 28th day.

9. Locations or intended use of each mix design.

10. Materials and methods for curing concrete.

1.05 QUALITY ASSURANCE

A. Perform work in accordance with ACI 301.

B. Obtain concrete materials from same source throughout.

C. Test for alkali-silica reactivity (ASR) using ASTM C1260.

D. Conform to ACI 305R when concreting during hot weather.

E. Conform to ACI 306R when concreting during cold weather.

1.06 REGULATORY REQUIREMENTS

A. Concrete finished as a walking surface shall comply with the following per ICC / ANSI A117.1:

1. Have a slip-resistant finish per Sections 302 and 403.

2. Changes in level shall comply with Sections 403.4 and 303.

3. Openings in floor surfaces shall comply with Section 302.3.

4. ADA Accessibility: Comply with ADA and ICC / ANSI A117.1 requirements.

1.07 PROJECT CONDITIONS

A. Weather Conditions:

1. Do no concrete sidewalk work when raining or when subgrade or base has free water on the surface or does not meet compaction requirements; suspend operations until surfaces are adequately dry.

2. Mixing and placing concrete shall be discontinued when a descending air temperature in the shade away from artificial heat reaches 40 degrees F and shall not be resumed until an ascending air temperature in the shade and away from artificial heat reaches 35 degrees F unless authorized by the Engineer.

B. Subgrade Conditions: Subgrade shall be firm and unyielding, free of ponded water, frozen earth or any organic material.

C. Existing Utilities: Locate, mark and protect existing utilities as specified in Section 02 1725 prior to start of work.

PART 2 - PRODUCTS

2.01 ESDS REQUIREMENTS

A. ESDS Requirements: Work specified in this Section may contribute to ESDS points which are the Contractor's responsibility to identify, coordinate and document.

2.02 FORM MATERIALS

A. Steel, wood, or other suitable material of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal. Use straight forms, free of distortion and defects. Use flexible spring steel forms or laminated boards to form radius bends as required. Forms shall be of depth equal to depth of sidewalk, ramp, stairs, curbs or gutter, and so designed as to permit secure fastening together at tops. Coat forms with non-staining type of coating that will not discolor or deface surface of concrete.

2.03 BASE COURSE

A. Base Course: Refer to Section 32 1100.

2.04 CONCRETE MATERIALS

A. Concrete Sidewalks: Portland Cement Concrete in accordance with WSDOT 8-14.

2.05 CONCRETE MIX

A. Concrete Sidewalks: Mix concrete and deliver in accordance with WSDOT 8-14.

2.06 REINFORCEMENT

A. Welded Wire Mesh: In accordance with WSDOT 9-07.7.

B. Reinforcing Steel: Steel reinforcing bars conforming to ASTM A615/A615M, Grade 60, or as noted on Drawings.

C. Reinforcement Accessories:

1. Tie Wire: Annealed, minimum 16 gauge.

2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.

   a. Provide stainless steel or plastic components for placement within 1-1/2-inches of weathering surfaces.

2.07 JOINTS MATERIALS

A. Joint Materials:

1. Premolded Joint Filler in accordance with WSDOT 9-04.1(2).

2. Joint Sealants in accordance with WSDOT 9-04.2.

2.08 ACCESSORIES

A. Curing Compound materials in accordance with WSDOT 9-23.

1. Curing Compound: Clear, membrane forming, conform to ASTM C309, Type I, Class B; curing compound shall not permanently discolor concrete.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other sections that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

3.02 EXAMINATION

A. Verify compacted subgrade is acceptable and ready to support sidewalks.

B. Verify gradients and elevations of base are correct.

C. Placement of base course indicates acceptance of the subgrade by installer.

3.03 INSTALLATION – BASE COURSE

A. Specified in Section 32 1100.

3.04 PREPARATION

A. Moisten base to minimize absorption of water from fresh concrete.

B. Coat surfaces of manhole and valve box frames with oil to prevent bond with concrete.

3.05 FORMING

A. Place and secure forms to correct location, dimension, profile, and gradient.

B. Confirm that top of form and screed elevations will provide positive water drainage off completed concrete work.

C. Assemble formwork to permit easy stripping and dismantling without damaging concrete.

D. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

E. After formwork is completed, recheck the grades, slopes and crosslopes for sidewalk conformance with ADA and ICC / ANSI A117.1.

3.06 REINFORCEMENT – PLACEMENT

A. Place, support and secure reinforcement against displacement. Do not deviate from required position.

B. Accommodate placement of formed openings.

C. Bend tie wire back behind the line of rebar on weathering surfaces.

D. Conform to applicable code for concrete cover over reinforcement.

3.07 CONCRETE – PLACEMENT

A. Place concrete in accordance with ACI 304R.

B. Ensure reinforcement, inserts, embedded parts, formed joints are not disturbed during concrete placement.

C. Place concrete continuously over the full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.

3.08 JOINTS

A. Locate expansion and contraction / score joints as shown on Drawings or directed by Owner. Lay out joints for equal spacing except where specifically dimensioned otherwise on Drawings.

B. Align sidewalk joints.

C. Place 1/2-inch wide isolation joints where necessary to separate paving from vertical surfaces and other surface features.

D. Provide contraction / score joints at equal spacing between expansion joints or as shown on Drawings.

3.09 FINISHING

A. Exterior Cement Concrete Sidewalks:

1. Broomed Finish: Medium light broom finish.

2. Expansion and Contraction Joints: Tool edges.

B. Place curing compound on exposed concrete surfaces immediately after finishing. Apply at application rate required to achieve restriction of water loss not less than required by ASTM C309 in accordance with manufacturer's instructions.

3.10 TOLERANCES

A. Sidewalks cross slope shall not exceed 2.0 percent and shall not pond water.

B. Accessibility Requirements:

1. Conform to requirements of ADA and ICC / ANSI A117.1 as applicable to sidewalks and public walkways.

3.11 CURING

A. Cement concrete curing shall be in conformance with WSDOT 5-05.3(13).

3.12 PROTECTION

A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.

B. Do not permit pedestrian traffic over pavement for 7 days minimum after finishing.

3.13 WORKMANSHIP

A. Concrete shall be installed using the best workmanship, including the following:

1. Reinforcing steel set back from face of concrete required distance.

2. Concrete surfaces exposed to view free of waviness or deflection from inadequate form construction.

3. No filling or patching required of concrete surfaces exposed to view.

4. No tie wire or reinforcement within 1-inch of any concrete surface.

5. Corners aligned plumb and straight with consistent appearance.

6. Proper consolidation of concrete, free of rock pockets or voids.

7. No ponding of water.

8. Conforming to ADA and ICC / ANSI A117.1 accessibility requirements.

B. Any part of the concrete paving work installed with improper or poor workmanship shall be removed and replaced at Contractor's expense.

3.14 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of the Contract Documents and to good construction practices.

1. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.

2. Contractor shall rely on his own testing, experience and skill in determining what means and methods to employ to achieve specified compacted density and other requirements of this section and not rely solely on test data from Testing Agency.

3. ADA Accessibility Compliance: Execute and monitor the work of this section for compliance with ADA and ICC / ANSI A117.1 accessibility requirements. Inspect and certify compliance with the ADA tolerances as specified in Section 01 4500.

B. Owner will engage an independent testing and inspection agency to perform field inspections and tests and prepare test reports in accordance with Section 01 4500.

1. Contractor shall:

a. Submit proposed concrete mix design of each class of concrete to agency for review prior to commencement of concrete operations.

b. Coordinate and schedule inspection and testing of reinforcing steel and concrete work by the agency at the appropriate times and prior to cover.

c. Provide testing agency with access to the work to allow required inspections and testing.

d. Correct deficiencies or remove and replace any work that inspections and test reports indicate do not comply with specified requirements.

C. Tests taken are spot checks only at a given location and shall not be interpreted as representing the quality or integrity of all of the work performed.

D. Test data and reviews shall not be construed as acceptance of the work by the testing agency nor shall it relieve the Contractor of his responsibility to replace non-conforming or failed work.

E. Testing Agency shall inspect and test the following:

1. Confirm subgrade soil is firm and unyielding prior to placement of base course or concrete sidewalks.

2. Base course compaction density in accordnance with ASTM D1557 and ASTM D2922 as applicable.

3. Concrete compressive strength in accordance with ASTM C39.

4. Concrete slump testing in accordance with ASTM C143.

5. Entrained air percentage in concrete in accordance with ASTM C231.

END OF SECTION